



PROJECT MUSE®

## Marianne Moore's Precision

Natalia Cecire

Arizona Quarterly: A Journal of American Literature, Culture, and Theory,  
Volume 67, Number 4, Winter 2011, pp. 83-110 (Article)

Published by University of Arizona  
DOI: [10.1353/arq.2011.0025](https://doi.org/10.1353/arq.2011.0025)



➔ For additional information about this article

<http://muse.jhu.edu/journals/arq/summary/v067/67.4.cecire.html>

---

NATALIA CECIRE

---

## Marianne Moore's Precision

Neatness of finish! Neatness of finish!  
Relentless accuracy is the nature of this octopus  
with its capacity for fact.

Marianne Moore, "An Octopus" (1924)

THAT MARIANNE MOORE IS A "PRECISE" POET HAS long been a commonplace of Moore criticism. "We are now used to calling Marianne Moore an observer of unique precision," Evelyn Feldman and Michael Barsanti write (7), while Bonnie Costello indicates that "precision is [Moore's] passion" (*Marianne Moore* 38). Robin G. Schulze, meanwhile, indicts Grace Schulman's edition of Moore's poems (2003) because, as she puts it, "the saddest argument that this entire edition makes is that Moore was not very precise" ("How Not to Edit" 132). Schulze's comment, suggesting that any half-awake reader of Moore should *know better* than to suggest that Moore was not precise, reveals how central the idea of precision—or as Schulman herself puts it, "exactitude"—has come to be for Moore studies (xxvi).

Precision is perhaps the most widely agreed-upon feature of Moore's poetics, and as a mode of securing knowledge, it has served to ratify Moore's position as a central figure of American modernism. Modernist writers sought to create a literature that constituted real knowledge, knowledge in a strong sense, of which scientific knowledge was, at the turn of the twentieth century, the gold standard. As Thorstein Veblen put it in 1906, "modern common-sense holds that the scientist's answer is the only ultimately true one" (4). Thus Ezra Pound could write approvingly that "if Marconi says something about ultra-short waves it MEANS something. Its meaning can only be properly estimated by someone who KNOWS" (*ABC* 25). Marconi, the physicist-inventor, and not the poet or the literature professor, was the exemplar of the

*meaningful* speaker. Scientific knowledge was held up as paradigmatic of knowledge itself, and experimental science, as a set of protocols and conventions for obtaining it, was therefore looked to as a model for what Charles Altieri has termed the “new realism” (12). Precision is a scientific desideratum, an “epistemic virtue,” as Lorraine Daston and Peter Galison would call it (39), and thus Moore’s “precise” poetics has generally been taken as evidence of a modernist seriousness about reality.

While the scientific new realism was a widespread feature of modernism, and one particularly attributed to its more vocal male practitioners (Altieri, following Daniel Albright and Ian F. A. Bell, takes Pound and William Carlos Williams as his case studies), it is Moore who seems to be most widely and unanimously called a “precise” writer—so frequently, in fact, that the suggestion of “fussy” emerges. We are much more likely to discuss other modernist poets in terms of “sincerity,” as Ezra Pound would call it, or “objectification,” in Louis Zukofsky’s formulation, while Moore is always “precise.”<sup>1</sup> If modernist poetics involved a heroic, even scientific commitment to a realism more realist than realism, there nonetheless seems to be a critical suspicion that Moore may have even taken it a bit too far—that, like that of the glacier she describes in “An Octopus,” Moore’s relentless accuracy and capacity for fact have a threatening quality to them. Thus among Moore’s contemporaries as well as in subsequent criticism, Moore’s precision has been read doubly, to confirm her as both a serious, scientific-minded modernist and an easily dismissed fussy spinster or a “hysterical virgi[n],” as Hart Crane put it in a 1927 letter (522).

That the same attribute—precision—should both ratify Moore’s poetics as capable of knowledge and disqualify it as hysterically incapable of knowledge discloses its complexity. In this essay I wish to put pressure on this notion that Moore is “precise,” not to overturn the label but to examine its implications for the way that Moore’s poetry is constituted as a site of knowledge. The ambivalence of precision rests on its applicability to two different but linked domains. Insofar as precision is the mark of a laudable accountability to reality, it is understood as a neutral scientific practice, independent of material or social contingencies. Yet insofar as it is read as fussiness, it is a quality inhering in the poet herself: Moore made out to be a precise *person*, making precision a feature of her personality—a virtue. And indeed, while there seems

at first to be no *necessary* connection between precision and morality, in practice Moore criticism has always made precision a righteous honesty. A remark by Wallace Stevens, in a review of Moore's 1935 *Selected Poems*, may serve as an example. "Miss Moore is scrupulous," Stevens writes. "That Miss Moore uses her wit is a bit of probity . . . . Instead of being intentionally one of the most original of contemporary or modern poets, she is merely one of the most truthful" (113, 117). Stevens's remark calls attention to the double status of being "truthful": at once an intellectual aspiration and a moral virtue. Indeed, Stevens opens his review by attributing to Moore a "scrupulous spirit," a personal quality that he hastens to reassure us is not the same as "hyperaesthesia," a malady of poetic "fastidious[ness]," underscoring rather than deflecting the dubiousness of precision's virtue (113). Precision here verges on pathology: even Stevens' warm review seems to register a profound mistrust that reveals the extent to which precision's epistemic and moral valences intertwine.

Precision is thus an important descriptor of Moore's poetics, but a complex one that not only reveals but also occasions considerable ambivalence. Stevens's epithet, "scrupulous," connoting an almost pathological caution ("Scruple"), is one that has been echoed by critics from Kenneth Burke to Sandra Gilbert. Thus Moore's poetic precision enacts the knowledge-securing properties as well as the ambivalences of the science of her period—specifically, the science of natural history. Scientific knowledge stood in for "the only ultimately true" knowledge, yet science has always been polyvocal; as Steven Shapin has succinctly put it, "faith in Method grew even as incompatible versions of what such a Method might be proliferated" (32).<sup>2</sup> Thus Moore's precision cannot be said to imitate a coherent scientific practice—nor does it reject natural history practices in favor of "alternative" poetic ones. Rather, as I will argue, Moore's poetic precision enters into contemporaneous debates *within* natural history about how to remain accountable to the diversity of real, physical animals and plants being studied. Moore's own "scrupulous" accountability to a physical reality, manifested in complex syntactic and referential structures, reproduces the overwhelming quality that the techniques of precision are meant to manage, revealing a poetics whose very commitment to knowledge as such lends it a darkly unknowable dimension.

## REAL TOADS

The word “precision” has a variety of uses, but it always entails reference to some kind of fixed point, a thing being approached, approximated, separated out, described, retrieved, or (in the case of a pattern) maintained—some real toad to ground whatever imaginary garden may surround it. Thus to be precise is always to be precise *with regard to something*. Moore’s precision has often been located in her form, which is in turn often reduced to her use of “syllabics,” as if the mere presence of poetic meter were unusual in a poem, and as if syllabic meter were the defining feature of Moore’s poetics. Yet as a gloss for “precision,” formal regularity has little explanatory power; moreover, it proves insufficient to account for Moore’s vast body of free verse poems, including such important poems as “An Octopus,” “Marriage,” and most versions of “When I Buy Pictures,” which are widely allowed to be “precise,” and which indeed are often thematically concerned with precision, but which clearly are not formally “regular.” To allow the rubric of “syllabics” to eclipse other aspects of Moore’s precision is a symptom of broader ambivalences about precision; we wish to imagine the precise poet as always obsessive-compulsively counting things, even when she is manifestly not doing so, a point to which I will return. I therefore wish to respect the precision of Moore’s form while interrogating the terms on which it has been identified. How does precision secure knowledge? And what kind of knowledge?

To answer these questions, let us examine Moore’s poem “To a Snail” (1924), a twelve-line blason that doubly subverts the genre:

If “compression is the first grace of style,”  
     you have it. Contractility is a virtue  
 as modesty is a virtue.  
 It is not the acquisition of any one thing  
 that is able to adorn,  
 or the incidental quality that occurs  
 as a concomitant of something well said,  
 that we value in style,  
 but the principle that is hid:  
 in the absence of feet, “a method of conclusions”;  
 “a knowledge of principles,”  
 in the curious phenomenon of your occipital horn.

(*Becoming* 65)

Praising piecemeal the body of a snail rather than that of a lover, Moore finds therein the principles of poetic craft. Cristanne Miller's description of "The Plumet Basilisk" could as well apply to the snail: "Like the poem itself, the basilisk that 'you' see . . . is a work of art, a moral guide, every bit as much as it is a creature scientifically observed and precisely rendered onto a page" (45). The snail, similarly, is characterized physiologically by "compression" in a shell, "the absence of feet," and an "occipital horn." But these three physiological attributes quickly open out into directives for the *ars poetica*, each physical feature of the snail correlating with a poetic desideratum. Thus physical compression in a shell is simultaneously the verbal compression of poetry and "the first grace of style"; the absence of feet, in this unmetred poem, indicates "a method of conclusions"; and that most "curious" feature of the snail, the occipital horn, mysteriously suggests "a knowledge of principles."

Yet while the poem's punning references to poetic form suggest the snail as an allegory for poetry, Schulze has put it, "Moore's animals remain animals" ("Marianne Moore's" 5). Part of the force of the poem's poetic desiderata derives from their rootedness in the physical reality of the snail's body. And while we can spend most of the poem entertaining the idea that the snail is merely a physical cover for more important intellectual abstractions, such a reading is punctured by the poem's delicately deferred final words, "your occipital horn." The attribute, named by a technical anatomical term, breaks the easy double meaning of the physical forms—compression, an absence of feet—named in the poem; its technical nature mitigates against the semantic doubleness on which punning depends. And because the chiasmus in the final lines defers the revelation of the "occipital horn" until the very end, the double reading of snail as poem is reduced suddenly; only at the end of the poem are we back to a physical fact, a snail, a specimen.<sup>3</sup>

But the occipital horn also introduces another problem: despite the anatomical terminology, despite the way that it so cleverly troubles the parallel between snail and poem, it is already a metaphor—for, strictly speaking, the snail does not have an occipital horn. "Occipital" refers to the occiput, or back of the head—hence the "occipital bone" at the base of the skull and the "occipital lobe" of the brain, and even an "occipital horn syndrome" that manifests in calcium deposits on the occipital bone (Horn and Tümer 651). But snails do not have skulls, obviating the possibility of a horn; moreover, their tentacles are always in pairs

and soft, unlike the “horn.” In terms of physical resemblance, a better candidate for the “occipital horn” is perhaps the pointed apex of the snail’s shell—though that would reduce “occipital” to a mere invocation of bone. In this final detail, then, concretion and abstraction meet in vertiginous confusion. The “occipital horn” is the aspect of the snail that is most apparently technical, and, owing to the narrowed semantic possibilities of the specialized anatomical terms, it is the detail that most strenuously resists assimilation into the analogy between snail and poem. Yet, to borrow Gottlob Frege’s terms, even while the possibilities of *Sinn* are narrowed, the possibilities of *Bedeutung* remain as diffuse as ever: the occipital horn is the least clearly referential detail of the snail that is named. The occipital horn, at once thoroughly specific and thoroughly vague, stages a crisis in naming, for the term’s very specificity makes it unsuited to carry its semantic burdens. Like a single snail specimen (“a Snail”) representing the class *Gastropoda*, the occipital horn takes on an unwieldy task of signification, thus raising the problem of the relationship between the particular and the abstract. The “curious phenomenon of [the snail’s] occipital horn” alerts us to Moore’s interest in linguistic reference—not only in the instability of reference, which has become by now a commonplace that hardly warrants demonstration, but also in the subterfuges and patches by which we evade that instability—the gestures that constitute precision.

We might use the term “indexicality” to describe the way that Moore’s precision circulates around the fixed points of physical bodies and objects, even texts.<sup>4</sup> Moore’s indexicality occurs at multiple levels, for while she performs indexicality literally with her citations, she also *invokes* indexicality in a less direct sense by proposing indexical relations between things. C. S. Peirce’s classic example of an index is a weathervane, which registers and indicates the physical presence of the wind in a manner prior to cognition or language (141). Moore invokes indexicality when, in a similar fashion, the poem becomes an index for the physical composition of the snail. Experientially, the poem is present to us, and it registers linguistically the trace of the snail’s body, as “a painted portrait . . . is the sign of the person for whom it is intended” not merely through resemblance (what Peirce would come to call iconicity) but “because it was painted after that person and represents him” (141–42). To be clear, the snail’s trace on the poem is not indexicality in a strict sense; there is no physical snail leaving a trail of slime

(for instance) as its index on the page. But it is clear that the poem argues for what Peirce would call a “correspondence in fact” between the physical attributes of the snail and the poetic art—that a necessary and direct relation between one and the other is being proposed if not enacted (30).

The index thus implies an existence beyond itself, even as it serves as a reduced point of reference for that existence. It manages the unmanageable, turning a breeze into a compass direction, the principles of poetic style into a snail, or a snail into a poem. Moore's quotations in “To a Snail” are exemplary of this indexical logic as well as typical of her quotation practice. In her notes to *Observations* (1924), “compression is the first grace of style” is attributed to “Democritus” (corrected to “Demetrius Phalereus” in 1951), while the other two quotations are attributed to “Duns Scotus” (*Becoming* 137). These are not bibliographic citations; they do not point to a specific location where the words can be found in context. Instead they point to *people*—or rather, the ideas of people, for Moore's sources turn out to be highly derivative. As Bonnie Costello observes, the quotations attributed to Duns Scotus are taken from a source noted by Moore in a reading diary as “*Medieval Mind*, II, 516” and not from a work by Duns Scotus himself (*Marianne Moore* 53). The words quoted are Henry Osborn Taylor's, in his summary of Duns Scotus's meditations on whether theology is a science: “Is theology, then, properly a science? Duns will not deny it; but thinks it may more properly be called a *sapientia*, since according to its nature, it is rather a knowledge of principles than a method of conclusions” (516). That here, above, is the “real” source or origin of the quotation (located in digital simulacrum with the help of WorldCat and Google Books) is rather beside the point. A reader hoping to track down the source on the basis of “Duns Scotus” alone would be entirely at sea; it is not a citation meant to lead one to a specific place. Rather, it conjures up a web of scholarship and associations, including debates within medieval scholasticism and retrospective assessments thereof—a whole body of thought now metonymically represented by the name “Duns Scotus.”<sup>5</sup> Moore's citations in “To a Snail” are typical in this regard; by supplementing the quotations not with bibliographic entries but with the names of authors, Moore establishes a liaison between the text and the outer world without privileging a particular origin—and without especially helping the reader locate the source of the quotation. Quota-

tions thus serve as specimens to ground wider and sometimes—as in the case of “Democritus”/Demetrius—undefinable entities.

I mean “specimen” quite literally, although “specimen” itself is not an unambiguous concept. The hallmarks of Moore’s precision are also the hallmarks of natural history’s efforts to manage what we might call the “empirical sublime,” the overwhelming and often monstrous scale of biological diversity that the empirical enterprise makes visible. Precision always circulates around a fixed point, and in natural history, that fixed point is the specimen, an exemplar of the species or higher taxon. Specimens played (and still play) an important role in a complex system of *types*, among them what Paul Lawrence Farber has called the “classification type-concept.” The classification type-concept lets a species (or higher taxon) serve as the model by reference to which the rest of the genus (or next-highest taxon) may be described. Thus, for example, the eighteenth-century French naturalist Georges-Louis Leclerc de Buffon let the common flycatcher serve as a point of reference for describing the twenty-four other species of flycatcher (Farber 94). In this case the “type” was the “model species,” the common flycatcher. In the face of overwhelming biological diversity both among and within populations, the type species serves as a point of reference for the whole genus, just as, in a collection, the specimen served as a point of reference for the species.

Indeed, one specimen, the “type specimen” (or “holotype”) also serves as a point of reference for any given species. The type concept in natural history is metonymic; as Lorraine Daston points out, the holotype need not be typical or particularly representative of the “essence” of the species; indeed, in species exhibiting sexual dimorphism, seasonal molting, or other variations, it would be an impossibility. It is not that the naturalist believes that the holotype is, or even could be, exemplary or typical of the species; rather, “the type specimen is only accidentally, not essentially, a representative sample of the species” (162). Indeed, the primary use of the holotype is to define species *nomenclature*, not the species *per se*. The fixity of the species *name* outweighs other considerations, so that the selection of the holotype is almost pointedly arbitrary. The use of the holotype constructs an unusually stable relationship between word and thing, because the name is fixed to a single specimen, just as the name “Duns Scotus” may be affixed to a concrete

pair of quotations. In doing so, however, the holotype puts special pressure on the relationship between thing and concept—the concept, that is, of the species that the name is supposed to designate.

This is a system that sought to manage diversity while remaining accountable to nature's particularity. The specimen offers a real physical referent at the expense of the possibility of accurately exemplifying the entire species for which it serves as a metonym. The type system thus insisted on an ethic of "no ideas but in things," placing faith in the physical body of the organism. As the British philosopher of science William Whewell put it in his 1847 *Philosophy of the Inductive Sciences*, "[Natural history's] lesson is, that we must in all cases of doubt or obscurity refer, not to words or definitions, but to things" (qtd. in Daston 171). Beginning in the nineteenth century, and greatly aided by recent advances in preservation techniques, naturalists placed their faith primarily in the reality of specimens.<sup>6</sup> A parallel between this technique of scientific knowledge and Moore's poetic practice, does not suggest that Moore is *doing natural history*; she is manifestly doing poetry; however, a common epistemological positioning insists upon strong relationships between words and things at the expense of the relationships between words and the concepts that they represent. Poetic principles can inhere in the body of a snail, just as a snail can be recapitulated in the physical form of a poem. What Moore eschews, in the interests of those relations, are strict delineations of populations: the snail as a species, Duns Scotus as a thinker; these latter categories can be as wide and overlapping as we like; the concretions by which the categories are secured are never intended to encapsulate their essence, but rather to defer abstract categories in favor of naming some solid and intractable thing.

#### IMAGINARY GARDENS

Indexicality relies on physical things, and yet that very reliance is telling. As John Plotz has suggested in the context of recent "thing theory,"

"Thing" is the term of choice for the extreme cases when nouns otherwise fail us: witness the thingamagummy and the thingamabob. Thing theory is at its best, therefore, when it focuses on this sense of failure, or partial failure, to name or to classify. . . . "Things" do not lie beyond the bounds of reason, to be sure

(that would be absurd or paradoxical, or flat out impossible), but at times they may seem to. That seeming is significant: these are limit cases at which our ordinary categories for classifying signs and substances, meaning and materiality, appear to break down. (110)

To be sure, Plotz is not making an argument about *all things*; rather, he is making an argument about the *preoccupation* with things. And both Moore and the naturalists are distinctly preoccupied with things, and indeed with limit cases: the lives and afterlives of people and their texts, and that vast sublime array of what are called, just on the verge of oxymoron, “living things.” Precision is the means by which those limit cases must be managed.

And yet while both Moore and the naturalists *index*, they do so with consequences for the populations to which indices point. Within the biological sciences, one possible framework for understanding this relation is the essence/population opposition, which by some accounts underwrites the difference between eighteenth-century “idealized” representations of specimens and the naturalistic images (including photographs) that became more prevalent in the nineteenth and twentieth centuries.<sup>7</sup> Essentialism supposes that a species has an “essence” or “true nature” from which its realizations in nature deviate. Thus while flora and fauna appearing in nature might exhibit almost unlimited particularity and baffle attempts at classification, there is an underlying order in which classification is not only intelligible but clear. In broad strokes, biological essentialism is usually associated with a pre-Darwinian understanding of species as relatively fixed groups, while population thinking, which “stress[es] the uniqueness of everything in the organic world,” is interested specifically in the very diversity that populations exhibit (Mayr 46).<sup>8</sup>

But as Daston has pointed out, it is necessary to distinguish between essentialism, which is an ontological premise, and typology, which encompasses a wide set of *practices* (168). To try to separate, say, what makes a duck a duck from the merely contingent features of any given particular duck is not a mysticism but a necessary prerequisite to claiming to define the category “duck.” Moreover, to recognize biological diversity as simply the state of things rather than as error or deviation from the essence does not remove the *practical* problems of communica-

tion and pedagogy within the discipline—the need, in short, to represent. It is in this context that we must understand typological thinking, which has characterized both pre- and post-Darwinian natural history. Types need not imply essentialist thinking; as Mary P. Winsor argues, “taxonomists from the Renaissance onwards adhered to a wide variety of world views, but usually chose practical considerations over theoretical purity” (387). Naturalists long before Darwin often took a “polythetic” approach that would “let a list, or cluster, of properties count as a definition without insisting that any particular property be always present” (390). Thus natural history, in encountering biological diversity, necessarily took on and existed within what I have been calling an empirical sublime: nature’s infinite variability and even, as in early modern curiosity cabinets, its capacity for “monstrosity.” Indeed, by using arbitrary type specimens to represent species, naturalists respected the vast formlessness that was biological diversity even as they sought to manage it. The specimen is a concrete (bounded, not sublime) object that can nonetheless point to the vast sublimity beyond itself.<sup>9</sup>

Precision lies not only in centering on fixed points (such as type specimens, such as quotations) but also in closeness to as many fixed points as possible, in producing what we might call a “high-resolution” image of the thing under investigation. For Moore this aspect of precision has usually been discussed in terms of an attention to detail; parallel practices in natural history include detailed anatomical descriptions of specimens and their categorization into detailed taxonomies. But in both instances the very notion of a “detail” warrants further consideration, for “detail,” like the broader “precision,” bears affective as well as epistemological weight. We can see this in Moore’s use of details in “To a Snail”; syntactically, the poem is striking for its snail-like boundedness. It contains just three complete, grammatical sentences, and without being fragmented, they are filled with—indeed, composed primarily of—details. We may look to conceptual details as well as details about the poem’s addressee, a snail. In the latter category, we have the three physical attributes of the snail. In the former, consider the four examples that appear in the poem’s long final sentence: two examples of what we value in style (the principle that is hidden; a knowledge of principles), and two examples of what we do not (acquisition of adornment; the incidental quality of the well said). These examples are details because, when posed as examples, they exist to elaborate and specify the idea of

valuing the hidden principle. The two examples of “what is hid” are balanced by two examples of what is manifest, suggesting a concern for symmetry. Such conceptual symmetry, in fact, overrides the possibility that so much detail—especially the specifications of what we do *not* value—may be superfluous to the sentence’s main claim, which might be paraphrased as “In style, we value the hidden principle.”

That the true nature of style be explained *symmetrically* seems to be at least as important as that it be explained *accurately*; or rather, Moore’s precision entails, inseparably, a formal balance of detail as well as an abundance thereof. Perhaps it is this tendency to perform the fulfillment of formal obligations that has contributed to critics’ notion that Moore is “scrupulous” to a fault. But this sense, of course, inheres in the very notion of the “detail,” which is particular, subordinate, lesser, or partial, as opposed to the abstract, central, major, or whole. To say that Moore deals in details is already to suggest that she deals in the ancillary, the nonessential—that she is, in R. P. Blackmur’s phrase, “content with smallness” (283). To insist on detail is *necessarily* to be “scrupulous,” to have the air of fulfilling a formal obligation. Yet we should notice that the semantic content of Moore’s sentence is rigorously grammatically subordinated, the delicately paralleled examples all hanging on an austere “It is”—the neuter singular personal pronoun and the copula. In “To a Snail,” as in so many of Moore’s poems, the idea that these semantically rich parallel examples are “details” in the sense of being partial or merely ancillary is only made possible by the rigor with which Moore segregates lexical meaning from the main subject and verb, grammatically decentralizing meaning. In this syntactic reversal of figure and ground, Moore does not so much make details into the main event as disperse the main event—the nature of style—into a series of details: grammatically subordinated examples of what is manifest, what is hid. Indeed, such a semantic imbalance necessarily occurs when certain emphatic structures of which Moore is fond are mobilized: “There is . . .”; “X is Y”; “It is X that . . .,” etc. Thus detail becomes a prominent feature of Moore’s poems because she uses grammatical subordination to make so many things *into* details.

We may thus read in this moment an allegory for the tensions that empiricism brings, for while the poem’s final sentence ostensibly rejects the merely ancillary (“any one thing that is able to adorn,” “the inci-

dental quality that occurs/as a concomitant of something well said") in favor of deeper, hidden principles, it does so by way of paralleled phrases that insist on their own status as details, as grammatically ancillary and "scrupulously," we might say, balanced. Details, because they are *details* and by definition subordinated, are singularly unstable places on which to found hierarchies of meaning. Thus, just as the details about the snail's body can never fix the indexical snail/poem relation, the details of this final sentence refuse the hierarchy of figure and ground, instead flooding the reader with an empirical sublime of highly ordered yet unassimilable data. And thus, like the famous Borges map now made boundless, precision risks itself reproducing the sublime that it at first set out to contain.<sup>10</sup>

Although indexicality and detail genuinely work to pin down the real, by the same stroke the index indicates, and detail reproduces, reality's sublime multiplicity. And while the carefully wrought tensions of "To a Snail" help us to see this, I am not at all suggesting that Moore's poetry acts as a corrective to an all-too-rationalistic scientific impulse; rather, Moore explores the poetics of tensions that are *already* present in the practices of natural history—the tensions, in particular, between thing and name, between category and specimen, and between detail and comprehensibility. It behooves us to read natural history as a dynamic, contentious living discipline, not a static paradigm that might then be imitated by (say) poets. Moore's poetry calls attention to that dynamism, especially since Moore has tended to be associated with the more popular faces of natural history—magazine articles, newspapers, national parks, museums, and zoos—in addition to more canonically "scientific" (that is, professional) figures like Charles Darwin.<sup>11</sup> While science is often casually conceived in opposition to popular culture, or as at most informing popular culture unidirectionally, this model is, as science historians have argued, questionable at best.<sup>12</sup> Moore's engagement with both popular and professional versions of natural history points to the more complex interactions of a science in the process of consolidating its professional identity and, simultaneously, constructing and institutionalizing a popular version of itself in museums, in zoos, and in the burgeoning conservation movement. While it would be tempting, therefore, to characterize professional natural history as precise (and therefore scientifically virtuous), with popular natural history taking up the role of its debased, imprecise cousin, it would be more

accurate to see popular and professional natural history as advancing complementary but linked strategies for mapping and containing the empirical sublime of biological diversity.

Precision, here, was one of the distinguishing features of a professional natural history that began to institutionalize in the United States in the late nineteenth century. The significant changes in natural history museums and in the visual culture of natural history in this period reflected the profession's efforts to distinguish itself from the broad and enthusiastic population of nature-lovers, and especially bird-watchers. As Ann Shelby Blum has explained, at the close of the nineteenth century the visual conventions of professional natural history illustration were distinguished by highly detailed, relatively schematic illustrations, frequently ones that dispersed plants and animals into their component parts (323). While figures depicting whole plants or animals were not uncommon, more characteristic were series of images of a single body part, such as the head or the claw, which allowed comparison between variants (Figs. 1 and 2). Like Moore rendering the sense of a sentence in the form of details, the professional naturalists and the illustrators they supervised disaggregated specimens and re-presented them as a series of

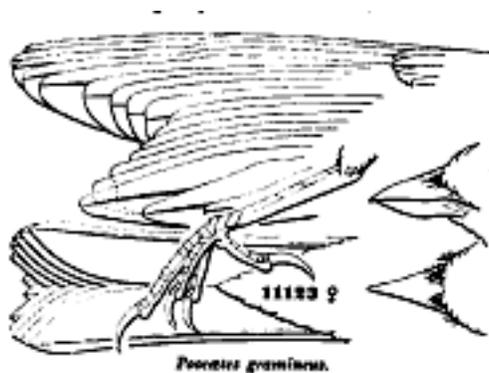


Fig. 1. Robert Ridgway, "Pooecetes gramineus [Grass Sparrow; Bay-Winged Bunting]," from Baird, Brewer, and Ridgway, *A History of North American Birds* (545). The image of the bird has been disaggregated into its component parts.

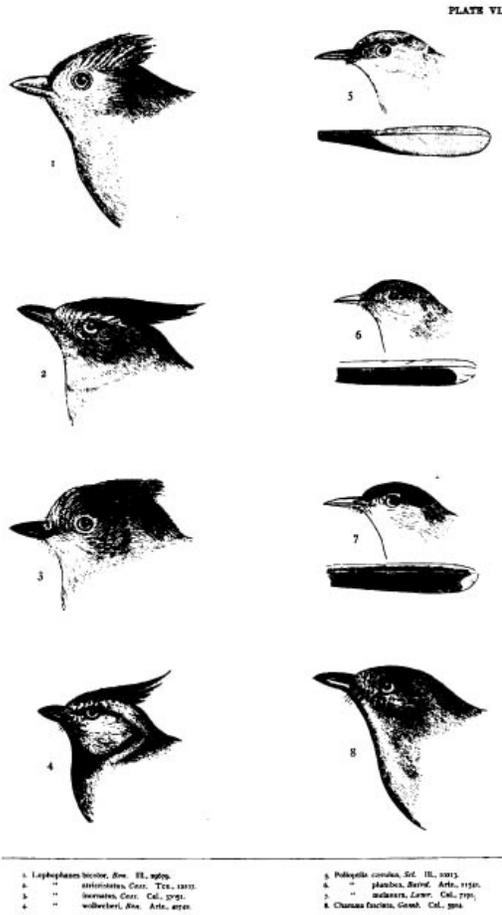


Fig. 2. Robert Ridgway, Plate VI, from Baird, Brewer, and Ridgway, *A History of North American Birds*. The image compares the heads of several different birds.

details. During the nineteenth century, such precision also carried over into natural history museums, which arranged specimens taxonomically, sometimes whole, sometimes dissected (Paul 164). Yet the precision of professional natural history again constantly risked reproducing the bewildering variety of nature, presenting as a mass of unassimilable detail. Thus, as Hermon Carey Bumpus, director of the American Museum of Natural History (AMNH), wrote in 1907, "we [now] view

with some misgivings the elaborately technical schemes of classification; we wonder how much the visitor really profits by the examination, for example, of the tactile setae of the dactylopodite" (299). This is why "some of the most precious holdings of major natural history museums are rarely if ever displayed to the public" (Daston 158). Indeed, the British curator W. R. Butterfield strikingly anticipated the language of Moore's 1924 "Poetry" when he wrote in 1912 that "at present many of our museums are scarcely more than mere aggregations of specimens; in other words, they are museums of raw material" (343). Natural history's very tools of precision—the specimens that stood as indices of species and higher taxa and the detail with which those specimens were classified, presented, and analyzed—could simultaneously be read as the raw material of natural history in all its rawness, pure unordered nature, the overwhelming empirical sublime all over again.

Thus in the early twentieth century, naturalists (increasingly called zoologists and botanists) made an uneasy peace with the vast public of nature-lovers, and natural history museums like the AMNH, which Moore visited frequently, turned to popular modes of communicating with the public. In particular, the taxonomic display gave way to the more "accessible" "habitat groups" or "museum groups." Museum groups, still popular today, are free-standing displays of stuffed animal specimens, usually dioramas in which specimens are placed in a more or less naturalistic position, with an artificial background that simulates the animal's habitat. The habitat group's emphasis on location and integral wholes harked back to the nineteenth-century norms of animal portraiture favored by the twentieth-century amateurs, as contrasted with the emphasis on taxonomy and comparative anatomy that distinguished professional natural history. In the museum, the norms of the amateurs won out and were ultimately embraced as the way of the future, and in place of the sublime precision of the taxonomists, the new natural history museum offered boundedness. In his 1914 article "The Story of Museum Groups," Frederic A. Lucas of the American Museum of Natural History unabashedly locates the origin of the museum group in popular spectacle, writing that "the curved, panoramic background and overhead lighting" are "borrowed consciously or unconsciously from our cycloramas," the illusionistic paintings otherwise known as panoramas (29).<sup>13</sup> Rightly did the AMNH curator of birds, Frank Chapman, call the habitat group a "window on nature" (qtd. in Bumpus 63); the habi-

tat group was necessarily framed, yet, like the panorama, it also concealed its framedness. A self-effacing medium, the habitat group offered not only specimens in the form of the animals, but entire specimen habitats. Thus the group imparted a sense of completeness, sometimes at the expense of realism, as Lucas describes:

The Bullfrog, Giant Salamander, and Florida groups . . . [bring] together in one composite picture a number of animals that probably would not be found in so small an area at any one moment of the season depicted, but might all be found there at some moment of the season. . . . In this, the day of moving pictures, we may say that as the moving picture condenses into five minutes' time the events of days or weeks, so these groups depict in a few square feet of space the life and happenings of a much larger area. (32)

Lucas thus strikingly links—as cinema and media theorists in recent decades have likewise done—the panorama, the film, and the (museum) diorama as popular media that could condense time and space.<sup>14</sup>

Protocinematic visual norms came to triumph in the exhibition halls of the natural history museum, not because they were considered scientific at the turn of the century but rather the reverse. Indeed, professional naturalists like the ornithologist Elliot Coues complained that the museum group was unscientific (Lucas 5). But it must not be supposed that the shift in museum norms signified a straightforward yielding on the part of the professional natural historians to popular values; rather, the profession had found a means of controlling the way that its work was disseminated to the public—and to endorse the ways in which the public itself could participate in natural history—while maintaining what Andreas Huyssen has called “the great divide,” the bifurcation between high and low (scientific) culture. Thus Bumpus explicitly rationalized changes to the museum in the terms of segregating the *professional* specimen collections from the *display* specimens by adding to the museum new sets of rooms devoted wholly to research. Research and public instruction would now be spatially and conceptually segregated within the museum. “We are beginning to perceive,” Bumpus wrote, “that the exhibition hall is not the proper place for the display of the collections as such, that the cases are not primarily for the installation of specimens but rather for the inculcation of ideas” (299).

Bumpus's comment points to a tension in the epistemology of natural history; while professional natural history knew nature by way of precision, precision also threatened to reproduce nature's sublime chaos, undoing knowledge and preventing "the inculcation of ideas." The turn to a popular and explicitly pedagogical mission in the museum both consolidated professional authority and yoked the profession, not uncontroversially, to a powerful system of popular knowledge, what Bill Brown has called the "amusement/knowledge system" (208). As the natural history museum refashioned itself from being an archive to being a site of popular spectacle, the museum group joined the world's fair, the panorama, and the early cinema as a form of what the then-president of the AMNH, Morris K. Jesup, called "rational amusement" in 1892 (qtd. in Griffiths, *Wondrous* 7). The indexical aura of the elaborately posed stuffed specimens was now bounded by coherent narratives.<sup>15</sup>

Here, the empirical sublime emerged again; though the specimens were stuffed and contained within the diorama, as popular spectacles they were re-released into the wilderness of the modern pleasure-seeking crowd. Frank Chapman, a professional ornithologist and eventual curator of birds at the AMNH suggested as much in "Ornithology at the World's Fair."<sup>16</sup> Chapman's ambivalent piece celebrates the Columbian Exposition at Chicago for its large number of zoological specimens, while simultaneously lamenting the lack of professional classification and contrasting the "finely mounted collections shown by the National Museum and the State of Kansas" with "the moth-eaten, undressed skins tacked on the wall of some exhibitor's collection" (315). Chapman concludes a catalog of ornithological sightings at the fair by comparing it to the disordered, uncategorized state of nature itself: "It is quite probable that in this brief review more than one collection of birds has been overlooked. Two hundred and nine acres covered with exhibits proved as difficult 'collecting ground' as the mazes of a tropical forest, and afforded birds quite as excellent opportunities for concealment" (321). The containing technology of the fairground is inseparable from the crowd that it is designed to please. It is the same crowd that Bumpus imagined as incapable of taking in a professional natural history collection, either in its "elaborate schemes of classification" or in the details of "the tactile setae of the dactylopodite." In this model, the crowd, the domain of "the popular," cannot countenance the sublime precision of professional science, yet it is itself a problematic source of sublime

chaos. Thus the process by which natural history altered itself in this period reproduced the ambivalence of precision itself; it took the crowd into its bosom in the newly pedagogical natural history museum in order to keep it at bay, withdrawing the bulk of the scientific collections into separate research areas into which the public could not venture at all.<sup>17</sup> It spared the common visitor the sublime precision of professional science; it spared professional science the sublime of the crowd; and it did both these things by institutionalizing an *alliance* between professional and popular natural history.

HANDS THAT CAN GRASP, EYES THAT CAN DILATE,  
HAIR THAT CAN RISE IF IT MUST

Marianne Moore's poems know in the way that natural history knows: through a precision that not only takes physical objects seriously but operates by appeals to indexicality and by proliferating detail. Moore's precision also evokes the sublime in ways that produce radical uncertainties, and while uncertainty in poetry tends to be celebrated (in the guise of "ambiguity," for instance), there is something about the sublime uncertainty occasioned by *precision* that creates unease, for it is an uncertainty arrived at not by happenstance or by whim but by rigorous attachment to concrete specifics. Moore's precision does underwrite the way in which she is read as a "scientifically" serious modernist, as William Carlos Williams suggests when he writes that "with Miss Moore a word is a word most when it is separated out by science, treated with acid to remove the smudges, washed, dried and placed right side up on a clean surface" (318). But I wish to return once more to the gendered implications of Moore's "scrupulousness." For as Huyssen has famously noted, "it is indeed striking to observe how the political, psychological and aesthetic discourse around the turn of the century consistently and obsessively genders mass culture and the masses as feminine, while high culture, whether traditional or modern, clearly remains the privileged realm of male activities" (47).

While to fully explore the workings of gender either in Moore's reception more broadly or with respect to precision specifically would be beyond the scope of this essay, it is worth noting the consonances between the success of Moore's precision and its threat.<sup>18</sup> In "How to Read," Ezra Pound suggests reforming literary history on the model of (one version of) the history of science; after all, he remarks caustically,

“when studying physics we are not asked to investigate the biographies of all the disciples of Newton who showed interest in science, but who failed to make any discovery. Neither are their unrewarded gropings, hopes, passions, laundry bills, or erotic experiences thrust upon the hurried student or considered germane to the subject” (15). In this moment Pound clearly agrees with Huyssen’s sketched portrait of autonomous modernism, insofar as he seems to think that the “experimental nature [of modernism] makes it analogous to science, and [that] like science it produces and carries knowledge” (Huyssen 53). Repudiating the digressive, artifactual quality of literary history, he hopes for more systematic knowledge of literature: “Later it struck me . . . that the best history of literature, more particularly of poetry, would be a twelve-volume anthology in which each poem was chosen not merely because it was a nice poem or a poem Aunt Hepsy liked, but because it contained an invention, a definite contribution to the art of verbal expression” (17). Good, scientific literary judgment turns in part on the rejection of the literary judgment of an Aunt Hepsy, presumably an old maid whose taste runs to the popular and—in an excellently precise double entendre—the “nice.” Here Pound imagines literature attaining the status of science by casting off the *modus operandi* of a “nice” fussy spinster, one who is obsessed with irrelevant details and whose literary judgment is the very definition of bad taste. Though Pound greatly admired her, there could hardly be a modernist writer more self-consciously fashioned as an Aunt Hepsy than Marianne Moore—famously celibate, “nice” in both senses, continuously interested in popular culture, and given to the proliferation of detail.<sup>19</sup> Pound’s satirical list of “unrewarded gropings, hopes, passions, laundry bills, or erotic experiences” represents the disordered irrelevancies of literary history that must be cleared away, and yet Moore admonishes that it is not “valid to discriminate against ‘business documents and // school-books’; all these phenomena are important” (*Becoming* 72).<sup>20</sup> If, as Huyssen suggests, a fear of the popular is “always also a fear of woman, a fear of nature out of control” (52), then it is not surprising that Moore, as a woman poet whose precision helped to reproduce, even as it helped to contain, the empirical sublime of nature out of control, should be regarded with a certain suspicion.

Yet what is perhaps more unnerving about Moore’s poetics is the way in which it points to the location of these elements in science itself. Moore’s precision never bothers to flirt with a fantasy of univocal

masculine knowledge, but rather structurally tests out specific (fraught, contested) practices in a natural history that already incorporated both the all-male profession and the feminized amateurs, the diorama and the type-specimen collection, the sublime of taxonomy and the sublime of the crowd. Moore's precision, like the precision of natural history, is an out-of-control form of control, making it legible through the rubrics of what Jennifer Fleissner has called "obsessional modernity." Perhaps, indeed, this is why Williams imagines Moore as scientific precisely in the quintessentially compulsive act of washing, or why Moore's style is so often telegraphed by "syllabics," as if to mark her with an equally compulsive addiction to counting. What finally occasions unease is not a poetics that cannot know, that of the caricatured Aunt Hepsy, but a poetics that *does* know, that has a strong grasp on the real, and that calls upon "nature out of control" *in order* to know.

By invoking an empirical sublime, Moore thus also registers the ambivalent gendering of the sublime itself, most famously (and bluntly) framed in Edmund Burke's formulation.<sup>21</sup> While the sublime is typically gendered masculine, the *experience* of the sublime momentarily puts one in a "feminine" position of near-surrender followed by exhilaration, an experience that is, in Suzanne Guerlac's words, "a function of that play of presence and absence that marks the process of signification in general," potentially modeling both scientific and poetic processes (7). The empirical sublime similarly engages in a play of presence and absence that maps to masculine-feminine dynamics of awe and surrender, but with a key difference. For the empirical sublime is the sublime not of a solid mass but of feminine multiplicity, an infinitely porous, proliferating world of details and deformations, the sublime of biological diversity, of "nature out of control." Thus the play of presence and absence in the empirical sublime appears not only in the dynamics of awe and surrender but also in the impossible task of empiricism, to account for every detail "precisely" and yet to remain unified and coherent, itself a gendered tension between presence and absence, between (say) a snail and a poetics.

While in Kantian terms an "empirical sublime" should be a contradiction, because the merely phenomenal ought not to register as sublime, the *accounting* of natural diversity, such as is the task of natural history's mechanisms of precision, by definition converts biological phenomena into a conceptual apprehension thereof, producing what

Kant might approve as “a sublimity that can be found in the mind” (129). Natural history’s contested structural apparatuses in this period thus underwrite the “agreement with nature” that, according to Kant, make it possible to construe an art work as sublime (129) and, therefore in Moore’s poetry, come to constitute a ground for the sublime in their own right. The sublime resides in the highly mediated apparatuses of scientific and poetic knowledge, and indeed itself *serves* as a mode of knowledge. Precision thus marks out a precarious dialectic between the profound and the petty, foundations and “fiddle,” a dialectic that is always also gendered, subtending the dynamics of aesthetic and cognitive experience that played out in the constitution of modernist scientific and poetic knowledge. As Moore put it, “there are things that are important beyond all this fiddle,” and that is—isn’t it?—always the trouble.

*Emory University*

#### NOTES

I am grateful to a number of people who provided feedback on earlier versions of this essay, including Dan Blanton, Julia Bloch, Juliana Chow, Eric Falci, Lyn Hejinian, Charles Légère, Katie Simon, an anonymous reviewer for *Arizona Quarterly*, and, especially, Hillary Gravendyk. I thank them for their insight and generosity.

1. I do not wish to give the impression that these other values of the new realism are never applied to Moore; see, for instance, Costello’s chapter (1–14).

2. Shapin applies this dictum to the seventeenth century in particular, although it certainly applies equally if not more to early twentieth-century science.

3. An earlier draft, titled “Snail,” does not insist upon or even much support the parallel between snail and poem; though Moore mentions compression, absence of feet, and the occipital horn in the draft, all three appear in the draft’s first three lines, obviating the possibility of sustaining any puns until the end. Moreover, in the draft, the puns would not function in the first place. As Costello notes, the draft is longer (less “compressed”) than the later version (*Marianne Moore* 52); moreover, the draft poem is arranged in syllabic stanzas that less distinctly manifest an “absence of feet” than the later free verse version of the poem. A facsimile of the draft, housed at the Rosenbach Museum and Library’s Marianne Moore archive, is reprinted in Costello, “‘To a Snail’: A Lesson in Compression.”

4. I use “indexical” in a sense borrowed from the history of art and film theory. The term comes originally from the semeiotics of C. S. Peirce. Indexicality is the state of what Peirce calls “secondness,” one degree removed from the thing itself and prior to cognition or language. The term has been useful to theorists of visual

art and film because it affords a way of talking about physical presence. It has also, however, often been assimilated to a Saussurian semiotics with which it is fundamentally incommensurate, as if Peirce's sign were simply the Saussurian sign with an extra term superadded. That art and film theorists, often theorists who are deeply engaged with structural linguistics, have borrowed Peirce's term registers the need for a theory relating signs to physical presence; on the other hand, the use of the term "index" in art and film theory does not really engage Peirce's semeiotics on its own terms (which are, fundamentally, the terms of a theory of mind rather than a theory of language). See Krauss. On the incommensurability of Peirce's and Saussure's theories of signs, see, for instance, Short 16–21 and Deledalle 100–13.

5. This citation, and any reference to Duns Scotus whatever, disappears from the version in *Complete Poems*, although the lines in the poem to which the citation was originally attached remain.

6. This is not to say that other elements might not be used; indeed, sometimes a holotype was not a specimen at all, but rather a drawing or a description by the "author" of the species. For example, the fleshy-stemmed plants of the *Liliaceae* family are difficult to preserve, and have "iconotypes" that serve as type specimens—that is, images (Daston 160). But such anomalies do not flout natural history's preference for specimens; rather, they confirm it in the breach, for if it were possible to preserve lilies with any reasonable hope of retaining their characteristics, the botanists in question certainly would have done so.

7. See, for example, Daston and Galison's account of "truth-to-nature" (55–113). Although Daston and Galison are careful to note the variety of concepts according to which images of nature were standardized (ideal, average, typical, characteristic), they conclude that the "the atlas maker's task was to determine the essential" (66).

8. For an intriguing discussion of the delineation of biological species as a metaphor for literary genre, see Poovey.

9. While "what is properly sublime cannot be contained in any sensible form," "the [natural] object serves for the presentation of a sublimity that can be found in the mind" (Kant 129).

10. For another view of the sublime in Moore, see Costello, "Marianne Moore."

11. We may add one more dimension of historical dynamism—Moore's revisions, on which see Schulze, "Textual Darwinism." On archival sources, see in particular Costello, Marianne Moore; on Moore and national parks, see Ladino; on Moore and the natural history museum, see Paul, and Raine; on "An Octopus" and Mount Rainier National Park, see Willis.

12. See, for instance, the section of *Isis*, "Focus: Historicizing 'Popular Science,'" wherein Daum writes: "Today, older trickle-down or two-stage models that attempted to capture what happens when science is being popularized are passé—

and rightly so. These models understand popular science as the result of forms of communication through which specialized knowledge produced on a higher level—that is, within the realm of research-oriented science—is translated to a largely passive audience. Popular science thus represents a kind of science ‘lite,’ derivative at best, if not the illegitimate brainchild of true knowledge dragging its audience down the slippery slope toward trivialization. Criticism of this model has been endlessly varied, almost becoming a mantra; but in itself it offers no useful alternatives. This is rather ironic, since hardly any historians—if any at all—in the last thirty years or so have actually subscribed to the two-stage model” (320).

13. The American Museum of Natural History reprinted slightly revised versions of Lucas’s article as a pamphlet several times.

14. See, for example, Griffiths “Journeys” and *Shivers*. Care should be taken to distinguish the museum diorama from the mid-nineteenth-century spectacle of the diorama, which was invented by Louis J. M. Daguerre (of daguerreotype fame). Daguerre’s diorama manipulated the way that light played against a number of painted scrimms to create an effect of moving pictures.

15. See in particular Haraway’s highly textured reading of the groups in the African Hall at the AMNH (26–58).

16. As Blum points out, Chapman was a pivotal figure in professional/amateur natural history relations; he was a major proponent of museum groups at the AMNH and edited a popular ornithological journal, *Bird Lore*, for the Audubon societies (336).

17. As Haraway has detailed, the relationship between amateurs and the AMNH was particularly complex in the case of wealthy donors, who would go on safari in Africa and send specimens back to the museum, contributing, literally, science (56).

18. Moore studies flowered under the auspices of feminist criticism, to the extent that one might say that Moore criticism is conventionally concerned with gender. Some of the most notable explorations of gender in and around Moore’s writing are also cornerstones of Moore criticism: Costello, *Marianne Moore*; Heuving; and Miller, to name a few.

19. On Moore’s interest in popular culture, see in particular Rieke.

20. There is, of course, significant irony in this tension, since Pound not only enthusiastically endorsed Moore’s early work but was himself given to raiding archives of ephemera for poetic ends. For a sensitive treatment of Moore’s “digressions,” see Reddy.

21. As numerous scholars have pointed out, the notion of the sublime relies on a now discredited theory of gender. See, for example, Freeman.

## WORKS CITED

- Altieri, Charles. *The Art of Twentieth-Century American Poetry: Modernism and After*. Malden, MA: Blackwell, 2006.
- Albright, Daniel. *Quantum Poetics: Yeats, Pound, Eliot, and the Science of Modernism*. Cambridge: Cambridge University Press, 1997.
- Baird, S[pencer] F., T[homas] M[ayo] Brewer, and R[obert] Ridgway. *Land Birds*. Boston: Little, Brown, 1874. Vol. 1 of *A History of North American Birds*. 3 vols.
- Bell, Ian F.A. *Critic as Scientist: The Modernist Poetics of Ezra Pound*. London: Methuen, 1981.
- Blackmur, R.P. "The Method of Marianne Moore." 1935. *Language as Gesture: Essays in Poetry*. New York: Harcourt, 1952. 260–85.
- Blum, Ann Shelby. *Picturing Nature: American Nineteenth-Century Zoological Illustration*. Princeton: Princeton University Press, 1993.
- Brown, Bill. *The Material Unconscious: American Amusement, Stephen Crane and the Economies of Play*. Chicago: University of Chicago Press, 1996.
- Bumpus, H[ermon] C[arey]. "A Contribution to the Discussion on Museum Cases." *Museums Journal* 6 (1907): 297–301.
- Bumpus, Hermon Carey, Jr. *Hermon Carey Bumpus: Yankee Naturalist*. Minneapolis: University of Minnesota Press, 1947.
- Burke, Edmund. *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and the Beautiful*. Ed. J. T. Boulton. 1759. London: Routledge and Kegan Paul, 1958.
- Butterfield, W[illiam] R[uskin]. "Museums of Ideas." *Museums Journal* 11 (1912): 343–46.
- Chapman, Frank M. "Ornithology at the World's Fair." *The Auk* 10 (1893): 315–21.
- Costello, Bonnie. *Marianne Moore: Imaginary Possessions*. Cambridge: Harvard University Press, 1981.
- . "Marianne Moore and the Sublime." *Marianne Moore*. Ed. Celeste Goodridge. Spec. issue of *Sagetrieb* 6.3 (1987): 5–13.
- . "'To a Snail': A Lesson in Compression." *Marianne Moore Newsletter* 3.2 (1979): 11–15.
- Crane, Hart. *Complete Poems and Selected Letters*. Ed. Langdon Hammer. New York: Library of America, 2006.
- Daston, Lorraine. "Type Specimens and Scientific Memory." *Critical Inquiry* 31 (2004): 153–82.
- and Peter Galison. *Objectivity*. New York: Zone, 2007.
- Daum, Andreas W. "Varieties of Popular Science and the Transformations of Public Knowledge: Some Historical Reflections." *Isis* 100 (2009): 319–32.
- Deledalle, Gérard. *Charles S. Peirce's Philosophy of Signs: Essays in Comparative Semiotics*. Bloomington: Indiana University Press, 2000.

- Farber, Paul Lawrence. "The Type-Concept in Zoology during the First Half of the Nineteenth Century." *Journal of the History of Biology* 9 (1976): 93–119.
- Feldman, Evelyn, and Michael Barsanti. "Paying Attention: The Rosenbach Museum's Marianne Moore Archive and the New York Moderns." *Journal of Modern Literature* 22 (1998): 7–30.
- Fleissner, Jennifer. "Obsessional Modernity" The 'Institutionalization of Doubt.'" *Critical Inquiry* 34 (2007): 106–34.
- Freeman, Barbara Claire. *The Feminine Sublime: Gender and Excess in Women's Fiction*. Berkeley: University of California Press, 1995.
- Frege, Gottlob. "On Sense and Meaning." *Critical Theory since 1965*. Ed. Hazard Adams and Leroy Searle. Tallahassee: Florida State University Press, 1986. 623–36.
- Gregory, Elizabeth, ed. *The Critical Response to Marianne Moore*. Critical Responses in Arts and Letters 39. Westport, CT: Praeger, 2003.
- Griffiths, Alison. "'Journeys for Those Who Can Not Travel': Promenade Cinema and the Museum Life Group." *Wide Angle* 18.3 (1996): 53–84.
- . *Shivers Down Your Spine: Cinema, Museums, and the Immersive View*. New York: Columbia University Press, 2008.
- . *Wondrous Difference: Cinema, Anthropology, and Turn-of-the-Century Visual Culture*. New York: Columbia University Press, 2002.
- Guerlac, Suzanne. *The Impersonal Sublime: Hugo, Baudelaire, Lautréamont*. Stanford: Stanford University Press, 1990.
- Haraway, Donna. *Primate Visions: Gender, Race, and Nature in the World of Modern Science*. New York: Routledge, 1989.
- Heuving, Jeanne. *Omissions Are Not Accidents: Gender in the Art of Marianne Moore*. Detroit: Wayne State University Press, 1992.
- Horn, Nina, and Zeynep Tümer. "Menkes Disease and the Occipital Horn Syndrome." *Connective Tissue and its Heritable Disorders: Molecular, Genetic, and Medical Aspects*. 2nd ed. Ed. Peter M. Royce and Beat U. Steinmann. New York: Wiley, 2002. 651–85.
- Huyssen, Andreas. *After the Great Divide: Modernism, Mass Culture, Postmodernism*. Bloomington: Indiana University Press, 1986.
- Kant, Immanuel. *Critique of the Power of Judgment*. Ed. Paul Guyer. Trans. Paul Guyer and Eric Matthews. Cambridge: Cambridge University Press, 2000.
- Kenner, Hugh. *A Homemade World: The American Modernist Writers*. New York: Knopf, 1975.
- Krauss, Rosalind E. *The Originality of the Avant-Garde and Other Modernist Myths*. Cambridge: MIT Press, 1986.
- Ladino, Jennifer K. "Rewriting Nature Tourism in 'an Age of Violence': Tactical Collage in Marianne Moore's 'An Octopus.'" *Twentieth Century Literature* 51 (2005): 285–315.

- Lucas, Frederic A. *The Story of Museum Groups*. 4th ed. Guide Leaflet Series no. 53. New York: American Museum of Natural History, 1926.
- Mayr, Ernst. *The Growth of Biological Thought: Diversity, Evolution, and Inheritance*. Cambridge: Belknap-Harvard University Press, 1982.
- Miller, Cristanne. *Marianne Moore: Questions of Authority*. Cambridge: Harvard University Press, 1995.
- Moore, Marianne. *Becoming Marianne Moore: The Early Poems, 1907–1924*. Ed. Robin G. Schulze. Berkeley: University of California Press, 2002.
- . *The Poems of Marianne Moore*. Ed. Grace Schulman. New York: Viking, 2003.
- Paul, Catherine E. *Poetry in the Museums of Modernism: Yeats, Pound, Moore, Stein*. Ann Arbor: University of Michigan Press, 2002.
- Peirce, C. S. *Peirce on Signs: Writings on Semiotic by Charles Sanders Peirce*. Ed. James Hoopes. Chapel Hill: University of North Carolina Press, 1991.
- Plotz, John. "Can the Sofa Speak?: A Look at Thing Theory." *Criticism* 47.1 (2005): 109–18.
- Poovey, Mary. "The Model System of Contemporary Literary Criticism." *Critical Inquiry* 27 (2001): 408–38.
- Pound, Ezra. *ABC of Reading*. 1934. New York: New Directions, 1960.
- . "How to Read." *Literary Essays of Ezra Pound*. Ed. T.S. Eliot. New York: New Directions, 1968. 15–40.
- Raine, Anne. "Still Life in the Age of Mechanical Reproduction: Nature, Modernity, and Marianne Moore." *Gregory* 173–84.
- Reddy, Srikanth. "'To Explain Grace Requires a Curious Hand': Marianne Moore's Interdisciplinary Digressions." *American Literature* 77 (2005): 451–81.
- Rieke, Alison. "'Plunder' or 'Accessibility to Experience': Consumer Culture and Marianne Moore's Modernist Self-Fashioning." *Journal of Modern Literature* 27.1–2 (2003) 149–70.
- Schulze, Robin G. "How Not to Edit: The Case of Marianne Moore." *Textual Cultures: Texts, Contexts, Interpretation* 2.1 (2007): 119–35.
- . "Marianne Moore's 'Imperious Ox, Imperial Dish' and the Poetry of the Natural World." *Twentieth Century Literature* 44.1 (1998): 1–33.
- . "Textual Darwinism: Marianne Moore, the Text of Evolution, and the Evolving Text." *Text: An Interdisciplinary Annual of Textual Studies* 11. Ed. W. Speed Hill and Edward M. Burns. Ann Arbor: University of Michigan Press, 1998. 270–305.
- "Scruple." Def. 1. *The Oxford English Dictionary Online*. 3 April 2009. Web. <<http://dictionary.oed.com>>.
- Shapin, Steven. *The Scientific Life: A Moral History of a Late Modern Vocation*. Chicago: University of Chicago Press, 2008.
- Short, T.L. *Peirce's Theory of Signs*. Cambridge: Cambridge University Press, 2007.
- Stevens, Wallace. "A Poet that Matters." Rev. of *Selected Poems*. 1935. *Gregory* 113–18.

- Taylor, Henry Osborn. *The Mediæval Mind: A History of the Development of Thought and Emotion in the Middle Ages*. Vol. 2. London: Macmillan, 1911.
- Veblen, Thorstein. "The Place of Science in Modern Civilisation." 1919. New York: Russell & Russell, 1961. 1-31.
- Williams, William Carlos. "Marianne Moore." 1925. *Imaginations*. Ed. Webster Schott. New York: New Directions, 1971. 310-20.
- Willis, Patricia C. "The Road to Paradise: First Notes on Marianne Moore's 'An Octopus.'" *Marianne Moore Issue*. Spec. issue of *Twentieth-Century Literature* 30:2-3 (1984): 242-66.
- Winsor, Mary P. "Non-essentialist Methods in Pre-Darwinian Taxonomy." *Biology and Philosophy* 18.3 (2003): 387-400.

