

ABSTRACT

Title of Dissertation: EKPHRASTIC REVISIONS: VERBAL-VISUAL
NETWORKS IN TWENTIETH CENTURY
POETRY BY WOMEN

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This study considers contemporary ekphrastic poetry—poems to, for, and about visual art—particularly by female poets in the U.S. and theorizes a broader, more complex model of how the genre operates. I suggest a network model that attends to the multiple, simultaneous, and often dynamic relationships inherent in verbalizing the visual arts, where historically inter-aesthetic relations have been understood as an act of transgression and a desire to subsume a representational “other.” Continuing to explore ekphrasis as a socially-inscribed encounter, as critics have since W.J.T Mitchell’s field-defining essay “Ekphrasis and the Other,” I recast the definition of ekphrasis as an elaborate network of relationships not only between poems, images, and readers, but also literary traditions, social contexts, individual artists, related works of art, textual conditions, and historical events. This expanded conception of networked ekphrasis allows for a nuanced understanding of the relationships between the arts, where speaking for another, as ekphrastic verse does for visual art, is more than an act of gendered contest, but can be a recovery against historical erasure, as with Elizabeth Alexander’s

“The Venus Hottentot,” an act of empathetic collusion, as in the verse of Lisel Mueller, or the deliberate decentering of poetic authority, as in Elizabeth Bishop’s “The Map” and “The Monument.” Thus, I position the ekphrastic network as a site of social discourse where the spectrum of possible outcomes between poetry and images is broader and more complex than accounted for in previous theorizations.

“Ekphrastic Revisions” presents methodological opportunities for scholars interested in reshaping the genre’s tradition. Where Part I introduces the tradition and genre of ekphrasis through methods of close readings alongside textual, biographical, and archival studies, Part II introduces a digital humanities project called “Revising Ekphrasis,” which establishes best practices for using LDA topic modeling and social network analysis to read the ekphrastic genre at scale using a curated dataset of more than 4700 poems. In using tools available to the digital humanities, I take into consideration the range of possible questions that can be asked best through close and distant reading in order to revise the ekphrastic tradition.

EKPHRASTIC REVISIONS: VERBAL-VISUAL NETWORKS
IN 20TH CENTURY POETRY BY WOMEN

By

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Dedication

To Jason

Songs 8:6-7

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Introduction

Re-vision – the act of looking back, of seeing with fresh eyes, of entering an old text from a new critical direction – is for women far more than a chapter in cultural history; it is an act of survival.

-Adrienne Rich

In the twentieth and twenty-first centuries, poetic engagements with the visual arts—a genre called ekphrasis—has drawn from and reshaped a long tradition of viewing, describing, creating, and narrating images. From W.H. Auden’s “Musée des Beaux Arts” to Jorie Graham’s “San Sepolcro,” poetic conversations between the arts are as active as they have ever been since Homer’s first description of the shield of Achilles in *The Illiad* (18.483-601). The desire to speak to, for, or about the presence of an image is a social impulse, one we understand in terms of the contexts that shape the conversation. Whether poems respond directly or indirectly to the images they engage, ekphrasis offers fertile ground for exploring enduring questions about the relationship between verbal and visual media and more broadly as a means for considering cultural, ethical, and social attitudes about the limits and possibilities of representation.

The following dissertation proposes a refiguring of ekphrasis in terms of its social network and argues that we need to expand our existing model for how the genre works to better account for the subtlety, diversity, and complexity of poetic responses to visual art in the past century. My project began in response to the troubling realization that while ekphrastic production by both male and female poets continues to increase, we lack a satisfying way to account for women and, correspondingly poetry by women, as vital

participants the ekphrastic tradition. While gender plays a significant role in our current understanding of how ekphrasis operates, critical accounts of the role women play as writers and viewers themselves has been under-theorized.

In his influential essay on the genre, W. J. T. Mitchell radically shifts critical studies of poetic engagements with images away from metaphorical comparisons by arguing that ekphrasis activates historical and ideological oppositions between the linguistic and spatial arts as a staging of anxieties about “otherness.” Mitchell goes on to explain that the “treatment of the ekphrastic image as female other is commonplace in the genre.” To date, Mitchell’s theorization of ekphrasis as playing out a struggle for aesthetic superiority remains a powerful influence on our critical approaches to how the genre works, because it pushed beyond previous studies that simply compared the two arts formally. For many ekphrastic examples, Mitchell’s theorization works well, particularly in poems by male poets gazing upon feminized images and providing insight into the iconophobic tendencies of western letters. Yet, Mitchell’s essay concludes with the following claim:

My examples are canonical in their staging of ekphrasis as a suturing of dominant gender stereotypes into the semiotic structure of the imagetext, the image identified as feminine, the speaking/seeing subject of the text identified as masculine. (180-1)

Mitchell’s “canon,” however, consists of four poems, all by male poets: Wallace Steven’s “Anecdote of a Jar;” William Carlos Williams’ “Portrait of a Lady,” John Keats’ “Ode on a Grecian Urn;” and Percy Bysshe Shelley’s “On the Medusa of Leonardo Da Vinci in the Florentine Gallery.” Mitchell then qualifies his assertion that his examples are “canonical” by insisting: “All this would look quite different, of course, if my emphasis

had been on ekphrastic poetry by women” (181). Mitchell does not go on to explain what might look different, although he stipulates that the difference would “not be a function of the poet’s gender” (181). He also insists that “gender is not the unique key to the workings of ekphrasis, but only one among many figures of difference that energize the dialectic of the imagetext,” Mitchell’s cautions his readers, arguing that gender is “one way” ekphrasis responds to the “otherness” of the image.

In his book-length genealogy of ekphrastic poetry, *Museum of Words: Ekphrastic Poetry from Homer to Ashbery*, James A. W. Heffernan pushes the issue of the genre as a gendered contest between rival arts further, depicting this competition as playing out fantasies of male desire in the verbal ravishing of the female image. Insisting that gender is central to ekphrasis and its tradition, he writes: “Ekphrasis, then, is a literary mode that turns on the antagonism—the commonly gendered antagonism—between verbal and visual representation” (7). Heffernan’s genealogy includes close readings of approximately 25 poems; however, none of those poems are by women save a single paragraph that addresses Adrienne Rich’s poem “Mourning Song.”

Such overdetermined claims of gendered opposition as a defining feature of ekphrasis might lead one to wonder, as Elizabeth Bergmann Loizeaux does:

“[i]f ekphrasis works in the gendered way that Mitchell describes – and I think it surely has – then one would expect it to be inhospitable ground for women, especially in the twentieth century when women are presumably more sensitized to such dynamics and might be expected to be more wary of entering into them” (80).

Loizeaux further asserts that the decision to write “against” the tradition of a typically male-dominant gaze represents a deliberate choice by women poets who are often aware of the socially-inscribed positions of viewer and viewed. Rejecting the claim that women

poets must adopt the position of male-centered viewer in order to write about image (as suggested in theories of the gaze by Luce Irigaray or Laura Mulvey), Loizeaux points to a tradition of women writers, from Joanna Baillie to Rita Dove, whose ekphrastic poetry does not “take the place of the male or ... accept the position of male-created seductive passivity” (122). Instead, Loizeaux suggests “feminist ekphrasis” as a term to describe poetry that directly addresses the competitive tradition of ekphrasis and deliberately works against it.¹

When we include ekphrastic poems by women in our account of the genre’s tradition, what we uncover is a richer and more varied history. In ekphrasis, the female poet shares commonalities with the feminized object in her view, and the terms “self” and “other” are not necessarily antagonistic, complicating considerations of gender as the axis upon which a paragonal² model of ekphrasis turns. Women occupy a doubly-situated awareness in the ekphrastic situation similar to John Berger’s observations about women in art: “And so she comes to consider the *surveyor* and the *surveyed* within her as the two constituent yet always distinct elements of her identity as woman” (46). These culturally inscribed positions are familiar to her, altering the hostile relationship between the “self” and “other” that Mitchell’s ekphrastic triangle describes. Given the long history of feminizing the image, the female poet shares a familiarity with the objects she represents, and it is reasonable to imagine that her recognition of these similarities allows for greater

¹ See Elizabeth Bergmann Loizeaux. “Women Looking: The Feminist Ekphrasis of Marianne Moore and Adrienne Rich.” In her introduction to the chapter, Loizeaux describes an extended history of women such as From Margaret Cavendish to Elizabeth Barrett Browning to Marianne Moore to Anne Sexton to Rita Dove participating in an ekphrastic genre despite the misgivings of feminist theorists such as Luce Irigaray or Laura Mulvey.

² The term “paragone” with origins in the writing of Leonardo Da Vinci, who stakes out privileged territory for painting over poetry, has been used to refer to the competition between linguistic and spatial representation. More attention will be paid to the term in chapters one and two below.

access to the sophistication of the “sister arts” metaphor, a network that includes both rivalry and relatedness, often at the same time. Increasingly, scholars are finding the gendered model of ekphrasis limiting. Sara Lundquist notes in a study of Barbara Guest's ekphrastic verse that "examination of the ways women poets go about seeing and responding to gender content in painting complicates and enriches ekphrastic theory itself, particularly the assertion that the relationship of poetry to painting is always of necessity intensely *paragonal*" (283). As ekphrastic poetry continues to figure prominently in contemporary poetry, there is increasing need for both critical models that account for less confrontational approaches to the genre and the inclusion of contributions by women as we refigure the ekphrastic situation.

In the introduction to a co-edited volume on women's ekphrasis, Jane Hedley wonders, “Are there good reasons for claiming that poems by women see differently—that women poets bring a particular set of motives and intentions to their ekphrastic encounters” (15)? *In the Frame* is the first collection of essays to consider ekphrasis by women and begins a recuperation of women's writing about art which has been largely ignored in much of the twentieth century. Hedley suggests that each of the poets represented in the critical collection “is ‘speaking out’ on behalf of her own aesthetic, political, and/or psychological commitments with particular force and clarity” (15).

Approaches to feminist ekphrasis begin the important work of recovering a tradition of women looking at and writing about what they see in visual art. In “Noisy Brides and Suspicious Kisses,” Barbara Fisher argues that the trope of ekphrastic power relations “unfolds along the rhetorical trajectory of erotic consummation, or romantic desire, or sexual aggression, carrying ideological weight by signifying violence only at

several representational removes” (72). Pointing to the limitations of such an approach, Fisher presents poems by Anne Carson, Kathleen Fraser, and Cole Swenson that explicitly resist a gendered dynamic. Similarly, Joanne Feit Diehl in her essay, “Toward a Theory of Ekphrasis: The Female Tradition,” suggests a tradition of women resisting the gendered, paragone model in resistance to it, by demonstrating how Sylvia Plath, Elizabeth Bishop and Jorie Graham adopt ekphrastic stances that eschew the gendered paradigm, choosing instead the tutelary spirit the “rainbow-bird” of Bishop’s late poem “Sonnet”—“freed. . . from the narrow befall / of the empty mirror, / flying wherever it feels like, gay!” In the same collection of essays, Paul Fry resists gendered language and tropes in ekphrasis and, instead, articulates it in terms of a “fixation” on the visual art as the “beauty in truth.” He proposes that “What poems envy pictures for . . . is their supposed capacity for sheer ‘ostentation.’” According to Fry, however, women’s ekphrasis rejects the “ostensive moment” opting instead for: “a sense of community, of history, of specifically human values in play” (60). What Diehl and Fry share in common is a vision of community, of playfulness, and of freedom; however, these suggestions for “alternatives” to the paragonal model are staged as an “either/or” choice by women. Calling attention to what is lost when ekphrasis is reduced to the point of seeing gendered conquest at every turn, the essays from *In the Frame* are important not only because they highlight many examples of women participating in the tradition of ekphrasis, but also because it is the first monograph length study of the genre that considers ekphrasis by women.

Not all women write against a tradition, and likewise male poets also demonstrate awareness and concern about the dangers of display and the seductive narrative of

ekphrastic desire. In fact, many poets today see the discourse of the Sister Arts as a site of social engagement, discursive meaning making, and a means for evading stable, static subjectivities.

My dissertation enters into this changing critical landscape to consider ekphrasis with two primary questions: first, how can we reshape our model of how ekphrasis operate away from an overly determined gendered contest between the arts and at the same time represent the diversity and polyvocality of the contemporary ekphrastic poem? Second, how might a revised understanding of ekphrasis locate contributions by women centrally in the tradition such that women are no longer seen as outsiders but as instrumental participants in its formation and practice? In other words, this dissertation begins by asking precisely what is limiting about our existing model and what might be done to expand our understanding of the ekphrastic network of poet/speaker, reader and artwork to acknowledge pleasurable and ethical exchanges as well as hostile ones. Similarly, I consider whether rivalry is an inescapable part of ekphrasis or if having a tradition constructed almost solely by examples from male poets has limited our understanding of the genre this way. Furthermore, my research responds to a continuing need to collect, circulate, and talk about women's contributions to the ekphrastic tradition where existing literary canons have ignored, silenced, or devalued them. From close readings that focus on examples by women to data collection that specifically seeks out examples of ekphrasis by female poets, I take seriously Rachel Blau DuPlessis's assertion that "[f]orms of feminist reception would call for, notice, notate, and comment upon the productive presence of women artists and writers wherever they are at work, would look at what motivates them, would analyze carefully their implicit definitions of gender

materials, and would investigate how these definitions are conducted with relation to gender ideologies and contradistinctions in the surrounding, historically mobile milieu” (“Marvelous” n.page).³ This dissertation demonstrates an effort to recuperate a past and to reshape a future of women looking at, taking pleasure in, and writing about visual art—not as outsiders but as participants within the tradition. Whereas current critical models relegate women’s role to their working against a male-dominant gaze, this study serves to reconstitute women’s contributions to ekphrasis as constituent of and formative to the genre’s tradition.

Calling to mind Adrienne Rich’s definition of revision as an act of survival, I argue that any future study of ekphrasis must be aware of the methodological factors that have played a role in women’s absence from the tradition to this point. Consider, for example, the following claim by Heffernan:

Without pretending to have assimilated more than a modest fraction of all twentieth-century poems about visual art, I could begin by suggesting that they repeatedly display the basic features we have found permeating ekphrasis from Homer onwards: the conversion of fixed prose and gesture into narrative, the prosopopeial envoicing of the silent image, the sense of representational friction between signifying medium and subject signified, and overall the struggle for power—the paragone—between the image and the word. (136)

Heffernan is pointing to one of the most difficult challenges facing any literary scholar who hopes to make generalizations about the far-reaching literary history of a genre—the twin limits of scope and scale. Despite qualifying his assertion that ekphrasis is forever recreating a contest between rival arts with an acknowledgement that he can’t even come

³ A similar argument is made in Jayne E. Marek’s *Women Editing Modernism: “Little” Magazines & Literary History*. Lexington: University Press of Kentucky, 1995. Where I am addressing genre, Marek addresses our understanding of the Modernist movement, an understanding skewed by the underrepresentation of the significant impact women had as editors and benefactors of the publications that brought the most celebrated Modernist authors to publication.

close to having read all contemporary ekphrasis, Heffernan's subtext is that for the span of time that preceded the twentieth century he either has or could have read every example. Therefore, one might assume that the problem with ekphrasis in the twentieth century is that there is simply too much of it. There are two issues to contend with here: the supposition that he has already accounted for all the ekphrasis that matters up to the twentieth century and the presumption that a few examples from the twentieth century are sufficient enough to speak for all of it. Yet, despite the wealth of examples of twentieth-century ekphrasis, particularly by female poets, Heffernan's genealogy doesn't include a single extended example by a woman, demonstrating quite powerfully what women have known for a long time: numbers matter.

Distant Re-vision

When he first coined the phrase "distant reading" in "Conjectures in World Literature," Franco Moretti set into motion an intense debate in literary history and criticism over the value of reading—close, distant or otherwise—that strikes at the heart of what most literary scholars believe to be the most sacred part of their work. Moretti, however, adopts what he knows will be a controversial stance because it questions the value of what most literary scholars, at least in the United States, believe to be the fundamental, methodological approach to literature:

... the trouble with close reading (in all of its incarnations, from the new criticism to deconstruction) is that it necessarily depends on an extremely small canon. This may have become an unconscious and invisible premiss by now, but it is an iron one nonetheless: you invest so much in individual texts only if you think that very few of them really matter. Otherwise, it doesn't make sense. And if you want to look beyond the canon (and of course, world literature will do so: it would be absurd if it didn't!) close reading will not do it.

Predicting Moretti's claim against the primacy of close engagement with texts would stoke the ire of a diminishing numbers of scholars whose body of scholarly production was produced during the height of New Criticism is easy enough. More interesting are the wide range of responses from those for whom questions of canon formation, genre definitions, periodization, and literary history have been central to their cause and in particular structuralist, postmodern, and cultural critics. The fact is, though, that even Jacques Derrida, whose work is most recognizable for his calls to deconstruct binary distinctions, canon formations, and "laws of genre," was really a "close reader" at heart. Whether constructing or deconstructing literary categories, literary studies in the twentieth and twenty-first centuries has been a field defined by its "close engagements with texts." On a more personal level, close reading is why most of us become literary scholars, and the implication of Moretti's polemic questions the value of the pleasurable and personal part of what we do. Taking the most extreme possible stance against the culture of close reading and occasionally arguing that we should not be concerned with actually reading individual texts, Moretti insists that we should leverage technological advances in computation to consider a broader scope of "writing." Essentially, Moretti explains, the principle challenge to a truly inclusive canon is the human mind. Human beings cannot closely read millions of literary works in a matter of hours (or even a lifetime) and hold them in their head all at once, and Moretti argues computers can.

Of course, what we mean by "reading" in each of these cases differs significantly. Computers read differently than humans do, and what Moretti argues is not just that computers "read" but that computers can read *better* than human can—an assertion that turns Moretti's argument even more controversial because he confronts those who insist

that detailed readings are the domain of literary scholars. What we do as humanists is read *better*, which is to say, as humans we read interpretively and in socially, humanistically informed ways.

Moretti insists that computational readings, based on quantifiable methods that include data such as sales publication rates and sales or etymological and linguistic patterns create not only a new, but an *improved* reading of literary history that cannot be achieved through any single scholar's reading. Taking the most extreme stance of cultural criticism, Moretti points out that canons should be opened, biases ignored, "high" and "low" forms of writing included together to create an improved history that traces literary works in a way that is not biased by the individual preferences of scholars. Setting aside his rhetoric, many would agree that the project of cultural criticism in the 1980s and 90s was more often than not about how literary canons demonstrate an attempt to preserve cultural hegemony, and Moretti's solution is quantity. Computers can "read" millions of books, sorting, organizing, and identifying patterns across all of them faster, and more "accurately" than humans can.

Before delving into the divisiveness of celebrating computers' reading "accuracy," let's turn first to see what Moretti actually means by the term "distant reading:"

Distant reading: where distance, let me repeat it, *is a condition of knowledge*: it allows you to focus on units that are much smaller or much larger than the text: devices, themes, tropes—or genres and systems. And if, between the very small and the very large, the text itself disappears, well, it is one of those cases when one can justifiably say, Less is more. If we want to understand the system in its entirety, we must accept losing something. We always pay a price for theoretical knowledge: reality is infinitely rich; concepts are abstract, are poor. But it's precisely this

‘poverty’ that makes it possible to handle them, and therefore to know.
This is why less is actually more. (*Maps* 57-8)

As is often the case with purposefully provocative claims, the argument for “distant reading” has been generally reduced to a radical call to stop reading texts and start reading statistics instead—as if statistics could provide satisfactory “answers” to questions about literary history and tradition. Moretti further stokes the rhetorical fire when he claims that quantitative approaches to literature make “a more rational literary history” (*Maps* 4), or that “quantitative data are useful because they are independent of interpretation” (30). Despite many appeals to human interpretation and aside from his earnest attempt to improve the diversity of literary studies beyond narrow canonical debates, Morretti has lost most of his audience before he even had a chance to get started. At best, Moretti’s work is seen widely as a provocative, interesting idea with the best of intentions, but deeply flawed. The phrase “more rational literary history” cues institutional debates over the “value” of science, technology, engineering, and math (STEM) versus the “value” of the arts and humanities, and few humanists (digital or otherwise) will agree that numbers “answer” humanities questions. As for his second claim, that quantitative data is “more useful” based on its “independence from interpretation,” humanities scholars—who are all too aware of the silences, absences, and erasures of literary production—will be rightfully suspicious. Data is deeply interpretive because the conditions of data collection, preservation, and digitization are not value neutral. The value or accuracy of quantitative studies depends on the data used for the study in the first place, but if there are no remaining copies of a disproportionately higher number of novels by women than those by men, the results will be equally skewed. The

fact that data is interpretive; however, shouldn't invalidate quantitative studies or the value of distant reading altogether. Distant reading practices that make claims about "correctness" or "purity" are not "the answer," but distant reading is, and should remain, an important part of the methodological options available to literary scholars.

Returning to Moretti's claim that "distance is the 'condition of knowledge,'" I would like to suggest a more nuanced understanding of the word "condition" that perhaps changes the trajectory of the debate. The word "condition" means "a single affecting element or influence" ("condition," def. 1a.b., 4a.b.). Therefore, one condition of knowledge is distance. Closeness is another. Somewhere in between is where most of our work happens. Even though we rarely think about the limits of exactly how "close" to a text we can get or how finely we can read, we know there are limits. The human ability to read millions of texts is as impossible as it is to read one poem perfectly. Considering what the human limitations of distance are and how they affect the production of literary history, of which canon formation, genre definitions, and periodization are a part, should be a serious concern to the literary studies. Our attempts to revise canons, to rebuild literary traditions, and to resituate genres is limited by the scale of what we can read, and the models literary scholars create to explain them are limited because of the scope of our comprehension.

Quantitative studies have the potential to demonstrate how absent women have been from our critical conversations of the genre. If we hope to revise the ekphrastic tradition by placing women and their poems at the center of the conversation, then we need to find a way to cast a wider net. Including one female poet in a series of close readings of four or five male counterparts remains a common practice in literary

scholarship, lending itself to the assumption that women are exceptions to male-centered norms. David Kennedy's recently published *The Ekphrastic Encounter in Contemporary British Poetry and Elsewhere*, for example, includes a chapter titled, "Reframing the Canon from Keats to Ashbery" in the first part which serves as a model for how Kennedy will read the poems throughout the rest of the book *except* for the two chapters dedicated to women. While Kennedy deftly weaves a "female ekphrastic tradition," the underlying message is clear: there's a tradition, and there are women who write outside of it. True, it is important to acknowledge that part of the tradition includes being ignored, silenced, and underrepresented. However, if the aim is truly to recapture a history of ekphrasis by women, then the way forward is to figure out what we can use of "distant reading" and "close reading" to change our own critical distance and to see with "fresh eyes." The premise for a methodology that includes women as central to the tradition here is not to erase past exclusions but to insist that women didn't arrive late to literary history. Continuing to approach to literary history and the ekphrastic genre with women as outsiders or latecomers to the tradition will do little more than draw the lines of division between women and tradition even more starkly. Therefore, if we are to be faithful to the mission of diversity in our formation of literary history and tradition, then quantitative studies must play a part in the way ahead. The emerging field of digital humanities can be (and I would argue has been) a critical partner in creating methodologies and critical practices that attend to questions of diversity and cultural heritage that inform humanistic inquiry.

Literary scholars respond to questions of genre by creating models. For example, when Mitchell describes the "suturing of dominant gender stereotypes" onto the

“interworkings of ekphrasis,” he does so by creating a model which he calls the ekphrastic triangle. The ekphrastic triangle describes the relational exchange between a poet/speaker who is situated between the art object and the reader to whom he renders the work of art through language, as well as the conditions under which the subjects in the model operate. Mitchell’s model combines not just the exchange between subjectivities, but also the linear narrative of ekphrastic “indifference,” “hope,” and “fear” that characterize the paragone competition between the arts. In other words, models are abstract methods for simplifying complex systems or concepts for the purpose of making them more easily manipulated and understood, as well as to help predict future actions; therefore, models in general are a form of distant reading. Whether generated by humans as conceptual models or hand drawn or computer generated, models make broad claims regarding the nature of how something works and are limited by the scope of our knowledge about what is being modeled. In literature, the limitations of our human ability to read reduce the possible breadth of information that can inform the model’s creation and the usefulness of the distance we can achieve between our knowledge of singular texts and our abstract understanding of the “whole.” Therefore, when Mitchell creates a model of the “canonical” relationships in ekphrasis, his sense of the genre is limited by the numbers of poems he uses to formulate the model.

Advances in technology have the potential to help literary scholars redefine the limits of reading distance, not because they read “better” than humans but because computers compute better than humans. Leveraging the strengths of technology to broaden the reach, scale, and scope of our exposure to ekphrastic poetry, therefore, improves our ability to create more accurate models of how ekphrasis works. Since we

know that computers are not the same kinds of readers that humans are, it is important to be aware of the “conditions” that shape the ways computers read. Questions that require attention to quantity, scope, and scale are particularly suited to computation, and the promise computation holds for the field of literary studies is that it can extend the reach of a scholar’s “view.” The quantitative abilities of computers can be useful to, not exclusive of, human reading; they can count, calculate, sort, and prioritize faster. They can produce visualizations and match and detect patterns, and have the potential to help extend our readerly distance if we can figure out what “reading” this way means. In other words, if we can discern salient questions that computer reading is designed to address, how might we respond to Adrienne Rich’s call for “re-vision,” whereby learning to see what we already know differently is an act of survival?

The dissertation that follows was prompted by the emerging affordances of digital and computational technology as tools that can inform and help improve upon existing scholarly practices in literary studies. I was drawn to the study of ekphrasis because of the quandary that images as feminine, silent subjects could be found almost everywhere in critical treatments of the genre, and yet women were absent from our formation of the model used to understand how the genre works—as if no women wrote ekphrasis. However, what any gloss of recent publication lists will tell you is that women are and have been very active, productive practitioners of the genre. Intrigued by the seeming irony, I wondered: how could we fundamentally shift the way we conceive of the venerable tradition of ekphrasis such that women are seen as influential and historically relevant participants in that tradition, rather than outsiders always trying to break in or as ventriloquists trying to break out of a “frame”? To address this question, I turn to the use

of digital tools such as social network visualizations and topic modeling to generate suggestive methodologies that seek to crack open the binding of the ekphrastic canon and reconceive the ekphrastic genre as a dynamic, responsive, growing network of poetic engagements with the visual arts.

Overview

Much like the changing face of academic and scholarly publication, this dissertation is necessarily a hybrid, and in some ways does not follow the traditional format. Instead, it represents the evolution of a project from a print-oriented form of scholarship to an increasingly digitally-mediated form. This dissertation presents methodological opportunities for scholars interested in ekphrasis to move beyond a seemingly ubiquitous meta-narrative of the genre that turns on antagonism and anxiety about the perceived dangers of “others.” Four principles guide the dissertation’s trajectory. First, that ekphrasis is a genre that participates in, borrows from, and puts to new use the discourses of other literary and non-literary genre. Second, the “ekphrastic triangle” as our sole critical model for the genre limits the range of possible outcomes we see in the ekphrastic situation, such that gendered, competitive relationships are more likely to be a result. Thirdly, that establishing a model of ekphrasis that positions contributions by women as a central part of it is a necessary next step for the field and would represent a dramatic change from studies of ekphrasis in the past where ekphrasis by women has been seen as “in addition to” or “alongside” the tradition. Fourth, ekphrasis operates as a network of discursive exchanges between subjectivities, genres, and social contexts, and from the close readings of individual poems scaling upward to

hundreds or thousands poems, conceptualizing ekphrasis as a network opens up the range of possible interactions we see between poetry and the visual arts.

The dissertation is also divided into two parts. In Part I, I introduce the tradition of ekphrasis as a genre, and contextualize that history in terms of the shifts in genre theory in the twentieth century. Drawing from literary methods that range from close readings to archival, historical, and biographical research, the first part of the dissertation argues that individual ekphrastic poems operate as social networks, placing speakers, readers, and works of art in dynamic relationship to one another within a context of other, alien, and simultaneous discourses.

In the first chapter, “Verbal-Visual Networks: Toward a Broader Theory of Ekphrasis,” I compare the changing shape of genre theory with the evolution of criticism about ekphrasis and argue that bringing our understanding of how ekphrasis operates in line with cultural studies approaches to genre improves our understanding of the dialogic and discursive ekphrastic situation. I also refigure the ekphrastic situation as a network and argue that social network analysis provides a flexible, extensible means for demonstrating the multiple and polyvocal exchanges within the single ekphrastic poem. Specifically, I demonstrate two possible ways that the ekphrastic situation can be modeled using network analysis in Joan Murray’s poem “Interlude”—as exchanges between multiple poetic subjectivities and as repurposed genre put to new social use.

Chapters two and three explore the literary and social contexts of individual poems. Each chapter considers how network theory broadens the available means we have to model how ekphrasis works. For example, in chapter two, “Speaking for Objects: Networked Voices in Lisel Mueller and Elizabeth Alexander,” I begin with

feminist ekphrasis by poets who deliberately write against a tradition of male-centered gazing and mastering. Lisel Mueller and Elizabeth Alexander construct voices for silent, objectified, and often nude or scantily clad representations of women, reclaiming a subjectivity through which they critique the male gaze by which they were (de)constructed. The poems in this chapter demonstrate an awareness of the double-edged potential of prosopopeia, that speaking for an object may help reclaim its agency but at the same time diminishes it in the act of breaking its silence. Mueller and Alexander's choices, however, open up the poetic and visual network of ekphrasis. While both poets critique the male gaze as contributing to the female subject's deconstruction, reduction, and silencing, the particular feminist strategies employed by these two poets attempt to expand the number of participants in the ekphrastic exchange while resisting the formation of a new visual female subject available for renewed fetishizing. By opening the network of sight and sound, past and present, internal and external, the poet challenges the painter's ideologies without exerting her own power of speech to control it. Mueller's first-person ekphrasis increases the number of discourses within the ekphrastic exchange, subverting the traditional ekphrastic speaker's inclination to narrow the network of relationships between readers and artwork to establish his own authority. In "A Nude by Edward Hopper," Mueller balances particular detail with abstraction to intervene in conversations between Hopper and his spouse, at the same time inviting readers' external exposure to Hopper's art into the discourse of the poem. Similarly, in "Artist's Model, ca. 1912," Mueller employs the same indeterminacy of visual subject to increase readers' empathetic response to the figure of the nude model in Western art.

On the other hand, Elizabeth Alexander uses the networks of the African diaspora to reclaim a speaking subjectivity for the “Venus Hottentot” icon and to contrast scientific observation with personal history. Adopting a persona, Alexander vocalizes images of Sara Baartman—the Khoisan woman used as a 19th century spectacle, reproduced in engravings and drawings, and displayed as an ethnographic and aesthetic artifact at *Musée de l’Homme* until the 1970s. Alexander’s poem humanizes Baartman’s image and critiques scientific modes of observation. Through imagined speech, Alexander’s voice provides a means for “feeling with” the distant, silenced figure of Baartman and opens the possibility for recognition between the reader and the image. These poets imagine the voices in their poems not as their own or even as the actual, necessary silent voice of the historical and represented figure, but instead as an intermediate voice—a vocalized presence that calls attention to what is and what must remain, for ethical reasons, silent.

Chapter three, “Description, Density, and Creation: Elizabeth Bishop’s Ekphrastic Networks” argues that Elizabeth Bishop’s ekphrastic description creates dense networks of relationships between visual objects to decenter the authoritative position of the poet/speaker and to resituate ekphrastic subjects, which include but are not limited to the poet, artwork, and reader. Through recursive and discursive changes in descriptive modes, Bishop builds layers of descriptive edges across the ekphrastic network, which becomes a collection of detail. For example, in “The Map,” the speaker, printer, map maker, and historian become peripheral to the ekphrastic network and depend upon the active engagement of readers, who learn to select and prioritize from an assemblage of detail. In “The Monument,” the discursive and descriptive exchange calls into presence a

conceptual, obscured, and notional museum. Through oscillations between concrete and abstract description, the speaker and reader negotiate into presence a monument that gathers form from the collaborative process of its description rather than from an *a priori* sense of national purpose. I argue that Bishop's "The Monument" engages other similar poems by Bishop's American contemporaries through the social context of the years following the Great Depression. Drawing connections between Svetlana Alpers' description of the Dutch arts and Bishop's appreciation for primitive art, I argue that Bishop's ekphrasis is more socially engaged than previously considered because it deploys ekphrasis's tutelary function to connect her readers to an economy of art.

In Part II, I expand the network model of ekphrasis to consider hundreds of ekphrastic poems in conversation with one another and also in the context of thousands of non-ekphrastic poems through the use of a digital humanities project called "Revising Ekphrasis." Chapters four and five suggest a methodology for studying ekphrasis on a much larger scale than considered possible. Taking into consideration the range of possible questions that can be asked best at of close and distant perspectives, the second half considers how the tools of topic modeling and social network analysis might help our re-vision of the ekphrastic tradition.

In the fourth chapter, "Collecting Ekphrasis: Building a Digital Collection of Modern Verse to Study Ekphrasis," I contend with the challenges of building a digital corpus of ekphrastic and non-ekphrastic poetry that represents best practices for the collection, description, revision, and preparation of 4,771 poems that in chapter five will provide the dataset for distant readings and network visualizations. In the field of digital humanities, issues of how to organize, describe, and revise datasets is of particular

importance, since sound and transparent principles of data collection and preparation often determine the scope and accuracy of the resulting digital project. The chapter, then, has two purposes: to articulate the process by which the “Revising Ekphrasis” dataset was created and prepared for the distant readings in chapter five and to offer an explicit account of how iterative design operates in the collection and preparation of humanities datasets. There is an increasing awareness among digital humanists of the need for more detailed accounts of data processing and preparation for digital projects that include distant reading practices, and this chapter responds to those concerns for more fully articulated documentation of data preparation methods.

However, chapter four also lays bare the challenges of assembling a collection of ekphrastic poetry, and in particular poetry by women. Despite the increasing rate of publication, their representation in online repositories is still significantly lower than the number of available poems by male poets. Similarly, it documents decisions about how to describe and prepare the data with an attentiveness toward the dissertation’s priorities to make contributions by women central to a refiguring of ekphrasis and pays particular attention to methods for preparing data for the most useful distant reading results.

Chapter five, “Review, Revise, Requery: Reading Ekphrasis as/in a Dynamic Social Network” considers what we learn when we use the tools of the digital humanities to read at a distance and to visualize hundreds of ekphrastic poems. I consider what opportunities exist for asking familiar questions about ekphrasis in new ways using an algorithm that creates an entirely different model based on poetic discourses. Studies of ekphrasis often refer to the methodological limitations of comparing words and images, and computational tools may increase the available methodological approaches for the

critic interested in ekphrasis while at the same time posing novel challenges. Using Topic models, I introduce the possibilities and perils of studying the highly figurative language of ekphrasis with new methodologies afforded to us through tools of the digital humanities. Acknowledging the challenges of such a study (limited data sets, complexity of semantic analysis of figurative text, irony of using “visualizations” of text to discuss textual representations of images), my networked readings of topic modeling results suggest a way ahead as we determine what questions we might be able to ask with topic models of poetic texts and the potential that asking these questions might have for expanding and enriching what we already know about the conventions of a genre.

As has been my argument throughout, the limited ekphrastic network of speaker-artwork-reader distorts our understanding of the plurality and complexity of the genre’s outcomes—specifically in ways that exclude works by female practitioners. In the final chapter I expand the scope of the network model by placing individual ekphrastic poems in conversation with hundreds of other ekphrastic poems in order to demonstrate the way in which the genre both draws from and is informed by other poetic discourses.

Chapter 1: Verbal-Visual Networks: Toward a Broader Theory of Ekphrasis

The only thing, funnily enough, that I never get tired of doing is looking at pictures.

-Gertrude Stein, from *Lectures in America*

Poets and storytellers
move into the vacancies
Edward Hopper left them.

-Lisel Mueller, “American Literature”

In a “culture of images” where the access to and transmission of film, television, and Web pages happens almost seamlessly, the poetic tradition of looking at, describing, and narrating painting or sculpture might appear quaint. Why would poets spend so much time writing about these subjects when cameras, computers, copiers, screens, and printers have made their reproduction almost effortless? And yet, in the face of these emerging technologies and the rapid reproduction of art by an increasingly technologically savvy public, some of the most celebrated poems of the twentieth and twenty-first centuries are ekphrastic. This study considers contemporary ekphrastic poetry—poems to, for, and about visual art—particularly by female poets in the U.S., in light of the present moment and theorizes a broader, more complex model of how the genre operates, accounting for inter-aesthetic relations historically labeled as outliers. Furthermore, it suggests a network model that attends to the multiple, simultaneous, and often dynamic relationships inherent in verbalizing the visual arts, historically understood as an act of transgression and a desire to subsume a representational “other.” Continuing to explore ekphrasis as a socially-inscribed encounter as critics have since the publication

of W.J.T Mitchell's seminal essay "Ekphrasis and the Other," the following chapters articulate ekphrasis as an elaborate network of relationships not only between poems, images, and readers, but also literary traditions, social structures, individual artists, related works of art, textual conditions, and historical events. Whether relishing or rejecting the "culture of the image," today's poets recognize that contemporary culture is saturated with ever-growing, ever-changing, constructed representations, and while many demonstrate a concern about how visual representation and display affect human interaction, social engagement, and thought, they do not necessarily see all images as a danger or a competitor. As a result, I posit a model for ekphrasis as a network of social discourses where the spectrum of possible relationships between poetry and images is broader and more complex than accounted for in previous theorizations.

In *Picture Theory*, Mitchell suggests that "we may find that the problem of the twenty-first century is the problem of the image" (2), and continues a project begun in *Iconology* (1986) in which he maps a history of representation that frequently attempts to draw neat divisions between the universe of "words" and "images"—a division meant to serve political and moral purposes. Mitchell begins *Picture Theory* by calling to mind the recently published National Endowment for the Humanities' (NEH) *Humanities in America: A Report to the President*, "alarming" statistics of lower reading rates, and the "cheery" prospect of using images to refashion what we have come to know as the "Culture Wars." That "cheerfulness" in retrospect turned into a moral war waged against the culture of the image only a few years later, as Lynne Cheney and others campaigned to systematically dismantle the NEH and the National Endowment for the Arts (NEA), which found itself embroiled in a debate over public funding for visual artists, and in

particular those who questioned the tenets of Christian faith.⁴ The 1995 campaign to defund NEH and NEA resulted in a dramatic cut in funding to those two agencies—proving the ethical and political charge of the image as a site of idolatrous desire to be alive and well.

The difficulty of claiming that pictures dominated culture in 1994 when *Picture Theory* was published is that doing so leaves little room to chart the exponential explosion in the culture of images since that point. Mitchell's claim is published just after *Mosaic*, the first Web browser to integrate images and text on the same Web page, was released to the public, an event that fuelled a period of rapid innovation in the World Wide Web.⁵ Moreover, the technological achievements of the last 15 years in cable and satellite television and the evolution of public internet access from telephone, dial-up service to high-speed fiber optic broadband, which delivers integrated texts, sounds, images, and video almost instantly to a plethora of devices, could not have been adequately predicted. Such a history doesn't even account for the more recent boom in mobile technology, wirelessly streaming video to screens that fit in the palm of one's hand. Websites, created by a few technically-savvy individuals in 1994, are considered old, static technology by today's standards of dynamic, user-driven content. With the advent of social network applications such as "Facebook," "Flickr," and "YouTube" (which will undoubtedly be outmoded technology by the time this dissertation reaches publication), almost anyone can produce and distribute images for a global audience and

⁴ For a chronology of the National Endowment of the Arts funding, see <http://www.nea.gov/about/Chronology/NEAChronWeb.pdf>. Scrolling to the fiscal years 1995-1998 will provide details as to the depth of the cuts which reduced the agency's federal funding for the arts by 39%.

⁵ Galore explains the significant impact the Mosaic browser had on the growth of the Web as the first browser to provide simultaneous display of images and text. For more on the impact of Mosaic's release on April 22, 1993, see Galore.

the results of doing so can be politically powerful. Consider the civil-uprisings that began on January 25, 2011 in Egypt where images of violence against peaceful protesters disseminated rapidly and widely via social networking software, creating consensus, coalition, and a powerful, international voice for change. The current culture of images is not always so democratic, however. Despite technological innovation and expansion, only a few media conglomerates dominate 24-hour image-dependent networks and cable news channels, a reminder that the power to distribute images is also economically driven. At the same time, public funding for endowments and agencies that provide public access to images, such as NEA, NEH, and the Corporation for Public Broadcasting (PBS), dwindles and once again faces partisan criticism and possible elimination under the auspices of budget shortfalls. In essence, the culture of images is as laden with political, ethical, and cultural pressures as ever, while the production, reproduction, and distribution of images continues to grow exponentially.

Contemporary Ekphrasis and Critical Tradition

Publication of contemporary ekphrastic verse mirrors the increasing ubiquity of images. Amid all of our anxieties about poetry as a muffled voice set against the onslaught of the culture of images, poetry about, to, and for visual art thrives and is not necessarily born out of antagonism. For instance, most of the 56 volumes of poetry honored with the National Book Award since its inception in 1950 include ekphrastic poems: *The Complete Poems of Marianne Moore* (1952); *The Shield of Achilles* (1956) by W.H. Auden; *Life Studies* (1960) by Robert Lowell; *The Complete Poems* by Elizabeth Bishop (1970); *Self-Portrait in a Convex Mirror* (1976) by John Ashbury; *The Need to Hold Still* (1982) by Liesl Mueller; *This Time: New and Selected Poems* (1998)

by Gerald Stern; *In the Next Galaxy* (2002) by Ruth Stone; *Lighthead* (2010) by Terrance Hayes. Increasingly common within the last 10 years are books of poetry published and widely reviewed in which the title poem is ekphrastic or ekphrasis represents a majority of the collection: Laura Moriarity's *Nude Memoir* (2000), Mark Doty's *Still Life with Oysters and Lemon: On Objects and Intimacy* (2001), Cole Swensen's *Try* (2004), Mary Jo Bang's *The Eye Like a Strange Balloon* (2004), Sharin Dolin's *Serious Pink* (2006), Grace Bauer's *Beholding Eye* (2006), Steve Gehrke's *Michelangelo's Seizure* (2007), Kathleen Rooney's *Live Nude Girl: My Life as an Object* (2010). Possibly because of its location at the intersection of the visual and verbal arts and potentially because the genre offers rich opportunities to talk about a twentieth and twenty-first century skepticism of the homogeneous natures of the linguistic and visual arts, ekphrastic poems are commonplace in anthologies of modern and contemporary poetry.

Aware as they are of a dangerous tendency to want to locate truth and authority in visual images, poets still write about images because they like looking at them. Gertrude Stein's declaration in *Lectures in America* remains true for many poets writing today: "The only thing, funnily enough, that I never get tired of doing is looking at pictures" (83). Looking at paintings, sculptures, photographs, collages, and the like is pleasurable, and the dilemma for many contemporary writers seems to be how to negotiate the pleasures of observation with the ethical awareness that the nature, construction, and representation of looking, particularly at images we know to be representational constructs themselves, can have social, political, and even moral consequences.

In the twentieth century, critical treatment and theorization of ekphrasis flourished and transformed, as well. Critical definitions of ekphrasis, though, are often at odds over

whether or not it qualifies as a genre, sub-genre, or literary mode. In fact, most critics comment on ekphrasis's classification offhandedly rather than explicitly; however, the way critics refer to ekphrasis often parallels contemporaneous literary debates over the nature of genre. In *The Sister Arts*, Jean Hagstrum revived the term "ekphrasis" to describe "pictorial" poems—that is to say those that create vivid images in "much the same way" that painting or drawing might. As a sub-category of iconic poetry, Hagstrum cites the origin of the Greek term *ekphrazein* as meaning "to speak out" or "to tell in full" as he repurposes the term to describe the "special quality of giving voice and language to the otherwise mute art object" (18). Hagstrum, however, increases the literary domain of ekphrasis from George Saintsbury's description of it in *The Earlier Renaissance* as a Greek rhetorician's "exercise in the verse *tour de force*" that elaborately describes a visual object—not necessarily visual art (27). While ekphrasis had been a rhetorical term related to *enargia* and used alternately as a means by which speakers produce in the audience's mind a vivid representation of a visual subject, in the twentieth and twenty-first centuries, the term became useful to those literary scholars exploring the intersections between visual art and poetry.

Often mirroring the century's changing critical landscape, definitions of ekphrasis present the genre first as "pictorial" poems, then metaphoric, self-actualized icons, then parallel visual and linguistic sign systems, and finally as "the verbal representation of visual representation" (Heffernan 2). For instance, in "The Ekphrastic Principle and the Still Moment of Poetry; or, *Laoköon* Revisited," Murray Krieger defines ekphrasis as "the imitation in literature of a work of plastic art," elevating ekphrasis to a universal, formal principle to which all modern poetry aspires (107). Krieger's concentration on the

spatial/temporal binary of images and words reflects similar ongoing scholarly conversations about genre as defined by its relationship to time and space. For example, Northrop Frye's rhetorically-purposed "Theory of Genres" (1957) describes literary genre in terms of the spatial-temporal relationship between author and reader. Kreiger's definition of ekphrasis is cast in such a way as to demonstrate the extraordinary achievements Modern poetry that strains against the temporal limits of the verbal art in an attempt to achieve spatial presence.

In *The Gazer's Spirit*, John Hollander references the Greek origins of the term ekphrasis but is primarily interested in sketching a brief history of poetic ekphrasis and in creating taxonomies of ekphrastic "modes" (notional, actual, emblematic, unassessable actual ekphrasis). He elucidates exigencies for a variety of ekphrastic situations, explaining the purposes of writing about actual paintings or decaying monuments or how imagined works of art differ from one another, linking the form of the work of visual art to the formal and literary tropes in the corresponding ekphrastic poem. *The Gazer's Spirit* compiles important, canonical examples of the genre over a sweeping historical context, demonstrating the genre's sweeping tradition. Though the attempt to organize ekphrasis by types of responses to visual art appears overtly Neoclassical at first, Hollander ends his introduction with a consideration of the rhetorical agenda of ekphrasis:

All ekphrastic writing, whether in verse or prose, must exploit deeper rhetorical design as well as respond to a number of more obvious considerations. These would include, for example, the matter of scale: the scale of writing and of parts of the written text as well as of reading the image. Then, too, there is the identification—and thereby, often, the construction—of parts or elements of the image being addressed: selection among these, and descriptions of relative primacy or ancillary quality, of

relative prominence and importance. There is the emergence of some explanatory or interpretive agenda, perhaps only after an initial or conventional one has been worked through. (90)

Issues of primacy, interpretation, and exploration, in other words, are frequently ideological and are at play in a poet's representation of the visual otherness of the plastic arts, making the ekphrastic situation and resulting poem inherently ideological. Interestingly, Hollander's consideration of ekphrasis is reluctant to draw neat distinctions between ekphrasis in prose and verse; however, subsequent critical definitions of ekphrasis delineate poetic ekphrasis more clearly from other forms of verbal representation of visual representation.

James A. W. Heffernan and W. J. T. Mitchell dispute Krieger's emphasis on imitation, arguing instead for a narrower interpretation—the verbal representation of visual representation—but they differ in their attitudes to whether or not ekphrasis is a literary mode or genre. Both Heffernan and Mitchell agree that comparative analyses between the two arts has reached the limits of its effectiveness and instead consciously redirect critical inquiry toward understanding the social, ethical, and moral stakes of confronting the silent, spatial, and frequently feminine visual image in language, considered to be active, temporal, and masculine. In *Museum of Words: The Poetics of Ekphrasis from Homer to Ashbery*, for example, Heffernan defines ekphrasis as “a literary mode” that revolves around the gendered antagonism between word and image.

In a footnote, Heffernan explains:

I call it a mode rather than a genre (as Kreiger does) because it lacks the distinguishing formal features we find in such traditional genres as epic, dramatic, and lyric. Some of the participants in the 1986 Columbia colloquium on ekphrasis claimed that ekphrasis deserves no special literary status at all because it can appear within works of various genres

(such as epic) and because no formal or syntactic features distinguish it from any other kind of literature. But the same objections could be made about elegy. (194 n20)

Heffernan's insistence on "formal features" reflects his scholarly orientation toward British Romanticism in which the status of literary genre undergoes a transformation. The measure of poets' artistic genius during British Romanticism, and in much of the subsequent criticism about it, was often measured by an individual poet's willingness and ability to outstrip generic convention. Such is the evaluative measure of German Romanticists such as Friedrich Schlegel, who in his denial of genre as an adequate means for assessing poetry simultaneously renewed perceptions of genre as prescriptive literary classifications, a point which Jacques Derrida capitalizes upon in the "Law of Genre," when he writes:

As soon as the word "genre" is sounded, as soon as it is heard, as soon as one attempts to conceive it, a limit is drawn. And when a limit is established, norms and interdictions are not far behind. (56)

As Anis Bawarshi and Mary Jo Reiff point out in *Genre: An Introduction to History, Theory, Research, and Pedagogy*, Derrida's focus on texts' "participation" in genre as opposed to "belonging" paves the way for understanding genre as a textual performance. Texts resist neat categorization, and through their reproduction and reconstitution of genre conventions, texts self-reflexively comment on their own ideological agenda. Classifying ekphrasis as a "literary mode" allows Heffernan to craft the ekphrastic tradition as a narrative of literary social history, from the classical epic to the modern lyric. Such a move would be less feasible if ekphrasis were considered to be a genre in the Romantic or even Post-Romantic sense because poets under the duress of generic convention strain against such restrictions. For Heffernan, the social dynamic of

ekphrasis is historically persistent, and defining ekphrasis as a mode avoids having to contend with ways in which poets break from or resist its conventions. As a literary mode, Heffernan is better positioned to make his more overarching claim “that the history of literature can be written as a history of its perennially conflicted response to visual art” (2).

W. J. T. Mitchell’s important essay “Ekphrasis and the Other” situates ekphrasis at the nexus of the sister arts’ tradition, which in his previous study, *Iconology*, he proves to be rife with political and cultural struggles for dominance between competing media forms. By considering the social actions of ekphrasis as setting in motion relationships between codified words and images, Mitchell releases critical conversation about ekphrasis from the limitations of metaphorical and formal comparisons between the two arts. He defines ekphrasis as “a curiosity: it is the name of a minor and rather obscure literary genre (poems which describe works of visual art) and of a more general topic (the verbal representation of visual representation)” (152).⁶ By dividing ekphrasis as literary genre from its non-literary and rhetorical use, Mitchell highlights one of the critical moves in literary studies that distinguish Structuralist attitudes toward genre: literary genres operate within the domain of a constructed, *literary* reality. Bawarshi and Reiff explain that “Structuralist approaches [to genre] are more concerned with how socio-historically localized genres shape specific literary actions, identifications, and representations” (18). Mitchell’s theorization of the ekphrastic situation within the context of a triangular relationship between the speaker/poet, artwork, and reader places

⁶ Similarly, Grant Scott characterizes ekphrasis as “both a poetic device and a literary genre.” See “The Rhetoric of Dilation: Ekphrasis and Ideology,” *Word & Image* 7, no. 4 (October-December 1991): 301-10.

the ekphrastic genre in its own literary universe, which can then be understood a site of textual production and social contest.

The term “ekphrastic situation,” as Mitchell presents it, resonates with the classic rhetorical Greek origin of the term.⁷ Composed of context, author, text, and audience, the rhetorical situation is a flexible means for fashioning effective arguments that respond to the needs, interests, and schema of an audience whom the speaker wishes to persuade. Mitchell repurposes the rhetorical situation, constructing a literary model to show how ekphrasis operates. By articulating an ekphrastic “triangle” that situates the poet/speaker, the art object, and the audience in relationship to one another, Mitchell establishes a responsive exchange between three socially codified subjectivities. Drawing from a tradition of gendered discourse that allies a speaking subject with maleness and a silent art object with femaleness, Mitchell positions the poet as the active, organizing voice negotiating the representation of a silent, spatial image to a silent, complicit reader. While the invocation of a triangle implies a reciprocal relationship between the three parties, Mitchell explains that the driving force of the ekphrastic situation is derived from the disjunction between the artwork and the reader, who both depend upon the poet/speaker in order to “see” one another. A visual representation of Mitchell’s ekphrastic model can be seen in Figure 1.

⁷ In Greek, “ekphrasis” means “to speak out.” A rhetorical definition of the term can be found in Lanham, Richard. *A Handlist of Rhetorical Terms*. 2nd Ed. Berkley and Los Angeles: University of California Press, 1968. The term was originally used to describe an exercise in the *Progymnasmata* to create lively and engaging descriptions of commonplace objects, people, and events.

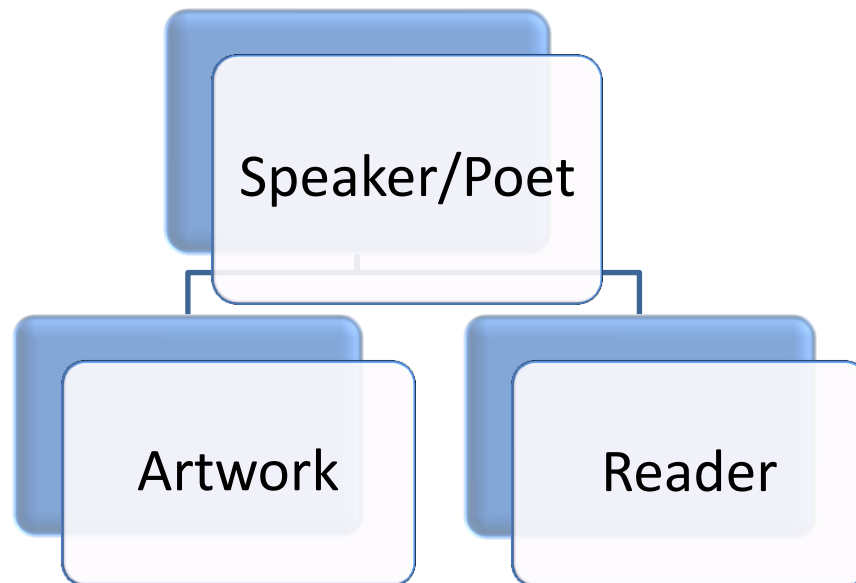


Figure 1: Mitchell's Ekphrastic Triangle represents the speaker/poet as the organizing voice that presents an obscured or absent work of visual art through language to a complicit audience.

Mitchell focuses on the way in which the literary genre of ekphrasis structures interpretation and production. The ekphrastic situation of a poet/speaker responding to a work by another artist sets the stage for a contest between visual and verbal representation such that identification and representation inform and reproduce a literary reality. For example, when Mitchell defines the social situation of ekphrasis as a triangular relationship (a poet/speaker gazes upon an object and relates that engagement to a reader/audience), he describes a literary universe of social action in which language codifies ideological struggles between verbal and visual media. In other words, the poetic ekphrastic situation becomes a literary domain in which anxieties about “otherness” drives the poem’s social action.

Thus, the boundaries of ekphrasis as a literary reality are drawn in such a way that limits the number of possible social relationships between the three parties: speaker/poet, artwork, and reader. Consequently, Mitchell theorizes a linear narrative of fascination that he sees unfolding in the ekphrastic situation. Verbal engagements with the visual arts begin with an assumption that rendering visual art in language would be an impossible project, an assumption Mitchell calls “indifference.” However, describing or narrating the visual representation ignites an ekphrastic “hope” that words might just achieve the immediacy that the visual image demands. The impending and potentially more alluring presence of the image, though, is met with equally strong resistance, an “ekphrastic fear,” that anxiously resists the realization of the image through language because its presence threatens the authority of language. In other words, the illusion of immediacy and presence of spatial representation—the possibility that images might make their meaning known all in an instant—presents a threat to the authority of language. Therefore, according to Mitchell, the ekphrastic situation is destined to play out a linear narrative of historically-recognized competition between rival arts called the *paragone*, a term used by Leonardo da Vinci to assert painting’s supremacy over poetry because of its ability to have an “immediate effect.”⁸

⁸ The term “paragone” is used to describe the competition between painters and poets and their respective modes of representation. As Jean Hagstrum notes in *The Sister Arts*, the term is understood better as a sociological phenomenon than philosophical. It is most apparent during the Renaissance, when the competition between poet and painter resulted in a superior social and educational status for painters than they had experienced since antiquity, a position that threatened the relative status of the Renaissance poet. The term is first used in the criticism of Leonardo da Vinci. See Hagstrum, 66.

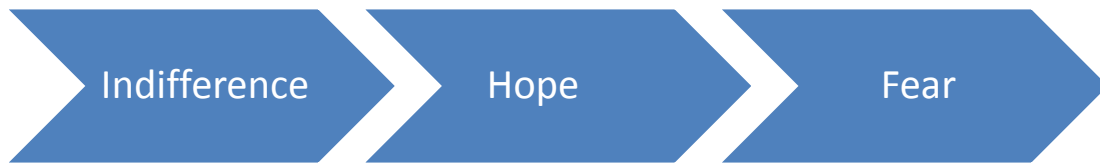


Figure 2: Mitchell's ekphrastic narrative constructs a literary reality in which poetry begins by regarding the visual image with indifference, which leads to an ecstatic hope that the image can be realized in language, followed by the fear that the presence of the image threatens the authority of verbal representation.

Mitchell offers a caveat to his narrative by writing that the paragonal model does not account for “counter-voices and resistances” in poems such as such as Williams’s “Portrait of a Lady,” acknowledging that competition may not be the only possible relationship between the arts. He goes on to explain that his essay does not begin to address variance between kinds of visual representation (“metal engravings and inlays on a shield; paintings on an urn; a rococo pastoral by Fragonard; and anonymous Renaissance oil painting; a plain, unadorned jar, ...photography, maps, still-life, or portraiture”) and concludes by saying “like the typical ekphrastic poem, [this explanation of ekphrasis] will have to be understood as a fragment or miniature” (181).

Heffernan takes the literary reality of the ekphrastic situation as a paragonal competition between rival arts even further than Mitchell, claiming that it is one of the fundamental principles of the “literary mode.” Furthermore, Heffernan extends Mitchell’s claims about the gendered, social dynamic between words and images, insisting that the contest between “verbal representations of visual representations” is a fundamental principle for all ekphrasis (2). Heffernan explains his interest in ekphrasis thusly:

First, because it evokes the power of the silent image even as it subjects that power to the rival authority of language, it is intensely paragonal.

Second the contest it stages is often powerfully gendered: the expression of a duel between male and female gazes, the voice of male speech striving to control a female image that is both alluring and threatening, of male narrative striving to overcome the fixating impact of beauty poised in space. Third, the relation between the arts in an ekphrastic work of literature is not impressionistic—not something conjured up by an act of juxtaposition and founded on a nebulous “sense” of affinity. On the contrary, it is tangible and manifest, demonstrably declared by the very nature of ekphrastic representation. (1)

When his genealogy turns to twentieth-century poetry, Heffernan argues that these ekphrastic principles are just as evident in the twentieth century as they are in Homer’s linguistic fashioning of Achilles’ shield in the *Illiad*. However, Heffernan’s insistence on ekphrasis as a literary reproduction of gendered contest between rival arts that is historically persistent leads him to inaccurate and occasionally misleading representations of modern and postmodern poems. For example, when he turns briefly to Adrienne Rich’s poem “Mourning Picture,” Heffernan’s insistence on the primacy of the paragone competition between visual and verbal media strips the poem of its more subtle and interesting exploration of elegy, memory, and gender. Heffernan writes that “Mourning Picture” is:

an exercise in paragonal prosopopeia,⁹ spoken posthumously by a girl whose language strives to outdo the painting of her black-clad parents sitting with the remembered image of their child outside their clapboard house on a hill overlooking western Massachusetts. Her language strives to recreate “each shaft of grass” in words that make us feel “its rasp on her fingers” and see “the map of every lilac leaf / or the net of veins on my father’s grief-tranced hand. (136-7)

Characterizing Rich’s poem as an exercise in the superiority of linguistic representation over the pictorial eschews the more interesting questions the poem asks about how to

⁹ A Greek term describing the act of speaking for or as someone or something else that either cannot or will not speak for itself.

represent loss and mourning without at the same time fixing the object of loss in the present moment—a shared challenge for both verbal and visual elegies.

Certainly, the language of interarts competition comes into play in the poem, but the nature of that rivalry is not between the aesthetic superiority of one medium in favor of another. Instead, Rich uses the discourse of sister arts rivalry to critique the patriarchal construction of Edwin Romanzo Elmer's familial painting and to call into question the ethical dilemmas at stake in elegy—visual or verbal. Rich critiques Elmer not for the painting's inability to render grief and mourning, but rather points out the way in which Effie's memorial in the painting reifies and fixates familial gender-roles. Elizabeth Loizeaux makes this point clear in her chapter "Women Looking: The Feminist Ekphrasis of Marianne Moore and Adrienne Rich" from *Twentieth Century Poetry and the Visual*

Arts:

In the end, "Mourning Picture" rejects Elmer's elegiac relation to the past. A family drama like many mid-century poems about women, it is an anti-elegy that refuses to mourn the loss of a family founded on the gender relations implied in the picture. The daughter will not, the voice asserts, die off like the mother, nor will she tell the lie about memory that her father's memorial embodies: "Should I make you, world, again... and leave *this* out?" she asks. Fully awakened, she declares her old life past: "I am Effie, you were my dream." (106)

The speaker's contention may be that the artist's medium is an insufficient memorial, but as Loizeaux explains, pointing to those aesthetic inadequacies comes in service of a larger and more pressing project, which is to say to revise the gendered constructions of Elmer's pictorial elegy. Asserting her superiority as a speaker with agency, Effie's voice confronts the artist's subject, which is an altogether different project than saying that poetry is a more adequate form of elegy than painting, as Heffernan suggests she does.

The fact that important questions exist about the poem, ones that are elided by focusing on the speaker's desire for representational dominance, demonstrates the need for an alternative model to discuss and to interpret adequately those poems like "Mourning Picture" that do not fit the strictly paragonal model.

In her introduction to *Twentieth Century Poetry and the Visual Arts*, Loizeaux explains that

[i]t has been difficult to move beyond the appealing drama of *paragone*, with its plot of conflict and uncertain victory. But under its lens every ekphrastic relationship looks like linguistic appropriation, every gesture of friendship like cooption, every expression of admiration a declaration of envy by the word for the unobtainable power of the image. (15)

Specifically, Loizeaux references Gertrude Stein's use of the term "familiarity," Ntozake Shange's comparison to "friendly conversations," and Cole Swenson's desire to "spend time with" art as examples of how contemporary poets have resisted the assumption that competition between the arts is a fundamental principle of ekphrasis. "Otherness is not always 'rival,'" Loizeaux writes, "even when it is 'alien'" (17).

Loizeaux's significant reconsideration of ekphrasis places it within a wider social and literary context than that of Mitchell and Heffernan. Insisting that "the very structure of ekphrasis encourages poems that emphasize the dynamic interplay of the perceiving, thinking, feeling poet, the work of art, and the audience," Loizeaux reminds us that ekphrasis extends beyond literary realities because of its relationship to other forms of writing, as well as to social, and historical moments (16). She further remarks that "The poet's response to a work of art is born of/into a context alive with other responses"—a point she believes resonates in the observations of Mikhail Bakhtin regarding discourse in the novel: "...between the word and its object, between the word and the speaking

subject, there exists an elastic environment of other, alien words about the same object ...” (17). Each chapter of *Twentieth Century Poetry and the Visual Arts* situates ekphrastic poems within literary and extra-literary contexts. As a result, Loizeaux demonstrates how the rising influence of museum culture, contemporary feminisms, conversations between poets, and collaborations between poets and visual artists inform and are informed by particular ekphrastic poems, including examples by W.B. Yeats, Marianne Moore, Adrienne Rich, Rita Dove, and Ted Hughes. Pairing close-readings of poems with corresponding extra-literary social contexts, Loizeaux reconstitutes the literary realities of individual ekphrastic poems as dynamic responses to a wider range of available discourses and moves the conversation of ekphrasis beyond the limits of the paragone narrative.

Untethering ekphrasis from its literary-social reality, Loizeaux’s approach, I would argue, is suggestive of cultural studies revisions to theories of genre, where the divisions between literary and non-literary discourse have been called into question. As Bawarshi and Reiff explain:

Cultural Studies genre approaches seek to examine the dynamic relationship between genres, literary texts, and socio-culture—in particular, the way genres organize, generate, normalize, and help reproduce literary and non-literary social actions in dynamic, ongoing, culturally defined and defining ways....An important aspect of Cultural Studies approaches to genre is the way they define and use genres to examine dynamic relations between literary texts and historically situated social practices and structures. (23-4)

Ekphrastic poems draw on non-literary genres such as art historical writing, museum curation, and scientific description, and by doing so demonstrate what Loizeaux calls the dynamic interplay between the poet, the work of art, and the audience. Combining

multiple discourses extends the social action of the ekphrastic poem and in turn shapes the poet's engagement with the visual object. For example, when Loizeaux considers Rita Dove's "Agosta the Winged Man and the Black Dove" in the context of a contemporary historical moment when the interest in and number of African American Museums expanded rapidly. Loizeaux demonstrates through close reading how the literary reality of the ekphrastic poem responds multiply to historical, literary, and social contexts of museum culture while simultaneously contending with the framed, racialized dynamics of the work of art itself. This methodological approach is significant because Loizeaux complicates Mitchell and Heffernan's literary ekphrastic narrative—that all ekphrasis acts upon the "sibling" and often gendered contest between the arts—by suggesting that a poem's use of and commentary on non-literary discourses may complicate the narrowness of that assumption. In light of Loizeaux's contextualized reading, the social action of the ekphrastic poem extends beyond reifying word/image contests between poets and painters by offering up ways in which ekphrasis calls attention to the complex social issues of display, African American history, and museum practices.

Ekphrasis as a Genre

Building on Loizeaux's characterization of ekphrasis as born of and into social contexts and as dynamically and discursively responsive to those social contexts, this study begins by insisting on the definition of ekphrasis as a *genre* in the sense that we have come to understand the term in cultural studies—a recognizable response to social context that borrows from and puts to new use other literary and non-literary discourses. Foregrounding the issue of genre privileges ekphrastic dialogism and ekphrasis's

appropriation and reconstitution of other literary genres, such as narrative, dramatic, and lyric poetry. It also acknowledges the influence of non-literary genres, such as art historical criticism, cartography, scientific description, and museum curation. Further, reasserting ekphrasis as a genre underscores the internal and social contexts that shape and are shaped by the poem's engagement with another media.

In *Ideology of Genre*, Thomas Beebee describes the appropriation of other genres in the novel as changing the “use-value” of one genre in the context of another and in doing so calls into question the underlying ideologies of those other genres. When we say that ekphrasis is poetry *to, for, and about* visual art, we privilege the way in which ekphrasis explicitly assimilates the discourses of narrative, lyric description, and dramatic monologue into the ekphrastic situation. For example, in the case of Adrienne Rich's poem, “Mourning Picture,” Effie speaks directly to her father, placing the non-literary genre of oral utterance into another, literary, context—a posthumous, painted representation of a girl addressing her absent father. In this case, the narrator and the reader both become “overhearers” of the conversation and the direct recipients of her speech, considering that her father is also absent and the painting serves as his proxy. Within the ekphrastic situation, speech genre takes on new use-value, as it is disconnected from its original context. Rather than a direct exchange between two living people, in “Mourning Picture,” the painted, silenced, and posthumous girl responds to her absent and also silent father's assumption that his daughter can be made present again in memory—and not just made present, but that he can maintain a gender-role status quo within the family unit at the same time. Therefore, what was once a “primary genre” (as Bakhtin would describe it), becomes part of a secondary genre (the ekphrastic poem) and

is put to new social use—a feminist critique of the painted family’s implied gender roles. While we expect speech to pass between two living beings, Rich’s use of prosopopoeia uses the understood social context of speech to underscore the absence of the speaker who if alive might not have the same freedom to speak freely.

What distinguishes ekphrasis from the narrative, lyric, or dramatic poem is the situation of a poet responding to an image or work of plastic art that is often, though not always, the creation of another artist, an engagement which is then related to another participant, the reader, whose relationship to the work of art may be direct (as in the case of poems published alongside reproductions of the work of art) or indirect (unassessible or visually obscured by distance or erasure). Considering genre in terms of its response to social purpose and context rather than by the identification of “formal features” makes sense in terms of how we understand ekphrasis to operate, recalling that it is precisely the lack of “formal features” that causes Heffernan to call it a “mode” rather than a genre. As Beebee points out, “generic differences are grounded in the use-value of a discourse rather than in its content, formal features, or its rules of production” (7). Genre, as a consequence of social context, is the means by which discourse achieves purpose, and by understanding genre as verbalized or written responses to socially-recognized and distinct situations the way Bakhtin and Beebee do, ekphrasis is a genre that cannot be classified as a type of narration, description, or dramatic monologue. However, ekphrasis can and invariably must assimilate those literary genres, as well as non-literary genres.¹⁰ Granting that genre puts discourse to recognized social use and that one genre’s appropriation of another reframes the appropriated genre’s “use value” realigns our

¹⁰ Beebee explains, “genre is the precondition for the creation and the reading of texts” (250).

understanding of the dynamism and responsiveness of the ekphrastic situation with recent moves to reintegrate theorizations of literary and non-literary genres.

Ekphrasis as a “context in which a text and its users function, relate to other genres and texts, and attain cultural value” expands the range of possible “countervoices and resistances” that Mitchell gestures to at the end of “Ekphrasis and the Other.”

Appropriating other literary and non-literary genres in ekphrasis occasions a double-commentary from within the literary reality of the ekphrastic poem as well as outside of it by reshaping the social context and ideological assumptions of the genre being absorbed. For example, resituating the discourses of museum curation within the new context of an ekphrastic poem calls into question the social contexts that shape the discourses of museum curation in the first place. Such a move creates a relationship between the literary reality of the ekphrastic poem and the social pressures that surround it. In this sense, ekphrasis as a genre presupposes an internal and external connectedness.

I invoke the similar histories of genre theory and critical engagements with ekphrasis not as a means to simply point to the banal coincidence that how we understand literary tradition is reflected in how we trace ekphrastic tradition, but instead to demonstrate how realigning ekphrasis with genre theory offers opportunities to expand our consideration of the ways in which ekphrasis operates. Approaching ekphrasis as a genre, a dynamic system of relationships between texts and contexts, expands the range of possible stances between poetry and the visual arts and presents opportunities to explore relationships other than the alluring narrative of interarts competition. I am not the first person to point to the limitations of a linearly constructed ekphrastic situation. Many scholars, especially recently, have cast suspicion on the idea that all texts are

doomed to the violent ravishing of silent, often feminized images by the speaking, and often masculinized voice in poetry. As I have already noted, Mitchell qualifies his own model of the ekphrastic situation—which I am calling a linear—to account for “counter-voices and resistances.” Mitchell’s essay concludes that his will “have to be understood as a fragment or miniature” (181). The question becomes, then, a fragment or miniature of what? Considering ekphrasis from the perspective of genre invites increased attention to what those “counter-voices” and “resistances” might look like.

Despite a general recognition that the paragonal mode does not sufficiently account for many ekphrastic poems, we have been uncertain about how to move beyond it. As we say that the model is insufficient or that it “doesn’t account for the full range of interactions” between words and images, studies seem to return to the possibility that violence is inherent in the genre.

Stephen Cheeke’s book *Writing for Art: The Aesthetics of Ekphrasis* considers ekphrastic activity in terms of aesthetic reciprocity. Identifying the usual ways of examining ekphrasis—as sisters or through alterity—Cheeke suggests that

Sometimes the encounter with alterity takes on special charge when it is not merely an occasion for the discovery of difference, but a place of *relation* and therefore of the possibility of exchange. As such, it may be the model for a more positive evaluation of aesthetic experience in terms of recognition or assent. (6)

Beginning his assertion with Foucault’s statement, “The relation of language to painting is an infinite relation,” Cheeke’s study weaves together an ekphrastic tradition through artfully-worded, close readings of the usual suspects. For Cheeke ekphrasis acts as a verbal token or gift to the visual works of art they represent.

Susan Harrow proposes a “New Ekphrasis” in her introduction to a special issue of *French Studies: A Quarterly Review* that features five articles about writers since 1950 who find companionable approaches to visual arts. Considering work by Elaine Scarry in *Dreaming by the Book*, Harrow suggests that a “new ekphrastic poetics” eschews resemblance as the primary purpose for contemporary ekphrastic projects.

Ekphrastic practice in the writerly text is a process of confronting abstract, nonfigurative, or counter-mimetic art. By so often occluding or transforming its referent, modern ekphrasis slips free of “painting-in-words” by erasing the signifying premises of traditional ekphrasis, writerly texts embrace the impossible wording of the image *qua* image and reveal the creative potential to which that impasse give rise. (263-4)

The articles in this issue, she explains, do not see poetry (and some prose) as rivals with visual art, but as reciprocal visual and textual cultures. What Harrow writes of French ekphrasis is in many ways true of ekphrasis in English over the twentieth to twenty-first centuries, as well. An active part of the centuries’ experimentation with lyric and narrative forms, ekphrasis in contemporary practice explores the cultural and intellectual concerns of ekphrastic traditions through reciprocal dialogic experiments that engage with issues of alterity through constructions of corporeality and performance.

The difficulty in moving theories of ekphrasis forward to accommodate the genre’s flexibility and diversity has been finding a model that can accommodate the variance between relationships without eliding the careful balance each draws between kinship and rivalry, discourse and spatial fixation. Many studies discuss particular poets’ ekphrastic interventions and describe how they work against “traditional” ekphrastic paradigms, but when we use one poet’s approach to understand another poet’s work, that

too becomes inadequate. In other words, if each time we return to examples of ekphrasis to explain how it does not fit our existing model, perhaps we need a new model.

Considering ekphrasis to be a genre in light of work such as Bakhtin and Beebee and with an awareness of contemporary genre theory where scholars imagine the value of reintegrating literary and non-literary genre studies, the following study builds upon existing theories by suggesting new methodologies for the study of ekphrasis that recognize its unique situation of the genre as something quite different from the genres of narrative or lyric or dramatic, but as one that, like the novel, depends on the mingling of them, a participation with and performance of other genres in order to change their “use-value.” Ekphrasis evolves from a social context in which a speaker engages with a work of art and in doing so creates a conversation that is at least tripartite, but generally speaking larger than that. Ekphrasis is never just between speakers and readers—even if the poet wants it to be. Ekphrasis always draws from, participates in, and puts to new social use other genres. Therefore, ekphrasis comments doubly on the literary reality and on the social and material features of its construction (context). We know that ekphrasis often uses a gendered, paragonal model, but need better methods to help uncover the “other ways” and other modes that ekphrasis operates in. I will propose ways in which advances in digital technology can present more nuanced methods that better account for the range, polyvocality, and even conflicting attitudes between the verbal and visual in ekphrasis. The following study contributes to the scholarship of ekphrasis by presenting new, digitally-enabled methodologies for understanding the literary and non-literary tradition of ekphrasis that also offer opportunities to reframe that tradition such that women's contributions are not additional or other to it, but constituent of and integral to

its formation. Furthermore, my dissertation takes up Heffernan and Mitchell's claims about the genre's competitive nature, arguing that many ekphrastic poems, particularly those by women, make use of the double-commentary of ekphrasis to call attention to ethical and social practices of looking, displaying, and taking pleasure in visual art and images.

Ekphrasis as a Network

Beginning with the assumption that ekphrastic poems participate in a genre that includes at least three participants (poet/speaker, artwork, and reader) and that places these three subjectivities in conversation with the literary reality of the poem and an outside social context, I turn to networks and network analysis to help map the internal and external connections of an ekphrastic poem. A model of contemporary ekphrasis would require enough flexibility to accommodate both "friendship" and "rivalry" as possible relations between poetry and visual art, often at the same time. It would have to evolve organically from the text allowing for multiple subjectivities positioned in dynamic relationship to one another and assume a modern speaker and reader's instant access to a simultaneous, politically and ethically charged, culture of images in which the electronic reproduction and distribution of images is always already present.

Additionally, it would need to acknowledge the existence of an "ekphrastic tradition" constructed of a canon of poems whose authors are most frequently male and most often occupy a masculine gaze, while at the same time present opportunities for the inclusion of poems that operate outside of that tradition and not simply because they deliberately work against it. Finally, a new model would need to account for the literary and non-literary genres upon which ekphrasis draws and in which ekphrasis participates. For

example, as we look toward the social and ethical exchange of ekphrasis within a wider social and literary context, a new model would need to provide a means by which we can account for the tradition of ekphrasis within the wider tradition of other poetic genres. The new model needs to be scalable—able to attend to the small, subtle, and ambiguous discursive exchanges within a single poem as well as the much broader contest of those discourses as participating within a broader literary tradition. Without these, any new model of ekphrasis would also become a “miniature.”

Social network theory, born out of the social and behavioral sciences in the 1950s and 60s, offers a good starting place for such a model. As a method for modeling data, network models work well when what we wish to uncover are patterns of behavior or relationships between “actors.” As Stanley Wasserman and Katherine Faust explain in *Social Network Analysis: Methods and Applications*, “The social network perspective encompasses theories, models, and applications that are expressed in terms of relational concepts or processes. That is, relations defined by linkages among units are a fundamental component of network theories” (4). Importantly, the four guiding principles of network modeling and analysis complement what we know of contemporary ekphrasis.

- Actors and their actions are viewed as interdependent rather than independent, autonomous units¹¹
- Relational ties (linkages) between actors are channels for transfer or “flow” of resources (either material or non-material)

¹¹ True, some ekphrastic poems demonstrate a poet’s desire to construct an autonomous work of art and work to create a hermetically sealed formal poem in order to assert its independence; however, I am basing my definition of ekphrasis as necessarily participating in and making use of other genres, engaging with another work of art, and participating in a tripartite exchange. Despite attempts to be autonomous, the ekphrastic poem is necessarily a relational genre, and my hope is that a network model will account both for the author’s intended autonomy *at the same* time as its unintended connectedness.

- Network models focusing on individuals view the network structural environment as providing opportunities for or constraints on individual action
- Network models conceptualize structure (social, economic, political, and so forth) as lasting patterns of relations among actors.
(4)

In modeling and analyzing networks, it is the relationships that determine the nature and flow of the entities of which it is comprised. What social network modeling offers the study of ekphrasis is a methodology for visualizing increasingly complex, extrinsically informed subjectivities in which more than three actors (speaker, artwork, reader) participate. In such a model, the nature of the relationships between each entity shapes the interpretation of the entire network, and multiple, various, and interdependent relationships between entities can exist simultaneously. The key to network theories is that they require relationships from which concepts, patterns, and processes can be discerned. However, models of networked data are not prescriptive; rather the shape, form, and patterns of linkages between nodes in the network shape organically. For example, as Wasserman and Faust point out, “Rather than focusing on attributes of autonomous individual units, the associations among these attributes, or the usefulness of one or more attribute for predicting the level of another attribute, the social network perspective views characteristics of the social units as arising out of structural or relational processes or focuses on properties of the relational systems themselves” (10). Therefore, relationships between entities in a network are more significant than any individual entity by itself. Network analysis provides a means for reading relationships as coexistent and interdependent without depending on singular attributes of any particular node on the network.

As graphical representations of relationships, networks rely on a language that may at first appear unfamiliar to a literary scholar but that offer another possible way to understand the language of ekphrasis that can open up our methods for articulating how the genre operates. Network graphs are a spatial representation of relationships between “nodes” and “edges.” Nodes, which are alternatively called “actors” or “entities,” are the visual representation (circles, triangles, squares, small images) of a single person, group, event, idea, or word that shares a relationship with another similarly defined person, group, event, idea, or word. Edges, also referred to as “ties,” are the graphic representation of the relationship shared between nodes, often in the form of solid or dotted lines. The “edges” between nodes can be changed to reflect particular attributes of the relationship between the two entities. For example, the ekphrastic triangle that Mitchell suggests can be visually represented in a network diagram akin to Figure 3. The poet/speaker (which are often used interchangeably), the artwork, and the reader are form three separate nodes in the network. Each node is represented by a blue, rectangular box and labeled with the name of the node. Among the three nodes are two edges, which are represented by solid blue lines. The lines have been further improved upon to represent the direction of exchange between each of the three nodes. The relationship between the poet/speaker and the artwork is a two-way exchange in the sense that the poet looks at the artwork, which produces a mute, visual response. The poet/speaker, then, conveys that exchange to the reader. As a result, the edge between the poet/speaker and artwork has arrows at each side, indicating an implied correspondence, while the edge between the poet/speaker and the reader represents a single direction, as there is no assumed feedback from the reader to the poet/speaker.

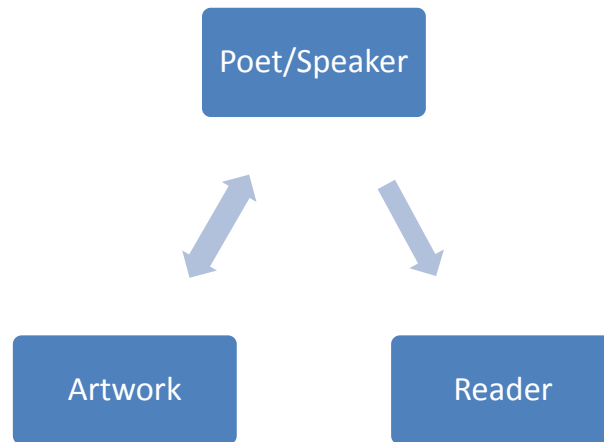


Figure 3: Ekphrastic triangle visually represented as a social network includes three nodes (Poet/Speaker, Artwork, and Reader) and two edges (a two-way relationship between the Poet/Speaker and the Artwork and an outward relationship from the Poet/Speaker to the Reader).

The three nodes in Mitchell’s model—poet/speaker, artwork, and reader—are not necessarily all connected. An ekphrastic poem may represent the poet/speaker’s exchange with an artwork that is inaccessible to the reader except through the poet’s verbal rendering; however, one might imagine how this diagram would change were the poem presented in an anthology where images of the artwork are also reproduced, in which case there would also be a bi-directional line between the artwork and the reader. The directions of the edges between each node are significant because they represent responsiveness between one node and another. In Figure 3, the lines between speaker and artwork reflect inward and outward motion. The poet looks at the image, and the image’s silent response resonates within the poet’s representation of it. The reader’s connection to the ekphrastic network happens only through the reception of language, but cannot respond in a way that changes the poet, unless it creates something new. In the language of social networking, the term “walks” can be used to explain how to move interpretively through the network. For example, in Figure 3, the exchange “walks” from

poet/speaker, to artwork, back to poet/speaker, and then to the reader. This model demonstrates several important elements of what we have come to understand as “traditional” ekphrasis. There is a hierarchy inherent in the act of writing that positions the poet as the most heavily weighted and most “connected” central node.¹² Centrality in social networks is determined by “degrees of relatedness,” which is to say the number of edges in and out of a single node within the network. In a network in which the direction of the relationships between nodes is visually mapped through directional edges, outwardly directed edges represent the influence one node has on another. Nodes with higher numbers of outwardly directed edges (“outdegrees”) are considered to be more influential or “weighted” more heavily in the network than those nodes that primarily have inwardly directed edges (also called “indegrees”). In the ekphrastic triad drawn in Figure 3, each node has one indegree; however, the speaker has two outdegrees compared with one for the artwork and none for the reader. In this sense, using a directed network graph captures how the structure of the relationship between poet/speaker, artwork, and reader lends itself to the paragone competition between the arts that Mitchell and Heffernan describe. The image is subjected to the authority of language because in this model of ekphrasis the relationship between the artwork and the reader is dependent upon the poet/speaker’s exchange with the reader through language.

When represented visually, the tripartite ekphrastic triangle that Mitchell suggests demonstrates the limitations of considering ekphrasis within a solely literary reality. For instance, we know not all poets are the “speaker” in the poem. While the network

¹² It is worth noting that one of the limitations to the triangle is the confusion between poet and speaker. In Mitchell’s model, these are treated similarly; however, we know that speakers in poems are often characters themselves. We lose this distinction as we conflate the two, reducing the complexity of the ekphrastic dialogue from the start.

diagram in Figure 3 represents the situation of a poet producing a poem in his or her own voice; in the case where the speaker is not the same as the poet, the combination of the poet and speaker as a single node makes less sense. Similarly, if the poem appears in an anthology alongside a reproduction of the painting the poem comments on, an edge would form between the reader and the artwork. By adding one edge to the ekphrastic network, the “centrality” of the poet/speaker position diminishes. For example, in Figure 4, the visual exchange between the reader and the artwork would increase the number of “outdegrees” for each node. The artwork in this case would have two outdegrees just as the poet/speaker does, shifting the centrality more equally between the poet/speaker and artwork.

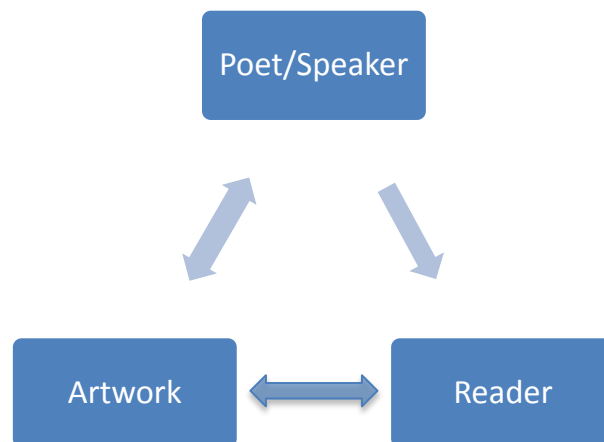


Figure 4: The ekphrastic triangle represented as a social network in the case where a reader has access to a representation of the artwork, such as in the case of an anthology of poetry and painting.

Ekphrasis as a network, like social relationships in network diagrams, are not linear or triangular but a fluid, dynamic, and responsive to changes in context. In ekphrasis, multiple relationships exist between one subjectivity and many others, often at the same time. Similarly, a model for ekphrasis needs to account for multiple, simultaneous

relationships: between poet and speaker, between reader and poet, between poet and image, between the image and its referent, between the reader and the image, to name just a few.

The benefit of using network representations to demonstrate the ekphrastic situation is that it points to the limitations of the tripartite ekphrastic exchange and makes evident the need to understand the wider and more complex possibilities that the context of ekphrastic poetry invites both inside the literary reality of the poem and extending outside and yet related to the poem. By graphically representing ekphrastic poems as playing out a socially-situated network of relations between words and images, poems and other poems, poets and other artists, we can imagine a network that can represent multiple strategies either independently or even at the same time. Admittedly, it may seem strange to visually represent the verbal representation of a visual representation; however, since what makes up “nodes” and “edges” can change, we are afforded more flexibility in terms of the kinds of relationships we hope to explore and the numbers of poems we want to consider. What fascinates us about poetry is its capacity for simultaneity—its ability to “contain multitudes” as Walt Whitman writes. It holds choice in suspension and offers delicate moments of indecision. What frustrates most critics writing about ekphrasis is that poetry about images often does both and frequently in elegant, sophisticated, and understated ways. The complexity and intricacy of ekphrastic poetry, however, is often dampened by our need to explain how it either is or is not participating in one limited way, and networks present opportunities to represent more than one possible way of operating at often the same moment.

Networks as fluid and dynamic representations present opportunities to consider ekphrastic poems from multiple perspectives. Consider, for example, the dynamics inherent in a female poet writing a poem about an image of a woman. The women poet, writing in what she recognizes to be a “male tradition” responds to the dynamics of that tradition. At the same time, she responds to the potentially male visual artist, to the visual object itself, and to the actual woman represented in the painting. Moreover, if this is a poet responding to a work of art by a well-known artist, say Edward Hopper or Pablo Picasso, she would also have an awareness of their other works of art and other poems written about them. I suggest one method of accounting for hypothetical poem in a network diagram can be found in Figure 5, which demonstrates this hypothetical example by representing each of the possible other nodes engaged by the ekphrastic poem, such as: the artwork, the artist, the tradition of ekphrasis, other specific poems about the same image, the museum in which the work of art resides. In other words, we can create “ego-centric” network visualizations. Ego-centric networks consider the possible edges between nodes from the perspective of a single node in the network and are useful because they demonstrate how an individual node “sees” the whole. Depending on how connected the node is, ego-centric network visualizations can be a very limited view of a much larger network, and correspondingly represent the limited perception of a network from one location in it. In the above scenario, the result would be a highly centralized network in which the relationship between one subject and another is negotiated through the text of the poem and from the perspective of its speaker. Understanding the ego-centric network view of the poet/speaker helps to clarify the relationships that such a

view misses. Thus, the ekphrastic situation is expanded upon, but only from the perspective of the poet/speaker.



Figure 5: An ego-centric network view of the ekphrastic situation from the perspective of the poet/speaker who engages with social, textual, and visual contexts in an ekphrastic poem.

Ultimately, my suggestion is not to replace the ekphrastic triangle so much as to resituate it as part of a larger network and by doing so allow for a variety of relationships to exist simultaneously within an ekphrastic encounter, which would also account for the discursiveness and polyvocality characteristic of contemporary poetry. Networks provide a methodology for exploring ekphrasis as a genre that borrows from, participates in, and comments upon other genres such as narrative, lyric, and dramatic, as well as a possible approach to understanding how the discourses of ekphrasis borrow from, comment on, and impact the discourses of other genres. Rather than privileging

subjectivities as the only way to see ekphrastic relationships, social network theory and visualizations offers possible approaches to understanding ekphrastic discourses in relationship to non-ekphrastic or non-literary discourses. Situating Mitchell's linear, paragonal ekphrastic narrative or Heffernan's axis of gendered hostility one within a larger model of social relationships that can exist between poetry and images allows for a multiplicity of interactions inherent within the ekphrastic situation that may add to our understanding of the hostile competition between words and images.

Networks and Interludes

Commissioned by the Memorial Gallery of Art at the University of Rochester, Joan Murray's poem "Interlude" responds to a 1963 painting with the same title by the painter John Koch. Both the poem and a reproduction of the painting appear in an anthology called *Voices in the Gallery: Writers on Art*, which includes 40 works of art from the Memorial Gallery of Art and poems commissioned by the gallery to be written in response to pieces in the collection. Drawing connections between Renaissance masterpieces, Man Ray's photographs, musical tropes, and the roles of women in art and their relationship to male artists, Murray's poetic exchange with Koch's painting critiques introspective creation that focuses primarily on the artist's own idealizations. Murray contrasts the artistic process with a dynamic relationship between the female figures in the painting, calling attention to the interdependence of the female subjects and their creation of community.

Murray's poem and Koch's painting present an interesting case for shifting the network focus away from subjectivities as nodes to consider a limited network of genres

and discourses present in “Interlude.”¹³ Since networks are graphic representations of relationships and since nodes can represent anything that shares a relationship with anything else, networks become powerful ways to visualize other kinds of relational dynamics in addition to mapping relationships between subjectivities. For instance, Murray’s poem draws from literary and non-literary genres and the discourses that make up those genres in order to call attention to differences between the painting’s and the poet’s attitudes toward looking, female bodies, and display.

The painting *Interlude* (Figure 6) depicts an intimate studio setting in which the artist (presumably himself) lounges on his sofa, legs kicked out comfortably in front of him while his left arm rests gently on the back of the sofa as he sips from a cup with his right hand. He is turned to the right, from the viewer’s perspective, and he gazes attentively at the almost life-size canvas resting on an easel which is turned away from the viewer’s point-of-view and toward the painter such that only a faint trace of the canvas’s subject is reflected in the mirror, which is just over the couch and provides the backdrop to what seems like a home studio. While Koch reclines in the background, in the foreground, his young, dark-skinned, nude model is perched at the edge of a bed. The model’s right hand rests at her side, while the left reaches directly to accept the cup and saucer that an older woman (presumably the artist’s wife) in a bright red housecoat is about to serve her. Koch’s wife’s eyes are directed down toward the teacup, cautiously, so as not to spill. On her face is a faint smile. The model’s attention, too, is focused on the cup and saucer. The intimate gesture between the two women occupies the

¹³ The network is limited by the purpose of my intent in this chapter, which is to be suggestive of possible methods for modeling ekphrasis with social network analysis. We could, for example, distill even further the available discourses in the poem and their incorporation of other non-literary genres. Since this will be explored in more detail in the next few chapters, my purpose here is primarily illustrative.

foreground of the painting, while the artist remains distanced from the interaction, absorbed in his own gazing at the object of his creation on the canvas.



Figure 6: John Koch, *Interlude* (1963)

This poem is instructive as an entry into a discussion of ekphrasis because it both adheres to and purposefully subverts assumptions of ekphrasis as playing out a gendered contest between poets and painters. While the poem contrasts the native environment of the painting as spatial, silent, still, and feminized with the medium of language as active, temporal, and male, the titles of the poem and the painting, perhaps, contrast these interests most clearly. The painting's use of the term "interlude" refers to several elements of the work. Firstly, it refers to the subject of the painting. The viewer can see that this is a brief respite in the midst of a long session in which the painter has been

observing his model and been in the process of “creating” her likeness. During the break, the “interloper,” the artist’s wife, intercedes and provides relief with a cup of tea.

Similarly, the term “interlude” could refer to the relationship between the painter and the model, where the painter’s momentary fascination by and infatuation with the ideal woman on the bed provides for him an “interlude” from a long-lived marriage. The term interlude, however, comes from a musical tradition. Often used to refer to a brief musical episode inserted between longer musical pieces, interlude becomes the pun upon which Joan Murray’s poem turns.

Interlude

This is between them—
the hand extending, the hand receiving,
like the great scene on the Sistine ceiling
where a single touch
ignites the clay
and Eve amazed by the naked shape
rides tucked beneath God’s wing.

But it’s not the creation—
which goes on in the corner
where a man turns away in his own contemplation.
And it’s no annunciation,
despite the flowing red robe
of the one who’s hovering
—above the one who’s shivering.

This is only a pause
in the ongoing objectivity of the universe
a ceremony between two women
—neither one dressed:
one nude on the edge of a rumpled bed,
and the other, plump and dimpled,
in a primly ruffled housecoat.

No, there’s no intoned magnificat
—just the slow slippared steps of the artist’s wife
which eternally prolong the moment
before the tea cup is released.

Her downcast gaze holds a steady course—
the cup sails forward,
balanced by equanimity.

Despite the mirror's conspiracy,
there's no way to see
what frontally greets her—
though the lambent curves of the model's back—
The Violin d'Ingres carved from mahogany,
each sinew attuned as she reaches for the tea—
suggest the symphony.

The artist sits aloof in the distance,
slumped on the hand-tufted, shirr-skirted couch,
like an onist
who prefers his fantasy to company.
He reflects on what he's done,
Rechecks his course,
Rattles the ice in the glass his wife has brought.

Through the window where he's placed us,
he makes us notice as his Galatea stirs,
how the fine gold droplets on her ears
(beneath the sleek onyx sweep of her hair),
Make his homey wife
In her round-shouldered robe
Seem out of place and pitiful.

But if we look for some resentment
As she stands inelegant
In relation (and in service) to that loveliness,
Her self-possessed air (concealing a smile),
Comes forward to dismiss us,
Saying, "Don't waste your pity:
She isn't what I ever wished I was—or what I've lost."

"I've stood in this room a hundred times,
Offering the cup.
I've seen it sipped. Or held for warmth.
Or left there on its saucer unconsumed.
But I'm the only one he's touched.
Even now—
He's looking through the paint to find my pulse."

Murray refers to the painting as “a pause / in the ongoing objectivity of the universe.” In the following stanza, she explains that the exchange between the model and the artist’s wife is not an “intoned magnificent;” in other words, it is not a religious ceremony or hymn. The moment is described as “prolonged” in the next line. Murray’s critique seems to be that this moment between the artist and the model is supposed to have grave significance, given the solemnity of the gesture; however, as she has explained in the first two stanzas, the act is neither creation nor annunciation. Comparing the painting to the Sistine Chapel and Da Vinci’s *Annunciation*, Murray explains that the relationship between the two female figures is simply “a ceremony between two women / --neither one dressed: / One nude on the edge of a hard rumped bed, / and the other, plump and dimpled, / in a primly ruffled housecoat.” But this ceremony is significant for its playing out of the relationship between the older wife who has been depicted as having lost her sexual allure, and the younger, idealized model who visually echoes the mahogany shape of the chair just to the left, and which Murray compares to Man Ray’s *The Violine d’Ingres* (a much more widely-recognized work of art than Koch’s, which in turn could be seen to diminish Koch’s painting by comparison). Given the comparative empowerment of the model because of her youth, her comparison to the “Virgin Mary,” her physical position of power as the one the husband desires to look at and to paint, Murray creates a situation in which the model appears to entertain a higher station than the “homey” wife. Later in the poem, Murray notes that the gold earrings on the model’s ears “make his homey wife / in her round-shouldered robe / seem out of place and pitiful.”

Mapping verbal and visual subject within the poem as individual nodes within a network allows us to understand the way the language of the poem creates relationships between its subjects and how each relationship impacts our reading of other relationships in the ekphrastic network. For instance, in Figure 6, the poet/speaker is the central node in the network, organizing the connections and relationships between various subjectivities through verbal exchange. Each node represents a subject that the poet/speaker places discursively in relationship to other visual subjects. For example, the ekphrastic triangle can be found in the network as edges connect the painting *Interlude* to the poet/speaker. An edge also connects the poet/speaker to the reader. Since the poem is reproduced with a copy of the painting, there is also an edge between the reader and the painting. The material condition of this poem's publication allows a direct relationship between the reader and the work of art, which means that the reader does not solely depend on the poem itself to "see" the work of art.¹⁴ The network is changed, and the poem's centrality reduced by the reader's access to the painting through the anthology. The poem draws comparisons between the *Creation of Adam* by Michaelangelo and Koch's painting; therefore, *The Creation of Adam* becomes another node in the ekphrastic network, but it is connected to *Interlude* through the poet/speaker who makes the comparison. The same is true of comparisons made to the *Annunciation* and *The Violin d'Ingres*. The advantage to reading ekphrasis as a network is that it begins to address what Jerome McGann calls a work's "radiant textuality." The material condition of the poem, presented as it is beside a reproduction of the image to which it responds,

¹⁴ A point could be made here that the visual presentation of the painting is mediated through photographic representation, but for now I have synthesized the painting and the anthology's copy of the painting.

shapes and alters the range of relationships available to the ekphrastic poem with regard to the reader, and even highlights the poet's choice to compare the image to other works of art not included in the museum anthology.

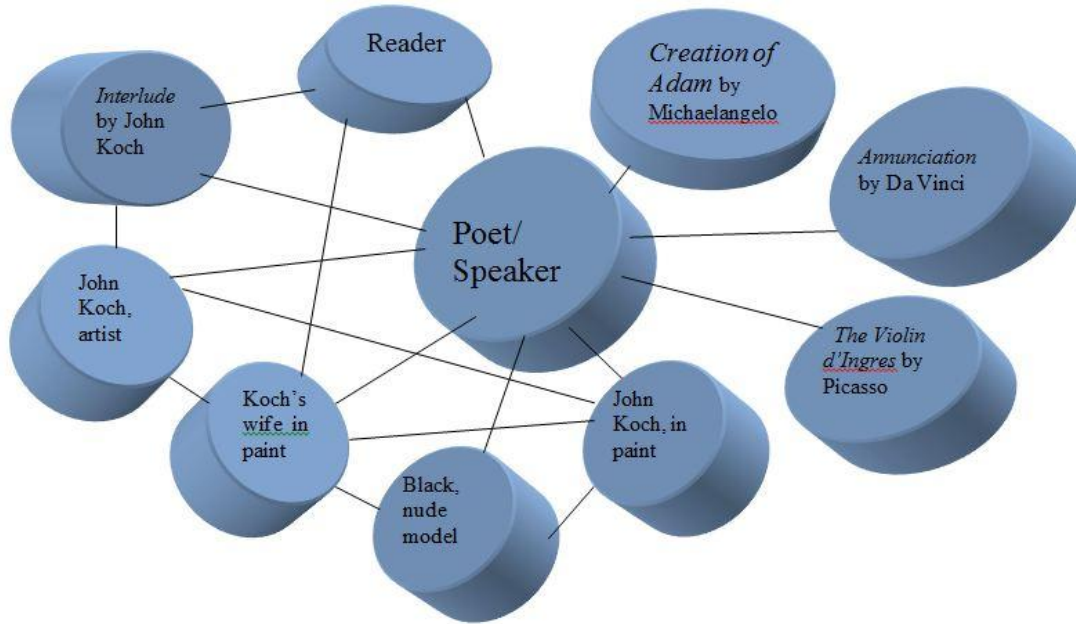


Figure 7: A network model of "Interlude" by Joan Murray. Nodes represent subjects in the ekphrastic poem and edges represent the visual-verbal exchanges created by the language of the poem.

The edges in Figure 7 imply that the relationships between nodes are non-directional, but we could argue that the lines between entities could also demonstrate “indegree” and “outdegree” relationships as mentioned earlier. There is often a discursive relationship, where one subject reaches out toward the other and returns changed. For instance, in the example of “Interlude,” Murray endows the painted wife figure with the poetic powers of speech, invoking another ekphrastic trope in which the poet provides an imagined voice for an absent or silent object. On the one hand, Murray reshapes the reader’s interaction with the visible image by granting her the ability to

speaking. Koch's "homey" wife confronts her audience, whom she assumes sees her as "pitiful," revising their expectations of the social dynamics between her and the model. Speech refocuses the center of the poem's interpretation of the image, a move which could be seen as a way of "competing" with the immediacy of the image by using language to reshape reader's perspective. On the other hand, the use of prosopopoeia in this case also increases the ties between the painting's represented subjects and the audience, generating improved "equanimity" between the two female figures on the canvas. Murray writes in the penultimate stanza:

But if we look for some resentment
as she stands inelegant
in relation (and in service) to that loveliness,
her self-possessed air (concealing a smile),
comes forward to dismiss us,
saying, "Don't waste your pity:
she isn't what I ever wished I was—or what I've lost."

Koch's wife-as-speaker dismisses "pity" because it presupposes that the nature of her relationship to the model is subservient and, therefore, regrettable. The voice of the wife calls to our attention the inherent assumptions that we as viewers make about what the desires of the wife figure are: to be young and beautiful, to be desired, to be permanent. The figure denies the viewer and reader's expectations by responding that these are things she never wanted. By association, she also disputes that somehow standing "in relation" or even "in service" "to that loveliness" is somehow pitiful.

Mitchell explains "ekphrastic hope" as a desire for "reciprocity" or free exchange and transference between visual and verbal art. The "goal" of ekphrastic hope is "the overcoming of otherness." His choice of the term "overcoming" works dually: in one sense, meaning to achieve sameness by surpassing the limitations of difference and at the

same time taking over the other to make it the same as the self. Essentially, he argues, the “hope” of ekphrasis is to contain the alterity of the image for the purpose of resemblance. “Ekphrastic hope” therefore is not a “free exchange” but a “freedom to lay claim” (156). Fearing that the subaltern image may overtake the autonomy of the image in such an “exchange,” Mitchell warns that ekphrastic poems react to their own curiosity and hope with “ekphrastic fear.” But this seems to be a logic which Murray’s poem works against. She is not attempting to become the artist in the background and seems to refuse any desire to take over the painting itself.

What Murray ultimately critiques is not the medium of the painting, nor its stillness, nor its silence. Instead, she criticizes the painter for fetishizing the creative process. If Murray were to attempt to “master” the work with words, her poem, essentially, would commit the same mistake. Her poem, in contrast, insists that the artist must have better sight. The poet in this scenario is neither woman. She is not the artist’s wife who is at the service of his model, nor is she the model he depicts. Whereas Koch portrays himself as detached from the creation, involved in his own introspection, Murray is insistently involved in her representation of the painting. Murray’s relationship to the work of art is reflected in her depiction of the exchange of a teacup between wife and model: suggesting a symphony, the aural combination of instruments to create a harmonious effect, one which extends beyond the wife, model and poet to the reader, as well.

When we say that the “paragonal” model of ekphrasis is “one way” ekphrasis operates, we attest to the failure to achieve union or to achieve the condition of the object of desire. Much like the frustrated affections of courtly love poems in the troubadour

tradition, the objective of such an encounter is to erase the gap between self and other, in other words to persuade the object of affection to succumb to the poet's desire. But few contemporary love poems follow the tradition of courtly love from the troubadours as it was begun, and likewise there are other forms of affections and attractions to images and what they represent today.

Social network analysis, however, also presents opportunities to move beyond the network of subjectivities that Mitchell discusses to consider the ekphrastic poem as entering into an already on-going discourse. Loizeaux describes the contemporary ekphrastic situation thusly:

... ekphrases often carry on exchanges with other ekphrases (as well as with art-historical commentary) as both engage the work of art: a poet represents the work of art in response, in other words, not just to the work of art but to other representations of it, and in doing so crafts an "answer" to those implicit members of the audience. (17)

Ego-centric networks of ekphrastic subjectivities are less able to demonstrate the plurality and diversity of the "answers" ekphrastic poems offer their intended or implied audiences than networks that visualize relationships between discourses and genres in an ekphrastic poem. Another possible way to map the ekphrastic network is to consider the relationships between the social contexts and use-values of the genres and discourses found in an ekphrastic poem. In the case of "Interlude," Murray employs narrative, dramatic, and speech genres to represent Koch's *Interlude* using two simultaneous and interdependent stories. Narration structures the speaker's encounter with the painting in the space of the museum by shaping the poem as shared walk through the museum. Phrases such as "But if we look for some resentment..." use pronouns like "we" to synthesize the visual perspective of the reader to the visual perspective of the speaker, as

if both could literally be in the same space at the same time. Narrative, then, within the context of the ekphrastic poem creates a tension between the original usage of first-person narration, in which the reader sees from the narrator's limited perspective and the social and textual situation of the ekphrastic poem where the reader can actually "see" the poem as it is reproduced on the facing page of the anthology, which acts as a virtual exhibit presenting selected works from the museum's collection. Despite having direct access to a representation of the painting, complicating the original intent of first person narration—to align the speaker and reader's two views. Further on, the wife's speech underscores this tension when she directly addresses the poet/speaker and reader together, despite our awareness that the reader and the speaker are not in the same space.

The poem also includes the genre of dramatic poetry, describing the activity suggested in the painting as if it were an unfolding performance in two parts, the foreground and the background. The dramatic elements of the poem draw from the language of art history in the way it positions the poet/speaker, reader, wife, model, and artist. For example, the reader/speaker stands at the vanishing point which is "outside the window." Similarly the exchange between the artist's wife and the model occupies the foreground, while the contemplative artist remains "aloof" in the distance. The use of dramatic elements similarly calls attention to the disconnect between actual drama and the painting. The repurposed dramatic genre within the ekphrastic situation puts discourses of time ("This is only a pause / in the ongoing objectivity of the universe.") to new use by amplifying an awareness that the poet/speaker's narrating of the imagined, shared gallery experience operates in a different temporal reality than the dramatic staging of the painting. The image is not referred to as "still" but "balanced"—a term

that draws from curatorial or art historical discourses and which subtly connects the poet/speaker's narrative "tour" to the unfolding but still drama in the painting (28).

Koch's wife's verbal intervention disrupts the discursive exchanges between the wife and model's "ceremony" and the gallery tour between the poet/speaker and the reader. Prosopopoeia, the poetic device in which the poet/speaker endows the inanimate work of art with speech, is another example of putting one genre to another use. Prosopopoeia draws from the genre of oral utterance, putting it to new use by creating an active, vocal presence for the silent work of art. Delivered as a direct address to the poet/speaker and the reader, Koch's wife's speech act disrupts the narrative trajectory of the gallery tour and assumptions about the relationship between the foreground drama (the "ceremony" between wife and model) and the background drama (the artist in aloof contemplation). As a doubly-active presence in the poem, the poet both usurps the silence of the spatial medium, and at the same time undermines her authority within the gallery walk narrative. The result is a counter-voicing of the image that reshapes perceptions of authority and agency between speakers. While the narrator has suggested that the wife is "out of place and pitiful," the speaking, painted woman refutes the assessment that she is in need of the poet/speaker or reader's "pity:" "She isn't what I ever wished I was—or what I've lost."

Modeling "Interlude" as a network better accounts for the counter-voices in the ekphrastic poem than earlier theorizations, because it represents the ways in which the poem engenders competitive and sympathetic relationships often at the same time. In Figure 8, the dramatic, narrative, and speech elements in "Interlude" are nodes in the network and the edges represent shared discourse within the poem. For example, the

language of museum curation (“Through the window where he’s placed us”) connects the gallery narrative and the background drama between the artist and his artwork. Similarly, the poem draws comparisons based on the formal similarities between the features of Koch’s painting and those from *The Creation of Adam* or *The Annunciation*, and the formal, spatial principles of the visual work’s composition is made conversant with the use of religious narrative: “Eve amazed by the naked shape / rides tucked beneath God’s wing” (ll 6-7). The mingling of religion and art historical assessments further create an edge between the speaker/poet’s narration to the unfolding dramas in the foreground and background of the painting.

At the end of the poem, when Koch’s wife directly intervenes between the poet/speaker’s gallery tour narrative and the dramatic unfolding of the painting as a contest between competing binaries (older/younger, wrinkled skin/ smooth skin, homely/lovely) and reshapes viewers’ assumptions about the power relationships in the painting and in the poem. The move is simultaneously altruistic and hegemonic, the two possibilities Loizeaux describes for prosopopoeia in twentieth-century ekphrasis. Creating a voice for a subjectivity that is not the poet’s own roots the poet doubly within the discursive interplay between genres. By endowing the silenced woman with speech, the poet trades one competitive exchange between images and words for another. For example, the speaking, active wife circumscribes the painter’s activity in the background by capitalizing on its insularity and asserting that she is the object of his desire, rather than being the passive recipient of that desire. Similarly, the speaking wife asserts her superiority over the silent, nude, and black model; however, Koch’s wife’s speech also behaves altruistically, by reshaping the poet/speaker’s own gallery narrative of the wife

as “pitiful,” “plump and dimpled,” and “in service to” the model. As an active and deliberate speaker, Koch’s wife reshapes the foregrounded drama such that it is the model who deserves our pity. While the artist’s wife has “stood in this room a hundred times, / Offering the cup” the model, by contrast is only one of the many models who have occupied the same position. What the network model of ekphrasis reveals is that the multiple ongoing discourses of ekphrasis can be conflicting and simultaneous, resisting the easy assumption that all ekphrastic poems seek to exert their linguistic, verbal authority over the silent, rival image.

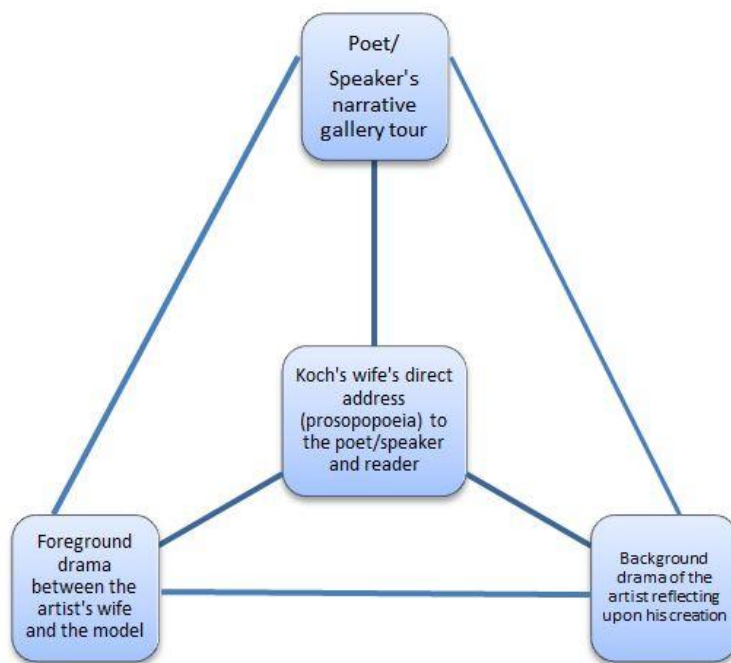


Figure 8: "Interlude" as a social network of ongoing discourses (edges) between appropriated genre types (nodes).

Modeling the ekphrastic poem as a dynamic exchange in a network of on-going discourses allows for the visualization of the internal literary reality of the poem as well

as its social context, revealing the ways in which “countervoices” and “resistances” can exist at the same time as the competitive rivalry between the sister arts. By mapping the discourses and genres the ekphrastic poem draws from, we can gain a better perspective of the ways in which literary and non-literary contexts shape the ekphrastic situation, as well as better account for the diversity of possible responses available to the ekphrastic poet.

In the network graph in Figure 8, the nodes of the network represent the genres appropriated by “Interlude.” The edges between them represent the discourses that offer exchanges between the new uses of each. For instance, the gallery narrative provides language that connects the speaker and reader’s perspective on the painting to the poem’s dramatizing of the foreground and background regions of the painting. Language of perspective and position (“This is between them” and “in the distance”) and reflection (the “mirror’s conspiracy”) connect the foreground and background dramas, as does the naming of the painted figures (husband/wife, artist/model). The imagined utterance further expands the number of edges in the network by intervening in all three genres—correcting “pity” as a way of viewing wife, restructuring the power relationship in the foreground drama, and usurping the authority of her “aloof” artist husband.

The two “Interlude” network graphs presented here are purposefully partial and suggestive. The advantage of using a network model is that networks require an amount of consistency in terms of how the nodes and edges are defined. In other words, within a network, the edges need to represent a consistent type of relationship. In the first case, the network displays relationships based on visual or verbal exchanges between the subjects introduced in the ekphrastic poem. An ego-centric view of the network, the first

“Interlude” network explores how the poet/speaker forms and negotiates relationships within the ekphrastic situation. The second network demonstrates an argument for one way in which the discourses of the poem, participating in and putting to new use the contexts of other genres, enter into a larger field of language to simultaneously demonstrate and disrupt the male-gaze and artistic mastery.

Conclusion

The network model of ekphrasis helps to resituate the ekphrastic poem as a dynamic interplay of literary and non-literary genres that puts the discourses of each to new use. Insisting upon the contemporary awareness of ekphrasis as participating in lively, ongoing conversations in literary and social contexts that are often overlooked, the network model of ekphrasis is wary of constricting the genre within a tripartite exchange and encourages the external and internal awareness of the poem’s engagement with other literary and non-literary contexts. Responding to cultural studies approaches to genre theory, networks provide a means for mapping and explaining how the genre operates. As graphical and linguistic representations, networks accommodate the spatial and temporal relationships of the ekphrastic exchange by accommodating the multi-modal nature of ekphrasis in ways that traditional close-readings do not. Through visual-verbal argument, networks provide an environment that can gesture toward the simultaneity of ekphrastic poems and open the genre up to more complex considerations of the “counter voices” and “resistances” that exist as part of the genre’s tradition that so many contemporary literary scholars find at work there and invites further opportunities to move beyond critical interpretations of ekphrasis as a paragonal contest between rival arts. Finally, a network model of ekphrasis breaks the binding of the ekphrastic canon by

inviting into our understanding of its tradition those poems/poets that have often been considered as outside or adjacent to dominant models that privilege formal features or the gendered contest of previous models, as I have mentioned in the introduction.

In the chapters that follow, I suggest approaches to ekphrasis made possible by the network model and correspondingly demonstrate relationships between poetry and the visual art that complicate or avoid positioning the two arts as hostile competitors. In chapters two and three, I consider the ekphrasis from the perspective of single poems and their immediate literary and social contexts. In chapters four and five, I explore the possibilities of viewing the ekphrastic network as a dialogic, dynamic exchange in which discourses of hundreds and thousands of ekphrastic and non-ekphrastic poems participate. Taking advantage of newly available computational methods to create groups of discourses within a larger collection of texts, I suggest possible methodologies for breaking the binding of the ekphrastic canon and expanding the tradition in such a way that women are considered an active, engaged, and influential part of it. Throughout the entire study that follows, however, I place poetry by women at the center of the discussion in order to demonstrate how a network model presents a new way to account for the plurality, sophistication, and range of attitudes women bring to bear on the ekphrastic situation.

Chapter 2: Speaking for Objects: Networked Voices in Lisel

Mueller and Elizabeth Alexander's Ekphrasis

We humanize what is going on in the world and in ourselves by speaking of it, and in the course of speaking of it, we learn to be human.

-Hannah Arendt

The word life has in some artists' minds a relation to those greatly despised words, story and anecdote. In that all life is gesture and all gesture can be the basis for story or anecdote, there cannot be the slightest gesture or mood of nature that does not in a sense create anecdote.

-Edward Hopper

The ekphrastic situation is inherently dramatic. Whether projecting the voice of the silent art object or setting a scene or animating an image as if it were a tableau, ekphrastic poems invite the metaphors of drama. They stage social relations, invite theatricality, and present themselves as players to their audience. Conversely, were we to create an anthology of late nineteenth and early twentieth century dramatic monologues, many of the poems included would also be ekphrastic, including the most canonical—Robert Browning's "My Last Duchess." The ekphrastic situation begs poetic performance, and the impulse to wear art as a mask and to create its imagined voice spins a complex web of social relationships between poets, visual artists, images, poetic speakers, models, and audiences.

In this chapter, we will explore how the ekphrastic poetry of Lisel Mueller and Elizabeth Alexander deploy personae to expand the ekphrastic situation. Using the poetic device, *prosopopoeia*—in which the poet creates a voice for a dead, absent, or imaginary

person—Mueller and Alexander resist occupying the visual objects they speak for, increase the number of nodes within the ekphrastic exchange, and through alternating detail and abstraction suggest for the reader divergent narrative paths within the network of the poem. Extending the use of network diagrams to discuss the ekphrastic situation of each poem, this chapter will also make visual arguments using a range of digital tools; thus, an underlying consideration throughout will be the best means for crafting visual evidence about texts that negotiate complex relationships with visual objects themselves.

The term *prosopopoeia*, derived from the Latin rhetorical use of the term in the mid-sixteenth century, gestures toward the Greek term *προσωποποιία*, meaning face/person. Quintillian used *prosopopoeia* to describe an argument in which the speaker assumes the voice and character of another person.¹⁵ Frequently deployed as an exercise to acquire a more intimate understanding of opposing arguments, *prosopopoeia* becomes one way of making absent voices present in the argument. Perhaps today this use of the term is most evident in the modern theater of our justice system, as prosecutors often describe the absent victim of a murder as “speaking through the evidence.” However, as an ekphrastic convention, envoicing the silent presence of the plastic arts has existed as long as the written word and in much of the critical conversation about ekphrasis, *prosopopoeia* is considered the most radical means by which a poet animates the still, silent work of art with language.¹⁶

Speaking *in place of or for* another, in this case visual art, can be a questionable ethical move. By occupying the physical space of the plastic work of art, the poet

¹⁵ "prosopopoeia, n." OED Online. September 2011. Oxford University Press. 19 November 2011 <<http://www.oed.com/view/Entry/153015?redirectedFrom=prosopopoeia>>.

¹⁶ One might take as an example the poem by Posidippus to Lysippus recorded in the Greek Anthology (16.275), with which John Hollander begins *The Gazer's Spirit*. See also Hedley, Jane.

achieves a physical presence as well as the ability to animate the still object through speech. As Elizabeth Loizeaux describes in *Twentieth Century Poetry and the Visual*

Arts:

Twentieth-century prosopopoeia in ekphrasis participates in the development of the dramatic monologues of Browning and Tennyson into the masks and personae of Yeats, Pound and Eliot and the postmodern concept of the poetic self as multiple and staged. In ekphrastic prosopopoeia, the speaking voice is not only objectified, but also embodied (in the image), making a double anchor in the world outside the poet. (24)

While the initial act of putting one's self in the position of visual art can be empathetic—an attempt to feel with someone or something else from their perspective—a delicate balance exists between imagining speech and bending the object to the will of the speaker. In other words, by adopting the persona of a work of art the poet negotiates a matrix of ethical balances between empathy and impersonation. Within the critical tradition of ekphrasis, prosopopoeia frequently signposts moments in which the poet's hope of assimilation with the art object, as Mitchell describes in "Ekphrasis and the Other," has turned toward fear. James Heffernan's account of the gendered genealogy of links speaking *for* objects as a form of resistance:

We do well to remember the root meaning of ekphrasis: "speaking out" or "telling in full." To recall this root meaning is to recognize that besides representational friction and the turning of fixed forms into narrative, ekphrasis entails prosopopoeia, or the rhetorical technique of envoicing a silent object. Ekphrasis speaks not only *about* works of art but also *to* and *for* them. In so doing, it stages—*within the theater of language itself*—a revolution of the image against the word, and particularly the word of Lessing, who decreed that the duty of pictures was to be silent and beautiful (like a woman), leaving expression to poetry. In talking back to and looking back at the male viewer, the images envoiced by ekphrasis challenge at once the controlling authority of the male gaze and the power of the male word. (Heffernan 6-7, emphasis mine)

Heffernan's point—that prosopopeia allows the artwork to speak out against the authority of the image's construction—metamorphoses a bit when he considers that what the object says is determined by another authoritative gaze, one which belongs to the poet. While it is true that the ability to “talk back” allows the image to recover “center stage,” to continue the ever-present theater metaphor, that voice remains a form of ventriloquy. Loizeaux describes prosopopeia, therefore, as double-edged—poised either to act altruistically toward the image, as in Adrienne Rich's “Mourning Song” or to collapse the aesthetic distance between the self and other in “the most hegemonic of moves” (24).

Unsurprisingly, then, *personae* and prosopopeia offer a wellspring of opportunities for poets to explore the ethical complexities of ekphrastic speech. In the 2009 collection *In the Frame: Women's Ekphrastic Poetry from Marianne Moore to Susan Wheeler*, four essays examine the use of prosopopeia as a device female poets use to speak against the controlling powers of a male gaze. For example, Loizeaux and Karl Kirchwey read Effie's voice in Adrienne Rich's “Mourning Song” as a subversive and feminist retort to tropes in Western art. In “Noisy Brides, Suspicious Kisses,” Barbara Fischer reveals Kathleen Frasier's “mesostic” strategy in crafting a voice for the circus actress depicted in Edgar Degas' *Miss La La at the Cirque Fernando* (1979), and in “Jorie Graham Looking,” Willard Spiegelman posits Graham's first-person speakers as invading the space of the canvas as in “San Sepolcro” in order to violate and expand its two-dimensionality (188). More explicitly for Loizeaux, Kirchwey, and Fischer than for Spiegelman, prosopopeia can be a feminist strategy for revising the “relentless

inscriptions of masculine desire” that Griselda Pollock describes or Laura Mulvey’s use of “voyeuristic” and “fetishistic” male gazes.

The poems by Lisel Mueller and Elizabeth Alexander in this chapter demonstrate the poets’ awareness of the double-edged nature of prosopopoeia. Their choices as poets in the creation of a speaker indicate an opening up of the poetic and visual network. While both poets critique the male/scientific gaze contributing to their subjects’ deconstruction and reduction—her silencing—the particular feminist strategies used by these two poets expand the number of nodes (actors) in the ekphrastic exchange while resisting the formation of a new female subject available for renewed fetishizing. By opening the network of sight and sound, past and present, literary and social contexts, the poet challenges the painter/creator and introduces fresh narrative potential. Few might recognize the influence of poets such as Mueller, Alexander on more recent ekphrasis of poets such as Laura Moriarty in her book-length poem *Nude Memoir*; however, Mueller and Alexander’s work pre-stage work like Moriarty’s, which creates multiple networks of sight and language to imagine a self in which public art and private history are intricately woven.

Furthermore, this chapter offers experiments in using computational tools to make visual arguments about each poem’s poetic network, extending my assertion that the ekphrastic poem is a network of relationships between “actors,” to use language familiar to both social network analysis and ekphrastic poetry. In social network analysis, the terms “actor” and “node” are used interchangeably. Throughout this chapter, I will use the term “actor” when the purpose is to point to the activity within the network in addition to its graphical representation. The shape of the network visualizations in this

chapter is determined through the internal pressures of the language of the poem and the external pressures of its textual condition. In the Mueller section, network visualizations are simple illustrations that tease out “nodes” and “edges” through close readings.¹⁷ In other words, the hand-drawn networks created in conjunction with close readings visualize the formation of a hermeneutic strategy, one that reads poems as networks and imagines what might constitute its nodes and edges. They are exploratory in nature and suggestive of future work that could be done to formalize such an approach. However, my readings of the poems extend beyond social network analysis by combining it with traditional literary critical methods, such as archival research, and interpretation of primary source materials to place the internal literary context of the poem in conversation with the external social contexts of the poem’s construction. In second half of the chapter, I consider Elizabeth Alexander’s “Venus Hottentot (1825)” through the combination of “traditional” and innovative digital methodologies. Like the first half of the chapter, “traditional” forms of literary and scholarly methods, such as close reading, and primary and secondary source research, prompt arguments about the way the poem is effected by and participates in the poet’s own historical moment. Additionally, I employ a set of tools called the *Discourse Network Analyser* (DNA) and *NetDraw* to encode and then visualize speakers’ relationship to the objects they describe. Through these visual arguments, I extend my introductory assertion that we might use the technologies and tools available to us to reconsider ekphrastic relationships, anticipating that in the future we might use these readings as a theoretical grounding for building more appropriate

¹⁷ In the introduction, “edge” is defined as the graphical representation in a network of the relationship shared between two nodes.

tools that can craft “beautiful evidence.” However, these early network drawings offer visual arguments about the complexity and density of contemporary ekphrastic poetry that would be lost if we were to assume that all canonical ekphrasis is essentially comprised of a poet gazing upon an object and representing that experience to his reader. Thus, computational interventions must be conjoined with theoretical—and canonical—re-visioning.

The use of social network analysis in literary studies is a relatively new but increasingly popular methodology in the field of digital humanities; however, most humanities-based research projects that use social network analysis map relationships between communities of authors, either as “schools of thought” or more literally institutional affiliations. Other social network studies consider networks of correspondence exchange between authors, editors, and critics. Similarly, social network analysis has been used to map co-appearances between literary figures in novels and plays, charting which characters share the stage or the narrative moment over the course of the text / performance. However, the explorations of social network analysis in this chapter and the one that follows represents a shift in thinking about network theory as representing stable human subjectivities, capitalizing on the elasticity of the terms “node” and “edge.” Since nodes can represent anything that shares a relationship with anything else, social network analysis has been in the fields of social science, information science,

and medical science useful ways to graphically represent relationships between ideas, concepts, events, imagined communities, and biological data.¹⁸

Conversations with Artists

Despite winning a Pulitzer-prize a National Book Award, the Lamont Prize, and the Carl Sandburg Prize, Lisel Mueller's oeuvre has remained woefully unconsidered within the landscape of contemporary poetry. Few articles exist about her work that do not either restrict her scope to Midwestern regional poet or marvel at her success as a woman and German immigrant who was 15 when she began to learn to read and write in English. However, Mueller's poetry expands far beyond the field of the Midwestern landscape in poems that plumb the interior life and articulate its negotiation with an outside and often complex historical, political, and aesthetic community.

Her engagement with the visual often turns her toward adopting personae and speaking/writing from the position of what she sees. Most often, she adopts the role of the woman in paintings—a choice she sees not as a form of overt feminism, but as an identification with or recognition of known experience upon which she builds. When asked in an interview, published in a collection of other interviews with post-confessional poets, about how being a woman and a poet shaped her writing, Mueller responds:

I naturally write in a feminine voice, and the experience I know best has to do with being a woman. When I write a dramatic monologue, which I do frequently, I assume the voice of a woman more often than that of a man. Other than that, I'm not really conscious of being a "woman poet" as opposed to being a poet who happens to be a woman. . . . I like to assume someone else's voice. When I was young, I would have loved to be an actress. Maybe it stems from that, that possibility of being in

¹⁸ The rapid development of social media has emboldened social science research, as programs such as Twitter, Flickr, Facebook, and YouTube create large, evolving sets of social science. Social network graphs of Twitter data extends far beyond user to user relationships to the social distribution of a word or a concept expressed in the form of a "hashtag" (eg. #ekphrasis).

someone else's shoes and imagining how the person feels. I find it boring to be constantly writing about myself. There are so many other more interesting people in the world, or have been. At the same time, I have the satisfaction of taking the liberty of trying to be that other person and imagining how I would feel had I been that person. So there is a double satisfaction in being someone else and still being myself. (Conversation 71)

Prosopopoeia, then, affords Muller a “double-satisfaction,” to take leave of one's self and occupy “someone else's shoes” and to imagine how that person might feel. Taking her liberties with Simone de Beauvoir's argument in “The Ethics of Ambiguity,” Muller recollects: “In language, I transcend my particular case” (72). For Mueller, writing and language are the primary means by which we order and organize our environment. To write what we see and to write what is not us, that is to imagine the “other” in language, is the most ethical way to transcend the boundaries of selfhood without becoming its possessor or losing one's self. Adopting dramatic personae, then, and imagining a voice for the figures whose visual presence becomes an empathetic means for exchange and for the production of knowledge about otherness. In poems such from “Paul Delvaux: The Village of Mermaids” to “The Artist's Model, ca. 1912” to “Monet Refuses the Operation” to “A Nude by Edward Hopper,” Muller adopts the voice of models and artists in an attempt to “feel with” them—in other words, to use language to transcend personal experience.

Titles such as “After Whistler” and “The Cook *After Vermeer*” reveal Mueller's awareness that her poems take up a discourse with artists who have already commented on the world.¹⁹ In particular, her first-person ekphrasis increases the number of actors in the network of the poem in order to transcend not only her “particular case,” but also

¹⁹ See Loizeaux, 5

those of the reader and painter. Intervening in the discourse between poet and painter, painter and viewer, she extends the interaction between the internal actors of the poem outward toward an external network of friends, readers, viewers, and gallery-goers, inviting them into the private discourse that is implied, ongoing, and unspoken in works of visual art. Through prosopopoeia in “A Nude by Edward Hopper” and “Artist’s Model, ca. 1912” Mueller connects a community of makers and viewers, guiding them through an embodied act of co-discovery from inside and outside the frame. Her speakers guide readers through networks of sight and speech, opening dialogues between the reader/speaker and the painting’s social and compositional setting. She alternates specificity and archetype with allusion and abstraction to encouraging readers’ active viewing and reshaping of potential narrative outcomes.

Starting Fires in Vacant Rooms

In her 1992 poem “American Literature,” Lisel Mueller explains that “Poets and storytellers / move into the vacancies / Edward Hopper left them.” As she narrates writers’ compulsion to “settle down in blank spaces” in Hopper’s paintings, she insists that “bereft interiors / is just what they’ve been looking for” and that the still and unexplained presence of “lumpy beds,” “birdcages,” and “decks of cards” inspire writers’ “predilection / for starting fires in empty rooms.” Gail Levin points out in her introduction to *The Poetry of Solitude: A Tribute to Edward Hopper* that Hopper’s paintings tease writers and poets into conversation, and his art is and has been frequently characterized as poetic. Unlike his contemporaries who were drawn to abstract expressionism and later action painting, Edward Hopper’s new realism invited, encouraged, and even left absences for the mind of the poet to enter into the visual field

and to activate it. In fact, in her biography of Hopper, Gail Levin describes how Hopper would have poems by Goethe, Verlaine, or Robert Frost in his mind as he painted. Recounting conversations she had with poets while assembling the volume, she remembers William Carpenter's suggestion that Hopper has "an emotional or aesthetic incompleteness (not failure!) in the image that demands completion in the other medium."²⁰ She goes on to write:

The "poetic insight" in Hopper's work had struck Horace Gregory, himself a poet;²¹ Robert Coates in 1948 would write of Hopper's "poetry and momentousness,"²² and Alexander Eliot evoked in 1955 the painter's "deeply poetic view of the world."²³ Shortly afterwards, Stuart Preston was to expand on the analogy, citing Hopper's "austere, detachedly poetic point of view" and comparing him to Robert Frost.²⁴ (9)

In the same introduction, Levin proposes that Mueller wrote "A Nude by Edward Hopper" after visiting Hopper's last retrospective exhibition at the Art Institute of Chicago (AIC) in 1964. First published in *Poetry* in 1967, just months after Edward Hopper's death and only a few before Josephine Nivison Hopper's, "A Nude by Edward Hopper" was included in Mueller's *The Private Life* (1976) and republished again in her Pulitzer-prize winning volume *Alive Together: New & Selected Poems* (1996).

When Gail Levin included "A Nude by Edward Hopper" in *The Poetry of Solitude*, she placed the poem beside a color print of Hopper's painting *Girlie Show*, 1941. Though never explicitly stated in the introduction or the footnotes that the pairings of poems to paintings in the volume were a result of direct influence, the publicity

²⁰ William Carpenter to Gail Levin, letter of February 14, 1995.

²¹ Horace Gregory, "A Note on Hopper," *The New Republic*, 77, December 13, 1933, 132.

²² Robert Coates, "The Art Galleries: Edward Hopper and Jackson Pollock," *The New Yorker*, January 17, 1948, 56.

²³ [Alexander Eliot], "Gold for Gold," *Time*, May 30, 1955, 72.

²⁴ Stuart Preston, "Art: Award to Hopper," *The New York Times*, December 16, 1960, 16.

language on the dust jacket does make the assertion that: “This unique volume, collected and introduced by Gail Levin, combines for the first time classic pictures by Edward Hopper and the poems they inspired.” However, as in the case of Lisel Mueller’s two poems “A Nude by Edward Hopper” and “American Literature,” some couplings are the result of editorial decisions rather than inspiration.

At first read, *Girlie Show*, Hopper’s provocative painting of a striptease, appears as likely a candidate as any other to have inspired Mueller’s poem, but upon deeper investigation, reading the poem as strictly responding to one nude in Hopper’s oeuvre misrepresents the poem’s complexity. In an effort to learn more about the connection between *Girlie Show* and “A Nude by Edward Hopper,” I contacted the archives division of the Art Institute of Chicago (AIC) and discovered that *Girlie Show* has never been on display there. Furthermore, no replicas of the painting were ever reproduced in the literature (publicity materials, exhibition catalogue, newspaper articles) surrounding the show.²⁵ Levin’s explicit assertion that Mueller was inspired by the 1964 AIC exhibition before writing “A Nude by Edward Hopper” and the implicit argument that the specific painting to which she responds is *Girlie Show* cannot both be true. However, in their 1980 anthology *In Her Own Image: Women Working in the Arts*, Elaine Hedges and Ingrid Wendt’s corroborate that Mueller wrote the poem after her 1965 visit to the AIC Hopper retrospective.

Lisel Mueller’s poems have been described as celebrating “the autonomy of self, the mysteries of intimacy, growth and feeling. . . .” Such a celebration of personal growth and autonomy can be seen in the accompanying poem, which was written after visiting and exhibit of the work of the American painter Edward Hopper at the Chicago Art Institute

²⁵ Marie Kroeger, email, November 3, 2011

in the late 1960s. The poet contrasts the male painter's portrayal of a woman with the speaker's experience of her own body. (175)

Arthur Miller, curator and librarian for special collections at Lake Forest College, where Mueller's papers and library reside, could not recall if there were any Hopper replicas in her archive, and based on Lake Forest College's electronic catalog of her manuscripts, it appears neither Mueller's early drafts of the poem nor her materials from the 1964 exhibit survive.²⁶ In turn, Art Miller suggested I contact Jenny Mueller, Lisel's daughter and a poet in her own right teaching at McKendree University in Lebanon, Illinois. In the course of our conversation, Jenny Mueller explained, "I don't know what painting that poem refers to, but somehow I doubt it's *Girlie Show*. I've always found the juxtaposition of "Nude" and *Girlie Show* in the Levin-edited anthology *The Poetry of Solitude* a little off." Lisel Mueller, herself, now past ninety years old, regrets that she cannot remember with more specificity which particular image inspired her writing of the poem, and yet she doubts herself that *Girlie Show* was it.

While the answer to which specific Hopper painting inspired Mueller's poem seems unlikely to be fully resolved, perhaps that is the point. Closer examination of the language of the poem demonstrates Mueller's resistance to such particularity. The choice of an indefinite article ("A Nude") purposefully suspends the desire to identify one specific work, and while many of the physical markers Mueller offers seem familiar within the corpus of Hopper's paintings, finding all of them within a single painting is not possible. Consider for a moment that nine other famous Hopper nudes beside *Girlie Show* might be candidates as well: *Standing Nude* (1902-4); *Summer Interior* (1909);

²⁶ According to the Lake Forest College Library's special collections department, Lisel Mueller and her husband Paul owned a book of Hopper paintings, but this was published after the publication of Mueller's poem.

Painter and Model (1902-4); *Standing Female Nude with Painter in Background* (1902-1904); *Nude Crawling into Bed* (1903-5); *Evening Wind* (1921); *East Side Interior* (1922); *Eleven A.M.* (1926); *Morning in a City* (1944); *A Woman in the Sun* (1961).

In the poem, Mueller adopts the persona of a nude woman in Hopper's painting and negotiates the poet's knowledge as a living, breathing woman with the frozen and starkly represented presence of Hopper's creation.

"A Nude by Edward Hopper"
For Margaret Gaul

The light drains me of what I might be,
a man's dream
of heat and softness;
or a painter's
—breasts cozy pigeons,
arms gently curved
by a temperate noon.

I am
blue veins, a scar,
a patch of lavender cells,
used thighs and shoulders;
my calves
are as scant as my cheeks,
my hips won't plump
small, shimmering pillows:

but this body
is home, my childhood
is buried here, my sleep
rises and sets inside,
desire
crested and wore itself thin
between these bones—
I live here.

Doubtless the "bereft interior[s]" in Hopper's nude paintings is what enticed Mueller to want to "start fires" in them. With the exception of *Girlie Show*, all of the nudes listed

above are depicted from an intimate and privileged vantage point inside either a hotel room or a bedroom or a studio, and they demonstrate Hopper's participation in an ongoing, contemporary discourse about women's sexual independence. Upon his return from Europe and following his marriage to Jo Nivison, Hopper continually seems to be working through the push and pull of Victorian social mores, a change in marital expectations, and revisions of what female sexuality could and should be. In his early paintings and drawings of nude women in both conventional and less conventional poses, the women's faces are often covered, erasing her individuality and identity, including *Summer Interior* (1909), *Nude Crawling into Bed* (1903-5), *Evening Wind* (1922), and *Eleven A.M.* (1926). However in later paintings, Hopper's sexualized women become more assertive, participatory, and possibly even more dangerous as in *Morning in a City* (1944), *Girlie Show* (1941), and *Woman in the Sun* (1961).

As Vivien Green Fryd explains in, "Edward Hopper's 'Girlie Show': Who Is the Silent Partner?" the marital relationship between Jo and Edward Hopper, their personality differences, and their ambitions created a complicated web of power relations in the development of Hopper's art. While Jo resented her husband's conservative expectations that she set aside her professional ambitions as an artist in order to take charge of domestic tasks and support of his artistic endeavors, Hopper perceived that Jo exerted control over him through sexual manipulation, harping and acerbic conversation, and refusal to participate in the household economy—particularly by feeding him and satisfying his sexual need. As Fryd and Levin have both noted, Hopper's biting cartoons point to his bitter dissatisfaction that Jo used domestic and sexual denial to assert her

authority.²⁷ Fryd suggests that the Hopper's art reflects their own evolving concept of the "companionship marriage" which came to prominence in the 1930s as a marriage that "achieved unity 'through such interpersonal relations as the mutual affection, the sympathetic understanding, and the comradeship of its members.' This modern form rejected the former patriarchal and procreative model, and encouraged male and female sexuality and mutual sexual gratification, and the increased independence of women both inside and outside the home" (60). Furthermore, Fryd argues Hopper's painting of women (clothed and nude) are working out the shifting power relations between female model and male painter, wife and husband, New Woman and modern man. Pointing to Jo's insistence that she become her husband's only female model, her collaboration in the construction of Hopper's female characters, and her meticulously detailed journals recording the evolution of each of her husband's paintings, Fryd suggests that Jo Hopper is a silent but active presence in Hopper's work.

²⁷ See Fryd, pages 64-5 for copies of Hopper's cartoons, *Meal Time* (1925), *Status Quo* (1932), *The Sacrament of Sex* (ca. 1935), *Non-Anger Man*, *Pro-Anger Woman* (ca. 1935).

Figure 9: *Morning in a City*, Edward Hopper (1944)

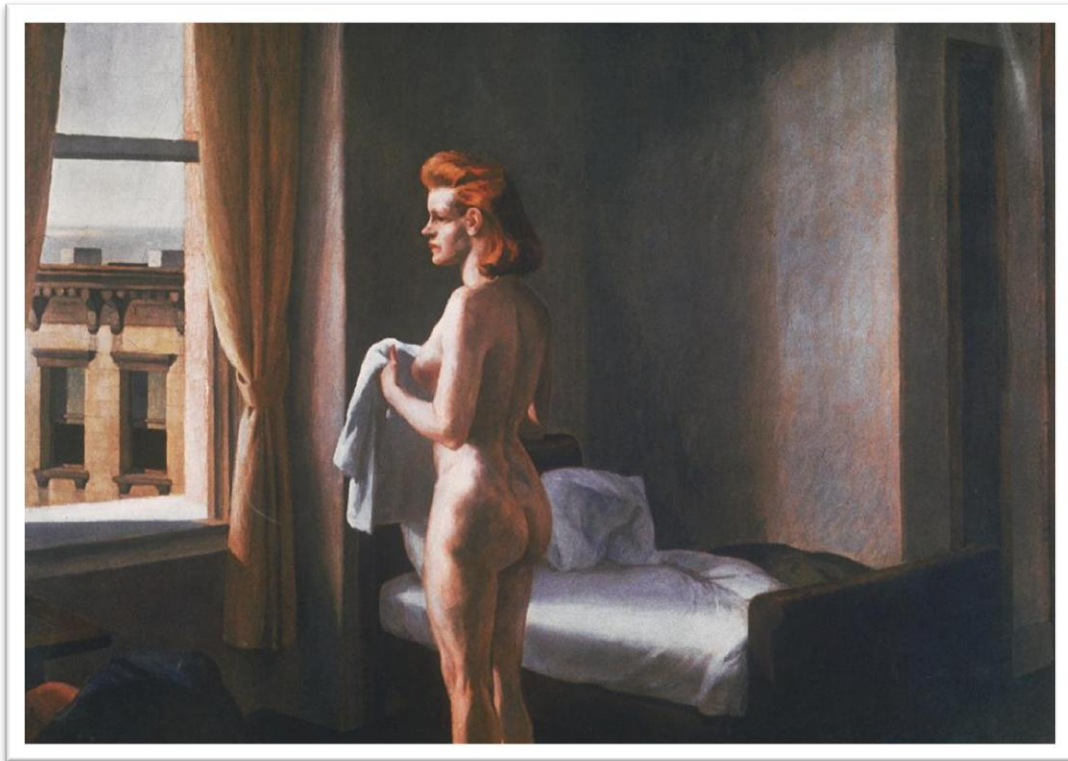


Figure 10: Edward Hopper, *A Woman in the Sun* (1961)



Figure 11: *Eleven A.M.*, Edward Hopper (1926)

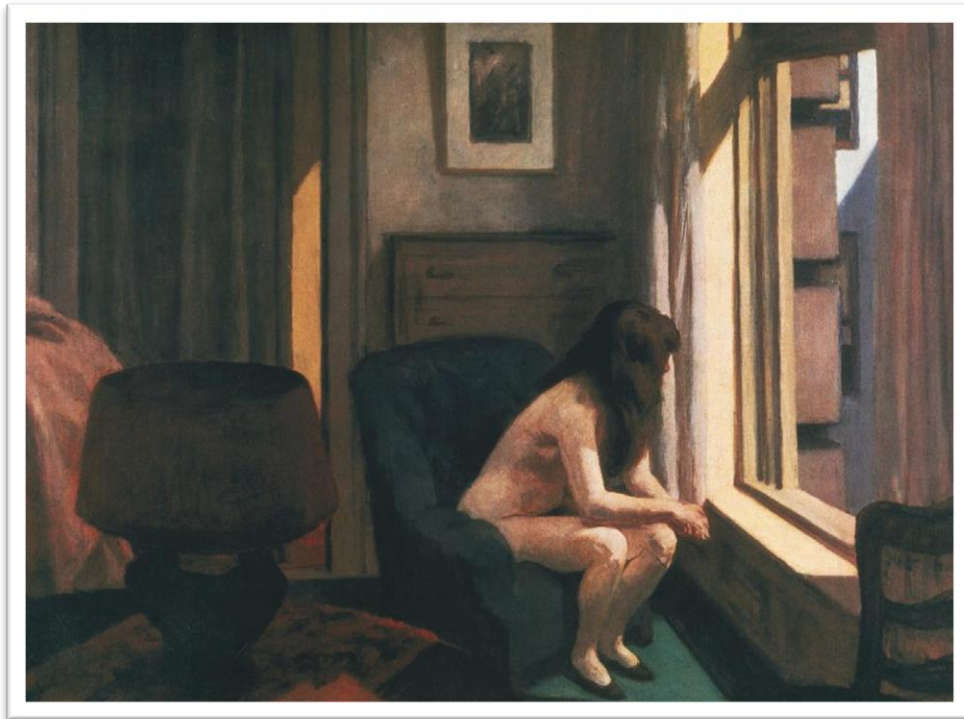


Figure 12: *Girlie Show*, Edward Hopper (1941)

Mueller, had she not already known, would likely have learned at the 1964 exhibit that after marrying Edward, Jo insisted she be his only female model.²⁸ Trained as an actress in the Washington Square Players, Jo Hopper collaborated with her husband, altering herself as she modeled for him and helping to shape some of Hopper's most memorable characters: a nude woman looking out her window (*Eleven A.M.*, 1926), a seated figure at the automat (*Automat*, 1927), an usher at the cinema (*New York Movie*, 1939), a stripper on stage (*Girlie Show*, 1941), and a patron at a diner (*Nighthawks*, 1942). In her journals, Jo recalls with pride her modeling, writing in 1959, "I'm so excited. He has me stretched out in back with not a stitch on - playing dead." Describing herself as a collaborator in the process of staging the women she represented, Jo Hopper often encouraged her husband to imagine names, personalities, and stories for the figures he painted, figures they fantasized and even gossiped about: "Did he kill her? Can't tell yet...." (Wood 6).

Mueller enters the body of the nude in "A Nude by Edward Hopper" as if feeling her from the inside out toward the surface of the paint, the way one might expect an actor to "get into character." The descriptive activity of the second stanza, detailing the physical markers of the woman in paint becomes the poet's portal to the inner life of paintings. Her veins, scar, bruise, thin calves and hips, offer a means for Mueller to slip into the skin of the woman, and what she finds there is familiar. Rising and setting, cresting and waning, her desire follows the shape of her body and thins. The shorter lines (I am, my calves, desire, thin, I live here) form a sense of self that exists inside the

²⁸ Lloyd Goodrich, the curator responsible for the 1964 exhibition, included in the text of the exhibition catalog an explanation of Jo's insistence that she remain her husband's only model after their marriage as well as a copy of two pages .

longer, physically descriptive lines and between the scrutinies of the painter's brush and bright light, which in the first stanza "drains her" more than the kinder and softer noon sun.

If Mueller is talking about one particular painting, the most likely candidate is *A Woman in the Sun* (1961) [Figure 9]. Displayed at the AIC exhibition Mueller attended and also reproduced in the 1964 gallery catalogue, *A Woman in the Sun*, is one of Hopper's last oil paintings. It figures a naked woman standing just left of center in a sparse, blue/green room. The woman is lean, muscular, and angular. Her long auburn hair falls just past her shoulders. Her right arm is gently bent while she holds a cigarette between her fingers. Although she is standing sideways from the viewer's perspective, both breasts can be seen with dark red nipples, and the bright mid-morning sun filtering in through the large window outside of the canvas just to the right, appears to gradually making its way up her body. She has a dark patch of skin, possibly a scar on her right thigh. The light is long and bright and also reflected on the dunes just outside the window in the rear of the painting, but the angle of the sun is such that it does not yet hit her face. The only other objects in the room are an un-made bed, blue-black high heels promiscuously deposited underneath, a painting on the wall facing the woman, and the corner of a painting just over the bed. There are also drapes on the window, and it is possible that the window to the right is open, as the curtain seems to be blowing into the room just slightly. Clearly, though, no one lives in this room. Unlike *Evening Wind* or *Morning in a City*,²⁹ the traces of the woman's life cannot be found inside the painted

²⁹ *Morning in a City* has been reproduced here, as it is also a possible candidate for Mueller's ekphrasis. It, too, was exhibited in 1964-5 at AIC and was reproduced in the catalogue.

room. In both *Morning in a City* and *A Woman in the Sun*, the unyielding morning light contrasts the nude figure's more worn appearance, creating a tension between the "young" day and the woman in mid-life.

In Hopper's notebooks, Jo and Edward kept an ongoing dialogue about the paintings that were commissioned, purchased, and exhibited. Jo kept meticulous detail of the materials used, agreements with buyers, and an ongoing back and forth banter between she and her husband about the characters, lighting, setting, and development of the painting. The entry for *A Woman in the Sun* demonstrates this quite well. Jo points to the specific angle of the sun as it makes its way up the skin of the woman, but has not yet reached her face. She likens the lighting of the scene to similar lighting that she and her husband had seen in the play *Diary of Anne Frank*. Finally, both she at the bottom of the notebook and Edward at the top (the hand changes) note his preferred naming and titling of the painting, "A Wise Tramp."³⁰ The "tramp" aspect of the figure seems to involve the sparse interior of the room. She is wise, because she is empty. Sex for her is not intimacy. Unlike other portions of the notebook where Jo indicates her agreement with her husband, she holds him at a distance in this entry, writing at the bottom, "Ed called her, 'a wise Tramp'!"

³⁰ In Figure 6, Jo's handwriting appears at the bottom right corner in her typical script writing; however, at the top, the second title is printed in all capital letters—a more typical hand for Edward Hopper, who sometimes signed his work this way.

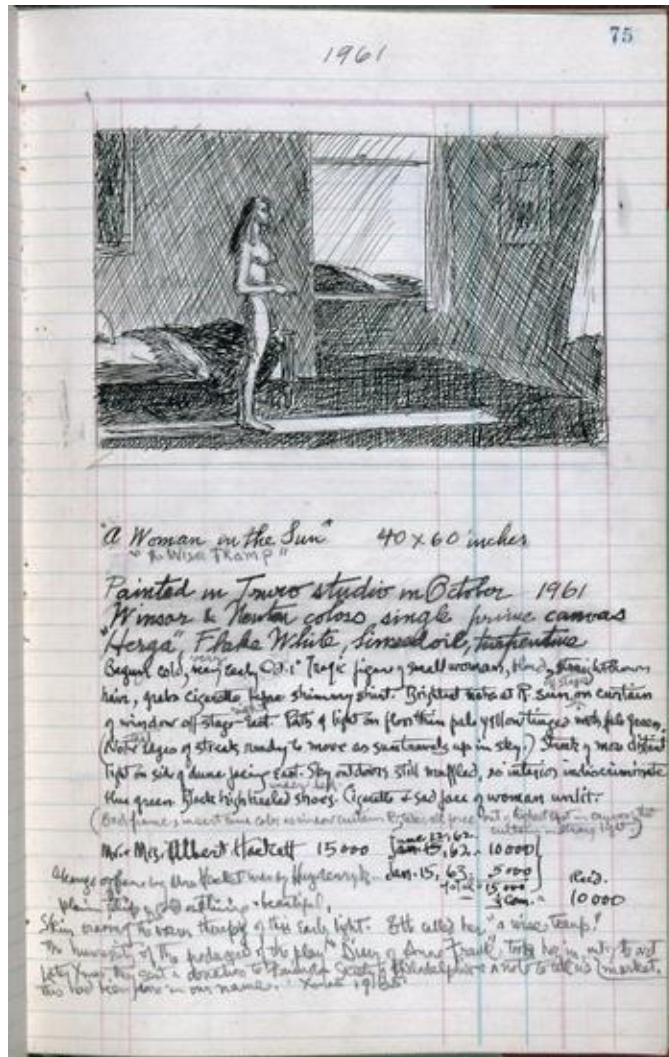


Figure 13: Artist Notebook 3 "A Woman in the Sun"³¹

Though Mueller would likely not have had an awareness of this particular notebook entry, other entries from earlier notebooks Jo kept were reproduced in the 1964 exhibition guide. It's difficult to know if they were reproduced along with the paintings, as the AIC archives division does not include this information; however, Mueller's poem, whether about *A Morning in the City* or *A Woman in the Sun*, inserts itself into the

³¹ Edward Hopper, front cover of Artist's ledger—Book III, 1924–67. 12 3/16 × 7 5/8 × 1/2 in. (31 × 19.4 × 1.3 cm). Whitney Museum of American Art, New York; gift of Lloyd Goodrich 96.210a-hhhh

ongoing discourse of female sexuality—a discourse that gets played out between Hopper and his wife in the notebooks.

Mueller's voice, however is not Jo's. Jo, who seemed to relish the characterization of Hopper's women as femme fatales, would have judged the nude women in his paintings much more harshly. Mueller's own voice, then, supplants Jo Hopper's with a more sympathetic picture—the nudes are not all whores or tramps. Mueller enters the female conversation of what the New Woman is—not all sex, but homes where childhood, sleep, and desire live beneath the skin. Perhaps not coincidentally, the poem which appears opposite “A Nude by Edward Hopper” in *The Private Life* is “In Praise of Surfaces” in which the line “[t]o learn about the invisible, look at the visible,’ says the Talmud” parallels the first line of the following stanza “words too are surfaces / scraped or shaken loose.” The slippages, gaps, and inadequacies of paint and words are the spaces where depth, connection, and knowledge of otherness can be collected. In the final lines, love is expressed as collection:

No skin diver, I
Could never reach bottom;
Rock by wet rock,
Piecemeal,
I collect you.

Similarly, “A Nude by Edward Hopper” is about how one “collects” the visible surfaces of self to reconstruct the interior that must exist somewhere beneath the surface. Entering through the paint to imagine a self with a history and a humanity, Mueller comes into conversation with Jo and Edward Hopper, as if to remind them that the nude woman is not all sex.

Though there does seem to be “a nude” at the center of Mueller’s poem, the indeterminacy of precisely which one informs a new understanding of the poem. Mueller seems to concentrate on a single image, but in doing so, her awareness of his other nudes (perhaps all gathered together in one room of the gallery), creates implicit connections to and traces of others. In many of Hopper’s nudes, the female figure *does* appear to be at home. *East Side Interior*, or perhaps one of the paintings that is not specifically a “nude” but rather a woman in a nightgown such as *Morning Sun* or *Summer in the City* (1941) seem likelier candidates for phrases such as “breasts cozy pigeons, / arms gently curved.”

Balancing detail and abstraction, Mueller not only intervenes in the conversations between the Hoppers, but she also expands the field of vision, placing multiple Hopper paintings into conversation among themselves, much the way an exhibition does in a retrospective show about an artist’s corpus. The *I* who “lives here” is also Hopper. In much the same way that Hopper’s work is so recognizable for its tropes, styles, and attitudes toward modern life, we also recognize Hopper not just from looking at any single work but by seeing that work in conversation with others like it.

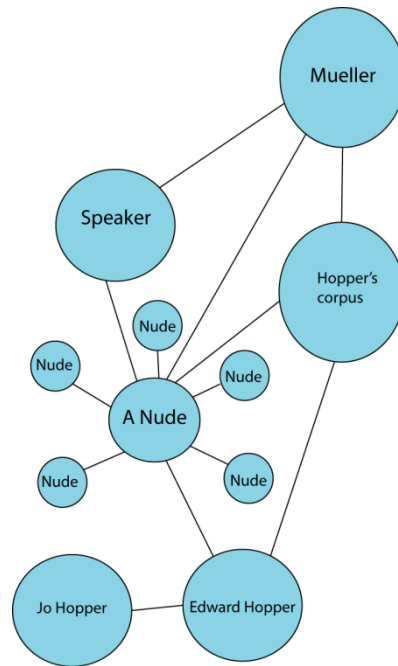


Figure 14: A social network graph of the exchanges suggested by the explicit visual and verbal engagements in Mueller’s poem. Nodes represent the multiple subjectivities that comprise “speaker,” and “artwork” by demonstrating how there are negotiations between the artist and the poet which are independent from the painting itself. Likewise the speaker in the poem is neither the painting nor a representation of the poet, but is another, distinct entity. The smaller “nude” nodes represent actual Hopper paintings that inform the imagined whole of The Nude, to which Mueller refers, that is represented by the central node in the cluster.

Through her use of abstraction and detail, Mueller expands the ekphrastic situation to include multiple actors in the visual network of the poem. Figure 14 represents how through prosopopoeia, Mueller creates a “double anchor” for herself, by creating a voice that is neither her own, nor the actual voice of a specific work of art. The social network in Figure 14 visualizes the way Mueller’s poem increases the number of nodes in the ekphrastic situation. The speaker, whose presence stands apart from a specific painting, also describes a painting that draws from tropes and familiarities with other Hopper nudes. As the subject of the poem, the “nude” the poem describes is created as a sub-network exchange between features of several possible paintings. The voice of the poem’s speaker shares an edge with the imagined nude, which is a collectively

formed from the synthesis of constituent nodes—the actual Hopper paintings themselves. The poet and the speaker are separate nodes that share an edge because the speaker in the poem is both drawn from the collective nude images and at the same time her voice is provided by the poet. Mueller uses her visual exchange with the nude/s to create the voice of the speaker, which is further informed by the edge shared by Mueller's connection to the larger audience and history of Hopper's artistic production. In other words, the edge shared between Mueller and Hopper's corpus represents her direct engagement with Hopper's work at the retrospective exhibition she attended at AIC. Mueller's relationship to Edward Hopper is once removed, and the edges between the painter and his corpus are accessible to the poet through the painting. The only edge Jo Hopper shares directly to the network is through her husband, the painter, who after 1926 used his wife as a model for all of his paintings of women; therefore, her access to the network is mediated by Edward Hopper. Tracing a path along the edges of the network from the speaker through the particular, composite work, Mueller interjects the speaker's voice into the ongoing discourse between Edward and Jo Hopper. Mueller enjoys a double-satisfaction in "A Nude by Edward Hopper" that allows her to speak from Jo's perspective without "being" Jo, and from such a perspective displaces the visual scrutiny to which Hopper subjects his female nudes. Even as a the simplest mapping of nodes, the ekphrastic situation proves to be much broader than speaker, painting, and reader.

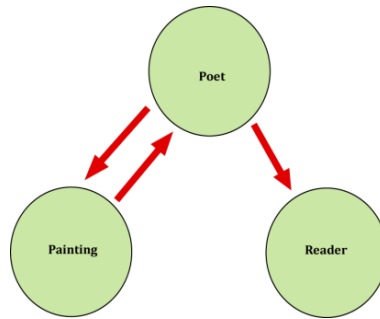


Figure 15: A Network Diagram of Mitchell’s Ekphrastic Triangle

Networks of Readers

By dedicating “A Nude by Edward Hopper” to her long-time friend Margaret Gaul, Mueller turns the poem into a continuing conversation between friends about the evolution of womanhood. Lisel and Margaret met at Evansville College (now University of Evansville) in the early 1940s as students and remained friends throughout Lisel’s courtship by and marriage to Paul Mueller. With the dedication, the poem becomes an intimate conversation between women who have lived and witnessed nearly 25 years of each other’s lives and who looking at the worn and bereft interior of Hopper’s nude, may see familiarity in the figure’s physical imperfections but also share a common desire to push against her emptiness.³²

Using prosopopoeia to enter empathetically into the conversation between husband and wife, painter and model, she also extends this conversation outward to a broader readership and viewership, making it an act of female recognition. The poem is not just, “I live here” but “we live here”—the model, the poet, and her friend—a community of women and artists. Returning to the networked nature of ekphrasis, we can see how the “ekphrastic triangle” reduces the poem’s complexity and delicate

³² Email from Jenny Mueller to the author dated 11/8/2011.

negotiations. To see “A Nude by Edward Hopper” as a poet representing an art object to a singular, reading audience reduces the poem to the level of a shrew voice speaking out and publicly chastising her maker for what he has done; however, by increasing the number of actors in the network such that it begins to gesture toward the multiple discourses in which the poem participates, we begin to see how counter voices and resistances subtly reshape the poem.

Margaret and Edward Gaul remained friends with Lisel Mueller and her husband throughout their lives—a friendship based on mutual interests in culture and the arts.³³ In “A Nude by Edward Hopper” Mueller assumes a familiarity with her friend about Hopper’s nudes, his larger body of work, and perhaps even a particular painting; however, returning to the indefinite article “a” in the title, Mueller leaves the particular painting in question, which in turn opens the network of sight and language up to her friend, who may also have seen the same exhibit. Further, the openness of the visual network embraces a wider array of readers and even gallery visitors. The reader’s own imaginative space is invited to enter Mueller’s gallery of Hopper’s nudes. By offering choice and indeterminacy, Mueller refuses to commit the sins of the speaker in “My Last Duchess,” by offering access, choice, and even inviting the readers to imagine along with her the voices of women in other Hopper paintings— in other words, to see in conversation as well as to speak.

The graph in Figure 15 is an extension of the network in Figure 14 that includes the edges audiences share with the network. There are three new nodes added to the network: Margaret Gaul, the reader, and the gallery visitor. Margaret Gaul shares an

³³ Email correspondence. 11/13/2011.

edge with Mueller as the person to whom the poem is dedicated. Since Gaul and Mueller are likely to have attended the Hopper retrospective at AIC together, she also shares edges with Edward Hopper, the nude, Hopper's corpus of work, and the speaker. The edge between Gaul and Edward Hopper represents the likelihood that Mueller assumes her friend's awareness of the artist's life and work. A similar edge between Gaul and Hopper's corpus represents the same collective sense that one might create of an artist based on a retrospective exhibition of his work. By dedicating the poem to Gaul, Mueller creates additional edges between Gaul and the speaker and Gaul and the composite nude. In addition to Gaul, the speaker directly addresses the general reader. The general reader would not share an edge with Margaret Gaul, because the identity of the women to whom Mueller dedicated the poem was not widely known. However, the reader will probably have some familiarity with some examples of Hopper's work, as well as come to know the speaker and the nude in the painting through the poet, but also possibly through outside exposure. To write about Hopper is to write about one of the United States' most celebrated painters. None of the yellow, reader nodes share direct edges, because the relationships between them are negotiated through their reading of the poem. This implicit, external network is charted in Figure 15 with non-directional lines.

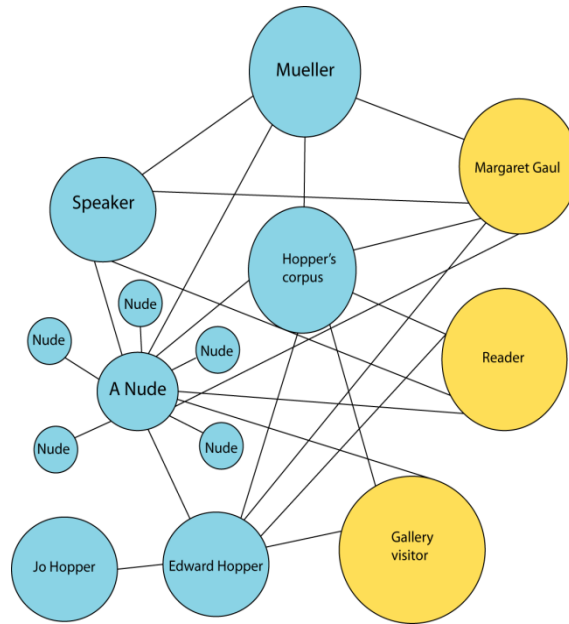


Figure 16: A social network graph of the speakers, artists and readers. The three readerly presences in the network share no direct edges, even though they are part of the same network.

Networked Histories

In her next volume of poetry, *The Need to Hold Still*, Mueller would return much more explicitly to the use of a collective voice to speak from the splintered physical self of the female model in “The Artist’s Model, ca.1912.” The poem, which begins the way a murder victim might narrate her own demise in mystery narrative, reads: “In 1886 I came apart—.” Quickly, we discover that the speaker is not a singular Mme. Rivière, but a composite voice of women models during the artistic developments from the mid-1800s through, perhaps, abstract expressionism. Enhancing the element of mystery, the speaker metamorphoses as she weaves her personal narrative from a portrait by Ingres through pointillism, cubism, and abstract art. In fact, one might read Mueller’s speaker as if she traces herself through the lines of Alfred Barr’s famous “Cubism and Abstract Art”

diagram pictured in Figure 17.³⁴ Barr's timeline graph, which was used as the cover to the 1936 exhibition guide to the Museum of Modern Art's influential show *Cubism and Abstract Art*, is a work of art in its own right. Barr's chronologically-organized network diagram creates an argument about the influences and causes for artistic movements in Europe and the United States. As an advertisement, catalogue cover, gallery guide, and an work of art for the exhibition, Barr's poster creates a visual network design that argues for a particular understanding of modern art. The network encourages viewers to assign imagery to the verbal terms on the chart as a way to actively participate in the recreation of twentieth-century "isms". Mueller's poem, however, humanizes such a network through the voice of the women whose bodies and selves were erased, diminished, fractured, and reassembled in service of the artists' craft.

³⁴ See Edward Tufte, *Beautiful Evidence*.

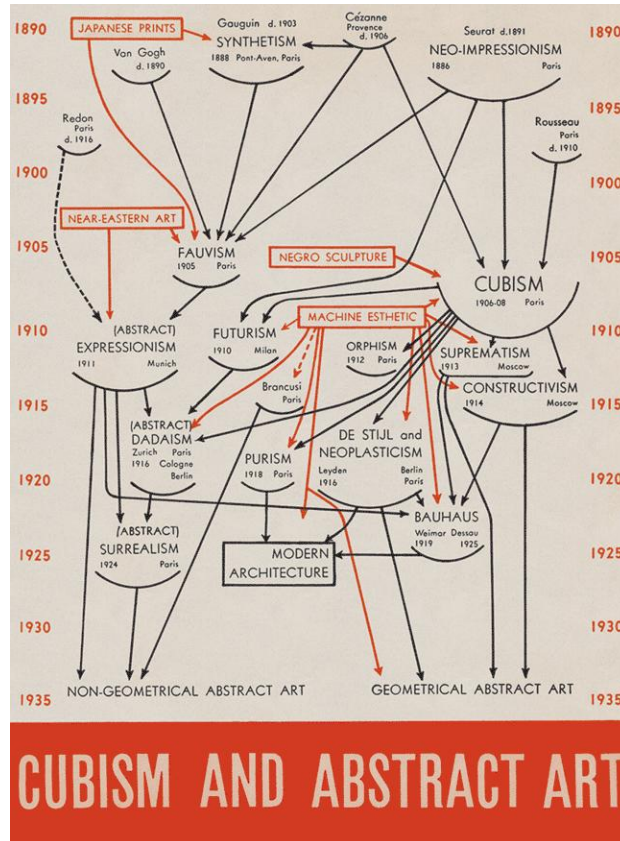


Figure 17: Alfred H. Barr, Jr “Cubism and Abstract Art” (1935)

Reading “The Artist’s Model, ca. 1912” requires negotiating a network of female archetypes and implied masterworks from the early 19th through the mid-20th centuries. By articulating the deformation of the female model’s representation, Mueller weaves together familiar icons in modernist art, alluding to specific paintings while at the same time remaining purposefully vague in order to remain inclusive. Identifying George Seurat’s *A Sunday Afternoon on the Island of La Grande Jatte* (1886) as the most likely moment of departure, Mueller accuses pointillism as the radical moment of disjuncture between the “portraiture” of Ingres and modern art. Possibly gesturing to Édouard Manet’s *Le déjeuner sur l’herbe* (1863), in which the painter used a combination of

models to create an “unbroken invitation,” the speaker moves from a whole and sensual physical presence “splintered into thousands / of particles, a bright rock / blasted to smithereens.” Narrating her own redistribution and assembly, the speaker connects Seurat’s pointillism to cubism (perhaps Picasso’s portraits of Dora Maar) and later abstract expressionism (probably not Willem De Kooning’s *White Nude*, 1967). The speaker creates a record for what will become her erasure and physical absence.

The Artist’s Model, ca. 1912

In 1886 I came apart—

I who had been Mme. Rivière,
whole under flowing silk,
had sat on the grass, naked,
my body an unbroken invitation—

splintered into thousands
of particles, a bright rock
blasted to smithereens;
even my orange skirt dissolved
into drops that were not orange.

Now they are stacking me like a child’s
red and blue building blocks,
splitting me down the middle,
blackening half my face;

They tell me the world has changed,
haven’t I heard, and give me
a third eye, a rooster’s beak.

I ask for my singular name
back, but they say in the future
only my parts will be known,
a gigantic pair of lips,
a nipple, slick as candy,

and even those will disappear,
white on white or black on black,
and you will look for me

in the air, in the absence of figure,
in space inside your head,
where I started, your own work of art.

The network of this poem is shaped differently than in “A Nude by Edward Hopper;” rather than creating a network of readers and makers, the poem narrates a self by creating paths between artistic movements. Voice takes the place of the vanishing subject as she is disassembled through visual craft. Using empathetic strategies, the speaker uses voice to realize “the absence of figure, / in space, inside your head, / where I started.” Taking a much more confrontational stance, as there is an “I” and a “you” who are not the same, the speaker uses the reader’s activity of reading and imagining to actualize a physical presence that, though ephemeral, has been narrated back into presence. By loosely narrating the reader’s own experience of modern art, the speaker leads the reader to draw associations between them, but the narrated self is contingent upon the imaginative and associative memory of the reader.

In Figure 18, I have created a differently shaped “network” in which the poet and the reader are on opposing sides of the visual works of art. The text of the poem creates sequentially and chronologically organized edges between the speaker and viewer and represent each collaborative imagining of representative works of art formed through textual allusion to recognizable features of works and the reader’s participatory and active visualization of specific works that fit the textual features the text suggests. Because Mueller’s poem is suggestive of specific painterly tropes but refuses to name individual paintings, the nature of the network graph is fundamentally different from Barr’s in Figure 17. Both are present text that demands active visualization on the part of the reader/viewer; however, where Barr’s is a prescriptive argument for the genealogy of

modern art, Mueller's creates a playfully open and yet progressive cocreation of the treatment of the female form in modern painting. Rather than presenting the images as "nodes," this graph uses the images as a means for labeling the imaginative activity that the text provokes and to illustrate the vertical, chronological direction in which the speaker performs her own erasure—a process in which the reader's imagination becomes complicit. This network diagram includes only representative samples of the tropes Mueller alludes to in order to create the effect of the poem. Perhaps, given the date of 1912, Duchamp's *Nude Descending a Staircase* is less vague, and yet the poem never mentions the title, only an *approximate* date. Purposefully vague, the poem resists fixating a single work by relying upon the reader's awareness of modern art to increase the sense of physical obsolescence of the speaker.

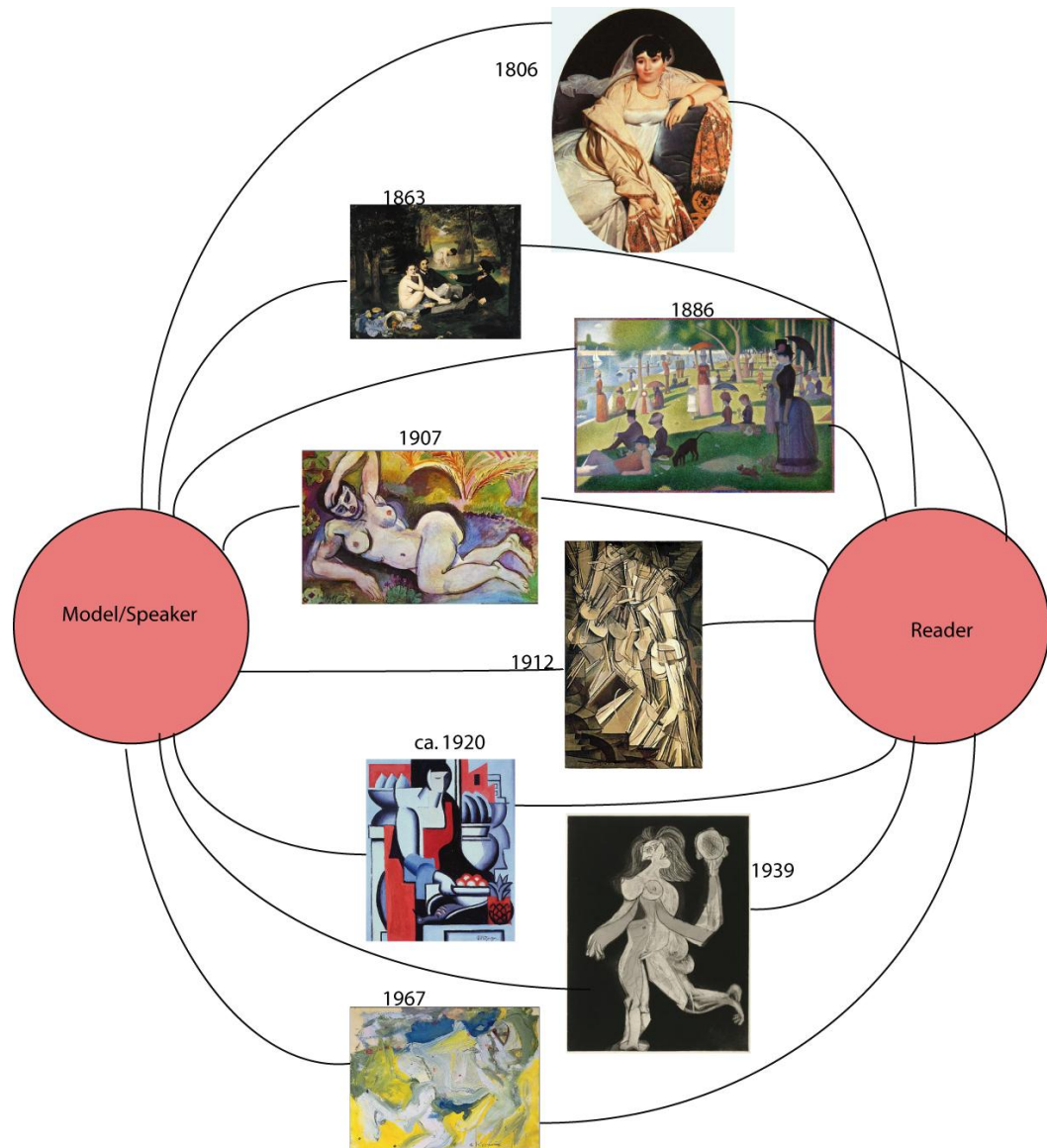


Figure 18: The network performance of Mueller’s speaker in “The Artist’s Model, ca. 1912.” The nodes on the left and right represent the speaker in the poem and the reader. Each of the edges is labeled suggestively with works of art that might fit the tropes that the speaker describes. The edges unfold chronologically, such that reading them vertically presents the narrator’s disappearance on the canvas.

The paintings in each of the “nodes” inside the network are ones that come to mind when I read the poem; however, the works of art that come to mind for another reader may be slightly different, and therefore another speaking subject will be created. She will be

“your own work of art.” This is true at the start of the poem, as well. Alternatively vague and specific, the title “The Artist’s Model ca.1912” specifically points to Marcel Duchamp’s *Nude Descending a Staircase No.2*, and at the same time gestures to the anonymity of the woman represented in the artwork. Poised quite centrally between the revolutionary use of pointillism and the future developments of abstract expressionism, the voice in the poem attempts to connect the past, present, and future of her representation with story. Who the model is and who the reader would picture is subjective; however, by narrating archetypal aspects of modern art movements, the speaker creates herself through the process of her own deconstruction. The empathetic strategy, then, is to require the reader to visualize the “otherness” of the painted medium using personal experience and knowledge which then becomes the speaking subject. The model becomes not just visual other, but achieves a familiarity with the reader that one might imagine the reader would be reluctant to see dismantled.

Self in Conversation

Striking for its bold voices in a poetic environment where subtle, academic prosody reigned supreme, *The Venus Hottentot* (1990), Elizabeth Alexander’s first volume of poetry, met with widespread critical acclaim. In a rare review of a first-time author from a small (University of Virginia) press in the *New York Times*, Doris Jean Austin writes that “[Alexander’s] predominantly first-person narrative style connects her directly to the reader.” Citing Alexander’s ability to connect the political power of the Black Arts poets with the successful younger but quieter generation of academic poets, Austin continues:

This collection is a historical mosaic with profound cultural integrity. The title work exhumes the previous century's mutilated victim of science and history and sets her amid today's heroic voices. The current proliferation of benign, yet soothing works of poetry gives "The Venus Hottentot" a particularly exhilarating quality.

Alexander's book collage of personal and historical personae struck Stephen Yenser in his *Poetry Magazine* review as well: "Alexander's volume is a whole café of different voices. There are a number of epigraphs scattered throughout the book, and the poems include interior monologues, quotations, attributions, indirect speech, and conversations" (214). *The Venus Hottentot* includes four sections grouped thematically, and "The Venus Hottentot (1825)" comprises the entire first section, positioning it as an *ars poetica* for the volume, an opening polyphonic demonstration of how the personal, historical, and political following sections might be read. Further import might be derived from how the voice of the maligned, silenced, and mutilated Hottentot Venus is afforded full weight of intellectual significance among widely recognized icons throughout the volume: Romare Bearden, Deadwood Dick, Nelson Mandela, Jackie Robinson, and John Coltrain. Such purposeful placement foregrounds Alexander's volume as an act of recovery, a rearticulating of the scope, diversity, and importance of her personal and cultural inheritance, and at the same time an unwillingness to "write a poem that said 'blackness/is,' because we know better than anyone/that we are not one or ten or ten thousand things/Not one poem" as she writes in "Today's News."

For Alexander, ekphrasis offers an opportunity and a means for creating an ethically-considered space for herself within the Western poetic tradition, as well as a chance to take up issues of race and gender. Though not formally associated with The Dark Room Collective, a Cambridge-based group of African American writers,

Alexander recalls reading at The Dark Room in 1989 and fondly describes the audience as those who could “code switch with the same fast dazzle” as she (337). Published in *Callaloo* that same year, “The Venus Hottentot (1825)” is divided into two sections. The first envoices the scientist Georges Cuvier, whose autopsies, excisions, and drawings of Sara Baartman,³⁵ a Khoisan woman brought first to England and then to Paris as a human exhibition, theorized a physiology and physiognomy of the black sexual primitivism and deviance, which Sander Gilman notes shaped a nineteenth-century iconography of black female subjects in Western art, literature, and science. The second section collects and vocalizes multiple women displayed as “Venus Hottentot” by using a history of their display as human curiosity show, as engravings, as “scientific” drawings, and as museum exhibitions (224). Whereas the ethics of dividing and dehumanizing the object of the gaze is the usual concern for the ekphrastic poet, for Alexander these are precisely the activities that ekphrasis allows her to work against. Operating outside the realm of sight the ekphrastic network of Hottentot voices refuses a fetishizing gaze, comments on the racism and misogyny of “scientific” observation, and at the same time reveals Alexander’s concerns as a “code-switching” artist participating in a discourse articulating black identity.

Cuvier’s Network

Curiously little has been made of the date in the poem’s title in reviews or articles about “The Venus Hottentot (1825)” but such a specific detail so prominently displayed calls attention to itself. By 1825, Sara Baartman, the Hottentot Venus whom Cuvier

³⁵ This study will use the name Sara Baartman to refer to the woman studied by Georges Cuvier. Her name is variously printed as Sara Baartman, Sarah Bartmann, Saartjie, and Saarjie (Dutch for “Little Sara”). Historians remain uncertain about her actual name; however, I have chosen Sara Baartman rather arbitrarily for consistency.

famously autopsied, had been dead for 10 years at the age of 26 from, as Cuvier diagnoses, inflammation and “exposure.” Other textual evidence from within the poem that might indicate a reason for the date includes the collection of images at the middle of the poem’s second section. “The Ball of Duchess Du Barry,” an engraving, is not published until 1829, and the two lithographs most likely referred to in that same stanza were published in 1917 and 1950 respectively. The full figure scientific drawing reproduced with Cuvier’s famous autopsies and reproduced in Gilman’s article appeared in “Extraits d’observations faites sure le cadaver d’une femme connue à Paris et à Londres sous le nom de Vénus Hottentote,”³⁶ which is republished by Jules Cloquet in 1825. This rendering of Bartmann’s body, a mixture of aesthetic and scientific conventions, “forms the major signifier for the image of the Hottentot as sexual primitive in the nineteenth century” (Gilman 240). By placing the date of the publication in the title of the poem, Cuvier becomes an unnamed presence in the title beside the performative and constructed naming of his scientific “discovery.” Furthermore, in 1825, Cuvier published *Recherches sur les ossemens fossils: où l’on rétablit les caractères de plusieurs animaux dont les révolutions du globe ont détruit les espèces*, which combined with his position at the *Museum de l’Histoire Naturelle*, established Cuvier as one of the most influential natural scientists of the early 19th century.

³⁶ Trans. Excerpts from remarks made on the body of a woman known in Paris and London as the Hottentot Venus.

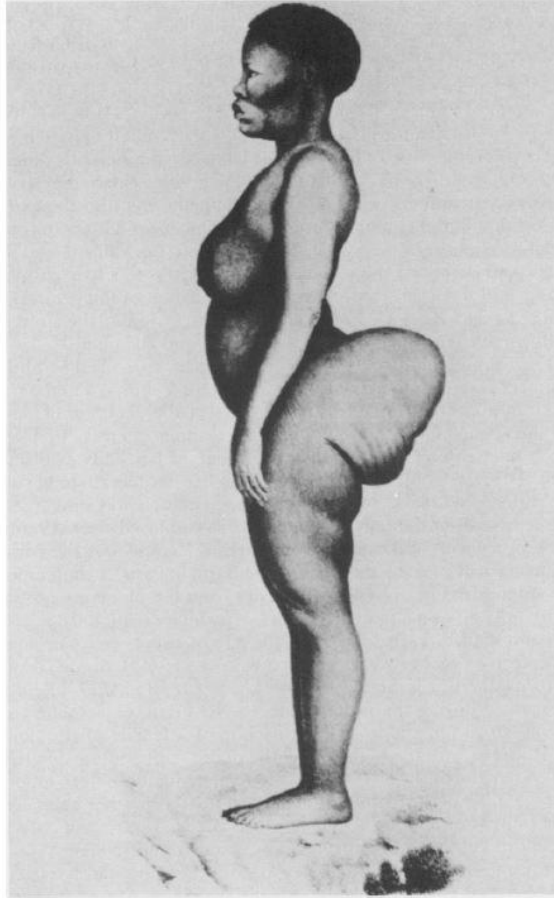


FIG. 5.—“The Hottentot Venus.” Georges Cuvier, “Extraits d’observations faites sur le cadavre d’une femme connue à Paris et à Londres sous le nom de Vénus Hottentote,” 1817.

Figure 19: Autopsy drawing of Sara Baartman

Divided into two sections, each representing separate speaking personae, the poem distinguishes between divergent modes of observation—the scientific and the personal—each with very different outcomes. Furthermore, the poem is divided formally between Cuvier’s 13 two-line stanzas and the Venus Hottentot’s 12 eight-line stanzas. In the first section, Cuvier’s name is announced, and his scientific and egocentric visual field is limited by his the discipline of science. Through his speech, he establishes himself as the creator of “The Venus Hottentot.”

CUVIER

Science, science, science!
Everything is beautiful

blown up beneath my glass
Colors dazzle insect wings.

A drop of water swirls
like marble. Ordinary

crumbs become stalactites
set in perfect angles

of geometry I'd thought
impossible. Few will

ever see what I see
through this microscope

Cranial measurements
crowd my notebook pages,

and I am moving closer,
close to how these numbers

signify aspects of
national character.

Her genitalia
will float inside a labeled

pickling jar in the Musée
de l'Homme on a shelf

above Broca's brain:
"The Venus Hottentot."

Elegant facts await me.
Small things in this world are mine.

Cuvier's unmistakably fetishistic viewing begins with the ecstatic apostrophe—" Science, Science, Science!" defining his object of study, his mode of discovery, and the results of

his observations. Both ecstatic exclamation and proclamation of his tautological methods, Cuvier's science is a site of worship. The second line, "Everything is beautiful" further elucidates a process of discovery that is totalizing and reductive all at once. Cuvier's observations reveal themselves to be fragmenting, destructive, and possessive. "Blown up" with its connotations of violence describes the way the particularizing of the scientific gaze destroys its objects of inquiry, which, curiously enough is not actual inquiry since Cuvier asks no questions and spends much of his time describing what he sees through the narrow lens of the microscope. Under glass colors dazzle, drops swirl, crumbs become, reducing each phenomena to geometries and numbers, the language of his process. Cuvier observes the Venus Hottentot the same way he observes water, insects, and earth, and so she, too, is reduced to fragments. Referring to Baartman as a pronoun—a gender and not a person—Cuvier reduces her to her genitalia, further divided into specimens in a jar, then placed on display. In the Musée de l'Homme, Bartman's genitalia and by extension all black women that, when placed next to "the Broca's brain," stand for the whole "national character" of Khoisan people.

Alexander creates parallels between Cuvier's scientific observations and a Western canon of ekphrastic speakers. Mid-way through his monologue, Cuvier articulates his central position as one that creates, displays, preserves (or discards) and names the Hottentot body: "Few will / ever see what I see / through this microscope." Cuvier's readers will know about "national character" because Cuvier is in the position to describe it. Much like the egocentric, prosopopoeic speaker of Mitchell's canonical ekphrasis, Cuvier positions himself between the reader and his subject as verbal authority. We cannot see Cuvier's specimens through his microscope; therefore, as

scientist, rare witness, and translator of numbers, Cuvier is in the best position to “signify aspects of national character.”

Science also comprises the means by which he exerts his powers of observation onto his environment. Collected through microscopes, measurements, numbers, and geometry, Cuvier’s sight and science negotiates his inraction with an outside world. Therefore, science becomes not only the way Cuvier sees, but it also becomes all he sees. The Musée de l’Homme, a legitimizing force and representative of the institution, the history, and the community of science, receives Cuvier’s creations (notebooks, measurements, jars) and validates Cuvier’s assertions about “national character” and the later claim: “Everything is beautiful.” Visualizing Cuvier’s topical network reveals how he uses prosopopoeia to establish himself as an authority, reducing readers’ access to his field of vision by claiming it all for science.

Using a software program called the Discourse Network Analyzer (DNA), I have labeled each speakers’ topical array and rendered that interpretive reading in a network diagram with a program called NetDraw. Designed to create visual networks of agreement and disagreement on environmental policy, DNA is a computer program in which texts (articles, congressional testimony, policy statements) can be imported. Each document can be tagged by highlighting a statement and assigning to that statement a speaker (who made the statement), a topic category for the statement, an organizational affiliation for the speaker, and whether or not the speaker agrees or disagrees with the claims being made. The names, topics, and organizations in each category are defined by the person describing the text to create a constrained master list which then can be applied to all the texts imported into the DNA. When the texts are tagged, the file can be

exported in a database format and used to create co-occurrence and relational network visualizations.

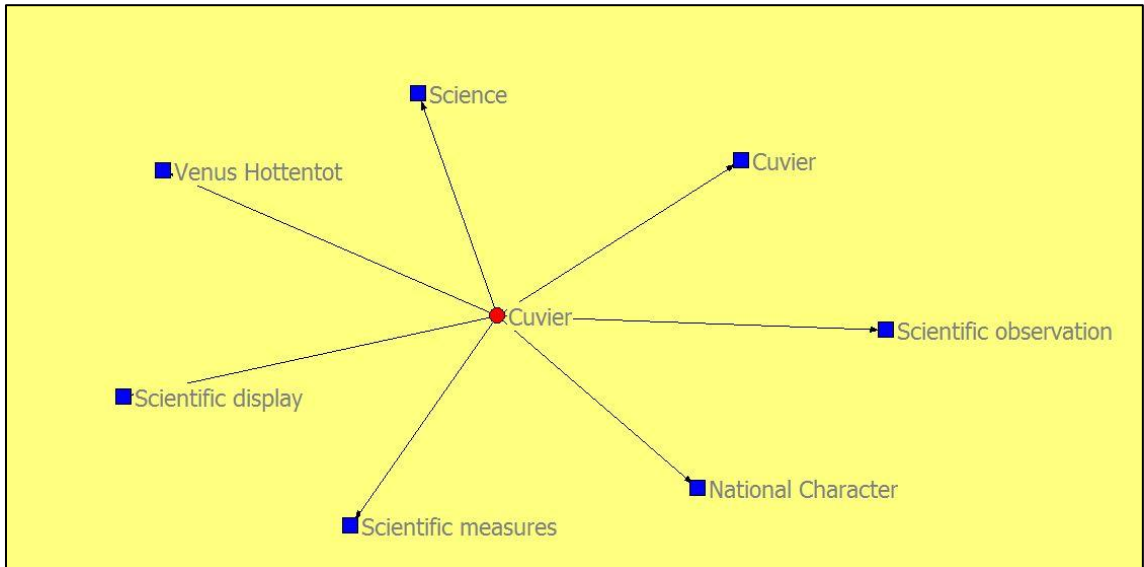


Figure 20: A social network diagram of Cuvier’s speech in “The Venus Hottentot (1825).” Cuvier as speaker is central to his prosopopoeia and is represented by a red circle. The radiant blue nodes represent the concepts he connects himself to through his speech. The edges in the network represent Cuvier’s speech.

Since DNA was not designed to work for poetry, I needed to adapt the categories for the purposes of the poem while staying within the algorithmic constraints of the software so that the network visualizations would remain accurate. To that end, I imported the entire text of “The Venus Hottentot (1825)” into DNA, and created a list of possible tags, including: speakers (listed under the “person” column in Table 1: DNA list of Cuvier’s statements and categories: The table represents the interpretation that produces the network graph in Figure 20. From left to right the columns represent a unique identifying number assigned to each statement, the name of the person making the statement, the central idea, location, or subject of the statement, and the text from the poem that creates the edge between the speaker and his subject.), statements (listed under

“text), topics (called “categories”), and agreement (for the purposes of this diagram, I have left all entries in “agreement”). For example, Table 1 lists the sections of text from the first section of the poem. In each instance, Cuvier is the speaker. In reading the poem, I created a constrained list of categories based on the topic of Cuvier’s speech: himself (“Cuvier”), science, scientific observation, scientific measurement, scientific display, the Venus Hottentot, and national character. Tagging the poem this way reveals how almost every statement refers back to some aspect of the scientific process or to Cuvier himself.

Table 1: DNA list of Cuvier's statements and categories: The table represents the interpretation that produces the network graph in Figure 20. From left to right the columns represent a unique identifying number assigned to each statement, the name of the person making the statement, the central idea, location, or subject of the statement, and the text from the poem that creates the edge between the speaker and his subject.

id	person	category	text
1	Cuvier	Cuvier	CUVIER
2	Cuvier	Science	Science, science, science!
3	Cuvier	Scientific observation	Everything is beautifulblown up beneath my glass.
98	Cuvier	Science	Everything is beautifulblown up beneath my glass.
106	Cuvier	Cuvier	my
5	Cuvier	Scientific observation	my glass
4	Cuvier	Scientific observation	Colors dazzle insect wings.
99	Cuvier	Science	Colors dazzle insect wings.
6	Cuvier	Scientific observation	A drop of water swirlslike marble
100	Cuvier	Science	A drop of water swirlslike marble.
7	Cuvier	Scientific observation	Ordinarycrumbs become stalactitesset in perfect angles
101	Cuvier	Science	Ordinarycrumbs become stalactitesset in perfect anglesof geometry
9	Cuvier	Science	geometry
8	Cuvier	Scientific measures	geometry
107	Cuvier	Cuvier	lâ€™d thought
10	Cuvier	Scientific observation	Few will ever see what I see
102	Cuvier	Science	Few will ever see what I see through this microscope.
11	Cuvier	Cuvier	I
108	Cuvier	Cuvier	I see
12	Cuvier	Scientific observation	microscope
13	Cuvier	Scientific measures	Cranial measurements
103	Cuvier	Science	Cranial measurementscrowd my notebook pages,
14	Cuvier	Scientific display	crowd my notebook pages
109	Cuvier	Cuvier	my notebook
15	Cuvier	Cuvier	I
110	Cuvier	Cuvier	I am moving
104	Cuvier	Science	I am moving closer, close to how these numbers signify aspects of national character
16	Cuvier	Scientific observation	these numbers signify
17	Cuvier	National Character	aspects of national character.
18	Cuvier	Science	Her genitalia
19	Cuvier	Venus Hottentot	Her genitalia
105	Cuvier	Science	Her genitalia will float inside a labeled pickling jar in the Musee de l'Homme on a shelf
20	Cuvier	Scientific display	will float inside a labeled pickling jar
22	Cuvier	Science	Musee de l'Homme
23	Cuvier	Science	Broca's brain
24	Cuvier	Venus Hottentot	The Venus Hottentot
21	Cuvier	Venus Hottentot	The Venus Hottentot
25	Cuvier	Science	Elegant facts
111	Cuvier	Cuvier	await me.
26	Cuvier	Science	Small things in this world are mine.
112	Cuvier	Cuvier	mine

The reader, who is not taken into consideration in this network drawing, would be an outlier in the graphic array of topics and statements. Unable to access the object of

scientific and ethnographic inquiry, readers are limited to Cuvier's monologue; that is, until the second section of Alexander's poem.

Venus Hottentot

Whereas the first section of the poem is clearly labeled "CUVIER," the second section's speaker remains unlabeled. Rather than speaking from a single, authoritative position as Cuvier does, the voice in the second section is a bricolage, culling from representations in Cuvier's notebooks and publications about Sara Baartman, secondary scientific studies of other "Hottentot women," historical records, advertisements, engravings, lithographs, contemporary articles, and artifacts from the Musée de l'Homme. Alexander organizes a collective voice around the history of Sara Baartman which uses a wide, diverse, and inclusive visual network to reconstitute the subjectivity of the silenced, fragmented, and diasporic Venus Hottentot body through Alexander's prosopopoeia.

Describing herself not from a position of authority, but from the perspective of the gazed-upon (human exhibition, engraving, lithograph, scientific specimen) the unnamed Venus Hottentot reconstitutes a voice out of her own objectification, and because of her contingency also garners more prestige within the poem's network. While Cuvier narrates scientific description, the practice of dividing, particularizing, and scrutinizing, the Venus Hottentot persona creates connections between and among seemingly unrelated people, locations, and events. Through language, she confronts the danger of re-inscribing the black female body as an object of fetishistic viewing, creates a networked identity for the erased black female subject, and articulates what Alexander elsewhere describes as the necessary "dreamspace" for shaping collective black consciousness.

2.

There is unexpected sun today
in London, and the clouds that
most days sift into this cage
where I am working have dispersed.
I am a black cutout against
a captive blue sky, pivoting
nude so the paying audience
can view my naked buttocks.

I am called "Venus Hottentot."
I left Capetown with a promise
of revenue: half the profits
and my passage home: A boon!
Master's brother proposed the trip;
the magistrate granted me leave.
I would return to my family
a duchess, with watered-silk

dressers and money to grow food,
rouge and powders in glass pots,
silver scissors, a lorgnette,
voile and tulle instead of flax,
cerulean blue instead
of indigo. My brother would
devour sugar-studded non-
pareils, pale taffy, damask plums.

That was years ago. London's
circuses are florid and filthy,
swarming with cabbage-smelling
citizens who stare and query,
"Is it muscle? bone? Or fat?"
My neighbor to the left is
The Sapient Pig, "The Only
Scholar of His Race." He plays

at cards, tells time and fortunes
by scraping his hooves. Behind
me is Prince Kar-mi, who arches
like a rubber tree and stares back
at the crowd from under the crook
of his knee. A professional
animal trainer shouts my cues.
There are singing mice here.

“The Ball of Duchess DuBarry”:
In the engraving I lurch
towards the belles dames, mad-eyed, and
they swoon. Men in capes and pince-nez
shield them. Tassels dance at my hips.
In this newspaper lithograph
my buttocks are shown swollen
and luminous as a planet.

Monsieur Cuvier investigates
between my legs, poking, prodding,
sure of his hypothesis.
I half expect him to pull silk
scarves from inside me, paper poppies,
then a rabbit! He complains
at my scent and does not think
I comprehend, but I speak

English. I speak Dutch. I speak
a little French as well, and
languages Monsieur Cuvier
will never know have names.
Now I am bitter and now
I am sick. I eat brown bread,
drink rancid brother. I miss good sun,
miss Mother’s sadza. My stomach

is frequently queasy from mutton
chops, pale potatoes, blood sausage.
I was certain that this would be
better than farm life. I am
the family entrepreneur!
But there are hours in every day
to conjure my imaginary
daughters, in banana skirts

and ostrich-feather fans.
Since my own genitals are public
I have made other parts private.
In my silence, I possess
mouth, larynx, brain, in a single
gesture. I rub my hair
with lanolin, and pose in profile
like a painted Nubian

archer, imagining gold leaf
woven through my hair, and diamonds.
Observe the wordless Odalisque.
I have not forgotten my Xhosa
clicks. My flexible tongue
and healthy mouth bewilder
this man with his rotting teeth.
If he were to let me rise up

from this table, I'd spirit
his knives and cut out his black heart,
seal it with science fluid inside
a bell jar, place it on a low
shelf in a white man's museum
so the whole world could see
it was shriveled and hard,
geometric, deformed, unnatural.

Connecting narrative and description, location, and language, African and Western Art, adjacency and object-hood, the voice of the Venus Hottentot starts with a singular history, expands and gathers additional voices and representations, and then assumes a central position within the poem's network. Beginning as nothing more than the "black cut out" or absence against the blue sky, her body is the nothing around which London, the clouds, and the audience are arranged. The collective I and eye in the second section orders her environment much differently from Cuvier. By looking outward, the Venus Hottentot speaker draws connections across unlikely terrain as she narrates her physical presence, display, and destruction. Describing herself in terms of proximity (against, to the left, behind, toward, between) to other objects on display, the speaker connects herself to the natural world, to commerce, to languages, to high and low art, and to African and European cultures. From Capetown in the second stanza to London to Paris, the speaker's entry into commerce connects familiar locations in the

African diaspora, which in turn allow her to move between agrarian culture of South Africa and the “cabbage-smelling/citizens” of London and the “*belles dames*” of Paris. Her language connects visual representation as scientific drawings, caricature engravings, and newspaper lithographs to African (“painted Nubian//archer”) and European art (the *Odalisque*).³⁷ Through prosopopoeia, she associates the inquiry of the “citizens who stare and query,/ ‘Is it muscle? bone? or fat?’” with the scientist Cuvier who “investigates/between my legs, poking, prodding,/ sure of his hypothesis.” As her body becomes the currency by which cultural, monetary, and class exchange is facilitated, she learns languages: “I speak//English. I speak Dutch. I speak / a little French as well, and / languages Monsieur Cuvier / will never know have names.” Throughout the process of being displayed and observed, poked and investigated, the speaking subject weaves and shapes her own narrative through the network of her captivity, organizing and making sense of the divisive and destructive scrutiny to which she is subject.

Eschewing her own bodily description, the Venus Hottentot’s language is purposefully vague, contiguous, and multiple in avoidance of creating another black female icon, ripe for white-male fantasy or demonization. Returning to the curious date in the poem’s title, a voice for the Venus Hottentot speaking in 1925 would be a posthumous one for Sarah Baartman. Most often in reviews and commentary on the poem, the second section is attributed directly to Baartman, but such an attribution cannot easily be made. As Gilman explains, “Sarah Bartman was not the only African to be so

³⁷ The image of the Odalisque played an important role in 19th century Orientalism. A term used for Turkish female slaves used as chambermaids for the sultan’s harem and who might someday become a concubines themselves, the odalisque is the subject of *Grand Odalisque*, an 1814 oil painting by Jean Auguste Dominique Ingres which depicts a reclining, nude, white, female concubine and is famous for its use of anatomical distortion.

displayed: in 1829 a nude Hottentot woman, also called ‘the Hottentot Venus,’ was the prize attraction at a ball given by the Duchess Du Barry in Paris. A contemporary print emphasized her physical difference from the observers portrayed” (213), a print which appears in the sixth stanza of Alexander’s poem. The Hottentot persona’s prosopopoeia creates yet another voice for the more radically silenced and erased presence of the Hottentot figure in the engraving, gathering it into the collective I/eye of the poem. Perhaps ironically, the visual artifacts in the sixth stanza occasion the most active use of language the Hottentot voice uses to describe herself. Lurching toward the belles dames, the engraving offers her an excuse to transcend spatial, racial, and class boundaries. Also to be found in the sixth stanza is a caricature titled “The Hottentot Venus” in which a seated white man observes through a telescope at the buttocks of a black woman on a pedestal, bending over such that her buttocks are parodied to be “luminous as a planet.” Published in 1950, the lithograph uses the Hottentot iconophilia to clarify and reify sexual and racial differences, but the poem’s speaker through prosopopoeia employs stereotype to recuperate the physical and historical absence of other Hottentot women.



FIG. 6.—“The Ball of the Duchess Du Barry,” popular engraving, 1829.

Figure 21: “The Ball of the Duchess Du Barry” reprinted in Sander Gilman’s essay, “Black Bodies, White Bodies: Toward an Iconography of Female Sexuality in Late Nineteenth-Century Art, Medicine, and Literature.”



FIG. 8.—“The Hottentot Venus,” popular engraving, ca. 1850.

Figure 22: “The Hottentot Venus” is another engraving reprinted in Sander Gilman’s “Black Bodies, White Bodies: Toward an Iconography of Female Sexuality in Late Nineteenth-Century Art, Medicine, and Literature.”

By joining Baartman’s visual representations and known history with Hottentot iconography to recover the lost identities of absent African women, the poem flirts with another ekphrastic convention—speaking to, for, or about representational objects that are inaccessible. In *The Gazer’s Spirit*, John Hollander defines poems with lost or absent actual visual objects:

And here we might consider for a moment how, while we can be certain that a poem invokes an actual work of art, present to the writer if only in retrospect, there are very many cases of that object being lost or

untraceable. The result is that the poem *might as well be notional* [ekphrasis]. (14)

Hollander links poems with unknown or lost aesthetic sources with ekphrastic poems that create their aesthetic subjects through language. In other words, notional ekphrastic poems create an aesthetic object only accessible through the language by which it is created. The particular engraving of “The Ball of the Duchess Du Barry” can be found, as Alexander found it in Gilman’s article,³⁸ but as Gilman points out, many other women were displayed similarly and numerous other engravings were produced with no regard for naming their subject other than “Venus Hottentot.” Therefore, the visible and traceable engravings in the poem stand for many others which shaped an iconography of black female sexuality as primitive and perverse. The women, the stories, the languages, the families, the cultures, and the intelligences whose traces can only be found in either quasi-scientific drawings or caricature are lost and only accessible by imagining them, and by reimagining them among European and African culture, language, science, and commerce, the Venus Hottentot becomes more than the sum of her parts.

Using the Discourse Network Analyzer to tag the speakers and the topics of the second section of the poem, a broad range of at least 15 topics emerge. In this section, there are statements by the overarching voice of the Venus Hottentot persona, which includes the prosopopeic envoicing of the images in the sixth stanza, and also a statement (though really a series of questions) attributed to the audience. As a result, the voice of the Venus Hottentot is not an uninterrupted authorial voice, but a voice that is partly constructed by the statements of others, represented by the additional red node as another

³⁸ Email to Elizabeth Bergmann Loizeaux, April 2007

speaker in the network diagram. In part because of the gathering of voices and in part because of the position of being an object of public and private spectacular and scientific display, the Venus Hottentot's view outward onto the world and her humanity—the organizing, and thinking brain in a physical body that feels, sees, speaks, imagines—refuses to see in the same narrow way that Cuvier does, and consequently creates a broader and more central presence within the network of the poem.

By grouping “statements” according to categories of observation, we can visualize a density for the speaking subject of the Venus Hottentot that is made present in language but not recreated visually, preventing a further fetishizing of her physical form. Topical nodes, then, become useful because they help the reader to identify important aspects of an ekphrastic poem within and outside of their “tradition.” For many women poets, how one looks is of particular concern. Though each may use the ekphrastic devices of description and narration in their own manner and even disagree as to the nature and usefulness of each of those approaches, one similarity among them is that each of the poets expand the gaze beyond a single observing stance and observe more dispersedly. Rather than dissolving or diluting the speaking subject, such a strategy provides opportunities for more connection.

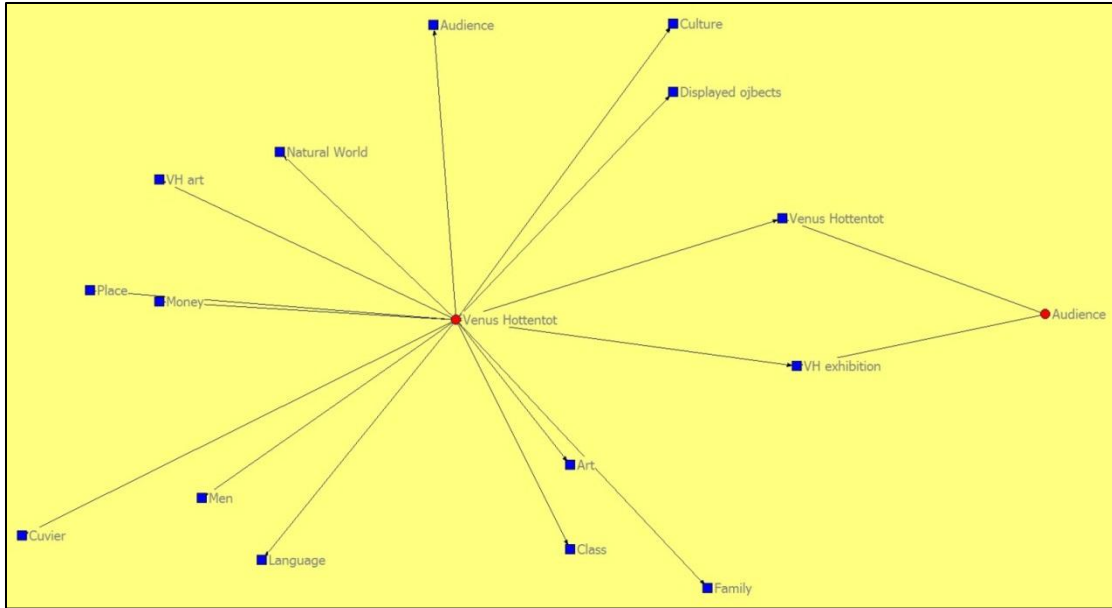


Figure 23: The Venus Hottentot discourse network: The layout of the discourse network for the Hottentot speaker is similar to the one in Figure 20, and the methods for selecting, tagging, and rendering the graph are the same between the two, though the results are quite different. The speaker, labeled Venus Hottentot is represented by a red circle. The subjects of the Venus Hottentot’s prosopopoeia are represented as blue squares. The Hottentot’s speech forms the edges of the network. It is through speech that the invisible Hottentot creates a presence in the world by connecting herself with a broad range of subjects. The audience, represented on the graph on the far right, also speaks during the Venus Hottentot section. The Venus Hottentot vanriloquises the men and women who come to see her as a human curiosity, asking, “Is it muscle? bone? Or fat?”

26	The Venus Hottentot (1825)	634	663	10/19/2011	Venus Hottentot	2 (VH)	Natural World	yes	There is unexpected sun today
27	The Venus Hottentot (1825)	667	673	10/19/2011	Venus Hottentot	2 (VH)	Place	yes	London
29	The Venus Hottentot (1825)	683	689	10/19/2011	Venus Hottentot	2 (VH)	Natural World	yes	clouds
30	The Venus Hottentot (1825)	720	724	10/19/2011	Venus Hottentot	2 (VH)	Place	yes	cage
31	The Venus Hottentot (1825)	731	743	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I am working
32	The Venus Hottentot (1825)	760	779	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I am a black cutout
33	The Venus Hottentot (1825)	790	807	10/19/2011	Venus Hottentot	2 (VH)	Natural World	yes	captively blue sky,
113	The Venus Hottentot (1825)	808	821	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	pivotingnude
34	The Venus Hottentot (1825)	829	844	10/19/2011	Venus Hottentot	2 (VH)	yes	paying audience	
35	The Venus Hottentot (1825)	829	844	10/19/2011	Venus Hottentot	2 (VH)	Audience	yes	paying audience
36	The Venus Hottentot (1825)	854	871	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	my naked buttocks
37	The Venus Hottentot (1825)	873	903	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I am called Venus Hottentot.â€¢
114	The Venus Hottentot (1825)	904	910	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I left
38	The Venus Hottentot (1825)	911	919	10/19/2011	Venus Hottentot	2 (VH)	Place	yes	Capetown
39	The Venus Hottentot (1825)	938	945	10/19/2011	Venus Hottentot	2 (VH)	Money	yes	revenue
40	The Venus Hottentot (1825)	947	963	10/19/2011	Venus Hottentot	2 (VH)	Money	yes	half the profits
41	The Venus Hottentot (1825)	968	983	10/19/2011	Venus Hottentot	2 (VH)	Money	yes	my passage home
42	The Venus Hottentot (1825)	993	1009	10/19/2011	Venus Hottentot	2 (VH)	Men	yes	MasterC's brother
43	The Venus Hottentot (1825)	993	1009	10/19/2011	Venus Hottentot	2 (VH)	Men	yes	MasterC's brother
44	The Venus Hottentot (1825)	1033	1043	10/19/2011	Venus Hottentot	2 (VH)	Men	yes	magistrate
115	The Venus Hottentot (1825)	1062	1076	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I would return
45	The Venus Hottentot (1825)	1083	1089	10/19/2011	Venus Hottentot	2 (VH)	Family	yes	family
116	The Venus Hottentot (1825)	1090	1099	10/19/2011	Venus Hottentot	2 (VH)	Class	yes	a duchess
46	The Venus Hottentot (1825)	1106	1278	10/19/2011	Venus Hottentot	2 (VH)	Money	no	watere-silddresses and money to grow food,rouge and powders in glass pots,silver scissors, a lorgnette,voile and tulle instead of fias,cerulene blue insteadof indigo
47	The Venus Hottentot (1825)	1283	1290	10/19/2011	Venus Hottentot	2 (VH)	Family	yes	brother
48	The Venus Hottentot (1825)	1304	1355	10/19/2011	Venus Hottentot	2 (VH)	Money	no	sugar-studded nonpareils,pale taffy, damask plums.
49	The Venus Hottentot (1825)	1376	1393	10/19/2011	Venus Hottentot	2 (VH)	Place	yes	LondonC's scircuses
52	The Venus Hottentot (1825)	1376	1416	10/19/2011	Venus Hottentot	2 (VH)	VH exhibition	yes	LondonC's scircuses are florid and filthy,
50	The Venus Hottentot (1825)	1448	1456	10/19/2011	Venus Hottentot	2 (VH)	Audience	yes	citizens
119	The Venus Hottentot (1825)	1508	1551	10/19/2011	Venus Hottentot	2 (VH)	VH exhibition	yes	My neighbor to the left isThe Sapient Pig,â€¢The Sapient Pig.â€¢The OnlyScholar of His Race.â€¢He playsat cards, tells time and
120	The Venus Hottentot (1825)	1535	1650	10/19/2011	Venus Hottentot	2 (VH)	Displayed objects	yes	fortunately scraping his hooves.
121	The Venus Hottentot (1825)	1651	1677	10/19/2011	Venus Hottentot	2 (VH)	VH exhibition	yes	Behindme is Prince Kar-mi
53	The Venus Hottentot (1825)	1651	1771	10/19/2011	Venus Hottentot	2 (VH)	Displayed objects	yes	Behindme is Prince Kar-mi, who archeslike a rubber tree and stares backat the crowd from under the crookof his knee.
54	The Venus Hottentot (1825)	1772	1817	10/19/2011	Venus Hottentot	2 (VH)	Men	yes	A professionalanimal trainer shouts my cues.
122	The Venus Hottentot (1825)	1772	1817	10/19/2011	Venus Hottentot	2 (VH)	VH exhibition	yes	A professionalanimal trainer shouts my cues.
117	The Venus Hottentot (1825)	1818	1846	10/19/2011	Venus Hottentot	2 (VH)	Displayed objects	yes	There are singing mice here.
55	The Venus Hottentot (1825)	1847	1876	10/19/2011	Venus Hottentot	2 (VH)	VH art	yes	â€¢The Ball of Duchess DuBarryâ€¢
124	The Venus Hottentot (1825)	1847	1877	10/19/2011	Venus Hottentot	2 (VH)	Art	yes	â€¢The Ball of Duchess DuBarryâ€¢
123	The Venus Hottentot (1825)	1878	1894	10/19/2011	Venus Hottentot	2 (VH)	VH art	yes	in the engraving
56	The Venus Hottentot (1825)	1895	1896	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I lurch
126	The Venus Hottentot (1825)	1895	1902	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I lurch
57	The Venus Hottentot (1825)	1914	1992	10/19/2011	Venus Hottentot	2 (VH)	Audience	yes	belles dames, mad-eyed, andthey swoon. Men in capes and pince-nezshield them
125	The Venus Hottentot (1825)	1914	1992	10/19/2011	Venus Hottentot	2 (VH)	Class	yes	belles dames, mad-eyed, andthey swoon. Men in capes and pince-nezshield them
59	The Venus Hottentot (1825)	2011	2018	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	my hips
60	The Venus Hottentot (1825)	2049	2060	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	my buttocks
127	The Venus Hottentot (1825)	2083	2104	10/19/2011	Venus Hottentot	2 (VH)	Natural World	yes	luminous as a planet.
61	The Venus Hottentot (1825)	2105	2191	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	yes	Monsieur Cuvier investigatesbetween my legs, poking, prodding,sure of his hypothesis
62	The Venus Hottentot (1825)	2142	2149	10/19/2011	Venus Hottentot	2 (VH)	Displayed objects	yes	my legs
129	The Venus Hottentot (1825)	2193	2206	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I half expect
130	The Venus Hottentot (1825)	2207	2223	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	yes	him to pull sick
131	The Venus Hottentot (1825)	2224	2276	10/19/2011	Venus Hottentot	2 (VH)	Displayed objects	yes	scarves from inside me, paper poppies,then a rabbit
63	The Venus Hottentot (1825)	2278	2334	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	yes	He complainsat my scent and does not think comprehend
132	The Venus Hottentot (1825)	2340	2347	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I speak
64	The Venus Hottentot (1825)	2340	2356	10/19/2011	Venus Hottentot	2 (VH)	Language	yes	I speakEnglish.
133	The Venus Hottentot (1825)	2357	2364	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I speak
65	The Venus Hottentot (1825)	2357	2370	10/19/2011	Venus Hottentot	2 (VH)	Language	yes	I speak Dutch
134	The Venus Hottentot (1825)	2372	2379	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I speak
66	The Venus Hottentot (1825)	2372	2395	10/19/2011	Venus Hottentot	2 (VH)	Language	yes	I speaka little French
67	The Venus Hottentot (1825)	2405	2461	10/19/2011	Venus Hottentot	2 (VH)	Language	yes	andlanguages Monsieur Cuvierwill never know have names
68	The Venus Hottentot (1825)	2467	2478	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I am bitter
69	The Venus Hottentot (1825)	2483	2497	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	nowI am sick.
70	The Venus Hottentot (1825)	2498	2535	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I eat brown bread,drink rancid broth
71	The Venus Hottentot (1825)	2537	2552	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I miss good sun
72	The Venus Hottentot (1825)	2554	2573	10/19/2011	Venus Hottentot	2 (VH)	Family	yes	miss MotherC's sadza
73	The Venus Hottentot (1825)	2575	2599	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	My stomachis frequently
74	The Venus Hottentot (1825)	2656	2710	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I was certain that this would bebetter than farm life
75	The Venus Hottentot (1825)	2712	2740	10/19/2011	Venus Hottentot	2 (VH)	Money	yes	I amthe family entrepreneur
135	The Venus Hottentot (1825)	2712	2740	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I amthe family entrepreneur
136	The Venus Hottentot (1825)	2785	2850	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	my imaginarydaughters, in banana skirtsand ostrich-feather fans
76	The Venus Hottentot (1825)	2788	2807	10/19/2011	Venus Hottentot	2 (VH)	Family	yes	imaginarydaughters
77	The Venus Hottentot (1825)	2812	2850	10/19/2011	Venus Hottentot	2 (VH)	Culture	yes	banana skirtsand ostrich-feather fans
78	The Venus Hottentot (1825)	2858	2884	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	my own genitals are public
79	The Venus Hottentot (1825)	2885	2917	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I have made other parts private.
80	The Venus Hottentot (1825)	2918	2941	10/19/2011	Venus Hottentot	2 (VH)	Language	yes	In my silence I possess
81	The Venus Hottentot (1825)	2942	2983	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	mouth, larynx, brain in a singlegesture.
82	The Venus Hottentot (1825)	2984	3031	10/19/2011	Venus Hottentot	2 (VH)	Culture	yes	I rub my hairwith lanolin, and pose in profile
83	The Venus Hottentot (1825)	3039	3053	10/19/2011	Venus Hottentot	2 (VH)	Art	yes	painted Nubian
84	The Venus Hottentot (1825)	3072	3117	10/19/2011	Venus Hottentot	2 (VH)	Money	yes	gold leafweven through my hair, and diamonds
85	The Venus Hottentot (1825)	3119	3150	10/19/2011	Venus Hottentot	2 (VH)	Art	yes	Observe the wordless Odalisque.
86	The Venus Hottentot (1825)	3151	3188	10/19/2011	Venus Hottentot	2 (VH)	Language	yes	I have not forgotten my Xhosadicks.
137	The Venus Hottentot (1825)	3151	3188	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	I have not forgotten my Xhosadicks.
87	The Venus Hottentot (1825)	3189	3225	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	My flexible tongueand healthy mouth
88	The Venus Hottentot (1825)	3235	3266	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	yes	this man with his rotting teeth
89	The Venus Hottentot (1825)	3268	3285	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	yes	If he were to let
90	The Venus Hottentot (1825)	3286	3312	10/19/2011	Venus Hottentot	2 (VH)	Venus Hottentot	yes	me rise upfrom this table
91	The Venus Hottentot (1825)	3314	3363	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	no	Iâ€¢d spinhis knives and cut out his black heart
92	The Venus Hottentot (1825)	3365	3391	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	no	seal it with science fluid
93	The Venus Hottentot (1825)	3392	3410	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	no	insidea bell jar,
94	The Venus Hottentot (1825)	3411	3458	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	no	place it on a lowshelf in a white manâ€¢s museum
95	The Venus Hottentot (1825)	3466	3487	10/19/2011	Venus Hottentot	2 (VH)	Audience	yes	whole world could see
96	The Venus Hottentot (1825)	3488	3514	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	no	it was shriveled and hard,
97	The Venus Hottentot (1825)	3515	3546	10/19/2011	Venus Hottentot	2 (VH)	Cuvier	no	geometric, deformed, unnatural.

Table 2: My reading of the Venus Hottentot's speech follows the same format as in Table 1. From left to right the columns represent a unique identification number for the row, the title of the poem, the location of the tagged line in the document, the date the reading was performed, the name of the speaker, the section of the poem being tagged, the subject of the text, whether or not the speaker

agrees with the statement, and the line of the poem being described.³⁹

By multiplying the voices of the speaking subject in “The Venus Hottentot (1925)” Alexander creates a connected, diverse, and central identity. Such a conception of black female identity becomes a recurring theme in Alexander’s larger body of poetry and prose and represents a deliberate strategy for creation of an African American “dreamspace” in which concepts of what she describes as the “black interior”—the self-perception of black people that exists outside of dominant stereotypes. The physicality of the Venus Hottentot’s sight and speech cannot be separated—and the process demonstrates an empathetic mode of observation: a voice rendered through the embodied experience of display. “I see” is inextricable from statements such as: I am; I speak; I smell; I eat; I rub. The speaker’s observations as the objects of display are the thinking, feeling, and imagining other to what the audiences and Cuvier query and describe, and she reveals her physical presence to be her own construction. Imploring that the audience to “Observe the wordless Odalisque,” the Venus Hottentot reveals herself to both participate in the act of looking (for she, too, must be looking at the Odalisque in order to adopt a similar stance) and construct her own physical stance and “to-be-looked-at-ness.”

A Self in Conversation

The ekphrastic strategy in Alexander’s first book of poetry becomes an early working out for much of her later work in prose and poetry. As Terri Francis explains in her essay “I and I: Elizabeth Alexander’s Collective First-Person Voice, the Witness and

³⁹ One might note that there are more columns in this table than in the previous one. Initially, the intention was to show edge direction; however, my decision in the end was to use the exact same data to produce graphs using the same methods. The columns that appear in this table but not in Table 1 do not affect the resulting network graph; however, it was not possible to remove that data from this particular table, so it remains as a trace of a suggestion toward future iterations of the project that might try using directed edges (ones with arrows indicating the flow of the relationship).

the Lure of Amnesia,” Alexander uses a collective voice to craft the relational sensibility that distinguishes Alexander as a black woman writer. According to Francis, “she writes her social identity into being partly through explicitly addressing and representing the shared interests of a black female readership, breaking down traditional norms or objectivity and abstraction—without resorting exclusively to literal forms of direct address such as letters” (2). Rather than expressing the self in Duboisian terms of double-consciousness, Alexander prefers collage as a metaphor for black consciousness in the vein of Harlem Renaissance visual artist Romare Bearden, a stance she explores in her essay “The Genius of Romare Bearden.”

As I’ve written, I think his particular use of the collage as he specifies that techniques as African American—as it engulfs the call and response and jazz improvisation, as it references the Middle Passage, and the ripping of something from its original source and reconstituting it in a new space that still has allusions to and memory to that old place—is a brilliant metaphor for talking about black creative production, survival, and living” (*P&P* 164).

Reconstituting the persona of the Venus Hottentot in a poetic space with “allusions to and memory to” the past historical moment and artifacts, affords Alexander as a black woman writer a starting point from which to negotiate her own identity—a poet participating in a Western, traditional discourse (free verse, ekphrastic poet looking at, responding to, and creating objects for audiences and readers) and a black woman (within a tradition of African diaspora and the site of Western iconophilic representation of sexual primitivism, which asserts the absence of intellectual ability).

Alexander is also acutely aware that the same activity that creates dangerous stereotypical assumptions of identity groups at the same time strives to preserve types of difference and creates an audience for those who might otherwise be erased. In an

interview with Meta Jones, Alexander, in the course of explaining that black culture is anything black people have made (much akin to Gwendolyn Brook's claims), reminds us that "On one level, we need to remember that culture is that which makes its way to an audience" (P&P 157). What "The Venus Hottentot (1825)" makes perfectly clear is that without the commerce, the exhibitions, the engravings, and the scientific drawings and notebooks, there would be nothing left of the Venus Hottentot to recover. The relationship is double-edged. While the process of being exhibited and dehumanized literally causes the demise of Sarah Bartman, the existence of an audience and an economy for the Venus Hottentot's consumption has also preserved her in such a way that Alexander has something to return to in an effort to reconstitute a speaking and active black female identity. Her multiple positions are visualized as the more complete network of the poem, which locates Alexander outside and separate from the Venus Hottentot and Cuvier, and yet her own identity as writer and poet require that she occupy both positions.

Alexander returns to artifacts that speak out of a historical moment participate in an ekphrastic convention described by Loizeaux: "The transcendence of the work of art is also modified in modern ekphrasis by a greater sense of art as historical. . . The presence of the work of art can function as a portal and as a place of contact" (21). The allure of the visual artifacts in *The Venus Hottentot* for Alexander are their usefulness as vehicles to reclaim and to recover historical consciousness and character. Alexander describes it as "experantia" meaning "the wish to communicate across place and across boundary" (P&P 156). She characterizes her poems as archives and as a means for preserving and

recreating lost people, dialects, ideas, and even “esoterica”—the quirks, oddness, and particularities of a people.

Alexander’s sense of culture as reliant on an audience in order to be defined is recognizable in her use of multiple speakers who position themselves differently in relationship to their perceived audiences. As a speaker, Cuvier’s observations, his methods, and his consequent representations of his objects of study were enacted from the privileged position of an authority whose attitude and description literally stand for the object itself. In contrast, the highly constructed and displaced voice of the Venus Hottentot employs a multi-directional approach to narrative, urging the reader to participate. Cuvier’s “few will see” is confronted by the Venus Hottentot’s insistence to her audience to “observe.” Where Cuvier’s “notebooks” and “geometries” become the means toward constructing “national identity,” the Venus Hottentot invites the active inquiry of the audience (“Is it muscle? bone? Or fat?”) While Cuvier’s voice focuses on the acquisition and possession of knowledge (“Elegant facts await me. / Small things in this world are mine.”), the Venus Hottentot “possesses” nothing, not even herself, and yet as one possessed occupies more density, more connection, and more influence within the poetic, cultural, and historical network of the poem than Cuvier, whose “black heart” becomes more easily sealed within the discourse of a science that proves to be “geometric, deformed, unnatural.”

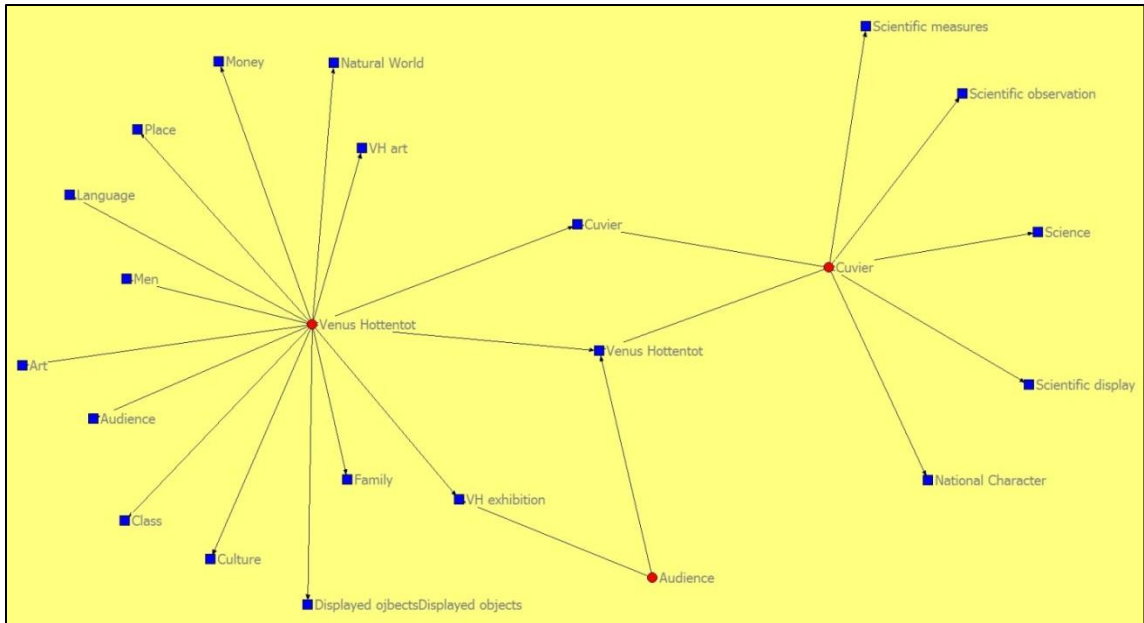


Figure 24: Social network graph of the interpretive reading of the first and second sections of “The Venus Hottentot (1825).” The Venus Hottentot speaker (red dot on left) has a higher centrality in the poem based on the number of subjects she engages through her speech. Cuvier’s degree of centrality is much lower in the network (red dot on right). In the central area of the graph, there is a blue square labeled Cuvier. This represents the “idea” of Cuvier as he discusses himself and as he is mentioned by the Venus Hottentot. One method for determining centrality is to remove nodes from the network to determine how it would influence the rest of the network. Removing Cuvier’s node and the edges associated with it would have much less significance on the overall network than if we were to remove the “Venus Hottentot.”

Combining the discourse network analysis encoding from the first and second sections of the poem into one cohesive social network demonstrates the differently shaped networks that the two primary speakers in the poem create through language. In the introduction, the issue of centrality is introduced, but in the Venus Hottentot, we see the significance of centrality in order to maintain control over the ekphrastic poem. For instance, the Venus Hottentot speaker, represented by a red circle on the left side of the graph, has a higher number of edges connecting it to the rest of the network. There are 14 edges emanating from the Venus Hottentot’s node, and as was mentioned in the introduction, the number of edges connecting a single node to other nodes in the network is one way to measure its centrality in the network. Centrality is a measure of authority

and influence of one node on the others throughout the network. On the right hand side, the node for Cuvier's speaker has fewer edges—only seven. The node for the audience, also in red, has only two edges. Both of the edges connecting the audience to the network ultimately connect them to the Venus Hottentot, and not Cuvier at all. The visualization clarifies the threat the Venus Hottentot poses to Cuvier. Cuvier's position within the network is vulnerable. Were the Hottentot speaker to be able to “cut him out,” His loss would be much less influential on the shape of the network than the loss of the Hottentot speaker. In other words, because the Hottentot speaker is so deeply and widely connected to other nodes on the network, her erasure is more consequential. On the other hand, Cuvier's narrow network of “science,” “national character,” “scientific measurement,” “scientific observation,” and “scientific display” (“Science, science, science!”) makes him vulnerable to the Hottentot's fantasy of erasing him.

The Venus Hottentot's fantasy of violence differs from the dangerous visage of Shelley's Medusa. One might be inclined to read this poem as W.J.T. Mitchell reads P.B. Shelley's manuscript poem “On the Medusa of Leonardo Da Vinci in the Florentine Gallery,” which is to say as a way of using the deformed and paralyzing “other” female image to rise up and usurp the authority of its viewer poet—to turn him to stone—to turn the represented other into a virtual weapon. This, however, would be a misrepresentation of Alexander's poem. In the last two stanza's, the Hottentot's use of the conditional “If he were to let me” keeps always at the forefront of the reader's mind that the position of power is and will always be in the hands of her maker. Her revolt can only be imaginary and in the frozen moment of poetic representation, such an act will also always only be an act of imagination, which is why she would “spirit” away his knives—the source of

her own fragmentation. Furthermore, the voice of the Venus Hottentot does not seek to use her own deformity or image to become a weapon, but instead seeks to use her own radical humanity to expose her viewer's deformity—his heart, which she describes as “shriveled and hard,/geometric, deformed, unnatural.” Rather than silencing him, as is the traditional ekphrastic fear, the Venus Hottentot uses the assemblage of voice to turn back and expose Cuvier's language—turning “small things” into “shrunkened” and the *Musée de l'Homme* into “a white man's museum,” which could variously be read as one that displays more about “white men” than it does “national character” of the objects on display, revealing “geometry” as a deformation and unnatural. In her polyvocality, she uses language to seal Cuvier along with his scientific observation in its own jar and put them on display for the poem's reader.

Conclusion

Through their use of prosopopoeia as an empathetic strategy, Lisel Mueller and Elizabeth Alexander create subjects who not only speak against the condition of their representation but who open the ekphrastic network of visual-verbal relations to engage a wider array of readers, viewers, and creators and to suggest alternate ethically-considered narrative trajectories. Mueller's delicate balancing of detail and ambiguity forges networked subjects who intervene in the intimate conversations between artist and model, expanding the conversation to include active readers, able to participate in the discourse of aesthetic creation. Assembling an archival self through historical, visual, and cultural touchstones, Alexander's Venus Hottentot creates a unified, polyphonic voice out of its radical division of parts, and through its creation, Alexander actualizes a strategy for the reformation of a black South African self and collective identity. “The Venus Hottentot

(1825)” transforms the destructive practices of slavery and colonization into a network through which disparity is transformed to strength. As I mention briefly in the introduction, the use of network graphs and social network theory is new, and there is much to be expanded upon and one objective of my research is to be provocative in such a way as to invite future research on the ways in which social network analysis can be leveraged to study literary and discursive relationships.

The following chapter will turn to the dialogic network of ekphrastic description in Elizabeth Bishop’s ekphrastic poetry. Where issues of centrality play an important role in the recuperation of the black female body of the Venus Hottentot in Elizabeth Alexander’s poem, the following chapter will use network visualizations to explore how dialectics of description shift the center of the ekphrastic network and in doing so change the relationship between speakers, artists, works of art, and readers.

Chapter 3: Description, Density, and Creation: Elizabeth Bishop's Ekphrastic Networks

The great triumph in her descriptions, I think, is the drama of perception lying beneath them and enacted by them, her sense of the cost as well as the pleasures of such observation suggests that she also looked at the world because she felt compelled to.

-Frank Bidart

The problem faced by the modern viewer is how to make [Dutch] art strange, how to see what is special in an art with which we feel so at home, whose pleasures seem so obvious.

-Svetlana Alpers, *The Art of Describing*

Joseph Cornell: inside your boxes
My words became visible for a moment.

-Octavio Paz, "Objects & Apparitions"

While the previous chapter explores ways in which networks of ekphrasis can be deployed to achieve personal and political recuperations of female identities, this chapter will consider how networks of ekphrastic description can be used to resituate the relationships between speakers, poets, artists, readers, and objects of representation as a collaborative enterprise of "makers," contradicting existing theorizations of ekphrasis as a hostile encounter fueled by rivalry and antagonism by decentralizing the author's central position in the poem. Through close readings and network visualizations of Elizabeth Bishop's widely celebrated art of description, I present a model of ekphrasis in which layers of description increase the dimensions of the ekphrastic engagement and correspondingly the number of possible relationships between viewers and objects, an act

that decreases the centrality of the poet as an authoritative and organizing voice and elevates the reader's responsibility from passive recipient to active participant in the economy of art, where artwork is shared, exchanged, and reproduced.

In a letter to Randall Jarrell in December 1955, Elizabeth Bishop describes her reaction to his review of *A Cold Spring* as a relief. Admitting that it excited her to tears, Bishop seems to gush over Jarrell's comparison between her poetry and the painting of the seventeenth-century Dutch artist, Johannes Vermeer.

I still, from the bottom of my heart, honestly think I do NOT deserve it—but it has been one of my dreams that someday someone would think of Vermeer, without my saying it first, so now I think I can die in a fairly peaceful frame of mind, any old time, having struck the best critic of poetry going that way. . . (*One Art* 31)

While Bishop's delight and surprise seem genuine enough, perhaps there is also a touch of irony in her response. For Jarrell to compare Bishop's poetry to a Dutch painter may well demonstrate to Bishop his growth as a reader as much as it does her development as a writer.⁴⁰ While Bishop was known to appreciate many of the "old masters" and even contemporary ones, her poetry and prose more often champions works by amateur and primitive artists instead. Evidence of Bishop's growing interest in Vermeer and more generally the Dutch arts appears earlier in her correspondence on February 5, 1954, when she mentions to Ilse and Kit Barker that she received the Phaidon *Vermeer* for Christmas. Before she posts her letter, she appends the following: "Heavens, I'd like to see that Flemish show I keep reading about. Have you been able to get to see it?" (*One Art* 287)

⁴⁰ Peggy Samuels begins *Deep Skin: Elizabeth Bishop and Visual Art* with the same quotation from Elizabeth Bishop's letters; Samuels' emphasis is on how genuinely flattered Bishop is because Jarrell has made the connection between her work and Vermeer's painting. However, Jarrell's earlier reviews of Bishop's work classified her as a "miniaturist," according to Susan Rosenbaum in her article "Elizabeth Bishop and the Miniature Museum" *Journal of Modern Literature* 28.2, 61-99.

The show to which Bishop most likely refers was considered the most significant travelling art exhibition in the United States in 1954. Titled *Little Masters in 17th Century Holland and Flanders*, the show opened at The Metropolitan Museum of Art in 1954 and toured the United States until 1957.⁴¹ Bishop's interest in this show demonstrates her affinity toward the artistic accomplishments of Dutch painters, who were not often considered by the institutional forces of museum curators and art historians as meeting the standards and quality assumed of the true "Flemish Masters" or the Italian. The works included in this exhibition are those that were often commissioned and sold within a merchant-class for domestic purposes.

Until recently, Bishop's interest in the Dutch arts had received relatively little critical attention, yet her appreciation of them offers valuable insight into her ekphrastic poetry and her ethics of observation and display. Bonnie Costello offers the most influential commentary regarding Bishop's interest in the Dutch arts, suggesting that:

Bishop greatly admired and imitated the Dutch art of describing, but the cultures she represents are very different. And unlike the Dutch, Bishop often looks, as Adrienne Rich long ago pointed out, as an outsider, at cultural positions different from her own. Still life in her poems thus offers a refracted mirror, in which we see ourselves reflected, as well as the very different world to which these displays bear witness. (88)

Costello aptly notes that Bishop's poetry inclines toward acts of refracting and self-perceptive description rather than the possession of art objects as domestic possessions. Comparing the relationship between Bishop's poetry and the Dutch arts from the perspective of the still life—which is meant to celebrate a robust, bourgeois lifestyle where commerce represented the dominion of colonial reach—Costello makes the deft

⁴¹ New York. American Federation of the Arts. "Little Masters in 17th Century Holland and Flanders (circulating exhibition)," 1954–57, no catalogue.

distinction between the colonizing gaze of the Dutch merchant class and Bishop's more ethnographically aware use of description. However, Costello's characterization of Dutch arts misses an important aspect of Dutch visual culture that also appealed to Bishop. Svetlana Alpers in *The Art of Describing* explains that the Dutch art market, entirely distinct from the art market of Renaissance Italy, enabled a robust, middle-class commerce for aesthetic objects. What distinguishes the Dutch arts is not only a celebration of colonial dominion, but also the means by which it was created, exchanged, and integrated into the daily lives of the merchant-class. While Bishop certainly celebrates the descriptive quality of the Flemish painters, she is also intrigued by the way in which craftsmanship entered the domestic space of the home and could be selected, appreciated, and displayed by a middle-class consumer.

In this chapter, I consider Bishop's ekphrastic poems in light of Alpers's important work on description in seventeenth-century Dutch painting (portraiture, still life, and landscape), drawing parallels between their mutual aesthetic values. Bishop's ekphrasis selects objects which are at the same time domestic and foreign, familiar and strange, in order to draw poetic networks of description between speakers, works of art, and readers. Through linguistic instability, reflexivity, and repetition, Bishop shapes a dense network of descriptive relationships and reveals her ethical stance on questions of observation and display. Rather than expanding outward beyond the local ekphrastic situation of poet-artwork-reader, Bishop explores the possibility of shifting the power of description and display between poet, artwork, and reader through three descriptive modes that create relationships between subjects by drawing equivalencies between them, by acts of classification, and by estimating the spatial,

temporal, or conceptual proximity between them. At first, Bishop's ekphrastic poems appear to typify the poet-artwork-reader network that W.J.T. Mitchell describes in "Ekphrasis and the Other," but upon closer observation it becomes clear that such a reading oversimplifies the complexity of Bishop's aesthetic and ethical aims. This chapter argues that unlike her contemporaries, such as Randall Jarrell, Robert Lowell, and John Berryman, whose poems take up visual works of art by recognizable "masters" available to a wider public audience through reproductions, public museums and monuments, Bishop's ekphrastic poetry fosters intricate matrices of relationships within an intimate engagement between objects of art that lie outside the purview of institutional forces such as governments, academies, and public museums. Demonstrating her preference for the "primitive" and the particular, Bishop turns her ethics of viewing inward, and observational stance that estranges the self in its effort to "really see" and that elevates the reader from a passive recipient of description to its curator.

The Ethics of Description

In 1766 when Gotthold Ephraim Lessing sets about the task of creating "laws of genre," which relegate painting and poetry to their respective "natural" environments (painting to space and poetry to time), he argues that in attempting to achieve the spatial qualities of painting through description the poet denudes poetry of its power and authority. As Lessing explains, "Poetry has the wider sphere. Beauties are within her reach which painting can never attain... more is allowed to the poet than the sculptor of the painter"(qtd. in Mitchell 107). W.J.T. Mitchell emphasizes that Lessing's argument, occasionally muddled and structurally unsound, is constructed in ethical terms for

specific political and economic purposes: to elevate his own intellectual stature and advance his own career, as well as to assure that French influences do not affect German sensibilities. Lessing's argument within the *ut pictura poesis* tradition—that there are limits to the powers and purposes of the verbal and pictorial arts which are not meant to be transgressed—has a lasting hold on modern criticism of poetry. It has been difficult to shake the notion that description (often preceded by the qualifier “mere”) is a lesser component of poetic craft.⁴²

Ekphrasis, a word that originated as a rhetorical term meaning not only “to speak out” but also “to tell in full,” was first understood as a form of *enargia* or lively description and used as a form of exercise for Greek rhetoricians to practice lively descriptions that could faithfully render an image in the listener's “mind's eye.”⁴³ While critical adoption of the term “ekphrasis” has shifted away from the classical rhetorical definition, it is worth remembering ekphrasis' underlying rhetorical impulse and responsibility to faithfully represent an image. In this chapter, Bishop's visual ethics are explored in two ways: first, in terms of what objects Bishop chooses to describe, and second in the manner in which description is deployed, echoing Bishop's use of the term “heroic observation.” In her famous “Darwin Letter” to Anne Stevenson, Bishop responds to Stevenson's discussion of the poet's relationship to surrealism. Stevenson, who was in the midst of writing the first full-length study of Bishop's poetry, compared her writing to Klee and Ernst, suggesting that they shared similar faith in the unconscious. Bishop responds, writing:

⁴² I use Lessing to make this case; however, similar lines of argument can be seen in Gerard Genette, *Figures of Literary Discourse*. Trans. Alan Sheridan. New York: Columbia University Press, 1982.

⁴³ Hagstrum, Jean H. *The Sister Arts: The Tradition of Literary Pictorialism and English Poetry from Dryden to Gray*. University of Chicago Press, 1987. Print.

Yes, I agree with you. I think that's what I was trying to say in the speech above. There is no "split." Dreams, works of art (some), glimpses of the always-more-successful surrealism of everyday life, unexpected moments of empathy (is it?), catch a peripheral vision of whatever it is one can never really see fullface but that seems enormously important. I can't believe we are wholly irrational—and I do admire Darwin! But reading Darwin, one admires the beautiful and solid case being built up out of his endless heroic observations, almost unconscious or automatic—and then comes a sudden relaxation, a forgetful phrase, and one feels the strangeness of his undertaking, sees the lonely young man, his eyes fixed on facts and minute details, sinking or sliding giddily off into the unknown. What one seems to want in art, in experiencing it, is the same thing that is necessary for its creation, a self-forgetful, perfectly useless concentration. (Letter 8-20 Jan. 1964)

Bishop's use of the term "endless heroic observations" celebrates a process of layering descriptive detail over descriptive detail such that, through their collection, create not only a representation of the thing observed but also a representation of *the process of observation*. This process encourages the poet to achieve—through concentration—the ability to see "peripheries" that reflect both the observing self and the thing observed, in other words, the "strange" within one's self. Bishop's heroic concentration casts a wide net, collecting so much detail that it disrupts the viewer's perspective that actually helps us to "see better."

Bishop's poetry demonstrates "heroic" looking that is both perceptive and receptive, a recursive attention whereby the viewer sees, revisits, and thus revises her perception—essentially a discursive looking process that results in her recognition of, familiarity with, curiosity in, and engagement across difference. As in the case of heroic observation, the accumulation of detail distorts the view just enough that it can actually improve the viewer's sight, while at the same time prevent it from becoming an object of scrutiny. This process results in her recognition of familiarity of, curiosity in, and

engagement with otherness that attends to its well-being. As Helen Vendler describes it, Bishop's descriptive practice is the "continuing vibration of her work between two frequencies--the domestic and the strange".⁴⁴

Beyond or behind the familiar, whether the visual or the human familiar, lies the perpetually strange and mysterious. It is that mystery which causes those whispered exclamations alternating with the pained "Yes" provoked by human vicissitude. It guarantees the poet more to do. On it depends all the impulse to domestication. Though the human effort is bent to the elimination of the wild, nothing is more restorative than to know that earthly being is larger than our human enclosures. (Vendler 23)

Bishop's ekphrasis plays out this "continuing vibration" in its negotiations between the visually engaged, observing self and the foreignness or otherness of the art object through description. Vendler's observations highlight the responsiveness and reflexiveness that characterizes Bishop's descriptive, ekphrastic process: her verbal balancing, weighing, reassessing, and responding to a visual other. To Bishop, the act of description should never overtake its visual subject, just as the domestic in her poetry never overwhelms or "domesticates" the foreign. Description represents a reflexive coexistence. Description, instead, represents a reflexive coexistence. As the history of the ekphrastic tradition shows us, the question of the familiar and the strange is fundamental to the genre: the staging of self and other in W.J.T. Mitchell's assessment involves first recognition of difference, followed by a hope for sameness. In Mitchell's paragonal model, however, that hope dissolves into fear that the verbal will be subsumed by the immediacy of the visual. Bishop's ekphrasis, however, does not respond fearfully to the foreign or the strange. Instead, it negotiates relationships between them through description, prolonged observation, and responsiveness, demonstrating a curiosity that is not self-involved, but

⁴⁴ Helen Vendler, "Domestication, Domesticity and the Otherworldly," *World Literature Today*, 51 (1977), 23.

self-forgetting. Bishop's accumulation of detail held in delicately undecided suspension characterizes her ethic of looking and displaying is most recognizable in her ekphrastic work. Dynamic and discursive, Bishop collects descriptive detail that she shares with her reader in open and suggestive ways.

Due to Bishop's ethical approach to heroic description, we might locate in Bishop additional affinities for the Dutch approach to art. In *The Art of Describing*, Svetlana Alpers articulates two aspects of Dutch visual culture that echo attitudes found in Bishop's poetics. First, she emphasizes the Dutch attentive commitment to the observing eye and the craft of description. Second, she outlines another feature that we can also see as part of Bishop's own ethical approach: that art should be a part of the middle-class marketplace rather than owned and enjoyed by an elite few. Unlike Renaissance Italian art, which depended heavily on a system of patronage and limited the circulation of art to a wealthy aristocracy, Dutch art was exchanged as a commodity in the common marketplace and by depicted "common" subjects was considered "vulgar" by Italian standards.⁴⁵ Portraiture, still life, and landscapes represented in Dutch painting describe "pleasures taken in a world full of pleasures: the pleasures of familial bonds, pleasures in possessions, pleasure in the towns, the churches, the land" (Alpers ii). Just as significantly, Alpers links the Dutch concept of art as a commodity to our more twentieth-century, middle-class consumption of art as

a liquid investment like silver, tapestries, or other valuables, where pictures were bought from artists' shops or on the open market as

⁴⁵ Svetlana Alpers *The Art of Describing* "In the Renaissance this world was a stage on which human figures performed significant actions based on the texts of the poets. It is a narrative art. And the ubiquitous doctrine *ut pictura poesis* was invoked in order to explain and legitimize images through their relationship to prior and hallowed texts."

possessions and hung, one presumes, to fill space and to decorate domestic walls.” (Alpers xxii)

Art that took Dutch daily life as its subject was also a commodity exchanged as a routine part of it, uniting the practical and domestic concerns of food, shelter, and employment with the pleasurable, imaginative, and descriptive activities of observation and display—a symmetry that Bishop appreciated.

Ease of access to and exchange of works by primitive artists shaped part of the Dutch arts’ allure for Bishop as well. While she enjoyed a wide range of visual arts as an observer, a practitioner, a patron, a student, and a friend to painters and sculptors, Bishop’s own art of poetry more frequently than not celebrated the amateur or primitive practitioner. In addition to her appreciation of Alexander Calder, Joseph Cornell, Kurt Schwitters, Paul Klee, Rembrandt, and Vermeer, Bishop championed those she called “primitive artists” such as Gregorio Valdes. Art by primitive artists could be accessed, exchanged, and appreciated in local settings, and correspondingly, the Key West local celebrity of Gregorio Valdes, who displayed his artwork in a barbershop window and who was eager to work for the modest commissions that Bishop could afford appealed to the young poet. After purchasing her first painting for \$3, Bishop offered Valdez \$300 to paint the home she was renting. Beyond the economic and social advantages, Bishop favored the primitive painter’s attention to painstakingly detailed and minute observations. Describing her affection for Valdes’s work, Bishop highlights his zealous attention to detail and to craftsmanship, for her a defining part of the primitive painter’s aesthetics, which she recalls as uneven in an article for the *Partisan Review*:

The classical ideal of verisimilitude did not always succeed so well, fortunately. Gregorio was not a great painter at all, and although he

certainly belongs to the class of painters we call “primitive,” sometimes he was not even a good “primitive.” His pictures are of uneven quality. They are almost all copies of photographs or of reproductions of other pictures. Usually, when he copied from such reproductions, he succeeded in nothing more than the worst sort of “calendar” painting, and again when he copied, particularly from a photograph, and particularly from a photograph of something he knew and liked, such as palm trees, he managed to make just the right changes in perspective and coloring to give it a peculiar and captivating freshness, flatness, and remoteness. (*CP* 58)

For Bishop, the distinction between the “good primitive” and the mediocre “calendar” painter hinges upon attention to detail, that in its excess estranged or obscured the familiar aesthetic subject enough to make it new. (See Figure 25 and Figure 26 for examples of Valdes’s painting.) Bishop, who dabbled in painting and considered herself a “primitive painter” of sorts demonstrated attentiveness to the ephemera of our daily existence in her watercolors by foregrounding unremarkable materials of daily life, such as electrical cords and power lines. Obscuring the central object—a home, a church, or a city municipality—with objects such as verandas, windmills, utility poles, and palm trees, Bishop’s watercolors change or complicate the viewer’s perspective to call attention to the act of observation itself. (See Figure 27 and Figure 28 for examples of Bishop’s watercolors.)

In their visual arts, Bishop and Valdes find pleasure in the familiar visual ephemera often overlooked or unseen by primitive writers, whose works Bishop did not enjoy:

Where primitive painters will spend months or years, if necessary, putting in every blade of grass and building up brick walls in low relief, the primitive writer seems in a hurry to get it over with. Another thing was the almost complete lack of detail. The primitive painter loves detail and lingers over it and emphasizes it at the expense of the picture as a whole. But if the writers put them in, the details are often impossibly or wildly

inappropriate, sometimes revealing a great deal about the writer without furthering the matter in hand at all. (CP 46)

In this excerpt from “U.S.A. School of Writing,” Bishop claims that the value of primitive painting above primitive writing is its concern for detail and the ability to include increasing detail without overrunning the limitations of space. Bishop’s contrast between primitive painters and poets is instructive to our understanding of the self-forgetting rather than self-involved position of the artist. Whereas increasing visual detail causes the painter to focus intently outside of the self, excessive verbal detail works the opposite way—privileging the self over the visual subject. Similarly, Alpers identifies attention to detail in seventeenth-century Dutch painting, and points to it as one reason Dutch art had received relatively little attention in European art history. She writes: “The problem faced by a modern viewer is how to make this art strange, how to see what is special about an art with which we feel so at home, whose pleasures seem so obvious” (xxii).⁴⁶ Alpers explains that art history values the foreign and the unknown over the domestic, making it difficult to explain the significance and achievement of the Dutch arts in comparison to the Italian. Unspoken but implied, Bishop’s statement regarding primitivism also defines her early attitude toward how significantly details shape a poem or story as a whole by relating it to its constituent parts.

⁴⁶ Scholars such as Giorgio Vasari, Heinrich Wölfflin, and Erwin Panofsky, according to Alpers, institutionalized the valuation of Italian narrative painting within the academic discipline of art history. Whereas Italian painting relied heavily on narrative, painting from the north “does not offer [viewers] easy access” (xxii). Bishop finds in the primitive painter a similar lack of concern about narrative urgency, and she insists that to lose oneself in the process of detailed description “at the expense of the pictures as a whole” is more possible in the pictorial arts than the verbal.



Figure 25: Painting of the Church of Mary Rosario in Cuba by Gregorio Valdes



Figure 26: Painting by Gregorio Valdes and owned by Elizabeth Bishop



Figure 27: Watercolor by Elizabeth Bishop



Figure 28: Pencil and Watercolor by Elizabeth Bishop

Bishop's choice of ekphrastic subjects and her manner of observing them distinguishes her from her contemporaries, such as Jarrell, Lowell, Berryman, W.D. Snodgrass, and Anne Sexton. While her peers consider works by masters such as Albrecht Dürer in Jarrell's "The Knight, Death, and the Devil" or popular monuments as in Lowell's "For the Union Dead" or as Snodgrass and Sexton do in their ekphrastic poems on Vincent Van Gogh's *Starry Night*, Bishop fixes her view and her poetry on

subjects more humble, perhaps domestic, and even populist: maps, National Geographic photographs, dilapidated local monuments, a relatives' lackluster paintings, even her own desktop as she does in "12 O'Clock Noon." Much like the Dutch who painted objects and subjects of daily life, Bishop sets her sights on the art that exists in the daily (or at least potentially daily) middle-class community. Bishop's choice was deliberate and anxiety producing, since focusing on "minor subjects" often caused critics to refer to her work as "miniaturist" and to her as a "poet of description," diminishing her status as a significant figure in contemporary poetry. Susan Rosenbaum elaborates on Bishop's concerns about her literary reputation, noting that:

...she felt that such labels, in their reliance on subtle distinctions of both gender and value, relegated her to a secondary status. In the Romantic tradition, the miniature was associated not with the transformative power of the imagination, but with fancy, a mental faculty defined by its inability to transcend the visual, the material, the contingent or particular; thus, fancy was characterized by the accumulation of miniaturist detail, by its status as a derivative craft, and by the logic of the copy versus that of the original (62).

Bishop faced the qualified praise of her peers as a descriptive poet—an evaluation that could potentially relegate her work to the "feminine, sentimental tradition" (62).⁴⁷ Yet, confronted with her professional anxieties, Bishop's ethics of observation, description, and detail, her resistance to American postwar infatuation with the large, and her selection of unlikely, familiar, and domestic ekphrastic subjects, in retrospect, distinguish her work and her status as a "major" American poet. In 1988, recognizing this distinction between Bishop and her more Romantic contemporaries, Eavan Boland compliments her "the one Un-Romantic American poet of her generation" (80). According to Boland,

⁴⁷ See Susan Rosenbaum, "Elizabeth Bishop and the Miniature Museum" *Journal of Modern Literature* 28.2 (Winter 2005): 61-99 for more discussion of Bishop's early reviews which fault Bishop for her hyperfocus on miniscule detail.

Bishop's "earth is not represented as a dramatized fragment of her consciousness. Instead, she celebrates the separateness, the awesome detachment of the exterior universe" (74). Boland praises Bishop's humility and her refusal to allow her artistic ego to occupy the center of her poems as a significant contribution to midcentury poetics.⁴⁸

In the critical discourse about her work, what coheres is a respect for Bishop's descriptive attentiveness to an object's strange familiarity, for her respect of its autonomy, and for her willingness to emerge changed from the experience of looking.⁴⁹ Undeniably, Bonnie Costello's work on Bishop's painterly eye, her "rhythm of vision," and her visual skepticism in landscape description in *Planets on Tables* and in similar earlier essays locates Bishop's intense concern with careful, reflexive observation. Susan Rosenbaum explores the significance of smaller scale and compression to Bishop's attitude toward museum culture and art as a commodity, while Mary J. Elkins's 1994 essay considers Bishop's methods of observation. Thomas Gardner compares Elizabeth Bishop's descriptive impulses to that of Jorie Graham, and Anastasia Graf describes Bishop's careful observation as a dialectic in "Representing the Other: A conversation among Mikhail Bakhtin, Elizabeth Bishop and Wisława Szymborska." Finally, Peggy Samuels relates Bishop's affections for Paul Klee's work to her attentiveness to the simultaneous strangeness and familiarity of the object in view, a stance that Samuels sees as respecting the autonomy of the displayed object and revealing the poet's willingness to

⁴⁸ Terrence Diggory's *William Carlos Williams and the Ethics of Painting* describes Williams' effort to construct a non-confrontational and mutually accommodating relationship between art and poetry using Julia Kristeva's theories of psychological transference and nonoppressive desire. Networks may offer an interesting way to read the deferred gazing and askance glancing described in Diggory's study.

⁴⁹ Judith Saunders's "'Large Bad Picture' and 'Rime of the Ancient Mariner: A Note on Elizabeth Bishop's Modernist Aesthetics'" compares Bishop's poem with Coleridge's "Rime," weighing human purpose and commerce.

emerge changed from the ekphrastic encounter. Through words like weave, skin, net, and deep surface, Samuels gestures toward the need to understand Bishop's poetry as an active network that is porous and receptive as well as tensile and resilient.

Recently, Zachariah Pickard, in his book *Elizabeth Bishop's Poetics of Description*, argues that Bishop's poetry should not be considered ekphrastic because it does not depend upon readers' prior awareness of a work of art. Guided by examples of ekphrastic poetry by Bishop's peers, Pickard insists that ekphrasis depends upon readers' familiarity with the image to take the place of describing it in order to narrate the image into another purpose. Bishop's choice of subjects, which require and even prioritize description, for Pickard, place Bishop outside of the ekphrastic genre, a point with which I obviously disagree. Rather, Bishop's ethical approach to the visual, reflected by her appreciation of the Dutch painters and the primitive, and her concentration on heroic observation place her firmly within an ekphrastic tradition. Bishop's ekphrasis responds to the social situation of the genre, but with more subtlety than, perhaps, her contemporaries; however, Bishop's work is distinctive in its attentiveness to and consciousness of the social contexts in which she produces a verbal representation of a visually signifying subject for her audience. Exploring Bishop's dense networks of description informed by her ethical sense of heroic observation in "The Map" and "The Monument," the following chapter will use social network analysis to visualize how Bishop responds to a tradition of looking and representing the visual arts. Bishop's dense networks of descriptive detail are suggestive of relationships between poetry and the visual arts that do not "turn upon the axis of gendered hostility."

Density and Description

In the context of a literary oeuvre attuned to the pleasures, responsibilities, and dangers of observation, Bishop's ekphrastic poems craft dense descriptive relationships between speakers, the works of art, and readers as an ethical response to the visual arts in the medium of language. Rather than viewing Bishop's descriptive readjustments as retractions and revisions, this chapter uses network visualizations to demonstrate that Bishop's alterations, adjustments, and re-descriptions build a dense network of connections through an assemblage of descriptive statements. Bishop's method of "heroic observation" accumulates descriptive statements, even those that contradict one another, in an attempt to hold them all in view simultaneously, and the effect of that accumulation is that it destabilizes her authoritative view of the object, inviting her reader into the act of creation through the need to select, organize and interpret a descriptive collection. The descriptive relationship created within "The Map" and "The Monument" as a network, we can better understand the multi-dimensionality achieved by Bishop's ekphrasis and by extension perceive more fully the degree to which Bishop uses description to resituate "makers" and "readers" as collaborators – in short, to engage readers in the very act of heroic observation she employs herself.

Although her ekphrastic poetry has received considerably more critical attention of late, Bishop's ekphrasis has never been included in full-length studies of how the genre operates.⁵⁰ Possibly this can be explained by the uneasy position "description" occupies within literary history. Recalling a critical tradition in which description is seen

⁵⁰ For essay-length studies of Bishop's ekphrastic poetry, see Rosenbaum, Susan. "Elizabeth Bishop and the Miniature Museum." *Journal of Modern Literature* 28.2 (2005): 61–99. Print. and Bonnie Costello's chapter "Elizabeth Bishop and the Art of Still Life" found in *In the Frame* Eds. Jane Hedley, Nick Halpern, and Willard Spiegelman (Newark: University of Delaware Press, 2009), 145-163.

as inferior to narration, and consequently in which description in ekphrasis is seen as a “detachable fragment” or “interruption” or “diversion” from narrative progress, description has received surprisingly less critical attention. One notable exception is Terrence Diggory’s *William Carlos Williams and the Ethics of Painting*, which argues that painting provided for Williams a model of description as a resistance to the representational “violence” of symbolism. Due to the sparsity of critical work on description, we have yet to create a critical language that adequately explains how description works in literature. Mark Doty’s *The Art of Description* begins to rectify this lack of meta-language from a creative perspective and may help readers understand the richness and diversity of poetic description.⁵¹ In the readings of Bishop’s poems that follow, I suggest modes of description that Bishop uses, and in doing so point specifically to how alterations or adjustments in Bishop’s to descriptive mode change the nature of relationships between her visual subjects. By shifting, revising, and reversing descriptive modalities, Bishop’s ekphrastic poems culminate in networked layers of relationships between poetic subjects.

Bishop’s ekphrastic poems have three descriptive modes, which I will refer to as equivalencies, classifications, and proximities. Moving fluidly from one descriptive mode to another, Bishop holds an object in view while at the same time avoiding the dangers of scrutinizing it. In her equivalency mode, Bishop relationships between objects with one another through literary devices of metaphor, or by comparing or juxtaposing amounts or measurements or proportions of two or more objects at a time. Some of Bishop’s most memorable descriptions create unlikely equivalences, such as the phrase

⁵¹ Doty, Mark. *The Art of Description: World Into Word*. Graywolf Press, 2010. Print.

“about the size of a dollar bill” in “Poem” or a “grunting weight” in “The Fish.”

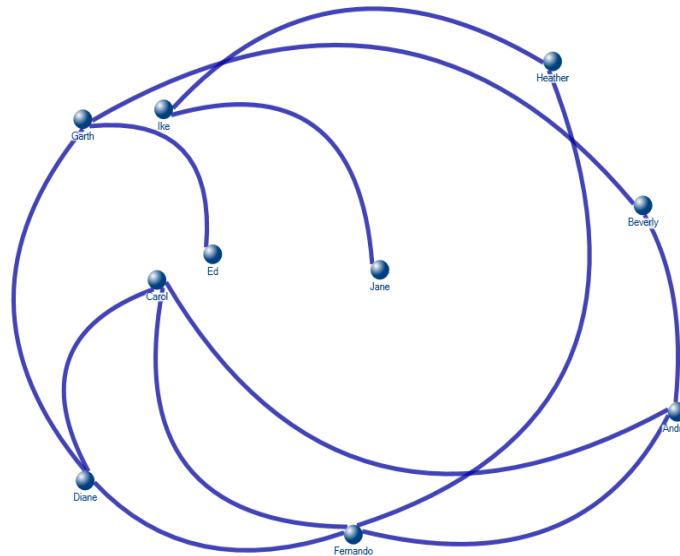
Generally equivalencies are expressed in a matter of degrees, which allows Bishop to tinker with scale, expanding and collapsing the lens of her readers’ mind’s eye and resituating or adjusting the speakers’ and readers’ perspectives on the object of her description.

The second mode – classification—establishes affiliations between visual subjects by considering why they belong or don’t belong together. Bishop’s classification mode begins by identifying a shared characteristic with a class of color, type of object, size, shape, or material, but then in almost the same breath questions those categorizations by highlighting the ways in which an object does not fit comfortably into the category and starts over again. Bishop’s third descriptive approach is her proximate mode in which description draws relationships between objects based on perceived or actual spatial distance, ordinal or causal orientation, or adjacency and juxtaposition. Bishop deploys the proximate mode through the use of directional cues, such as: near, far, between, above, and below. Since distance between objects depends heavily on the perspective of the viewer and the viewed, and as a result Bishop’s constantly shifting positions and perspectives in the poem allow her to refuse a single vantage point as speaker and to keep descriptive relationships between visual objects open and fluid. In the proximate mode, descriptive relationships form around the language of spatial orientation, such as juxtaposition, adjacency, order, or arrangement. Bishop orients herself or disorients the position of her concentrated gaze with radical shifts in perspective. In conjunction, these three descriptive modes work together to destabilize two-dimensional, static views of the visual subject. Shifting, reasserting, and retracting causes bishop to draw increasing

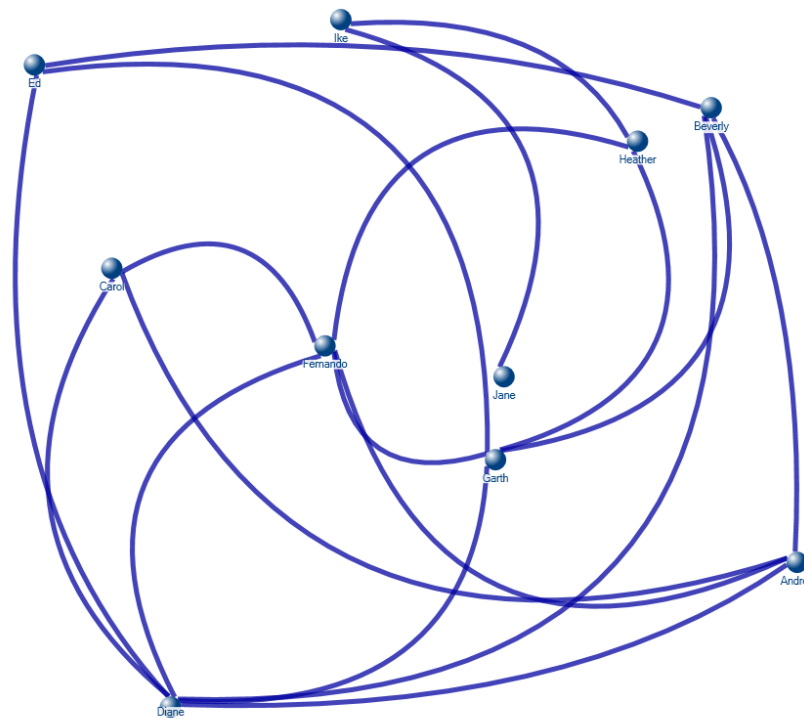
numbers of descriptive relationships between poetic subjectivities in order to populate the poetic network with descriptive ties that suggest social and ethical attitudes toward looking and representing.

Throughout the chapter, I use the word density to explain the effect produced by Bishop's shifting between descriptive modes, fashioning relationships between the speaker, the reader and the object in view. As the network becomes increasingly dense with descriptive detail, the number of edges, the centrality of the author, artist, and reader diffuses and reading the poem requires selecting, organizing, and prioritizing possible descriptive relationships in order for the reader to see with the speaker. For example, in a hypothetical network, fewer edges shared among nodes increases the likelihood that one of those nodes might have more edges than other nodes. For example, Figure 29

Figure 29: A sparsely connected network. In this hypothetical network, there are 10 people represented by nodes. The edges represent correspondence. By looking at the graph, one can tell that the nodes with the most edges have the highest degree of centrality in the network.



Created with NodeXL (<http://nodexl.codeplex.com>)



Created with NodeXL (<http://nodexl.codeplex.com>)

Figure 30: A dense network: A continuation from Figure 29, this figure represents the same number of nodes as there are in the network graph in Figure 29. However, the number of nodes in this network has doubled, but as the edge density of the graph increased (more nodes in the same amount of space), the centrality of nodes such as Diane’s node, decreased. More edges shared among the same number of nodes will reduce the centrality of any single poem.

The difference between Figure 29 and Figure 30 has to do with how many edges are shared among a set number of nodes. In other words, as Bishop creates descriptive associations in the ekphrastic poem and as more edges are added to the same network, the centrality, meaning the ability for any one node to influence the network, diminishes. Simply put, higher density in the network means more edges between the same numbers of nodes. Density has an inverse relationship to the degree of centrality—the higher the density, the less likely it will be that a node will have a high degree of centrality within the network. Because it represents the cumulative effect that results from layering descriptive types, graph density is one measure of how the Bishop’s descriptive process

decenters the poet/speaker as an authoritative voice within the poem as part of her method of heroic observation. In doing so, she both educates readers in that method and thus invites them to appreciate the austerity of the visual subject, a process that demonstrates an ethical alternative to the dynamic offered in the critical models from of Mitchell and Heffernan. The following examples will show how Bishop's discursive use of three descriptive modes decenters the centrality of the speaker and creates a dense network of verbal-visual exchange—the desired ends to “heroic observation.”

Mapping Description

Originally published in 1935 in *Trial Balances*, Bishop's “The Map” foregrounds a poetic career in which considerations of the limits and responsibilities of description play a recurring role. Bishop connects the map's makers, printers, and readers to the map's surface and visual subjects through relationships established through description. By visualizing the poem's descriptive network, we see how makers and readers in the poem are located at the periphery such that no single maker possesses an authoritative view of the map or its visual subject—the representation of the Earth's surface. Through description that creates equivalences, estimates proximities, and classifies entities in the map's network, Bishop demonstrates how “heroic observation” evolves toward an ethical mode of observation and display by creating depth and dimension.

As the subject of an ekphrastic poem, a map is an unconventional choice. Largely utilitarian, maps are considered to be tools that help us see the earth's geographical features and jurisdictional boundaries from a much wider, overall perspective. Humans are too small and too close to the earth to see it without the imaginative and technical powers of maps (and more recently photography) to perceive how the earth might

“really” look. In the early twentieth century, cartographer and cartographic historian John K. Wright pointed out that maps have aesthetic responsibilities in addition to scientific and political ones. According to Wright, maps with dull colors, imprecise lines, and sloppy printing and lettering inspired less confidence in the reader’s sense of the map’s veracity.⁵² He argued at the time that the “art of cartography” works interdependently with the rules and science of “cartographic science” (Karresen 125).

During the years between 1920 and 1950 and in conjunction with a growing tourism industry, pictorial maps experienced a resurgence of popularity. According to the Library of Congress’s map and cartography archive:

The panoramic map was a popular cartographic form used to depict U.S. and Canadian cities and towns during the late 19th and early 20th centuries. Known as non-photographic representations of cities portrayed as if viewed from above at an oblique angle. Although not usually drawn to scale, they show street patterns, individual buildings, and major landscape features.⁵³

Maps are perhaps one of the few universally recognizable pictorial subjects. Many cultures depend on them as tools and as a way of conceptualizing and abstracting geographic features, national borders, and transportation routes. In Western visual culture, maps begin to be displayed as art within as aesthetic objects in homes, and by choosing a “map” as her subject, Bishop refers to a visual representation with which every reader has some familiarity.

⁵² John K. Wright insists in “A Plea for the History of Geography” *Isis*, Vol. 8, No. 3 (Jul., 1926), 477-491 that humanistic inquiry should contribute to scientific geographic understanding. In making such an argument, he points to Alexander von Humboldt’s second volume of *Cosmos* in which Humboldt articulates a history of poetic descriptions of nature and landscape painting to the human mind’s contemplation of the physical universe. Wright also points to a previous issue of *Geographic Review* from 1924 in which there is an extended discussion of “local color” in literature and insists, “A colorless regional monography falls short of the geographical truth.”

⁵³ “Map Collections Home Page.” The Library of Congress Map Collections. Web. 17 March 2012.

Maps, the spatial representation of the Earth's surface, describe geographical boundaries through means unique to images, such as shading and texture, and Bishop's map turns on a descriptive process that creates a denser image whereby the complex and graduated boundaries come to life. Bishop's descriptive map creates a density of connections, as well, between visual subjects (land and water), jurisdictional and national boundaries (Newfoundland, Labrador, the Strait of Belle Isle, and Norway), printers and poets, writers and readers, by creating a descriptive tension between them, destabilizing seemingly static relationships to create a more complex understanding for how each entity is both like and unlike the objects surrounding it.

The opening lines of "The Map" describe the land by proximity and classification: "Land lies in water; it is shadowed green." The first half of the sentence creates a spatial relationship between the two geographical features—one inside the other—and classifies the land by the color green. Both claims seem indisputable on the surface, even if the connotation of the verb "lies" seems to stake an early evaluative claim on that relationship. The poem's network begins to populate by connecting the land and water (sea) by means of their spatial relationship to one another and then by their color (proximity and classification). For example, shades of green and blue are conceptually proximate because green is comprised of both blue and yellow; however, at the same time we know green is not the same as blue—a method of classification. This crossing back and forth between features of the map builds a sense of the earth in which its features are contingent upon one another.



Figure 31: Water and Land Relationships

To build my visualization, I began by recording my observations of the way in which the terms water and land were connected through descriptive associations. In each of the graphs to follow, relationships established by classification are represented in solid green lines (50% transparent) and the blue, dotted line (edge called an edge in SNA) represents descriptive connections created by proximity.⁵⁴ Relationships established through descriptive equivalence (not yet apparent in the first line of the poem) will appear in red, dotted lines. By using the term “green” to describe the land (that several lines later will be described as distinct from the blue water), Bishop creates a relationship between the water and the land based on their difference: water/blue and land/green. As the poem unfolds, I have represented in NodeXL each descriptive relationship as demonstrating a relationship between the many visual elements of the map according to Bishop’s

⁵⁴ One of the challenges of creating a visualization of a social network is that layers of edges (lines between nodes) are displayed on top of one another. I have attempted to represent the three different types of description using three separate colors and graphical representations. Green solid lines represent classification. Blue dotted lines represent proximity. Red dashed lines represent equivalency. This limitation of the software was not something that could be modified at this stage of research; however, future work to make the multiple sorts of layers more easily discernible will help further clarify the three types of relationships. For now, the three types of lines should, when layered one upon the other, show enough of a trace of each to make their presence visible.

descriptive approach: classification, proximity, and equivalence. Line by line I have worked through “The Map” performing a close reading of the text in which I create an edge for each descriptive statement in the poem and a node for each of the two things the descriptive statement connects. In the NodeXL table, column A names the node Bishop begins here statement with, and column B lists the node to which column A is compared. The third column lists the color of the graphic representation of the descriptive statement according to the mode of description Bishop uses: classification, equivalency, or proximity. The fourth column describes the width of the edge in the graph followed by the stylistic features of the edge—either solid or dotted, and the next column to the right determines how dark the edge should be. In column H are labels that define the descriptive mode Bishop uses to draw a relationship between the nodes. Finally, column N lists the poetic line or part of a line in which the description appears.

For example, the next lines in the poem:

Shadows, or are they shallows, at its edges
Showing the line of long sea-weeded ledges
Where weeds hang to the simple blue from green.

begin to take shape as follows in NodeXL:

	A	B	C	D	E	F	G	H	I	J	N
1			Visual Properties					Labels			Other Columns
2	Vertex 1	Vertex 2	Color	Width	Style	Opacity	Visibility	Label	Label Text	Label Font	Add Your Own Columns Here
3	land	water	blue	3.0	Dot		75	proximity	Color	Size	Land lies in water;
4	land	water	green	2.0	Solid		50	classification			it is shadowed green
5	shadows	shallows	red	3.0	Dash		25	equivalence			shadows or are they shallows
6	edges	shadows	green	2.0	Solid		50	classification			shadows or are they shallows, at its edges
7	edges	shallows	green	2.0	Solid		50	classification			shadows, or are they shallows, at the edges
8	land	water	blue	3.0	Dot		75	proximity			shadow/shallow marking depth and perspective bet. One and the other
9	land	edges	blue	3.0	Dot		75	proximity			its edges (closest to water)
10	land	ledges	green	2.0	Solid		50	classification			showing the line of long sea-weeded ledges (renaming) at its edges / sea-weeded
11	edges	ledges	red	3.0	Dash		25	equivalence			ledges descriptive rhyme and parallelling of terms
12	sea-weed	weeds	red	3.0	Dash		25	equivalence			the sea-weed and the weeds are similar edge-plands of sea and land
13	weeds	water	blue	3.0	Dot		75	proximity			where weeds hang to the simple blue from green
14	weeds	land	blue	3.0	Dot		75	proximity			where weeds hang to the simple blue from green
15	sea-weed	water	green	2.0	Solid		50	classification			sea-weed (name identifies as part of water)
16	land	water	blue	3.0	Dot		75	proximity			or does the land lean down
17	land	water	blue	3.0	Dot		75	proximity			to lift the sea from under
18	shelf	land	blue	3.0	dot		50	proximity			along the fine tan sandy shelf
19	land	water	blue	3.0	Dot		75	proximity			or does the land lean down
20	land	shadows	red	3.0	Dash		25	equivalence			shadows... at its edges
21	land	shallows	red	3.0	Dash		25	equivalence			shallows... at its edges
22	water	shadows	red	3.0	Dash		25	equivalence			shadows... at its edges
23	water	shallows	red	3.0	Dash		25	equivalence			shallows... at its edges
24	land	water	green	2.0	Solid		50	classification			blue from green
25	water	land	green	2.0	Solid		50	classification			blue from green
26	land	water	blue	3.0	dot		75	proximity			land tugging at the sea from under
27	land	water	blue	3.0	Dot		75	proximity			drawing it unperturbed around itself

Table 3: The Node XL table contains the network nodes in column A and B. Columns C-G determine the graph’s visual properties. Columns H-J determine how edges in the graph are labeled according to Bishop’s descriptive mode. Column N lists the poetic line.

The result in tabular format is a record of a “close” and interpretive reading, much the way social scientists perform close readings of archival documents to establish relationships between family members or businesses. For example, in the table the line “It is shadowed green” describes the land in contrast to the blue water, but “shadowed” begins a string of uncertainties—a qualification of the color green that makes a subtler

point that the green is variegated and influenced by its relationship to its surroundings, which is to say its proximate relationship to the water. The edge between land and water is recorded in the table as both classification and equivalence: they are categorized as separate colors—blue and green—but equated through the use of the modifier “shadowed.” The second line of the poem gestures back toward the first, using repetition to destabilize the initial classification of the land as “shadowed” with the word “shallows” to present a nuanced alternative in terms of equivalence and to place it in the between spaces of the words “edges” and “ledges.” Lines and borders are less distinct on the visual map, appearing in gradations from greens to blues, the weedy transition between land and sea. The second half of the stanza similarly personifies the land while it casts suspicion on the land’s passivity, “is the land tugging at the sea from under?” The shift in perspective creates another layer of description based on the proximity between the land and the water. Land manipulates the water as it “leans” and “lifts.” The map’s perspective becomes subject to alternating views—does the land extend up from the water or reach down into it? As a result, layers of equivalencies and proximities enact radical shifts of verbal perspective, creating a multidimensionality within the verbal representation of the visual. Similarly, the pushing and pulling of the land and the sea mimics the assertion and reassertion of Bishop’s observations between the shadows and the shallows, ledges and shelves, sea weed and weeds; subsequently, the verbal blending of borders creates a side-to-side awareness of boundaries and the limits of their distinctions.

Visualizing the above “close reading” as a series of descriptive layers recorded in tabular format, Figure 32 shows how relationships between visual subjects grow in

number and variety.”⁵⁵ The land and the water occupy the most central positions within the network because they are repeatedly connected to one another and have the highest total number of edges overall. The other visual presences, such as shadows, shallows, edges, and ledges that mark borders are also connected to both the land and the water, and yet they are less central to the poetic network because they do not share as many network edges.⁵⁶ The accumulated connections between the land and the sea through shadows/shallows, edges/ledges, green/blue, above/below, tugging/lying creates a linguistic depth to the flat map. While the map gestures toward geographic boundaries with shading and texture, Bishop’s increasing layers of verbal description add edges between the ‘nodes’ of “The Map” and consequently increase the network’s overall density.

⁵⁵ Note that the graph in Figure 7 represents data from the first stanza only. Figure 8 represents the second stanza, and Figure 9 represents the entire descriptive network of “The Map.”

⁵⁶ The use of the word “edge” in this paragraph is confusing. Edge is both the word that Bishop uses to describe the border between land and sea, as well as the social network graph language that describes the lines on the graph. I have tried to reduce the use of the word here to only those instances where it is necessary, but I continue to use the word, as it is a significant one for both purposes.

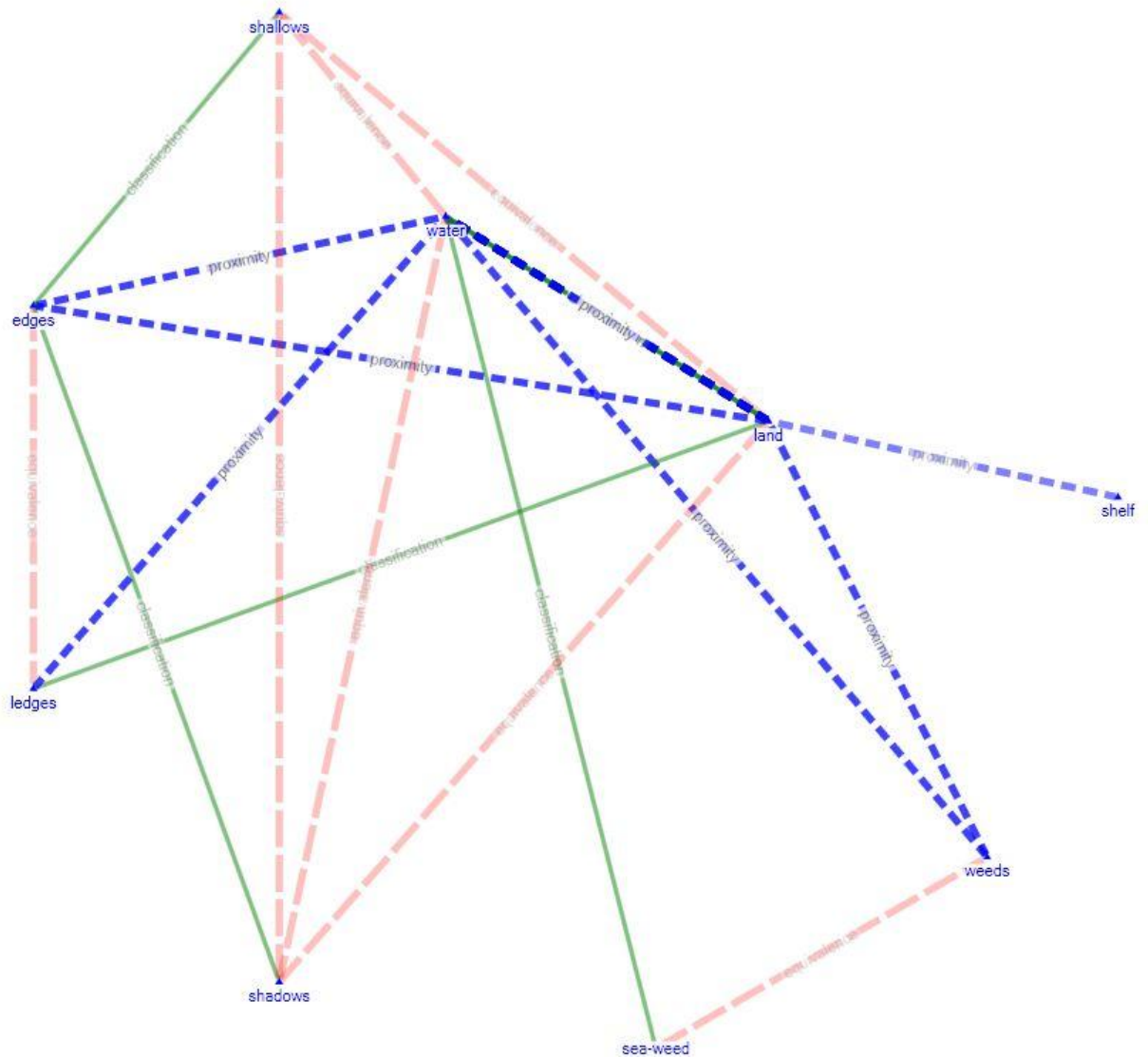


Figure 32: First stanza "The Map" descriptive network: Each node on the network is labeled with its corresponding name in Bishop's poem. The nodes represent the two points that the descriptive language of the map uses to create relationships. Description based on proximity is represented in dotted blue lines, relationships in pink represent the drawing of equivalencies, and green lines represent classifications.

Refusing to reduce it to a simplified, flat image, Bishop establishes an ethical approach to representing the map as the poem's visual subject. Bishop's map respects the complex and nuanced boundary distinctions between land and water which the visual map represents in shades through by creating multiple layers of verbal descriptions. Each

reworking of description, which turns on the syntactical use of “or,” creates pluralities of ways to “see” the relationships established visually by the map, which could be read as a companionable approach rather than a competitive one. The map, as Bishop renders it, is a visually rich and representationally sophisticated approach in which viewers can understand and “see” the earth’s surface from a perspective that is not immediately accessible to us.

Whereas the first stanza builds a descriptive density akin to the shading and texture of the visual map, the second and third stanzas pull the map, its creators, and its viewers into the descriptive web of the poem (Figure 33, below). Though the descriptive qualities of the first stanza create a multi-dimensional understanding of visual and verbal representation, the second stanza introduces a the term “we”—the collective reading and viewing identity of the poet and reader—and the printer, who produces the map. The next visualization, Figure 33, represents the same reading process, assigning descriptive categories to each statement as was demonstrated above, except this time for stanzas two and three. As readers and map-creators are drawn into the network, description turns more heavily toward classification.

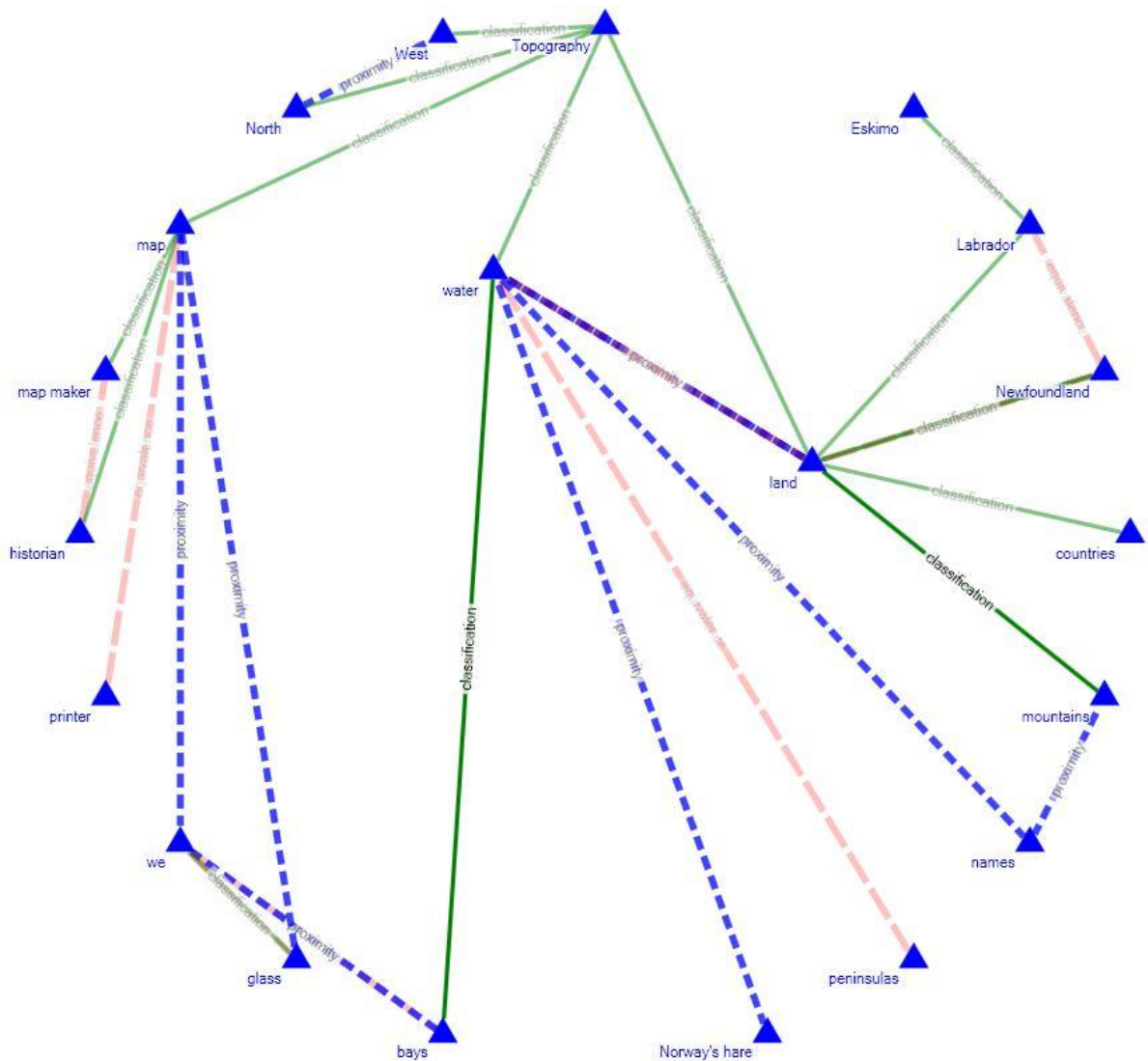


Figure 33: The second and third stanzas of “The Map” shows the number of edges representing modes of description increase. As they do, the nodes associated with the water, the map, and the land share the most edges.

The second and third stanzas populate the poem’s peripheral relationships. The land and water become associated with the peninsulas of Labrador and Newfoundland, “Norway’s hare” as Bishop describes it, cities and towns, as well as bays, each of which are named on the map. Naming, however, connects the visual space of the map to the verbal medium of the poem, Bishop explains:

The names of seashore towns run out to sea,
the names of cities cross the neighboring mountains
—the printer here experiencing the same excitement

as when emotion too far exceeds its cause.

Associating the printer's enthusiasm to the transgression of boundaries between the water and the land Bishop contrasts the printer's influence on the map's creation to the earlier glass barrier between the "we" and the map. Although Bishop insists "We can stroke these lovely bays, / under a glass as if they were expected to blossom," the glass that cages "invisible fish" prevents the map's viewers and readers from influencing how it is displayed.

Bishop is likewise committed to the map's creative process. The printer in the second stanza and the historians and map-makers (who are not the same) of the third stanza perform different roles in the process of the map's creation. Bishop holds the printer, someone who reproduces maps, responsible for the spatial arrangement of names on the map's surface. It is worth remembering that reproduction through printing is a matter of creating impressions, pressing ink onto the static surface of the page, and Bishop suggests that the printer's emotional excesses, allowing the names of cities to cross visual boundaries, intrudes in the creative process. The printer's lines, however, are bookended by a series of metaphorical equivalencies established by descriptions that connect the "we" (the readers and the speaker collectively) to the bay ("expected to blossom"), the map ("a clean cage for invisible fish"), and the peninsulas ("like women feeling for the smoothness of yard goods"), and call into question the necessary limits of the imagination placed on readers. In the poem, "we" are also reproducing a map, and Bishop questions where the point of balance exists between emotional detachment and excess: should we view through glass or allow our imagination to become part of the creative process? Fewer descriptive connections between the map's makers and the

map's visual subjects push them to the outside of the poetic network and call into question the perspective from which they are able to approach their task: representing something from a perspective they have not seen themselves and that they can only partially conceive of because of their unique role in the map-making process.

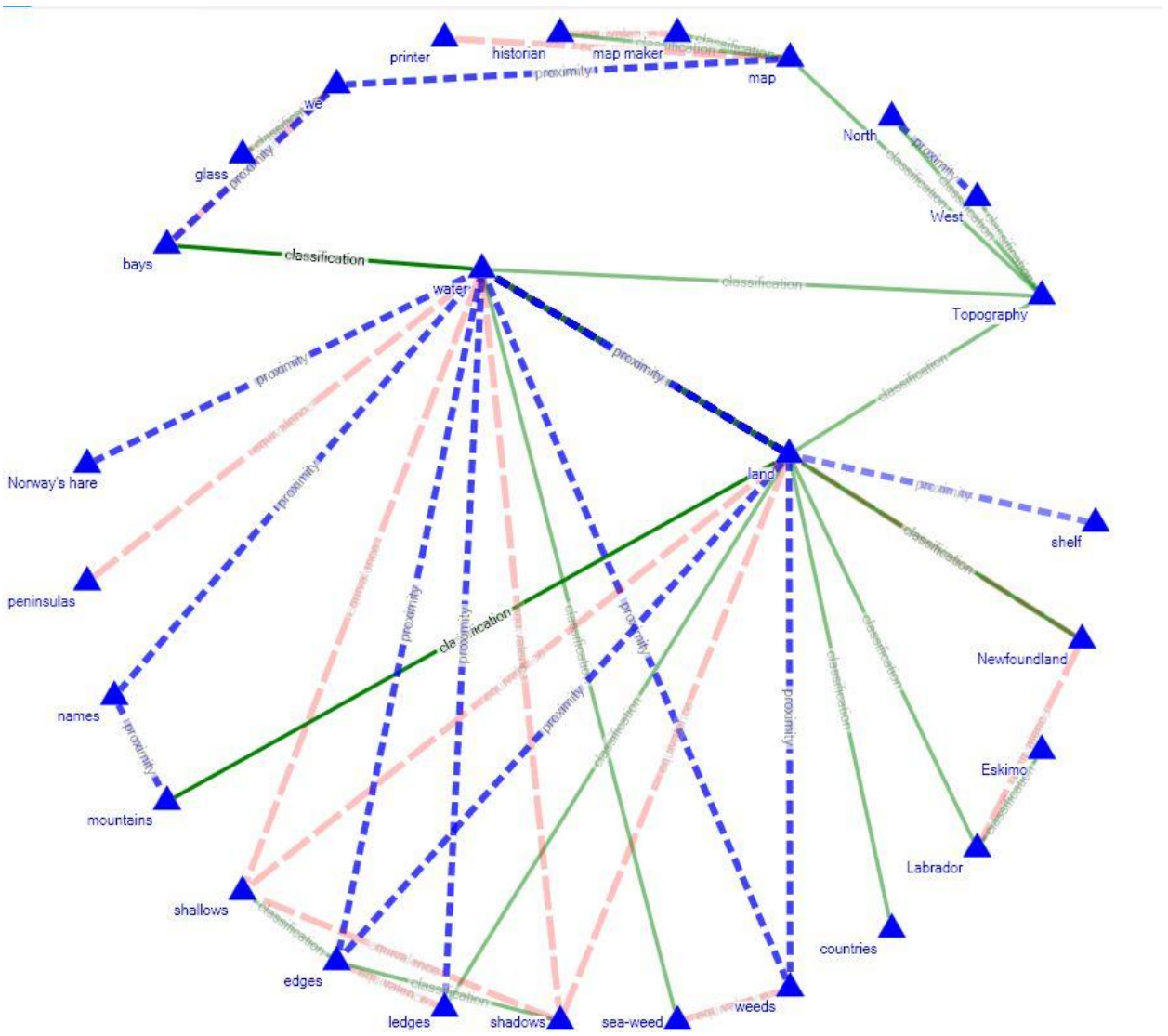


Figure 34: Descriptive Network of "The Map" As in the previous two figures, the edges in the graph represent the descriptive relationships Bishop creates through drawing equivalencies, proximities, and classifications. The sheer number of edges as they are multiplied by Bishop's discursive process pushes the "makers" (poet, we, printer, historian, and map maker) to the outer edges of the network, obscuring their "view" in much the same way that Bishop's heroic observation chamions a peripheral view of the visual subject.

The visualization in Figure 34 suggests that the makers of the map enjoy few direct connections to the geographical features represented on the map itself and highlights the peripheral vantage point from which each “maker” begins her task. Not represented physically within the map, its creators remain on the outskirts. The speaker, readers and the printer may be connected to the map through their eagerness to draw equivalences between visual subjects (represented in red, dashed lines), but the historian and map-maker are more frequently connected through their ability to classify (represented by green solid lines). The “delicate” colors in the final stanza fall within the domain of historians and map-makers, charged with assigning colors.⁵⁷ These two disciplines classify geographical features historically, politically, and topographically. Calling into question the process of selecting map colors, Bishop writes:

Are they assigned, or can the countries pick their colors?
--What suits the character or the native waters best.
Topography displays no favorites: North’s as near as West.
More delicate than the historians’ are the map-makers’ colors.

Asking who can assign colors extends Bishop’s earlier questions in the first stanza. Is it possible that historians and map-makers, whose perspectives are limited in scope and access, suffer the same distortions of perspective which Bishop uses to create dimension and complexity in her verbal rendering of the map? Located at the edge of descriptive discourse, both the makers and the interpreters of the map participate in creating the larger network of description in order to make meaning. By displacing the printer, historian, cartographer, poet, and reader to the peripheries of the network, Bishop’s map

⁵⁷ Understood as distinct from printers who reproduce, map-makers are cartographers, trained specifically to draw maps that allow us to classify the earth’s surface through a combination of science and aesthetics.

defuses their linguistic and representational authority—no single maker can occupy the omniscient perspective that, perhaps, a map implies.

Printers, historians, and map-makers, and by association “we,” approach the subjects of the map, land and sea, from the edges of the network, rather than from its center. As a result, the map and its visual and verbal renderings tell us as much about those who made it as they do the geological features it supposedly describes. In political maps, colors distinguish between national boundaries and populations and may have a tacit effect on the viewer’s perception of a country’s character.⁵⁸ The suitability of color selection, akin to the push and pull between blue sea and green land, are laid bare as choices made in the process of representing the land by visual and verbal means. Reflecting the structure of the poem’s first two lines, the concluding lines make seemingly declarative statements that in light of the rest of the poem become less definitive than they sound at first. Topography, taken to mean the earth’s surface shape, may “display no favorites” but the writing (“graphy”) of the earth’s surface (topos) certainly does. Representing north and west, sea and land are distinctions that require collaborative and relational activities between historians, whose narratives create a chronological depth to the map by tracking the ways in which wars, politics, geographical events, and economics change national character and boundaries, and cartographers whose artisanship draws distinctions reflecting historical, aesthetic, and technical judgments.

⁵⁸ Similarly, a 1924 issue of *Geographical Record* notes that a 1921 issue of Robert L Ramsay’s “Short Stories of America” was published specifically for the purpose of teaching English composition courses. The volume elucidates sixteen various ways in which “local color” may be depicted in literature (659-660).

Bishop's method of recursively asserting, questioning, and reasserting fresh description forms the internal structure of the poem's network. Refusing a static and authoritative stance from which to describe the map's features, Bishop uses distortion, changes in perspective, and the blurring of boundaries to first render her visual subject and then to train the reader to select, prioritize, and arrange the elements in the map to bring it into view. Bishop's map, in fact, may offer the aesthetic opposite of Wallace Stevens's jar in Tennessee. Rather than ordering and making sense of its surroundings, "The Map" teaches and then depends upon reader's active participation in order to be seen. The reader must navigate the network of descriptive equivalences, classifications, and proximities choosing from them, ordering them, and then rendering them in the mind's eye—a process similar to the printer's in the second stanza. Essentially, the reader and poet collectively reproduce the map, and in doing so must also avoid the emotional excesses committed by its printer. Unlike the ekphrastic situations in Joan Murray's poem in the introduction or Elizabeth Alexander's or Lisel Mueller's ekphrasis in chapter two, Bishop's poem decentralizes the negotiating authority of the speaking voice and increases the reader's access to the ekphrastic object in such a way that all the map's entities depend on one another in order to be seen. Much like the other ekphrastic poems in this study, though, Bishop addresses the ethical stakes in creating such reproductions—allowing one's own "emotion to exceed its cause."

On one hand, in this section I have used social network analysis to assist a close reading of "The Map" in order to demonstrate visually the verbal complexity, density, and dimension Bishop establishes in the poem in service of her ethical representation of it. At the same time Bishop critiques assumptions we make about maps, and by

extension other forms of representation such as poetry. On the other hand, this section also suggests methods by which the computational powers of social network analysis programs such as NodeXL might enhance our readings and interpretations of ekphrastic poems. For example, designed to compute centrality, social network analysis appears particularly suited for reconsidering the prominence and centrality of poetic nodes within the ekphrastic encounter as a means for redrawing an ekphrastic model that can be fluid and flexible. Similar future studies extend could be made of the networked reading of the poem. While my diagrams here include at least one edge for each of the nodes in the poem's network in order to demonstrate how description forms the image's density, even more connections could be added to the network which reflect more nuanced readings of the poem. For example, I do not include much of the descriptive subtext in the poem. Including more relationships wouldn't change the overall shape of the network much at all; however, if someone wanted to explore more fully the computational powers of social networking to calculate centrality or degrees of relatedness between poetic nodes, increasing the number of descriptions through more deeply interpretive readings might be an interesting direction to take this form of analysis.

Descriptive Dialectic in "The Monument"

While the previous section examined a network comprised of descriptive relationships between poetic entities, this section turns to mapping the discursive unfolding of Bishop's poem "The Monument" as a way of extending our understanding of Bishop's attempts to establish an ethical relationship between her verbal representation and her visual subject. Visualizing Bishop's dialectical description of a monument—public art that marks collective, significant events, locations, and people—demonstrates a

radical departure from similar ekphrastic poetry on public monuments by not only including responses by imagined interlocutors but also by allowing those imagined alternative voices to intervene in the creation of the monument itself.

To address Bishop's discursive descriptive process, I have turned to existing scholarship about the usefulness of SNA in fiction and plays to demonstrate characters' relationships that questions existing assumptions about genre. For example, at the Association for Computational Linguistics Annual Meeting in 2010, David K. Elson, Nicholas Dames, and Kathleen McKeown presented their work with SNA to extract and model discourse in Victorian fiction.⁵⁹ By creating a script that could identify and extract conversations from large volumes of straight text, Elson and colleagues created networks in which characters were associated with one another if they were present for the same conversation. Studies of the Victorian novel have assumed for a long while that face to face social interactions in urban settings are of lower quality and frequency than in more intimate rural settings. By using the computer to recognize character names, to associate names with quoted conversation, and to match the name and conversation network to interpretive data about the setting in which the conversation takes place,

⁵⁹ See Elson, David K., and Nicholas Dames, and Kathleen R. McKeown. "Extracting Social Networks from Literary Fiction." Proceedings of the 48th Annual Meeting of the Association for Computational Linguistics. Uppsala, Sweden: Association for Computational Linguistics, 2010. 138–147. Web. 17 Apr. 2012.

Elson, Dames, and McKeown demonstrate that frequent, extended conversation is as likely if not more likely to occur in urban settings than rural ones.⁶⁰

Whereas previous studies that use SNA to study discourse networks use computational approaches to collecting discourse data at scale (61 novels in the case of the Victorian novels project), I am beginning on a much smaller scale by looking at a single, specific poem to see whether or not discourse networks could be usefully extracted from ekphrastic texts on a micro-level first and potentially evolve into a larger-scale, unsupervised study.⁶¹ Bishop's "The Monument" serves as an excellent place to begin because it relies so heavily on descriptive conversation to create its visual subject. Furthermore, visualizing Bishop's poem as a conversation network enables at a small scale the kind of genre-critique which is commonly attempted through large-scale studies. If ekphrastic poems are dialectical in nature, then visualizing the types of discourse and how the discourse evolves begins a process of creating a new model that demonstrates more precisely how the ekphrastic triangle (poet, artist, reader) needs to be expanded. As I have argued throughout, Mitchell's ekphrastic triangle is itself a kind of network; by expanding the parameters of how we employ networks as a critical apparatus, we likewise expand the range of interpretative possibilities and the ethics associated with them.

To model a discourse network in "The Monument," I am using a type of social network analysis called affiliation networks (or bimodal networks). Affiliation networks

⁶⁰ Additional studies using SNA to investigate discourse networks include Rydberg-Cox, Jeff. "Social Networks and the Language of Greek Tragedy." *Journal of the Chicago Colloquium on Digital Humanities and Computer Science* 1.3 (2011): n. pag. and Moretti, Franco. "Pamphlet 2: Network Theory, Plot Analysis." 11 May 2011. Web. 17 Apr. 2012. My response to Franco Moretti's pamphlet was published in a blog collective on the *Magazine Modernisms* website, edited by James Stephen Murphy, Rhody, Lisa. "A Method to the Model: Responding to Franco Moretti's Network Theory, Plot Analysis." *Magazine Modernisms* 22 Aug. 2011. Web. 17 Apr. 2012.

⁶¹ In computational terms, unsupervised tests are those that do not require human interventions while the test is being run.

in other types of SNA study individuals' attendance at events, membership to organizations. Instead, I have assigned each of the two speakers to the lines they speak in the poem. Doing so accounts for the narrative unfolding of the poem and allows us to see at which points the speakers shift the types of statements they make in response to one another and to the monument. Visualizing the poem as a network demonstrates how the speakers' relationship to one another builds out of their conversation, and also how their dialectic shapes the monument in turn.

A Network of "Wood" and "Would"

"The Monument," which rarely appears in conversations about ekphrasis in general or in discussions of Bishop's ekphrasis in particular, deserves a central role in discussions of women's ekphrastic poetry in the 20th century. Participating in a popular strain of ekphrasis on public art and monuments, Bishop joins prominent male contemporaries such as Wallace Stevens, John Berryman, and Robert Lowell, in a century-long conversation among American poets about the status and value of art in the public sphere. Bishop's concentration on the ethical responsibilities of looking and describing also make "The Monument" an exemplary poem for discussing ethics in ekphrasis animated as the "swarming-still" of discursive description in which the relationships between nodes in the ekphrastic network (the monument, its maker, its two viewers, and the reader) are established in terms of affiliation and collaboration. Deploying ekphrasis's "tutelary function" in the dialectic between poet as teacher and reader as student, Bishop offsets the poet's own position of power as the artist-creator by including in the verbal construction of the visual subject a second voice—a reluctant, if not resistant, onlooker whose interrogations about the monument's position challenge the

first speaker's affinities for it. The visual presence of the monument evolves into being through collaborative conversation between the two speakers. Insisting that monuments (and by extension painting, poetry, and sculpture) are significant because they are sites of "commemoration," Bishop reconceptualizes the monument's responsibility to public memory-making as a collaborative act and a necessarily communal construction. Unlike her friend Robert Lowell, who narrates the bronze relief by August Saint-Gaudens in Boston Commons as a means to establish his own personal, historical, and artistic authority in "For the Union Dead," Bishop imagines the monument as evolving *to* purpose rather than deriving *from* it.

In 1936 just after reading Wallace Stevens' *Owl's Clover*, the earliest drafts of Bishop's poem appear in her notebooks. Initially a sketch inspired by Max Ernst's frottages, Bishop's turns her drawing into a poem that engages with the ongoing 1930s debate over the status and necessity of public art. She does so in a characteristically balanced way, acknowledging the crushing financial realities of the Depression and at the same time insisting that art is most necessary at such moments, a viewpoint that conforms with her strong continuing affinity for the respective roles that Dutch art and primitivism play as commodities to be made available outside the wealthier classes.

Barbara Page points to Bishop's Key West notebooks by way of demonstrating Bishop's earliest poetic responses to Stevens:

In form and tone, Bishop's "The Monument" answers Steven's "The Old Woman and the Statue" and "Mr. Burnshaw and the Statue," in *Owl's Clover*, poems almost crushed by the burden of the past, in which mannered minds fend off the death of things in the impending night of cultural collapse. By contrast, Bishop visually and verbally builds a figure of undetermined possibilities by insisting not on the preestablished meaning of the thing *but on the activity of making it*, like a child at the

shore unconcerned with the source of the flotsam incorporated in her sand castle. (203-4, emphasis mine)

Page's association between Bishop's descriptive practice and children's sandcastles overstates the case slightly; however, it does capture the "perfectly useless concentration" that Bishop valorizes in conversations with Anne Stevenson about what she admires in Darwin's "heroic observation." Bishop's willingness to remove her personal investment in her artistic product distinguishes her from her peers. Responding to Marianne Moore's review of *Owl's Clover* in a letter, Bishop writes: "However, what strikes me as so wonderful about the whole book... is that it is such a display of ideas at work—making poetry, the poetry making them, etc." (December 5, 1936). Stevens' defense of art and poetry in *Owl's Clover* attempts to reconcile what he sees as false binary oppositions between lived experience and the life of the mind, and he uses the archetype of the monument to construct his defense. In a letter of explanation to his friend Hi Simons, Stevens elaborates: "Although this deals specifically with the status of art in a period of depression, it is, when generalized, one more confrontation of reality (the depression) and the imagination (art)" (268). Stevens' choice of the word "confrontation" may be an indication as to why he found it difficult to reconcile art and reality, arriving at the encounter as one refereeing a match between two oppositional parties; however, Bishop found in this exchange the usefulness of Stevens' "ideas at work" when she began to write "The Monument." Furthermore, in the same letter from Bishop to Moore quoted earlier, Bishop emphatically asserts that the statue in the "Old Woman and the Statue" is

ART—sometimes the particular creation, sometimes an historical synthesis, sometimes his own work—but always his own conception of such art. In the first section I thought he was confessing the "failure" of such art (I don't like to use these words but they seem the only ones) to

reach the lives of the unhappiest people, and the possibility of a change—
of something new arising from the unhappiness, etc. (*One Art* 48)

The status of the unfortunate woman, the recognition of art and reality in Stevens' work as being at odds, and her concentration on art's ability to reach the life of the unfortunate old woman results in her consideration of art as something new, perhaps a new art, that results from their encounter. Bishop continues by quoting from Stevens' poem:

As if the black of what she thought
Conflicting with the moving colors there
Changed them, at last, to its triumphant hue

The origins of Bishop's monument form out of her understanding that the encounter between the reluctant or even hostile observer and the artist's creation builds a new creation—in the words of "The Monument:" a commemoration.

Responding to Stevens' old woman with a sense of responsibility to her and to the dialectical structure of *Owl's Clover*, Bishop's poem evolves as a conversation between a speaker who has an affinity for art and a more reluctant guest or friend—someone who has been brought to art. The reason for going to see the monument, which perhaps is not something the second speaker is inclined to do on her own, frames the poem as a kind of tour in which there is a guide and a follower. The opening line: "Now can you see the monument? It is of wood" focuses the reader and the visitor's attention plainly on the material presence of a structure. It also signals the role of the poet as mentor to her guest, by enacting ekphrasis's "tutelary function"⁶² and by signposting Bishop's awareness that she is stepping into a poetic convention akin to Moore's, "Have you time for a story / (depicted in tapestry)?" in "Charity Overcoming Envy" (1963). Beginning *in media res*

⁶² See Elizabeth Bergmann Loizeaux *Twentieth-Century Poetry and the Visual Arts* and described later in the chapter.

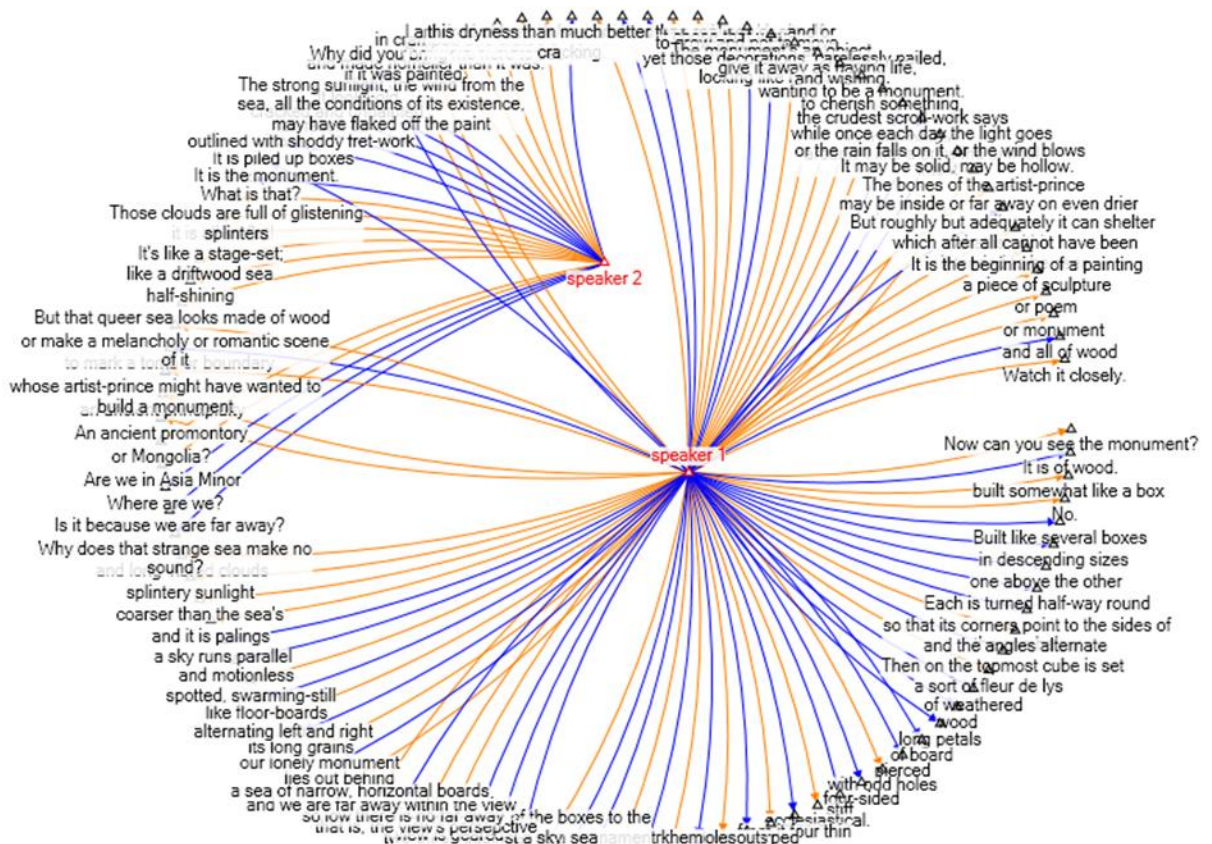
with a question whereby the decision to go see the monument has already been made (“Now can you see the monument?”), Bishop engages the internal responsive reflex of the reader, while at the same time beginning a dialogue with an unannounced companion who responds with questions of his or her own:

“Why does that strange sea make no sound?
Is it because we’re far away?
Where are we? Are we in Asia Minor,
Or in Mongolia?”

And later: “What is that?” and “Why did you bring me here to see it? / A temple of crates in cramped and crated scenery, / What can it prove?” The dialogic structure of “The Monument” provokes responsiveness to the alternating perspectives of the writer and reader. To form the graph in Figure 35, I began by listing the speakers in the poem. By connecting the speakers in the poem to their respective descriptive statements in tabular format and then to create a visualization in Figure 35 that demonstrates the basic discursive form of the poem. By connecting the speakers to their respective descriptive statements in a tabular format, the resulting network visualization demonstrates the basic discursive form of the poem. Beginning with the first speaker, I have segmented statements as they appear in order within the text to demonstrate where the second speaker interrupts the first (though I return to this point later, it is useful to point out that this interruption occurs at approximately the eight o’clock position). The resulting network graph represents a temporal unfolding of the poem’s text as a discursive exchange between two speakers. In this network graph, I have taken a different approach than in the previous two. In Figure 35, the nodes located along the outside edge represent lines in the poem as they unfold sequentially clockwise around the graph’s perimeter.

Each poetic line shares an edge in the network with either the first or second speaker . As I describe further on, the color of the edges between speakers and their poetic lines define interpretive attributes of the speaker’s line.

The Monument: Network of Wood and Would / Material and Possibility



Created with NodeXL (<http://nodexl.codeplex.com>)

Figure 35: The discursive structure of "The Monument" Each outer node represents a poetic line. The edges represent which speaker each line belongs to. The lines unfolded sequentially, clockwise, around the network graph.

The companion and interlocutor’s questions demonstrate discomfort over the distortion of sound, the dislocation of the landscape, and the purpose of the object that the first speaker insists on coming to see. By interrupting the first speaker, the second refocuses and

reminds the more figuratively inclined and imaginative first speaker of her responsibility to the physical world and by association those, like the second speaker, who are more comfortable with it. The poem's opening line changes in significance from can you see what the monument *is* (wood) to can you see what the monument *might be* (would)? Focusing on the wood as the material which constructs the physical monument also calls attention to the word wood's homophone "would"—a linguistic gesture toward possibility. Expressing desire, wishfulness, uncertainty, and advice, "would" poses questions, destabilizes certainty, and suggests rather than tells. As a result, the poem becomes a network of wood and would, certainty and possibility, the literal and the figurative—surfaces of language and art from which the two speakers in the poem draw to create "The Monument."

Descriptive statements, segments of the poem attributed to either speaker, in the network visualization are represented as either blue or orange. Each descriptive statement reveals the speaker's bias toward the monument's physical presence (as mere boxes, wood, chipped paint, for example) or toward its imaginative and figurative potential (eroded air, a frottage of the sea, glistening splinters). For example, the first speaker makes grounded physical descriptions of the monument: "It is of wood" and "built of boxes." These lines are represented in blue because they focus primarily on the monument's "wooden" or physical attributes. However, lines that accentuate the monument's figurative and imaginative potential are represented in orange. These lines are often characterized by a synesthetic confusion of the wooden material of the monument with surrounding objects. For example the physical description of the sea "A sea of narrow horizontal boards" merges attributes of the monument's material presence

with its surroundings and expands the metaphorical possibility of the monument beyond its mere physical description (the “would” of possibility against the “wood” of materiality).

Identifying language that is allied more heavily with the literal or figurative aspects of the monument with blue (“wood”) and orange (“would”) lines as they appear in the poem, the graph indicates that after first few statements, the first speaker gravitates toward concrete description, attempting to describe the monument in terms with which the second speaker is more comfortable, eventually dipping back and forth between literal and figurative descriptions. However, as the first speaker’s descriptions become more figurative and imaginative, the second speaker intervenes for the first time. In Figure 35, the first statement made by the second speaker intervenes at about the eight o’clock position in the circle. The previous four orange lines attributed to the first speaker are interrupted by the second speaker’s literally-minded question, “Why does that strange sea make no sound?”

And yet, as the poem progresses, the literal voice of the second speaker begins to absorb and recreate the metaphysical potential in the wooden box structure. After an initial resistance, the second speaker enters into the imaginative language that shapes the monument’s creative possibility.

“But that queer sea looks made of wood,
half-shining, like a driftwood sea.
and the sky looks wooden, grained with cloud.
It’s like a stage set; it is all so flat!
Those clouds are full of glistening splinters!
What is that?”

Drifting into the imaginative speech that synesthetically combines the materials of the monument with its surrounding, the second speaker accepts the invitation to participate in monument-making. Finding the activity exciting (“It is all so flat!”) at first, she then finds it disorienting. Disorientation causes the speaker to pull back, refocus, and search for literal language with which to ground the conversation again.

Precariously poised at the verge of collapse under the weight of description, the dialectical structure of “The Monument” repeatedly pulls the language of the poem back from the brink of overreach. As the wooden sea and sky flatten the horizontal lines of “the view,” erasing depth and perspective, the first speaker approaches the point in Bishop’s explanation of “heroic observation” in which “sinking or sliding giddily off into the unknown” seems most likely to occur. In *Art and Memory in the Work of Elizabeth Bishop*, Jonathan Ellis comments:

For Bishop, observation is only heroic when there remains the threat of forgetting oneself, of “sinking or sliding” under emotion. She likes to test herself by moving between these extremes, edging one way and then the other. Her best poems draw their energy from the sense that she might fall at any moment—that her performance of being more or less in control may fracture at just a single misplaced word. (63-4)

Just as Bishop’s first speaker arrives at the point where “self-forgetting observation” and description begins to overtake the object itself; however, the second voice of the reluctant companion intervenes, reminding the first speaker to keep the monument’s physical presence in view. It is one thing to flirt with the possibility of self-forgetfulness and another to allow it to happen. Doing so seals the creative act, completing the action of making. Each time the scene becomes flattened in “The Monument,” the second voice

interrupts, asks questions, and in doing so redirects the poem, opening it again to reconceptualization and fresh description.

As the second speaker fatigues under the pressure of the monument's creative force, she admits, "I am tired of breathing this eroded air, / this dryness in which the monument is cracking." Evolving into more than a physical presence, the creative process of monument-making provides a language in which the two speakers can relate to one another. The second speaker confronts earlier concrete descriptions ("Built / like several boxes in descending sizes / one above the other") with derisive resistance: "It's piled-up boxes, / outlined with shoddy fret-work, half-fallen off." Still, the language describing the second speaker's fatigue, the "cramped and crated scenery" and the "eroded air" show that the monument becomes more than a mere physical structure. Together the speakers are drawn together into a common language that may not agree, but which moves closer toward an ability to recognize and work with one another.

Responding to the second speaker's frustration, the first picks up the conversation, elaborating on the descriptive associations made by the second speaker, extending them, and connecting the figurative possibilities of the monument to larger considerations of art's purpose. Taking up the tutelary role, the first speaker carries the "driftwood sea" and the sky, "wooden, and grained with cloud" and connects it to the monument's purpose:

It is an artifact
of wood. Wood holds together better
than sea or cloud or sand could by itself,
much better than real sea or sand or cloud.

Because of the collaborative and conversational monument-making process between both speakers, the first speaker, more adept in the figurative use of language, can respond with figurative language that echoes the second speaker's own.

In "The Monument" Bishop allies the verbal and visual arts as corollaries that transgress the surfaces of the real and the imaginary—the "wood" and the "would"—for the purpose of "commemoration." By confusing, mingling, and crossing the limits of the physical monument structure through the dialectical descriptions shared between the reluctant and tutelary speakers, the monument becomes a collective, conceptual construction building toward meaning, rather than deriving meaning from a pre-existing event or purpose. Scanning the circular graph in Figure 35 according to the narrative progression of the poem (clockwise), the beginning of the poem depends heavily on physical description. Reaching the second speaker through the literal description of the monument allows for greater metaphorical description throughout the second half of the poem, which still attending to the physical monument, begins to speculate about the monument's history and origins, to intimate a life, repositioning it as a metaphorical as well as physical presence.

The monument's an object, yet those decorations,
carelessly nailed, looking like nothing at all,
give it away as having life, and wishing;
wanting to be a monument, to cherish something.

The first part of the compound sentence reads as a concession to the first reader: the monument is *merely* an object. Then it builds on the monument's physical descriptions toward the possibility of what it *would be* by imagining a life for it that extends beyond the materials of its construction. The decorations, which have been carelessly nailed onto

the boxes, demonstrates that there was human agency in its construction, and the result of that effort is a particular carelessness that builds into the imagined narrative of the monument as having an agency of its own, wanting, wishing, even cherishing. The monument as “artifact” possesses a history, which becomes significant not because of the intentions of an “artist-prince” but because of the “commemorative” activities of those who come to see it. Whether the “bones of the artist-prince” are held inside or not, the structure retains the possibility for collective creation, cherishing, and commemoration.

These early-stage, small-scale explorations of SNA visualizations help us expand the ethical possibilities for ekphrasis beyond Mitchell’s limited triangular network. For example, by displaying the same network of information in Figure 36 using an algorithm that displays network relationships in a spiral shape, the pattern of concrete description moving toward abstraction and returning to concrete again reflects the discursive, dialectical structure of Bishop’s poem. While the monument’s harsh environment—strong sunlight, wind, sea—establish physical constraints under which the structure must endure, the first speaker guides the second toward a comfortable relationship between the material status of the monument as a ruin and the creative, metaphorical potential for human engagement. By watching closely, as the first speaker has by returning to the physical presence of the monument throughout the poem, the creative and life-bearing activities of art become an act of community and possibility, rather than an act of hostility, per Mitchell, or even an act of absorption, per Stevens.

descriptive network as a homophone, an analogy, an artifact, and a tomb, the monument never becomes an archetype in the way that the urn, bird, and jar do, not only because of the dialectical and recursive descriptive exchange between speakers but also because of the unique role it creates for the reader.

By establishing a tutelary relationship between the first and second speaker, Bishop realigns the relationships between the poet and reader. Rather than directly instructing the reader to look or assigning descriptive hierarchies, Bishop expands the reader's relationship to the monument by allowing the reader increased agency. Much like seventeenth-century Dutch art, which refused to impose narrative significance to the objects it described, Bishop's description refuses to articulate a narrative explaining the monument's purpose. Instead of consuming the artistic image by imposing movement through language—which is the danger of over-riding stillness in traditional ekphrasis—Bishop shows (and our expanding the use of network beyond Mitchell's triangle into other kinds of networks reveals) that movement does not require that we *move away* from and thus subsume the image. The dialectical and even contradictory attitudes between the first and speaker of the poem require that the reader make curatorial decisions about the poem's subject in order to bring it to fruition. In *Twentieth-Century Poetry and the Visual Arts*, Elizabeth Bergmann Loizeaux describes the genre's "tutelary function"—the impulse to instruct one's audience on how and where to look, alerting the reader to what has been (or might be) missed or comes to pass outside the frame. Modern ekphrasis also includes an "anti-didactic" strain, which Loizeaux describes:

Twentieth-century poets are keenly aware that the work of art is made according to the peculiar vision of the maker. So in twentieth-century ekphrasis there is a heightened emphasis on the provisional nature of the

truth pictures convey, just as there is about the history it tells. . . There is a wariness, too, of the viewer's ability to see "right," and of the illusion-making nature of art that further complicates the difference between "seem" and "is." (23)

Alternatively, Bishop's ekphrasis resists the didactic/anti-didactic push and pull of her contemporaries by turning her readers into curators, calling into question even her own ability to describe and to evaluate what she sees. Questioning the values of big museum culture and providing multiple descriptive connections, equivalences, juxtapositions, distortions, and arrangements, Bishop requires the reader also to select, organize, and evaluate. In a period in which museums became the primary custodians and curators of art, Bishop's tutelary function is to turn her readers into stake-holders, encouraging them to choose their own art and to make their own assessments in much the same way that the Dutch middle-class participated in the seventeenth-century art market.

Implied in the circular construction of the network graph in Figure 35, "The Monument" ends at the beginning:

It is the beginning of a painting,
a piece of sculpture, or poem, or monument,
and all of wood. Watch it closely.

At this point, with the homophonic wood/would allusions firmly established, the poem's concluding line fuses the double intention to create the unlikely effect of a decomposing structure on the verge of springing to life. Rather than commanding the reader to watch, the last three words act as invitation to join the dialectic. The act of watching for both speakers leads to describing, which quickly turns into an act of interpretation. By returning to the beginning, the first speaker's characterization of the object in view as a monument is thrown open again and requires the reader to return to the layers of

description, resistance, reassessment, and changes of perspective in order to collect and to reassemble the work of art and to join the creative, collaborative efforts of the two speakers, perhaps arriving at a new construction of “would.” Thinking of the reader as curator has become a particularly popular idea in the latter part of the twentieth century, particularly in new media poetics, where user and reader interaction with a text lend to its creation; however, by creating a monument through networked, recursive description closely allied with the values of Dutch painting which resist imposing a guiding narrative, Bishop’s “The Monument” defies our critical expectations of the ekphrastic situation by democratizing the relationship between herself as poet once removed and redistributed amongst two speakers, who rather than creating a guiding narrative of the monument’s significance, invite the reader to participate in a collaborative act of “commemoration.”

Contemplation, Commerce, and Free Exchange

On April 4-5, 1962, Bishop wrote an extended letter to her friend Robert Lowell in which she responds to his newly finished manuscript *For the Union Dead*. By way of evaluation, Bishop concludes with the following paragraph:

I feel I *must* write a lot of poems immediately—that is my test for “real poetry.” Only they would come out, if at all, sounding like you. But (perhaps I have said this before) if after I read a poem, the world looks like that poem for 24 hours or so, I’m sure it’s a good one—and the same goes for paintings. I studied a huge book on Bosch I have for several days—and the world looked like Bosches for a month afterwards—not that it really doesn’t anyway, these days. Then recently here I saw a Jules Bissier show (do you know his paintings? –slight, maybe, but beautiful) and the world looked all like Bissiers for a long time, here, there, and everywhere. *Your* scenery comes and goes, half-real and half-language, all the time... (*One Art* 409)

Insisting that she feels compelled to write after reading Lowell’s work is, for Bishop, one of the highest compliments she could offer. As in “The Monument,” Bishop insists that

“good” art, whatever the medium, should lead us toward new acts of artistic creation, and her sense of art as a form of communal exchange, which she articulates first in “The Monument,” plays a significant role in her developing ethics of observation and representation throughout her career. By way of conclusion, I will focus on Bishop’s two most obviously ekphrastic poems, one written at the beginning of her career and one at the end: “Large Bad Picture” and “Poem.” Putting these two poems in conversation with one another, this section will draw together the values Bishop shares with seventeenth-century Dutch painting and the primitives with her evolving aesthetic ethics of observation, description, and representation.

Published over 30 years apart, “Large Bad Picture” and “Poem” (Bishop’s two ekphrastic poems about her great-uncle’s paintings) demonstrate a refined, but consistent set of aesthetic values. Art to Bishop should be openly exchanged through both material (between readers and poets, painters and viewers, among family members, within communities) and metaphorical (connecting through description, juxtaposition, allusion) artistic commerce. Her approach suggests that readers become curators themselves, thereby resisting, challenging and questioning the authorities that institutionalize art—be they museums, academic institutions, or publishers—and that art therefore depends upon a public willing and able to perform such a role. Unsurprisingly, Bishop’s most recognizable ekphrastic poems are on paintings with which the reader will have little familiarity. They belong to a local, familial economy and inheritance and thus highlight Bishop’s persistent use of lesser known, more domestic objects in favor of widely popular ones. Much the way she chooses a different path in her treatment of public art in “The Monument,” Bishop’s ekphrasis steers clear of the masters. While women such as

Anne Sexton, Sylvia Plath, and Adrienne Rich wrote ekphrastic and often confessional lyrics about well-known artist-figures and paintings, Bishop elected to focus on a more local subject in her great-uncle's paintings.

By reading "Large Bad Picture" and "Poem" together, we find that Bishop's aesthetic critique of her great-uncle's amateur work reveals how Bishop's descriptive density, distortion, and collaboration ground her aesthetic ethics and involve her reader as an active and equal participant in the ekphrastic network, a rather different ethic than that found in many of the works of the established ekphrastic canon. Included in *North & South*, "Large Bad Picture" creates a caricature of Uncle George's painting. George Hutchinson, who was 14 or 15 years old when he painted the large bad picture, is so concerned with filling the space of the canvas and at the same time with the minute details of its disparate parts that the painting becomes an insular, self-involved process of creation for the painter alone. Beginning with the title, Bishop announces the painting's imbalanced composition as a whole and presages its falling victim to the expanse of the canvas (suggesting that painting carries its own ethical dilemmas). The magnitude of the canvas leaves the young and as-yet-untrained artist-uncle with the dubious task of filling the space.

Remembering the Strait of Belle Isle or
some northerly harbor of Labrador,
before he became a schoolteacher
a great-uncle painted a big picture.

Throughout the poem, Bishop's descriptive language heightens the reader's awareness of the difficulty of proportion within the painting, pointing to the mistreatment of figure-ground relations and perspective, in phrases such as "receding for miles on either side" or

“high above them” which dwarf the “small back ships” with “spars like burnt matchsticks.” Exaggerating perspective with language that approaches the enormity of the canvas, Bishop makes it difficult for the reader, who would have no foreknowledge of the painting, to locate a center of the painting or a position from which to begin to view it. The poem moves from the cliffs down to the detailed caves and waves then back up to the n-shaped birds in an enormous sky and back down to the ships. True rhymes such as sky/high and caves/waves sound like nursery rhymes, playfully mocking the painter’s youthful creation.



Figure 37: Great Uncle George's painting depicted in Bishop's poem "Large Bad Picture" and recently on display at Tibor de Nagy

Years later in *Geography III*, Bishop returns to another painting by her great-uncle. This one, much smaller in size and less precise in detail, strikes Bishop differently. Painted much later, the painting in “Poem” is “about the size of an old-style dollar bill.” It’s so small that the speaker must look very closely to discern the details: the “thin church steeple—that gray-blue wisp—or is it?”; “tiny cows”; “miniscule white geese.” The steeple goes from a wisp to a brush hair, barely there as it and the geese and cows seem to retreat from the speaker’s view. The “small backwater,” though much larger in reality than it is depicted in the painting, becomes a recognizable and tangible connection between Bishop and her great uncle. Forced to look closely at the nearly indiscernible descriptive details of the landscape to find the feeding geese, the irises, the half inch of blue sky, and the flyspeck of a bird, Bishop is drawn into awareness and connection. She explains in the final stanza:

Our visions coincided—“visions” is
too serious a word—our looks, two looks:
art “copying from life” and life itself,
life and the memory of it so compressed
they’ve turned into each other. Which is which?

Whereas the vast space of the canvas from “Large Bad Picture” prevents the speaker from seeing connectively and associatively because of its sparsity, the compression of the smaller field in “Poem” connects Bishop with her uncle across time and space and even artistic media. The effect is radically different from that of someone like Anne Sexton in “The Starry Night” which also features an abstract and highly compressed landscape where the small spire of a country steeple figures prominently. However, Sexton relies on readers’ preexisting knowledge of Van Gogh and his painting to capture the highly energetic, ego-centric, and volatile nature of creative genius. Loizeaux explains how the

powerful myth of Van Gogh as “mad genius” becomes a powerful tool in the hands of Sexton:

For Sexton and Snodgrass, the self-reflexive nature of ekphrasis could be used to test the implications of the popular understanding of artistic genius: painting can mirror not only the emotional states of the poets who view them, but concepts and modes of creative practice. Sexton and Snodgrass test those modes in response to a Van Gogh painting, in response to ideas about Van Gogh in the culture, and in response to each other. (119)

Bishop’s compression works inversely to that of Sexton and Snodgrass as Loizeaux describes it. Rather than using the compression, energy, and popular persona of painter to project her creative convictions, Bishop employs the more intimate and unknown persona of the artist to demonstrate how compression and detail connect her to an artistic and familial heritage. The value of the small landscape assembles out of its ability to conduct a kind of commerce between family members, owners, artists, and memories. By titling her work “Poem,” Bishop offers her work in exchange for cramped, dim memory painted on a piece of Bristol board. Her great-uncle’s painting offers the kind of artistic commerce that Bishop uses to praise Lowell’s manuscript and to critique her uncle’s juvenile work. The smaller, later work invites Bishop into her companion artist’s “look” in order to “share views.” Together, they create, connect, and commemorate. As viewer/curator of her uncle’s work, Bishop creates a new art in which her selecting, ordering, and reproducing creates similar connections for a reader who will also select, organize, and reproduce internally poetic description thereby engaging in the exchange of artistic commodities.

The overstated stasis of “Large Bad Picture,” however, does not allow for the same co-creative activities as “Poem.” Bishop’s critique of the large, bad painting is

similar to her criticisms of Gregorio Valdes, whom she argues “did not see any difference between what we think of as his good picture and his poor pictures, and his painting a good one or a bad one seems to have been entirely a matter of luck” (CPr 58). Focusing so heavily and particularly on each detail, the large painting presents each item in isolation from the egocentric vantage point of the artist. Bishop remarks on the incongruity between the cliffs, which are fretted, and the water, which conforms in “perfect waves,” depicting the water as more placid than the land:

On the middle of that quiet floor
Sits a fleet of small black ships,
Square-rigged, sails furled, motionless,
Their spars like burnt match-sticks.

The ships rest uncannily still upon the “quiet floor” of the water’s surface. Each new descriptive word adds to a growing feeling of stasis: words such as sits, rigged, furled, and burnt imply that the action, if there was any to begin with, has passed. The energy and purpose of the ships has burned out like the match sticks and the sea stands still.

Judith P. Saunders draws compelling parallels between Bishop’s “Large Bad Picture” and Samuel Taylor Coleridge’s *Rime of the Ancient Mariner*, arguing that Bishop’s poem uses the occasion of her uncle’s unwitting replication of Coleridge’s poem as a means for building literary allusions and relationships. Saunders compares Bishop’s use of stillness in the large bad picture to Coleridge’s: “As idle as a painted ship / Upon a painted ocean” (2.117-8). In other words, the large bad picture comes untethered from the scene it is meant to represent (“the Strait of Belle Isle or / some northerly harbor of Labrador”) and the remembering that initiates the painting’s construction loses its authenticity. Unlike the poet-speaker in “The Monument,” who struggles to ground poetic abstraction and the

imaginative co-creation of the monument with the careful description of its physical structure, Bishop's great-uncle's art is born out of the highly romanticized activity of remembering.

More significantly, the painter's closed and self-involved act of remembering increases the painting's immobility and sentimentalism.

One can hear the crying, crying,
The only sound there is
Except for occasional sighing
As a large aquatic animal breathes.

Like the "pink" sun that rolls and rounds but never moves from its perpetual twilight, the painting stalls under the weight of the painter's egocentric recollection of private memories. The antithesis of "Poem," where the act of remembering and the creation of the small, dense, Bristol board painting enables "Live and the memory of it" to become "so compressed," the large bad picture remains a solitary act of sentimentalized "copying" that Bishop faults in Valdes's less successful work.

Bishop's ekphrasis, therefore, demonstrates a presiding ethic for her work: contemplation and commerce together comprise art's ethical responsibilities. In her article "Bishop and the Miniature Museum," Susan Rosenbaum delicately weaves Bishop's concerns with aesthetic value, the art of copying and the miniature as art, with the poet's awareness of the currency of museum culture. Rather than dismissing Bishop's comparison between the size of an "old-style dollar bill" and her Great-Uncle's painting, as many scholars do, Rosenbaum makes the following observations:

Why did Bishop bother to include the dollar bill at all, if she had simply wanted to convey lyric's commercial disinterest? What if rather than simply accepting the differences between the painting and the dollar bill, we also consider their similarities? After all, Bishop tells us that they are

the same size and mostly the same colors: they therefore may be analogous forms of representation and value. (73-4)

By calling attention to the social trust required for a dollar bill to hold value, one that is solidified by a moral trust inscribed on dollar bills in the words “In God We Trust,” Rosenbaum extends the moral-financial trust relationship to the way we establish moral-aesthetic value, something “agreed upon by a community of like-minded connoisseurs” (74). A small token of family history passed from one family member to another, for Bishop Uncle George’s painting continues to evoke considerations of exchange and value, but it has matured in its sense of how we cope with the financial compensations and evaluations of art, specifically as it relates to museum acquisitions. Bishop’s ambivalence toward the commodification of art in terms of an artist or poet’s status plays out within the family economy of “Poem.”

As readers become curators, they also create a verbal copy that can then be transferred by other means to a new audience. Rosenbaum explains that Bishop’s focus on copies and compression demonstrates an intentional use of the language of financial exchange. Dollar bills, which are also an artistic copy, are rarely considered art, but rather taken only on the basis of their monetary value. However, as Rosenbaum explains:

The dollar’s status as legal tender depends on a community agreement, a kind of family trust; although this financial trust is institutionalized through the national treasury and banks, a moral community underwrites these financial arrangements. The inscription, “In God We Trust” on the post-1929 dollar bill makes this connection explicit. Similarly, the economic value of poems and paintings usually depends on the moral category of aesthetic value, agreed upon by a community of like-minded connoisseurs. (74)

Bishop’s ekphrastic poetry, rather than relying wholly on her ability to educate a public, invites her readers to participate in the creation of an artistic “trust”—one in which

readers also have a stake in the arts, as well as access to the creation, exchange, and appreciation of aesthetic objects. By creating readers who select, organize, and reproduce their own images, Bishop fosters an external network of readers and makers who transmit and receive art as copies independent from its monetary value but equally as secure.

Conclusion

By the time “Poem” was published in 1976, Bishop’s status as a major figure in midcentury American poetry was well established. Awarded a Pulitzer Prize in 1956, an Academy of American Poets Fellowship in 1964, the Merrill-Ingram Award and National Book Award in 1968, and anthologized hundreds of times, Bishop’s membership in the upper echelons of American poetic tradition was assured; however, Bishop remained wary of the forces of such institutionalization. While the widespread publication and readership for her work assured a financial and literary status that Bishop desired, her appreciation of and affinities for the local, personal, and domestic appreciation and connoisseurship of art remained an important part of her aesthetic. In the same letter in which she praises her friend Robert Lowell’s work, Bishop responds to her friend’s personal and historical retellings of New England in *For the Union Dead*. In response, Bishop tells a story about the deteriorating use and appreciation of culture she witnesses first in Great Village and later in Brazil:

The saddest thing is the Literary Society (my mother and aunts belonged) in the early 1900’s: “The Society met fortnightly to read & discuss great literature. A winter each was spent on Keats, Ruskin, Mrs. Browning, Milton, Shakespeare, Dante, and two winters on Browning and Tennyson.” I imagine no one in the village has opened a Milton or a Browning for years now, and TV aerials rise from the shingles. The dying out of local culture seems to me one of the most tragic things in this

century—and it's true everywhere, I suppose—in Brazil at any rate. Small towns far inland on the rivers were real centers; they had teachers of music and dancing and languages—they made beautiful furniture and built beautiful churches. And now, they're all dead as doornails, and broken-down trucks arrive bringing powdered milk and Japanese jewelry and *Time* magazine. (One Art 408)

Moving from the local and communal marketplaces in which art is “useless and free” and exchanged and used and lived with into the canons of American poetry created a particular ethical dilemma; however, Bishop responded by staying true to her personal sense of aesthetic ethics. By eschewing populist subjects, by creating dense networks of ekphrastic description, and by elevating the role of the reader to curator in her engagements with objects that are themselves representations, Bishop continued to traffic in the local and personal, encouraging her readers to become confident participants as well. The role of curator is a kind of authorship in itself. Through the activity of selection, evaluation, and prioritization, Bishop's readers participate in the realization of her verbal renderings, authoring their own unique aesthetic objects and, hopefully like the Dutch, become an active participant in art's collateral exchange which Bishop sees as a pro-creative and necessary human activity.

Part II

Chapter 4: Collecting Ekphrasis: Building a Digital Collection of Modern Verse to Study Ekphrasis

Introduction

Whereas chapters 2 and 3 consider the local, internal, and historically-situated ekphrastic poem as a network of discourses between images and words, poets and visual artists, speakers and readers, and a work of art within its social context, the following two chapters explore the advantages of reading “at a distance,” to use Franco Moretti’s oft-cited phrase, and within a larger-scale context of thousands of other poems to invigorate and broaden our understanding of ekphrasis—its tradition, tropes, and canon (*Conjectures* 56). In this chapter, I discuss the process of assembling a digital corpus of approximately 4,500 poems, which in the next chapter will become the dataset used for two topic modeling experiments.⁶³ Because the composition of a dataset determines the effectiveness of computational analyses of texts, the methods for collecting, curating, and processing the dataset must be transparent, iterative, and thoroughly documented. However, methodologies and best practices regarding topic modeling and social network analysis of literary, and specifically figurative language data, require further refinement. Since establishing best practices, to a large extent, determines the degree to which we can depend on a project’s claims of discovery and new knowledge production, this chapter

⁶³ According to John Sinclair’s important work on the topic, “A corpus is a collection of pieces of language text in electronic form, selected according to external criteria to represent, as far as possible, a language or language variety as a source of data for linguistic research.” For more about creating digital corpora, see Sinclair, J. 2005. “Corpus and Text - Basic Principles” in *Developing Linguistic Corpora: a Guide to Good Practice*, ed. M. Wynne. Oxford: Oxbow Books: 1-16. Available online from <http://ahds.ac.uk/linguistic-corpora/> [Accessed 2012-09-01].

contends with the practical and procedural aspects of collecting, curating, and preprocessing texts using figurative language for the purpose of topic modeling. Moreover, I suggest an iterative process of project development that attends to the fiscal and temporal demands of digital humanities work by producing short term models with lightly encoded texts that can evolve into more richly encoded datasets for longer-term project goals.

The story of the ekphrastic tradition, and women's relationship to that tradition, is in many ways the story of data collection and curation, as reflected by Mitchell's statement at the end of "Ekphrasis and the Other:"

My examples are also canonical in their staging of ekphrasis as a suturing of dominant gender stereotypes into the semiotic structure of the imagetext, the image identified as feminine, the speaking/seeing subject of the text identified as masculine. All this would look quite different, of course, if my emphasis had been on ekphrastic poetry by women. But the difference, I would want to insist, would not be simply readable as a function of the author's gender. The voice and "gaze" of the male, as Williams's "Portrait of a Lady" should make clear, is riddled with its own countervoices and resistances, and no one is going to blame the Grecian urn for the banalities Keats forces her to utter....

I have not mentioned the verbal representation of other kinds of visual representation such as photography, maps, diagrams, movies, theatrical spectacles, nor reflected on the possible connotations of different pictorial styles such as realism, allegory, history painting, still-life, portraiture, and landscape, each of which carries its own peculiar sort of textuality into the heart of the visual image. This treatment of ekphrasis, then, like the typical ekphrastic poem, will have to be understood as a fragment or miniature. (181)

What Mitchell points to at the end of his seminal essay is a human dilemma. It would be impossible to mention all of the kinds of ekphrasis, all of the "many figures of difference," that fuel his model of ekphrasis as a semiotic struggle staged within a tripartite network of speakers, artworks, and readers. Mitchell argues that while there

might be other “countervoices” and “resistances,” as he calls them, within the ekphrastic tradition, the limitations of human reading and print publication force him to set them aside for later studies. Distant reading practices, however, offer promising alternatives to Mitchell’s limited data collection—all poems by dead, Romantic or modernist white men.

Thus, the second part of this dissertation considers Mitchell’s dilemma and responds to the human limitations of “Ekphrasis and the Other” by suggesting a distant reading methodology that, when combined with close, interpretive readings, offers a broader, more complex, and more inclusive alternative to the tradition and critical understanding of ekphrasis. By explaining the method and rationale for collecting thousands of poems, hundreds of which are ekphrastic, lightly curating them with descriptive metadata, and ensuring the best possible methods for preprocessing the corpora to answer questions relevant to our critical understanding of ekphrasis, this chapter sets the stage for a visualization and exploration of the dialectical relationships between ekphrastic poems and other ekphrastic poems, as well as ekphrastic poems and non-ekphrastic ones.

At the same time responding to concerns of the digital humanist, this chapter also demonstrates best practices for iterative project development that responds to the types of questions relevant to humanities scholars redressing issues of canon-formation and ekphrastic tradition. For example, through experimentation during the preprocessing of the data, I identify the stoplist⁶⁴ best-suited for exploring ekphrasis, and poetry more generally. For digital humanists refining their methodologies and for the literary scholar

⁶⁴ A stoplist is a file with high-frequency words in a language (English in this case) that are removed from a corpus of text before some form of textual analysis.

interested in uncovering latent patterns in ekphrastic poetry, the chapter that follows uses the refinement of digital practices to produce compelling results about the language of “stillness” and “looking” in ekphrastic verse.

Project Overview⁶⁵

Ekphrasis offers a wealth of opportunities to ask familiar humanities questions about canon-formation, literary tradition, and genre definition, and at the same time affords avenues for the advancement or refinement of methods and tools in the field of digital humanities. Effective digital project design marries humanities questions with digital tools, algorithms, or other technologically-enabled processes to produce new knowledge, reveal latent patterns of language, or discover better questions.⁶⁶ The project described in this chapter and the following one strives to meet this goal by leveraging the inherent computational power of an algorithm called latent Dirichlet allocation (LDA)⁶⁷ to identify trends in ekphrastic texts for the purpose of discovering new ways of understanding the relationship between them. Such a comparison, a reading of relationships between texts in a corpus of hundreds of ekphrastic poems, would help to

⁶⁵ The data preparation, scripts for removing duplicates, scripts for extracting text and metadata, clean-up of text, preparation of texts to be imported into MALLET, configuration of the EC2 instance for MALLET experiments, and formatting of data exported from the MALLET model represent contributions from Travis Robert Brown. The generous contribution of his time and expertise has made this a much better project and chapter. Any error or misrepresentation of data, however, is solely my responsibility.

⁶⁶ For more digital humanities project design, see Daniel Pitti’s “Designing Sustainable Projects and Publications” in Schreibman, Susan, Ray Siemens, and John Unsworth. *Companion to Digital Humanities* (Blackwell Companions to Literature and Culture). Hardcover. Oxford: Blackwell Publishing Professional, 2004 or Jeremy Bogg’s blog posts on project development at “Digital Humanities Design and Development Process · ClioWeb.” <http://clioweb.org/2008/04/06/digital-humanities-design-and-development-process/> Web. 17 Sept. 2012.

⁶⁷ Kao, Anne, and Steve R. Poteet. *Natural Language Processing and Text Mining*. Springer, 2006. Print.

overcome the human shortcomings that Mitchell describes. LDA models⁶⁸ of thousands of poems refocus the question of ekphrastic tradition and tropes on the relationships between discourses.⁶⁹

Reading at a distance affords scholars interested in ekphrasis a methodological alternative to semiotics or metaphorical comparison by detecting word frequencies, linguistic patterns, repeated phrases, or by detecting and predicting patterns across hundreds or thousands or even millions of examples. Rather than being limited by the human capacity to read a few texts at a time, distant reading practices facilitate the detection of subtle language trends across thousands of texts in minutes to hours. Strictly speaking, though, LDA is not a method of reading. LDA is a form of computer learning, an algorithm that through repeated iterations refines existing predictions about data in order to fine tune its accuracy. Most other distant reading tools, such as Many Eyes⁷⁰, Wordle,⁷¹ or even many of the tools in TaPOR⁷² depend on detecting frequencies of word use and patterns of repetition or analyze the linguistic patterns in text, much like the Stanford Natural Language Processing Group's CoreNLP.⁷³ Docuscope, another text analysis tool in the digital humanities, depends upon extensive lexica to categorize text

⁶⁸ Through a process that will be described later in the chapter, LDA produces a list of likely topics based on word distributions in a corpus of texts. More broadly, models are representations of a large concept, idea, or machine. In this case, a topic model represents the likely categories of language in a corpus of texts.

⁶⁹ The word *discourses* as it is used here is, perhaps, best defined by Melanie Kill in the glossary of Bawarshi and Reiff, 211. "Language in use and understood as participating in social systems so having determining effects in social life." This definition is particularly fitting because it is suited both to the purpose of discourse within a literary context of the poem, as well as within the social context found at the end of the chapter when the network diagrams place poetic language in groups.

⁷⁰ "Many Eyes." <<http://www-958.ibm.com/software/data/cognos/manyeyes/>> Web. 17 Sept. 2012.

⁷¹ "Wordle." <http://www.wordle.net/> Web. 17 Sept. 2012.

⁷² "TaPOR: Text Analysis Portal for Research." <http://portal.tapor.ca/portal/portal> Web. 17 Sept. 2012.

⁷³ "CoreNLP." <http://nlp.stanford.edu/software/corenlp.shtml> Web. 17 Sept. 2012.

data.⁷⁴ However, LDA uses probability to refine its own methods of organizing and sorting data.

LDA, a form of probabilistic topic modeling,⁷⁵ therefore, presents opportunities previously unavailable for studying latent structures in poetic texts. Free verse and lyric poems are frequently at odds with the strict structure needed for semantic data mining tools; however, probabilistic topic modeling does not depend on correct semantic arrangements to work. Through Gibbs sampling, probabilistic topic modeling responds to the semantic ambiguity typical of figurative language by disambiguating words through samplings of other less polysemous words from the same document. Therefore, the same words employed in different contexts are parsed differently.⁷⁶ Sorting texts by the probability with which they include words that co-occur with similar words in similar texts renders “topics,” which are groups of texts that the algorithm predicts share a proportion of common language.⁷⁷

Considering the strengths of probabilistic topic modeling and the possible benefits of using latent patterns of language co-occurrences to ask questions about the canon,

⁷⁴ “DocuScope.” <http://www.cmu.edu/hss/english/research/docuScope.html>

⁷⁵ A form of topic modeling that relies on advanced statistical models for predicting probability.

⁷⁶ For example, a word like “spot” could be used as a noun: “I saved you a spot.” It can also act as a verb “Did you spot him?” Alternatively, it could also be a proper name: “Come, Spot!” LDA would parse the words differently based on context. The first example might appear with other words that have a likelihood of indicating location. The second might appear in a distribution of words indicating sight. The third might appear with a list of proper names. LDA does not determine the definition or meaning of the word. Instead it uses a form of probability to predict which other documents and the word “spot” is likely to appear.

⁷⁷ Chapter 5 will describe the LDA algorithm in much more detail. Matthew Jockers’s soon-to-be published book, *Macroanalysis: Digital Methods and Literary History* (UIUC Press, 2013) promises to shed some light on methodologies useful for humanists interested in studies involving Latent Dirichlet Allocation (LDA). In the meantime, his blog post “The LDA Buffet is Now Open; or, Latent Dirichlet Allocation for English Majors” (<http://www.matthewjockers.net/2011/09/29/the-lda-buffet-is-now-open-or-latent-dirichlet-allocation-for-english-majors/>) offers a humorous, narrative introduction to the assumptions inherent in LDA models. Similarly, Scott Weingart’s blog post “Topic Modeling for Humanists: A Guided Tour” presents an approachable introduction to LDA (<http://www.scottbot.net/HIAL/?p=19113>).

tropes, and tradition of ekphrasis at scale, I developed a digital project that collected over 4,500 plain text poems and created a modest metadata scheme to begin describing and curating the data to help interpret LDA models. Furthermore, I hoped to render the results of topic modeling with network graphs that facilitate interpretive and exploratory navigations through the corpus.⁷⁸ Using a tool called MALLET to run the LDA algorithm, I generated lists of topics from my private corpus of 19th through 21st century poetry, including non-ekphrastic as well as ekphrastic poems.⁷⁹ Furthermore, I reconsidered assumptions about ekphrastic poetry in light of the topic distributions produced by the model. For example, one might expect that a topic including words about stillness and muteness might be the most common topic in ekphrastic poetry because theories of the genre take as a given ekphrasis' reliance on the binary tension between word and image, time and space. Similarly one might expect another topic to form around the language of rivalry, which represents what recent scholarship calls an over-determined feature of the genre. Therefore, I used the following three questions to guide the selection and preparation of the dataset used in the topic modeling experiments.

1.) Could a computer distinguish differences between poems by men and by women? In "Ekphrasis and the Other," W.J.T. Mitchell argues that were we to read ekphrastic poems by women as opposed to ekphrastic poetry by men, we might find a very different relationship between the active, speaking poetic voice

⁷⁸ This project was funded in large-part through a fellowship from the Maryland Institute for Technology in the Humanities (MITH) <http://www.mith.umd.edu/>. The technical, data curation, and preprocessing described herein are informed by the generous collegiality, time, and thoughtful conversations with MITH's staff, especially Travis Brown, Trevor Muñoz, and Jennifer Guiliano.

⁷⁹ MALLET's: MACHINE Learning for Language Toolkit." <http://mallet.cs.umass.edu/>. Cameron Blevins makes the case with regard to modeling Martha Ballard's diary, which is later revised by Clay Templeton in a MITH blog entry suggesting that MALLET's ease of use makes it the best "out of the box" program for humanists. See <http://mith.umd.edu/topic-modeling-in-the-humanities-an-overview/>.

and the passive, silent work of art—a dynamic that informs our primary understanding of how ekphrastic poetry operates. Were this true and were the difference to occur within recurring topics and language use, a computer might learn to recognize latent textual patterns more likely to occur in poetry by men or by women.

2.) What role does the language of stillness play in the latent patterns of ekphrasis? Would topic modeling of ekphrastic texts pick out “stillness” as one of the most common topics in the genre? Much of the definition of ekphrasis revolves around the language of stillness: poetic texts, it has been argued, contemplate the stillness and muteness of the image with which it is engaged. Stillness, metaphorically linked to muteness, breathlessness, and death, provides one of the most powerful rationales for an understanding how words and images relate to one another within the *ut pictura poesis* tradition—usually seen as an hostile encounter between rival forms of representation. The argument to this point has been made largely on critical interpretations enacted through close readings of a limited number of texts. Would a computer designed to recognize co-occurrences of words and assign those words to a “topic” based on the probability they would occur together also reveal a similar affiliation between stillness and death, muteness, even femininity?

3.) Could a computer detect vocabularies or combinations of words and images that distinguish poems as ekphrastic or non-ekphrastic? Mitchell explains that “no special textual features can be assigned to ekphrasis, any more than we can, in grammatical or stylistic terms, distinguish descriptions of paintings statues, or

other visual representations from descriptions of any other kind of object” (159).

We base this assumption on human, interpretive, close readings of poems;

however, there is the potential that a computer might recognize subtle differences as semantically significant when considering hundreds of poems at a time.

In general, these are small questions constructed in such a way that there is a reasonable likelihood that we may get useful results because they draw on the algorithmic strengths of probabilistic topic modeling.⁸⁰

Furthermore, the current chapter demonstrates a project design process that mirrors iterative design principles from the computer sciences in order to produce a project that is actionable in the short term, sustainable in the future, and responsive to the evolving needs of the project in order to improve, expand, and enrich the project’s findings over the long term. The next three sections of this chapter present the methods, rationales, and future goals of three important aspects of the project that determine the efficacy and reliability of chapter 5’s LDA tests. Through each of the following sections, I strive toward transparency about the dataset, its collection, its curation, and the preprocessing techniques that prepare it for textual analysis. Like most digital projects, the dataset, metadata, and preprocessing techniques will continue to evolve and improve. Each of the following sections will describe how changes, errors, and difficult choices about selection and processing participate in ongoing improvements to the project that

⁸⁰ The choice of the word “results” instead of “answers” is purposeful because none of these would be answers. Instead the result of each study is designed to turn critics back to the texts with new questions.

require documentation and version control.⁸¹ The advantage to LDA models is that they do not require extensive meta-tagging to produce salient results.

The Data

Text mining and computational tools designed to analyze latent patterns in natural language data present researchers interested in contemporary literature with daunting challenges. The question of how to acquire a large set of already electronically available poems from the twentieth-century on confronts the challenges of copyright protection and availability. Currently, there are no existing public datasets of contemporary poetry as there are for literary works published prior to 1922. The lack of public, digital collections of contemporary literature available for humanistic digital and computational analysis prompts Mark Sample to ask: “how have scholars of contemporary American literature been left behind by the rise of digital tools and the methodologies afforded by those tools that have otherwise been a boon to literary scholars working on earlier eras of American literatures?” (*Debates* 188) Sample points to the constantly-extending length of copyright restriction that prevents researchers from accessing, using, and publishing from digitized texts. He continues:

Although it’s risky to generalize about the digital humanities, it is safe to say that the work of the digital humanities is ultimately premised upon a simple, practical fact: it requires a digital object, either a born-digital object or an analog object that has been somehow scanned, photographed, mapped, or modeled in a digital environment. In the context of literary studies, this usually means a large corpora of digitized texts, such as the complete works of Shakespeare, the multiple versions of Whitman’s *Leaves of Grass*, or every single book published in England during the nineteenth century. (188)

⁸¹ Version control is to information science and data curation as variorum is to texts. In this project the repository where each version of the data is saved is called GitHub.

While he specifically highlights the disadvantage that copyright restrictions cause for the study of latent and predictive patterns in Don DeLillo's work, Sample argues that DeLillo is really a metonym for contemporary authors whose work will remain under lock and key for years to come, untouchable in the form of large, public archives, which have fuelled (and continue to) the explosion of digital humanities work in literary period studies prior to 1900. Admittedly, collections such as HATHI Trust *do* include collections full-text, searchable copies of some contemporary works; however, the results return only page numbers corresponding with searched text. Access to HATHI Trust full-text files is only available through special research arrangements.

How, then, can we leverage the power of tools for text mining, pattern recognition, and corpora discovery for the purpose of studying texts written after 1922? Could private, unpublished collections of modern poems yield a collection that would be sizeable enough to study using LDA algorithms and still produce salient results? Drawing from existing Web sites that publish modern verse may push the boundaries of what is acceptable in terms of copyright restrictions; however, in the short term the ability to use the data, even if none of it could be published, offered a promising mid-way solution. In the short term, I created a private collection of poems drawn from online, public resources for private research use, allowable under copyright and fair use law. Doing so allows me to test algorithms, but this solution means that the only data I can

make available to readers is the data produced by the model that does not present the possibility of reassembling whole texts.⁸²

Therefore, the data set used to perform the following tests and studies, like many digital humanities projects, reflects not just the research agenda of the project as a whole, but the particular practical and editorial constraints of what is available. In order to perform a computational analysis of thousands of poems, there needs to be an electronic resource with digital files/copies of thousands of poems. When working with large data or small data using computational text analytics, one clear challenge from the outset is finding the right dataset to work with.

Funding for the project extended for only four months; therefore, scanning poems from print sources with optical character recognition (OCR) software risked spending too much time on data collection to the exclusion of the project's other goals. The next best option was to collect electronic copies of poems from online, public content providers, such as *The Academy of American Poets'* Web site (poets.org) and the *Poetry Daily* Web site (poems.com) to create a private digital repository of mostly twentieth-century poems. *Poetry Daily* (poems.com) is an online anthology of contemporary poetry. Designed to publicize the most recent work produced by contemporary poets, *Poetry Daily* reproduces one poem (and sometimes two) each day. The site displays each poem on its site for exactly one year. After one year, the online version of the poem is retired. Given the one-year agreement with literary magazines and small presses, the poems in *Poetry*

⁸² Topic distributions of key words produced by LDA models in this study consist of single words, and therefore cannot be used to reproduce the original text. In the short term, the only data that I can publish includes the titles of poems and the statistical data generated by the model; however, in future iterations of the project, I hope to collaborate with content providers, exchanging their data for my results to improve their site's overall navigability and my project's access to more data to build and refine future LDA models.

Daily's online anthology are often published within the past five years. The most recently published poems in the digital collection used for this study come from *Poetry Daily*.

The overall corpus, comprised of 4,771 documents, was assembled from five sources by using a macro⁸³ to produce digital copies of poems as individual documents, including the title of the poem, the name of the poet, the text of the poem, and any available publication information, including the name of the book or journal where the poem was originally published, the date, and the name of the publisher.⁸⁴ The largest content provider, *The Academy of American Poets* Web site (poets.org) generated 4,266 total poems for the collection, and *Poetry Daily* (poems.com) added 373 poems to that. Another portion of the poems in the corpus includes specifically ekphrastic poems from popular print anthologies or bibliographies. These poems were often keyed by hand. In particular, 34 poems came from John Hollander's anthology *The Gazer's Spirit*; 79 poems were discovered from Robert Denham's *Poets on Paintings: A Bibliography*. Additionally, I added to the corpus ekphrastic poems by women whose work was not included in the aforementioned sources, including poems by Jorie Graham, Carol Snow, Barbara Guest, and Cole Swenson, thus accounting for the remaining 19 items. Table 4 breaks each source and number of poems down, including the proportion of poems from each source.

⁸³ A simple program written to accomplish repetitive tasks. The scraping macro used to collect electronic copies of poems, written specifically for a Mozilla Firefox plug-in called iMacro, opened each Web page, selected the title, author, poem text, and available publication information and dumped each one into its own plain text file.

⁸⁴ The data collected from *Poetry Daily* represents those posted on the site between January 15, 2011 and extending through January 14, 2012.

Table 4: Total number of poems from each content source and percentage of the corpus comprised of each source

Source	Total # of poems	% of corpus
Poets.org	4266	89.4%
Poems.com	373	7.8%
<i>The Gazer's Spirit</i>	34	.7%
<i>Poets on Paintings</i>	79	1.7%
Graham, Snow, Guest, & Swenson	19	.4%

In an effort to keep the poem data as clean as possible and free from error, a second script removed all of the metadata from each text file, leaving only the title of the poem and the body of the poem in plain text. The digitized text features of the poem were made UTF-8 compliant.⁸⁵ Next, each document was assigned a unique identifying number. Poems from poets.org received the prefix po- followed by a 6 digit number. Files extracted from poems.com received a pd- prefix followed by a 5 digit number; likewise, files from John Hollander's *The Gazer's Spirit* begin with the prefix gs-. Documents with poems from *Poets on Paintings* and the small group of women poets received the prefixes respectively: fc- and sg- followed by a 6 digit number. Randomly generated, the numbers became document identifiers as well as the name for each poem file. The entire collection of poems resides in a directory specifically for the corpus's text files, divided based on the source of its collection. Changes to the collection during the data standardization processes were tracked in a private GitHub⁸⁶ repository.

We seem almost inherently to know the value of "big data:" scale changes the name of the game. Still, what about the smaller universes of projects with minimal

⁸⁵ UTF-8 stands for USC Transformation Format – 8 bit. This is a universal format for encoding digital text.

⁸⁶ GitHub is a repository for the data equivalent of text variorums.

budgets, fewer collaborators, and limited scopes, which also have large ambitions about what can be done using the digital resources we have on hand? Without detracting from the import of big data projects, smaller projects offer the field rich opportunities for exploratory studies using advances in natural language processing tools, and the outcomes of such projects can be relevant and useful both in and of themselves as well as beneficial to large-scale projects by providing possible methods for tasks such as fine-tuning initial results. Small data sets such as this one prompt digital humanists to ask questions like: how do we recognize useful results? How do we know if our algorithms are working the way they are intended? Trying to answer questions about metadata curation, interoperability, and detail with big data can be expensive and time consuming, but small and mid-sized data sets can be more deeply and inexpensively encoded. Herein lies the necessity for discussing my methods, as in this chapter, alongside results—the topic of chapter 5. Methodological documentation is as important to the digital humanities as the refinement of theoretical concepts has been to the study of literature.

Importantly, small projects (and even mid-sized projects with mid-sized datasets) offer the promise of richly encoded data that can be tested, reorganized, and applied flexibly to a variety of contexts without potentially becoming the entirety of a project director's career. The space between close, highly-supervised readings and distant, unsupervised analysis remains wide open as a field of study, and yet its potential value as a manageable, not wholly consuming, and reproducible option make it worth seriously considering. Small to mid-sized data collections are often flexible enough that an iterative project design process allows frequent improvements and refinements to the data collection that can be seamlessly folded into the data versioning and project development

process. For example, in a small corpus, additions to the corpus can influence the results of the entire study more easily. Furthermore, data corrections are much easier to accomplish and can happen much more quickly in response to confusing results or test errors. By maintaining clear records of the evolving state of the data through a version control system such as GitHub, small projects can more flexibly respond to improvements, adjustments, and refinements of the dataset that help better address the humanities questions the project is attempting to ask. Results of data mining experiments with small datasets can also be more easily interpreted in light of subject area expertise. Because the project is small, future studies will likely focus on how adding and removing items from the dataset influences LDA results. New iterations of the project can develop quickly as the dataset grows and that the number of ekphrastic poems in the collection increase, thereby improving the reliability and scope of the project as a whole.

The promise of iterative design in small digital humanities projects is that we can begin to build, test, and produce initial results while at the same time refining, improving, and expanding the data, metadata, and preprocessing techniques. In terms of the data collection process, the need to produce a substantive enough dataset also required some compromise in terms of the kinds of data captured. For example, harvesting digitized poems from the Web was not a perfect solution. In an effort to capture the most reliable online resources and by including all the poems from poets.org, the data set includes a undefined number of poems published before 1900, and our ability to define precisely how much of the dataset consists of pre-1900 poems depends on a much lengthier process of metadata formatting and curation. Further drawbacks to using these two electronic collections include the lack of transparency regarding editorial selection. Both

collections are largely assembled based according to editorial preferences that are not clearly stated on the Web site.⁸⁷ Rather than representing my own choice of poems, I must rely on the selection of texts, editions, and textual variances that fit the site's editorial preferences. Furthermore, poems from *Poetry Daily* will vanish after 365 days, making corrections or references back to the original virtually impossible.

Though the presence of pre-1900 texts may detract from the reasonable claims to be made with regard to periodization, the implementation of short-cycle, iterative design in which version controls track changes to the dataset, suggests that small bursts of human and programming interventions to improve the dataset have the potential to make substantive improvements in the overall project. Moreover, the existing dataset allows us to begin modeling a corpus of poetic texts right away and ask questions about the model's outcomes that respond to issues of poetic tradition, tropes, and genre definition.

Metadata

One of the advantages to using LDA is that it does not depend upon a richly-encoded set of metadata—data describing data—to produce salient results. On the other hand, LDA, which is an unsupervised form of data mining, generates descriptive metadata that can be used for navigation and exploration. However, coupling even small amounts of metadata with LDA studies creates richer conditions for using LDA as an exploratory, as well as a descriptive, tool.

Metadata quality, standards, and curation are concerns close to the hearts of librarians, but metadata is evolving as an important consideration for literary scholars

⁸⁷ Unfortunately, a written request for Poets.org's editorial priorities and policies has not yet been responded to by the site's publisher.

because it helps us to organize and develop our hermeneutic approach toward computational analysis. In "Metadata for Corpus Work," Lou Burnard argues that particularly in the case of working with linguistic analyses of digital corpora, metadata plays a central role in understanding and interpreting test results.⁸⁸ He writes:

Nevertheless, it is no exaggeration to say that without metadata, corpus linguistics would be virtually impossible. Why? Because corpus linguistics is an empirical science, in which the investigator seeks to identify patterns of linguistic behaviour by inspection and analysis of naturally occurring samples of language. A typical corpus analysis will therefore gather together many examples of linguistic usage, each taken out of the context in which it originally occurred, like a laboratory specimen. Metadata restores and specifies that context, thus enabling us to relate the specimen to its original habitat. Furthermore, since language corpora are constructed from pre-existing pieces of language, questions of accuracy and authenticity are all but inevitable when using them: without metadata, the investigator has no way of answering such questions. Without metadata, the investigator has nothing but disconnected words of unknowable provenance or authenticity.

Granted, LDA, which is a probabilistic modeling algorithm rather than a linguistic one, depends less on the pre-existence of rich metadata because the model produces its own metadata that, as we will see in chapter 5, helps “restore and specify” context. However, the point should not be overlooked. Lightly curated metadata accompanying the textual data in combination with the metadata produced with the model allows for better visualization of test results and increases the number of interpretive options.

Consistent and accurate metadata benefits interpretations of the model in three ways. First metadata helps expose our human assumptions and biases about the dataset. By producing only two categories of metadata—the gender of the poet and the genre classification of the poem—we can explore ways in which traditional definitions of

⁸⁸ More on metadata standards and creation can be found in Burnard, Lou. 2005. "" in *Developing Linguistic Corpora: a Guide to Good Practice*, ed. M. Wynne. Oxford: Oxbow Books: 30-46. Available online from <http://ahds.ac.uk/linguistic-corpora/> [Accessed 2012-09-05].

ekphrasis compare to the model's predicted topic distribution. Secondly, accurate metadata allows the researcher or research team to supervise the model creation process and provide nuanced oversight over the algorithm. For example, in some topic models where trends over time are particularly significant, metadata creates the conditions under which textual features can be mapped over time. In point of fact, Rob Nelson's study of the *Richmond Daily Dispatch* tracks strains of nationalistic language (such as elegiac or celebratory) over the duration of the Civil War. Nelson's chronological graphs demonstrate correlations between elegiac and nationalistic language with casualty and enlistment rates. As a result, Nelson can make arguments about the effectiveness of particular forms of nationalistic rhetoric over time and in response to corresponding calls for enlistment and reports of war fatalities—all of which becomes possible because of a richly encoded data set. Thirdly, metadata improves the type of data and results that can be shared about a copyright protected or private data collection. In cases such as this project, when the full text is unavailable for use by readers, metadata created by the researcher can be made available in its place.⁸⁹ Since the majority of documents included in my corpus are still under copyright protection, I cannot make the original, plain text data visible to readers and future researchers; however, I can make metadata I generate available. Finally, metadata turns individual files into collections, articulating a collective purpose through the standardization of description that, when well formed, also clarifies its intended use, by tailoring metadata to the questions being asked and the desired outcome of the results.

⁸⁹ Substituting metadata for content is a solution commonly offered by content repositories and libraries with regard to electronic distribution of copyright-protected materials.

Even for small projects, developing standardized metadata is a time-intensive process. The decision to create metadata for this digital collection, then, represents a deliberate choice to balance what might be done with what can reasonably be accomplished in this lifecycle of the project. In his introduction to a 2009 issue of *Digital Humanities Quarterly*, Matthew Kirschenbaum poses the following:

How do we *know* when we're done? What does it mean to "finish" a piece of digital work? As Bill Kretzschmar points out in his essay, the verb "to finish" can mean to *complete* or something more like to polish or perfect. What is the measure of "completeness" in a medium where the prevailing wisdom is to celebrate the incomplete, the open-ended, and the extensible?
(2)

Digital projects—due in part to the plasticity of their digital environment and in part to the innovation-centric funding mechanism that rewards new beginnings over completeness—rarely end, unless they are forgotten or set aside and never in that instance considered “done.” Those are more likely to be “archived” as half-made proofs-of-concept fallen short of expectation. At first, iterative project design principles may appear to perpetuate the open-endedness Kirschenbaum describes; however, projects that are designed to respond to exigent humanities questions with small datasets and that begin to address those questions early in the project’s development are more inclined to sustain interest and support. Iterative projects may never be done, but they can be over when they evolve into something else.

Embracing iterative design principles, this project begins by adding a small amount of metadata that can be added to incrementally, fuelling short-term discoveries in a timely way while at the same time staging improvements that increase or extend the project’s long-term possibilities. Metadata created and used in this study (and available

in Appendix A), targets specific research questions about latent trends in ekphrastic discourse that break down along gender lines, latent patterns in language surrounding stillness, space, and femininity, and latent features of language that distinguish ekphrastic from non-ekphrastic poems.

Standards for capturing, producing, and standardizing metadata continue to be an ongoing conversation in digital humanities communities that use probabilistic topic modeling. Despite a disciplinary tectonic shift toward establishing metadata standards for interoperability⁹⁰, no particular best practices have been articulated to this point for creating and building small, private corpora with metadata intended for use in topic modeling. Consequently, the metadata creation and curation process for this project combines broadly-conceived best practices for metadata standards with the practicality of what works.

When the poetry data was collected, descriptive information about each poem was stripped (copied) out of individual text files with a script and placed into corresponding fields in a spreadsheet. For example, all of the author, title, and publication data (such as book title, publisher, and year) were extracted from the text file and placed into separate fields of the metadata spreadsheet. Repeating this process consistently across every file during the collection process, the descriptive information, called metadata, populated a spreadsheet with the following fields: document identifying number (doc id), title (title), author (author), publication information (pub info), notes (notes). Since the Web pages from which the poems were extracted were not always consistent about formatting or

⁹⁰ The ability of data to work between various kinds of technology. For example VHS and BetaMax were not interoperable, leading to the demise of the Betamax format; however, html pages are more interoperable, as they can be read on a variety of browsers.

including publication data, anything that might be used to describe a poem's publication history was combined and entered into a single field.⁹¹

Adding to and modifying the metadata in spreadsheet form⁹² improved the process of entering and refining metadata by simplifying and regularizing it. Features such as auto fill improved my ability to group segments of data and enter the metadata more efficiently. With the use of simple processing scripts, the comma-delimited spreadsheet could be used in the future to generate a TEI header.⁹³ Furthermore, using Excel helped keep field and category names consistent. I particularly liked the flexibility of modifying and editing metadata in a spreadsheet and then exporting the data into whichever standard—RDF or TEI header—was needed later.

In a concentrated effort to build consistent metadata, I established criteria to help make consistent choices. Specifically in the case of gender assignment, I assigned each author to the categories of male, female, or unknown, based on the best available data (such as author or biographical statement) from online collections, print anthologies, or other scholarly sources, such as journal articles or biographies. If it was difficult to ascertain gender from the given information, the gender category was tagged as unknown. In the event that a particular author's gender self-definition changed between the publication of one poem and the publication of another poem, the gender definition at the date of poem's publication was used, or, as in the case of opposite-gender

⁹¹ This process, as it turns out, was not without complication, as some publication fields included commas, semicolons, and other markers that later introduced errors into the dataset; however, the errors introduced do not immediately impact the effectiveness of the LDA model. Instead, correcting this data field became one of the decisions against perfection and in favor of short-goal completion. Correcting publication data, then, will become part of the next iteration of the project.

⁹² Microsoft Excel, 2010.

⁹³ TEI is one recognized schema for encoding documents with descriptive information. TEI – Text Encoding Initiative, <http://www.tei-c.org/index.xml> Web. 10 Sept. 2012.

pseudonyms, the gender-definition of the author's writing persona was used (as in the case of George Eliot).⁹⁴ Among the 1,868 poets whose work is represented within the corpus, 681 are women and 1,021 are men. The remaining 165 authors' names are tagged "unknown" including authors who purposefully obscure their gender identity, published anonymously, or were part of a 10% sample designated for a classification analysis. Of the poems collected from *The American Academy of Poets*, 1,360 are by women and 2,570 are by men, and 334 poems were marked "unknown." Among the poems collected from *Poetry Daily* approximately 142 of those poems are by women, while 192 are by men. The remaining 37 poets are tagged "unknown."

In an effort to ensure consistent genre category assignments, I defined the criteria a poem must meet before being tagged as ekphrastic at the outset of the project.⁹⁵ Having to assign clear labels to poems often tested the resolve of the sometimes arbitrary-feeling decisions between what makes one document ekphrastic and the other not. However, each decision represented a conscious effort to remain consistent. If a poem included the name of a work of art, obvious description, paratextual information on the document's Web page, or was taken from an anthology of ekphrastic poetry, I labeled it ekphrastic. Poems that mention artists' names, but that did not mention a specific work of art were labeled "unknown" unless or until a secondary source, such as a syllabus, collection, or

⁹⁴ There are a few exceptions to this rule, however. In earlier stages of the project's development, I hoped to use gender and genre categories to train a classification algorithm to test if it could distinguish differences between ekphrastic poems by men versus those by women. In order to create that study at least 10% of the data needed to be classified as "unknown" in order to run those tests. As a result, some records were intentionally left tagged "unknown."

⁹⁵ In order to refine the criteria for ekphrastic, non-ekphrastic, and unknown category assignments, I began with a random sample of poems using a random number generator. Reading those poems, I considered what was a reasonable degree of research that could be performed in order to finish the metadata creation in a timely way. The genre definition guidelines were derived from recording criteria that would correctly describe most of the 20 poems in my initial sample.

scholarly article cited a specific work of art to which it referred. Notional ekphrasis, those poems that create imagined works of visual art, such as Keats' Grecian urn, were labeled ekphrastic so long as at least one other source also recognized the poem as ekphrastic—for example, it was included in the “Poetry about Art” section of *The American Academy of Poets* Web site or found in an anthology of ekphrastic poetry. Poems that included one or more easily-recognized ekphrastic trope, such as possible envoicing of an art object or an epigraph including a dedication to a painter, or poems that include extended descriptions of domestic objects that might be considered ekphrastic (such as a map or a bowl) were also categorized as “unknown.” Finally, poems that did not meet either the criteria for “ekphrastic” or “unknown” were classified as “non-ekphrastic.” All in all, 276 poems in the entire corpus were tagged ekphrastic. Future iterations of this project will continue to increase the number of ekphrastic poems in the collection.⁹⁶ In the following chapter, we see two ways this metadata fuels how we select, model and interpret the data through the LDA process; however, it should be noted that the usefulness of the digital collection and the model stems from its inclusion of both ekphrastic and non-ekphrastic contributions.

Metadata concerning the existence of duplicate poems in the database improves the reliability and efficacy of the model's results. During the process of creating the dataset, duplicate files resulted from one of two possible avenues.

⁹⁶ Future work would also include a classification analysis, which unfortunately was not something that could be accomplished during the grant-funded portion of the project. Classification analysis includes training an algorithm on a set of exemplary data (a combination of ekphrastic and non ekphrastic) and then using the computer's decision trees to predict the classification of an “unknown” set of data. By parsing through classification decision trees, one might identify the algorithm's learning process and begin to ask questions about how human assumptions about methods of classifying ekphrasis may be understood by contrast.

1. A file may appear in the original poets.org or poems.com database twice. These were the easiest files to catch, because they are most often identical in title and author formatting.
2. A file may appear in multiple sources under slight changes in title and author name. In other words, if William Carlos Williams' "Musée des Beaux Arts" appeared in *The Gazer's Spirit* edited by John Hollander, which it does, and was keyed in without the accent mark, but it also existed in the poets.org database, but generated an error during the conversion to text where the accent mark had been. It is possible that the script designed to tag duplicates read these two files differently and therefore did not mark them as duplicates.

All in all, precautions to capture duplicate files generated an additional metadata category, marking every file in the database after the first instance as a duplicate. When the text data is merged with the metadata during the preprocessing stages of the LDA tests described in the next chapter, files marked as duplicates are left out of the dataset used for LDA analysis. This results in a decrease of files from 4774 to 4500. Despite our best efforts, some duplicates that were not detected by the duplicate script remain in the data set when it is imported into MALLET; however, these files do not seem to pull the topic distribution in ways that decrease the accuracy of the model. In fact, in some instances, the ability of the model to assign nearly identical topic proportions to duplicate files serves as further indication that the model is working—while this may seem foreign now, this concept will become clearer in the next chapter. Future studies using this dataset would benefit from careful and perhaps manual data cleaning that fixes special characters and repairs their UTF-8 assignment.

Iterative design, version control, and purposeful imperfection

Iterative design processes require establishing clear methods for version control for primary data, for metadata, and for LDA modeling data. As digital projects are seldom solitary undertakings, version control repositories such as GitHub⁹⁷ allow multiple users to read, modify, and track versions of their data in a way that can be recovered if needed either because the existing dataset was corrupted or because there is a need to re-run an earlier test on a prior version of the dataset. The advantage to continuing to use GitHub to track versions of the data and metadata is that the project's data set and meta-data can continue to be improved, updated, and increased, while at the same time establishing a record of the project's legacy data. Through version control and careful record keeping, changes to the data can be introduced in the middle of the project to produce immediate results.

Why should such a thing matter to the literary scholar? If, as I have argued throughout this dissertation, our understanding of the ekphrastic tradition is a dialectical process of discovery, engaging with historical tropes, and readjusting, then the ability to compare future data models with those that are more limited or biased represents the enormous potential for future scholarship. Versioning datasets allows researchers to compare their evolution, leading to a better understanding of how the data, the humanities questions, and the rich points of inquiry have changed over time. Similarly, if metadata is a form of criticism, descriptive or predictive, it underscores the existing beliefs of the researcher who created it.

⁹⁷ GitHub is the repository in which the data versions are held <<https://github.com/>>.

As the earlier quotation from Kirschenbaum makes clear, data and metadata are elusive aspects of digital projects. None is ever big enough, clean enough, or well-structured enough to achieve precisely what it is that researchers would like to achieve. Just at the point where the “perfect” dataset seems within reach, new standards or technology are released, creating new needs or even opportunities to create “the perfect dataset.” Most projects have lifespans determined by fellowships or grants or sabbaticals, and we can’t afford to spend the entire project chasing a standard that simply doesn’t exist. In fact, the DH mantra may well be “project or perish.” Hard decisions about data formatting and metadata creation are often determined by two factors: intellectual value and time. First, data should be thoughtfully selected, described (tagged with metadata) and well-formatted enough in order to work and to reasonably make the argument that your results can be trusted. The best and highest-value data and metadata address the central questions of your project, and when they are not absolutely necessary, it is time to make the difficult decision to stop. To engender the values of iterative project design often means choosing between good-enough and great, and creating the data and metadata for this iteration of the project required that choice. Focusing on gender and genre for metadata categories, I decided to let go of other tags, like publication date or URLs pointing to online and freely available copies of the poems in the dataset; however, by choosing not to pursue perfection, the project continued on schedule.

Each missed opportunity, excluded poem, and unremarked upon metadata tag presents opportunities within the small project environment to make substantive improvements in short, serialized steps. Perfect data sets are a myth, one that often forms a barrier to scholars who wish to begin DH projects and feel surrounded by projects

“more perfect” than what feels achievable at first. Rather than struggling for the perfect data set, I want to suggest that we place a much stronger emphasis on the more intellectual and more necessary component of data curation—data versions. I would argue that we judge projects not by the “completeness” or “perfection” of the data, but how well its versioning has been documented, how thoroughly curatorial decisions such as what to tag, when, and why have been publicized and described, and how much the evolution of the data contributes to the development of other projects within the community. In much the same way that we know more about the value of an article by how often it has been cited, we should value a digital humanities project by how much can be learned by the projects that follow it.

The Story of Stopwords; or, Data Preparation

In the previous two chapters, close readings of ekphrastic poems by Elizabeth Alexander, Lisel Mueller, and Elizabeth Bishop take seriously the influence so-called “little” words like “to,” “by,” “on,” and “above” have in the poem’s semantic composition. Distinct for its highly concentrated language, poetry places an increased degree of significance on even the poet’s “smallest” word choices. For example, Robert Frost’s poem “Stopping by Woods” would be a different poem if it were titled “Stopping in Woods,” and the difference would be more than a matter of the speaker’s physical proximity to the woods—near rather than in them. The change would resonate aurally, as well. Consider, then, the difference that would be made by removing punctuation, line breaks, diacritical marks, capitalization, and high-frequency words. Auden’s opening line “About suffering they were never wrong, / The Old Masters: how well they understood...” would be dramatically different if instead it read: “suffering never wrong

old masters understood.” What if Keats’ Ode opened: “unravish d bride quietness foster child silence slow time sylvan historian express flowery tale sweetly rhyme”?

The first steps in preparing documents for topic modeling require making such changes. Preprocessing strips documents of upper and lower case letters, removes line breaks and enjambments, deletes high-frequency words including articles, prepositions, pronouns, conjunctions, and common verbs—like “is,” “are,” and “were”—and turns documents into strings of sequential words that no longer bear the same syntactical meaning they once did. Given this, how can a methodology that requires radical decomposition of a poem’s linguistic meaning offer valuable insights into exploring texts? Knowing, as we do, the significance of the line, “She looked on, and her looks went everywhere” in Robert Browning’s “My Last Duchess,” most literary scholars would be and should be nervous about the fact that preprocessing removes the whole line in its entirety from the text of the poem. Each word in the duke’s pivotal line “justifying” his implied action is included in a list of words, called a stoplist, stricken from the text before it is imported into the LDA environment. In topic modeling, the words “she” “looked” “on” “and” “her” “looks” “went” “everywhere” exemplify frequently used lexia that hold little semantic weight. Because of their frequency, however, prepositions, articles, conjunctions, and other high-frequency words are removed from the corpus so that their sheer volume does not skew the results of the LDA model. While the understatedness of Browning’s line actually underscores its significance within the poem, the same line in, say, the middle of a transcript from a congressional hearing would not operate the same way, and LDA algorithms were developed with non-fiction prose, not poetry, in mind. Raising these issues illustrate how different one methodology (topic

modeling) might be from another (like close reading), but more importantly require understanding how the deformativ⁹⁸ aspects of preprocessing first determine the creation of LDA topics and the model's predictions about likely similarities between documents and then influence whether and how interpretations and discoveries can be made with the model's output. The results, surprising as they were, emphasize the promise and interdependence of close and distant reading practices as cooperative methodologies.

As I noted earlier, the ekphrastic networks created in chapter 5 use a computer program called MALLET to create LDA models of text corpora by predicting the likelihood that documents with similar patterns of language use are most likely also close thematically. What precisely "topics" are will be considered in closer detail in the following chapter; however, before the LDA algorithm in MALLET is possible, the texts in the corpora need to be converted into a format MALLET can understand. Over the course of the final pages in this chapter, I review the decisions made during the preprocessing stages of the topic modeling experiments that form the basis of networked readings of ekphrasis. As we will discover along the way, preprocessing—done in a purposeful and reflective way—leads to a discovery about the language of stillness in ekphrasis and the ability for machine learning techniques to detect stasis with the articles,

⁹⁸ I purposefully invoke the term *deformance* here to call to mind Jerome McGann and Lisa Samuel's use of the term, in "Deformance and Interpretation" in which they write: "A deformativ procedure puts the reader in a highly idiosyncratic relation to the work. This consequence could scarcely be avoided, since deformance sends both reader and work through the textual looking glass. On that other side customary rules are not completely short-circuited, but they are held in abeyance, to be chosen among (there are many systems of rules), to be followed or not as one decides. Deformativ moves re-investigate the terms in which critical commentary will be undertaken. Not the least significant consequence, as will be seen, is the dramatic exposure of subjectivity as a live and highly informative option of interpretive commentary, if not indeed one of its essential features, however neglected in neo-classical models of criticism that search imaginative works for their "objective" and general qualities." <http://www2.iath.virginia.edu/jjm2f/old/deform.html>

conjunctions, prepositions, and high-frequency words such as “still,” “stillness,” and “say” removed from the poems’ text.

I admit that I began as a non-believer—none of my training as a literary scholar or reader of poetry prepared me for the fact that the little words, upon which so many papers and articles in literary studies hinge, could be completely removed from a text and yet produce results I could trust. Removing high frequency words from the collection of poetry does affect the outcome of a computational analysis, but the results were not at all what I expected. Despite my vehemently held belief that high-frequency words carry more semantic weight in poetry than in prose, the stopword tests prove that we can produce useful and reliable results without them. Additionally, the results show that stillness and stasis in ekphrasis are more evident when the direct references to them are removed and their co-occurring metaphors and language divide into multiple, diverse discourses, ranging from peaceful to anxious. Although computational studies of literary texts and the close reading practices of literary scholars appear at first glance to be contradictory when it comes to how we read, the two fields in combination can work to the advantage of literary scholars by refocusing and occasionally distorting the lens of close reading to bring the latent patterns of texts into clearer focus.

Despite digital humanist’s celebration of MALLET as a robust but approachable tool for topic modeling, few humanities projects consider how its preprocessing steps affect its output. While some digital humanities scholars, including Matthew Jockers and Ted Underwood, opt to write their own custom LDA programs using a programming environment like R, the choice to author one’s own LDA modeling program is neither compelling nor practical. MALLET provides a robust, extensible, and perfectly viable

solution, and choosing to use tools that already exist and work well saves precious time during the lifecycle of a project. MALLET made the most sense for this project because it was relatively easy for me to learn and consequently would make my results easier to share. Furthermore, by choosing to use MALLET, my discoveries, trials, and results can be more readily applied by other scholars in the short term, thereby reducing the need to learn how to program rather than increasing it. For DH methods to become more commonplace, we must reduce the threshold of understanding and acceptance rather than unnecessarily increasing it.

In the field of computer science, where methods and algorithms of natural language processing (like LDA) were developed, high frequency words that hold little semantic weight create a high noise to signal ratio. In most applications of algorithms such as LDA, high-frequency words overwhelm the model, skewing it away from semantic clusters. The sheer repetition of articles, conjunctions, prepositions, common transitive verbs (was, is), or simply common verbs (look, say, see) overshadows less frequent but semantically weightier words. To correct for this imbalance, developers of natural language processing algorithms compile lists of high-frequency words that are routinely removed from the dataset. MALLET is no exception. The default settings for importing data into the program removes stopwords listed in Appendix B. In practice, stopword lists improved the results of LDA algorithms on large corpora of non-fiction texts such as grant proposals, *Science* magazine, and Congressional testimony.

To a computer scientist, this all seems quite obvious. If you are a literary scholar, particularly if your object of study is poetry—the previous paragraph is likely to be anxiety producing. The “little” words removed by the MALLET default list, we know,

are not filler words. They may not carry semantic weight, but they do carry syntactic significance, which is to say that they often determine or define the semantic weight of the words surrounding them. As poetry critics, readers, and writers know, articles, conjunctions, prepositions, and pronouns are all an important part of an art form valued for its economy of language. In fact, some of the most interesting articles in literary studies hinge on such things. Consider the previous chapter in which the word “or” in Bishop’s “The Map” creates descriptive density within the ekphrastic network of speaker, map maker, printer, and reader—the syntactical significance of the word “or” destabilizes authorial control over the image and shifts the creative and interpretive relationship among them. I couldn’t make that argument without focusing on the significance of a word that the stoplist preprocessing would remove from the data set altogether. This represents the crux of many debates over close and distant reading—losing something in order to gain another perspective.

Close and distant readings, however, are not mutually exclusive for LDA to be effective. By contrast, what the following tests proved to me is that they depend upon one another and, when used together, produce a richer understanding of texts—particularly ekphrastic ones. Unwilling to be convinced that removing high-frequency words could work, I designed a test to see how the presence of stopwords affected the usefulness of the topic keyword distributions the LDA produced. Without introducing the LDA process in detail here, as it is covered in greater detail in chapter 5, what is useful to know at this point is that LDA is an algorithm that sorts through documents and creates groupings of words that are most likely to co-occur—in other words, to appear in

the same document, in this case each poem. It is a form of machine learning that uses relationships between words to predict which documents share a common language.

As Mitchell, Heffernan, Hollander, Loizeaux and almost anyone writing about the genre explain, ekphrastic poems beseech their readers to “look” and “see,” commenting to varying effect on the stillness and silence of the work of visual art. Therefore, the following test foregrounds the words: look, see, still, and stillness. To test the influence of stoplists on topic models of the poems in my digital corpus, I imported the dataset into MALLET in four ways and then ran a 40 topic model of each version of the preprocessed data. In the first test, I skipped preprocessing altogether, keeping every word in tact in the corpus (See Table 5). For the second test, I heavily edited the MALLET stoplist, and about 50% of the high-frequency words were removed from the poetry dataset before it was modeled (See Table 6, Appendix C). The third test only slightly modifies the stoplist leaving words frequently associated with ekphrasis in the text to be modeled (See Table 7, Appendix D). Finally, I ran the last test using MALLET’s default stoplist (See Table 8, Appendix B). More attention in the following chapter will be paid to what, exactly, topics are and how they are created with LDA.⁹⁹ The following four tables demonstrate the results of the 40 topic key word distributions from each of the tests.

Learning to read topic keyword lists takes some practice; however, for the purposes of understanding the influence of stoplists on topic word distributions, there are a few things to focus on in the following Tables 1-4. First, each number on the far left represents the topic number, in this case from 0-39 because 40 topics were requested. The next number, called a hyperparameter estimation, shows the model’s prediction as to

⁹⁹ A copy of the MALLET commands and parameters used for this test can be found in Appendix E.

how much of the collection might be described by each topic (For Topic 1, the hyperparameter is 0.25 or 25%). Next, to the right of the hyperparameter estimation are the top 20 words associated with the topic in descending order from most likely to least likely.

The question to ask as we compare these four tables is: how does the presence or absence of high-frequency stopwords in poetry data affect the distribution of words most likely to be found in a topic, and more specifically, how does it influence the distributions of ekphrastic texts? How might the presence or absence of words commonly associated with ekphrasis affect the ekphrastic poems within the model?

Table 5

Table 5 / Test 1: Keyword distribution - No stoplist		
Topic ID	Hyperparameter	Key word distribution
0	0.25555	the a in of on with house up by dog an table old street door at kitchen room under cat
1	0.83605	the and to s on at one from with this all out up now down back for time there no
2	0.00343	that ye and to in of for your my me so may ne thou is us doe sing woods which
3	0.00767	night moloch for wi johnny o ye auld york syne gat lang three fere andor stan owre kong lord fu
4	0.23175	we our us in are with when as how were for ourselves have what each who together from while re
5	0.50699	the of and in with that to out who on from god all fire time night world light earth man
6	0.38771	a and like with in as on skin his eyes hands hair black body inside mouth white blood little out
7	0.2099	of the its s this no to body death for from stone earth light here in into world by own
8	0.51036	was and a had were that in it to said but could did came when saw they then i one
9	0.68727	to not and be for will is love no but that if more or let all life heart as have
10	0.40124	the in of a for to on new from with old at or who one day year like years days
11	0.47055	t i it s you to can don but that what know so m say about a like ll we
12	0.05175	s little drink who mr dad money says for hair at richard boy shot spam black lamb milk get big
13	0.50871	i my me am in have when myself m so this mother see love face mine how man father own

14	0.08862	tree s fruit apple their sweet no come honey soil apples buy eat seed ripe garden leaf bees full bee
15	0.01868	de an la s n y t e a el le l me en miss green at din o on
16	0.03657	d o all soul n see ring heav th too r well while ev ever what thro long name pass
17	0.19007	a of s in blue white red as green with light gold flowers flower color yellow an glass eye silver
18	0.86073	and a to of that or it as for this so be not is have all what but if one
19	0.30406	a the of water like on with where river from into over through its or by across black an city
20	0.21519	they their them and are to men with by children women have up these those who themselves each old faces
21	0.65618	the in of like on light night sky wind as trees sun snow rain from moon leaves when at its
22	0.08392	the and to with of his in but their a on her nor as at this by so all thus
23	0.06979	one its of by s another life their when being each choose coat matter with movement hide person thread suddenly
24	0.04091	s too back whack jump off potato honey ice jazz ball happy chocolate crazy liver butter fast baby chicken bed
25	0.09293	poem a with write words poet poems by book an read or s writing poetry stop page word text written
26	0.23994	the and a with in s upon by their they blood from through its at like on heart each dead
27	0.13829	with thy thou that thee and o all shall from er nor yet but when now s then sweet which
28	0.43763	the to of it into then as and its up a down for on from over out back through head
29	0.24138	he his him man s and a for who father to at when dead on himself boy by now but
30	0.04181	no more than some any self nothing portrait even not duke less cause question change case necessary raven announce likely
31	0.27699	the of in to as an which by or with from more than on world mind life at sense these
32	0.36481	and the a of in s as are long old where that by all there song o so little is
33	0.04452	being not by people who because having states gertrude am inside american an been our also going during real plane
34	0.59288	the is a it in of that are there has not an this what but one nothing time will does
35	0.10043	the sea of and on ocean ship sand waves water boat tide as rock shore great beach shark land wind
36	0.24688	you your are in with have when will to who do at were yourself face re now woman ve for
37	0.18012	her she mother woman a s to as girl at from with for who eyes back white herself not hair
38	0.1903	the and to s of his in from by on who their god our land war great whose lord king
39	0.07415	a of each an horse letter line p em height box set space used ear ink horizon ocean between cowboy

Table 6

Table 6 / Test 2: Keyword distribution - heavily revised stoplist (stopword-ekphrasis-TT.txt)		
Topic ID	Hyperparameter	Key word distribution
0	0.02506	ball spam eat father milk potato eng trouble food from casey mrs horowitz chicken cow ate brooklyn ice never market
1	0.45871	had it of said in they then one did with out down saw would when for not on up went
2	0.22881	they their them are in by men children on have women up themselves see old hands faces girls heads bodies
3	0.19003	of with red white like hair black blue eyes girl mirror little lips green color yellow pink shoes brown silk
4	0.02321	gertrude has inside text stein lauren shot likely type bad everything must version species by animals across whitney effect genius
5	0.08197	poem write poems poet letter book read page writing poetry then words written wrote poets word name letters pages english
6	0.25807	he his him man in for on dead father himself boy has god now son eyes head hand see by
7	0.29525	in on with house room out for table up from street door morning window off into car kitchen outside night
8	0.37333	of in with for life death earth its from world soul god man no out light by dead where body
9	0.59167	of in on from where into light like over with down water by river up one then dark now here
10	0.16245	his from our by their on god in let men lord great every when for hell land good have own
11	0.01145	de la el miss le en me green do on yo ain thump verde les est no dat con ah
12	0.20948	of in with their for art self where praise his fire horse deep wall set double words blood broken rock
13	0.02364	black little richard moloch love daddy harlem white fat red high braids moonlight bloody bill jazz loves jesus european club
14	0.055	by form movement matter its stop coat desire theory point human consciousness physical solar above layer alive fabric tenure sensation
15	0.06074	thy thou thee love then for with art me thine ever doth er more sweet heart st dear soul from
16	0.00569	ye of ring with in let drink sing woods it which doe us for answer theyr eccho rats up out
17	0.04171	history here stone war from dead states fly name call exist names does mexico buzz monument marble built march between
18	0.41975	of in with for one old years when new on by two last year after how long from no first
19	0.12516	sea of on water boat blue ocean waves sand ship with land tide shore beach sun fish green island wave
20	0.10667	water with fish bones skin hot old smell out rock dirt broken bone sand some off mud steel dry dust
21	0.66363	will in are not love for one when no have day let night go on more may still time now
22	0.11132	our us ourselves from how together live bodies even heads return with heat occupation lives ours sleeping planet luminous hearts

23	0.09126	song music of bird singing sound sing songs notes long sings wind hear sang voice listen heard blow door sounds
24	0.58131	it don like know have say me how do when for about with they ll out on want up ve
25	0.08963	of in city america people over war new york under world white american man st streets street jew avenue paris
26	0.33956	in with like upon how eyes long night from by its voice heart they no light hand on hear deep
27	0.21709	of in tree green flowers grass flower fruit for trees garden like leaves sweet with summer apple rose wood leaf
28	0.34873	in of snow night sun sky on moon rain wind winter light summer fire are it white blue cold by
29	0.04999	of its bells hawk out from woman it guitar round itself stone time sand head parrot final shell living wings
30	0.00708	night wi sir conturbat mortis timor for auld lord some syne gat mr ye duke lang announce rocks owre cleft
31	0.05357	with his her he their on in from by more for heaven fate they stood mind now then vain arms
32	0.00422	for choose din ben hath ne instead thi erthe al gunga herte may merci alabanza oure yow myn shal no
33	0.04266	by new fear modern art times painting museum mr order model artist calm york studio public center situation prometheus oil
34	0.17635	her she of woman mother girl from for with hair in herself on not daughter child says one hands lady
35	0.5389	not of it in no for have which more by one would do much some will even how such us
36	0.62254	it like its in on into out up from back body down then over hand inside when hands their mouth
37	0.37389	my me in of have with mother love from would myself heart father mine life face hair name body god
38	0.4388	of in it are one like which on has nothing about something its from into world other time things sense
39	0.1928	of with from in their on now which when some where er by while her happy day round heaven still

When too many high-frequency words were left in the dataset, the signal-to-noise ratio becomes too high to interpret the word distributions, as can be seen in Tables 1 and 2. The results in Table 6 show the key word distributions when about half of the words from the MALLET default stoplist. The results produced by the model are heavily influenced by pronouns and prepositions. For example, Topic 2 forms around collective identities with key words including: they, their, them, are, in, by, men, children, on, have, women, up, themselves, see. Similarly, Topic 22 combines pronouns with collective

bodies, or many body parts, such as: our, us, ourselves, from, how, together, live, bodies, even, heads. While those may prove interesting if the study we hoped to perform were centered on collective versus individual identities or distributions between gendered pronouns; however, for the kinds of questions I want to focus on, strong pull along the lines of prepositions and pronouns is not as useful. For example in Table 6, Topic 33 includes the words “by, new, fear, modern, art, times, painting, museum, mr, order, model, artist, calm...” Despite the expectation set by the art-oriented vocabulary, the ekphrastic poems are not predicted by the model to include more than 4% of their language from that topic. However, the model inversely identifies that non-ekphrastic poems are highly likely to have a proportion of its language come from this topic, one more sign that the model is not producing useful results. Parsing the exact relationship between the documents that draw heavily from Topic 33 is not a matter of nuance. Instead the group seems to be primarily created around the use of the word “by.” Having specifically included “by” in the model does seem to have made a difference in terms of locating and identifying poems in which “by” accompanies other kinds of words, many of which relate to other visual aesthetic objects, but sorting through the topic is about as useful as conducting any kind of close reading of the word “by” in a poetic collection. Consequently, the results are too disperse and don’t help us to answer the questions we hoped to ask about “stillness” or “looking.” Gendered pronouns such as those found in Topic 6 and Topic 34 (Table 6) might produce interesting studies about the use of gendered pronouns in poetry and the language that gendered pronouns tend to co-occur with; however, in this particular study, we’re not simply looking at gender, but instead focusing on how women and men talk about stillness and looking. The way in which the

data is being sifted through the introduction of such high frequency words changes the focus of the model, and in this case, those changes are not productive to addressing the main questions of the project.

Returning to Table 5, the inclusion of all words in the topic model (ie. not using a stoplist at all) further reduces the potential uses of the model as a means for exploring the language of “stillness” and “looking;” instead, the topics generated in Table 5 demonstrate that articles, pronouns, prepositions, and high-frequency verbs are often found together. No surprises there.¹⁰⁰ Topic 8 is dominated by frequently used verbs: “was, and, a, had, were, that, in, it, to, said, but, could, did, came, when, saw, they, then, I, one.” While the word “saw,” which might be interesting in terms of understanding ekphrastic poetry, in this case it does little to identify a trend regarding ekphrastic “looking.” Instead, by glancing down the hyperparameter estimations, one can find that the topics with the highest proportions, such as Topic 1, are distributions of articles and pronouns that offer little insight into the texts themselves. The key word distributions in Table 6 suggest that, contrary to my original inclination, even poetry uses enough high-frequency “little” words that their inclusion in the model only obscured whatever else might be discoverable.

¹⁰⁰ While the results of the third test are not useful for this particular study, the results could be useful for another line of inquiry. For example, Topic 25 in Table 2 seems exceptionally focused on poetry, writing, and words, accounting for an estimated 9% of the collection (.089 rounded up). To find a topic so clearly, semantically evident attests quantifiably to poetry’s self-reflectiveness. What, then, is to be made of Topic 35, which draws heavily from the language of the sea (e.g. sea, ocean, ship, sand, waves, water, boat, tide, rock, shore, great, beach, shark, land, wind) and predicted to account for 10% of the corpus? Whether or not this is a bias of the dataset or a trend that deserves further inquiry is precisely the type of question that cannot be attended to here, but could be a trend worth investigating.

Table 7

Table 7 / Test 3: Keyword distribution - Slightly modified stoplist (stoplist2.txt)		
Topic ID	Hyperparameter	Key word distribution
0	0.0446	drink at cat goat wolf eat man fox hair dogs nose elephant milk shot black head cats ho play house
1	0.17536	dead blood death fire at war men black living man red god bones stone earth die burning broken hot iron
2	0.13577	sweet song er bird spirit heaven earth thoughts long dim deep ah heart hath soul beauty sad eye music weary
3	0.00975	bells de la el green en verde con los mi del se poem est thunder os ya poema oo sobre
4	0.01839	praise mr mrs johnny milk captain drawer horowitz good give yr friday henry kong learning nervous pigeon son alabanza run
5	0.10995	table dog kitchen eat ice coffee food bread plate orange morning cup dinner glass cat breakfast sugar cream fish happy
6	0.03259	year spring ring mary deer hills owl march joy pretty hall brings winter starlings wild turn months bells aged swarm
7	0.02432	parrot trumpet oil ringing kingdom beat lee surface chickens pink head parade strung poverty daybreak legged dust brain annabel lynn
8	0.03548	life earth choose world version flag creation announce rule pressure god animal persephone link witness discuss dream politics free space
9	0.21504	skin mouth body tongue blood bone heart inside flesh black face water hard fingers salt bones legs taste open cut
10	0.06537	god lord ye hell man good heaven soul truth holy jesus devil mercy peace sin prayer king son lamb spirit
11	0.02004	coat theory thread sir prometheus fabric sensation layer mattress matter completed fold folds yastrzemiński cut threads stitch cloth code blue
12	0.21468	world mind made sense things at nature body thing point human space order form place part person thought feeling real
13	0.72897	night at light dark sun moon sky day wind sleep still stars rain long eyes hear air white darkness song
14	0.10302	land war freedom great power king america free still at er arms fame fight strong fate virtue battle man gods
15	0.62123	love life heart death time man world day soul long see god still earth men face eyes die before give
16	0.41795	body at back inside air world time small hands water after bird before eye look line tiny half place forward
17	0.22487	city house street window streets after windows room walking walls smoke past cars time train back houses car town door
18	0.05818	war american america people states richard white president free public big york great americans james bomb century flags bush plane
19	0.35331	white black woman hair red at girl eyes boy face hands blue back man mother bed room arms see mirror
20	0.11715	sea water sand ocean waves ship boat blue fish shore tide beach white green land sail island waters rock shark
21	0.00714	night wi fear monkeys auld syne gat fere lang fu owre ye na stack till afton nae lasses luve stac

22	0.03881	at place stood vain rest heaven high fear hell mind feast care fair prey length fate proud maid pride sight
23	0.00791	de miss le ain din la dat les cf slim ter dey jump ah sieve des scarlett pas yo peter
24	0.2945	tree green trees flowers leaves grass summer blue flower red fruit leaf garden white spring birds sun rose gold sweet
25	0.11396	see glass light eye words half surface portrait text picture dust hanging mirror box art black open lamp white oil
26	0.02932	man dead men woman women spam loves fish shoe age time european watch people world unfolded daddy sex jew lies
27	0.03353	horse see look passage perfect women beautiful cross enter miracle flow role alive beach real lower curious waits form interest
28	0.10424	poem write words poems letter poet book word read page writing poetry language letters wrote written days poets pages english
29	0.59076	at say don ll ve see time make says people day look things back good after feel remember thing won
30	0.00294	gertrude ye ne doe ring woods conturbat mortis timor theyr al eccho sing ben answer love stein thi shal erthe
31	0.12433	mother father children brother child home son parents made at years daughter school dead wife grandmother family days great dad
32	0.3327	at back saw before made turned looked thought head knew didn left still man stood night after heard felt sat
33	0.10409	stone head hand round eyes great man left rock foot stands hawk master back narrow set shape close mountain bound
34	0.03898	return sand life patience numbers lightning spiral shell rocks windmill weren animals live walrus desert call covered violet layer crab
35	0.02921	occupation whack time question cover west change grace duke wrong charity justice political chair circular mill fallen held diminish likeness
36	0.06473	thy thou thee art doth er hath thine sweet st ye happy tis joy fair mine hast view ere heaven
37	0.07777	men heard round day lay at saw till side fair merry stood high eyes good lady look sat young cried
38	0.18687	river water snow trees ice road cold lake winter fields country bridge sun stones horse woods field hill frozen leaves
39	0.01737	ball moloch york field father harlem times eng trouble casey jazz brooklyn tenure funeral thousand blues chang ebbets bat los

Table 8

Table 8 / Test 4: Keyword distribution - MALLET default stoplist		
Topic ID	Hyperparameter	Key word distribution
0	0.18396	round high bird moon blow full wide half silver low wild mountain wing green hills hill wind eye woods sun
1	0.02184	johnny good milk mrs run horowitz mr potato cream ate ice mattress pie learning plate barbie cow diner stan animal
2	0.12127	night moon stars light sleep sky star fly darkness dark air flight blue mother hour dusk birds midnight wings sight

3	0.08316	thy thou thee love er art sweet hath doth fair tis thine ye joy st heaven mine behold happy dear
4	0.21113	house window door room table dog kitchen morning bed glass line day windows floor back time sit wall half work
5	0.07156	didn people wasn weren worked knew war hide happened couldn family middle husband wanted occupation felt read age jews hadn
6	0.02495	horse moloch broken thump stone time west bit pony set rock angel cowboy greatest feet candle le mental jazz farewell
7	0.04728	man dead men woman cat dog loves fox dogs age wolf poor women caught desert clock friend tom lion walking
8	0.01104	de la gertrude el en green le din miss con yo verde inside dat ain les los slim dey ter
9	0.17388	black girl white hair woman red blue man shoes eyes big hat fat dress young girls back women wearing mirror
10	0.39171	heart love death soul eyes night long earth life day dead face sea heaven light sleep blood tears lips voice
11	0.64375	eyes back body face light hands hand head dark open air inside woman white world arms small feet close black
12	0.00981	choose mr life bo lady bonghy yonghy shalott sieve camelot jug order jones phyllis daphne tristan lands di heap jumblies
13	0.02399	women monkeys announce oil ferry political person boat advance waters whitman animals perfect great press flow beautiful bodies walt emperor
14	0.17747	don ll ve won back people hand good thing make didn drink bad left man love isn put wouldn kind
15	0.03142	war flags rise past lies captain passage great north rocks monument jew india thunder africa southern history country march british
16	0.02637	spam letter people american york henry president america war tenure world bush september william prometheus wallace army st guam yastrzemski
17	0.0023	ye ne sing doe woods thou conturbat mortis timor ring theyr al eccho ben answer hath love thi shal erthe
18	0.07099	music song bells sound sing singing notes praise time words songs guitar hear ear voice listen heard bird buy tune
19	0.78105	love time life day world things long years night make live find days back give home end place good call
20	0.2278	poem words book write word poems don read poetry poet feel work story page called makes writing letter language speak
21	0.18449	mother father boy children child son home brother years made dead girl school family sister daughter boys wife parents grandmother
22	0.01041	whack duke sir portrait cf text lord freud albert london grace water beat king jeoffry che ladies miss gri elizabeth
23	0.18265	sense mind world human body space life made things order form point nature place free movement time real history desire
24	0.18222	tree flowers flower summer green fruit sweet spring garden grass trees rose apple sun gold honey blossoms year autumn bloom
25	0.07575	water river lake surface ice back rivers ve bridge fish bottom swimming banks flat swim winter mississippi pan boat stream
26	0.01624	ball father blues field eng harlem trouble casey lauren boy shot white los play chang ebbets brooklyn yr people high

27	0.02369	fish riding drawer miracle moonlight woman fucking ray apologies kingdom opens daughter idea loved mermaid tlot thursday blades diminish pond
28	0.03332	fear maid mind place stood twas fair heaven death rest love ground pride care kind fate proud pursued prey pain
29	0.28902	skin blood mouth inside black tongue bone flesh eye water bones cut body glass eat broken salt hole open teeth
30	0.51021	wind sky light trees blue white snow leaves green rain sun field dark red grass air road earth water birds
31	0.02932	sand matter spiral stone living ancient edge endless fold cave silence rill burning canyon troy gate round slowly hush stretched
32	0.0315	states coat flag thread theory needle fabric gun cart dot version spider donkey united july call voice mexico moment rips
33	0.23052	god man great men earth world soul good make lord hell made peace death truth heaven fire spirit light time
34	0.0549	land ring er fame vain freedom fate arms heav war america race free plain liberty rise blood shore power sacred
35	0.07687	color stop painting art artist painted model perfect cover museum wrong makes reason wanted witness change completely case light hope
36	0.3379	back made head turned night looked left thought stood fell man heard knew put sat side long day hand men
37	0.15139	city street streets train past river inside cars paris car town york days houses talking night famous walking people lights
38	0.11498	sea water waves ocean ship boat sand tide fish shore beach rock great white shark blue land sail waters vast
39	0.00964	ye night wi ha auld merry tomlinson syne sin rats gat mayor piper michael man pipe lord alabanza fere lang

Perhaps the most demonstrative and telling difference between the results in Tables 3 and 4 is that in the topic where the words “look,” “see,” “still,” “at,” and “before” are included the distribution of ekphrastic poems become more diffuse.¹⁰¹ Fewer ekphrastic poems are associated with any single topic in the third test (Table 7); whereas, in the fourth test (Table 8), the ekphrastic poems are more demonstratively clustered together. For example, in the third test, 88 ekphrastic poems were predicted to draw more than 1% of their language from Topic 13. Topic 13, likewise, is the most dominant topic across the collection and is associated with a predicted 72% of the poems overall, meaning the words with the greatest weight in Topic 13—“night, at, light, dark, sun, sky, day, wind,

¹⁰¹ The exact list of words included in test 2 that were not included in test 1 can be found in Appendix B.

sleep, still”—are likely to be found in at least 72% of the corpus as a whole. Other topics from which many ekphrastic poems draw more than 1% of their language include topics 13, 19, 16, 15, and 29. Further sifting through of the poems, their genre classification, and their topic proportions reveals that the difference between “see” and “saw” or “look” and “looked” tends to decrease the coherence of ekphrastic poems. Contrary to my prediction, introducing the many-varied language of stillness and looking disrupted possible cohesion among ekphrastic poems and instead created affinities between texts that had more to do with the exact form of the word than with its semantic function.

Surprisingly, the fourth test (Table 8), which uses the MALLET default stoplist (removing the most words from the corpus before topic modeling), yields the most salient results. Topic 11, which describes 64% of the entire corpus but is not the most heavily weighted topic in the model, contains 125 ekphrastic poems—about 50% of the poems with the category tag, “ekphrastic.” Topic 11’s keywords, found in Table 8, coalesce around body parts (eyes, back, body, face, hands, hand, head, arms, feet), space (open, air, inside, world, small, close), and shade (light, dark, white, black). The poem most closely associated with Topic 11 is William Carlos Williams’s poem “Danse Russe.” Though we know Williams’ poem was most likely written after having attended the Ballet Russe at the Met, the poem’s close affiliation with a topic drawing heavily from the ekphrastic poems in the collection caused me to reconsider it. The Ballets Russes, which transformed 20th century ballet, synthesized efforts across the fine arts. Visual artists, including Pablo Picasso, Henri Matisse, Juan Gris, Giorgio de Chirico worked with Russian and French choreographers, producing sets, costumes, curtains, posters, and

even programs for performances.¹⁰² Following the Ballets Russes at the Metropolitan Opera House, Williams' artist-friends at the 291 Gallery, were known to have painted and photographed Ballets Russes. There is no textual, or as far as I can tell critical, discussion of Williams' poem in terms of the visual arts; however, given Williams's prolific ekphrastic writing, his close relationship to visual artists at the 291 Gallery, and the shared language between "Danse Russe" and more than half the other ekphrastic poems in the collection, I am inclined to reconsider the poem as a form of ekphrasis, and as such it would serve as an interesting foil to those ekphrastic poems that take female bodies as their subject.

Most of the other ekphrastic poems included in this topic, however, draw a smaller proportion of their language overall from Topic 11, begging the question: from which other topics do the ekphrastic poems from Topic 11 draw their language? Moreover, how do those poems' topic distributions compare with poems tagged as non-ekphrastic? Prompted by the model, these questions appear most promising to the overall aim of the project. Using the MALLETT default stoplist seems to sharpen the model's focus on the other discourses of ekphrasis as it has with representations of bodies, raising the possibility of exploring ekphrasis as drawing in varying proportions from multiple topics. Might ekphrastic poems that include language from Topic 11 also draw heavily from topics of love or mastery? Exploiting the metadata category for authors' gender, the results of the model introduce the possibility of exploring the distribution of topics among ekphrastic poems by men and by women and providing possible avenues to

¹⁰² "Visual Art and the Ballets Russes." Ballet Russes Cultural Partnership. Boston University. Web. 16 Sept. 2012.

discover whether or not the distribution of topics within ekphrastic poems by men and by women reflect divergent attitudes toward the visual arts.

Closer examination of the model from Table 8 reveals that several of the higher probably topics are much less coherent. For example, Topic 19, a topic with which 66 of the ekphrastic poems in the data set are affiliated includes the words: love, time, life, day, world, things, long, years. At first, the relationship between these words appears vague; however, returning to the metadata and scanning the poems most closely associated with Topic 19, we find that the biblical verse Ecclesiastes 3:1 (“To everything there is a season,/ and a time to every purpose under the heaven.”) draws most heavily from the topic’s language distribution. The other poems also predicted by the model to draw heavily from Topic 19 share language that articulate the double-bind between love, time, and the physical constraints of the natural world as a limiting factor to human affection, for example: love that ends through physical death and separation, as in “To Dorothy” by Marvin Bell or spiritually as in “Psalm” by Alicia Ostriker, or emotionally as in John Dryden’s “Why should a foolish marriage vow.” More richly than I would have imagined possible, the algorithm picked out the subtle conflation of time and love and the language of ekphrasis, predicting that 66 ekphrastic poems drew from the language of love and time.

Furthermore, and significant to this study, Topic 35 in Table 8 predicts that 7% of the collection includes language that draws heavily from the visual arts: color, stop, painting, art, artist, painted, model, perfect, cover, museum, wrong makes, reason, wanted, witness, change, completely, case, light, hope. The model’s prediction closely reflects our pre-existing knowledge from the metadata that approximately 5% of the database’s poems are

ekphrastic. These findings are doubly relevant. First, by so closely estimating the number of poems that draw from the language of visual art the model promises a higher likelihood of identifying the distributions of language my study wants to explore. Second, by estimating slightly *more* texts draw from language closely allied to the visual arts, it offers the tantalizing possibility of discovery.

Conclusion

Ultimately, the stopword tests present a convincing case for using the MALLET default stoplist from the collection when running LDA topic models on the corpus of digitized poems described at the beginning of this chapter. Including words like “we” and “us”—pronouns and articles and commonly used verbs—in the topic model is not worth the additional noise that enters the results; however, I would argue that claims made about the topic should include a closer reading of the way excluded words affect a reading/understanding of the topic. For example, “still,” “look,” and “see” don’t dramatically change the basic formation of the topics. The topics in Table 7 are very similar to topics in the Table 8. Searching for the terms in the topics doesn’t do us much good, either. What is more interesting is to look at the topic distributions to see what other poems are more closely related to them and then to read the poems to see how the features we are trained to recognize compare in the poems also related to those topics.

As ekphrastic poems beseech their readers to “look” and to “see” more clearly, the ekphrastic poems themselves come into focus in the topic model better without actual words “look,” “see,” and “still” present in the dataset when it is modeled. In topics where ekphrastic poems are more evident, the words “see” and “look” are also commonly used terms; however, those same topics continue to form in models without the words at

all. They exist like ghosts in the data even without a physical presence. In fact, the topics in which the terms “see”, “saw”, “look” and “still” are most common in Table 7 happen to also be those topics that are most dominant in the model as a whole: topics 13, 14, 15, 16, 19, 25, 27, 29, and 32. While higher proportions of language from ekphrastic poems are likely to appear in those topics, the ekphrastic poems mirror similar trends among non-ekphrastic poems, too. In other words, the model shows that the ekphrastic poems in Table 7 tend to follow patterns that are detectable trends among most of the poems in the dataset. The topics from Table 5 and Table 6 are significantly less useful because of the signal to noise ratio. The topic keys create so much noise that the effort to understand them is not worth it. The question, then, is whether or not ekphrastic poems are “just like” other kinds of poems or if perhaps we should reread some of those poems to detect ekphrastic elements. Is it possible that more poems in the collection are ekphrastic than are tagged that way?

One might argue that close reading practices are susceptible to hyperfocus on high-frequency words. Concentration on terms such as “look,” “see,” and “still” helps us distinguish dominant trends in the genre, but the frequency with which those words are used tend to also skew their semantic context. Using the MALLET default stoplist during pre-processing and removing words frequently repeated throughout ekphrastic poems from the digital corpus foregrounds latent patterns of language that hint at the polyvocality and varied attitudes and discourses surrounding ekphrastic tropes that are often difficult to ignore such as the stillness of the image. As a possible example of Jerome McGann and Lisa Samuel’s “deformance,” LDA makes more obvious the differences between the “still unravish’d bride of quietness” in Keats’ Ode from the

contemplative and restorative stillness of Carol Snow's "Positions of the Body."

Noteworthy, too, is that LDA may suggest or predict these latent differences in discourses surrounding looking and stillness, prompting close readings and a return to the full, reassembled texts to consider them in relationships to one another, which represents the real hermeneutic potential for LDA studies of poetic corpora.

In the next chapter, I turn to the question of how to understand, use, and interpret LDA topics and reintroduce the network as the vehicle for reading the latent polyvocality of ekphrastic verse and the advantage this has for scholars interested in understanding the role ekphrasis by women plays in the genre's ecology. I return to the idea of topic distributions—the tendency for poems to draw from more than one of the same topics—as a way for understanding simultaneous discourses of ekphrasis, first within the collection of ekphrastic poems by themselves and later among the entire dataset. Through readings that begin with a macroscopic, network view and scale down into close readings and comparisons of texts, I demonstrate how the data collection, metadata creation, and preprocessing of texts from this chapter can be leveraged to develop a new methodology for understanding ekphrasis within its own tradition and in relationship to other poetic genres.

Chapter 5: Review, Revise, Requery: Reading Ekphrasis as/in a Dynamic Social Network

In her introduction to *Twentieth-Century Poetry and the Visual Arts*, Elizabeth Bergmann Loizeaux draws parallels between the ekphrastic situation and M. M. Bakhtin's dialogic imagination, which he formulates in terms of the novel. Discourse, as Bakhtin describes it, consists of the flexible and reflexive relationships between language, as a form of social action and cultural production, and its object.

... between the word and its object, between the word and the speaking subject, there exists an elastic environment of other, alien words about the same object. . . any concrete discourse (utterance) finds the object at which it was directed already as it were overlain with qualifications, open to dispute, charged with value, already enveloped in an obscuring mist—or, on the contrary, by the “light” of alien words that have already been spoken about it. It is entangled, shot through with shared thoughts, points of view, alien value judgments and accents. The word, directed toward its object, enters a dialogically agitated and tension-filled environment of alien words, value judgments and accents, weaves in and out of complex relationships, merges with some, recoils from others, intersects with yet a third group. (qtd. in Loizeaux 17)

Similarly, the ekphrastic poem, characterized by its responsiveness to another existing work of art, enters *in media res* into dynamic, on-going conversations, for example, between artists and their subjects or between other poets and the same work of art, or between curators and art historians and the work of art. Loizeaux argues that the social and technological developments of the twentieth century in the form of the public museum and electronic reproduction energize the ekphrastic situation with a sense that ekphrasis (particularly regarding more popular works such as Van Gogh's *The Starry*

Night) enters into an already-lively conversation about the visual work of art. As she explains further on:

...ekphrases often carry on exchanges with other ekphrases (as well as with art-historical commentary) as both engage the work of art: a poet represents the work of art in response, in other words, not just to the work of art but to other representations of it, and in doing so crafts an “answer” to those implicit members of the audience. (17)

Loizeaux, therefore, redefines ekphrasis as a poetic genre that in the twentieth century is purposefully, necessarily, and often self-consciously dialogic, and consequently, I further argue that understanding twentieth-century ekphrasis requires a means by which it can be dynamically contextualized as/in an ongoing, historical *social network* of other poems, poets, artists, art critics, and readers.

The following chapter builds on Loizeaux’s assertion that the social and dialogic nature of ekphrasis requires that our critical understanding of it be contextualized within a flexible network of discourses, and I propose a methodology for discovering forms of discourse through topic modeling that can also be visually rendered and interpreted with network analysis. Leveraging the computational strengths of an algorithm such as latent Dirichlet allocation (hereafter LDA) to detect latent patterns of language across a corpus of hundreds or thousands of poems and examining the composition of LDA topics as an effective method for considering literary discourse, this chapter reads “at a distance” ekphrastic poetry within a small collection of only other ekphrastic poems and ekphrastic poetry within the context of thousands of other poems.

The chapter is organized as an exploration of how LDA detects latent patterns in corpora of poetic texts and how literary scholars can use LDA as a methodological intervention into the study of ekphrasis. In the first section, I explain the assumptions

made by the LDA algorithm as it explores a large corpus of texts and then further particularize the differences between topics created from articles in *Science* magazine and topics created from corpora of poetry. Identifying how the differences between the kinds of texts modeled produce different kinds of topics, I then present an interpretive strategy that depends upon the coordinated and telescopic vacillations between close and distant readings to best respond to the unique challenges figurative language texts present for LDA. Building from an identification of LDA topics as forms of discourse that depend on close readings in order to evaluate the effectiveness of the model, I then present two case studies that use the “forms of discourse” understanding (articulated in terms of what I call semantically evident and semantically opaque topics) to read a set of 276 ekphrastic poems. Reintroducing the use of NodeXL, previously introduced in chapters 2 and 3, as a social network analysis and graphing tool, I demonstrate visualizations of relationships between documents and topics, topics and other topics, and groups of documents clustered by the degree to which poems draw their language from each topic. By situating poems within networks of other poems that draw from similar discourses, I reconsider the ekphrastic tradition as representative of a plurality of attitudes toward the visual arts. Similarly, I gesture towards purposefully provocative avenues for future research that reconsider women’s contributions to the ekphrastic tradition. Throughout the chapter, methodological readjustments to the aperture of the LDA model as critical lens—transitions from distant to close readings—inform our understanding of ekphrasis as inherently dialogic, dynamic, and polyvocal.

As this project is particularly concerned with women’s contributions to the ekphrastic tradition, the examples in the following pages focus on women’s ekphrastic

poems as they engage with other poems closely associated with similar LDA topics. Each example is considered as a unique engagement between a specific poet, aesthetic work, and set of discourses, understood as topics, rather than a totalizing commentary on ekphrastic poetry by women in general. Instead, each close, networked reading is meant to be suggestive of the variety and diversity of possible engagements between women poets and poetic discourses that inform our assumptions about the genre and to further complicate and enrich what we understand as the genre's tradition and canon. The examples here are purposefully provocative, gesturing toward a way of accessing and reconsidering the ekphrastic tradition that privileges understanding individual poems as responding to and influenced by other poems participating in similar discourses to potentially widely ranging effect. Thus, in this chapter, I also demonstrate through example that employing advanced technologies at scale (which is to say across a large dataset of hundreds or thousands of poems) requires a clear argument as to how humanists closely "read" detailed visualizations of humanistic texts and how we must understand, adapt, and critique methodologies developed by computer scientists that provoke results appropriate to individual humanities disciplines and data. Considering individual poems as inextricably part of a larger network of discourses insists upon readings that are also performed *in relationship to* a diverse collection of poems participating in similar discourses.

Why use LDA to study ekphrasis?

LDA is a particularly useful way to explore the canon and tradition of ekphrastic poetry because both LDA and definitions of ekphrasis as a genre presuppose that there are latent patterns of language that when discovered characterize the group as a whole.

Ekphrasis as a genre of poetry is characterized by tropes, which tend to reoccur throughout the canon. With regard to twentieth-century ekphrasis, Loizeaux, for example, points to the way in which poets invoke museums as sites of display and as indicative of poets' anxieties about how museums act as interpretive forces. She also points to the impulse to narrate the work of art, to the poets' tendency to act as guide or instructor, and to craft an imaginary voice on behalf of the work of art. Understanding and interpreting poems in terms of they participate in the tradition of ekphrasis, then, becomes a matter of discovering how poets enter into, disrupt, or perpetuate the ongoing discourses associated with the tropes that typify the genre.

The use of LDA as a method of discovery and as a means of understanding the contents of large corpora of texts begins with a similar set of assumptions. First, LDA assumes that text documents in large corpora tend to draw from categories of language that are associated with the subjects of those documents. In an effort to discover the semantic composition of a large collection of text documents, LDA calculates the likelihood that words that refer to similar subjects appear in similar contexts, and then the LDA algorithm groups those words into "topics." LDA, then, presupposes that we can discover the semantic composition of a corpus by discovering the "topics" from which each individual text document draws its language.

Following in the vein of Matthew Jockers, Ted Underwood, Scott Weingart, and others who have published gentle introductions to topic modeling for humanists,¹⁰³ I want

¹⁰³ For other gentle introductions to LDA for humanists, see Matthew Jockers's blog post "The LDA Buffet is Now Open; or, Latent Dirichlet Allocation for English Majors" and Scott Weingart's blog post "Topic Modeling for Humanists: A Guided Tour."

to begin conversation about LDA in this chapter with a short, if potentially reductive narrative of how LDA generates topics from text corpora that I will return to throughout the chapter to guide discussion of how the LDA algorithms produce topic models of poetry.

Imagine that there is a farmer's market on the other side of town. Many of your neighbors rave about the quality of the produce, but you would like to know what kinds of produce are sold there before you decide to drive across town to try it out. Your neighbors leave for the market with empty baskets and return with full baskets. Assuming that your neighbors only chose from the kinds of produce available at the farmer's market and that there is a limited variety of produce available, each neighbor selects produce from the available choices that they like the best. Since it happens to be late summer, your neighbors select early Gala and Granny Smith apples, butternut squash, Bosc pears, and one neighbor even snatches up the last pint of blueberries. One by one as your neighbors arrive home, you survey the baskets' contents. As you look into more and more baskets, your predictions about what produce is available at the farmer's market becomes clearer. Examining the quantities and varieties of produce in each basket, you could begin to predict not only the range of produce that might be awaiting you at the farmer's market but also the relative quantities. You happen to know that this particular farmer's market guarantees that there will be 10 kinds of produce available each week, and over the course of sampling your neighbors' baskets, you come to the conclusion that the selection of produce at the farmer's market consists of 20% green apples, 20% red apples, 15% pears, 10% winter squash, 10% cantaloupe, 5% corn, 5% beans, and 2.5% tomatoes and 2.5% assorted other kinds of produce that were

different enough from one another that it makes sense to just call them miscellaneous. As more neighbors arrive, with baskets to examine, you can refine your predictions about what the available selection of produce might be at the farmer's market.

In the case of the farmer's market, your approach to predicting the 10 kinds of produce and the available quantities of each based on the contents of your neighbor's baskets is akin to the way LDA algorithms approach texts. LDA assumes that documents are like your neighbor's baskets. Authors, like your neighbors, select from a limited number of available kinds of words called "topics" in order to produce their documents, in this case poems. Each author chooses to varying degrees how much of each kind of topic they use for each document; however, the number of total available topics, just like the total number of kinds of produce remains constant. LDA attempts to describe the overall distribution of topics in a collection of texts in the same way that you discovered the kinds and quantities of produce at the market. The size of the "topics" likewise reflects your estimation of how much of each kind of produce is available. You were able to predict that there were more apples and pears at the market than there were blueberries and tomatoes because across the whole sampling of baskets there were more apples and pears and fewer blueberries.

There is one significant difference, however, between the human topic model example and the algorithm. LDA does not produce names for the topics it discovers or sort words with an understanding for what words *mean*. Consider that while you are sorting through baskets, you come across an Asian pear, but you've never seen an Asian pear before. The Asian pear was in a basket with a large number of apples and pears. You make note of that, set it to the side, and continue to sort through baskets. Over the

remaining baskets, Asian pears tend to appear in other baskets where there are also other kinds of pears. As a result, you come to the conclusion that, since Asian pears frequently appear in baskets with other pears, the Asian pear in each future basket should be sorted with the pears. This method of determining how to sort Asian pears reflects the manner in which LDA assigns words to topics, according to the other words that are found in the same document. Although the algorithm cannot account for what words mean, much like your method of discovery about Asian pears, LDA does a surprisingly good job of sorting words based on co-occurrence and proximity. Finally, LDA sorts words into topics based on prior knowledge that there are a definite number of topics in the overall corpus—much the same way that you knew to look for 10 types of produce.¹⁰⁴

Topic models (and LDA is one kind of topic modeling algorithm) are generative, unsupervised methods of discovering latent patterns in large collections of natural language text: generative because topic models produce new data that describe the corpora without altering it; unsupervised because the algorithm uses a form of probability rather than metadata to create the model; and latent patterns because the tests are not looking for top-down structural features but instead use word-by-word calculations to discover trends in language. David Blei, credited with developing probabilistic topic modeling methods, describes topic models the following way:

Topic models have been developed with information engineering applications in mind. As a statistical model, however, topic models should be able to tell us something, or help us form a hypothesis, about the data.

¹⁰⁴ The process by which the number of topics to tell the model to use is not, as of yet, a standardized procedure. The measure for the “right” topic number is often derived through trial and error. After starting with one number (usually between 40 and 60) one determines how “actionable” and “coherent” the topics that the model produces are, adjusting up and down in subsequent iterations until there is agreement that the best model has been produced.

What can we *learn* about the language (and other data) based on the topic model posterior? (Blei “Introduction” 84)

Blei stages topic models as an *ex post facto* method for testing assumptions about natural language data. In other words, once a collection has been created, LDA is designed to test our assumptions about what topics are discoverable. The type of discoveries that are possible with LDA seem viable ways to approach ekphrastic poetry given our understanding of it as a genre in which the language frequently returns to the eternal stillness of the image, prompts reflectiveness about historical location and memory, creates imagined voices for the art objects, or narrates the image. Furthermore, in Heffernan’s words, “Ekphrasis... turns on the antagonism—the commonly gendered antagonism—between verbal and visual representation.” Could topic models detect gendered language, tropes, or the language of stillness in ways that “we can *learn*” about the genre more broadly? This is the question which began “Revising Ekphrasis,” a digital topic modeling and corpus discovery project I developed that uses digital and computational tools to explore ekphrastic and non-ekphrastic poetry. The topic models described in this chapter represent only two of the experiments that have become part of the digital project. I have chosen these for two reasons: first, to propose a methodology for using LDA to explore and test assumptions about poetic tradition, genre, and canon formation; and second, to demonstrate how LDA provokes new questions about the ekphrastic tradition in ways that are more inclusive and broadly conceived than previous methods. Few questions will find “answers” here. Instead the hope is to uncover new approaches to address enduring humanities questions while at the same time expanding the range of possible questions we might fruitfully ask.

LDA topics and poetry

As was discussed in chapter 4, topic modeling is a form of text mining developed in response to the growing challenge of managing, organizing, and navigating large, digitized document archives, and coincidentally, topic modeling has also been developed with primarily non-fiction corpora in mind. One of the most notable early uses of LDA by Blei explores a digitized archive of *Science*. Other examples of topic modeling have used Wikipedia, NIH grants, JStor, and an archive of Classics journals.¹⁰⁵ As literary scholars well know, however, poems exercise language in ways purposefully inverse to other forms of writing, such as: journal articles, encyclopedia entries, textbooks, and newspaper articles. Therefore, it is reasonable to predict that there will be differences between LDA models of poetry and models of non-fiction texts. In terms the non-figurative language found in topic models of the journal *Science*, Blei explains that topics detect *thematic* trends across texts:

We formally define a topic to be a distribution over a fixed vocabulary. For example, the *genetics* topic has words about genetics with high probability and the *evolutionary biology* topic has words about evolutionary biology with high probability. (Blei “Introduction” 78)

Presented as a method of discovery and description, computer scientists see topics as revealing latent thematic trends that pervade large and otherwise unstructured text corpora, and with respect to the data used to create the topic model, this conclusion makes sense. Since the datasets used to develop and refine topic modeling algorithms have been non-figurative language texts, the assumption that there is a direct semantic relationship between words that are frequently found within close proximity of one

¹⁰⁵ See Ni, Xiaochuan et al.; Talley, Edmund M. et al.; Srivastava, Ashok, and Mehran Sahami.; and Mimno, David. “Classics-mimno.pdf.”

another. Blei's illustrative example of how the probabilistic topic model works in *Science* is the most accessible explanation thus far for humanists. Therefore, in order to compare how LDA creates topics in non-figurative texts (*Science*) versus how topics are generated from a corpus of poetry, I must first explain how the topics in Blei's model of 100 topics across 17,000 *Science* articles are created, using two of Blei's illustrations. Next, I will create a parallel example using Anne Sexton's poem "The Starry Night" from a 60 topic model of 4,500 poems from the "Revising Ekphrasis" dataset, pointing to how topic models estimate topic proportions in documents and how topic keyword distributions in poetry are not "thematic" in the way that topic models of non-fiction documents are.

In "Probabilistic Topic Models," Blei uses two illustrations to explain how topic modeling of a large, digitized collection of *Science*. The first illustration depicts an excerpt from one article within the collection titled "Seeking Life's Bare (Genetic) Necessities" and demonstrates the relationship between topics and keyword distributions. The first illustration in Figure 38 uses the colors yellow, pink, green, and blue to represent four of the topics the model predicts exist in the dataset. These are the "kinds of produce" from the opening farmer's market example. On the far right hand side is a bar graph which represents the proportions of the yellow, pink, and blue topics the model predicts are in the document (an article in this case). The largest topic in the document is yellow followed by pink then blue. The lines from the bar graph on the far right point to the places in the text where words that are associated with the yellow, pink, and blue topics can be found in the document. Essentially, the histogram is showing the equivalent of there being more apples than pears or grapes in a single basket. On the far

left hand side are the first three words of the topic keyword distribution. Those represent the “kinds of words” that could be found in the places in the text that are highlighted in yellow, pink, and blue.

Figure 1. The intuitions behind latent Dirichlet allocation. We assume that some number of “topics,” which are distributions over words, exist for the whole collection (far left). Each document is assumed to be generated as follows. First choose a distribution over the topics (the histogram at right); then, for each word, choose a topic assignment (the colored coins) and choose the word from the corresponding topic. The topics and topic assignments in this figure are illustrative—they are not fit from real data. See Figure 2 for topics fit from data.

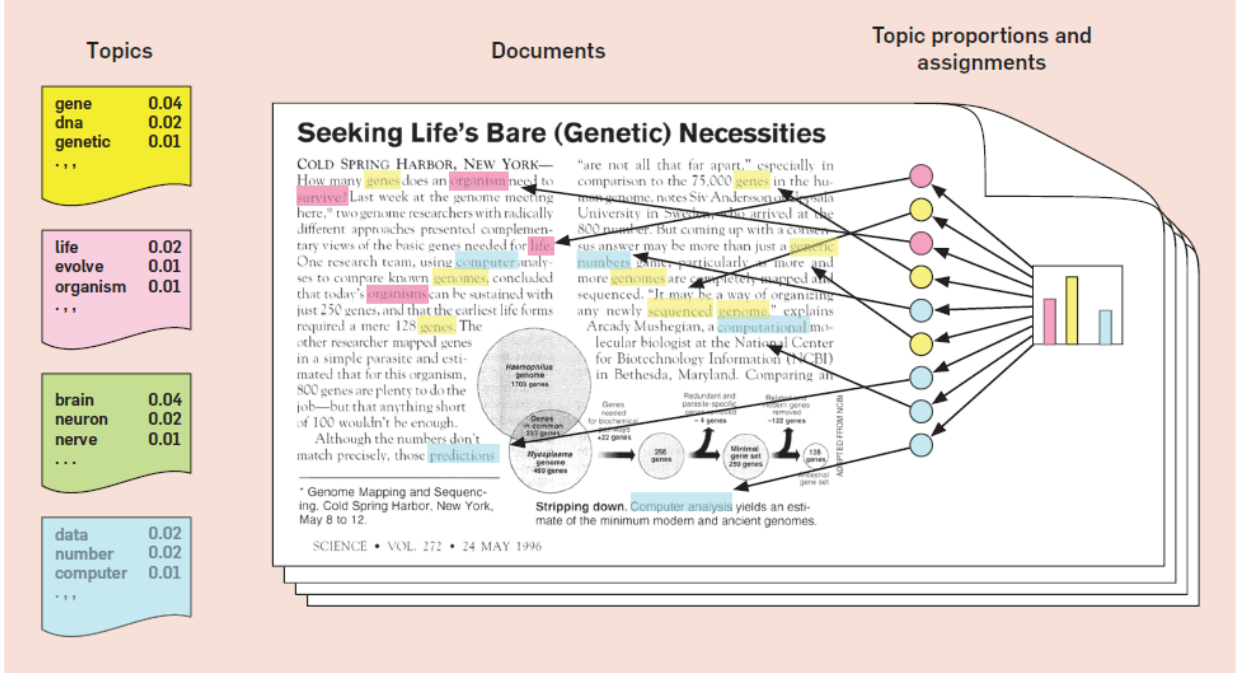


Figure 38: Illustrative example of *Science* topic model (Blei “Introduction” 78)

The graphic in Figure 38 helps to identify how the topic proportions (like the number of apples in a basket of produce from the market) correlate to individual words in the document (highlighted above in yellow, pink, and blue), which then comprise the “topic” keyword distributions which are displayed at the far left as a partial list of keywords.¹⁰⁶

¹⁰⁶ Introduced in chapter 4, each topic (kinds of produce) is composed of the words (fruit) in the document (basket). Topic keyword distributions are where the human task of interpreting what the model has done with the dataset begins.

Figure 38 is an illustrative example, meaning the document and topic assignments in the graphic are not actually derived from a specific model; however, in a second graphic, Blei continues to explain the how “Seeking Life’s Bare (Genetic) Necessities” appears within a 100 topic model of 17,000 *Science* articles. In Figure 39, Blei represents the probability of each topic using a histogram (bar graph) that demonstrates the relationship between the topics 0-99 (along the horizontal axis) and the probability (as a decimal along the vertical axis) that the topic is found in “Seeking Life’s Bare (Genetic) Necessities.” Some topics have higher probabilities of appearing in the document than others, as represented by the taller bars in the graph. On the right side of the graphic, the topic keyword distributions are listed vertically in columns. At the top of each column is a bolded word surrounded by quotation marks that serves as a label created by Blei to describe the words in the topic and demonstrating Blei’s rationale for claiming that topics are thematic. For example, the topic labeled “Genetics” is predicted by LDA to be the largest topic in the document in much the same way that in the farmer’s market analogy you could determine that the largest produce type in a single basket was from the topic “apples.” In that light, the model’s prediction about “Seeking Life’s Bare (Genetic) Necessities” makes sense. We would normally expect the words human, genome, dna, genetic to be found in articles about “genetic necessities.” By glancing over the words in the topic keyword distributions, we gather together a sense of what the article might be about.

Figure 2. Real inference with LDA. We fit a 100-topic LDA model to 17,000 articles from the journal *Science*. At left are the inferred topic proportions for the example article in Figure 1. At right are the top 15 most frequent words from the most frequent topics found in this article.

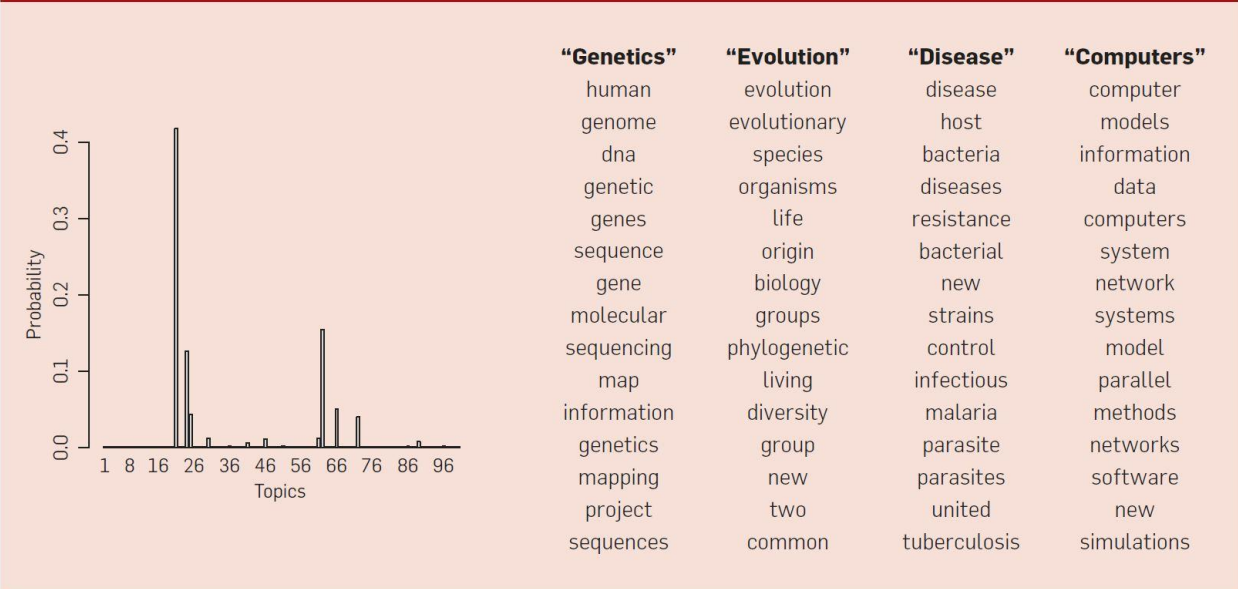


Figure 39: Topic keywords for a single document in *Science* and the proportion of the document described by each topic.

Surveying Blei’s list of key terms in each topic clarifies the way in which models predict thematic trends in large text corpora. The sense that each of the words in each of the columns belong together makes an impressionable argument for LDA’s ability to use Dirichlet allocation to sort large collections of documents into topical categories. By affixing the term “latent” to the statistical model (latent Dirichlet allocation), as Blei explains, foregrounds the expectation that topic modeling is meant to discover hidden, recognizable patterns within the large collection of texts. It would take even the most proficient reader an extraordinary period of time to read 17,000 articles from *Science*. Therefore, while we know through disciplinary familiarity and deduction that these are likely topics to be found throughout the journal’s publication, we wouldn’t be able to detect by human reading, or even planning, what that distribution would be. Blei,

therefore, concludes that probabilistic topic modeling “provides a powerful tool for discovering and exploiting the hidden thematic structure in large archives of text” (“Introduction” 82).

Unsurprisingly, humanists interested in sorting, sifting, and organizing large collections of text, managing large document archives, and creating better browsing options for digital libraries find LDA’s potential exciting and promising. Additionally, humanists interested in uncovering the “latent patterns” in large datasets are also enthused about the algorithm’s potential for exploratory studies. Most notably, Robert Nelson’s project “Mining the *Dispatch*” employs LDA to uncover hidden patterns within the archives of the *Richmond Daily Dispatch* just before, during, and after the Civil War. Nelson’s LDA analysis uses the topic distributions over thousands of *Dispatch* articles over the course of the war to track relationships between increases in military draft and fatalities and the patriotic rhetoric. Even more impressively, Nelson’s utilization of LDA is more than a descriptive endeavor, moving from topic distributions to argue that the rhetoric of nationalism shifts in the Confederate South during the Civil War in relationship to casualty rates and calls for enlistment.¹⁰⁷ Nelson’s work in this area represents one of the most ambitious and successful projects to date in the humanities that uses probabilistic topic modeling. *Mining the Dispatch* broaches the territory of figurative language in its analysis of patriotic discourse in Civil War Confederate newspapers. A strong correlation exists between increase in patriotic language that glorifies fighting on behalf of the Confederate states and the numbers of poems appearing

¹⁰⁷ For more information on how LDA has been used by humanists to detect changing attitudes toward patriotism and nationalism, see: Nelson, Robert K. *Mining the Dispatch*.

in the newspaper at the same time. In Nelson's project, poetry is combined with opinion articles and political and agricultural reports, and the composition of the dataset allows the poetic texts to map well with its prose counterparts.

However, topic models of purely figurative language texts like poetry do not produce topics with the same thematic clarity as those in Blei's topic model of *Science* or even Nelson's model of the *Richmond Daily Dispatch*. And the literary scholar has good reason to be skeptical about the results of LDA analysis when dataset to be explored includes primarily, if not exclusively, poetic texts. Whereas scholarly articles and books strive for clarity and avoid ambiguity, poetry specifically uses language's ambiguity. So, should the same standards for evaluating topic models of non-figurative language texts guide the principles we use to evaluate the accuracy of topic models of figurative language collections? How would they differ?

In general, the guiding factors for text mining generally and topic modeling specifically are to generate *actionable* and *comprehensible* results.

Actionable: Results should be consistent and reproducible, which means that the model could also be used to make predictions about new data added to the dataset. Of course, whether or not results are indeed actionable depends to a large extent on the ability to find a fair and measurable degree of success. Actionable results require that researchers are clear about their *a priori* assumptions and the composition of the dataset and the predicted degree to which the results might be found reliable.

Comprehensible: For the results of text mining to be useful, humans need to be able to read, to understand, and to interpret them. Frequently, in topic modeling comprehensible results are understood to be thematic or semantically meaningful. In other words, when reading key word distributions, it is usually obvious that there is a thematic array that humans can read and interpret sensibly. For example, in Blei's keyword distributions the terms "evolution, evolutionary, species, organisms, life, origin" lead to a comprehensible thematic topic: evolution.

Herein lies the rub for texts as highly figurative, purposefully ambiguous, and semantically rich as poems. Returning once again to Blei's article, he writes: "The interpretable topic distributions arise by computing the hidden structure that likely generated the observed collection of documents." In a footnote, Blei clarifies his claim:

Indeed calling these models "topic models" is retrospective—the topics that emerge from the inference algorithm are interpretable for almost any collection that is analyzed. The fact that these look like topics has to do with the statistical structure of observed language and how it interacts with the specific probabilistic assumptions of LDA. (Blei "Introduction" 79)

The topics from *Science* read as comprehensible, cohesive topics because the texts from which they were derived aim to use language that identifies very literally with its subject. The algorithm, however, does not know the difference figurative and non-figurative language. So the process LDA employs does not change: topics remain a distribution of words over a fixed vocabulary, which is to say all the words that make up the dataset upon which the LDA algorithm is run. Therefore, the first stage of a topic modeling

experiment with poetry requires determining what *comprehensible* means in topics generated from poetry corpora and whether or not the resulting models can be “actionable.”

The following example serves as a parallel, illustrative example to Blei’s but this time demonstrating how LDA “reads” a sample poem—Anne Sexton’s “The Starry Night.” To create the illustration, I used MALLET, a software environment introduced in chapter 4, to create a 60 topic LDA model using a dataset of 4,500 poems from the “Revising Ekphrasis.” When the collection of poems was prepared for the experiment, the MALLET default stoplist removed words considered to be too numerous such as articles, frequently used pronouns, conjunctions, prepositions, and pronouns. Recalling to mind the farmer’s market example from earlier in this chapter, “The Starry Night” is an example of what one neighbor’s basket of produce (poem/document) might look like. In the basket, 29% of the produce (words) would be like apples (Topic 32), 12% of the produce would be corn (Topic 2), and 9% of the produce would be like grapes (Topic 54).¹⁰⁸ All in all, 50% of the basket (poem/document) can be accounted for by three produce types (topics).¹⁰⁹ For simplicity’s sake, I have ignored the smaller topics and focus just on the top three topics. In order to simulate to some degree the way in which the topic model “reads” the poem, I have crossed out words that would be removed by the stoplist, and highlighted in green (Topic 32), yellow (Topic 2), and blue (Topic 54).

In Table 1, which directly follows the poem, there are three columns that list the topics from which “The Starry Night” is predicted to draw most heavily. In each column

¹⁰⁸ The words “poem” and “document” throughout the remainder of the chapter are used interchangeably because, as was mentioned in chapter 4, the dataset consists of individual poems saved as individual plain text documents that include only the title and body of individual poems.

¹⁰⁹ The sum of the three top document probabilities: (29+32+12=50)

of the table, the number of the topic is listed at the top next to the probable proportion of the document that uses words from this topic. The fifteen words below each Topic number represent a sampling of the word distribution that makes up the whole topic. For example, in the farmer's market example the topic with the largest percentage would be "apples." Under the "apples" topic, we might find Macintosh, Fuji, Honeycrisp, and Gala, all words associated with apples. For the purpose of making the assignment of words from the poem to the topic keyword distributions clear, each topic has been assigned a color (green/32, yellow/2, blue/54). Words in the text of "The Starry Night" that are associated with topics 32, 2, and 34 are highlighted in a corresponding color.¹¹⁰

The Starry Night

That does not keep me from having a terrible need of—shall I say the word—religion.

Then I go out at night to paint the stars. Vincent Van Gogh in a letter to his brother

The town does not exist

except where one black-haired tree slips

up like a drowned woman into the hot sky.

The town is silent. The night boils with eleven stars.

Oh starry starry night! This is how

I want to die.

¹¹⁰ Again, to be clear, the keywords in each topic are derived from all the documents in the set of 4,500 that the LDA considers to be part of the topic, so there will be more words in the key word distributions than there are in "The Starry Night." The model assumes that words in the key word distribution are often found in the context of other words also listed in the key word distribution.

It moves. They are all **alive**.
 Even the **moon** bulges in its **orange** irons
 to push **children**, like a god, from its **eye**.
 The old **unseen** serpent **swallows** up the **stars**.
 Oh **starry** **starry** **night**! This is how
 I want to **die**:

~~into that~~ rushing beast of the **night**,
~~sucked up by that~~ great dragon, to split
~~from my~~ **life** with no **flag**,
 no belly,
 no **cry**.

Table 9: Key word distributions generated by a 60 topic model of 4500 poems (Note: Keywords in this table are representative of the entire model, not just "The Starry Night.")

Topic 32 (29%)	Topic 2 (12%)	Topic 54 (9%)
night	death	tree
light	life	green
moon	heart	summer
stars	dead	flowers
day	long	grass

dark	world	trees
sun	blood	flower
sleep	earth	spring
sky	man	leaves
wind	soul	sun
time	men	fruit
eyes	face	garden
star	day	winter
darkness	pain	leaf
bright	die	apple

Once the model generates the topics, human interpretation begins. At first, Topic 32 and 54 appear similar to the coherent, thematic topics in the topic model of *Science*. Topic 32 includes words that could fall under the rubric of “night,” and the words in Topic 54 could be described as the “natural world.” We might be tempted based on this first read to assign the topic labels “night” and “natural world” in the same way that Blei labels topics from *Science* as “genetic” and “evolution;” however, as I will discuss further on, those labels and the assumption that the topics are “thematic” in the same way as Blei’s would be incorrect. For example, the night and natural world of “The Starry Night” are actually painted representations of those concepts, and consequently, it would be misleading to say that the poem is, strictly speaking, about night and the natural world *in the same way* that the article from *Science* is about genetics and evolution. I will

return to this idea further on, but for now it is safe to say that those categories do not appear to be different.

Topic 2, on the other hand, does not have the same unambiguous coherence that 32 and 54 do: the words in Topic 2 are more loosely connected. It would be tempting to read the topic as having to do with death, but we would do that because our reading of “The Starry Night” predisposes us to consider it that way. There are “intruder” words in this category. By looking solely at the words in the list and not taking into consideration “The Starry Night,” words such as long, world, and day are not necessarily words we might classify as “death” words in the strictest sense. In fact, topic intrusion is one way in which computer scientists have begun to develop a method for evaluating and interpreting topic models. In “Reading Tea Leaves: How Humans Interpret Topic Models,” Jonathan Chang, Jordan Boyd-Graber, Sean Gerrish, Chong Wang, and David Blei suggest methods for measuring the “interpretability of a topic model.” The authors present two human evaluation tests meant to discern the accuracy of models by using the keyword distributions (the kinds of produce at the farmer’s market), and the topic to document probabilities (the proportion of kinds of apples compared to how many fruit are in each basket)—called word intrusion and topic intrusion tests respectively. Word intrusion tests involve selecting the first eight or so words from each topic and adding one word each list for a total of nine words. Human subjects (generally disciplinary experts) were then asked to determine which word in each group did not belong. Chang, et al. discovered that with relative high success, human readers could discern a thematic connection between terms to reliably distinguish the one out-of-place

term. As a result, the authors suggest that word intrusion tests measure “how well the inferred topics match human concepts” (6).

Topic intrusion tests presented human subjects with topic labels (like apples, pears, and corn are labels for the “kinds of produce” that might be at the farmer’s market); the words most likely to be associated with each topic (such as Macintosh, Gala, Fuji, and Honeycrisp), and the top documents associated with each topic (basket #1, basket #2, basket #3, for example). Then, one document (a basket unlike any of the others) that does not belong in the group, the “intrusion,” is then added to the set. Human subjects were then asked to identify which document did not belong, which they could do with reasonable accuracy.

For the purposes of modeling poetry data, word intrusion would not be as effective a method for determining a model’s accuracy at categorizing documents or detecting latent patterns unless the specific changes that happen to the nature of topic distributions for poetic corpora are adjusted for. In other words, topics from the models in my project were not easily interpreted by keywords alone, and yet the results are still useful. I discovered that topic models of poetry do have a form of coherence, but the coherence is different than in topics of non-fiction texts. My research confirms, to a degree, Ted Underwood’s suspicion that topics in literary studies are better understood as a representation of “discourse” (language as it is used and as participates in recognized social forms) rather than a thematic string of coherent terms.¹¹¹ Topic models of poetry

¹¹¹ I qualify this statement out of recognition that the document types Underwood is modeling are volumes as opposed to individual poems, which may have effects on the degree of reliability with which one can make the comparison. For more on conversations between Ted Underwood and I regarding topics as forms of discourse, see Underwood, Ted. “What Kinds of ‘topics’ Does Topic Modeling Actually Produce?” and Rhody, Lisa. “Chunks, Topics, and Themes in LDA.”

do not reflect the anecdotal evidence that LDA frequently leads to semantically meaningful word distributions. Instead, topic models of the “Revising Ekphrasis” dataset created four consistently recurring *types* of topics. Moreover recognizing the following four types of topic coupled with close reading of samplings of documents containing each “topic,” which allows a literary scholar to see coherence in topics as forms of discourses, worked much better for determining whether or not the results of the model were actionable and comprehensible. “Intruders” as individual words does not work for LDA topics of poetry because poems purposefully access and repurpose language in unexpected ways; however, when viewed as forms of discourse, topics can be re-considered in light of whether or not close readings show that individual documents are entering into a form of discourse for a thematic purpose.

LDA topics of a model of the poetic documents in the “Revising Ekphrasis” dataset return one of four *types* of topic, which I define as follows:

- 1.) ***OCR¹¹² and other language or dialect distinctive features¹¹³*** – These topics represent, for example, errors that occur in the optical character recognition scanning process used when turning print documents into digitizing texts, for example substituting “com” for “corn.” The most common OCR errors have been filtered out through a preprocessing technique that searches for such errors and fixes them; however, machines aren’t perfect and some of these features remain in the final dataset. Their presence may sort out as if they were features of another language.

More commonly in this dataset, however, one or two topics form around an

¹¹² OCR – Optical Character Recognition software visually changes scanned print pages into digitized text.

¹¹³ Topic modeling is frequently used to help discover information in a variety of languages. I choose “other” rather than “foreign” here, since not all “other” languages would be for all researchers “foreign” ones.

approximate 1% of the data that includes foreign language terms or the original form of a poem before its English language translation. The following two topic examples found in the same topic model as “The Starry Night” demonstrate how the model clusters these:

Topic 8: de la Gertrude el en green le din miss con yo verde inside da taint

Topic 39: ye night wi ha auld merry Tomlinson syne sin rats gat mayor

Similarly, topics can also be created by grouping together distinctive dialects and languages other than English. We will not be considering these topics in detail other than to point out that they exist.

- 2.) **Large “chunk” topics** – Longer or extended poems that outsize the majority of other documents in the subset pull one or more topics toward language specific to that particular poem. For example, the keyword distribution for Topic 12 includes terms such as: bonghy, yonghy, bo, lady, jug, order, jones and jumbles. These are words that are repeated frequently in the extended poem “The Courtship of the Yonghy-Bonghy-Bo” by Edward Lear and demonstrate how one poem with high levels of repetition can pull a topic away from the rest of the corpus, along with other poems with high frequency repetitions of particular phrases. In the case of Topic 12, the poems included in the topic and shown in Table 2 tend to be longer and to include greater incidence of repetition. It is possible that these poems share thematic affinities, but the strength of those affinities have more to do with linguistic structure than meaning. In Table 2, the documents with the highest probabilities of drawing a large proportion of their words from Topic 12 are listed in descending order. Under

the “Topic 12” label are the probable proportions for each document expressed in decimals. In the second column are the corresponding poem titles.¹¹⁴

Table 10: Titles of poems in the "Revising Ekphrasis" dataset with the highest probable proportion of Topic 12, listed in decending order.

Topic 12	Poem Title
0.680665	The Courtship of the Yonghy-Bonghy-Bo
0.590501	Choose Life
0.504747	Zero Star Hotel [At the Smith and Jones]
0.501921	The Midnight [For here we are here]
0.47986	Earthmover
0.462247	Invitation to the Voyage
0.412626	Mr. Macklin's Jack O'Lantern
0.358385	The Steel Rippers
0.333965	The Cruel Mother
0.276595	Vacant Lot with Pokeweed
0.274312	Lullaby of an Infant Chief
0.253223	The Jumblies
0.250493	American Sonnet (35)
0.230571	Rückenfigur
0.221246	Two Poems
0.217995	The Lady of Shalott
0.2177	Mr. Smith

¹¹⁴ When the model outputs the probable proportions for each poem, it expresses that proportion in a decimal. When possible in my discussion of a topic, I convert the decimal to a percentage because that expression of proportion seems more appropriate and avoids statements such as “Rukenfigur” is predicted to contain .23 of Topic 12; however, when I list document probabilities as they have been produced from the model, those same numbers are expressed as decimals.

0.209471	The Assigination
0.191892	Ulalume
0.179114	I Too Was Loved by Daphne

3.) *Semantically evident topics*—Some topics do appear just as one might expect them to in the 100-topic distribution of *Science* in Blei’s paper. Topics 32 and 54, as illustrated above in Anne Sexton’s “The Starry Night,” exemplify how LDA groups terms in ways that appear upon first blush to be thematic as well. As I mentioned earlier, though, the illusion of thematic comprehensibility obscures what is actually being captured by the topic model. The way in which we interpret semantically evident topics like 32 and 54 must be different from the semantically coherent topics of non-figurative language texts. It is more accurate to say that Topics 32 and 54 participate in discourses surrounding that “night” and “natural landscapes” in Anne Sexton’s “The Starry Night.”

As Loizeaux points out in *Twentieth-Century Poetry and the Visual Arts*, Sexton is entering into an ongoing conversation with other confessional poets about madness and artistic genius by engaging in language that refocuses collective attention on a widely-recognized work of art with a recognized connection to another artist suffering from mental duress.¹¹⁵ She enters into that discourse through the other surrounding discourses that include night and natural landscape. It would still be incorrect to say that 29% of the document is “about” night, when what Sexton describes is a *painting* of a night sky and natural landscape. As literary scholars, we understand that Sexton’s use of the tumultuous night sky depicted by Vincent Van

¹¹⁵ For more on the ekphrastic conversation between Anne Sexton and W. D. Snodgrass regarding “The Starry Night,” see Loizeaux, Elizabeth Bergmann. *Twentieth-Century Poetry and the Visual Arts*.

Gogh provides a conceit for the more significant thematic exploration of two artists' struggle with mental illness. Therefore, it is important not to be seduced by the seeming transparency of semantically evident topics. Even though the topics appear to have a semantic relationship with the poems because they appear so comprehensible, it is important to remember that semantically evident topics form around a *manner* of speech that reflects quite powerfully the definition of discourse described by Bakhtin earlier in the chapter that “between the word and its object, between the word and the speaking subject, there exists an elastic environment of other, alien words about the same object.” The significant questions to be asked regarding such topics when interpreting LDA topic models have more to do with what we learn about the relationships between the ways in which poems participate in the discourses that the topic model identifies. Word intrusion tests (the kind suggested by Chang, et. al. as a measurement of a model's accuracy) may still work with semantically evident topics because semantically evident topics mirror the thematic comprehensibility of topics from models of non-figurative language; however, there are naturally occurring word intrusions that may not affect the efficacy of the topic distributions, and these would require deeper human interpretation before just throwing them out.

- 4.) *Semantically opaque topics*—Some topics, such as Topic 2 in “The Starry Night,” appear at first to have little comprehensibility. Unlike semantically evident topics, they are difficult to synthesize into the single phrases simply by scanning the keywords associated with the topic. Semantically opaque topics would not pass the intrusion tests suggested by Chang, et. al. because even a disciplinary expert might

have trouble identifying the “intruder” word as an outlier. Determining a pithy label for a topic with the keywords, “death, life, heart, dead, long, world, blood, earth...” is virtually impossible *until* you return to the data, read the poems most closely associated with the topic, and infer the commonalities among them.

In Table 7, I list the poems the model predicts contain the highest amount of Topic 2 in them along with the probable proportion of the document that draws from Topic 2 (The amount of each basket the model predicts can be described as “apples,” for instance).

Table 11: Titles of the 15 poems most closely associated with Topic 2 and their corresponding topic distributions

<u>Topic 2</u>	<u>Title</u>
0.535248643	When to the sessions of sweet silent thought (Sonnet 30)
0.533343438	By ways remote and distant waters sped (101)
0.517398877	A Psalm of Life
0.481152152	We Wear the Mask
0.477938906	The times are nightfall, look, their light grows less
0.472091675	The Slave's Complaint
0.451175606	The Guitar
0.447100571	Tears in Sleep
0.446314271	The Man with the Hoe
0.437962153	A Short Testament
0.433767746	Beyond the Years
0.433152279	Dead Fires
0.429638773	O Little Root of a Dream

0.427326132	Bangladesh II
0.425835136	Vitae Summa Brevis Spem Nos Vetat Incohare Longam

Skimming the top fifteen poems associated with Topic 2 would confirm our assumption that the model has grouped together kinds of poetic language used to discuss death. Topic 2 is interesting for a number of reasons, not the least of which is that even though Paul Laurence Dunbar’s “We Wear the Mask” never once mentions the word “death,” the discourse Dunbar draws from to describe the erasure of identity and the shackles of racial injustice are identified by the model as drawing heavily from language associated with death, loss, and internal turmoil—language which “The Starry Night” indisputably also draws from. To say that Topic 2 is *about* “death, loss, and internal turmoil” is overly simplistic and does not reflect the wide ranging attitudes toward loss and death that are present throughout the poems associated with this topic; however, to say that Topic 2 draws from the language of elegy would be accurate. Identifying that Dunbar’s “We Wear the Mask” and “The Slave’s Complaint” draws from the discourses associated with elegy supports recent scholarship by Marcellus Blout in “Paul Lawrence Dunbar and the African American Elegy:”

I am using a set of terms that point to how I see Dunbar as initiating a *tradition* of African American elegies. I should underscore here that I am not arguing that the African American practice of the elegy is necessarily distinctive from other traditions of the elegy. But I want to suggest that such practice is continuous. Dunbar’s poems of the 1890s point us directly to more recent elegies written by African Americans in the latter part of the twentieth century. (241)

By grouping Dunbar’s poems in a topic of elegiac language, the topic model supports Blout’s claims that Dunbar’s poems participate in elegiac discourse as a means of identity

formation for African Americans at the turn of the twentieth century. What the topic model (and more likely the networked close readings that will be drawn from the topic model) might also help identify is whether or not other poems by contemporary African American poets similarly draw from Topic 2, further supporting Blout's claim that Dunbar "initiates a tradition." The promise for future study is that as the corpus of poetry in the "Revising Ekphrasis" dataset grows, more questions such as these could be fruitfully explored.

Just as semantically evident topics require interpretation, determining the coherence of a semantically opaque topic requires closer reading of the documents most closely associated with each topic in order to check whether or not the poems are drawing on a similar discourse, even if those same poems have different *thematic* concerns. While semantically evident topics gravitate toward recurring images, metaphors, and particular literary devices, semantically opaque topics often emphasize tone. Words like "death, life, heart, dead, long, world" out of context tell us nothing about an author's attitude or thematic relationships between poems, but when a disciplinary expert scales down into close readings of the compressed language of the poems themselves, one finds that there are rich deposits of hermeneutic possibility available there.

Searching for thematic coherence in topics formed from poetic corpora would prove disappointing since such keyword distributions in a thematic light appear riddled with "intrusions." However, by understanding topics as forms of discourse that must be accompanied by close readings of the poems associated with each topic, researchers can make use of a powerful tool with which to explore latent patterns in poetic texts. For poetry data in particular and literary texts in general, close reading and contextual

understanding must be brought to bear on the computer algorithm used for distant reading but it is worth pursuing because the potential for making discoveries and improving the range of questions we might be able to ask about poetic texts holds great promise. While this study is limited by its focus on ekphrastic poetry within one dataset, I hope that it is also suggestive of future research that helps develop best practices for measuring the accuracy and interpretability of topic models of humanities data because the methodology represents an important area for increasing the scope of humanities questions we can ask in the future. As such, the claims above are relevant for humanities scholars who wish to try distant reading approaches, but also for computer scientists and digital humanists developing those technologies and training future scholars.

Social Network and Scalable Readings

Knowing that topic models offer potentially rich opportunities for increasing the scope of the questions we can ask about literary tradition and poetic discourses by classifying hundreds to thousands of poems more quickly than human scholars could on their own and that LDA can generate useful connections between texts by detecting latent patterns of language, having an effective way to pan the critical lens in and out of topic models improves the scholar's ability to make sense out of the vast amounts of data topic models create is critical. Furthermore, while bar graphs, scatter plots, and pie charts help visualize trends at either end of the spectrum—either in single or small sets of documents or vaguely across much larger sets of documents—they are less successful at helping readers move fluidly through the relationships created by the topic model. That “The Starry Night” draws from discourses of night and death could be discovered more easily through human close reading if we were only interested in the discourses of a single

poem; however, if we want to exploit the vast numbers of connections created between documents in a topic model, network visualizations are more promising because they have the potential to scale from distant, broadly-conceived connections down to more intimate clusters of connections. In other words, network visualizations allow us to see the way in which the discourses of “The Starry Night” are connected to the 4,499 other poems in the model and then zoom in more closely to connections between a few hundred poems, and then in even further to intimate connections between a 10-20 documents. In *The Dialogic Imagination: Four Essays*, Bakhtin makes the following assertion:

The word in language is half someone else’s. It becomes “one’s own” only when the speaker populates it with his own intention, his own accent, when he appropriates the word, adapting it to his own semantic and expressive intention. Prior to this moment of appropriation, the word does not exist in a neutral and impersonal language (it is not, after all, out of a dictionary that the speaker gets his words!), but rather it exists in other people’s mouths, in other people’s contexts, serving other people’s intentions: it is from there that one must take the word, and make it one’s own. (293-4)

Ekphrasis, particularly in the twentieth-century, knowingly enters into a socially-charged network of artists, artworks, poems, and readers and, like the words Bakhtin describes, ekphrastic poems are doubly charged with the sense of representational “afterness.” So the network environment is a fitting medium for uncovering the way in which ekphrastic poems connect and respond to the discourses that surround them, which they appropriate, disrupt, or ignore.

In this second section, I create a topic model of ekphrastic poems and demonstrate how topics as forms of discourse create salient connections between hundreds of poems. With an awareness of the types of topics described in the previous section, I will present

methods of visualizing the topic model results to uncover unexpected connections and prompt questions about the discourses of ekphrasis. Furthermore, I suggest using additional algorithms to cluster connections between documents and multiple topics, which increases the salience of the topic model's results. Beginning with a subset of 276 ekphrastic poems from the "Revising Ekphrasis" dataset, I create a 15-topic model and visualize the relationships between topics and documents in three possible ways, considering what questions might be asked about the network with each separate rendering.¹¹⁶

The following graphs are produced with social network software called NodeXL, which is integrated into Microsoft Excel. NodeXL is the best available software to use for the visualizations because, like every other digital tool in this study, it is freely available to the public, has the lowest possible learning threshold for task it needs to perform, and it is robust enough to create network visualizations of topic models as well as any other software available at the time this study was performed. Using NodeXL's suite of "clustering" algorithms, I am able to reorganize, synthesize, and manipulate thousands of relationships between topics and documents with relative ease. As a quick review, networks visualize relationships between *nodes*. In the case of the topic model, there are two possible types of nodes: documents and topics. Returning to the farmer's market analogy from the beginning of the chapter, I can visualize *edges* (meaning connections) between the kinds of produce offered at the farmers market and the individual baskets using the proportion of each topic found in each document. For

¹¹⁶ The process by which poems were selected and described can be found in chapter 4.

example, the proportion of apples in each basket establishes the degree to which the basket shares an edge with a type of produce. I could also use another calculation created by the model that calculates each document's degree of similarity to other documents. Returning to the market example, baskets are compared to other baskets using the relationship between the proportions of different kinds of produce in each individual basket. A similar form of relationship is calculated between topics and other topics. For example, the kinds of produce at the market share a relationship with one another based on the amount of each kind of produce found in each individual basket.

Using the model's calculations, I can visualize relationships between each node (types of produce and baskets) with edges (the lines between nodes on the graph) that represent the degree of relatedness between each node. This tends to produce very large graphs with a dense number of connections, but after exploring how the networks represent the model data, the use of algorithms that cluster together multiple topics and multiple documents based on similarities among them, proves to be the most powerful potential for this form of organizing, navigating, and visualizing ekphrasis.

In the small dataset of 276 ekphrastic poems, the topic keys are mostly semantically opaque. If we were to use the *word intrusion* threshold that Chang, et. al. describe in "Reading the Tea Leaves," we would, most likely throw this model out. The topic keyword distributions (top 20 words in descending order of probability) displayed in Table 8 would not likely stand out to most readers—even disciplinary experts—and the addition of an "intruder" would not likely improve one's ability to see the key words as comprehensible. The topic keyword distribution in Table 8 is like similar tables found during the stoplist tests in the previous chapter. On the far left under the label "Topic" is

a numbered list that acts like an empty container into which the LDA algorithm sorts words to create topics. The next column to the right labeled “Probability” represents the model’s prediction of the proportions of the entire corpus that likely draw their words from each topic. For instance, if Topic 0 were “squash” in the market example, then the model predicts that .02587 (or about 2.6%) of the entire selection of produce at the market is likely to be squash. The third column, “Keywords”, would include samples of squash from the entire selection at the farmer’s market from the most likely to the least likely to be found.

Table 12: Keyword Distribution for 15 Topic Model of 276 Ekphrastic Poems

Topic	Probability	Keywords
0	0.02587	orange dido tristan iseult linnet drop mark cousin roof fish union ysolt tintagel boston elizabeth crushing aquarium ladies free beating
1	0.03476	matter clay angel palm fold cup pots napkin soul folds form table point full place pieces lettuce hiding wet ugly
2	0.04023	wing person friends don girls human consciousness understand nature wait space film story david audience owl write reality art light
3	0.05145	thy thou thee er beauty art death picture grace hath sea eyes tis heaven spirit doth divine till hand love
4	0.04261	portrait monument foreman felt women monuments box press bacall detail young thick crimson instrument hotel compartment picked cornell europe lovers
5	0.0671	girl dance flags teacher dress icarus wall wood flag edge brueghel sun field round sing blue soil waving san market
6	0.06105	hill snow winter birds colors fire trees ice tall figures scene pack returning hounds brown evening dogs heel town jar
7	0.07064	surface body water bridge houses leaves model matisse hills pond photograph step silence woman artist flat leaning desire curve child
8	0.05386	world god death man lands light made thing back soul give face shape centuries flesh time set ancient terror rose
9	0.04185	train work left art vermeer horse don paint number good flood home stieglitz cane dragon burning church blood village fresh
10	0.02111	guitar blue things horizon final stone friend native patch tune mind sea music tom works manner poetry dream call oxidia
11	0.0396	coat back suddenly visible floats giving origin completed sensation floating tree open understand weave filled things cut shade fine garment
12	0.70035	light white man world time life long air face day blue sky water dark eyes hand dead body head great
13	0.04796	painted age hopper edward body background poster hungry bread ve ghost bed ashamed ten bricks doesn foreground hat silently gothic
14	0.02993	silver golden field country bound arms rise scratched thunder pleasant

Visualizing Topics as Discourse Networks

Once we have a sense that the keyword distributions in topics, we can begin visualizing the data from the model. The first network graph (Figure 40) displays affiliations between two groups: topics (the randomly generated number on the left) and individual documents in the collection. Because the graph contains two types of nodes (the points on the network diagram that represent documents and topics), the graph is called an affiliation network. We learn from affiliation networks that individual documents share some proportion of their language with other documents that also have edges to the same topic. Since there are 15 topics and 276 poems, there is a possibility of 4,140 possible edges (lines) between 391 nodes (276 poems x 15 topics). Though 4,000 is not too many to still be able create an understandable graph, removing those edges (lines) that are predicted to include less than 10% of the words from a topic would make the graph more readable because there would be slightly fewer edges to contend with; therefore the “baskets” (documents) drawing .1 (10%) or less from a “kind of produce” (topic) are removed from the graph. What remains, then is a network of individual poems (documents) that draw at least 10% of their words from the topics with which they share an edge (line). Therefore, if “Rükenfigur” by Susan Howe and “For the Union Dead” by Robert Lowell (in hot pink on the right side of the graph) are both predicted to draw more than 10% of their language from Topic 0, which they are, then they share an affiliation with one another through their mutual connection to Topic 0.

In terms of the graphic signification of the network, the nodes of the network are assigned a distinct color based on its affiliation with a topic. The labels for nodes representing poems include the first 15 characters of the poem's title. The labels for the topics are just the topic number as it was assigned in the topic keyword distribution table above (Table 8). Furthermore, the edges between nodes vary in terms of thickness and color based on the proportion of the document that draws from the words in the corresponding topic. In other words, if the "Man with a Blue Guitar" draws 15% of its language from Topic 7, the edge that connects the node to the topic would be thin and dark blue. Conversely, if the node representing "Red Quiet" is predicted to draw 40% of its language from Topic 4, the edge connecting the two nodes would be a thicker line in lighter blue.¹¹⁷ We know from Table 8 that the topic with the largest proportion across the whole collection is Topic 12. Predictably, then, Topic 12 can be located easily on the

¹¹⁷ Admittedly, the use of thick, light lines for larger proportions and thin, dark lines for smaller proportions may seem confusing since we usually attribute thicker and darker lines with greater significance and thinner, lighter lines with less weighty signification; however, the purpose was to keep the graph readable. Thick dark lines would obscure the visibility of the smaller but significant relationships. Furthermore, using a variation in color improves the visibility of the graph over all, but adding the variable widths of the lines helps to some degree with those who are unable to see the change in color. There is, within the field of information visualization, a serious conversation about how to better represent large data—in ways that are as explicit and readable as possible, but that do not reduce the data so far in the process that the data loses its accuracy. Developers at the Social Media Research Foundation, the group responsible for improving and maintaining NodeXL, are striving to improve the suite of available tools to be able to create graphs that represent the largest amount of data with the least possible attrition. For more information, see www.socialmediaresearchfoundation.org.

graph, because it has the most edges connecting to it.

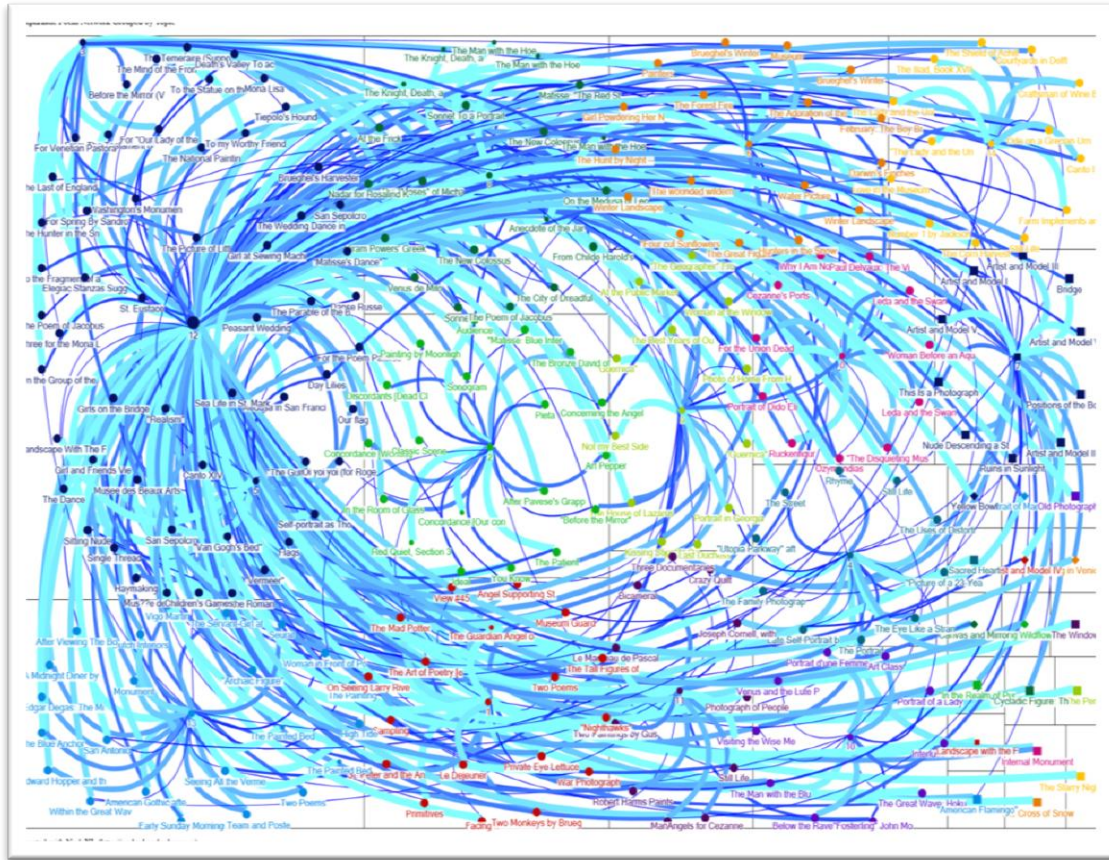


Figure 40: Document to Topic Affiliation Network Between 276 Ekphrastic Poems and 15 LDA Topics

When I first began to create the network graphs for this model, the labels for the documents were the document identifier numbers,¹¹⁸ and I noticed that all of the nodes with connections to Topic 3 (upper left hand corner in dark blue) in Figure 40 (Topic 3 is highlighted in teal in Figure 41) began with the same two letters—gs—meaning that they all came from John Hollander’s anthology of ekphrasis titled *The Gazer’s Spirit*. Though the topic label is small and compared to other topics in the network has fewer edges, the edges that connect to it are quite thick, indicating that a few poems in the collection draw

¹¹⁸ The random alpha-numeric identifying number assigned to each poem when the dataset was created, the process for assigning unique identification numbers to poems and documents is described in chapter 4.

quite heavily from the word distribution in Topic 3. The model, which does not possess foreknowledge about where the documents come from, detected latent patterns of discourse in *The Gazer's Spirit*, and even after 5 re-runnings of the same model, one of which included 200 additional non-ekphrastic poems, the pattern proved consistent and reproducible to the point that I feel confident labeling the topic the Gazer's Spirit Topic. The keyword distribution for the Gazer's Spirit Topic reflects a combination of archaic discourse (thy, thee, thou) and the discourse of courtly love (er, beauty, grace, eyes, heaven, divine, hand, love). This makes sense in the context of existing knowledge about Hollander's volume. The collection reads like a tribute to painting and the visual arts by poetry, and the language of desire is strong. If, as W.J.T. Mitchell and James A.W. Heffernan have claimed, the language of affection, love, and desire fuels the defining gendered stance between poetry and the visual arts, then it would also be reasonable to assume that the discourse of courtship and desire would appear more broadly throughout most of the documents. But it doesn't. Every one of the 20 poems with a greater than 10% distribution of words from the Gazer's Spirit Topic come from *The Gazer's Spirit*, and interestingly only one of those was written by a woman. In fact, of all the poems likely to have a 10% or greater distribution of words from the Gazer's Spirit Topic, only a few of the poems with a statistically significant portion of its language from Topic 3 are not also in *The Gazer's Spirit*: "The Picture of Little T.C. in a Prospect of Flowers," "The Art of Poetry [excerpt]," "Ozymandius," and "Canto I." Of those poems, none are by female poets.

Table 13: 20 Poems predicted to draw 10% or more of its language from Topic 3 / The Gazer's Spirit
Top 20 Poems with Probability > 10% of Topic 3
The Temeraire (Supposed to Have Been Suggested to an Englishman of the Old Order by

the Flight of the Monitor and Merrimac) by Herman Melville
To my Worthy Friend Mr. Peter Lilly: on that Excellent Picture of His majesty, and the Duke of York, drawne by him at Hampton-Court by Sir Richard Lovelace
From The Testament of Beauty, Book III by Robert Bridges
For Spring By Sandro Botticelli (In the Academia of Florence) by Dante Gabriel Rosetti
To the Statue on the Capitol: Looking Eastward at Dawn by John James Piatt
The Poem of Jacobus Sadoletus on the Statue of Laocoon by Jacobus Sadoletto
To the Fragment of a Statue of Hercules, Commonly Called the Torso by Samuel Rogers
The Last of England by Ford Maddox Brown
On the Group of the Three Angels Before the Tent of Abraham, by Rafaele, in the Vatican by Washington Allston
Death's Valley To accompany a picture; by request. "The Valley of the Shadow of Death," from the painting by George Inness by Walt Whitman
Elegiac Stanzas Suggested by a Picture of Peele Castle, in a Storm, Painted by Sir George Beaumont by William Wordsworth
On the Medusa of Leonardo da Vinci in the Florentine Gallery by Percy B. Shelley
The Mind of the Frontispiece to a Book by Ben Jonson
Venus de Milo by Charles-Rene Marie Leconte de Lisle
The City of Dreadful Night by James Thomson
Sonnet by Pietro Aretino
For "Our Lady of the Rocks" By Leonardo da Vinci by Dante Gabriel Rosetti
Mona Lisa by Edith Wharton
Ode on a Grecian Urn by John Keats
The National Painting by Joseph Rodman Drake

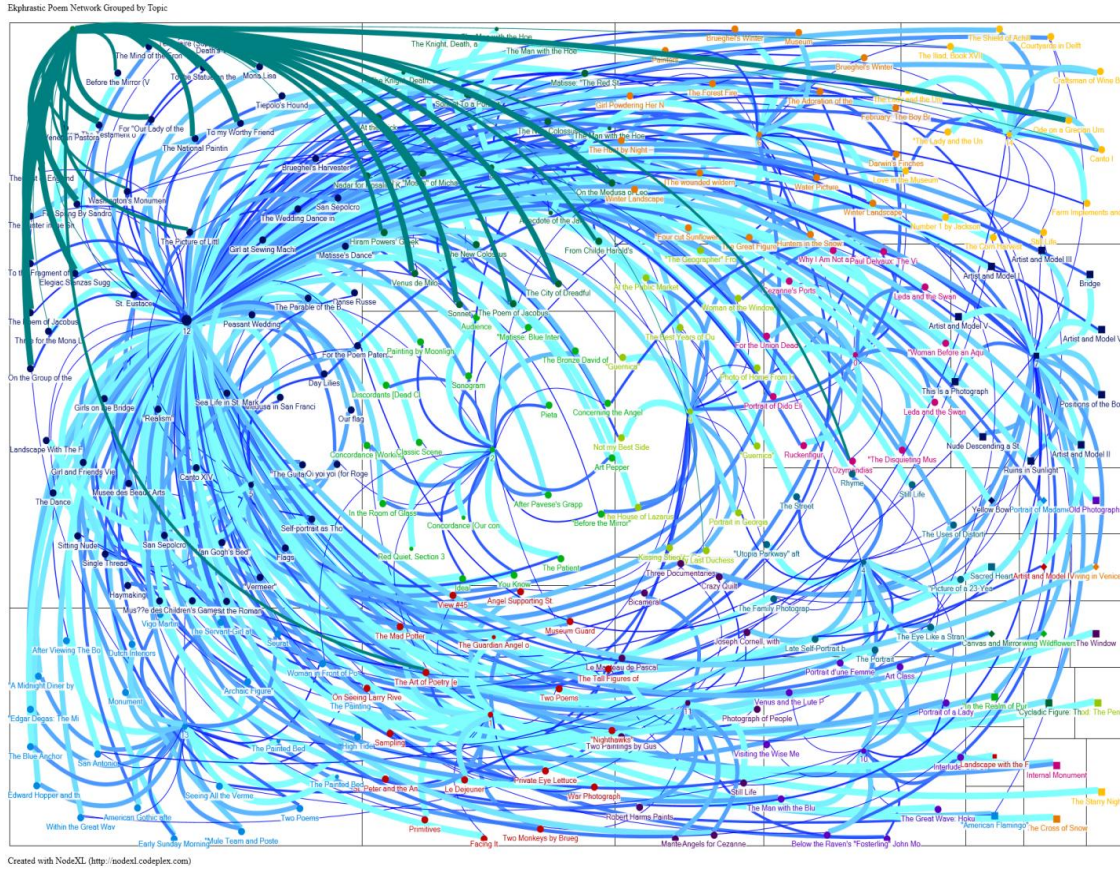


Figure 41: Ekphrastic Dataset 15 Topic Model, Topic 3 / The Gazer’s Spirit Topic

A possible explanation for the clear association between the poems in the Gazer’s Spirit Topic might be that most of the poems the model predicts most closely associated with the discourse found there were published prior to 1900. Out of the top 20 poems drawing from the Gazer’s Spirit Topic only “from The Testament of Beauty, Book III” by Robert Bridges and “Mona Lisa” by Edith Wharton were published in the 20th century, begging the question: is the identification of the archaic discourse of courtly love merely a function of when the poems were written? At this point, careful attention should be paid to the outliers of the group. With regard to Wharton’s “Mona Lisa,” the poem is distinctive within *The Gazer’s Spirit* in large part because it never mentions the primary

subject of the painting except in its title. As Heffernan describes in his accompanying discussion of the poem:

Wharton very cleverly avoids all of the celebrated questions in which the portrait comes officially wrapped (the sitter's gaze, what it betokens, the nature of the smile...) by looking only at the magnificent landscape behind her, extending almost two thirds of the way down the panel, in a tone influenced partly by Rossetti, partly perhaps by George Meredith's sonnets in *Modern Love*. (236)

Heffernan correctly identifies Wharton's *tone* as akin to Dante Gabriel Rossetti's, but not the manner in which she deploys that tone. Rossetti's poems, much like his paintings, are forever driven back to the idealized physical countenance of the woman in the frame.

Wharton purposefully looks around the woman in the portrait and describes the landscape using the archaic discourse of courtly love, and in doing so calls attention to the painter's treatment of the sitter as one more object literally framed by a similarly romantic, idealized sensibility.

Reframing topics as forms of discourse rather than thematic groups is a critical feature of the combined use of topic modeling and network analysis as a methodology because it requires that we continually refocus the aperture of our critical view. Our search for relationships between poems and our search for distinctive features of ekphrasis as a genre within the network needs to consider not only what the poems associated with a topic have in common but also what they do not. Such an approach helps us avoid the easy resolution that would otherwise gloss over the distinction between Wharton's poem and the others in the topic. More importantly, though, we would miss opportunities to ask more refined questions, such as: if Wharton's companion poem to "Mona Lisa," "La Vierge Au Donateur" had been included in the topic model, would it,

too, have been as closely associated with the same topic or another? In fact, Wharton's poems come as a pair titled "Two Backgrounds," and one might even be prompted to consider if reading them separately is an accurate way to read the poems to begin with, as one seems to depend so heavily on the other for counterbalance. Pairing the two poems and the work of art, Wharton clearly sees them as a conversation between two views and invites her readers to join in their conversation—precisely the kind of reading that a networked critical approach, such as this one, is designed to do.

Hollander, one might argue, purposefully selected Wharton's "Mona Lisa" because it disrupted the archaic courtly love discourse so pervasive in the volume's early poems and points to the fact that there are critical antecedents to the networked reading I'm suggesting here. Anthologies often select an outlier or two to complicate potentially reductive assumptions about the collection as a whole; however, what Hollander's critical anthology cannot accomplish as easily is to essentially pan back out of a collection of 30 to 40 poems to see those collectively within a the larger context of several hundred poems, find another related discourse, and then narrow the lens again to perform readings from a middle or close distance.

Locating Similarities between Discourses

Switching away, momentarily, from highly detailed network between individual documents and topics and backing out even further from the data, the next graph considers relationships between the 15 topics in the model. Looking at topic to topic edges (lines between topics) is one way to see the degree of similarity between them. Returning once again to the anecdote of the farmer's market begun at the start of the chapter, you predicted the kinds of produce (topics) available at the market based on the

individual units of produce found in each basket. For example, the “apples” topic is actually a representation of thousands of examples of round, red or green, glossy skinned fruit, while the “pears” kind is really a representation of all the bottom-heavy, smooth-ish, green-ish fruit in each basket—both types of fruit. Topic to topic graphs, essentially, recognize that based on the samplings of “apples” and “pears,” those kinds of produce are more similar to one another than either of them are to “cucumbers.”

Similarly, visualizing the topic to topic similarities and differences in the network of ekphrastic poems synthesizes within a macroscopic view the relationships between discourses the model identifies. In the graph below, the degree of similarity between topics (in other words the likelihood that apples are like pears) is represented by the thickness and color of ties or edges between them (in other words, not based on the topics’ spatial orientation). Topics that share thicker, brighter red edges are more similar to each another than topics that share thinner, darker green edges.

Viewing the network this way is important because it helps us ask another type of question about the poems. We can consider how similar the model predicts the forms of discourse to be. For example, the model predicted that Topic 12 can be found in at least 70% of the ekphrastic dataset.¹¹⁹ That means that most of the collection draws from the discourse identified by the LDA as belonging to Topic 12; however, Topic 12 does not share a strong similarity with many of the other topics in the model. We know this because in the topic to topic graph in Figure 42, the edges connecting Topic 12 and most other topics are thin and green. The sole exception is the edge between Topic 12 and Topic 8, indicating that the language between those two topics share similarities, but that

¹¹⁹ See the probability next to number 12 in Table 8.

there is a clear division between them and the distribution of language found in the rest of the model. Like the baskets from the farmer’s market that are composed of combinations of produce types, poems appropriate various forms of discourse, and so guided by the connections in the topic to topic graph, we can begin to ask questions about how we might use our knowledge about the similarities between topics to help us read laterally within the network. In other words, if we know that most poems contain some of Topic 12, how does the intervention of other, less prominent topics in the network affect the way we read the discourse identified in Topic 12?

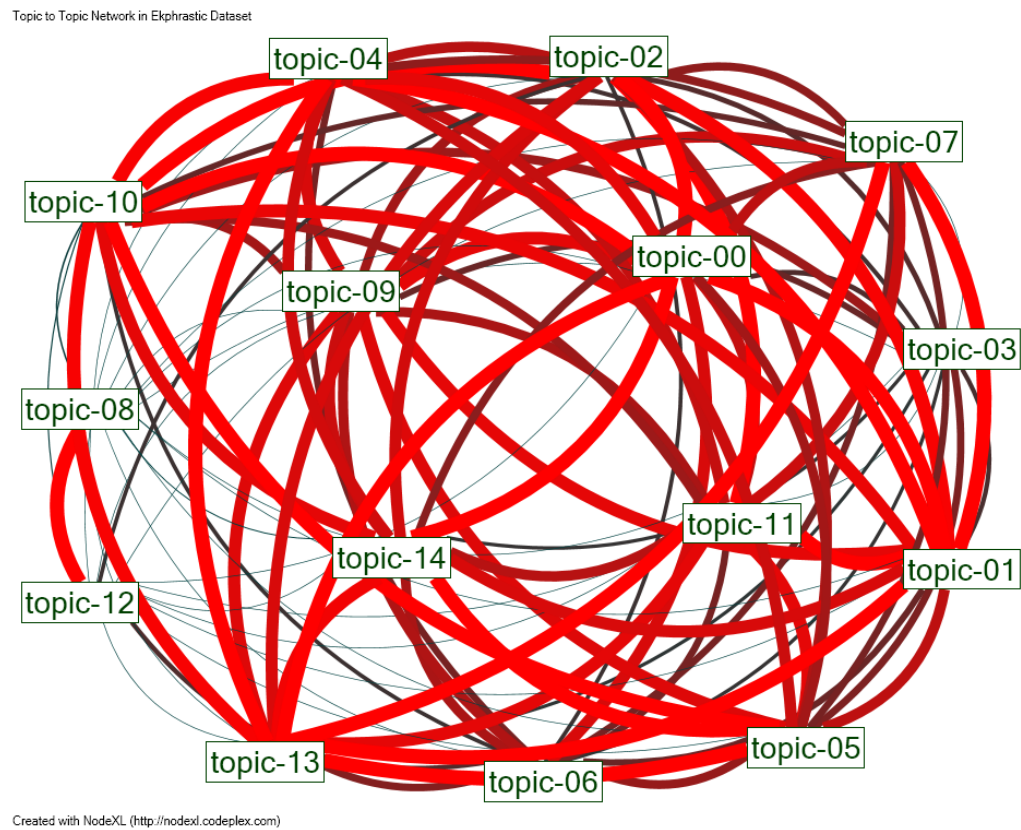
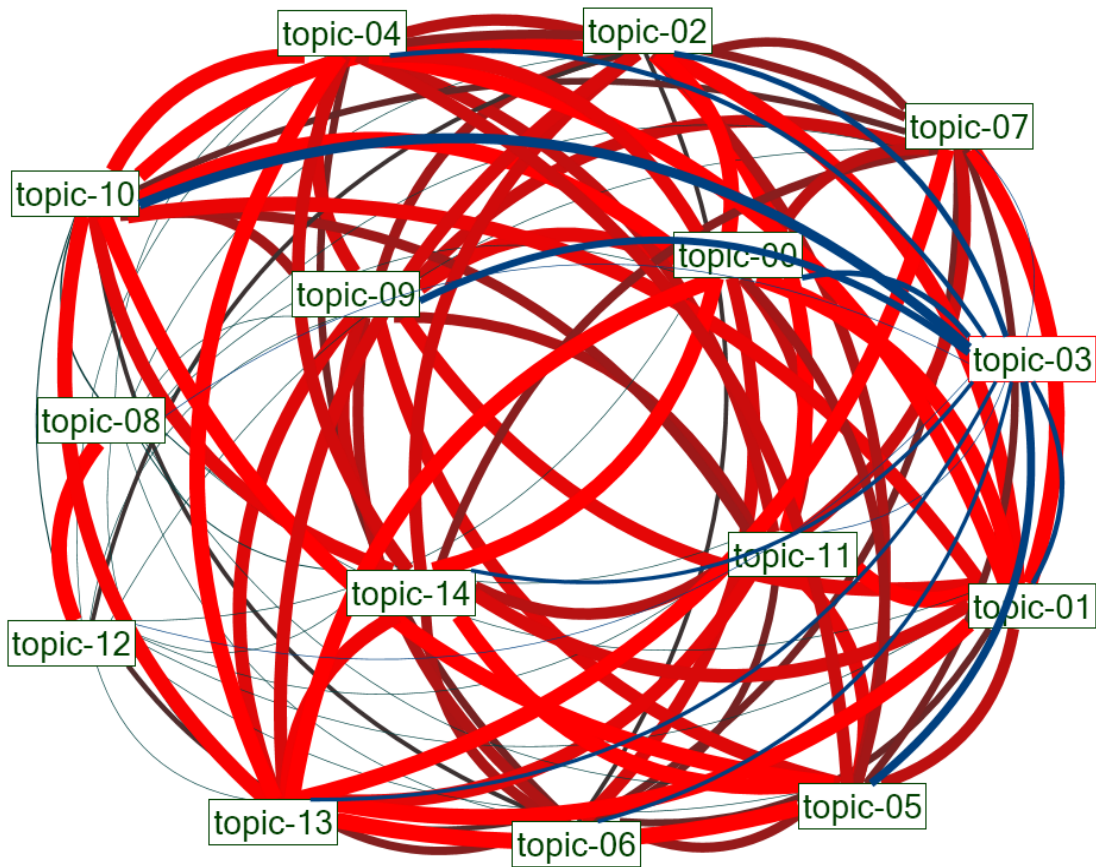


Figure 42: Topic to Topic Network in the 15 Topic Model of 247 Ekphrastic Poems

Another possible approach to the topic to topic network is to continue to follow the Gazer’s Spirit Topic to see what other forms of discourse the model predicts are

similar to it. In Figure 43, Topic 3 is highlighted and reveals that the Gazer's Spirit Topic is not as similar to other topics as most of the other topics (save 8 and 12). It would be reasonable to assume that the difference between the Gazer's Spirit Topic and the others is a matter of the prominence of archaic discourse in The Gazer's Spirit as compared with other poems in the collection that are more contemporary; however, the archaic discourse in the Gazer's Spirit is also caught up in the discourse of courtly love. The topic to topic graph serves as a reading map, helping us chart the places in the ekphrastic collection to look for whether or not the distinctiveness of the Gazer's Spirit is more a function of the archaic language or the language of desire.



Created with NodeXL (<http://nodexl.codeplex.com>)

Figure 43: Topic to Topic Network in the 15 Topic Model of 247 Ekphrastic Poems, Topic 3 Highlighted in Blue

Searching through the keyword distributions of the topics other than 3, 8, and 12 that have strong similarities to each other reveals that the only other topic to include in its top 20 key words that connote affection or desire is Topic 4. Returning to the topic keyword distribution in Table 8, the next most likely topic to include the word “love” in the first 20 words is Topic 4, which includes the following terms: portrait, monument, foreman, felt, woman, monuments, box, press, bacall, detail, young, thick, crimson, instrument, hotel, compartment, picked, cornell, Europe, lovers. As the topic to topic model predicts, the keyword distribution for the Gazer’s Spirit Topic is quite different

from the keyword distribution in Topic 4. First, the keywords in Topic 4 demonstrate a more contemporary diction than does the Gazer's Spirit Topic, but the difference is greater than that. Topic 4 includes names of specific artists (Cornell, Bacall), and the language of visual art is more specific ("portrait" in 4 rather than "picture" in 3). The sense of values and hierarchy is also more prominent in the Gazer's Spirit Topic than in Topic 4. For example, topic 3 includes value-laden terms such as beauty, grace, divine, and heaven; whereas, Topic 4 focuses more on tangible objects: monument, box, compartment, foreman. Recalling that Wharton's "Mona Lisa" in the Gazer's Spirit Topic addresses one of the most recognizable portraits in Western art without ever describing its sitter, Topic 4 seems like an interesting place to begin comparing the two topics.

Returning once more to the network of documents and topics in Figure 44, we can see by selecting Topic 4 and highlighting all of its edges in orange, few poems associated with Topic 4 also share edges (connections to) The Gazer's Spirit Topic (still in the top left-hand corner). Following each of the Topic 4 edges, what also becomes clear is that the poems in this neighborhood are also drawn toward other topics. The change in node color (most visible along the longer edges that are highlighted) demonstrates that the topic is also strongly associated with other topics—something not characteristic of the poems from the Gazer's Spirit Topic.

O'Reilley draws from the artist's biography in "Portrait of Madame Monet on Her Deathbed" with an epigraph in which Monet confesses he could not stop painting his dying wife's face, even though as, O'Reilley notes somewhat ironically, most of Monet's portraits of his wife had become forms of her erasure in favor of the artist's attention to light. Not every poem, though, is a portrait. An example of notional ekphrasis, "Internal Monument," G. C. Waldrup's prose poem, narrates the story of a man whose search for permanence and recognition become so burdensome that it leads to his early demise. As the monuments constructed inside the man become externalized after his death, the objects of memorial replace and subsequently erase the memory of the man who paid for their construction in the first place. With so many poems in Topic 4 considering portraits of one kind or another, Jorie Graham's "Drawing Wildflowers" from *Hybrids of Plants and Ghosts* appears to be an outlier, as it does not represent a human figure at all, except that the work of art, her process of drawing wildflowers, makes and unmakes, draws and erases as the pencil and paper make their "gray war" together: "I can make it carry *my* fatigue, / or make it dying, the drawing becoming / a drawing of air making flowerlike wrinkles of the afternoon..." (ll 14-16). Similar to many of the portraits in Topic 4, Graham's wildflowers are as much a manifestation of herself as they are representations of an external, natural object, an impulse considered self-consciously by each of the ekphrases on portraits in this topic.

Table 14: Top 20 Poems Most Closely Associated with Topic 4

Poems with proportion > 10% of Topic 4
"Utopia Parkway" after Joseph Cornell's Penny Arcade Portrait of Lauren Bacall, 1945 – 46 by Linda Hull
Canvas and Mirror by Evie Shockley
Portrait of Madame Monet on Her Deathbed by Mary Rose O'Reilley
Internal Monument by G. C. Waldrup

The Uses of Distortion by Caroline Crumpacker
Joseph Cornell, with Box by Michael Dumanis
Drawing Wildflowers by Jorie Graham
The Eye Like a Strange Balloon Mounts Toward Infinity by Mary Jo Bang
Visiting the Wise Men in Cologne by J.P. White
Rhyme by Robert Pinsky
The Street by Stephen Dobyns
The Portrait by Stanley Kunitz
"Picture of a 23-Year-Old Painted by His Friend of the Same Age, an Amateur" by C.P. Cavafy
Portrait in Georgia by Jean Toomer
For the Poem Paterson [1. Detail] William Carlos Williams
The Dance by William Carlos Williams
Late Self-Portrait by Rembrandt by Jane Hirshfield
Sea Life in St. Mark's Square by Mary O'Donnell
Washington's Monument, February, 1885 by Walt Whitman
Still Life by Jorie Graham
Still Life by Tony Hoagland
The Family Photograph by Vona Groarke

Reading the “unlike” discourses of the Gazer’s Spirit Topic and Topic 4 presents rich opportunities to discuss the plurality of attitudes and approaches women have brought to ekphrasis. The abstractions, erasures, and the language of making or being unmade in the portrait poems in Topic 4 share thematic similarities with Wharton’s “Mona Lisa,” whose famous countenance is never mentioned throughout Wharton’s poem except in the title; however, the means by which Wharton generates the poem, using the archaic discourse of courtly love, is distinctly different from the poems in Topic 4. In Topic 4 speakers self-consciously insert themselves into the display Wharton’s discourse adopts the voice of the detached observer to point to the painter’s inescapable presence in “Mona Lisa.” The combination of topic modeling and network analysis in this case provides a rich context of other poetic discourses that shed light on the subtle

choices and distinctions between the poems that captures the polyvocality of women's ekphrasis. Even with a limited set of 276 poems, topic modeling has distinguished between two kinds of discourse used by female poets to comment upon portraiture.

Perhaps Wharton's use of the archaic discourse of courtly love, as I mentioned earlier, within a context of other poems that similarly draw from such discourse to engage with visual images may seem like an opportunity already afforded to the reader of Hollander's *The Gazer's Spirit*; yet, what distinguishes the social network-situated readings that I'm suggesting here is the ability to consider the poem's deliberate use of that discourse in a way that it can also be compared to the 20 other poems that draw from a discourse of performativity and erasure, such as those in Topic 4. Moreover, the nature of the network encourages the fluid movement between topics and invites comparisons and connections. Networked reading help us better see how the discourses women use in ekphrasis on portraiture draw purposefully from other kinds of discourses, accessing what we have known but that to this point has been difficult to articulate a methodology for—that the tradition of women writing ekphrasis is multifaceted, active, and draws from a wide range of possible discourses.

Familiar Words in Alien Contexts

The third and final possible entry point to viewing the ekphrastic network produced by the topic model is through document to document relationships. By approaching the network this way, we juxtapose the similarities between individual poem-level discourses and can ask detailed questions about how individual poems create and are created by an ekphrastic tradition. Returning one final time to the farmer's market anecdote, comparing documents to other documents is like comparing each

individual neighbor's basket to every other neighbor's basket one at a time. In other words, LDA examines the content of one basket and calculates the degree of similarity between that basket and one other, a process that the model then repeats until every basket has been compared to every other basket. In the case of the ekphrastic dataset where there are 276 possible poems ("baskets") each poem's distribution of words (like the variety of produce in the "basket"), would be compared to each of the other individual poems' distribution of words (variety of produce in each individual "basket"); thus creating 75,900 possible relationships between individual poems.¹²⁰ To make as many comparisons through human reading would be impossible in the span of a single academic career; contrastingly, the LDA algorithm can complete this type of comparison in eight to ten minutes, depending on the capacity of the computer running the software. Granted, the comparisons that the topic model produces are limited—stoplist words have been removed, the LDA makes its predictions based on word co-occurrences rather than semantic context, and the results need to be accompanied with close readings to determine how "actionable" and "coherent" the topics produced by the model truly are. But as we learn how to read the LDA network with an awareness of the questions we can ask and the limitations that do exist, what we find is that the pairing of topic modeling and network analysis present a powerful tool for expanding the scale of our consideration of ekphrasis from 50 poems, as in the case of *The Gazer's Spirit*, to 276 ekphrastic poems. The network also increases the dimensions of that comparison such that we can consider three possible types of relationship between the poems.

¹²⁰ If there are 276 poems in the dataset and we compare them individually with the 275 other poems in the dataset, we arrive at 75,900 by multiplying 276 by 275.

The difference between looking at so many relationships within a relatively small number of documents, is that there are increasing numbers of ekphrastic poems that could be included in the model in future iterations of the project, is that 75,900 edges (lines on the graph connecting two poems or nodes) can be visually confusing. To put so many connections into the limited field of the page or screen is a challenge shared with many current visualization projects that struggle to represent large amounts of data and not a challenge easily overcome within the scope of this particular project; however, by keeping the dataset relatively small and by employing an additional algorithm from social networking, the following graphs attempt to find a middle-ground solution that, as technologies of visualizing large data improve, will likewise be refined. In the following graph, the document to document relationships between 276 poems are displayed in 14 “group” grid areas. The 14 groups do not reflect whether or not poems share the same topics as other poems in the way that the first network graph in the chapter did. Instead, I have used an algorithm from NodeXL which aggregates similarities that the topic model predicts to exist between individual documents and then creates “groups” of nodes (the representation of the poem in the graph, in this case a colored dot) based on how similar they are. Where documents are predicted to include higher degrees of similarity (i.e. the variety of produce in one basket is similar to the variety of produce in another basket) the nodes representing those poems are located spatially within the same grid of the graph. Furthermore, in the graph in Figure 45, darker and thicker blue lines denote stronger similarities between documents, while thinner, lighter blue lines designate documents with less similarity. Each group is characterized by its own color, which can be seen in the nodes and labels for each poem in each group. For example, all of the nodes and

labels for poems in Group 5 are red. Finally, in order to improve the visual comprehensibility of the graph in this first instance, the labels for each node (representing a poem) uses the poem's unique identifying number, rather than the title of the poem.

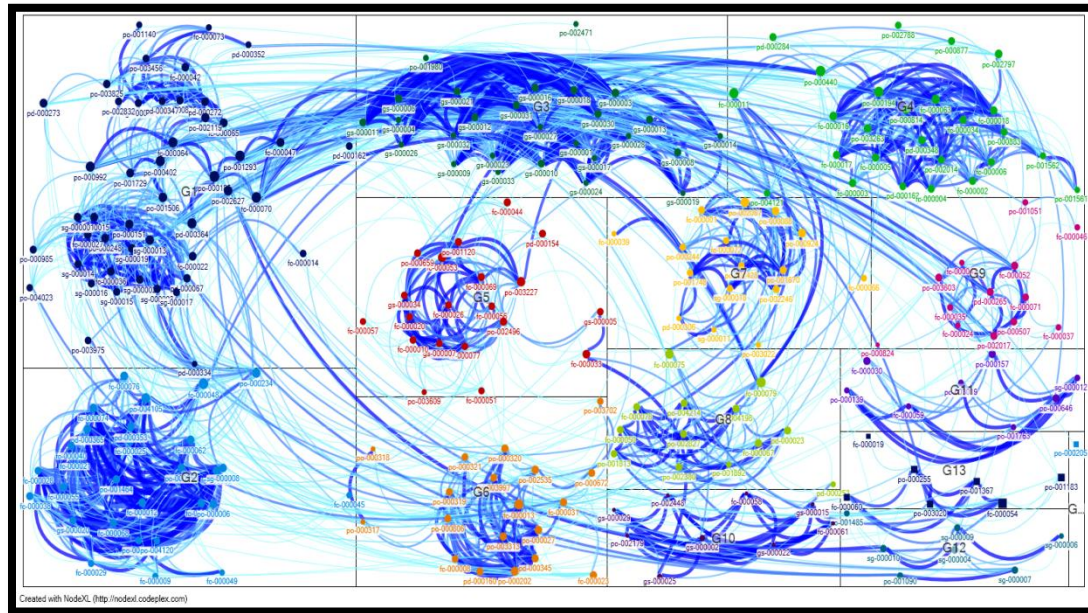


Figure 45: Document to Document (Poem to Poem) Similarities Between 276 Ekphrastic Poems

Essentially, the document to document comparisons generated through the topic model and then grouped together using NodeXL's clustering algorithm creates partitioned fields within the network grid area specific to each "group" of documents. Although the document to document comparison the topic model makes is based on the language from each individual poem and not on the topic assignments for that poem, the likelihood that similar topics would also be found between the two documents that are most similar is relatively high. When NodeXL uses the clustering algorithm to organize the documents spatially, the groups in each grid area tend to draw from one to three of the same topics. For example, the poems in Group 6, tend to draw from Topics 2 and 12. The poems closer to the center of the cluster draw from a higher the proportion of Topic

2 than 12, and as the nodes move further away from the center, the proportion of Topic 2 from which the poems are predicted to draw from diminishes. Poems still included in Group 6 but further to the outskirts may also include distributions of other topics, such as Topic 5. By grouping poems in terms of their individual relationships to other poems across the network, we discover a multi-dimensional way to explore documents as combinations of discourses. Whereas the topic-to-document graph in Figure 40 focused on single discourses, groups of document-to-document relationships allow us to see the multifaceted ways in which documents combine those discourses and to contextualize individual poems within a dialogic of other poems that similarly draw from the same or similar topics but that may not be assigned to the same topics.

There are many possible directions that reading a graph with as much data as Figure 45 can take. Rather than trying to present them all here, I offer a few possibilities as provocations for future research. As our networked reading began by focusing on Edith Wharton's "Mona Lisa," it makes sense to follow the poem through the network. Predictably, many of the poems in Group 3, where "Mona Lisa" is located, are the same poems that draw from Topic 3 and Topic 12.¹²¹ However, there is one distinct edge between "Mona Lisa" and a poem clustered with Group 1, which happens to be John Stone's "Three for the Mona Lisa." Stone's poem, firmly fixated on the portrait's sitter, is sparse—60 words in all, divided into 3 sections. Of the 60 words in the poem, only 17 words would have remained after the stop words were removed during the preprocessing of the dataset; two of those from the title. It is fairly safe to say that what connects these

¹²¹ Recall that topic 12 is expected to be found in 70% of the ekphrastic poems in the dataset. Most of the poems include combinations of Topic 12 with varying proportions of other topics. In Group 3, those topics are most frequently 12 and 4.

two poems has little more to do with anything besides the fact that they mention the same portrait by name. That might not be enough to be a “discourse,”—except that within ekphrasis referring to a visual work by name establishes the immediacy of one’s conversation with it. Though there is little else between Wharton and Stone’s poems, Wharton’s use of the portrait’s title as both a direct invocation of the readers’ awareness of the famous smile and a purposeful avoidance of it participates in a conversation among the community of poems that invite readers to draw on their existing knowledge of the painting, a community of poems that John Stone’s joins many years later. Were there to be more poems added to the dataset in which poets purposefully use the title “Mona Lisa” somewhere within the poem, they would continue to build a dialectical network of ekphrases in which multiple discourses respond to the same work of art. True, critical work about the poetic responses to single works (e.g. *Hunters in the Snow* or *Landscape with the Fall of Icarus*) are numerous; however, a networked approach increases the dimension of such a study by allowing literary scholars to place individual responses to a single artwork within diverse discourse contexts. Wharton’s not only responds to the individual painting, but to an artistic tradition of representation that cannot be untethered from the same archaic diction that populates the other poems in the Gazer’s Spirit Topic. Approaching ekphrastic poems this way is made even more significant as it reinserts ekphrastic work by women inextricably into the tradition of ekphrasis. Whereas previous studies of ekphrasis could, because of the reasonable limitations of human reading and print availability, have missed examples of ekphrasis by women, a computationally-enabled and networked reading strategy insists that ekphrasis by women is not an

extricable, partitioned part of the ekphrastic tradition, but deeply-connected and influential.

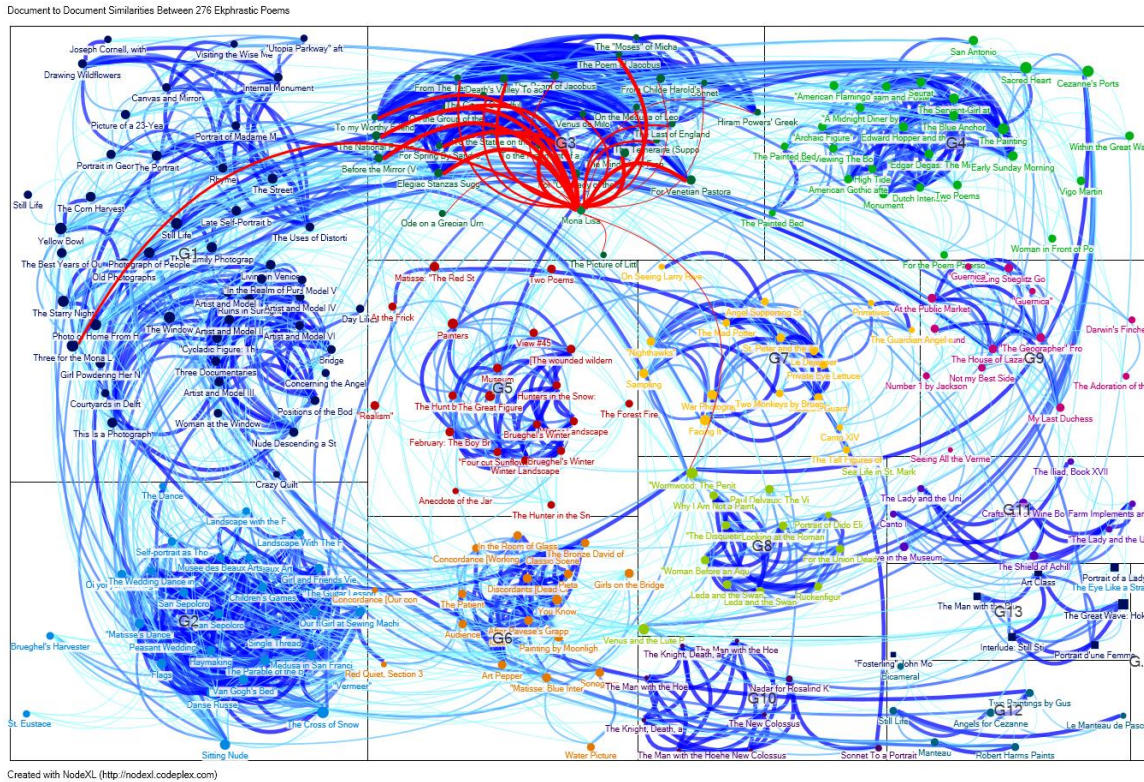


Figure 46: Grouped Document to Document Relationships of 276 Ekphrastic poems, “Mona Lisa” by Edith Wharton Highlighted in Red.

Finally, in considerations of ekphrasis by women, poems about domestic objects of display has most often been either excluded or ignored. Indeed, Loizeaux suggests at the conclusion of her consideration of Marianne Moore and Adrienne Rich’s divergent forms of “feminist ekphrasis:”

It might open to view the home as an ekphrastic arena, as influential in shaping the genre as has been the art museum for the past 200 years. (The home was, after all, where art was displayed before the founding of public art museums in the eighteenth century. (108)

Contemporary women poets attuned to the domestic influence on the tradition of display, arrangement, and craft have continued to turn to household art—bowls, quilts, tapestry, needlepoint, and tea settings, for example. While creating the metadata for the collection, I specifically considered the feminine, domestic tradition of ekphrasis as an integral part of it, and poems that consider household objects, such as Rachel Contreni Flynn’s “Yellow Bowl.” Other considerations of ekphrasis might not have included Flynn’s poem as an example. The subject of a twelve line poem divided into four three-line stanzas, the yellow bowl in question rests on a table in the middle of a contemporary kitchen: “the yellow bowl on the table / rests with the sweet heft / of fruit...” (6-7). Placed at the exact middle of the poem and the room, the bowl shapes the speaker’s perception of herself and her space as arrangements of containers and spaces for nurturing. The speaker, contained by the kitchen, cradles and sways a child in her arms, her own manifestation of the yellow bowl. The arrangement of the space improves the speaker’s capacity for affection because as it staves off the unspoken, but seemingly threatening sense of isolation (“and if I am singing / then loneliness has lost its shape, / then this quiet is only quiet.”)(ll 11-2). Flynn’s poem draws from the recognized ekphrastic tradition of Wallace Stevens’ “A Jar in Tennessee” but also the lesser considered precedents of Lydia Sigorney’s “To a Shred of Linen” and Johanna Baillie’s “Lines to a Teapot.” As of yet, little has been done to consider in greater detail the ways in which early ekphrastic poetry on household objects that might be considered more “craft” than fine art have influenced our ekphrastic heritage; however, the network graph of Flynn’s “Yellow Bowl” suggests that the broad reach of many of its edges in the document to document network in Figure 47 shows how comfortably the poem fits into

the ekphrastic tradition. Entering the ekphrastic network from the perspective of a single poem takes seriously our assumption that ekphrastic poems enter into a rich, historical, social, and ethical conversation with other poets, artists, kinds of art, poems, traditions, and readers.

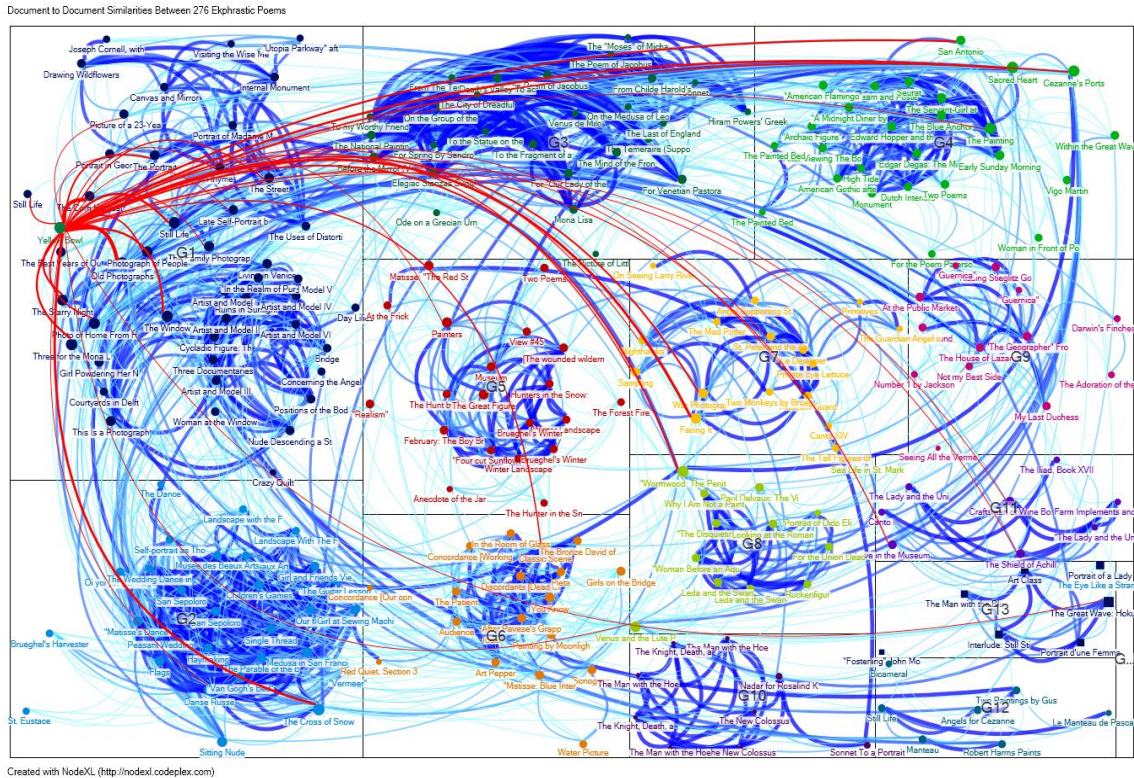


Figure 47: Document to Document Graph of Relationships Between 476 Ekphrastic Poems - "Yellow Bowl" Highlighted in Red

Conclusion

Locating individual ekphrastic poems within the context of ongoing ekphrastic discourses, as I do with networked topic models of ekphrastic poems, foregrounds our understanding of ekphrasis as an ongoing dialectic of multiple, divergent conversations. By understanding topics as forms of discourse, we avoid the mistake of assuming that topics represent a stable idea or object. Topics are produced by the range of available

poetic works in a corpus. As the number of poems and range of poetic types in the modeled corpora grow, the topic output of the model will also reflect those changes, manifesting the dynamic and plastic nature of both discourses and LDA models. Because topic models are so responsive to changes in the composition of the dataset, network analysis is a fitting way in which to visualize and to “read” those discourses. Whereas previous theories of ekphrasis often perpetuate a static or limited understanding of ekphrasis (as a formal principle of all poetry akin to Murray Kreiger, as a manner of pictorialism, as semiotic translation, as a form of ideological narratives) the advantage to understanding ekphrasis as a dialogic engagement with multiple discourses and forms of meaning is that it better accounts for the inevitable changes and future developments of the genre without limiting it to a stable ideological construct in which the genre is considered as acting out moral anxieties about otherness. Therefore, LDA and network analysis are rich methodological approaches to the study of ekphrasis. While this chapter only hints provocatively toward possible future inquiry, the promise of the methodology is that it responds to the dynamic and responsive ekphrastic situation as a poet’s entrance into an ongoing, network of social, visual, and verbal conversations.

This exploratory approach to large numbers of texts, and it is possible that the researcher who sifts through and closely reads poems individually decides that some of the results are not significant and that the model may need modifications. For instance, 276 poems forms a small dataset to work with. Increasing the total numbers of ekphrastic poems in the dataset would improve the model’s topic distribution. Furthermore, the ability to differentiate poems within the dataset by the date of publication may give increased weight to poems that do not have distinguishing archaic terms such as “thee”

and “thou.” We might also discover that results from a few poems that are longer than the rest pull the topic distributions in ways that skew the representation of the remaining texts. In this instance, better “chunking” or division of documents would improve the overall shape and suggestiveness of the models produced with LDA and, correspondingly, the network graphs which represent those results.

Current development in topic modeling looks quite promising for figurative language datasets. Interactive topic modeling programs allow users to interrupt, modify, and rebuild topic models without having to start at the beginning each time. While some early results of less successful models may be frustrating, interactive topic model programs currently in development might improve our ability to create useful models. With interactive topic models, human input during the running of the topic model that allows for corrections while generating the model may help to improve future outcomes.

However, even if more, better data could alter the kinds of hypotheses we form about the results or more interactive topic modeling programs could help us to correct for ambiguities, the methodology itself remains highly promising and has the potential to lead to close readings that pair texts in fresh and innovative ways. In this regard, Moretti makes his most powerful point. What LDA models, graphs, trees, and tables do is increase the researcher and literary scholar’s scope. Rather than suffer the limitations of human memory, this form of computational analysis encourages connected discovery that extends disciplinary expertise in useful ways—much the way Vannavar Bush imagined the Memex would. In other words, the expertise and deep knowledge of the human scholar is prompted by the voluminous capacity of “reading machines,” as Stephen

Ramsay calls them, and visualizations to expand and to test the literary scholar's assumptions or to attend to important nuances in existing knowledge.

I'm unable to explore here all of the possible questions we might be prompted to ask by the combination of topic modeling and network analysis to render networked, dynamic readings of ekphrasis. The purpose of this chapter has been to explore what opportunities might be presented and what questions asked by combining the computational strengths of algorithms such as LDA and the visualizations produced through network graphs. To read ekphrasis as/in a dynamic network allows the literary scholar to draw from an unprecedented scope of ekphrastic examples and to make critical interventions at multiple reading "distances." By reading and navigating collections of ekphrasis this way, we are better able to recast its canon, its tradition, and our understanding of how the genre operates.

Conclusion

Much like the genre of ekphrasis itself, this study has been both a response to existing theorizations and a proposal for how future research can make use of existing technologies to crack open the bindings of the ekphrastic canon to account for its diverse range of responses to the visual arts. Acknowledging that women are and have been vital practitioners of ekphrasis requires a refiguring of our methodological approach that inserts contributions by women at the center of the conversation. Theorizing ekphrasis as a network and modeling it that way attends to a growing awareness that both men and women are always writing ekphrasis with a sense of afterness—rather than from a sense that men have written a tradition that women then respond to.

This study, however, purposefully resists the inclination toward answering the question: “How do women write about the visual arts?” To do so would unnecessarily run counter to the diversity of responses we have come to expect. Instead, I have replaced that question with one I believe to be more provocative: “How can we better understand and represent the polyvocality and counter-voices that seem so alluring to poets about the ekphrastic situation?”—a question that is predominantly methodological.

The idea of “modeling” ekphrasis as individual poems by crafting complex social networks of literary and social contexts is a new and experimental approach that invites future scholarship to explore more fully the limits of its usefulness. The first part of this study argues for networks that place poetic language as the edges of ekphrastic networks, connecting nodes of subjectivity or genre. However, the range of possible approaches

might be more than what has been explored here. For example, one might model the relationships between multiple poems that respond to the same work of art, teasing out the social network between poets who enter into the “elastic environment of other, alien words about the same object...” as Bakhtin suggests (276). Another possibility would be to model the social network between multiple poems that respond directly and explicitly to one another, where the edges of the network are formed by shared language—such as those that respond to Auden’s opening lines from *Musée des Beaux Arts*: “About suffering, they were never wrong / The old master’s.” Another advantage to a social network method is that networks are graphic and linguistic. More could be done in future research with the use of images as they come into conversation with one another through the language of ekphrasis, exploiting the capacity for networks to integrate images and text, to create juxtapositions, and to create spatial and temporal arguments at the same time.

In Part II, chapters four and five respond to the suggestiveness of the methodologies in Part 1 by considering how wide the scholarly lens might extend. There are two methods at work together in this section, both of which focus quite narrowly on issues of language in ekphrasis. Chapter four addresses how to find, describe, and prepare ekphrastic poems for computational modeling that is very different from the close and detailed readings in Part 1. The challenge remains even today a matter of finding ways to collect examples of ekphrastic poetry by women and future iterations of the digital collection will and should focus on how to increase the size of the corpus. Furthermore, the potential to improve, describe, and manipulate the dataset hinges on the issue of methodology. Expanding the dataset correspondingly improves the quality of

questions we ask and the usefulness of the results we discover when we read them from a distance.

In the final chapter, the small networks of individual poems are thrown open as a means to understand and to provoke thoughtful conversations about the way in which ekphrastic poetry enters into a space alive with familiar and alien other discourses. Visualizations lead to a discovery of the kinds of questions we can ask by adjusting the aperture of the network lens. What I was unable to fully explore here and what promises to be a very rich area for future study is how topic modeling and network analysis might be useful for placing the collection of ekphrastic poems into much wider context by combining it with poetry that is not ekphrastic. As the example of “The Starry Night” in chapter 4 suggests in its sharing of topics with Paul Laurence Dunbar’s poem “We Wear the Mask,” by placing ekphrasis back into the context of non-ekphrastic poetry, we stand to learn more about the related discourses ekphrasis shares with other types of poetry (eg. Elegy).

Most significantly, though, this study is meant to open the door to future studies in its response to those like Alan Liu who ask “Where is the cultural criticism in DH?” By marrying enduring humanities questions and concerns that face cultural critics, this project suggests that cultural studies approaches to genre can inform the network methodology we might use to study it. Finally, this study attends to the methodological questions of digital humanities at the same time that it considers how technology helps to address concerns at the heart of cultural studies. Finally, this dissertation represents an invitation to literary scholars to consider how to leverage the strengths of technology to ask more questions or to refine existing ones, because doing so encourages, in Adrienne

Rich's words, "looking back,... seeing with fresh eyes, ... entering into an old text from a new critical direction" that is "for women far more than a chapter in cultural history; it is an act of survival."

Appendix A

<See AppendixA.pdf>

Appendix B

<See AppendixB.pdf>

Appendix C

<See AppendixC.pdf>

Appendix D

<See AppendixD.pdf>

Appendix E

Mallet test parameters

Test 1

```
mallet train-topics --input poems-nostop-seq.mallet --num-threads 2 --num-topics 40 --  
optimize-interval 10 --output-model poems08052012test4.model --output-doc-topics  
poesm08052012topicstest4.txt --output-topic-keys poems08052012test4keys.txt
```

Test 2

```
mallet train-topics --input poems-TT-seq.mallet --num-threads 2 --num-topics 40 --  
optimize-interval 10 --output-model poems08052012test3.model --output-doc-topics  
poesm08052012topicstest3.txt --output-topic-keys poems08052012test3keys.txt
```

Test 3

```
mallet train-topics --input poems-sl2-seq.mallet --num-threads 2 --num-topics 40 --  
optimize-interval 10 --output-model poems08052012test2.model --output-doc-topics  
poesm08052012topicstest2.txt --output-topic-keys poems08052012test2keys.txt
```

Test 4

```
mallet train-topics --input poems-seq.mallet --num-threads 2 --num-topics 40 --optimize-  
interval 10 --output-model poems08052012test1.model --output-doc-topics  
poems08052012_test1.txt --output-topic-keys poems08052012-test1keys.txt
```

****Note:** The naming of the files will be confusing here. The tests were actually performed in exactly the opposite order they appear in the text here. For readability in the text, I called them Test 1-4, though the file names will read as Test 4-1.

Bibliography

Alexander, Elizabeth. *American Sublime*. First ed. St. Paul, Minn.: Graywolf Press, 2005.

Print.

---. *Antebellum Dream Book*. 1st ed. St. Paul, Minn.: Graywolf Press, 2001. Print.

---. *Crave Radiance: New and Selected Poems 1990-2010*. St. Paul, Minn.: Graywolf Press, 2012. Print.

---. *Power and Possibility: Essays, Reviews, and Interviews*. Ann Arbor: University of Michigan Press, 2007. Print.

---. *The Black Interior: Essays*. 1st ed. St. Paul, Minn.: Graywolf Press, 2004. Print.

---. *The Venus Hottentot*. St. Paul, Minn.: Graywolf Press, 2004. Print.

Alpers, Svetlana. *The Art of Describing: Dutch Art in the Seventeenth Century*. Chicago: University of Chicago Press, 1984. Print.

Austin, Doris. "The Woman in the Sideshow" *New York Times*. 30 Sept. 1990. Web. 24 Oct. 2012.

Bakhtin, M. M. *The Dialogic Imagination: Four Essays*. Austin: University of Texas Press, 1982. Print.

Bawarshi, Anis S, and Mary Jo Reiff. *Genre : An Introduction to History, Theory, Research, and Pedagogy*. West Lafayette, Ind.; Fort Collins, Colo.: Parlor Press ; WAC Clearinghouse, 2010. Print.

Beasley-Murray, Tim. *Mikhail Bakhtin and Walter Benjamin : Experience and Form*. New York: Palgrave Macmillan, 2007. Print.

- Beebee, Thomas O. *The Ideology of Genre : A Comparative Study of Generic Instability*.
University Park, Pa.: Pennsylvania State University Press, 1994. Print.
- Berger, John. *Ways of Seeing*. London: Penguin Books, 1972. Print.
- Bishop, Elizabeth. *One Art: Letters*. Ed. Robert Giroux. New York: Farrar, Straus and Giroux,
1995. Print.
- . *The Collected Prose*. New York: Farrar, Straus and Giroux, 1984. Print.
- . *The Complete Poems, 1927-1979*. Later prt. New York: Farrar, Straus and Giroux, 1984.
Print.
- Bishop, Elizabeth, and William Benton. *Exchanging Hats: Paintings*. New York: Farrar,
Straus and Giroux, 2011. Print.
- Blei, David. "Probabilistic Topic Models." *Communications of the ACM* 55.4 (2012): 77–84.
Print.
- Blount, Marcellus. "Paul Laurence Dunbar and the African American Elegy." *African
American Review* 41.2 (2007): 239–246. Print.
- Boland, Eavan. "An Un-Romantic America." *Parnassus: Poetry in Review* 14.2 (1988): 73–
92. Print.
- Borgatti, S.P. (2002) *NetDraw Software for Network Visualization*. Analytic Technologies:
Lexington, KY. Available from <https://sites.google.com/site/netdrawsoftware/>
- Brandes, Ulrik, and Dorteia Wagner. (2011) *Visone*. (Version 2.6.2) [Software] Available
from <http://visone.info/html/about.html>.
- Chang, Jonathan et al. "Reading Tea Leaves: How Humans Interpret Topic Models." *Neural
Information Processing Systems (NIPS)*. 2009. Web. 3 Oct. 2012.

- Cheeke, Stephen. *Writing for Art : The Aesthetics of Ekphrasis*. Manchester: Manchester University Press, 2008. Print.
- Cheney, Lynne V. "Humanities in America. A Report to the President, the Congress, and the American People." (1988): n. pag. Web. 24 Oct. 2012.
- Colleary, Elizabeth. "Josephine Nivison Hopper: Some Newly Discovered Works." *Women's Art Journal* 25.1 (2004) Print.
- "Condition, N." *Oxford English Dictionary* Sept. 2012. Web. 29 Oct. 2012.
- Costello, Bonnie. *Planets on Tables: Poetry, Still Life, and the Turning World*. Ithica: Cornell University Press, 2008. Print.
- . "Vision and Mastery in Elizabeth Bishop." *Twentieth Century Literature* 28.4 (1982): 351–370. Web. 17 Mar. 2012.
- Denham, Robert D. *Poets on Paintings: A Bibliography*. Jefferson, N.C.: McFarland, 2010. Print.
- Derrida, Jacques. "The Law of Genre." Trans. Avital Ronell. *Critical Inquiry* 7.1 (1980): 55–81. Print.
- Devitt, Amy J. "Integrating Rhetorical and Literary Theories of Genre." *College English* 62.6 (2000): 696–718. Web. 12 Oct. 2012.
- Diggory, Terence. *William Carlos Williams and the Ethics of Painting*. 1ST ed. Princeton, N.J: Princeton Univ Pr, 1991. Print.
- Doty, Mark. *The Art of Description: World Into Word*. St. Paul, Minn.: Graywolf Press, 2010. Print.
- Elkins, James. *On Pictures and the Words That Fail Them*. New York: Cambridge University Press, 1998. Print.

- Elson, David K., and Nicholas Dames, and Kathleen R. McKeown. "Extracting Social Networks from Literary Fiction." *Proceedings of the 48th Annual Meeting of the Association for Computational Linguistics*. Uppsala, Sweden: Association for Computational Linguistics, 2010. 138–147. Web. 17 Apr. 2012.
- Fischer, Barbara K. *Museum Mediations: Reframing Ekphrasis in Contemporary American Poetry*. 1st ed. New York: Routledge, 2006. Print.
- Fish, Stanley. "Mind Your P's and B's: The Digital Humanities and Interpretation." *Opinionator*. Web. 25 Oct. 2012.
- . "The Digital Humanities and the Transcending of Mortality." *Opinionator*. Web. 25 Oct. 2012.
- . "The Old Order Changeth." *Opinionator*. Web. 25 Oct. 2012.
- Francis, Terri. "I and I: Elizabeth Alexander's Collective First-Person Voice, the Witness and the Lure of Amnesia." *Gender Forum: An Internet Journal for Gender Studies* 22 (2008): 1–12. Web.
- Frank, Joseph. *The Idea of Spatial Form*. New Brunswick: Rutgers University Press, 1991. Print.
- Frye, Northrop. *Anatomy of Criticism: Four Essays*. Updated. Princeton, N.J.: Princeton University Press, 2000. Print.
- Galore, Michael. "Mosaic Browser Lights Up Web With Color, Creativity" *Wired.com. This Day In Tech*. 22 Apr. 1993. Web. 24 Oct. 2012.
- Genette, Gérard. *Narrative Discourse : An Essay in Method*. Ithaca, N.Y.: Cornell University Press, 1980. Print.

- . *Paratexts : Thresholds of Interpretation*. Cambridge; New York, NY, USA: Cambridge University Press, 1997. Print.
- . *The Aesthetic Relation*. Ithaca, N.Y.: Cornell University Press, 1999. Print.
- Genette, Gérard, and G. M Goshgarian. *The Work of Art*. Ithaca, N.Y.: Cornell University Press, 1997. Print.
- Genette, Gérard, and Ann Levonas. "Boundaries of Narrative." *New Literary History* 8.1 (1976): 1–13. Web. 15 Oct. 2012.
- "Geographical Record." *Geographical Review* 14.4 (1924): 639–664. Print.
- Gilman, Sander L. *Difference and Pathology : Stereotypes of Sexuality, Race, and Madness*. Ithaca: Cornell University Press, 1985. Print.
- Golahny, Amy. *The Eye of the Poet : Studies in the Reciprocity of the Visual and Literary Arts from the Renaissance to the Present*. Lewisburg; London: Bucknell University Press ; Associated University Presses, 1996. Print.
- Gold, Matthew, ed. *Debates in the Digital Humanities* St. Paul: University of Minnesota Press. Print. 16 Nov. 2012.
- Goodman, Nelson. *Languages of Art: An Approach to a Theory of Symbols*. 2d ed. Indianapolis: Hackett, 1976. Print.
- Hagstrum, Jean H. *The Sister Arts: The Tradition of Literary Pictorialism and English Poetry from Dryden to Gray*. Chicago: University of Chicago Press, 1987. Print.
- Harrow, Susan. "New Ekphrastic Poetics." *French Studies* 64.3 (2010): 255–264. Web. 29 Oct. 2012.
- Hedges, Elaine, and Ingrid Wendt, eds. *In Her Own Image: Women Working in the Arts*. New York: Feminist Press, 1980. Print.

- Hedley, Jane, Nick Halpern, and Willard Spiegelman. *In the Frame: Women's Ekphrastic Poetry from Marianne Moore to Susan Wheeler*. Newark, DE: University of Delaware Press, 2009. Print.
- Heffernan, James A. W. *Museum of Words: The Poetics of Ekphrasis from Homer to Ashbery*. Chicago: University Of Chicago Press, 2004. Print.
- Hirschmann, Hagen, Anke Lüdeling, and Amir Zeldes. "Measuring and Coding Language Change: An Evolving Study in a Multilayer Corpus Architecture." *J. Comput. Cult. Herit.* 5.1 (2012): 4:1–4:16. Web. 3 Oct. 2012.
- Holcomb, Grant, and University of Rochester. Memorial Art Gallery. *Voices in the Gallery : Writers on Art*. Rochester, NY: University of Rochester Press, 2001. Print.
- Hollander, John, and Various Authors. *The Gazer's Spirit: Poems Speaking to Silent Works of Art*. 1st ed. Chicago: University Of Chicago Press, 1995. Print.
- Hopper, Edward. "A Statement by the Chairman of the Jury." *The Catalogue of the Twenty-Second Biennial Exhibition of Contemporary Oil Paintings*. Washington, D.C.: Corcoran Gallery of Art, 1951. Print.
- . *A Woman in the Sun*. The Whitney Museum of Art. Web. 9 Nov. 2011.
- . *Artist's ledger—Book III*. 1961. Artist's Notebook. 96.210a-hhh. New York.
- Jockers, Matthew. "» The LDA Buffet Is Now Open; or, Latent Dirichlet Allocation for English Majors." *Matthew L. Jockers* 29 Sept. 2011. Web. 29 Oct. 2012.
- Jones, Amelia. *The Feminism and Visual Culture Reader*. London; New York: Routledge, 2003. Print.
- Kao, Anne, and Steve R. Poteet. *Natural Language Processing and Text Mining*. New York, London: Springer, 2006. Print.

- Kendall, Richard, and Griselda Pollock. *Dealing With Degas: Representations of Women and the Politics of Vision*. New York, NY: Diane Pub Co, 1998. Print.
- Kennedy, David. *The Ekphrastic Encounter in Contemporary British Poetry and Elsewhere*. Farnham, Surrey, UK; Burlington, VT: Ashgate, 2012. Print.
- Kirschenbaum, Matthew G. "Done: Finishing Projects in the Digital Humanities." *DHQ* 3.2 (2009): n. pag. Web. 17 Sept. 2012.
- Lanham, Richard A. *A Handlist of Rhetorical Terms*. Berkeley: University of California Press, 1991. Print.
- Leifeld, Philip.(2011) *Discourse Network Analyzer (DNA)*. (Version 1.28) 2011.
- Levin, Gail, and Edward Hopper. *The Poetry of Solitude : A Tribute to Edward Hopper*. New York, NY: Universe Pub., 1995. Print.
- Loizeaux, Elizabeth Bergmann. *Twentieth-Century Poetry and the Visual Arts*. 1st ed. Cambridge, UK; New York: Cambridge University Press, 2008. Print.
- "Map Collections Home Page." *The Library of Congress Map Collections*. Web. 15 Apr. 2012.
- McCallum, Andrew Kachites. (2002). *MALLET: A Machine Learning for Language Toolkit* (Version 2.0) [Software]. Available from <http://mallet.cs.umass.edu>
- McGann, Jerome. *Radiant Textuality: Literature After the World Wide Web*. New York, NY: Palgrave Macmillan, 2004. Print.
- McGann, Jerome J. *The Textual Condition*. Princeton, N.J: Princeton University Press, 1991. Print.
- McNally, Nancy L. "Elizabeth Bishop: The Discipline of Description." *Twentieth Century Literature* 11.4 (1966): 189–201. Web. 17 Mar. 2012.

- Mimno, David. "Computational Historiography: Data Mining in a Century of Classics Journals." *ACM Journal of Computational Cultural Heritage* 5.1 (2012): 19. Print.
- Mitchell, W. J. T. *Iconology: Image, Text, Ideology*. Chicago: University of Chicago Press, 1986. Print.
- . *Picture Theory: Essays on Verbal and Visual Representation*. Chicago: University of Chicago Press, 1994. Print.
- Mitchell, W. J. T. *Picture Theory: Essays on Verbal and Visual Representation*. Chicago: University of Chicago Press, 1995. Print.
- Moretti, Franco. "Conjectures on World Literature." *New Left Review* 1 (2000): 54–68. Print.
- . *Graphs, Maps, Trees: Abstract Models for a Literary History*. London; New York: Verso, 2005. Print.
- . "Pamphlet 2: Network Theory, Plot Analysis." 11 May 2011. Web. 17 Apr. 2012.
- Moriarty, Laura. *Nude Memoir*. San Francisco, C.A.: KRUPSKAYA, 2000. Print.
- Mueller, Lisel. *The Need to Hold Still: Poems*. Baton Rouge, LA: LSU Press, 1980. Print.
- . *The Private Life: Poems*. Baton Rouge, LA: LSU Press, 1976. Print.
- Mulvey, Laura. *Visual and Other Pleasures*. Bloomington: Indiana University Press, 1989. Print.
- Nelson, Robert K. "Mining the Dispatch." *Mining the Dispatch*. Web. 3 Oct. 2012.
- Ni, Xiaochuan et al. "Mining Multilingual Topics from Wikipedia." *Proceedings of the 18th International Conference on World Wide Web*. New York, NY, USA: ACM, 2009. 1155–1156. Web. 3 Oct. 2012.
- NodeXL. (2008) Seattle, WA: Social Media Research Foundation (Version 1.0.1.226) [Software] 2012.

- North, Michael. "The Public Monument and Public Poetry: Stevens, Berryman, and Lowell." *Contemporary Literature* 21.2 (1980): 267–285. Print.
- Owens, Trevor. "Defining Data for Humanists: Text, Artifact, Information or Evidence?" *Digital Humanities Now* (2012): n. pag. Web. 25 Oct. 2012.
- Paul, Catherine E. *Poetry in the museums of modernism : Yeats, Pound, Moore, Stein*. Ann Arbor: University of Michigan Press, 2002. Print.
- Pickard, Z. "The Morality of Aesthetic Action: Elizabeth Bishop, Randall Jarrell, and the Politics of Poetry." *American Literature* 79.2 (2007): 393–411. Web. 17 Mar. 2012.
- Pollock, Griselda, and Joyce Zemans. *Museums after modernism : strategies of engagement*. Malden, MA: Blackwell, 2007. Print.
- "Prosopopoeia, N." *OED Online* Sept. 2012. Web. 21 Nov. 2011.
- Qureshi, Sadiya. "Displaying Sara Baartman, The 'Hottentot Venus'." *History of Science* xlii (2004): 233–257. Print.
- Rhody, Lisa. "A Method to the Model: Responding to Franco Moretti's Network Theory, Plot Analysis." *Magazine Modernisms* 22 Aug. 2011. Web. 17 Apr. 2012.
- . "Chunks, Topics, and Themes in LDA." *Lisa @ Work*. Blog. 1 Apr. 2012. Web. 3 Oct. 2012.
- Rich, Adrienne. *Arts of the Possible : Essays and Conversations*. New York: W.W. Norton, 2001. Print.
- Robillard, Valerie K, and Else Jongeneel. "Pictures Into Words : Theoretical and Descriptive Approaches to Ekphrasis." Victoria: VU University Press, 1998. Print.
- Rosenbaum, Susan. "Elizabeth Bishop and the Miniature Museum." *Journal of Modern Literature* 28.2 (2005): 61–99. Print.

- Rotella, Guy. *Castings: Monuments and Monumentality in Poems by Elizabeth Bishop, Robert Lowell, James Merrill, Derek Walcott, and Seamus Heaney*. Nashville, TN: Vanderbilt UP, 2004. Web. 17 Mar. 2012.
- Rydberg-Cox, Jeff. "Social Networks and the Language of Greek Tragedy." *Journal of the Chicago Colloquium on Digital Humanities and Computer Science* 1.3 (2011): n. pag.
- Saintsbury, George. *The Earlier Renaissance*. New York, NY: Scribner, 1901. Print.
- Sample, Mark. "Notes Towards a Deformed Humanities." *SAMPLE REALITY*. 2 May 2012. Web. 25 Oct. 2012.
- Samuels, Peggy. *Deep Skin: Elizabeth Bishop and Visual Art*. Ithica, N.Y.: Cornell Univ Pr, 2010. Print.
- . "Elizabeth Bishop and Paul Klee." *Modernism/modernity* 14.3 (2007): 543–568. Web. 17 Mar. 2012.
- . "Verse as Deep Surface: Elizabeth Bishop's New Poetics, 1938-39." *Twentieth Century Literature* 52.3 (2006): 306–329. Print.
- Saunders, Judith. "'Large Bad Picture' and 'The Rime of the Ancient Mariner': A Note on Elizabeth Bishop's Modernist Aesthetics." *ANQ* 8.3 17–22. Print.
- Scarry, Elaine. *Dreaming by the book*. New York: Farrar, Straus and Giroux, 1999. Print.
- Schelling, Friedrich Wilhelm Joseph von, and James Gutmann. *Schelling: Of Human Freedom*. Chicago: Open Court Pub. Co., 1936. Print.
- Schreibman, Susan, Ray Siemens, and John Unsworth. *Companion to Digital Humanities*. Hardcover. Oxford: Blackwell Publishing Professional, 2004.
- Scott, Grant F. "The Rhetoric of Dilation: Ekphrasis and Ideology." *Word & Image* 7.4 (1991): 301–310. Web. 12 Oct. 2012.

- . *The Sculpted Word: Keats, Ekphrasis, and the Visual Arts*. Hanover, NH: University Press of New England, 1994. Print.
- Sinclair, John. "Developing Linguistic Corpora: a Guide to Good Practice." *AHDS Guides to Good Practice*. 2004. Web. 17 Sept. 2012.
- Srivastava, Ashok, and Mehran Sahami. *Text Mining: Classification, Clustering, and Applications*. Boca Raton, FL: CRC Press, 2009. Print.
- Stein, Gertrude. *Lectures in America*. New York, NY: Beacon Press, 1985. Print.
- Steiner, Wendy. *The Colors of Rhetoric: Problems in the Relation Between Modern Literature and Painting*. Chicago: University of Chicago Press, 1982. Print.
- Steyvers, M., and T. Griffiths. "Probabilistic Topic Models." *Handbook of Latent Semantic Analysis* 427.7 (2007): 424–440. Print.
- Talley, Edmund M. et al. "Database of NIH Grants Using Machine-learned Categories and Graphical Clustering." *Nature Methods* 8.6 (2011): 443–444. Web. 3 Oct. 2012.
- The Academy of American Poets. "Poets.org." *Poets.org*. Poetry Archive. 2012 1997. Web. 29 Oct. 2012.
- Tufte, Edward R. *Beautiful Evidence*. 1st ed. Cheshire, CT: Graphics Press, 2006. Print.
- Underwood, Ted. "What Kinds of 'Topics' Does Topic Modeling Actually Produce?" *The Stone and the Shell*. Blog. 1 Apr. 2012. Web. 30 Sept. 2012.
- Vickery, John B. "Ekphrasis: The Illusion of the Natural Sign (review)." *MFS Modern Fiction Studies* 39.2 (1993): 433–435. Print.
- "Visual Art and the Ballets Russes." Web. 16 Sept. 2012.
- Wagner, Peter. *Icons, Texts, Iconotexts : Essays on Ekphrasis and Intermediality*. Berlin; New York: W. de Gruyter, 1996. Print.

Wasserman, Stanley, and Katherine Faust. *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press, 1994. Print.

Wilson, Judith. "Sniffing Elephant Bones: The Poetics of Race in the Art of Ellen Gallagher." *Callaloo* 19.2 (1996): 337–339. Print.

Wood, Gabby. "Edward Hopper's Wife and Muse." *The Observer* 24 Apr. 2004 : 6. Print.

Wright, John Kirtland. "A Plea for the History of Geography." *Isis* 8.3 (1926): 477–491. Print.