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**“COMPENDIOUS EXTRACTS OF STRANGE AND MEMORABLE THINGS”:
SIXTEENTH-CENTURY COMPILATIONS AND THE NEW WORLD**

by

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Abstract of the Dissertation

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The sixteenth-century compilation’s encyclopaedic scope embraced widely diverse texts in accounting for the newly expanded world. I examine its representational methods for what they suggest of the period’s habits of thought, and consider how these shape objects of knowledge. Michel Foucault’s methodological tools facilitate a critique of epistemological constructions, but his characterizations of the sixteenth-century compilation as condemned “to never knowing anything but the same thing” do not adequately account for its contested meanings and shifts in form. I consider how Martin Waldseemüller deftly arranges disparate texts to authorize Vespucci’s account of the New World and his map, announcing “America,” managing the unsettling discrepancies between received knowledge and new ways of describing the world.

Compilations instructing in the “arte” of navigation (Taisnier, Cortés) invoke the mathematical number’s abstractions in the face of shifting landscapes, demonstrating that “knowing” is caught up with “doing.” I caution against reading backwards through imperial history, assuming epistemological certainties. In Sebastian Münster’s *Treatyse*

of the Newe India, the presence of human subjects troubles cosmographical certainties, while also providing objects of curiosity for natural history. The possibilities of knowing become both troubled and enabled through encounter, evident also in Cabot's instructions to explorers. I analyze relational terms (novel, ancient, strange, monstrous, "our," beastly, peculiar, gentle, humane, barbarous, infidel), as the basis of Europe's identifications. Richard Hakluyt's early compilations, *Divers voyages* and *Principall Navigations*, create the possibility of a nation-specific imperial identity, through the gathering of texts.

Close reading does not always bear out the rigidly temporal shifts identified by critics. While firsthand "experience" and "novelty" carry cachet, texts flaunting their novelty often echo existing texts. The ancients' authority remains an oft-cited method of authorizing disputed material, alongside methods considered new – the mathematical number, instrumentation to measure the world, diagrammatic forms of representation (maps, astronomical charts) and narrative eye-witness accounts. The powerful critical methods of revisionist analysis warrant a recognition of the inevitably provisional nature of these abstractions and particularized investigations. Today as in the past, what we "know" to be "true" is a function of our institutional and political context. The coherence of our insights is always, inevitably, open to question.

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Table of Contents

Abstract	ii
Acknowledgements	iv
Chapter One	1
Introduction to “Compendious Extracts of Strange and Memorable Things”: Sixteenth-Century Compilations and the New World	
Chapter Two	29
“What our instruments showed”: Martin Waldseemüller, Jan van Doesborch and the task of representing a world unknown to the ancients in the early compilations	
Chapter Three	71
Jean Taisnier, Martín Cortés and the “arte of navigation”: developing a method and language to give shape to the expanding world	
Chapter Four	126
Richard Eden, Sebastian Münster and Sebastian Cabot: establishing the conventions with which to manage difference	
Chapter Five	180
Hakluyt and the role of the compilation in the development of national sensibilities	
Epilogue	227
Bibliography	234
Curriculum Vitae	234

Chapter One

Introduction to “Compendious Extracts of Strange and Memorable Things”: Sixteenth-Century Compilations and the New World

The allure of learning

The title of Thomas Marshe’s 1572 English translation of extracts from Sebastian Münster’s mid-century compilation, *Cosmographia universalis*, reads as follows:

A briefe collection and compendious extract of the strau[n]ge and memorable things, gathered oute of the cosmographie of Sebastian Munster. Where in is made a playne descrypsion of diuerse and straunge lavves rites, manners, and properties of sundry nacio[n]s, and a short reporte of straunge histories of diuerse men, and of the nature and properties of certayne fovvles, fishes, beastes, monsters, and sundrie countries and places.

The title alone demonstrates the faithfulness to established conventions: the claim to compendiousness, that is, the quality of being both brief and comprehensive; the promise of plainness, that is, a disavowal of both polish *and* misleading embellishment, and therefore an implicit claim to truthfulness (and this while promising an account of monsters); the attempt to account for *all* of the natural world, in this case living creatures (to paraphrase slightly, birds of the air, fishes of the sea, beasts of the field, various human nations, which is to say, races, and monsters); and to account for basic human activity, that is, their washing rituals, their “manners” (customs) and their “properties” (that is, natural properties, or characteristics, as used in relation to animals in the same title).

Though it is an example of a particularly sensationalist text, as it turns out, and not completely true to Münster's more even-tempered effort to present a full account of the world methodically, it nonetheless is able to find authority in the form of the compilation and assemble its salacious material from Münster's compilation, enthralling its readers while purporting all the while to be offering only plain descriptions in an orderly, respectable form. This in itself is not remarkable. What invites probing is how the compilation achieves this embrace of sensationalism and seriousness, all the while providing the discursive context in relation to which the European armchair traveler constructs his world, and self, in relation to the New World, as represented in its pages. This dissertation is an attempt to do just that – to probe the sixteenth century compilation, a genre that embraced texts as divergent as poetry and astronomical treatises – in the hope of understanding how the conventions and structures which informed its representational and epistemological practices also *produced* New World difference, and managed that difference so successfully that by the end of the sixteenth century the New World could figure as an eminently inhabitable world (in the literature promoting colonization, that is).

In Thomas Marshe's pages, the peoples of "sundry nacions" appear marvelous and monstrous, but the particular thrill of this derives from the form which promises coherence and the respectability of a presentation of knowledge – the compilation. In this instance the compiler goes so far as to explain his understanding of the particular "delectation" that is to be found in reading "newes" (novelty that is invested with the status of truth), in a volume which is able to offer a "combinacion of contrary thinges." It is in "oure nature," he writes, "that we cannot take continuall delectation or pleasure

alwayes in one kinde of thinge, but naturallye wee are inclined and desire to be pertakers of newes, of straunge and vnaccustomed thinges, of variable and diuerse matters whiche may breeded some admiracion to any of oure sences” (“To the Reader” 1).

The compilation’s capacity to contain an array of disparate narratives concerning various “contrary thinges” is precisely part of its appeal, for Marshe, because it carries the power to fascinate its readers well beyond the commonplace and quotidian matters (“as com euery dai in vse”) and it can be considered to have encompassed everything, in its diversity. He therefore extracts only what he considers to be the most notable parts. The “whole” work of Münster would have been unnecessarily “tedious” to read, and expensive (“very chargeable to the byer”). Consequently, the work is not large, he tells us, but there is such variety that the reader may feel himself to be wandering through the “whole world.”¹

The worke of it selfe is not greate but the examples and varieties are mani so that in a short and smal time, the reader may wander through out the whole world, and fil his head with many stra~ge [strange] and memorable things, he may note the straunge properties of diuerse Beastes, Fowles, and Fishes, & the descriptio~ [description] of far countries, the wo~derfull [wonderful] example of sundrye men, and straunge rytes and lawes of far distante nacions.² (2)

¹ Without fail the texts of this study use masculine pronouns to refer to the imagined reader. This is not just a reflection of the ubiquity of the generic masculine convention in the period but arguably suggests that the readers were indeed imagined as male. Certainly all the explorers and their compilers I encountered during my research were male. I began this research determined to keep alive, at least in my own writing practice, the recognition that women were indeed part of the early modern English body politic – indeed, some of their heads of state, for large stretches of time, were women. For better or worse, I gave up in the face of overwhelming opposition and in order to avoid having to insert my critical voice into almost every quotation by distancing myself from the masculine generic.

² A word of explanation regarding the conventions of punctuation and spelling: the symbol of the swung dash (~) is in the original, and substitutes for an “n” or an “m.” In some cases the convention used is a curved tilde or straight line appearing over the preceding vowel to indicate nasalization in lieu of an “n,” for example “ō” in the word “descriptiō.” Many sixteenth-century texts use a “v” where we would expect a “u” and visa versa, as in “diuerse” (meaning diverse). Spelling in the sixteenth century had not been regularized. Even within a single paragraph, the same writer may spell the same word differently. I have retained the original spelling.

There is great pleasure to be found in learning of “far countries” and the “straunge” practices of “far distante nacions,” a pleasure available to a reader through his immersion in the text and through his identification with the traveler so that he himself “may wander through out the whole world.” The pleasure he describes is visceral – it breeds admiration to our senses, as he puts it – and may move us to laughter and (“almost”) incredulity. That relationship between credibility and pleasure is vital – the ideal form needs to be sufficiently containing to keep the narratives on the right side of plausibility, while also being able to feed our desire, our intellectual curiosity, so that it makes an impression on both our minds and our senses, and so that we hold the accounts in our minds for a long time thereafter: “to the desyre of suche thinges most commonly we are not onely rapte and vehementlye inclyned, but also wee take such pleasure in them, that we doe longe remember them and recreate our mindes with often thinking of them” (1).

Marshe’s articulation of the allure in learning – as distinct from mere entertainment which carries less gravitas and is more easily dismissed and forgotten by our capricious minds – is strangely resonant, for all its excesses. The delight of which he speaks is all the more intense (“vehement”) for its relationship to the material. I know this delight, from years of studying fascinating material that absorbs me precisely because it derives from an earlier moment of European world-making. An intellectual hierarchy of sorts still has a bearing on my responses, despite my commitment to a critique of the real and how it is constituted, and my recognition of the ineluctable constructedness of what we think we know to be true.³ I am undoubtedly a product of my own epistemological

³ Throughout this dissertation I have tried to resist the impulse to use quotation marks to indicate my critical distance from a term (such as “real,” “know,” and “true”), because I fear that in too many instances it would be difficult to distinguish scare quotes from textual quotations, of which there are many, woven into my discussion. I have instead tried to communicate critical distance from a term in the discussion

and political context – evident as much in the commitment to critiquing apparent certainties and the canon’s forbidding judgments and identity assignations, as in the pull of the archive. The memory of the thrill I felt at being able to handle the delicate pages of a first edition of Waldseemüller’s 1507 volume, *Cosmographia Introductio*, held in safe-keeping in the Rare Books Division of the New York Public Library, is a bodily memory still capable of producing a quiver. Its particular value as a 500-year old text has to do, I imagine, with my own estimation of historical time and a tangible object that seems to hold the passage of time in its very material presence. My own practice has been shaped by the epistemological institutions that accord value according to historically determined categories, while teaching the theoretical and analytical tools that allow a deconstruction of hierarchical assignations of meaning.

More specifically, the learning background, and therefore the concerns and sensibilities I bring to this project of research, are not those of the historian – though I have had to learn the historian’s critical rigor when applying the tools of literary critique to a period of literature some 500 years distant, because the language, terms, conventions and even the fonts used, presented interpretative challenges. I approach the texts of my study with a background of reading in post-colonial literary studies and an abiding interest in how identities and worldviews come to be formed and seemingly secured through language and systems of representation. The language of identifications, that is, conceptions of “self” and “other,” and understandings of what comes to be known as scientific and historical truth – these are the formulations that I have sought to analyze, using to a range of theoretical tools. The objects of fascination – the “other” of my

itself, though I have used scare quotes in a few instances, where I feel confident that the context makes it clear.

intellectual project – are the scholars and writers of the particular moment in early modern Europe when the world was an open sea, awaiting discovery. The representative systems sixteenth-century explorers drew on in making known the world that was within their grasp functioned also to *create* that world, as known, and to render it explorable, knowable, indeed, inhabitable. I seek to understand the ways in which their own thrill and their yen to know their world, helped in fact to produce and shape it.

Richard Hakluyt, the great compiler of enormous tomes in the sixteenth century and the subject of my final chapter, describes the tantalizing moment when he first awoke to the allure of cosmography as a means to knowing the world, cosmography with all its fabulous instruments and maps, and its promise of further discovery and of access to the plentiful commodities in the lands already known. When he first discovers the open books of cosmography and the maps on display in his cousin's chambers, he is enthralled and resolves, there and then, to pursue cosmographical studies, as he explains in an often quoted section from the "Preface" to the first edition of his principal work, the 1589 collection of English voyages, the *Principall Navigations*. The passage is worth quoting at length:

I do remember that being a youth, and one of her Majesties scholars at Westminster that fruitfull nurserie, it was my happe to visit the chamber of M. Richard Hakluyt my cosin, a Gentleman of the Middle Temple, well knowen unto you, at a time when I found lying open upon his boord certeine bookes of Cosmographie, with an universall Mappe: he seeing me somewhat curious in the view therof, began to instruct my ignorance, by shewing me the division of the earth into three parts after the olde account, and then according to the latter, & better distribution, into more: he pointed with his wand to all the knowen Seas, Gulfs, Bayes, Straights, Capes, Rivers, Empires, Kingdomes, Dukedomes, and Territories of each part, with declarion also of their speciall commodities, & particular wants, which by the benefit of traffike, & entercourse of merchants, are plentifully supplied. From the Mappe he brought me to the Bible, and turning to the 107 Psalme, directed mee to the 23 & 24 verses, where I read, that they which go downe to the sea in ships, and occupy by the great waters, they see the works

of the Lord, and his woonders in the deepe, &c. Which words of the Prophet together with my cousins discourse (things of high and rare delight to my yong nature) tooke in me so deepe an impression, that I constantly resolved, if ever I were preferred to the University, where better time, and more convenient place might be ministred for these studies, I would by Gods assistance prosecute that knowledge and kinde of literature, the doores whereof (after a sort) were so happily opened before me. (xvii, xviii)

As Hakluyt presents it, the source of delight in exploring the world (and the obligation to do so) is to be found in the meeting of two textual forms, the *Mappe* and the Bible, each representing two philosophical worlds, cosmography and faith (a specifically Protestant faith) in a providential, knowable god.⁴ It is also made manifest through cosmography's tools of representation, and, quite simply, through the "entercourse of merchants." The natural world becomes an expression of God's providence and splendor, but the youthful Hakluyt experiences the wonder of it through words – the "words of the Prophet" and his "cousins discourse." Seafaring (according to the Psalmist) offers an opportunity to marvel at "the works of the Lord," but Hakluyt interprets this (in itself a politically significant act, in post-Reformation, anti-Romanist England) not as a directive to take to the *seas* himself, but to the *university*, to "prosecute that knowledge and kinde of literature" whose profound pleasure had just been "so happily opened before me." Elsewhere he talks of "my singular delight" to "have been as it were *ravished* in beholding all the premises gathered together with no small cost, and preserved with no little diligence, in the excellent cabinets" of curiosities of certain gentlemen (qtd. in Parks 167), as I discuss further in the final chapter. Natural history – if you like, knowledge about the world –

⁴ In a chapter on "Protestantism and empire: Hakluyt, and Property," David Armitage (2000) points out the quintessentially Protestant flavor of Hakluyt's story: "Hakluyt represented this event in idiomatically Protestant terms, as an encounter with a prophetic text, guided by a layman and applied to the life of an individual reader and believer" (71). Nevertheless, Armitage argues, Protestantism is wrongly assumed to be Hakluyt's primary influence or concern. See Chapter Five, below, for a fuller account of Armitage's analysis of Hakluyt's intellectual influences.

whether in the form of books, maps, or collections of objects of curiosity, is capable of effecting a kind of ravishment, so strong is the elation it engenders.

Critics have been quick to recognize that Hakluyt's passion for discovery is infused with his commitment to the prospect of colonization.⁵ The cousin whose knowledge so fascinated him was not just a disinterested scholar, but an ardent promoter of colonization who includes "discovery" as only one of many benefits of colonization listed in a lengthy promotional pamphlet on the subject, "Inducements to the Liking of the Voyage intended towards Virginia" in 1585 (qtd. in Taylor *Original Writings and Correspondence of the Two Richard Hakluyts*). These listed benefits evince an aggressive and self-seeking approach to exploration of the most blatant kind (for example, the "glory of God by planting of religion among those infidels," the "increase of the force of the Christians," the "possibilitie of the inlarging of the dominions of the Queenes most excellent Maiestie, and consequently of her honour, revenues, and of her power by this enterprise," and the possibility for trade, both in the listed commodities available in the New World and in the possibility that it would function as a market for English goods to alleviate poverty in England: an "ample vent in time to come of the Woollen clothes of England ... to the maintenance of our poore, that els sterve or become burdensome to the realme"). For the elder Hakluyt discovery and the literature that supported it are integral to the project of increasing the "power," "revenue," religious supremacy, trade, sea-faring prowess, and the profile and "honour" of the English realm.

The nexus between the language and representational systems of learning, on the one hand, and the inclination to dominate, or possess, albeit unconsciously and as

⁵ See, for example, George Bruner Parks, E.G.R. Taylor, Giles Milton, Anthony Grafton and David Armitage.

ancillary to the seemingly commendable drive towards knowledge, on the other hand, is of profound and abiding interest. The representation of knowledge is strangely entangled with the business of exploration and colonization, not least of all in the prevalence and power of the metaphor of “discovery” for intellectual practice in the sixteenth century. Amir Alexander (2001) writes that “the great voyages of discovery were repeatedly cited as a model and an inspiration by early modern promoters of the new sciences. The image of the natural philosopher as a Columbus or Magellan, pushing forward the frontiers of knowledge, became a commonplace of scientific treatises and pamphlets of the period” (1).⁶ If Alexander is right, the effect of this projection is to render the world eminently knowable, and the natural historian and his chronicler, heroic. The tools and strategies he used contributed to the inimical hierarchy that scripted the European adventurer and his readers as actors on a global stage writ large with possibility, in the language of imperialism and its accomplices, God, enterprise, and learning. But while this process may seem easy to trace in more overtly imperialist texts, it is less easy to identify in texts whose object is not colonization per se, but the enlargement of understanding. This presents a critical challenge because a reductive critique which determinedly seeks out signs of imperialism does little to further our understanding of what is at stake in these texts.

Mary Louise Pratt refers to the strategies of “anti-conquest” (4), that is, “strategies of representation whereby European bourgeois subjects seek to secure their innocence in the same moment as they assert European-hegemony” (7). I find the notion of “anti-conquest” useful in that it provides a way to understand the more subtle but nonetheless

⁶ Amir Alexander is an historian of science whose *Geometrical Landscapes: The Voyages of Discovery and the Transformation of Mathematical Practices* (2002) considers the relationship between mathematics and narrative practice during the sixteenth century.

dominating processes of natural history, and the disarming effect of its assured “innocence.” Pratt’s term is resonant for it does not undo the notion of “conquest,” despite the apparent opposition implied by “anti.” Rather it conceptualizes a conquest that masquerades as munificence and virtue and is therefore all the more devastating. But I am uncomfortable with the inscription of a conscious, intentional agent implied in her notion of “conquest” (“anti-” or otherwise). Subjects who “*seek* to secure their innocence” are in some way conscious (emphasis added). The compilations of this study introduce an array of subjects – some fully intent on colonization of the most blatant and targeted kind, others earnest and even philanthropic in their endeavor to develop the learning tools with which to know the world. Their epistemological and textual efforts contributed to the construction of imperialist categories of knowing, regardless of their particular objectives, innocent or not.

To be sure, the yearning to discover more and to account for an expansive world was oftentimes infused with expansionism of a less venerable sort, funded by patrons intent on financial gain and worldly success, albeit on behalf of their sovereign. And inextricably linked to the endeavor of voyaging was the business of *narrating* the “discoveries” and publishing the results, thus laying claim to the “discoveries.” Columbus’s fate demonstrates this: though it has been established that Columbus was the first European unwittingly to “discover” the new continent, his 1493 letter to Ferdinand of Spain was eclipsed by Amerigo Vespucci’s *Mundus Novus*, a four leaf quarto which found immediate and widespread publication in Europe, establishing Vespucci’s prior claim to the discovery and his pre-eminence as an adventurer, though he was in truth

“more a man of the book than an achieved sailor” (Grafton 83).⁷ Anthony Grafton sees in this the start of a new canon based on observation (84). I am not concerned with finding origins, canonical or otherwise. On the contrary, the more I read, the more it seems to me that a prior text can always be shown to have existed, creating the context and a model in relation to which a new text is constructed. The compilers whose works I examine were as quick to reference earlier narratives, establishing a lineage into which their work might be received, as they were to claim the special significance of announcing something “new” that might have bearing on the future – a practice that close reading suggests is based on convention. Indeed, the literature generated legendary figures – explorers, writers and even nations – in the name of learning, and in so doing established the possibility of empire. But these texts deserve close attention to understand how they did so.

In *Culture and Imperialism*, Edward Said argues that the “enterprise of empire depends upon the idea of having an empire” (11), not only the material instruments with which empire was claimed, though of course these were critical too. He contends, also, that the “actual geographical possession of land is what empire in the final analysis is all about” (78).⁸ The two are inextricably interlinked – the actual project of colonizing land, and the idea of empire constructed in the literature colonization generated. The stories and epistemological structures upon which European culture and learning is founded contributed powerfully to the imaginary within which empire lived and achieved its

⁷ Columbus's *Journal* could not have had the same impact as it was finally published only in 1825 and his *Letter* which did get more widely circulated, was just eight quarto pages long. See Mary B. Campbell *The Witness and the Other World* 170.

⁸ Edward Said (1936-2003) was one of the founding intellectuals of postcolonial studies and author of numerous prominent critiques of imperialism and its effects, most notably *Orientalism*, the influential study of the way the “Orient” has figured in the imagination of the west.

“coherence” and “durability” (7). Said quotes William Blake’s astute observation: “The Foundation of Empire is Art and Science. Remove them or Degrade them and the Empire is No more. Empire follows Art and not vice versa, as Englishmen suppose” (*Culture and Imperialism* 13). But to understand how, and to what effect, empire entered the European imaginary through “Art” and “Science” requires careful investigation of the texts within which these were given expression, rather than interpreting these texts simply as products of imperialism, read through the lens of our own learning practices and with the self-assurance of hindsight.

Power/knowledge

Michel Foucault’s analyses of the subtle power/knowledge nexus operating in the production of disciplines of knowledge (criminology, psychiatry, medicine), offer a critical method to account for how a society constitutes itself through the production of what it knows.⁹ Though he himself does not address his efforts towards imperialism at all, his analytical methods have made themselves available for studies of the history of colonization, and have spawned generations of cultural critics who have both taken up his critical practice and challenged or extended it. For example, in “Foucault and the Imagination of Power” (1986), Edward Said charges that “Foucault ignores the imperial context of his own theories” though Said’s discursive analyses of the language and knowledge-production of “the Orient” in *Orientalism* deployed and extended Foucauldian methods.¹⁰ Ann Laura Stoler, in her study of race and sexuality in

⁹ See *Madness and Civilization: A History of Insanity in the Age of Reason* (1965), *The Birth of the Clinic: An Archaeology of Medical Perception* (1973), and *Discipline and Punish: The Birth of the Prison* (1977).

¹⁰ Qtd. in Stoler (5). See Robert Young (1995) for an explication of Said’s argument that western knowledge practices were complicit and even instrumental in producing colonialism’s subjections, and his more disputed theory that colonial discourse was “self-generating” and had nothing to do with the “actual”

nineteenth-century European colonialism, has taken this critique further, describing Foucault's omission as "categorical colonial effacement" (*Race and the Education of Desire* viii). At the same time Stoler acknowledges that Foucauldian methods have generated an array of scholarship that critiques ("disassemble[s]") Eurocentric epistemology:

A collective impulse of the last decade of post-colonial scholarship has been precisely to disassemble the neat divisions that could imagine a European history and its unified collectivities apart from the externalized Others on whom it was founded and which it produced. And Foucault's metatheory has played no small part in that project, animating a critique of how specific and competing forms of knowledge have carved out the exclusionary principles of imperial power in the first place. (5)

But it is important to retain enough critical distance to approach specific areas of study without repeating Foucault's sometimes sweeping gestures. Stoler draws attention to critics "who draw on Foucault's discursive analysis for treating empire and its discourses of sexuality without querying the specific historicity assumed for those discourses" (6). The spirit with which I take up Foucault's powerful approach to representation and the production of knowledge in this study, is one which seeks respectfully, but with critical distance, to develop new understanding by bringing to bear a particular set of concerns, theoretical and historical, in relation to the literature under focus.

The method Foucault calls "genealogy" resists facile identifications of good and bad practices, and makes it possible to avoid having to conjure up knowing subjects,

– that the Orient is simply a projection of the west. Young is sympathetic to Said, indeed, can be said in some ways to be following Said's critical lead, though he argues that analyses of colonial discourse need also to pay due attention to historical specificity, to the "actual conditions such discourse was framed to describe, analyse or control," and to the traces of racism embedded within their own critical practices (Young 159, 160).

while at the same time enabling penetrating analyses of the ways in which the production of knowledge is implicated in the effects of power. He describes genealogy in this way:

I would call genealogy ... a form of history which can account for the constitution of knowledges, discourses, domains of objects, etc., without having to make reference to a subject which is either transcendental in relation to the field of events or runs in its empty sameness throughout the course of history.
(*Power/Knowledge* 117)

His genealogies propose, by example, critical skills with which to gain insight into the politics of knowledge production. His notion of “power” does not address itself to “repression” as such (*Abnormal* 43). Rather, he is proposing “a different type of analysis of power” (43) which considers the myriad of mechanisms and techniques by which any given society organizes itself and comes to know itself – mechanisms of exclusion and control, the language through which identifications are set up and known, the systems of ordering, the institutional techniques through which society addresses itself to itself and brings into being its subjects, that is, subjects who recognize themselves to be “at home” in the social structure: “The fundamental codes of a culture – those governing its language, its schemas of perception, its exchanges, its techniques, its values, the hierarchy of its practices – establish for every man from the very first, the empirical orders with which he will be dealing and within which he will be at home” (*Order of Things* xx).

Foucault has been criticized for resisting a concept of agency and for the heavy influence of structuralism in his early work – though he himself refused the label “structuralist.” Hubert Dreyfus and Paul Rabinow question the idea that discourse could ever be sequestered and governed by coherent, if unconscious, rules (79). David Hoy argues that Foucault makes it impossible to say how social change might come about or

“why anyone should care,” given that he refuses to adjudicate on the basis of values and insists on the self-referentiality of discrete discourses during the early period of his work (5). Despite a chapter titled “The Methodological Failure of Archaeology,”¹¹ Dreyfus and Rabinow nonetheless affirm the analytic method which analyzes how discursive formations produce the object about which they speak, and propose the term “interpretative analytics” to describe what they identify as a coherent methodology, developed over some years, despite Foucault’s distancing himself from his earlier work on “archaeology” (61). I do not mean to enter this debate here but refer to this work briefly because it offers me a critical entry point into the literature of colonization in the sixteenth century without ascribing intent in order to identify the techniques of (imperialist) power and instead considering how its language and systems contributed to sixteenth-century world-making.

Foucault is careful not to characterize power in terms of an agent to be identified and denounced with reference to ideology.¹² The workings of power are infinitely more subtle than this, as he presents it, and not a matter of identifying absolutes. His analyses of power invite reflection on the mechanisms by which truths that come to seem self-evident, are established, and what goes into the construction of their unassailable position in the name of science. Where does “truth” get its coherence? What comes to be deemed a worthy or desirable object of knowledge, by what authorizing system, and to what

¹¹ Dreyfus and Rabinow refer here to Foucault’s early methodology of discourse analysis, set out in *The Archaeology of Knowledge* (first published in 1967 as *L’Archéologie du Savoir*), written just before *The Order of Things* (1970).

¹² Foucault explains his reluctance to fall back on the notion of ideology in this way: “The notion of ideology appears to me to be difficult to make use of it always stands in virtual opposition to something else which is supposed to count as truth. Now I believe that the problem does not consist in drawing the line between that in a discourse which falls under the category of scientificity or truth, and that which comes under some other category, but in seeing historically how effects of truth are produced within discourses which in themselves are neither true nor false” (“Truth and Power” interview in *Power/Knowledge* 118).

effect? To attempt answers to these questions, in relation to the developing language of what I will here call science (though of course in the period of my study this term refers more generally to the business of “knowing” than the more specific disciplines “science” later came to represent), is to accept the ineluctable connection between knowledge and domination, perhaps nowhere more evident than in the history of colonization.¹³

Foucault invites consideration of what he calls “the politics of the scientific statement” (*Power/Knowledge* 112), not with reference to the controlling influence of ideology, a critical metaphor he considers flawed for creating the misleading impression that ideological control is somehow external to a discipline and its practices, and therefore liable to be set aside in an effort to reach the knowledge that is more true, more pure. Rather, Foucault is interested in how “the effects of power circulate” within the discourses and practices of knowledge, and considers “the rules of formation of statements which are accepted as scientifically true” (112):

It is a question of what governs statements, and the way in which they govern each other so as to constitute a set of propositions which are scientifically acceptable, and hence capable of being verified or falsified by scientific procedures.... At this level it's not so much a matter of knowing what external power imposes itself on science, as of what effects of power circulate among scientific statements, what constitutes, as it were, their internal regime of power, and how and why at certain moments that regime undergoes a global modification. (112, 113)

This is a useful understanding of certain forms of power – as something that inheres in knowledge practices, rather than something imposed by hostile and knowing outsiders –

¹³ Lorraine Daston (2000) uses a Latin term, what she calls “the more ample ‘*scientia*,’” to describe a broader epistemological endeavor than is designated by the current sense of the word “science” – the reach toward knowing more in the early modern development of the natural sciences. I find this a useful term for its avoidance of the temptation to fall back on terms that pre-empt the development of epistemological fields recognizable to the twenty-first century reader, but have nonetheless chosen to use the more recognizable term “science” advisedly throughout the dissertation.

for a reading of the texts of this study and their relationship to imperialism. Indeed, the relationship between “power” and “knowledge” is inevitable and unavoidable. What comes to be known will necessarily proceed from what is already known and established as authoritative, in the norms and practices of any given society, even where developments largely refute what has come before. Moreover, the habits of thought, the terms, and the representative conventions which shape what we are here calling “knowledge” in the sixteenth century will necessarily come from what has existed before – this is true of the generic forms as well as the language and terms of the representative systems. These forms and representational systems are never neutral translations of ideas, as I will argue in Chapter Three when considering the prominence of the mathematical number and geometry in narratives that account for an enlarged world. Knowledge practices function also to determine what *can* be known. However, to apply an analysis of what Foucault calls the “internal regime of power” in the knowledge practices of the sixteenth century, I have needed to look closely at the media in which “new” knowledge is presented – the compilations of exploration narratives – to get a better sense of how these writers understood, for themselves and their readers, what it meant to “know,” for fear of imposing on these texts a twenty-first century conception of “knowledge” – abstracted, communicable ideas whose relationship to practice is hierarchically determined. Only close reading can elucidate the nature of the relationship of “knowing” in the sixteenth century and “doing.” The texts of this study suggest also that this relationship is fluid and unstable, requiring of modern-day theorists a sensitivity to period and closer attention to the voices with which sixteenth-century practitioner/philosophers address their own contexts of learning.

Foucault's characterizations of the compilation in the sixteenth century

Michel Foucault's perspective on the knowledge practices of this period makes much of the cumulative impulse so evident in the form of the compilation, where seemingly incongruous texts are placed side-by-side in single, all-embracing volumes. As Foucault presents it, building knowledge in the sixteenth century is a matter of demonstrating resemblance. For Foucault, "resemblance in sixteenth-century knowledge is without doubt the most universal thing there is" (29) and it would make sense, following Foucault's analysis of early modern knowledge practices, that the compilation, as a form, should flourish. As he characterizes it, the compilation's methodologies and treatment of texts – where disparate descriptions and tales are placed alongside more apparently verifiable accounts – are in keeping with the period's wide embrace in search of similitude. In the sixteenth century the pursuit of knowledge is a matter of gathering, incessantly. It "can, and must, proceed by the infinite accumulation of confirmations all dependent on one another... Hence those immense columns of compilation, hence their monotony" (*Order of Things* 30). As a result, though faced with a world declared "new" and with invigorating "discoveries," the preoccupation with similitude, both in terms of content and methodology, meant that, for Foucault, "sixteenth-century knowledge condemned itself to never knowing anything but the same thing" (*Order of Things* 30).

This is not to say that the materials deemed worthy of inclusion in the serious publications of the age were all of one type – in fact, by Foucault's analysis, it is precisely the disconcerting variety of material, all bundled into single volume publications as though they were alike, that suggests the period's particular approach to text – the valorizing of the written word, regardless of genre – and its fixation with

resemblance that produced similitude out of what a modern scholar might consider difference:

And it is in this respect that resemblance in sixteenth-century knowledge is without doubt the most universal thing there is: at the same time that which is most clearly visible, yet something that one must nevertheless search for, since it is also the most hidden; what determines the form of knowledge (for knowledge can only follow the paths of similitude), and what guarantees its wealth of content (for the moment one lifts aside the signs and looks at what they indicate, one allows Resemblance itself to emerge into the light of day and shine with its own inner light). (*The Order of Things* 29)

For Foucault, the “wealth of content” – wealth, in this instance, suggesting both variety and plenty – in early modern texts paradoxically finds its guarantor in the figure of resemblance. Foucault’s argument finds that resemblance itself is the highest value, the defining feature, the brightest light, even though (and perhaps because) it is not immediately evident, “something that one must nevertheless search for, since it is also the most hidden.” It is helpful to understand Foucault’s position as an acknowledgement of the sophistication of early modern people of letters: they were no more taken in by the truth claims of legends than we are, but nevertheless understood the recounting of a myth, for example, to be of relevance, even “true,” just as a seemingly detached description might be. The task of gathering information was never complete – indeed, it could never be complete, as Gary Gutting explains in his elucidation of Foucault’s thinking: “The resulting conception of knowledge is one that places magic, erudition, and science on a par, that makes no essential distinction between direct observations and reported stories, that takes the form of commentary, and that is the essentially incomplete pursuit of an unending chain of similarities” (146).

The texts under discussion in this dissertation would on first reading seem to bear this out, but only superficially, in that it is true to say that works as diverse as what we would consider to be “magic” and “science” appear alongside each other. Material that might appear to a modern-day scholar as incongruous or contradictory is gathered into single volumes, each text purporting to “shed light” with equal seriousness. But this does not constitute an “unending chain of similarities” and compilers were more alive to their texts’ distinctions than it may appear. Compilers’ claims, which we will examine closely in the chapters that follow, offer insight into the practices and assumptions that obtained in early modern knowledge-gathering. To offer but one example, in Hakluyt’s 1589 *Principall Navigations* John Mandeville’s fabulous *Travels* are included along with other more recent and better tested “voyages” whose claims are presented as verifiable with reference to dates, plotted charts, and corroborating supporting documentation, structured into the compilation. The fact that Mandeville is left out of the larger compilation, the 1598 *Principal Navigations*, and that Hakluyt appends a cautionary caveat about its reliability, suggests a shift in sensibilities and expectations about demonstrable facticity. The chronological arrangement of texts may suggest that the texts are all of a sort, distinguished only by their chronology, but the division of texts into primary and secondary material is suggestive of a sense of distinct form and function even then, even though the logic seems to be circular and resolutely not exclusionary, regardless of the degree of dissimilarity.¹⁴ (Hakluyt’s compilations will be discussed in greater detail in the final chapter.)

¹⁴ Secondary texts such as “The tombe and Epitaph of Sir Iohn Mandeuill in the city of Liege noted by Ortelius in his *Itinerarium Belgij*,” an inventory of “presents giuen to the great Turke at that time by his Bashaes” and Mandeville’s “dedication” to Edward III, are listed in a separate list of supporting material, though the texts themselves appear immediately after the primary texts in the body of the compilation.

Foucault does not discuss in any detail the make-up of the texts upon which he bases his analysis of sixteenth-century knowledge practices. Nowhere does he describe in any detail how a text is constituted – and has come in for criticism, as a result, for the glibness of his analyses.¹⁵ This criticism seems warranted, though it is also important to note that his endeavor in *The Order of Things* is not a critical analysis of historical events or particular texts as such. Still, it seems necessary to test his characterizations through close readings of the texts themselves. For Foucault’s dismissal of the texts of this period as nothing but the same thing gives one pause; the cumulative impulse evident in so many sixteenth-century compilations does not necessarily result in layer upon layer of sameness. On the contrary, I hope to show that sixteenth century texts differed substantially from one another, and not just in terms of their content, but in their deft treatment of distinct texts. They were, like all literature, products of the tumultuous and varied ambitions of their time, and if one examines texts carefully, methodically, it quickly becomes evident that sixteenth-century texts reflect the shifts in orientation, back and forth, in the representation of the expanding world.

The form of the compilation

The compilation as a form is by its very nature varied, and compilations in the sixteenth century differ widely from each other. Though many of the volumes under discussion promise cohesion in one way or another, a promise which seems to be a key feature of the compilation in this period, closer examination suggests that they encompass such a varied

¹⁵ Pamela Major-Poetzl writes that *The Order of Things* “cannot be regarded as a historical study in any conventional sense. In fact, Foucault does not deal with objective reality at all. He examines various perceptions, and thus his ‘archaeology’ of the human sciences is a form of idealism that draws heavily from speculative philosophies of history and in particular from the Hegelian tradition” (149). Others have gone so far as to label him “antihistorical” because he isolates specific periods without offering explanations or analyses of historical shifts.

collection of texts, at times seemingly arbitrarily gathered together, that “cohesion” is made possible by nothing other than the fact of the publication of the document itself as a single title, and by the title’s assertion of completeness. And yet the compiler’s choice of inclusion is obviously not arbitrary, and during its development in the sixteenth century, patterns emerged and conventions became established, though individual publications adopted these conventions unevenly. Hakluyt famously chose to use the compilation to publish as many texts about England’s seafaring ventures as he could find or commission – he himself had translated some of the documents included and others he had brought into being by interviewing recently returned sailors and transcribing or reporting on these interviews, though even here the accounts are presented in the name of the sailor, without the degree of careful attention paid to the issue of authorship expected of published texts today. Hakluyt’s name appears only as compiler and publisher, and where appropriate translator, but his role was more active than that suggests – one might say he was a “generator” of texts, in addition to being a “collector” and “publisher.” Many sixteenth-century texts bear his name in some capacity, though not necessarily as “author.” For example, in the case of Ortelius’s prominent new map that appears first in *Principall Navigations* (1589), Hakluyt himself commissioned the map to accompany his new collection.

An enormous amount of text, structured in a variety of narrative forms, was generated over the decades, and centuries, during which the experience of discovery and encounter captured the European imagination. The enquiry which animates *this* text (which is also, arguably, inspired by the continuing fascination and resonance of encounter) is about the nature of writing produced in the business of discovery and its

ability to embrace diverse genres and representational modes, offering both the factual event and stirring narrative in its account of the New World. The compilation is, by its very nature, a flexible and changing form. I limit my discussion to compilations of travel accounts about the Americas: histories which reported on the encounters between the old world and the new, whether it be in the form of matter-of-fact ships' log books or the more grandiose and self-consciously eloquent dedications, reflecting on the endeavors which created empires out of countries and legends out of adventurers, entrepreneurs and naturalists.

The compilation was available for tales of heroic encounters with unknown worlds, and charts and tables, all bound together in a form which invited a serious attention. Expensive, leather-bound, gilt-edged, introduced by and dedicated to public figures, the compilations of the sixteenth century made up a mainstream, established genre, bestowing legitimacy and serious-mindedness on the sometimes questionable tales that made their way into the collections. Something about that form made it available to the encyclopedic ambitions of the period and to the making of legends: it offered scope for an astonishing degree of diversity and the break with tradition that facilitated a new epistemology, but it also promised an authority and orderly, scholarly seriousness, centered on the figure of the compiler himself who personally vouched for the contents of the tomes with his signature.

Methodology

Texts are not written in a vacuum, and it seems crucial to recognize the context of forceful imperialistic expansion within which the sixteenth-century compilation emerges along with the knowledge it sought to represent. But it is also important not to project

onto texts, with all the wisdom of hindsight, the significance of their imperialistic moment, and instead to try to read them in their own terms. In the case of Martín Cortés (Chapter Three) and Richard Hakluyt (Chapter Five), for example, it is not difficult to demonstrate the link between Europe's imperialistic ambitions and the development of knowledge because of their particular personal histories and the infusion of their interest in colonization in their texts. But I hope to read their texts, and others', to make a larger point about the period: while the imperialist history of the period inevitably shapes the production of what it knows, the construction of the world as an object of knowledge and the tools developed in order to represent it proceeded asymmetrically and in ways more complex and subtle than can be understood by a generalizable understanding of the relationship of knowledge and power. This relationship, between knowledge and power (or, specifically, imperialism), can only become evident when the texts of this period are scrutinized for what their form, language and representative methods reveal about the relationship of "knowledge" and power. In particular, the form of the compilation facilitated the construction of the world in this period; it was a form that was available to the unruly scope and ambitions of the period, to manage the improbable, chaotic burgeoning world, newly-known.

I have attempted a cautious approach to the literature of this study, recognizing that texts are always, inevitably situated, and that the intellectual sensibilities of the period and the habits of thought evident in the knowledge practices, bespeak a complex relationship between the vicissitudes of power and the production of knowledge. The method I have adopted in this study is modest in its ambition – to read the texts closely, attending to details of structure and language, in order to discern the kind of intellectual

construction of the world taking place at this time. This approach necessarily involves careful reading and an attention to detail, in the hope of appreciating how sixteenth-century explorers and writers understood their world and their task of representing it, without falling into the presentist trap of identifying developments that may not be borne out by close analysis. An investigation into how the world was being constructed at this time necessitates reading in this detailed manner – to identify the terms used to describe it, terms that may appear contradictory and awkward; to trace the development of the forms used to represent new “discoveries,” and to consider the knowledge-practices and representative methods with which the ever-expanding globe came to be “known.”

What follows

I offer a close reading of some of the compilations of the early period of European expansion. I consider texts ranging from Martin Waldseemüller’s *Cosmographie Introductio* (1507) to Richard Hakluyt’s enormous compilation, *Principal Navigations of the English Nation* (1598), in order to trace the ways in which New World difference was represented and knowledge-gathering became caught up with the period’s growing (and nation-specific) colonial interests.

The compilation’s encyclopaedic scope and pretensions towards scientific accuracy (in relation to the demonstrably material world) meant that it could embrace widely diverse texts. Lists of natural historical specimens, astronomical treatises, and maps are arranged side by side with self-consciously poetic texts and epic adventure tales. Representational methods, too, vary in style and authoritative premise: the recounting of verifiable events, logging of quantifiable data, reference to geometrical figures, catalogues (of “curiosities”), promotional literature for would-be colonists and

the eye witness narratives all have a place. I examine these representational methods for what they suggest of the habits of thought at this time and consider how they helped to set up what becomes considered worthy objects of knowledge. Specifically, in Chapter Two I examine cosmographical texts and in Chapter Three works on navigation. These texts evince the quest for an idiom with which to position the world – in relation to the heavens, in cosmography, and in the face of its ever shifting landscapes, in navigation. What concerns me is the business of *how* to “know,” and what schema are invested with the hope of knowing, in these texts. The treatment of the mathematical number and of instrumentation as pre-eminent, even in narrative-based texts, bespeaks a need to stabilize, and regularize, an increasingly incommensurable world. I argue that the representative schema were not just neutral translations of “knowledge” but determined what could become known

Bringing the tools of literary analysis to bear on these texts, not traditionally read for their literary elegance, yields a rich understanding of the complex movement between “self” and “other” at this time of discovery. I consider the ways in which the experience of encounter with the New World structured the literary imagination and the language of the emergent sciences. This is the focus of Chapter Four, a study of Sebastian Münster’s *Treatyse of the Newe India* and Sebastian Cabot’s “Ordinances” (Cabot’s instructions to explorers on how to collect data). I consider what happens when human subjects are treated as objects of curiosity and, then, of natural history – and how the possibilities of knowing become unsettled in the experience of encounter, evident also in the attempts to represent it. I look at the terms used, how they are treated, presented, withdrawn from, celebrated, anxiously qualified – relational terms such as novel, strange, familiar,

monstrous, “our,” beastly, peculiar, gentle, humane, barbarous, infidel – and consider what role these played in the knowledge-practices of the time.

Chapter Five turns to Richard Hakluyt’s early compilations, *Divers voyages* and *Principall Navigations*, with a view to identifying the ways in which the compilation became available as a site for asserting the increasingly national ambitions and identifications of the period, and the ways it made legends of explorers and breathed into being the idea of empire.

I consider the compilation in particular for a number of reasons: because of its scope and its claims to account for the “whole” world; because it invested a variety of material, even those of uneducated sailors, with the status of formal literature, worthy of expensive publication; because the compilers’ expository and editorial work offers rich opportunities for analysis of the ways texts were understood to work; and because it was given the role of announcing and laying out new learning about the world, in a variety of different registers. This genre played a significant role in making the New World intelligible to the Old in a period when epistemological fields had not yet hardened into separate disciplines and the ideas and terms with which the New World comes to be associated were not fixed. I have chosen the most prominent compilations to have focused on the New World, that is, compilations which were treated as significant by contemporaries or by later scholars. There are gaps, however, and scope therefore for further research. I have not aimed to be comprehensive, but have sought out texts which evince a wrestling with the problematics of world-making and which seem to reward the concentrated attention of close reading.

The unwieldy magnitude of the compilation invites probing. The compilations of the sixteenth century are widely divergent, and yet implausibly assertive of their coherence and earnestly avowed truthfulness. The earnestness itself suggests that their facticity is in question, or at least under focus. And indeed it was: new methods of writing about natural philosophy, new methods of producing histories, were developing, based on centuries-old writing practices but iconoclastic in their endeavor to give voice to the experience of even an unscholarly eye-witness who was now charged with the task of accounting for the shape of the globe, as newly constituted.

Chapter Two

“What our instruments showed”: Martin Waldseemüller, Jan van Doesborch and the task of representing a world unknown to the ancients in the early compilations

This chapter examines the first compilations to represent the New World, specifically Martin Waldseemüller’s *Cosmographie Introductio* of 1507 and Jan van Doesborch’s 1511 compilation, *Of the newe landes*.¹⁶ These early examples of the genre which dominated attempts to represent the newly “discovered” world during the sixteenth century differ substantially from each other. Waldseemüller’s compilation includes an array of dissimilar texts: his famous map, *Universalis Cosmographiae descriptio* (the first to use the word “America” to name the newfound continents), his “principles of geometry” (instructions about how to read his maps), the flowery literary prefatory pieces, and the influential narrative, “The Four Voyages of Americo Vespucci.” Jan van Doesborch’s diminutive and rather unsophisticated volume published in Antwerp in 1511 lay in obscurity for more than three centuries, but was republicized and celebrated by nineteenth-century American scholar Edward Arber in 1885 as the first English text to use the name “America.” The Van Doesborch text, replete with unabashed borrowings

¹⁶ The full title reads as follows: *Of the newe landes and of ye people founde by the messengers of the kynge of portyngale named Emanuel. Of the r. dyvers nacyons crystened. Of pope John and his landes and of the costely keyes and wonders molo dyes that in that lande is.* Printed in Antwerp in 1511. Available as the first book in *The First Three English Books on America [1511]-1555 A. D* (1885).

and sensationalist claims, differs substantially from Waldseemüller's, and the comparison is instructive for the shift it registers in literary sensibilities.

I begin with a close reading of Waldseemüller's compilation and consider how the seemingly disparate texts it contains, work together to create space, and authority, for one of the key texts Waldseemüller includes in his compilation, Americo Vespucci's description of the New World and the people encountered there. Vespucci's "Voyages" takes up more than half of the Waldseemüller compilation. Waldseemüller repeatedly points to Vespucci's text as the justification for his choice to attach the word "America" to the new land mass on his maps. But Vespucci's contribution is more than an exercise in naming: it establishes a set of relationships and authorizes the perspective of the European explorer/naturalist/colonialist, and for this Waldseemüller's rewards him by having his name celebrated into posterity. Vespucci accounts for both the strangeness of the New World *and* the reassuring familiarity of this potential colony. He refers to "instruments" and makes much of his authoritative positions as the eye-witness, but it is the epistemological status of this scholarly compilation itself that confers authority on Vespucci's text. His narrative must therefore be read in the context of the whole compilation if we are to recognize the ways in which the distinctive texts validate each other, using their particular methodologies and references to establish a lens with which to view the New World.

My task in the chapter that follows, therefore, is to examine closely, first, the Waldseemüller compilation, with all its component texts, and, second, the Van Doesborch, in order to be able to comment on the form itself, and the way the compilation as a form facilitates its representational endeavors.

For a key factor in understanding the representational practices of this period is the *form* of the compilation itself, with its wide embrace that excludes nothing and seems to generate wonderment as it gathers strength. And prominent within the compilation's ambit is the subject of cosmography which offered a language with which to account for the world. Part of the chapter that follows, therefore, is devoted to a discussion of cosmography, specifically.

My objective is to examine the representational tools of sixteenth-century literature to consider how the experience of encounter structured the literary imagination and created the intellectual and cultural milieu in which new questions could be asked, new epistemological investigations roused. In a discussion specifically of cosmography, I use the texts to consider how the presence of human subjects troubled cosmographical certainties. Close readings of accounts of the "New World" offer for analysis the terms with which difference is represented, accounted for, and disavowed, and the vocabulary with which the world is shaped. In the very early materials, particularly, epistemological fields have not been consolidated into separate spheres – self-consciously poetic texts are placed side-by-side with maps, which are set up in relationship with personal accounts – and recognizable tropes with which the New World comes to be associated, have not yet hardened into truisms. I also consider Michel Foucault's useful insights into the knowledge practices of the period (explicated primarily in his earlier work in *The Order of Things* of 1970) and engage with his ideas through close readings of the particular texts that form the focus of this chapter.

Waldseemüller's *Cosmographiae Introductio*

The facsimile edition of Martin Waldseemüller's *Cosmographiae Introductio* was first published by the United States Catholic Historical Society in 1907 to commemorate the fourth centenary of the publication of Waldseemüller's influential 1507 text and, specifically, the role of *Cosmographiae Introductio* in the naming of America. It is primarily "a little memorial volume," published to celebrate this political, historical entity.¹⁷ That it is an exercise in nostalgia is evident also in the attempt to mimic the type-set and layout, for example of the title page, of the original 1507 text (including the choice of typical vocabulary to mimic the titling of sixteenth-century extended titles) though of course this current edition has been translated into English by contemporaries of the publication and is a new publication altogether.¹⁸

Waldseemüller's compilation is, first, a work of cosmography. The original English title reads as follows:

Introduction to Cosmography with Certain Necessary Principles of Geometry and Astronomy to which are added the Four Voyages of Amerigo Vespucci, A Representation of the Entire World, both in the Solid and Projected on the Plane, including also lands which were Unknown to Ptolemy, and have been Recently Discovered.

There are four main contributing texts: Waldseemüller's large world map of 1507 called *Universalis Cosmographiae descriptio in plano*; his *Universalis Cosmographiae*

¹⁷ The "Introduction" explains the *raison d'être* for the 1907 publication in the following way:

As part of the *Cosmographiae Introductio* appeared a Latin version of the four voyages of Amerigo Vespucci. It was to serve as a justification for calling the new world "America."

The United States Catholic Historical Society, desirous of commemorating the four-hundredth anniversary of this notable event, publishes herewith a little memorial volume consisting [of the following]. (v-vi)

¹⁸ The extended title is given as follows: *Cosmographia Introductio of Martin Waldseemüller in facsimile, followed by the Four voyages of Amerigo Vespucci, with their translation into English; to which are added Waldseemüller's two world maps of 1507, with an introduction by Prof. Joseph Fischer, S.J., and Prof. Franz von Wieser; ed. by Prof. Charles George Herbermann, PH. D.*

descriptio in solido (the map shaped with a view to forming a three-dimensional globe); the *Cosmographie Introductio* (Waldseemüller's exposition of the "principles of geometry" written to accompany the maps); and the "Four Voyages of Americo Vespucci" which appeared in Latin in the 1507 text, translated from the original Italian, into French and then into Latin. In addition to these four primary items there are a number of prefatory pieces. Immediately after the title page is a dedicatory poem to Emperor Maximilian I written by Philesius Ringmann, a member of Waldseemüller's literary circle, known as the "Gymnasium Vosagense." Following this is the "Preface" by Waldseemüller himself (or "Martinus Ilacomilus," the Greek form of his name). Another piece by Philesius Ringmann addressed "To the Reader" precedes the Vespucci text, followed by two brief dedicatory poems to the reader by the Latin translator, Johan Basinus Sendacurius (also a member of Waldseemüller's circle in St. Dié, Lorraine).

In this section I begin a close reading of Waldseemüller's compilation by working through the prefatory material, which I understand to be the compiler's attempt to manage the enormous claims being made in this little volume, and his attempt to establish coherence from an array of dissimilar texts.

Cosmography is at the heart of Waldseemüller's objective in producing a *Cosmographiae Introductio*. Waldseemüller explains his purpose in this way: "The purpose of this little book is to write a description of the world map, which we have designed, both as a globe and as a projection" (caption to chart inserted between pages 66 and 67). To take this at its word, the compilation itself is simply a companion document produced in support of the map, the principal document. This suggests that this visual diagrammatic form carries great cultural and epistemological weight. But the materials

themselves assert their own significance, as we will see. Before the lesson in cosmography begins, the prefatory material sets out the cultural landscape celebrating the cosmographical breadth of this endeavor. The first text to appear is Philesius's poem to Maximilian I. The poem celebrates, in its opening gambit, that the emperor's "sacred" provenance extends to the ends of the earth, "the farthest lands":

To Maximilian Caesar Augustus
Philesius, Native of the Vosges

Since thy Majesty is sacred throughout the vast world,
Maximilian Caesar, in the farthest lands,
Where the sun raises its golden head from the eastern waves
And seeks the straits known by Hercules' name,
Where the midday glows under its burning rays,
Where the Great Bear freezes the surface of the sea;
And since thou, mightiest of mighty kings, dost order
That mild laws should prevail according to thy will;
Therefore to thee in a spirit of loyalty this world map has been dedicated
By him who has prepared it with wonderful skill.

The End.

The comparative term ("farthest") immediately places foreign lands in direct relationship to Europe, which occupies the center. Even when the strangeness of the "farthest" lands is presented in terms of climate extremes (lands where the midday sun's rays are "burning" or the surface of the sea is frozen), the image of the sun raising "its golden head" over "the eastern waves" renders that extremity familiar. Though the waves over which it shines are "eastern waves," the sun is the same sun known to Europe. "The sun," introduced as it is by the definite article, is not a different sun, nor is "the sea" a different sea. Difference, as soon as it is presented, is immediately reinscribed and gathered under the dominion of "the mightiest of mighty kings," Maximilian I.

Waldseemüller's own "Preface" begins, too, with a reference to "the most remote regions" and "the most distant races." As with Philesius's poem, the use of comparative adjectives sets up a direct relationship between these lands and Europe. The two are rendered simultaneously distant from each other, and in conversation. The quote from Boethius's poem repeats the gesture in Philesius's dedication, though this time it is not the sun but Phoebus, the god of the sun and of poetry, who presides over the waves of "the farthest east." Here the sun is even less distant and impersonal than the sun of Philesius's poem. Boethius's literary gesture makes Phoebus himself the source of the rays; it is this Greco-Roman god who brings about the unfolding day in remote lands. By celebrating the earth and its forces in this way, Waldseemüller, through Boethius, grants mythic proportions to European dominion over distant lands. What has seemed "remote" and unknown is now recast as being subject to the same authorizing dominion of the sun (or Phoebus), already known to the reader. Myth, measurement, figures and erudition all work together to establish the lofty vantage point of the compilation.

Having established as a premise that exploration is a "pleasant but also profitable" endeavor, his first assertion, Waldseemüller affirms the worthiness of "learn[ing] from books the location of lands and cities and of foreign people," his second assertion (33). Repeating the adjectives "pleasant and profitable" a third time, he makes a stand for the worthiness of learning about "the manners and customs of all these peoples," in the form of a rhetorical question ("who will deny?"). His second and third assertions are based entirely on a premise ("If it is not only pleasant but also profitable in life to visit many lands and to see the most distant races") that relies for its authority on Plato ("and many other philosophers"). This premise quickly segues into rhetorical questions that defy a

response. Indeed, who would deny the modest claims, on the face of it, that these pursuits are “pleasant and profitable?” And yet the two endeavors, to please and to profit, will go on to form a crucial legitimizing axis in the development of narrative forms for the next two centuries.

Waldseemüller’s preface seems to be creating space (and authority) for Vespucci’s text which, in turn, authorizes Waldseemüller’s own choice of the name “America” for the newly “discovered” continent. Vespucci’s account announces in narrative form what he calls “the new lands” (85) and draws attention back to Waldseemüller’s two world maps, the documents most prized as the rationale behind his efforts. The texts work together to validate each other, in a circular logic, and create more than the sum of their respective parts. The impulse is an inclusive one, but not mindlessly so. What the particular form of the compilation allows is precisely a wide-ranging embrace that enables difference to be *managed* and constructively deployed. Waldseemüller’s compilation relies on the inclusion of notably distinct texts in order to make the claims for which it is remembered.

Vespucci’s text is more readerly in style than the non-narrative elements of the text, as indeed he celebrates in his own preface. His dedication establishes a suitable tone of address, as per convention. His letter to “the most illustrious René,” Duke of Lorraine and patron of Waldseemüller’s literary circle, functions as an elaborate apologia, excusing the “foolhardiness” and “presumptuous[ness]” of his address with reference, first, to the Duke’s character (“your merits”) and, second, the writer’s confidence of “the absolute truth” of accounts “which neither ancient nor modern authors have written,” he adds in a parenthesis that underplays the magnitude of his claim to be presenting new

knowledge. Before proceeding with his account of a remarkable “discovery,” he secures in this way both the appropriate tone of the conversation (between an apparently modest writer of “triflings” and his august audience) *and* the fascinating novelty of what he also vouches is an absolutely truthful account. Vespucci makes a virtue out of what he disingenuously represents as his “unattractive and quite unpolished style” (84) by associating this plain style with the truthfulness he swears to. The careful rhetoric flies in the face of his purported fear that he would be received “as if I were a man unacquainted with the Muses and a stranger to the refining influence of learning” (84) as a result of this plainness. He asserts a number of times at the end of the letter that his accounts “will please” the reader, in “their very novelty,” though they might be more verbose (“prolix”) than the “subject warrants” – a moot point, as the subjunctive clause and its introductory “if” suggests. On the basis of these pages alone, Vespucci emerges as a consummate man of letters, deftly navigating his way through the expectations of veracity (“absolute truth”) and delight. The boldness of his claim to present knowledge that is entirely new, too, is tempered with gestures of modesty, steeped in rhetoric though they are. More importantly, he will emerge as Discoverer of America and nominator of this region as a result of these letters and the prominence and aggrandizing introduction they are given. (Though Waldseemüller withdrew his support of Vespucci as discoverer of America and removed the name “America” from his 1516 map, it was too late: Vespucci’s first name had already become synonymous with the New World.)¹⁹

¹⁹ See “Waldseemüller’s Globe of 1507” by J. Fischer and F. von Wieser in the 1907 edition of *Cosmographiae Introductio*, 29. Fischer and Von Wieser quote Waldseemüller on the success of his widely disseminated globe and world-map, by as early as 1508. Initially the word “America” referred exclusively to the southern continent, by 30 years later Gerhard Mercator applied it to both continents in the form of what was translated as “North America” and “South America” (that is, “*Americae pars septentrionalis*” and, further south, “*Americae pars meridionalis*”).

Of course, it is easy (or even obligatory, for the sake of politeness) to be modest when others have already sung one's praises. Vespucci's seemingly unassuming letter comes immediately after he has been hailed by Philesius as the discoverer of lands "unknown to *your* maps, Ptolemy" in a boldness of address that even Waldseemüller, the map-maker of the current volume, does not find necessary ("To the Reader," 82; emphasis added). Waldseemüller is less wont to dismiss Ptolemy in his own discussion of the ancient Greek astronomer, as discussed above. He invokes Ptolemy as an authority, or at least a fellow cosmographer, a number of times in his text. Waldseemüller is aware that the tools he uses were "first handed down by Ptolemy" (39). Elsewhere he signals that he and Ptolemy are of one mind: "Although parallels can be drawn at any distance apart, yet, to make the reckoning easier, it has seemed to us most convenient, *as it seemed to Ptolemy also*, in our representation of universal cosmography, both in the solid and projected on the plane, to separate the parallels by as many degrees from one another as the following table shows" (56, 57; emphasis added). Elsewhere Ptolemy is a source of knowledge: "But according to Ptolemy, from the equator to the arctic pole miles are not equal in all parts of the world" (76). Waldseemüller represents Ptolemy as knowledgeable enough to recognize the limits of his knowledge, perhaps the highest praise of all: "Ptolemy himself, in the fifth chapter of his first book, says that he was not acquainted with all parts of the continent on account of its great size, that the position of some parts on account of the carelessness of travelers was not correctly handed down to him It has been necessary therefore, as he himself says he also had to do, to pay more attention to the information gathered in our own times" (78).

In his own textual contributions to the compilation Waldseemüller is at pains to avoid a dramatic break with the wisdom of the ancients. But in other texts he includes in the compilation, such as the Vespucci narrative, the reader is invited to laugh at the ignorance of the ancient scholar, and novelty emerges as a particular value. In the 1507 translator's "Decastich to the Reader," novelty is unabashedly celebrated, along with the promise that Vespucci's tale will "amuse" the reader (83). A concern with veracity accompanies this celebration of the new, however. The reader is invited "to probe" the contents based on their own travels: Vespucci himself is said not to be concerned with the outcome of such probing (" 'tis not the writer's care"), a rhetorical finesse which works, paradoxically, to reassure the reader of the veracity of the account. The "Distich" is most boldly celebratory of the link between "what is new" on the one hand and what "pleases" and is "well told" on the other hand – a tension that writers of travel accounts will grapple with for centuries.

Michel Foucault's *The Order of Things* and the sixteenth-century practice of "infinite accumulation"

It is striking that, in a compilation that announces itself as an introduction to cosmography, literary texts make a significant contribution to the volume. It is not considered incongruous for (what we might consider) literary and technical, astronomical texts to appear together, and for these diverse texts to be deemed to have particular bearing on how the maps can be read. The constituent texts work together to reinforce the explicit objectives of the whole volume in a gesture which is less concerned with division and difference, and more concerned to give as full a picture (literally) to the shape of the world. In part, this is because the division of learning into separate spheres or disciplines

is not a feature of sixteenth-century knowledge practices. Michel Foucault rightly cautions against a retrospective application of nineteenth-century disciplinary conventions, arguing that “the lines of demarcation between disciplines or the groups with which we have become familiar” cannot be accepted as “valid” in a discussion of early material and knowledge practices:

As they stand, one cannot accept either the distinction between the broad types of discourse, or that between forms of genres (science literature, philosophy, religion, history, fiction, and so on). The reasons are blindingly obvious. We are ourselves uncertain of the use of these distinctions in the world of our own discourse...; after all, “literature” and “politics” are recent categories that can only be applied to medieval or even Classical culture by means of a retrospective hypothesis and by a play of new analogies or semantic resemblances. Neither literature nor politics nor, consequently, philosophy and the sciences were articulated in the field of discourse in the seventeenth and eighteenth centuries as they were in the nineteenth century. (“On the Archaeology of the Sciences” in *The Essential Foucault* 397)

Foucault’s caution is well-placed – it is important, though difficult, to resist applying inappropriate analytical categories to literature that predates the development of those categories. Also important is the need to subdue the paternalistic assumption that those writing 500 years ago did not see difference or recognize paradox. Certainly a sense of generic distinction is evident in the way in which texts are presented in explanatory prefaces and in the way they are arranged in the volumes themselves, but these differences do not involve the separation of spheres instituted in the nineteenth century and they are not subject to a later principle of logic which would identify difference as contradiction.

Foucault describes sixteenth-century knowledge systems as “plethoric:” “It is ... a knowledge that can, and must, proceed by the infinite accumulation of confirmations all dependent on one another. And for this reason, from its very foundations, this knowledge

will be a thing of sand. The only possible form of link between the elements of this knowledge is addition” (*Order of Things* 30). Foucault’s characterization of the textual practice of “infinite accumulation” of nothing “but the same thing,” is borne out by the sheer bulk of many of the compilations that were published during the sixteenth century. But in the case of Waldseemüller, the accumulated pieces function as mutually-dependent cross-references – their co-existence is not so much the result of sameness and certainty, as much as disparity and *uncertainty*. Waldseemüller’s careful management and setting out of contributing texts suggests that already, in the very early sixteenth century, the discrepancy between received knowledge and new ways of describing the world that did not converge with or affirm what had come before was unsettling – long before enlightenment knowledge practices created systems with which to identify and manage difference.

In the section that follows I continue to examine the Waldseemüller compilation, and consider specifically the representational tools it employs.

Waldseemüller: developing representational tools

Thus we see that Waldseemüller’s compilation manages strikingly disparate texts, and demonstrates the integrated nature of the relationship between a practice of “measurement” and “description,” at least in the explicit cross-references scattered throughout. In the body of his text Waldseemüller presents the maps themselves as the *raison d’être* of the volume: the title of his first chapter, “Of the Principles of Geometry Necessary to an Understanding of the Sphere,” suggests that the written text is offered in order to introduce his readers to the form of the globe, and its two-dimensional representational configuration. He makes this rationale more explicit later in the written

text accompanying the appended diagram of a sphere: “The purpose of this little book is to write a description of the world map, which we have designed, both as a globe and as a projection.”²⁰ Although the first such statement talks only of “the material sphere” (the thing itself, the earth) elsewhere it is clear that his geometrical explanations are concerned with the representative form – the map.²¹

Waldseemüller’s explanations in Chapter I are all focused on the terms used to describe the globe in language or visual representations: for example, the circle (“a plane figure” with a “line drawn around”); a circumference; the center of the circle, also described with reference to “lines drawn” and their respective measurements (“equal to one another”); a semicircle, diameter, and so on. Towards the end of the brief chapter he focuses on the units of measurement (a “minute,” “second,” and “third”) and explains that a “solid is a body measured by length, breadth, and height.”²² He is teaching his readers to read the world, as represented in maps, by introducing them to the tools of measurement and representation in order that they “more easily comprehend the description of the entire world which was first handed down by Ptolemy” (39).

The units of measurement seem to be establishing a language of precision that valorizes the mathematical unit over the learned, but vague prose of the ancients. But this language of measurement is not presented as an alternative, preferred system of accounting for the world, in competition with more descriptive practices; units of measurement are proposed as additional elements, another layer of “description,” to be read along with Ptolemy, and, on the other hand, Vespucci’s more sensationalist

²⁰ The appendix appears as an insert between 66 and 67.

²¹ In the prefatory “Order of Treatment” he describes the first chapter as “Of the elements of geometry that will be helpful to a better understanding of the *material sphere*” (35; emphasis added).

²² I have used capitalized roman numerals to refer to Waldseemüller’s chapter headings, as he does, to distinguish them from my own chapters.

descriptions of the New World. To a modern eye these texts emerge from different spheres of knowledge, and one might wonder at Waldseemüller's assumption that the varied documents he offers are all mutually illuminating. He sets out a linear path, explaining that his readers will need "an understanding of the material sphere" "before [they] can obtain a knowledge of cosmography;" after which they "will more easily comprehend the description of the entire world which was first handed down by Ptolemy;" and that "further light has recently been thrown [on Ptolemy's description of the entire world] by Amerigo Vespucci" in narrative "relations" or accounts of his experiences in the New World (39, the introductory paragraph to Chapter II "Sphere, Axis, Poles, Etc., Accurately Defined"). Geometry, cosmography, Ptolemaic description, ethnography in the manner of Vespucci: for Waldseemüller these very different textual modes are all mutually relevant, and do not belong to separate spheres. The word "add" appears significantly often in the prefatory material: "studying ... books of Ptolemy ..., and *adding* the relations of ... Vespucci" (34, emphasis added); there "will be *added* also a quadrant useful to the cosmographer. Lastly, we shall *add* the four voyages of Amerigo Vespucci" (36; emphasis added). A similar gesture is evident in the idiom of discussing terms one after the other: "we ought first of all briefly to discuss these terms one by one." For Waldseemüller, the knowledge value of what he promises is to be found in the successive, cumulative treatment of each of the constituent parts. In this sense, Waldseemüller's language seems to bear out Foucault's description of sixteenth-century epistemology as a matter of "accumulation," one in which the "only possible form of link between the elements of this knowledge is addition."

But this inclusive impulse and the accumulative methodology evident in the language used, does not amount to a preoccupation with similitude or “nothing but the same thing,” as Foucault puts it. For although the constituent texts are not treated as belonging to distinct realms in the way that they would be today, the nature of Waldseemüller’s cross-referencing suggests that he is attentive to the specific, and mutually reinforcing, contributions they make to his project of giving representative shape to a world scarcely known. The contributing texts are handled with a certain sophistication that suggests a consciousness of difference, albeit uncomfortable, even then. To make this argument more clearly, it is necessary to examine both the cosmographical texts and the Vespucci letters more closely.

In the section that follows I consider the specific textual character of cosmography. I offer a close reading of Waldseemüller’s own substantial contribution to his 1507 compilation, that is, the nine chapters of careful explanation about the principles of cosmography, presented to his readers in order to guide them in their reading of the two maps appended to the volume. I examine Waldseemüller’s repeated references to the very different Vespucci “Voyages” and comment on the integrated nature of the respective documents as a result of their presentation in the Waldseemüller compilation.

Cosmography: a view from the heavens

In the Preface to this commemorative 1907 edition of Waldseemüller’s text, published by the United States Catholic Historical Society, editor Professor Charles George Herbermann sets out the component parts of the historical document, focusing his attention on the significance of Waldseemüller’s decision to put forward the name “America,” and the Society’s desire to commemorate the anniversary of that act of

naming. As I argued earlier, the 1907 edition is presented, thus, as a nostalgic, even patriotic, publication, and it is useful to recognize the particular rationale for this scholarly endeavor and to probe beyond the explanations presented. Herbermann's gloss of the word "cosmography" for modern readers is perfunctory: "By cosmography was meant geography" ("Preface" v). In fact the two words were not synonymous. "Geography" was already in use, introduced in the late fifteenth century to describe the study of "the earth's surface, its form and physical features" (*O.E.D.*).²³ "Cosmography" referred to the study of the "cosmos," a word in use in the fifteenth century to describe an ordered universe (though "universe," from Latin *universum*, meaning the whole world, only came into use in this sense in the late sixteenth century).²⁴ While the term "cosmography" included the study of the earth and what was referred to as "the heavens," it was clearly broader in its scope than the term "geography," even at the beginning of the sixteenth century, and more eclectic. Waldseemüller offers us a useful, if brief, description in a chapter entitled "Of Certain Elements of Cosmography": "It is clear from astronomical demonstrations that the whole earth is a point in comparison with the entire extent of the heavens; so that if the earth's circumference be compared to the size of the celestial globe, it may be considered to have absolutely no extent" (68). Cosmography

²³ *O.E.D.* refers to the *New Shorter Oxford English Dictionary*, 1993 edition.

²⁴ A word of explanation regarding the difference between "cosmography" and "cosmology": Cosmography refers to the "convenient" Renaissance category "that comprised aspects of astronomy, surveying, navigation, map-making, and time-telling." (See Oxford University's E pact online curatorial project with associated essays, "Medieval and Renaissance mathematical arts and sciences," cataloguing pre-1600 "mathematical" instruments from four European museums: <http://www.mhs.ox.ac.uk/epact/>.) Cosmology is more encompassing – it refers as much to a set of beliefs, or a worldview, as to the objects of study that may inform this worldview, and is as much the product of invention as the product of research. See, for example, Thomas Kuhn's use of the term in *The Copernican Revolution*: "Man [sic] does not exist for long without inventing a cosmology, because a cosmology can provide him with a world-view which permeates and gives meaning to his every action, practical and spiritual" (6). Jim Bennett is careful to distinguish cosmography from cosmology: "Cosmography combined astronomy, geography, surveying, navigation, cartography, and instrumentation and concerned itself with the representation of both the heavens and the earth, but unlike cosmology it did not deal with the natural philosophy of either." See Jim Bennett, "Knowing and doing in the sixteenth century: what were instruments for?" (134).

placed the earth in its heavenly context, rather than in grand isolation, and this, a heavenly perspective of the earth, was its contribution to learning in the early sixteenth-century, at a time when the earth was still understood to be the stationary centre of the universe, but just a few decades before Copernicus would turn astronomy on its head by suggesting that the earth is merely one of a number of planets obeying the laws of motion.²⁵ Waldseemüller, the cosmographer, writing at the turn of the sixteenth century, could imagine the earth in comparison to the “celestial globe” – the “heavens” – and appreciate it as infinitesimal, “of no extent.” Even here it is a matter of perspective and method, rather than anything more absolute. Waldseemüller’s language is measured: the earth “may be considered” to be of “no extent.” It is a matter of approach. Cosmography, as practiced here by Waldseemüller, approaches the earth from the view of the heavens.

Waldseemüller’s text is replete with references to “the heavens” (33, 35, 47, 48, and elsewhere), to “astronomy” (35),²⁶ the “zodiac” (42, 43, 45, 46, 47, and elsewhere), “celestial zones” (35, 47). Waldseemüller is concerned with the movement of the earth in relation to other planets, and sets out to trace these movements and translate their paths into hypothetical “circles” (as he puts it, circles “on the sphere [the earth] and in the heavens, not really existing, but imaginary” (42). In his Chapter III, “Of the Circles of the Heavens,” he describes the zodiac as “a great circle intersecting the equator at two points” (43) and the “ecliptic” (“a circular line dividing [the zodiac] into two equal parts”; 43). He explains that the “moon and the rest of the planets wander at one time under the line, at another on one side or the other” (44). The vantage point that elucidates

²⁵ See Thomas Kuhn’s *The Copernican Revolution: Planetary Astronomy in the Development of Western Thought* (1957) for an account of how the Copernican theory was received (79). See footnote 28, below, and Chapter Three, below, for a lengthier discussion.

²⁶ “Astronomy” is used in Middle English to refer to the study of “celestial objects (including the earth in relation to them” (*O.E.D.*).

his explanations is consistently the view of the earth from the heavens. But he is also concerned with the view upwards, from the earth, into the heavens. His explanation of the horizon offers an interesting example:

The horizon, also called *finitor* (limiting line), is a great circle of the sphere dividing the upper hemisphere (that is, the half of a sphere) from the lower. It is the circle at which the vision of those who stand under the open sky and cast their eyes about seems to end. It appears to separate the part of the heavens that is seen from the part that is not seen. (45)

Waldseemüller explains his cosmography by inviting his readers to imagine themselves standing, unfettered, casting “their eyes about” upon the world. It is a learning available to those who can imagine themselves at large, licensed to survey the world and to know it, on the strength of their gaze.

Even when elucidating a seemingly earth-bound concept, Waldseemüller presents a view of the earth-in-space: “the middle of the heavens, being equally distant from the poles of the world, makes the equator” (48). It is the relationship of the earth to the heavens, in Waldseemüller’s conception, that makes geometry a key analytical tool. His explanation of the five key zones of the earth demonstrates this heaven-centred vantage point clearly. By means of a schematic circle diagram he marks off the key zones of the earth (which he calls zones “of the heavens”), called “frigid” (at the Arctic pole), “temperate,” “torrid” (at the equator), “temperate,” and “frigid” (at the Antarctic pole), and offers the following illuminating clarification regarding the terms he uses:

When we say that any zone of the heavens is either inhabited or uninhabited, we wish it to be understood that this applies to the corresponding zone lying beneath that celestial zone. When we say that any zone is *inhabited* or *inhabitable*, we mean that it is *easily inhabitable*. Likewise, when we say that any zone is *uninhabited* or *uninhabitable*, we understand that it is *habitable with difficulty*. For there are many people who now inhabit the dried-up torrid zone, such as the

inhabitants of the Golden Chersonese [Malacca in India], the Taprobanenses [Ceylon], the Ethiopians, and a very large part of the earth which had always been unknown, but which has recently been discovered by Amerigo Vespucci. (54; explanatory parentheses provided originally as footnotes by the 1907 editor; emphasis added)

Waldseemüller's "zones" are set in "the heavens" – though of course, as he says, when he writes of a "zone of the heavens" he means to refer to the "corresponding zone[s] lying beneath [those] celestial zone[s]." Nonetheless, his terminology to describe a region of the earth derives from its relationship to the imaginary astronomical lines circling the earth. The descriptions of the zones themselves are also hypothetical. Whether or not any given zone is "inhabited" or "uninhabited" has nothing to do with whether or not there are any actual inhabitants or not – for in fact in a number of "uninhabited" zones real people have been found to exist, as he explains. "Uninhabited" simply means that the zone is inhabitable only "with difficulty." Cosmography seems to allow a view of the world without having to deal with disconcerting fact of habitation. The earth-in-space is harder to contest than a peopled world. The language of cosmography can elide human habitation inconvenient to categories used, but not without evidence of disconcerting lack of resolution.

It is the presence of human beings in particular that most unsettles Waldseemüller's careful setting out of knowledge, and he himself points out (albeit reservedly) the inconsistencies that result when one recognizes the fact of human habitation while engaged with an astronomical theory that steers itself with its eyes on the heavens. But the context of the entire volume, and the constant cross-referencing, offers Waldseemüller a way to manage the discrepancies without abandoning centuries of accumulated learning.

Managing the ignorance of the ancients

In this way, Waldseemüller manages the tricky task of marrying the wisdom (and ignorance) of the ancients (primarily, Ptolemy) with current empirical findings, averting a clash of logic that in later years will see Sebastian Cabot remarking at Ptolemy's ignorance (in believing the area around the equator "uninhabitable and desolate by reason of the heat of the sun")²⁷ and Martín Cortés affirming unequivocally that the supposed "uninhabitable" zones are "well peopled":

Yet that the burnt zone is inhabited, and well replenished wyth people that lyue there, we knowe so certaynely by the number of them that dayly passe too and from the Indies . . . , that to say any thing to the contrary, it should be a manifest error, and therefore is it greatly to be marueyled, that certayne wise men haue affirmed these parts to bee vnhabitable. (*The arte of nauigation* 17)

For Cabot the wisdom of "antiquitie" is proven false by the experience of Portuguese explorers, and Cortés feels confident to pronounce "so certaynely" that "any thing to the contrary" should be seen as "a manifest error." The learned Jesuit, José da Acosta, is not confident he will be able to "endure the violent" heat at the Equator, only to find it so cold at noon under the equator that he has to go into the sun to warm himself: "What could I do then but laugh at Aristotle's *Meteorology* and his philosophy?" (qtd. in Grafton 1). But for Waldseemüller, it is still possible for classical cosmographical theory and human experience to co-exist, though the insights they yield seem to be in contradiction. Elsewhere, too, Waldseemüller is at pains to demonstrate a kinship with Ptolemy, not a divergence. In explaining the diagram in which he lays out the lines of parallel (horizontal lines, going up in steps from the equator) according to a grid first set

²⁷ Sebastian Cabot writes: "Althowghe the antiquitie were of an other opinion, supposinge the Equinoctiall circle to bee vnhabitable and desolate by reason of the heate of the soonne hauinge his course perpendicularly or directly ouer the same: except a fewe of the contrary opinion, whose assertions the Portugales haue at these dayes by experience proued to bee trewe" (*Decades* in Arber 141).

up by Ptolemy, he makes it a matter of “convenience” that his diagram follows

Ptolemy’s:

Although parallels can be drawn at any distance apart, yet, to make the reckoning easier, it has seemed to us most convenient, as it seemed to Ptolemy also, in our representation of universal cosmography both in the solid and projected on the plane, to separate the parallels by as many degrees from one another as the following table shows. (56-7)

Waldseemüller asserts the independence of his judgment – he is not following Ptolemy blindly and has ascertained for himself how best to separate the parallels – but nor is he setting himself up in opposition to Ptolemy. Even when he needs to describe an eighth “climate” (that is, a “region ... here used to mean a part of the earth between two equidistant parallels”) in the most northern parallel in order to account for a landmass unknown to Ptolemy, modern Iceland (called “Dia Tyles” or “of Thule,” as it is called by Virgil in the *Georgics*), he does so in an explicitly Ptolemean tradition. It was Ptolemy who “established” the first seven climates, named with reference to the “prominent places” within the region. “Ptolemy did not locate [the eighth climate], because that part of the earth ... was unknown to him, but was explored by later scholars” (62).

Waldseemüller presents his current work as an extension of Ptolemy’s, made possible by the work of later scholars and explorers. Therefore, when it comes to identifying areas (that is to say, “parallels”) south of the equator, Waldseemüller’s text presents his bold act of naming “Amerige” not so much as a departure from Ptolemy, but as a step in a long-established scholarly path, a step made possible by recent discoveries, specifically of “the fourth part of the earth ... which, because Amerigo discovered it, we may call Amerige, the land of Amerigo, so to speak, or America” (63).

At a later point Waldseemüller goes even further in honoring Ptolemy even in the face of his *not*-knowing. He acknowledges, first, that Ptolemy himself was conscious of the limits of his knowledge – a defensive move that functions immediately to ward off a hypothetical attack on Ptolemy’s learning. Second, he makes it the fault of “the carelessness of travelers” that the positions of the land masses were not correctly plotted in early charts. In this way, the work of cosmographers – even the ancients, such as Ptolemy – are understood to be codependent on the work of “travelers.” Waldseemüller carefully lays out a path for his own work, as a cosmographer in the tradition of Ptolemy who is nonetheless presenting bold new ideas. He affirms his ancient predecessor explicitly, and specifically whenever his own conclusions cause him to diverge from Ptolemy. At the same time, however, he reserves the right to decide in each instance which knowledge authorities to favor – contemporary experience-based accounts, on the one hand, or texts handed down by the ancients (and recently revived by the advent of the printing press), on the other:

All that has been said by way of introduction to the *Cosmography* will be sufficient, if we merely advise you that in designing the sheets of our world-map *we have not followed Ptolemy in every respect*, particularly as regards the new lands, where on the marine charts we observe that the equator is placed otherwise than Ptolemy represented it. Therefore those who notice this ought not to find fault with us, for *we have done so purposely*, because in this we have followed Ptolemy, and elsewhere the marine charts. Ptolemy himself, in the fifth chapter of this first book, says that he was not acquainted with all parts of the continent on account of its great size, that *the position of some parts on account of the carelessness of travelers was not correctly handed down to him*, and that there are other parts which happen at different times to have undergone variations on account of the cataclysms or changes in consequence of which they are known to have been partly broken up. It has been necessary therefore, as he himself says he also had to do, to pay more attention to the information gathered in our own times. We have therefore arranged matters so that in the plane projection we have followed Ptolemy as regards the new lands and some other things, while on the globe, which accompanies the plane, we have followed the description of Amerigo that we subjoin. (emphasis added)

Ptolemy himself is shown to be advocating knowledge-practices favored “in our own times,” bridging the methodological divide between what Vespucci will characterize as the ignorance of the ancients and a more empirical method which privileges the anecdotes of travelers as authoritative.

But for all its dependence on word-of-mouth methods, cosmography as presented by Waldseemüller privileges the capacity of instruments to present a knowable world. Whereas the world can only be seen by the naked eye up to the horizon’s limit point, as we saw above, the arc formed by a bold stretch of a compass can take in the gambit of the entire globe. In the practice of astronomy the imagination is emboldened to take on the mantle of the Creator himself.

Astronomy: in the footsteps of the Creator

Waldseemüller immediately establishes astronomy – the study of the planets – as a prerequisite of cosmography, and the two spheres of learning, though closely related, are not synonymous for him: “no one can obtain a thorough knowledge of Cosmography without some previous understanding of astronomy, nor even of astronomy itself without the principles of geometry” (35). But the earth is not absent in Waldseemüller’s cosmography, though it is shown to draw so heavily upon the practices of astronomy. It is a question of the earth’s *relation* to “the heavens” that most concerns him: in his “Order of Treatment,” an outline of what is to follow, he promises to speak of “the five celestial zones, and the application of these and of the degrees of the heavens to the earth” (35).²⁸

²⁸ Though Waldseemüller’s map includes a new continent entirely unknown to the ancients, and for that reason represents a dramatic advance, his cosmography takes as its starting point the Ptolemaic system which places the earth at the centre of the cosmos. It was not until 1543 that Copernicus’s *De revolutionibus* was published, setting out a heliocentric planetary system in which the planets are understood to revolve around the sun (*Columbia Encyclopedia*).

In all, Waldseemüller seeks an understanding of the world in relation to the heavens (and his detailed explanations of geometrical tools are proposed to that end, in the interest of certitude, albeit hard come by). But it is not just understanding that is promised, nor even epistemological certitude. In Chapter IV, “A Certain Theory of the Sphere,” he interrupts his plodding explanation of the (imagined) axis of the zodiac (which “is not apparent in the sphere, but has to be conceived”) to exclaim at the wonderment that is to be experienced in this work:

In this way [in identifying the axis of the zodiac], in the very creation of the world there seems to be a wonderful order and extraordinary arrangement. The old astronomers, *in describing the form* of the world, *followed*, as far as possible, *in the footsteps of the Creator Himself*, who made all things according to number, weight, and dimensions. We, too, while treating of this subject, inasmuch as we are so hampered by the conditions of our space that our system of minutes can be perceived only with difficulty, or not at all, and, if perceived, would beget even annoyance as well as error, shall infer the positions of circles from the markings of degrees in full. (50; emphasis added)

It is striking that it is by means of (or, as he puts it, “in this way”) an act of the imagination (that is, by visualizing and plotting imaginary circles, formally, in the discipline of astronomy) that the astronomer (and, through him, vicariously, his reader) is able to experience the “wonderful order” of the world and, indeed, to experience the divine. In fact, it is to experience *himself* as divine. To measure the world by “describing its form” “according to number, weight, and dimensions” the astronomer participates in the very creation of the world – follows “in the footsteps of the Creator Himself.” For Waldseemüller the divine grace that attended the work of the “old astronomers” is available to his contemporaries through the work they do, despite the difficulties involved in “our system of minutes” – difficulties related to human limitations, “annoyance,” “error,” and limitations that have to do with “the conditions of our space” in relation to

the subject of study: “We, too, while treating of this subject,” by implication, follow in divine footsteps. Measurement itself, on a global scale, makes this possible.

Frank Lestringant’s insight into the effect of cosmography as a practice suggests that cosmography functioned on a soaring, mesmerising scale, and that “the small scale of global representation” (that is, a view of the world that is at a remove, seen as if from the heavens) was “radically distinct from the medium or large scale appropriate to a region,” that is, a scale of description that can immerse its reader in a profusion of local historical detail.²⁹ “A history of events ... could easily enter into the latter type of map by way of a large qualitative scale that allowed one to fix accidental details, to inscribe locally the passage of the present” whereas “the small scale of the *mappa mundi* lent itself ideally, in a future-oriented vein, to audacious strategic anticipations” (2).

Cosmographers adopted, and offered to their readers, the gaze of the Creator. With the help of their instruments, the earth was seen as if on a grid. In comparison, the divisions established by topographical specificities and historical events were rendered muddled and cluttered. For example, Lestringant suggests that the Treaty of Tordesillas (in which Spain and Portugal agreed on a vertical line rigidly dividing South America according to a “direct line traced from pole to pole” in 1494)³⁰ “might be considered the first cosmographical act of the Renaissance” (3). This claim dramatizes cosmography as the capricious instrument of acquisitive empires but Lestringant’s insights into the particular way in which cosmography and its tools made themselves available to political ambitions, are useful. The effect of the cosmographical sweep, where the world is divided

²⁹ Frank Lestringant, Professor of the University of Paris IV, Sorbonne, is a scholar in cultural studies and Renaissance literature, specifically the literature of exploration. He has published significant studies of the phenomenon of cannibalism in the New World and sixteenth-century cosmography.

³⁰ The Treaty of Tordesillas is cited in Lestringant’s *Mapping the Renaissance World: The Geographical Imagination in the Age of Discovery* (3).

and known in powerful, situating gestures, establishes the authority of a cosmic eye and renders the surface details of a geography of description somehow diminutive.

Cosmography, operating on a global scale, sets up a relation not just to space (in its establishment of a global vantage point) but also towards historical time: whereas a detailed, large scale regional map works potentially as a kind of narrative of events or, as Lestringant puts it, an act of “memory” (3), available to be read and contested in all its distracting detail, the cosmographical chart is oriented towards the possibilities of the future – in alignment with the ambitions of explorers and emperors.

Waldseemüller’s publication is certainly ambitious, and its bold act of naming anticipates an expansionist future writ large. But it is important to recognize, too, that his cosmographical method, while looking heavenward and drawing on astronomy’s bold perspectives and practices, at the same time relies heavily on the earth-bound perspectives of the explorer and geographer. While this may appear to the inattentive reader as an indiscriminant embrace of “resemblances,” or “nothing but the same thing,” his treatment of the disparate parts of his compilation suggests a more sophisticated recognition of their distinct contributions to the possibilities of securing an intellectual grasp of an impossibly vast world.

Strategies for verification: the figure of the eye-witness and a language of measurement

Appeals to character or rhetoric will become inadequate strategies for verification by the end of the sixteenth century, as the travel account becomes a more sophisticated genre and as more European investment is staked on the accounts of explorers. Or, at least, as print culture makes available ever more texts and a sense of immediacy is generated by

the speed of reproduction between the event of a voyage and the time the account is circulating in print. The figure of the explorer emerges as a key guarantor of the tale and its pleasure, its currency. But as Stephen Greenblatt reminds us, this practice of insisting on the authority of the eye-witness is not new in this period, and that what he calls the “Renaissance geographical imagination,” with all its flaunting of the eye-witness, “sits as a very small edifice on top of an enormous mountain of hearsay, rumour, convention and endlessly recycled fable.”³¹ “Mandeville’s *Travels* consists almost entirely of plagiarized passages from other travel accounts, passages cleverly stitched together and rhetorically heightened by claims of personal experience” (“Foreword” *Mapping* xi). The eye-witness is a well-established, recognizable narrative figure in the sixteenth century. When explorers “insist on what they themselves have seen with their own eyes, they are not in fact distancing themselves from [an] older [cosmological] practice” – the loftier gaze discussed earlier – “so much as reproducing its traditional and time-honoured mode of self-authorization” (xi). Greenblatt’s caution not to be taken in by a narrator’s earnest avowals, and his suggestion that this is all part of a “game” that Renaissance men of letters were alive to and adept at playing, are well-placed. But even so, the sixteenth century sees a shift in the rules, evident for example in the fact that Richard Hakluyt’s second edition of *Principal Navigations*, published in 1598, excludes Mandeville entirely, though the compilation has grown from three volumes in 1589 to 12 volumes in 1598. With the massive increase in circulation of “true histories” during the sixteenth century, the appetite for what can be too-easily dismissed as fable diminishes. (See the

³¹ Stephen J. Greenblatt is widely considered to be the founder in the early 1980s of what he called “New Historicism,” a critical approach that reads literature as embedded within its cultural and historical context. Among his most influential publications are: *Renaissance Self-Fashioning: From More to Shakespeare* (1980), *Learning to Curse: Essays in Modern Culture* (1990) and *Marvellous Possessions: The Wonder of the New World* (1991).

final chapter on Richard Hakluyt in this dissertation for a discussion of Hakluyt's contributing texts.)

What does emerge, with increasing insistence, is a language of measurement that is more often associated with post-Enlightenment method. Even in Vespucci's early text there is evidence of a need to offer verifiable, *quantifiable* evidence to underscore the claims made in prose form. Vespucci attempts to set out evidence for what he reports, at least initially, though this is quickly passed over in favor of the more sensational elements of his account. His first letter offers "observations" based on what "our instruments showed" to support the conclusion that the "unknown land" they had reached was "distant from the islands of the Grand Canary 1000 leagues" (89 and 90). There is an evident commitment to measurement and its apparent impartiality. But these details also need to be viewed with circumspection. Their primary function is to secure the position of the eye-witness, rather than anything more thorough-going. As we see in Vespucci, what follows immediately after the (introductory) references to actual distance covered ("1000 leagues") and to real time spent, specified as "In the year of Our Lord 1497, on the 20th day of May" (89), is the more spectacular account of his first encounter with "hordes of naked people running along the shore" (90). The descriptions of the people and their lives take up a great proportion of the first letter. Vespucci presents himself as "exceedingly astonished" at the difference he encounters – the "barbarous customs," "violent hatreds" and intimacies he deems best "(in the name of decency) to pass over in silence" (95-6). Yet he is also struck by their similarities ("they speak ... using the same sounds as we," 95; "I believe that, if it were their custom to wear clothing, they would be as fairskinned as we are," 93). His vantage point is not an uncomplicated or static one,

and his text moves back and forth between presenting the indigenous people as seductively exotic and strange in their behavior, on the one hand, and placing them in a recognizable domestic context, on the other.

Managing difference

Evident in Vespucci's text is an impulse to recuperate what has been announced as entirely "new" and "different" (both terms that are used explicitly in this text, though they are not at all synonymous), to pull back from the alienating effect of sensationalizing difference. It is the presence of humans that makes it impossible to stay fixed in totalities. This recuperative impulse is evident when a favorable comparison is created ("they greatly excel us Christians," 93), or when those deemed strange are suddenly rendered familiar through the use of familiar terms or categories to describe what is seen of their life-styles (for examples, "utensils"), or when strange, animal-like behavior is described, but contextualized and made reasonable. For example, in his "First Voyage" Vespucci describes how the indigenous people react with terror on hearing their guns go off, not surprisingly: they "leaped into the water and swam away, like frogs sitting on the bank, which jump into the bottom of the marsh and hide the moment they are startled by a noise. In this way acted the natives" (110). Their fear renders them animal-like, and it is presumably this spectacle that Vespucci refers to when he introduces this anecdote as "a laughable thing" (110). The reader is therefore primed to be slightly cynical when Vespucci describes how they berated themselves for their own foolishness in gratuitously firing off artillery, and how they "quickly reassured [the indigenous people], and did not permit them to remain any longer in ignorance, explaining that it was with these guns that we killed our enemies" (111). No doubt the fear was at least partially intended: in a

previous anecdote he acknowledges that they shoot off their guns “indeed, rather to frighten than to kill them” (130). Here the indigenous people seem child-like – easily frightened, easily trusting. When they take their leave of them after this incident, they are described as departing “in a most friendly and kindly manner” (111). Elsewhere they are savage. When one of Vespucci’s young men is captured and killed, Vespucci describes how the indigenous women make a display (“before our eyes ... now”) of “cutting him in pieces, showing us the pieces, roasting them at a large fire..., and eating them” (138-9), an act of “taunting” which he describes as “bestial cruelty” and “so serious and great an insult” that they prepare for battle and are disheartened when commanded otherwise (139). But the next tribe they encounter is described very differently:

We found the people much kinder than the others; for our toilsome efforts to make them our friends were at last crowned with success. We remained five days among them trading and otherwise dealing with them We decided to take along with us two of this tribe that they might teach us their tongue; and, indeed, three of them volunteered to return to Portugal with us. (140)

Here the engagement is more mutual: the Portuguese hope to learn their language, in order, no doubt, to “deal” with them further, with an eye to their own set of interests. Friendship is hard-won, and primarily a means to successful “trading.” But, as Vespucci recounts it, there is an acknowledgement here of the indigenous people’s volition – their right to volunteer, or not. Elsewhere, when they come upon five women in a small isolated settlement, women “of such large and noble stature that we were greatly astonished,” they do not muster the same respect, despite eating the “great quantities of food” they are offered. Vespucci writes, “we agreed to seize the young girls by force and to bring them to Castile as objects of wonder” (129). Here it appears to be the power to evoke “astonish[ment]” – their status as “objects of wonder” – that renders the women

fair prey. They change their plan upon the appearance of men “much larger than the women and so magnificently built that it was a joy to see them,” despite their obvious menace. Vespucci and his men retreat quickly, realizing that they themselves were in danger of being taken “prisoners” (130).

In the Vespucci account the indigenous people are rendered as both strange and recognizable. They are both a threat and a source of “wonder” and “joy.” This wavering is born of a complex tussle between differing vantage points. The New World is offered up as spectacle and a source of pleasure (“I assure you that their very novelty will please”), on the one hand, and as source of truth, or learning, on the other. Vespucci speaks of his “trust in ... the absolute truth of the following accounts (on matters which neither ancient nor modern authors have written)” (84, 86).

Vespucci is aware of the need to secure the credulity of his reader, though his efforts are often rather careless and hasty. In the following passage he offers as a curious pretext for the delay in publishing further material, his obligation to “verify my statements.” This has the effect, also, of promising his illustrious reader the prospect of more reading pleasure:

We saw and learned very many customs of this tribe and region, but it is not my intention to dwell upon them here. Your Majesty will be in a position to learn later of all the more wonderful and noteworthy things I saw in each of my voyages; for I have collected them in one work written after the manner of a geographical treatise and entitled “The Four Voyages.” In this work I give individual and detailed descriptions, but I have not yet offered it to the public because I must still revise it and verify my statements. (111)

Vespucci betrays an awareness, here, that there is an established protocol and set of conventions which would render a text recognizable as a “geographical treatise.”

According to his description, this would involve collecting “them” (his observations, that

is, not the “wonderful and noteworthy things” themselves), giving “individual and detailed descriptions,” collating these “in one work,” and attending to the process of verification (“I must still revise it and verify my statements”). It is not clear what exactly he might need to do to “verify” his statements – it may be that he hopes to substantiate them with reference to other accounts, or corroborate them in some way – and he says nothing further on the matter at this point. One is tempted therefore to read this simply as a glib acknowledgement of a reader’s expectation that an account should be verifiable, and an implicit promise that his will be. Elsewhere, as discussed, he relies simply on the strength of his word, as eye-witness, and the interest of his tale which works, paradoxically, to captivate his readers who will find it hard to distance themselves from its intriguing details. But what renders it captivating is the ability to reference materially demonstrable instrumentation, with the hard figures they yield, along with the engaging narrative. When offering astronomical details he defers, albeit parenthetically, to his instruments (“at least so all our instruments showed,” 90). The effect of this is to offer his tale, at least rhetorically, an apparent facticity.

But Vespucci’s “Voyages” gains even greater scholarly stature and authority from its position within Waldseemüller’s compilation and, specifically, from Waldseemüller’s celebration of the significance of the Vespucci narrative for cosmography, in Waldseemüller’s exposition on the principles of geometry and astronomy. In its turn, Vespucci’s text offers Waldseemüller the authority to name a continent. But it also introduces the unsettling fact of human habitation into Waldseemüller’s otherwise systematic, technical treatise. So much so that Waldseemüller finds it necessary to produce one map (“in the plane projection”) in which “we have followed Ptolemy” and

another (“the globe, which accompanies the plane”) in which “we have followed the description of Amerigo” (78-9). That a description on the detailed scale of Vespucci’s is seen to have the power to undo, or at least unsettle, the work of cosmographers, is evident in Waldseemüller’s final introduction in his “Appendix.” First, he writes that “a cosmographer ought to know especially the elevation of the pole, the zenith, and the climates of the earth,” and he proceeds to reiterate in technical detail how these “climates” of the earth can be known, compass and ruler in hand, by creating and dividing circles on a two-dimensional representation of the earth (79). But his final sentence is instructive for what it suggests of his openness to question: “Having now finished the chapters that we proposed to take up, we shall here include the distant voyages of Vespucci, setting forth *the consequences of the several facts as they bear upon our plan*” (81, emphasis added). For Waldseemüller, the Vespucci voyages have “consequences” for the cosmographer; they “bear upon our plan.”

But even when generic distinctions do not appear to be as self-consciously managed in a compilation, and when audacious attempts to give shape to the world through narrative are tempered by only the most perfunctory attempts at verification, the compilation makes itself available for bolder purposes, as is evident in Jan van Doesborch’s small, but ambitious compilation of 1511. It is almost exactly contemporaneous with Waldseemüller and yet quite distinct in its methods and structure, as we will see. Van Doesborch will form the focus of the rest of this chapter.

Jan van Doesborch

Jan van Doesborch’s tiny compilation is celebrated by 1885 historian and compiler, Edward Arber, as “The First English book on America” and the first English text to use

the term “America.” The compilation does not attempt to account for the world in demonstrably “accurate” terms. When compared with the objectives (stated and implicit) in Waldseemüller’s 1507 compilation, it seems indeed to belong to an earlier era (though its date of publication is some four years later). Its idiom belongs to the making of legends. Foreign lands, as they appear in Van Doesborch, are thoroughly, alluringly strange. Though use is made of the convention of identifying relative distance in miles and dates are occasionally given, suggesting that voyages took place in real time and over real distance, the descriptions within which these evidentiary markers are found, move on quickly to sensationalist, descriptive mode. No witness is presented, in fact, no author is ever identified, and no particular voyage is narrated or even referred to specifically. There is little evidence of the need to provide details for the sake of verification, except in the vaguest sense. For Edward Arber the value in the text resides in its early use of the name “America” (though it appears as a significant variant, “Armenica” and only once). Arber explains the nature of its interest for him (and for his reader, therefore) in this way: “Anything that concerns the printer of the first English Work relating to America, must henceforth be of increasing interest” (Arber xxv). Arber does not discuss Waldseemüller’s 1507 text – though there is a high probability that Waldseemüller’s influential 1507 publication would have been known to Van Doesborch, a printer at Antwerp between 1508 and 1530 as Arber himself informs us, and a part of the printing world at a time when European printers were working collaboratively, before printing had become caught up in an imperialistic competitiveness.³²

³² The “Introduction” to *Cosmographiae Introductio* (1907) tells us that “Waldseemüller was born between 1470 and 1475, probably at Rodolfszell on Lake Constance” (6) and that he later moved to St. Dié in Lorraine (part of modern day France) where he set up a circle of philosophers and bibliophiles and where *Cosmographiae Introductio* was first published.

But although Arber is upfront about his nostalgic, patriotic purpose in publishing the Van Doesborch text, and that the interest in Van Doesborch derives from its role in the naming of America, he is also at pains to claim a scientific rigor, or at least significance, for its time: “It is in many respects, an English Cyclopaedia of the geographical and scientific knowledge of its Age” (Arber v), a claim that Van Doesborch himself does not make, and which a closer examination of the text does not seem to support. While he does promise to present or account for the “people found by the messengers of the king” and the “diverse nations christened,”³³ Van Doesborch does not promise totality, nor an encyclopedic scope, as the modest phrasing of his title suggests (*Of the new lands and of the people found by the messengers of the King of Portugal named Emanuel. Of the diverse nations christened. Of Pope John and his lands and of the costly keys and wonderous dyes that are in that land*).³⁴ Strikingly, the text does not represent itself with reference to a grandiose title in the form of a noun that promises a cohesive whole, as became popular in the decades to come, such as, “The Complete Geography” or even, more modestly, “Introduction to Cosmography.” This title is written entirely in the genitive case: “of the new lands and people,” and “of the diverse nations.” “Of” does the work of the preposition “about,” rendering the “new lands and people” objects rather than subjects in its grammatical construction.

The title is made up of three parts, each relating to a separate section within the compilation. The first section is an account of the “new lands and of the people found by the messengers of the king of Portugal named Emanuel.” This is made up of ten

³³ I have modernized the spelling here. See footnotes for original spelling and phrasing, where relevant.

³⁴ *Of the newe landes and of ye people founde by the messengers of the kynge of portyngale named Emanuel. Of the r. dyvers nacyons crystened. Of pope John and his landes and of the costely keyes and wonders molo dyes that in that lande is.*

paragraphs interspersed with broadly illustrative woodcuts. The first paragraph of this first section is the description of “Armenica” which is granted in this way the most prominent position of all.

The second section is equally brief, an account of “the ten diverse christened nations.” These “nations” are identified in the first paragraph of this second section and it is immediately apparent that the term “christened” refers to the places which are followers of “the holy Roman church,” specifically. The final, longer section is an “abridgment of the Mediaeval Legend of Prester John” (as Arber puts it) written in 507 A.D., a thousand years earlier. These are not brand new travelogues. The compilation therefore has none of the vaunted anticipation that accompanied the Vespucci accounts, nor the careful attempt at furthering knowledge of the Waldseemüller cosmography. But the description of America is instructive, for it sets up, rather unimaginatively, a relation of viewing that dominates travel accounts in the sixteenth century. The following excerpt is from Arber’s compilation. I have translated it into modern idiom:

Before this time, in the year of our Lord 1497, we sailed out of Portugal in ships from Lisbon by command of King Emanuel. In this way our voyage came to pass. For, [passing] by Fortune Island, [sailing] over the great sea with great excitement and danger, we at last established our lordship where we sailed a good 900 miles past the coast of Zealand. There we at last went on land, but that land is not now known for no masters have written of it. It is named Armenica. There we saw many wonders of beasts and birds that we had never seen before. The people of this land have no king nor lord nor God. They have all things in common. This race goes all naked. But the men and women have bound feathers all over their heads, necks, arms, knees and feet, for the sake of beauty and fairness. These folk live like beasts without any reason, and the women are also [held] in common. And the men have [sexual] relations with the women whoever they are, or whoever they first meet, whether she be his sister, his mother, his daughter or any other relation. And the women are very hot and disposed towards lechery. And they also eat one another. A man may eat his wife or his children, as we have seen, and they hang the bodies or human flesh in the smoke, as men do with pig’s meat. And that land is really full of people, for they live usually for 300 years and more as they do not die from sickness. They eat much fish for they can go under

the water and in that way fetch the fish out of the water, and they follow also one after the other, for the old men bring the young men there, so that they gather together a great company of people to pull. They come, the one [after] the other, to the field or to battle, and fall on their enemy with in a great heap. And when they hold the field [that is, when they are victorious in battle] they take other prisoners. And they kill and eat them, and when the dead have been eaten they then slay the rest. And they are eaten also, otherwise they would live much longer and many years more than other people, for they have costly spices and roots which they use to recover and heal themselves when they are sick.³⁵

The authorial subject (“we”) is never identified or placed historically, and the voyage referred to is not identified specifically. What we are told is that the voyage took place in 1497 – noteworthy as the year Amerigo Vespucci set sail from Spain. Indeed, on closer examination there are a number of similarities, at least in basic content, between this brief, and rather sensationalist account of the “discovery” of a previously “unknown” land named “Armenica,” and the Vespucci account in Waldseemüller, as if a reader had patched together a rather unscholarly, injudicious version of Vespucci, by memory, by stringing together the most salacious details. There is little word-for-word copying of

³⁵ Here aforetymes in the yere of our Lorde God M.CCCC.xcvi [1496] and so be/we with shyppes of Lusseboene sayled oute of Portyngale thorough the commaundement of the Kynge Emanuel[.] So haue we had our vyage. For by fortune ylandes ouer the great see with great charge and daunger so haue we at the laste founde oon lordshyp where we sayled well ix.C. [900] mylees by the cooste of Selandes there we at ye laste went a lande but that lande is not nowe knowen for there haue no masters wryten thereof nor it knowethe and it is named Armenica/ there we sawe meny wonders of beestes and fowles yat we haue neuer seen befor/ the people of this lande haue no kynge nor lorde nor theyr god But all thinges is comune/ this people goeth all naked But the men and women haue on theyr heed/ necke/ Armes/ Knees/ and fete all with feders bounden for there bewtynes and fayresnes. These folke lyuen lyke bestes without any resonablenes and the wymen be also a comon. And the men hath conuersacyon with the wymen/ who that they ben or who they fyrst mete/ is she his syster/ his mother/ his daughter/ or any other kyndred. And the wymen be very hoote and dyposed to cecherdness. And they ete also on[e] a nother The man etethe his wyfe his chylderne/ as we also haue seen and they hange also the bodyes or persons fleeshe in the smoke/ as men do with vs swynes fleshe. And that lande is ryght full of folke/ for they lyue [live] commonly. iii. C. [300] yere and more as with sykenesse they dye nat/they take much fysshe for they can goen vnder the water and fe[t]che so the fysshes out of the water. and they were also on[e] vpon a nother/ for the olde men brynge the yonge men therto/ that they gather a great company therto of towe partyes/ and come the on[e] ayene the other to the felde or bateyll/ and flee on[e] the other with great hepes. And nowe holdeth the fylde/ they take the other prysoners And they brynge them to deth and ete them/ and as the deed is eten then sley they the rest And they been than eten also/ or otherwyse lyue they longer tymes and many yeres more than other people for they haue costely spyces and rotes/ where they them selfe recouer with/ and hele them as they be seke. (xxvii)

text, but the subject matter is repeated. Vespucci's voyages were "undertaken by order of their Serene Highnesses of Spain and Portugal, ... two ... by order of King Ferdinand ... the remaining two .. by order of Manuel, King of Portugal" ("Preface" 88); in Van Doesborch we read, "in the year of our Lord 1497, we sailed out of Portugal in ships from Lisbon by command of King Emanuel" (88). Vespucci sailed "1000 leagues" from "the islands formerly called the Fortunate Islands, but now the Grand Canary" (89); Van Doesborch speaks of sailing "by Fortune Island," a good "900 miles past the coast of Zealand." Vespucci writes, "we discovered many lands ..., of which our forefathers make absolutely no mention" (88); Van Doesborch says, "There we at last went on land, but that land is not now known for no masters have written of it." Vespucci reports that "all of them, both men and women, go about entirely naked" (92); Van Doesborch says "This race goes all naked." Vespucci reports, "Living as they do in perfect liberty, and obeying no man's word, they have neither king nor lord" (94) and later, "No one of this race, as far as we saw, observed any religious law" (97); Van Doesborch writes, "The people of this land have no king nor lord nor God." Other similarities are to be found in their discussion of indigenous healing practices, using roots and herbs (Vespucci 100-101), their love of feathers for adornment (Vespucci 98), and their skill in fishing (Vespucci 101).

For the most part, the order in which Van Doesborch discusses each detail follows Vespucci's narrative, excepting in that Van Doesborch deals with sexual practices earlier, before describing battle tactics and eating habits, whereas Vespucci describes battle tactics and eating habits first. In Van Doesborch we quickly read that "the men have [sexual] relations with the women whoever they are, or whomever they first meet, whether she be his sister, his mother, his daughter or any other relation." In Vespucci's

account, “each man has as many wives as he covets, and he can repudiate them later whenever he pleases” (96). In Van Doesborch, “the women are very hot and disposed towards lechery.” In Vespucci, the “men are ... very sensual. The women are even more so than the men. I have deemed it best (in the name of decency) to pass over in silence their many arts to gratify their insatiable lust” (96). Although the subject matter is strikingly similar – the men having free access to the women, the women being even more “hot”/“sensual” than the men – Vespucci’s sensationalism is consistently more subtle, even slightly veiled, whereas Van Doesborch takes things further – sexual freedom becomes licentiousness to the point of incest, sensuality is turned into “lechery.” Vespucci is able to offer to his reader’s imagination the titillating prospect of erotic “arts,” but he pulls back from spelling out details that would muddy his reputation, and deflate his narrative’s sense of anticipation. Van Doesborch isn’t able to give detailed examples of the “lechery” of the women either, but instead of performing modesty, the text follows on with the spectre of cannibalism – “they also eat one another” (“wife,” “children” and “enemy”) – an image made all the more alarming in the description of the flesh being smoked on the fire, “as men do with pig’s meat.”

It is tempting to disparage Van Doesborch as the less scholarly, less sophisticated, more sensationalist text, in accordance with today’s sensibilities. It is worthy resisting the impulse to make a judgment of “merit” and instead to recognize what is at play in a text, in its own terms. In the literary context of his day, borrowings, second-hand tales, floating eye-witnesses, are stock-in-trade; texts are available to be circulated, used, ventriloquized, even without referencing sources. But on the other hand, it is also important to step back from Arber’s celebration of Van Doesborch and his attempt to

claim Van Doesborch as scholarly, worthy of regard by the “cultivated reader” (“Preface” v). Arber makes no effort to explicate the epistemology at work in Van Doesborch. His valuation of the text has, at its root, the ability to claim it as an original text (“the *very first*”) in an elevated, specifically “Anglo-Saxon” European tradition of which white America is understood to be a part, within a conception of modernity that gives ascendancy to that race:

But for us Moderns, the chief interest in these three Works may be, that they are the very beginning of a mighty Literature. The future of Mankind lies with the Anglo-Saxon race: and of all English books relating to the American portion of that race, the three reprinted in this volume are the *very first*. (vi; emphasis in the original)

His celebration of Van Doesborch as the first *English* book on America mimics Hakluyt’s exclusive focus on English texts in the late sixteenth century and his use of English *language* publications to promote an early consciousness of English national identity. Arber’s crude nineteenth-century patriotism invokes the unlikely Belgian publisher for purposes to which his modest compilation, published just at the turn of the sixteenth century, are ill-suited. What Van Doesborch demonstrates – and, in particular, Arber’s use of Van Doesborch – is that the complex interplay between representative human experience, historical time, geographical configuration, global scale, and literary circulation, makes cosmographical texts available to the strategic purposes of forms of nationalism.

Cosmography: much more besides

If one examines these great works of cosmography, it is clear that in their efforts to map out and account for the world, they are much more besides. For all Waldseemüller’s

efforts at setting out clearly a language of mathematical precision with which to represent the earth itself, his compilation is self-consciously literary and its final, lengthy narrative (Vespucci's) addresses itself to the vexed question of human identifications, managing the viewing stance of the European observer/reader as he encounters troubling differences and recognizes surprising similarities. The particular feat of cosmography, as a method, and a paradigm within which to represent the world, is that it gives standing to the individualized, miniaturized voice of experience, and sets it on a scale of cosmic proportions in which the infinitely contestable minutiae of time and space do not have to be defended. At the same time, the authority of an eye-witness who can attest to the veracity of an account, and to its human-scale truth, works to validate the larger claims of cosmography – as seen in Waldseemüller's text. What Jan van Doesborch (1511) shows us, is that this eye-witness trope is just that – a trope, a figure, a convention that needs very little “real” content to bolster the form of a practice that is not new, that by 1511 has centuries of Mandeville-style fable behind it.

In the following chapter I continue to examine how the compilation is deployed for the knowledge-practices of an expansionist Europe, specifically in relation to the “arte” of navigation. Here again, cosmographies and personal narratives are placed side-by-side, and instruments and tables are treated as significant and authoritative abstractions at a time when both “knowing” and “doing” are tasked with finding certainties in the face of the heaving oceans.

Chapter Three

Jean Taisnier, Martín Cortés and the “arte of navigation”: developing a method and language to give shape to the expanding world

In 1575 appeared *A very necessarie and profitable booke concerning nauigation*, Richard Eden’s English translation of a Latin compilation by Jean Taisnier which had originally appeared in 1572. Although this is a rather obscure and little-known text, comprising just 84 pages, it is suggestive of the growing relationship between imperial aspirations and scholarly method, and it offers a productive example of the changing nature of textuality during the sixteenth century, particularly when read in relation to other texts of the period. In my analysis of the 1575 English text, below, I will explore the following two issues: first, the relationship between the 1575 text and the texts that precede it and, second, the development of a language and method with which to account for the natural world and, in particular, the world as revealed through the sea voyages of the period. My concern is to identify, and reflect on, *what* becomes an object of knowledge in the sixteenth century, and *how* this object is taken up – that is, the language, categories, and representational forms that evolve in the pursuit, ostensibly, of knowledge.

From Taisnier’s *Book concerning navigation* I turn to another text concerned with navigation from a similar period, Martín Cortés’s *The arte of navigation*. This much more ambitious text aims to describe the position of the world in the heavens, and to set out the mathematical and astronomical tools for the purposes, amongst other things, of navigation. Both texts seem directed towards the *practice* of navigation, and the

development of a set of tools and instruments with which to achieve safer and more accurate expeditions. The texts register a noteworthy preoccupation with the shape of the world, and with the need to find an idiom with which to monitor it and know it, securely, in the face of its ever shifting landscapes. What concerns me is the matter of *how* to “know,” and what schema are invested with the hope of knowing, in these texts. Of particular interest are the ways in which these texts are taken up with instrumentation (employed with reference to a tangible, measurable world) and the mathematical number itself, in order to present narratives of exploration. To begin with, then, I turn to Taisnier’s *A very necessarie and profitable booke concerning nauigation* (1575), for a description of the text and its compiler.

Taisnier’s “worthy little book”: an epistemology rooted in the demonstrable world

Jean Taisnier was born in 1508 in Asse, in Belgium.³⁶ His biography, and his textual output, suggests he had varied and eclectic interests. Claude V. Palisca describes him as a “mathematician, astrologer and musician, a prolific and encyclopaedic author who flourished in the middle of the sixteenth century.”³⁷ He was educated after taking orders in the Jesuit community, the Society of Jesus, with the view, presumably, to a life in the church. Instead he became a tutor in the court of Emperor Charles V, where he was employed from 1530 to 1550. Taisnier traveled extensively with the court, as the political interests of Charles V extended over a vast region – during his reign of 58 years Charles was the political figurehead of an array of territories at various times (which he hoped to

³⁶ Some sources say 1509.

³⁷ See Claude Palisca’s “A Clarification of ‘Musica Reservata’ in Jean Taisnier’s ‘Astrologiae,’ 1559,” 133. Palisca (1921-2001) was professor of music history at Yale for many years, with interests and influence in Renaissance and Baroque music and thought. Key publications include *Baroque Music* (1968), *Humanism in Italian Renaissance Musical Thought* (1985) and, post-humously, *Music and Ideas in the Sixteenth and Seventeenth Centuries* (2006).

unite under a single entity), including Spain, Granada, Germany, the Netherlands, Luxembourg, and Hapsburg; he was engaged in battle with France for many years, he had grown up in Flanders, and he inherited the Spanish interests in America from his grandfather, Ferdinand II, in 1516.³⁸ But the court was based in Italy once Charles was crowned Holy Roman Emperor in Bologna in 1530. During the years in Italy with the court Taisnier studied further at the universities of Rome, Bologna and Padua. He retired to Cologne after the death of Charles V, and there he wrote and compiled the texts for which he later became better known, amongst others, *Opus mathematicum*, an eight-volume compilation on chiromancy (palm-reading), astrology and physiognomy.³⁹

Taisnier's travels while a member of the court extended to the New World. With the expansion of the imperial presence in America during the reign of Charles V, Taisnier would have had ample chance to stay informed about developments in the New World, and even about navigation as an important enabling activity of this period of imperial acquisitiveness and economic ambition.

The full title as it appears on the title page is as follows: *A very necessarie and profitable booke concerning nauigation, compiled in Latin by Ioannes Taisnierus, a publice professor in Rome, Ferraria, & other uniuersities in Italie of the mathematicalles, named a treatise of continuall motions. Translated into Englishe, by Richard Eden. The contents of this booke you shall finde on the next page folowyng.*

Taisnier's scholarly claims are announced upfront – we are told he is “a publice professor in Rome...& other universities” – a slight misrepresentation on Eden's part, or perhaps a

³⁸ See *Columbia Encyclopedia*.

³⁹ The full title is as follows: *Opus mathematicum octo libros complectens innumeris propemodum figuris idealibus manum and physiognomiae, aliisque adornatum, unintermitting quorum sex priores libri absolutissimae chieromantiae theoricam, praxim, doctrinam, artem, & experientiam verissimam* (1562).

reference to his “professed” membership of the Society of Jesus.⁴⁰ Though Taisnier never held a formal post at a university (he was a member of the court of Charles V until the Emperor died) he did offer public lectures in Europe as he traveled with the court.

Richard Eden’s role is represented as that of translator, and nothing more, but his framing – the new title and prefatory material – foregrounds navigation itself and, arguably, changes how the document will be read. Under Eden’s hand, navigation becomes the ultimate objective, whereas the preoccupations of Taisnier’s text include magnetism and the search for perpetual motion. The possibility of perpetual motion had been a source of fascination and polemic since the Middle Ages, as experimenters attempted to invent a device that could operate, or be in motion, without stopping, much as the planets are in continual motion.⁴¹ Eden’s title, however, turns this into a work about navigation and all topics are made to serve that end. Taisnier’s text was originally published in 1572 as *Opusculum perpetua memoria dignissimum, de natura magnetis et ejus effectibus, Item de motu continuo* (which I translate as *A most worthy little work of*

⁴⁰ In the sixteenth century the term “professor” was used, also, to refer to someone who was “a professed member of a religious order,” a usage which became obsolete during the course of the eighteenth century (*O.E.D.*).

⁴¹ Amongst those who sought to prove the possibility of a machine or natural phenomenon that would be perpetually in motion include, amongst others, a somewhat skeptical William Gilbert (1544-1603), notably in his influential study of magnetism, *De Magnete* (1600); Bishop John Wilkins (1614-1672), a co-founder of the Royal Society; Jesuit scholars in the seventeenth century, Athanasius Kircher (1601-1680) and Caspar Schott (1608-1666); Robert Fludd (1574-1637), a physician known for his fascination with the occult, who proposed a closed-circuit water mill. Even Robert Boyle himself (1627-1691) considered a perpetual motion mechanism based on the physics of simple hydraulics, like the steam engine. This lengthy episode in the history of science was relegated, finally, to the margins of scientific inquiry by the end of the eighteenth century and mainstream institutions refused to engage with it. In 1775 the French Academy of Science announced its refusal to enter into correspondence regarding perpetual motion, no longer considered worthy of scientific scholarship. (See *Encyclopædia Britannica*.) Similarly, the *Columbia Encyclopedia* declares that since the late eighteenth century, when the laws of thermodynamics became accepted by mainstream science, the search has been all but abandoned. But this may not be correct. More patents were lodged during the nineteenth century than at any other time. As recently as 2006, an Irish company, Steorn, announced in *The Economist* their “discovery” of a perpetual motion machine, and invited scientists to verify their findings. As of October 2007, no results have been announced, so the company claims it has seven patents pending. See Sarah Barmak, “Perpetual Commotion: Huckster or Genius? An Irish Firm is the Latest to Trump a ‘Perpetual-Motion Machine,’” *The Star*, Toronto (25 July 2007).

general history, about the nature and properties of the magnet, and the same of perpetual motion). Taisnier's Latin title names only the "nature and properties of the magnet" and "perpetual motion" as subject matter. The English text, under Richard Eden's hand, is a different publication altogether, with navigation identified as the exclusive focal point in the title. Drawing further attention to navigation, Eden's *epistle dedicatorie* is addressed to the "Surveyor" of the royal shipping fleet: "the ryght woorshipfull Syr Wylliam Wynter, Knyghte, Maister of the Ordinaunce of the Queenes Maiesties Shippes, and Surveyor of the Sayd Shippes." The five chapters, listed immediately following the title page, present subject matter that seems to serve navigation. Topics include the "marveylous nature and virtue" of magnetic stone and its uses for navigation, and other "Mathematicall secretes" of relevance to navigation, such as the relationship between a ship's proportion and its motion.

The volume is noteworthy for its efforts to stage a scholarly argument, and to make use of its formal aspects to announce itself as scholarly rather than merely entertaining. For example, "The Table" of contents appears immediately after the title page, listing the five component chapters in the style of the day. It is by no means an established convention to include a table of contents at all at this time – most of the compilations examined in this dissertation from before 1550, that is, from before Giovanni Battista Ramusio's standard-setting three-volume compilation published during the course of the 1550s, do not have tables of contents at all, though by the end of the sixteenth century, after the publications of Hakluyt and Eden, the convention of a "table" had become more established. The prefatory material is not included in the table contents,

an indication, perhaps, of the relative value attached to the respective component texts.

The chapters are set out as follows:

1. Of the marveylous nature and vertue of the Lode Stone, called in Latin Magnes, where they be founde, and howe to knowe the best.
2. Of continual motion by the sayd stone, Magnes.
3. Of the due proportion of whatsoever Ship, and the disclosing of certayne Mathematicall secretes.
4. Of ebbing and flowyng, with their diversities, and the causes thereof.
5. Demonstrations of proportion of motions local, confutyng the opinion of *Aristotle* therein. (emphasis in original)

Even the brief chapter titles point to the epistemological – and polemical – ambitions of the compiler that become more evident in the body of the text. This is particularly true of Chapter Five, with its offer of “demonstrations” – the promise of substantiation, not just hypothesis – and its claim to be “confutyng the opinion of Aristotle.” But even in the first chapters, which on first reading appear not to have epistemological ambitions of that order, apparently straightforward exposition reads as a stage in a polemic about new ways of advancing knowledge. In the first chapter, the discussion of the “Magnes or Lode Stone” is framed by the following exposition of his knowledge-enriching purposes, offered “unto our posteritie”:

For as muche as everything that is good is so muche the better as it is more common: therefore doo I intende to communicate *unto our posteritie* this little worke of the nature, effects and miracles of the stone Magnes. The whiche, although they may seeme to the *ignoraunt, common people*, to exceede the limittes of nature, yet to expert men, and to Mathematicians, they seeme not so strange, notwithstanding that it is almost impossible to manyfest al the secrets and miracles thereof: For whereas Art inventeth and bryngeth to perfection many thynges which are impossible to nature, it is necessary that he who desyneth to doo great effects in these thynges, and the lyke, be very expert in *woorking with the hande*: neyther is it sufficient for him to be a perfect Naturalist, Mathematician or Astronomer, for as muche as furthermore is required *great dexteritie of handiwoorke*. And for default hereaf, it cometh to passe, that in this our age, these natural artes lie hidde and unknowen. (emphasis added)

By identifying “posteritie” as the ultimate audience, the text anticipates a certain significance which belies the apparent diffidence of “this little worke.” The reader is invited to identify himself with the “expert men” and “Mathematicians” who are not so awed by the marvels of the miraculous Magnes stone, and to disassociate himself from “the ignoraunt, common people” to whom the properties of the stone seem “to exceede the limittes of nature.” The text goes on to draw a division between “Art” which “inventeth” what is “impossible to nature” and those who wish to “manifest” the “secrets and miracles” of nature. What is striking about this passage is its anticipation of what will later emerge as scientific method: for it is not “sufficient,” we are told, “to be a perfect Naturalist, Mathematician or Astronomer” – an expert, that is, in the relevant areas of theoretical knowledge. What is required “furthermore” is “great dexterities of handiwoorke,” and to be “very expert in working with the hande” – practical skill, in other words, not just theoretical skill.

He explains in detail how to make a compass, in order “to knowe the one pole from the other.” The instructions are specific (“Cause a large vessel to be fylled with water, in the whiche cause the stone Magnes to be layde uppon a lyght boorde, not deepe” and so on), and the objective is also made clear: “so that the places of heaven be [?] knowen by anye meanes.”⁴²

Learning, if it is to be of any value, as presented here, must be based in the knowable world and, crucially, in “experience.” “Opinion,” on the other hand, is aligned

⁴² The instructions read as follows: “Whiche of the two poynts aforesayde may aunswere to the pole Artike or the North pole, is founde in this maner. Cause a large vessel to be fylled with water, in the whiche cause the stone Magnes to be layde uppon a lyght boorde, not deepe, muche lyke the coveryng of a bore, so neverthelesse that the two poyntes founde in the stone may lye equally elevate in the said bore: and so by vertue of ȳ [this] stone the bore shalbe mooued to ȳ [this] place where the meridial pole shall extēde toward the South & the other opposite to the North, & shal rest ther. And thus shal it be easye to discern, whiche of the poynts answereth to the pole Artike, & to the pole Antartike, so that the places of heaven be [?] knowen by anye meanes.”

with ignorance. In the following passage, Taisnier’s explanations about the properties of the Magnes stone are indicative also of an orientation towards learning that is strikingly practical, and immersed in the world:

Some *ignorant men* were of *opinion* that the vertue of the stone Magnes, commeth not of heaven, but rather of the nature of the place where it is engendred, saying that the mines thereof are founde in the North, and that therefore euer one part of the stone extendeth towarde North. But these are ignoraunt that this stone is also founde in other places. Wherof it should folow that it shoulde then extende it selfe aswell to other and divers partes, as to the North. Which thing is false, as is wel *knownen by common experience*, for it euer moueth to the North in whatsoever place it be. (emphasis added)

The passage sets up a dichotomy between experienced-based and theoretical learning.

What can be “known by common experience” is deemed of higher value and accuracy than, by contrast, the “opinion” of “some ignorant men.” Of course, it is important not to take the text at face value. These claims to knowledge are rhetorical and not necessarily dependable – and, if we examine again the first line of this passage, we see that the knowledge-claims are undone by the text’s own contradictory reference to heaven as a source of “the vertue” and nature of the stone. “Heaven” stands in for nature as the source of an element’s properties – it is an unquestioned given in the text. (The suggestion that it may be possible to invent or discover a mechanism that is capable of perpetual motion, through magnetism in the case of this text, was considered blasphemous by some during this period,⁴³ and the text’s reference to “heaven” – with its evocation of the divine – as a

⁴³ Hans-Peter Gramatke, a German engineer who wrote a book-length study on the phenomenon of the search for a perpetual motion machine, explains the appeal, and the blasphemous threat, of the possibility of perpetual motion in this way: “In nature the motion of the sun and stars in the celestial sphere, and the recurring solstices ‘proved’ that eternal, or perpetual, motion is possible. These phenomena suggested the appealing conclusion that man might reproduce God’s creation in smaller scale. But this carried risk, for perpetual motion seekers were regarded as heretics, and potential victims of the inquisition.” The work of Jesuit scholars in the sixteenth and seventeenth centuries, amongst whom Taisnier himself, went some way towards lending religious respectability to this question. (See the tongue-in-cheek, but extensive collection

source of what exists in the natural world may also be designed to counter anticipated censure.) But even so, inherent in the text's logic is a dichotomy between knowledge that is able to be experienced (and thus tested and used) and knowledge that is merely theoretical, which can be dismissed as conjecture or belief. The merit in the kind of knowledge being presented here, according to the text itself, is not just in the source of what is known and in its ability to be corroborated, but also in the applicability and usefulness of that knowledge. Taisnier offers detailed instructions on how to reproduce the compass, with diagrams to assist the reader in the practical art of making a compass. His discussion implies that the anticipated voyage is the text's apparent *raison d'être*. This is an epistemology that is rooted in the demonstrable world.

In the third chapter, in which Taisnier turns to the “most swyft motion by arte of navigation,” his discussion of the comparative speed of ships is striking, first, for the way it sets up ignorance in opposition to knowledge and, second, for the way he flaunts personal observation as the preferred route to knowledge. In the passage, below, he is at pains to disparage the too-easy awe of the “unexpert,” the “common people” who see “a miracle” where “the expert Mathematicians” recognize the work of nature:

I intende nowe to speake of moste swyft motion, whiche to the *cōmon sorte of men seemeeth incredible*, for that the same maye be donne by saylyng in a shyp or other vessell, agaynst what so ever moste outragious course of any fludde or ryver, and agaynst most furious wyndes, what so ever they be, even also in deepest [?] and greatest sources of water. Neyther is it [?] if this be incredible to the unexpert. For the common people counteth that for a miracle, which the expert Mathematicians knowe to be naturall [...].(emphasis added)

Here the tendency of “the common people” to see “a miracle” in what the “expert Mathematicians knowe to be naturall,” a simple product of natural forces, explicable with reference to natural laws, is a source of ridicule (though just a page or two earlier the text itself was referring to “heaven” as the source of the “vertue of the stone Magnes,” though “ignoraunt people” believed otherwise). Here, the tendency to feel awe at the natural world is worthy of derision. To be specific, it is when human mastery of the natural world inspires awe and incredulity – the ability to harness the speed of the “moste outrageous course of any fludde” and the “most furious wyndes” by sailing ships – that the tone becomes contemptuous. The “expert Mathematicians” know that a ship’s capacity to manage, indeed to harness, the force of the tide or wind is based upon natural laws. The “common people” make sense of it only with reference to the divine. This “marvelling doubtlesse proceedeth of ignorance and lack of knowledge of the due proportion of the frame of al sortes of shippes: that is to meane, the deapth, breadth, heyght and length (named by the maisters, latitude, longitude, altitude, and profunditie).” The kind of “knowledge” that would answer the unschooled “marvelling” is of a strikingly material nature: “the deapth, breadth, heyght and length” are concepts which hold in their reach the simple act of measurement. True, the “maisters” (masters) have a higher order term at their disposal (“latitude, longitude, altitude, and profunditie”) to deal with the phenomenon of relative extent, and its relationship to the other dimensions (that is to say, “proportion”).

What interests me is the way in which the business of learning and reflecting on the material world and its laws, as presented here, invites the participation of the ordinary person, measuring rod in hand, as it were. And Taisnier himself, at this point, draws

attention to his own simple observations, in a sentence that does not smack of intellectual pretentiousness, but simply asserts a claim to witness. If the relative measurements are “unknowen to maister Carpenter or Shypwright, two shyppes can never be directed by equall course, but that one shalbe swyfter then another, as I playnly observed in the expeditions of Arsenaria” (Image 13). Taisnier’s claim to knowledge, here, is avowed with reference to his presence on sea-faring expeditions, not to any expert knowledge in the field of ship-building, or even sailing. The authority of his platform resides in his claim to have observed the phenomenon of which he speaks, himself. But this is also a rhetorical gesture on Taisnier’s part, and his appeal to the authority of observation is inconsistent and unconvincing. In the same double spread of text one finds examples of different rhetorical devices: for example, a performative reference to the authority of experiment which he parades, paradoxically, just as he denies the need to expound further, so obvious is the merit of his argument (“Of suche other marueylous naturall experimentes, I neede not here to speake of muche”); a glib, quickly passed-over offering of hearsay, where the merits of the tale reside in the purported credibility of the source (“I have hearde also of credible men, that ...”); and, with greater boldness, the promise of demonstrable proof, which the reader can reproduce for himself in his own experiment (“as hereafter I wyll playnely declare by Demonstration”). Though inconsistent and at times somewhat staged, Taisnier’s effort to demonstrate the authority with which he writes, favors observation and experiment over more traditional forms of learning.

The long reach of texts

It is tempting, always, to claim this high regard for the authority of observation, over the ability to theorize, as a new phenomenon. It is customary for scholars to write in general

terms, using a kind of shorthand, of the loss of authority in ancient texts and the new authority that inhered in “naked experience,” as Anthony Grafton puts it in his lively introduction to his study of sixteenth century texts.⁴⁴ Though Grafton’s discussions of individual texts do acknowledge complexity and variation, and though an alternative line of argument (that in fact the European encounter with the New World did little to dislodge classical systems of thought) is given a fair hearing in a bid to complicate the debate, nonetheless, too neat a dichotomy falls into place too quickly, even here: “written authority” is characterized with reference to the figure of “the old-fashioned pedant” (4) and the “age of a system of thought” becomes a marker of its “obsolescence” (5) in the face of “the substantive supremacy of modern science” (by which he means *early* modern scientific practice). “Novelty became the sign not of an idea’s radicalism but of its validity” and a “new understanding of the world grew from roots planted outside the realm of learning” (5). Grafton’s characterization of this period’s epistemological shift is elegant and filled-in with engaging descriptions of a range of sixteenth-century material, but the ease of these characterizations gives one pause and call for a more detailed teasing-out of terms such as “novelty” and “new understanding” and “modern science,” with reference to specific instances.

Certainly, the increasing deference to (purportedly) unembellished experience and demonstration evident in this period marks a departure from the elegant, untranslated prose of ancient scholars, which by mid-century was no longer enough to secure readers’ credence. Aristotle in the fourth century, B.C., had postulated intelligently and

⁴⁴ See Grafton’s *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* 1992. Grafton is an acclaimed professor of history at Princeton University who has published on Renaissance history and the history of historical practice. This particular study (*New Worlds*) was commissioned by the New York Public Library in celebration of its extensive collections. It is useful for its breadth and insight into the literature of the sixteenth century.

articulately about natural phenomena, only to be refuted centuries later by those who could reference experience, quantified and recorded, as their authority. But even he had taught that theory must follow observation, in his development of a teleological approach to biology.⁴⁵ I argued earlier (see “Introduction,” above) that although experience emerged as authoritative with increasing insistence during the course of the sixteenth and seventeenth centuries, and the ability to claim to have observed phenomena carried ever-increasing cachet, the representational forms that took hold during this period of exploration were not without a long and weathered history. The expectation that knowledge be demonstrable was an integral part of Aristotelian methodology. Aristotle’s epistemological schema, which, as Charles Schmitt has shown, were still widely taught during the sixteenth century, depended largely on the principle of demonstration.⁴⁶ The production of what was considered knowledge was never (only) a matter of elegant theorizing, detached from natural phenomena.

The terms used by theorists to designate diachronical shifts (for example, when referring to the “revolution” or “renaissance” in scientific method that is recognized as having taken place during the sixteenth and seventeenth centuries), are generally registered in rigidly temporal terms, and therefore are not necessarily helpful or accurate, when one considers the profound and lasting influence of key texts and ways of knowing

⁴⁵ When acknowledging his ignorance about how bees generate themselves in *On the Generation of Animals*, he writes the following: “The facts have not yet been sufficiently established. If ever they are, then credit must be given to observation rather than to theories, and to theories only insofar as they are confirmed by the observed facts” (quoted in “Aristotle,” *Encyclopædia Britannica*).

⁴⁶ Charles Schmitt’s work on Renaissance university curricula is discussed in Henry S. Turner, *The English Renaissance Stage: Geometry, Poetics, and the Practical Spatial Arts 1580-1630* (2006), 46. As Turner explains, Schmitt argues that the three categories of knowledge established by Aristotle still obtained in sixteenth-century thought: that is, theoretical or speculative knowledge, *epistēmē* (which dealt with the nature of things and their causes), practical knowledge, *praktikē*, and productive knowledge, *poiētikē*. All three were subject to the rules of logical demonstration. See also Charles Schmitt, *The Aristotelian Tradition and Renaissance Universities* (1984).

the world.⁴⁷ These terms, if not accompanied by a more subtle, and engaged analysis with specific material, fail to communicate the more complex inter-relationship between the “new” and the “ancient.” The word “revolution” would suggest a complete casting out of prior knowledge systems; it may be more useful to examine the tools upon which representation of knowledge depended, in order to identify epistemological shifts and their effects, and to reflect on possibilities of thought in the ways that the known world was represented.⁴⁸ Moreover, the suggestion of comprehensive change implicit in the word “revolution” – an overturning of what came before and an ushering in of something utterly different – does not adequately reflect the high degree to which texts are influenced by, or even depend on, prior texts.

Particularly during a literary period when authorship was not accorded the particular status, or protection, associated with authorship today, texts echo other, earlier texts. Taisnier’s work on the magnetic stone has been shown to be heavily dependent on a much earlier text from 1269, Peter (or Pierre) de Maricourt’s *Epistola de magnete* which was published for the first time at Augsburg in 1558 by Achilles Gasser, just a year

⁴⁷ For example, the historian of science, Marie Boas Hall, who was born in 1919 and produced important texts on Robert Boyle and Henry Oldenburg, coined the phrase, “Scientific Renaissance,” also the title of her seminal study (1962) of the period from 1450 to 1630. More recently Cornell University professor of the history of science Peter Dear (2001) has proposed a two-stage and more nuanced version of this historical narrative: “Scientific Renaissance” to describe the rediscovery of ancient philosophers in the fifteenth and sixteenth centuries, and “Scientific Revolution” to describe what took place in the seventeenth century. (Dear recognizes that fifteenth-century superstition and fascination with alchemy continued to animate natural philosophy well into the next two centuries.) Thomas Kuhn attributes the dramatic shift in scientific method to the impact of Copernicus’s *De revolutionibus* in 1543 (in *The Copernican Revolution*, 1956). See footnote 70 below, for a brief discussion of Kuhn and his critics.

⁴⁸ Elizabeth Eisenstein offers a useful example of a more considered use of the metaphor of “revolution” in her study of the impact of the printing press on Early Modern Europe in the “Afterword” of the second edition, in response to critiques levelled against the first edition – that she was claiming too sweeping a “revolution” on behalf of the printing press alone. Eisenstein reminds us that the term “revolution” “used to refer to the circular movement of the planets,” and explains that she had this sense of the word in mind when titling her book, in addition to the other sense, of “relatively abrupt and decisive change” which is nonetheless appropriate, she argues, given the quick and widespread “replacement of hand copying by printing as the *chief* [though not exclusive] mode of book production in the West” (333). Ultimately she finds it most useful to talk of a “long revolution” (335), in this way attempting to sidestep the reproof of reductionism.

before Taisnier wrote his text.⁴⁹ Taisnier's text relies, too, on *Treatise on the fall of the bodies* by Gianbattista Benedetti. As a result of his evident, and unacknowledged, use of these texts, some have gone so far as to denounce Taisnier as a “charlatan and a plagiarist.”⁵⁰ The similarities are unmistakable. For example, Taisnier's insistence that the aspiring researcher into natural phenomena “be very expert in working with the hande” (as discussed above) is echoed in De Maricourt's conviction that, “while the investigator in this subject must understand nature and not be ignorant of the celestial motions, he must also be very diligent in the use of his own hands, so that through the operation of this stone he may show wonderful effects” (qtd. in Gimpel, 194-5). In the same chapter Taisnier puts it this way: “neyther is it sufficient for him to be a perfect Naturalist, Mathematician or Astronomer, for as muche as furthermore is required great dexteritie of handiwoorke” (see full quotation, above). Both texts deal with both the properties of the Magnes stone as linked to the beguiling search for “perpetual motion” that occupied the attention of medieval philosophers and some early modern natural philosophers.⁵¹

Pierre de Maricourt's exposition about the properties of the Magnes stone were in fact a fortuitous, and ultimately more significant, side act, an attempt to construct a magnetic device that would prove the possibility of perpetual motion; it seems significant that this link is repeated in Taisnier's text, some three centuries later. Like De Maricourt, Taisnier begins by discussing the properties of the Magnes stone, and thereafter turns to

⁴⁹ The Institution of Engineering and Technology describes the *Epistola* as “a remarkable document”: “Basing a perpetual machine on the power of magnetic attraction – although ultimately doomed to failure – showed remarkable foresight, anticipating the operating principles of the modern electric motor” (<http://www.iee.org> research archives). See also <http://www.newadvent.org/cathen/12079e.htm>.

⁵⁰ See Palisca (1959) 133.

⁵¹ See footnote 43, above.

the possibility of perpetual motion (in De Maricourt's case, in two separate sections, in Taisnier's case in the first two of five separate chapters). The principal shift in focus in Taisnier's text is the attention given in the last three chapters to the motion of ships, that is, to navigation, which is then available to Richard Eden as the primary focus in his English edition, and the framing device. But even without Eden's input, Taisnier's compilation works its way through the issues of magnetism and perpetual motion and arrives, ultimately, at the problem of navigation. In this sense it is indeed an artifact of its historical moment, and not merely a replica of the earlier texts.

Before moving on it seems necessary to consider plagiarism itself, and how we might understand the copying of text in the sixteenth century. In Chapter Two, above, I argued that Jan van Doesborch's 1511 account of the New World seems to be a poor and unacknowledged reproduction of Vespucci's letters, with no acknowledgement of authorship offered. What is striking is not just the lack of acknowledgement, but the failure even to identify the speaking subject, as though the (frequently used) first-person pronoun is simply an aspect of the "story" and not a matter of authorship or copyright. Authorship itself, in the sixteenth century, is much more fluid than we understand it today.⁵² Though we will see certain writers giving serious attention to the particularities of authorship during this period of shifting conventions, the circulation of texts and stories suggests that medieval relationships to textuality still obtain, in some instances in the sixteenth century. Stephen Greenblatt draws our attention to an insight made by the medievalist critic, Leo Spitzer: "In a remarkable essay Leo Spitzer observed years ago that medieval writers seem to have had little or no 'concept of intellectual property' and

⁵² Mary Baines Campbell points out in a useful footnote that the word "plagiarism" had not yet become part of English parlance in the sixteenth century, though "plagiare does appear in sixteenth-century French" (*Science and Wonder* 31).

consequently no respect for the integrity or propriety of the first-person pronoun” (*Learning to Curse* 137). To accuse Taisnier of plagiarism, though no doubt true, is not a particularly illuminating or interesting charge, in itself, even by the mid-sixteenth century.

Taisnier’s thorough dependence on De Maricourt, in particular, has ramifications that go beyond the charge of plagiarism and that are more interesting for our discussion. Taisnier’s plagiarism suggests, first, that the knowledge he presents as his own is not, in fact, steeped in the research it seems to claim to be, with its emphasis on hands-on methods, (though Taisnier’s repeated assertions that this material has been verified through experiment, are striking, even though these are not experiments of his own making, but mere echoes of the 1289 document), and, second, that what might be hailed as a preliminary shift towards early modern scientific method, is in fact a second- or third-generation notion whose roots are to be found in a much earlier period. However, it is instructive to examine more closely the respective forms in which the discussions are presented – the language and representational tools used, the particular kinds of material focused on, the way in which support or evidence is gathered and presented – to get a sense of what kind of thought is possible, what categories of knowledge are in operation, and what kinds of assumptions those categories depend upon.

Navigation: experimental by nature

Stillman Drake, writing about the relationship between Renaissance music and scientific experiment, argues that experimental method was not a feature of sixteenth century physics, and that if experiments were suggested it was only to prove a long-accepted self-

evident phenomenon.⁵³ He distinguishes between “Baconian type of experimentation,” that is, the kind of “experiment” which aims only to collect “observational type of data” in order to verify a notion (485), and the “deliberate manipulation of physical objects for the purpose of corroborating” or “discovering a mathematical rule applicable to their behavior” (486). His critique is aimed at those who seek to discover, or hypothesize, when this kind of experimental practice began, and, in doing so, fabricate a long, uninterrupted line to “the origin of scientific experiment.” Scientific experiment, as he defines it, “does not go very far back, not even as far back as the invention of printing, let alone of writing”; the development of “mathematical reasoning” obverted the need for scientific reasoning. Even “in the later work of Galileo” (in the second half of the seventeenth century) we find evidence of the use of experiment only to confirm a preconceived mathematical law, and not of its systematic use to discover new laws. That step came after his time, as a logical extension of his work” (487). But an experimental approach to epistemology is evident earlier than Drake acknowledges it. Drake’s insistence on “mathematical laws” as a higher form of scientific practice paradoxically dictates a more rigid set of prerequisites for what would constitute “experiment.” The work of De Maricourt (1289) suggests a hands-on sensibility well before Drake would allow.

But more significantly, one could argue that navigation is by its very nature a form of experiment – particularly at a time, before a means of determining longitude had

⁵³ Stillman Drake (1910-1993) was a Canadian historian of science whose work on Galileo included translation of Galileo’s works, notably the *Dialogue Concerning Two Chief World Systems – Ptolemaic and Copernican*, and an influential analysis of the important role played by experiment and mathematics in the development of Galileo’s thought, an idea previously refuted. In an obituary in the journal of the history of science, *Isis*, Jed Buchwald and Noel Swerdlow describes Drake as a “dedicated scholar, whose name is virtually synonymous with the works of Galileo as they are read today” (663), *Isis* 85.4 (1994): 663-666.

been devised, when seafarers were acutely conscious that the world's land masses had not yet been charted in full or properly identified. To set off across an ocean was an act of great boldness. During the sixteenth century the experience of navigation, amongst other things, was in essence an experimental mode of knowing the world, but one which relied, also, on prior structures of knowledge and their representative forms.

Martín Cortés: The arte of navigation

From here I turn to Martín Cortés, *The arte of nauigation conteyning a compendious description of the sphere, with the making of certayne instruments and rules for nauigations, and exemplified by many demonstrations* (1561) for a different, perhaps more sophisticated, description of the properties of the “lodestone,” and an approach to the “arte of navigation” that draws on the sixteenth-century history of navigation in its development of astronomical tools. Although on the face of it there is not a great time difference between the two texts (the earlier Taisnier text written in 1559, published 1572, the Cortés text published at various times from 1561 to 1589 but, according to the body of the text itself, written in 1561, just two years after Taisnier's), the difference in their treatment of natural phenomena and the tools and language with which they endeavor to account for the universe, is striking.

The full title of the edition I am using continues as follows: *Written by Martín Cortes Spanyarde. Englished out of Spanishe by Richard Eden, and now newly corrected and amended in diuers places*, and the publication date is given as 1589. But a number of earlier imprints exist, printed by Richard Jugge, dated 1561, 1579, and 1584, as well as an updated edition which draws attention in the title to the tools with which the “attaining

of the knowledge of navigation” occurs. The new edition, printed by William Stansby in 1615, announces itself as “*newly corrected and enlarged, with many necessarie tables, rules, and instructions, for the more easie attaining to the knowledge of nauigation, by Iohn Tapp.*” It is instructive to note that the earlier versions of this title, from within the sixteenth century, suggest a certain epistemological acuity (the material on navigation will be “*exemplified by many demonstrations*”) and that this epistemological acuity intensifies in the seventeenth-century versions, evident in the title’s promise to offer “*many necessarie tables, rules and instructions, for the more easie attaining to the knowledge of nauigation.*” By 1615 the “*attaining of knowledge*” is understood to necessitate “*tables, rules and instructions,*” though these have their roots in earlier versions.

Before turning to a fuller discussion of the text, I would like to discuss briefly the figure of Martín Cortés. The identification of the author as “Martín Cortés Spaynard” is significant not just for the distinction it specifies between England and Spain, engaged in a fierce empire-enlarging race by the end of the sixteenth century. It also distinguishes this “Martín Cortés,” the fully-fledged Spaniard, from his older half-brother, also Martín Cortés, both named after their grandfather, Martín Cortés de Monroy. The first-born Martín (1523-1568) was the son of conquistador Hernán (or Hernando) Cortés, who in 1521 had conquered Mexico and, with it, the Aztec Empire, and the Aztec interpreter, Malinche, whom Cortés had acquired as a slave.⁵⁴ As a “mestizo,” born in Tenochtitlán (modern-day Mexico City), the elder Martín Cortés was not considered to be Spanish. The Martín of our text (1533-1589) was the son of Hernán Cortés and his second wife, a Spanish woman named Juana de Zúñiga.

⁵⁴ See *Columbia Encyclopedia* and W.H. Prescott, *The History of the Conquest of Mexic* (1919).

To turn to Martín Cortés's *The arte of Navigation*, it is necessary to remain conscious of the framing that the Cortés text receives at the hand of Richard Eden, as we saw, above, with Taisnier's text. Eden's framing of Cortés is visible, for example, in Eden's grandiose dedication to William Knight and other influential figures in the Merchant Adventurers, whom he addresses in the following way:

To the ryght woorshipfull Syr Wylliam Garerd Knyght, and Maister Thomas Lodge, Aldermen of the Citie of London, and gouernours of the honorable Fellowship or Societie, as well of certayne of the Nobilitie, as of Merchants Aduenturers, for the discovery of Lands, Territories, Ilands, & Signories vnknown, and not before their fyrst aduenture or enterpryse by Sea or Nauigation commonly frequented.

And to the ryght Worshipfull the Consulles, Assistents, and Comminaltie of the same Societie, RICHARD EDEN Wysheth health and prosperitie.

Eden's list of addressees establishes his constructed readership. I do not necessarily equate what I am calling the "*constructed* readership" with his *imagined* audience. The prominence given to certain select readers upfront, through the prefatory material, announces the text's preferred audience – which may not necessarily be the same as its actual readership, or as the audience imagined by the compiler and authors. Rather, it is a device through which the text may assert its own scholarly and civic credentials. At first the list of addressees reads as an assemblage of political figureheads and aristocracy – there is Sir William Knight, aristocrat (and, presumably, patron); the mayor of London; governors of the Society (of Merchant Adventurers); and "certain" of the nobility. But it is the Society itself that becomes the eventual focus of his address, initially in vague and admiring terms that refer to the business of discovery (and he specifies experienced mariners, those who would be reading this "not before their first adventure" or for whom "navigation [is] commonly frequented"), but by the end with reference more specifically

to the Society's structures of consuls, assistants and "comminaltie" – that is, its membership body of successful merchants with shared, and privileged, interests in the English cloth trade.

The Society of Merchant Adventurers was a guild, an early form of a chartered company, in this case of merchants with interests, primarily, in English wool and cloth exports. A loose affiliation of merchants had been incorporated into a trading company in 1407, and by 1560 were so successful that they were able to secure the monopoly on exporting cloth to Germany and the Netherlands. Not surprisingly, the Society was very influential in English foreign policy until the 1560s (that is, until just after Eden's first edition of this text in 1561) at which time English policy towards Spain and the Netherlands changed. In the height of its prosperity the Merchant Adventurers employed over 50,000 people in the Netherlands and are said to have been enormously influential as a result of offering "invaluable financial services" to "the Crown in times of urgent need."⁵⁵ But in 1564 the Netherlands' Regent instituted an embargo on all English traders in Antwerp after Elizabeth I refused to secure trading ships from the Netherlands from English pirates.⁵⁶ In addition, Elizabeth I withdrew her patronage from the Merchant Adventurers, choosing instead to manage English expansion more directly with an eye on English interests in the New World. At around the same time, 1566, an Exchange began to be built in London, in imitation of the Antwerp *Beurs*.⁵⁷ Thereafter the guild declined dramatically and national interests in export markets were driven by a more directed

⁵⁵ See Douglas Bisson, *The Merchant Adventurers of English: The Company and the Crown 1474-1564* (1993). Bisson argues that "the London-Antwerp connection was the indisputable nexus upon which English prosperity depended and the Anglo-Burgundian alliance ... the linchpin of English foreign policy" (qtd. by Walker 768).

⁵⁶ See G.D. Ramsay *The City of London in International Politics at the Accession of Elizabeth Tudor* (1975) 169.

⁵⁷ See Peter Spufford *The Decline of the Financial Centres in Europe: From Antwerp to London* (20).

expansionist policy.⁵⁸ The timing of this text, therefore, is worth noting: it comes at the height of the Merchant Adventurers' influence, but also at an early stage of a growing awareness that the New World held significant prospects for English trade.

This association between “discovery” of the New World and a hoped-for English prosperity is evident in the Eden text. Eden’s manner of address confers on the merchant adventurers the status and allure of discoverers “of lands unknown.” Under Eden’s pen these cloth merchants and exporters are makers of “adventure” and “enterprise.” Commerce becomes, here, a partner in the advancement of the greater good (or “common profite, to be common to all men”) for its role in the increase of knowledge (“Arte and Science”). But, for all the tribute paid to laudable “discovery” and the suggestion of universal benefit, it is finally, and specifically, the Society and its office-bearers and employees that are acknowledged and set up in conversation in the publication of this text.

In the body of his letter Eden goes further in explicitly linking commerce and the attainment of knowledge, so that commerce becomes associated with virtue, and profit with spiritual reward. He begins by affirming the rightfulness of the positions held by the politically powerful, suggesting, in a strikingly circular logic, that their very existence in positions of “preeminence” confirms that they are chosen by “God and Nature.”⁵⁹ They have been given “preeminence,” like “the most intellective and sensitue partes of the societie of men” in order that society may benefit “by their prouidence, wisdom, and

⁵⁸ See G.D. Ramsay 1962.

⁵⁹ “To Princes therefore, Counsaylours, Rulers, Gouvernours, and Magistrates, as to the most intellective and sensitue partes of the societie of men, hath God and Nature geuen preeminence and gouernaunce of the Common wealth, that by their prouidence, wisdom, and ayde, it may vniuersally florish, not only by iust administratio~ of good lawes, with due correction of malefactours, but also by lyberall rewarding of suche as haue well deserued, and especially by mayntenance of such Artes and Sciences, as the Common wealth can not well be without.”

ayde.” But the next, careful stage of his argument suggests less sycophantic simplicity and more astuteness: in an over-long sentence which almost loses itself in its attempt to maintain the delicacy of its assertions, Eden praises the selflessness involved in patronage of “the Artes and Sciences” in “some men of rare and noble nature” who “only for vertues sake” have “susteyned” “great charges” “(in maner to their own vndoing, through their great lose and hinderance)” for the sake of the greater good (“rather for knowledge and vertues sake, then for couetousnesse of gaynes”).⁶⁰ This “munificence, and liberalities” on their part has enabled others to perform “many goodly inuentions, vyages, nauigations, and discoueries of lands and seas, heretofore vnkowen.” The use of the second-person pronoun (“your”) to describe the voyages undertaken under their patronage has the effect of recasting the patrons themselves as explorers, in the logic of the text’s grammar. Patronage, or “mayntenance,” of these costly enterprises, is akin to the performance thereof and the patron himself is attributed with the skills and courage associated with adventuring: “there hath not lacked in you, eyther the lyke or greater promptnesse of minde, forwardnesse in attempting, magnificence in expences, or liberalitie in rewardes.” Patronage of exploration, in the logic of the text, is akin to the performance of it.

⁶⁰ “And although in some men of rare and noble nature, the desyre of honor and fame, only for vertues sake, and studie towarde their Countrey and Common wealth, haue mooued them (in maner to their owne vndoing, through their great losse and hinderance) to set forth and inuent diuers thyngs for the commoditie of the common wealth, and other, rather then for their owne, yet vndoubtedly, who so well consydereth, and indifferently wayeth that I haue sayd, shall fynde and see by dayly experience, that in maner onely munificence, liberalitie, and reward, or the hope thereof, geueth spurres to them that attempt great and vertuous enterprises, as I could more largely proue by so many testimonies of hystories, both holy & prophane, that the rehearsall therof should be but tedious, and not greatly necessary for my purpose, especially writing vnto your Honors and Worships, of whose munificence, and liberalitie, I haue had great experience, both in my selfe, and others, who by your ayde and mayntenance, haue attempted, & performed many goodly inuentions, vyages, nauigations, and discoueries of lands and seas, heretofore vnkowen. Wherein, what great charges you haue susteyned, and how liberall and constant you haue been in furthering the same, doth well declare, that hytherto you are rather losers then gayners thereby.”

Describing the attempt to find a northwest passage, Eden writes: “as is furthermore well knowen by *your fyrst vyages of discoverie attempted to Cathay*, by the Northeast seas, vpon certayne losse and detriment, for vncertayne hope eyther of gaynes, or of any such way to be found, otherwise then by certayne likely coniectures” (emphasis added). Though the passive verb (“attempted”) demurs, the pronoun names the patron-addressees as the title-holders of the voyages. Later in the paragraph the term “pilot” is used to denote the person responsible for carrying out the voyage itself – a term that is not granted the same claim to title as accrues to the patron of the voyage. In fact the patron, the “right Honorable and Worshypfull” Sir William Knight, is deemed originator not only of the voyage, but also of the discoveries themselves. The claims being made on his behalf are dramatic: thanks to “your vyages,” it is now known that life exists in the lands beyond the “circle Articke, where they thought that no luyng creater coulde drawe breath or lyfe for extreeme colde.” This “hath been by you discovered,” that was “vnknowne to the Antiques,” the ancients.⁶¹

For the brief few lines when Steven Burrough, the “excellent” “chief pilote” of the voyage to the Artic is named in the text, Eden slips into using the third person pronoun (“them”) to refer to the voyage and its dangers, rather than the second person address as before, as this would have taken the conflation of patron and voyager too far. However, he immediately reverts to his former style when apportioning credit for the success of the voyage: in addition to thanking God, “we are not thereby restrayned to be

⁶¹ “What of *your last vyage of discoverie* among the innumerable Rockes, Ilandes, and moueable mountaynes of yse in the frosen sea, by innumerable lands and Ilands vnknowne to the Antiques, euen vnder and farre within and beyond the circle Articke, where they thought that no luyng creature coulde drawe breath or lyfe for extreeme colde? whereas neuerthelesse *the same hath been by you discovered*, euen vnto the mightie ryuer of *Ob*, that falleth into the Scythian Ocean, or *Oceanus Hyperborei*, not farre from the mountaynes called *Hyperboreus*, so named, because they are situate almost vnder the North Pole, and thought therefore to be inaccessible.”

thankfull to such men, as by theyr arte, ingeniousnesse, trauayle, and diligence, haue deserued both iust commendation, and large rewarde. And therefore [we are] referring the reward to you (right Honorable & Worshipfull, to whome it apperteyneth).”

Of course, Eden himself has benefitted from the support of Sir William Knight: “I haue had great experience, both in my selfe, and others,” he tells us, of Knight’s “munificence, and liberalitie.” He “exhort[s]” Knight to continue in his support of these endeavours –specifically in his patronage of Steven Burrough, that he may “not [be] discouraged, for lacke of mayntenance,” but by implication also of his own (textual) endeavours, which rely on their financial support. He immediately goes on to describe the benevolence of the patrons from the Society of Merchant Adventurers who were “mooued” (moved) “of theyr owne good nature, fauouring all vertuous studies” to commission this present publication:

[F]or the same interest [that is, interest in the common profite, to be common to all men] was the first that mooued certayne Worshipfull of your company, as Syr *Wyllyam Garrerd*, *Mayster Wyllyam Mericke*, *Mayster Blase Sanders*, and *Mayster Edward Castlen*, to haue this worke translated into the Englishe tongue: Who of theyr owne good nature, fauouring all vertuous studies, and the professours of the same, did soone encline to his ho[...]st request heerein, and therewith not onely desired me, but also with liberall rewarde enterteyned me, to take in hand the translation. Which beyng now finished as well as my poore learning may perfourme, I desyre your Honors, and Worships, to accept in good part, as I haue meant heerein to grat[...]e you, and doo such seruice as my abilitie may suffice. *Now therefore thys woorke of the Art of Nauigation, being publyshed in our vulger tongue, you may be assured to haue more store of skilfull Pilots.* Pilots, (I say) not Pirots, Rulers, nor Rouers, but such as by their honest behauiour and conditions, ioyned with art and experience, may do you honest and true seruice. (emphasis of names in original; latter emphasis added)

Eden’s textual intervention – translation into “our vulger tongue” – is presented as having crucial bearing in the world of navigation, which is to say, on the success of English commercial activity, for the “store” of would-be pilots it is likely to yield, with its

instruction in “the Art of Navigation.” As presented here, the text is assumed to facilitate a ready translation of words into activity, and commercial benefit to the Society, specifically, and English society, more generally. The laying out of navigational principles and experience in the text, along with the text’s particular moral injunctions, is understood to lead to a greater availability of “skilfull” and “honest” pilots and, by implication, more successful ventures.

This seemingly direct causal link between a text and the activity it inspires in the world is not remarkable. The apparent confidence with which this causality is presented, depends upon a convention, which is both followed and parodied in the text: the self-deprecating quips hint at a playfulness that does not expect to be taken in earnest. Contradictions and unexplained variations are tolerated in the rhetorical finesse of a delivery which seems, on the one hand, to serve a linear and God-centred epistemology, while tacitly acknowledging, on the other hand, the illogical turns such an epistemology necessarily resorts to. For example, the sun is presented with a display of assurance as “the chiefe instrument and meane that God vseth” in the generation and sustenance of life, “except where and when it pleaseth him in any thing miraculously, otherwise then by the common order and course of nature, to commaund the contrarie.” That is to say, God uses the sun as his chief instrument in sustaining life, except when he does not.

In addition to recognizing that this seemingly straightforward causal relationship between text and world allows for contradictions, I would also like to consider the particular kind of representational tools that this text, specifically, purports to depend upon to achieve these results in the world of navigation – or at least, to try to identify which representational tools in Cortés’s text hold the promise, at least for Eden (“you

may be assured,” he writes), of inspiring and educating would-be pilots and safe-guarding hypothetical future voyages of discovery. The recounting of experience is certainly part of it; so is the opportunity to infuse the activity of navigation with the moral principles of the day – that is, by coupling the activities of navigation with the church’s civilizing mission and the state’s lauded role of creating wealth. Similarly, Cortés’s “Epistle dedicatorie” to King Charles V celebrates the fact that through the emperor’s expeditions “the Christian Fayth is amplyfyed” and the “whole of Spayne florisheth dayly more and more in sumptuous buyldyngs, and is abundantly enryched in treasure brought from your Indies.” In the simple equation presented here, “discovery” leads to the spread of Christianity and an increase in prosperity. The “discovered” territories are referred to here using the possessive pronoun: discovery and territorial annexation secures for Charles not only ownership, but the particular kudos that is associated with the advancement of learning. In this sense, Charles’s support of navigation places him above the endeavors of men of learning, here held in a certain contempt, for “by [his] prosperous attemptes, haue beene discovered so many Landes and Ilandes, heeretofore so vnknownen to the *Cosmographers*, *Geographers*, and *Historiographers*, that they neuer hearde of theyr names.”

Navigation, as recounted here – the setting forth to “discover” the world – promises great yield, but the text itself is the fulfilment of much of this yield. What bears further scrutiny is the particular shape of the instruction that is identified (in the title and in the text) as the “Arte” of navigation, as laid out in this “woorke.” For Cortés, the link between the navigational text as a representational form and the imagined experience of navigation (both in the past, as recounted in the text, and future, as inspired by the text),

is rendered slightly more complex through the particular didactic method in which this hope is invested.

Instrumentation and representational conventions: determining what can be known

Cortés has a clear objective in mind in writing (“the end desyred”) and expresses here, in his own words, what is at stake for him. He calls “Nauigation” the “principall intent why I began thys worke” and seems to imagine that his text will lead directly to improved navigation and his own heroism, as a result. For to “journey, or vyage by water, from one place to another” is one of the “difficuldest things.” It differs from land journeys in three crucial ways:

[F]or the land is fyrme and stedfast, but this [the sea] is fluxible, wauering, and mooueable. That of the lande, is knowen and termined by markes, signes, and limittes: but this of the Sea, is vncertayne and vnknowen. And yf in viages [voyages] by land, there are hylles, mountaines, rockes, and craggie places, the Sea payeth the same seuen folde with torments and tempestes: therefore these viages being so difficult, it shalbe hard to make the same vnderstood by words or wryting. *The best explication, or inuention, that the wittes of men haue found for the manifesting of this, is to geue the same paynted in a Carde.* (emphasis added)

For Cortés words are an ineffective form of representation for the disorienting, “wauering” experience of voyaging by sea, where the boundaries and “limittes” are “vnknowen” and not able to be “[de]termined,” as they can be with a voyage by land. To make oneself understood (and to understand it, oneself), the “best explication,” or the best way that “the wittes of men have found for the manifesting of this” (that is, “these viages”), is to be found in the precise and detailed form of pictorial representation that nonetheless uses the verb “to paint”: “to geue the same paynted in a Carde,” that is, to make a map. The degree of precision Cortés envisages becomes evident when he goes on to discuss how to identify and mark the relevant co-ordinates, discussed in greater detail

below. For now, I would like to pause to remark on the hope he invests in this particular kind of representational form in order to give expression to the experience of voyaging at sea, which “shalbe hard to make ... vnderstood by words or wryting.”

The form of representation Cortés favours with which to manage the wavering uncertainty of a moving ocean as he puts it, and the best representational form human intelligence (“*the wittes of men*”) can devise, is to be found in the geometric precision of a diagram. Writing at around the same time (1555), the Dutch mathematician Gemma Frisius (1508-1555)⁶² admitted that “we do by geometrial invention what is not permitted in the natural world.”⁶³ The certainty of the projected line, though patently a useful fiction (an “*invention*,” as Cortés also phrases it), avails itself precisely when Cortés feels the need to represent, and contain, the disorienting effects of the ocean.

Cortés goes on to specify in great detail how to create this “*carde*” – with recourse primarily to an *xy* graph (“two ryght lynes” drawn in “blacke inke, whiche in the middest shall cut or deuide them selues in ryght angles”), in order to plot the coordinates correctly to establish the “right position of places, or placing of countries and coastes.” The second stage of the process, however, is not just a geometric “invention” but also has recourse to the “true” reports of mariners, in order to know “the distances that is from one place to another” (56), and make what Cortés calls the “*patern*.” But for Cortés this reference to narrative belongs to a second stage and is in service of the primary representative vehicle, the “*Carde*.” The directions of the winds are established with reference only to the graphic dimensions of an ordered diagram, to be drawn up according to very specific instructions that find their idiom in geometry – point, cut, circle, lines, division into equal

⁶² See “trigonometry,” *Encyclopædia Britannica*.

⁶³ Frisius, *De astrolabo catholico liber* (Antwerp, 1556, F.4v), qtd. in Bennett 139.

parts, diameter. The natural world (here, specifically, each “wynde,” duly named and positioned) fits into this scheme in that it is understood to “corresponde” with the figures on the page.

Uppon the poynt where they cut, make a center, and vppon it, geue a priuie or hid circle, whiche may occupie in maner the whole Carde. This circle, some make with lead, that it may be easily put out: these two lynes deuide the circle into foure equall partes, and euery part of these shall you deuide in the myddest with a pricke or puncte. Then from one puncte to another, drawe a ryght Diametrall lyne with blacke incke: and so shall the circle remayne deuided with foure lynes, into eyght equal partes, which corresponde to the eight windes. In like maner shal you deuide euery of the eight into two equall partes, and euery part of these is called a halfe wynde.

Strikingly, the accounts of mariners are not relevant to the establishment of wind direction – for Cortés this is simply a matter of geometrical precision, which is not vulnerable to the vicissitudes of the natural world or human experience of it. As far as the representation of the winds are concerned, the basic plotting of a graph is deemed sufficient: “thus muche suffiseth.” But though his instructions are very much caught up with achieving accuracy, as he understands it, it is evident that Cortés is engaged also in the identification and establishment of cartographic conventions, and not just for the purposes of accuracy: “It is the custome for the most part, to paynt vpon the center of these compasses, a flowre, or a rose,” though this should happen once the rest of the map has been completed and “the coast is drawne.”

The mariners’ accounts become relevant at this later point, in charting the shape of the coast lines (according to the “true relation of suche as haue trauayled them”) and in creating a “paterne” that is drawn to scale (with an attendant “scale of leagues” appended to the bottom of the map). For Cortés, “good Cardes ought to haue the Coastes, Ports, Cities, and other places, situate according to the wyndes or lynes thereof, proportionally

as they are in the world: and not by the wyndes that the compasse sheweth.” What exists “in the world” is translatable to this representational form, if due attention is given to proportion. To achieve accuracy involves the meticulous process of “tracyng, or translatyng” the shape of what is known according to the grid of the map – a task that requires the greatest “diligence and discretion” and the use of “a fine penne” (57-8) – and drawing in, thereafter, the shape of what has only been described verbally, in due proportion. For Cortés this is not an act of interpretation, but of “translation,” and it requires not heuristic flair, but “diligence.”

In explaining how to work with the cartographer’s grid system, Cortés describes the relationship of the two-dimensional representation to the “real” using similar terms. One is to begin with what is “well knowen,” situated according to the “number” of latitude to which it “may answeare,” and thereafter transcribe the rest proportionally, guided by the latitudinal grid already plotted, with due precision (so that everything is positioned “in his proper place”). Cortés does not use the term “latitude” but “*altitude* of the Pole,” the customary way to refer to angular distance above the horizon in early modern English astronomical discourse, where the fixed position of the pole and the position of the “zenith” (the point in the heavens directly overhead) are the reference points.⁶⁴ In describing the plotting of the lines of (what we call) latitude, he also refers the

⁶⁴ Emphasis added. The term “latitude” did exist at this time as the measurement of a location’s relative distance from the equator (measured at this time with reference to the pole and the degree to which that “zenith” declined, that is, the point directly overhead, in the “heavens”). The *New Shorter O.E.D.* (1993) has it that latitude only came into use during the course of the seventeenth century, in the more commonplace technical sense, measured in degrees and minutes, but in fact Cortés uses it in this sense, with a technical seriousness, in the Chapter XVII on “latitude and longitude”: the “globe of the earth, is also diuided in breadth, and in length. The breadth (which is called latitude) is by degrees: for from the Equinoctiall, to eyther of the two poles, is 90. degrees. The length (which is called longitude) is by the degrees of the Equinoctiall, which is diuided in 60. degrees.”

process of “graduation” from the “Pole” to the “Equinoctiall lyne” where the pole serves as a firm reference point:

This graduation must be begun from some one cape, whose altitude of the Pole is well knowen. And the whole Carde being thus graduate, you must begin the number of the degrés from the Equinoctiall lyne, one, two, three. &c. toward the one Pole, and the lyke toward the other: so that to the knowne Cape, may answeare the number of his altitude. And so shall you doo to the whole Carde. Also, the Equinoctiall lyne shall be marked in his proper place.

Thereafter, the mapmaker is invited to pen in the place names and points of relevance. A discussion follows regarding the manner in which the “carde” can be rendered useful to mariners, though it is acknowledged that the two-dimensional rectangular form is an “imperfect” representation of a “Sphericall” world, creating distortion, and that maps that have not been duly corrected “ought to be corrected & amended by wise and expert men.” Still, this “imperfect” form is the “onely” form that can be used by “pilots and Mariners” – and it is a map’s functionality that emerges, in this account, as the key value:

The pilots and Mariners neither vse nor haue the knowledge to vse other Cardes, then onely these that are playne, as I haue sayd. The whiche, because they are not Globus, Sphericall, or rounde, are imperfect, and fayle to shewe the true distances. (61)

Thus, the diligent tracing of the lines of latitude, duly set out with precision and used to sketch in the “paterne” of named coastlines so that each point can be found “in his proper place,” become a resource for actual voyages. This “Arte,” or practice, offers a method with which to know world and to move from what is known to what is being discovered. The kind of knowing available in “arte” does not concern the nature of things, but even so, deals in the knowledge practices of the period and takes its language and its schema

from forms of representation that have purchase in contemporaneous idiom, which Cortés translates into detailed instructions, to be followed to the letter.

Under Cortés's pen, astronomy, along with the related practice of map-making, emerges as a practical tool with an imagined application in the nameable world. It is also a "science" (as he puts it) which requires a set of terms with which to know its objects. In Chapter XX, entitled "of certayne principles, that ought to be knowen for this science," he gives evidence of his consciousness that there are certain linguistic and conceptual terms ("words, appropriate to this science") at his disposal: "In treating of the Sphere, wee haue spoken of Circles, Circumferences, Centers, Diameters, Lynes, with such other words, appropriat to this science" (21). He goes on to explicate further geometrical terms for use in navigation: "ryght lyne," an "angle," a "Solide," a "circle," a "circumference" and a "Zenith," which he defines as "a poynt or pricke imagined in the heauen, directly ouer the toppe of any thyng, as if we should imagine a ryght lyne to passe by the center of the earth, extended from thence directly to heauen, and passing through the feete and head of a man standyng vpryght" (21).

These tools, by his own acknowledgement, are nothing if not imagined. It is useful here to turn to Henry S. Turner's analysis of spatialized forms of dramatic representation in the sixteenth century, and his comment on the relationship between representational *forms* and the "habits of thought" they enabled.⁶⁵ Though his specific

⁶⁵ Turner is a scholar of Renaissance drama and of early modern thought and the history of science. He is author of *The English Renaissance Stage: Geometry, Poetics, and the Practical Spatial Arts 1580-1630* and editor of *The Culture of Capital: Property, Cities, and Knowledge in Early Modern England* (2002).

field of research is the Renaissance drama, his insights into the significance of geometry as a mode of representation, and a mode of thought, bear relevance.⁶⁶

Geometry is a fictional system that, like the stage, requires an infusion of imagination to make its fictions plausible. Indeed, geometry offered early-modern writers nothing less than an entire system of representation to rival that of language, whereby all bodies, places, and ideas, no matter how distinct, might be rendered conceptually equivalent to one another. (6)

Turner's argument is that this rendering of phenomena into schematic representative form was not a neutral translation, but in fact helped to shape sixteenth-century thought and art (in particular, its dramatic forms). Though his focus is Elizabethan drama, his insights are suggestive for this study, and his analytical tools useful in recognizing that the representative conventions of the period did not just establish the structure within which representation took place, but also determined what became worthy objects of inquiry.

The relationship between the “particular” and the “whole”

Though Turner does not put it quite in this way, his insights into the language and methods of the period suggest that the ability of the sixteenth-century European to place himself on an enlarged stage, duly ordered and constituted, gained possibility and standing through the prevalence of a form of spatialized knowledge-production that was available for deployment in the world-at-large. Geometry's techniques – what Turner describes as “artificial projections to present information that could not be gained by the naked eye alone,” for example (31-2) – enabled an otherwise impossible intellectual grasp, not least of all through its relationship to place and its mediation between what is

⁶⁶ Turner explains his thesis in this way: “I argue that English playwrights working in the public theatres at the turn of the seventeenth century began to conceptualize problems of theatrical representation in terms that derived ... from contemporary developments in early-modern technology, applied mathematics, and pre-scientific thought” (3).

particular, detailed and tangible, on the one hand, and the abstracted, small-scale world, seen at a remove, on the other.

Turner develops the early-modern term “topographie,” defined in 1611 as the “Arte, whereby wee be taught to describe any particular place” by Arthur Hopton,⁶⁷ in order to analyse the ways in which representation of place occurs in texts of various sorts, and how Renaissance texts deployed conventions and “techniques of abstraction, reduction, or idealization, all of which derive from practical geometry” (31). Turner describes his notion of “topographesis” as “a distinct mode of representation” that “encompasses many different kinds of early-modern writing, both ‘literary’ and otherwise” (30-31) and goes on to explore this mode of representation in various arenas. However, a further reading of Hopton shows that Hopton’s notion of “topographie,” which calls for and invests confidence in the collection of the “particular,” is that it is one branch of study in a system that endeavors to account for the “whole” earth, ultimately. In the relationship of equivalence that Turner rightly identifies as being set up through this graphic “language,” the whole is deemed to be “known” with reference to the specific. To consider this further, it is worth quoting Hopton’s extended definition: topographie is the “Arte, whereby wee be taught to describe any *particular* place, without relation to the whole, deliuering *all things of note* contained therein, as ports, villages, rivers, *not omitting the smallest*: also to describe the platform of houses, buildings, monuments, or any such particular thing; and therefore a Topographicall description ought to expresse *every particular*” (Hopton 1; emphasis added).⁶⁸ Though Hopton sets

⁶⁷ Turner quotes from Arthur Hopton’s *Topographicall Glasse* of 1611 (Turner 30).

⁶⁸ See Arthur Hopton, *Speculum topographicum: or The topographicall glasse Containing the vse of the topographicall glasse. Theodelitus. Plaine table, and circumferentor. With many rules of geometry,*

aside considerations of “the whole” in his conceptualization of “topographie,” and calls instead for an exclusive focus on the particular (“without consideration to the whole”), his text immediately goes on to define two spheres of study related by contrast: that is, geography (the “animation of the *whole earth*, and his principall and most knowne parts”), and cosmography, (“a description of the worlde, ... the foure Elements, and also of the Sunne, Moone and the other Starres... with *all thinges else* that be contained within the concavity of the heavens”), and his text is a presentation of all three (Hopton 2-3). In doing so, Hopton’s text is a product of its age: to account for the smallest detail is an integral part of the sixteenth-century project to account for the “whole earth.”

Embedded in the tension between the particular and the whole are hints of the larger cultural and political dynamic, rendered visible under analysis. Turner comes to this via what he calls “topographesis in its ideological mode,” which, he explains, denotes “the way in which ‘place’ is represented by the larger discursive networks typical of a given society” (32). However, it gives one pause to read of the notion of “ideological representation,” which Turner suggests “always borrows from the more specialized formal conventions that give meaning to any given text and that endow certain places with a ready-made significance” (32). It is not clear what “ideological representation” might look like, as distinct from any other instance of representation, given that all instances of representation are born of particular historical contexts, and are received into contexts, that allow them to signify more than themselves and perform what might be called ideological work, often despite themselves, as it were, in the interplay between power and knowledge. The distinction has more to do with an analytical orientation to a

astronomy, topography perspectiue, and hydrography. Newly set forth by Arthur Hopton Gentleman. (1611).

text, it would seem. In this way, Turner nonetheless usefully proposes the analytical category of place, or rather “concrete places” which are available as “the vehicles through which problems of social class, political identity and belonging, status aspirations, modes of production and value, competing epistemologies about the social and political world, or attitudes towards urban order and urban experience can be scrutinized and dissected” (32-3). To that list I would add the problematics of empire at play in Europe’s expansionist project, which dealt richly in the management and representation of places – rendered as specific, named, and particularized, on the one hand, and on the other, idealized, imagined, and highly abstracted, through the “artes,” or practices, and epistemologies of navigation, cartography, cosmography, and print.

Measurement and quantification: the promise of infallibility

Cortés gives us a sense of his own understanding of the epistemological shift that has taken place in his life-time, the specific methods that have enabled the increase in knowledge about the world, and of his rather immodest belief in the contribution he himself has made to that increase, at least as it pertains to navigation. To begin with, in his dedication to Charles V, he situates navigation firmly in a context of divinely-ordained spreading of the faith (“the Christian Fayth is amplyfyed”), which has the added advantage of bringing great wealth (“in manner whole *Spayne* florisheth dayly more and more in sumptuous buyldyngs, and is abundantly enryched in treasure brought from your Indies, farre surmounting the ryches of *Solomon*”). But his trump card is the extraordinary achievement, as he would have it, of bringing to light (the light of a European day, that is) through navigational feats what was “so vnknown to the Cosmographers, Geographers, and Historiographers, that they neuer hearde of theyr

names.” However, he is quick to clarify that he is not suggesting that navigation itself is new, and “not a thyng of antiquitie.” What is new (“I am the fyrste” he is so bold as to claim), is the way in which his account is set out, offering “a briefe compendiousnesse,” laying out what he calls infallible principles (“infayleable principles”), “evident demonstrations,” “shewyng wayes to Pilottes by teachyng them the making and vse of Instrumentes” in order to “knowe *and take*” (that is, measure and note) the altitude of the sun, and how to order “theyr Cardes” (their maps). This kind of knowing is strikingly practical, ordered, and able to be noted down, with a faith in its reach toward a precision based in quantification (“so certayne”), thanks to the instruments here demonstrated, and the detailed method of measuring and representing the world that the “compendiousnesse” of his form enables.

And heere doo I not say that Nauigation is not a thyng of antiquitie. For we reade that in olde tyme, the *Argonanti* sayled to *Colchos*, and *Danaus* brought the fyrst Shyppe from *Egypt* to *Greece*. But I saye, that I am the fyrste that haue brought the Arte of Nauigation into a briefe compendiousnesse, geuing infayleable principles, and euident demonstrations, describing the practise and speculation of the same, geuing also true rules to Mariners, and shewyng wayes to Pilottes, by teachyng them the making and vse of Instrumentes, to knowe and take the altitude of the Sunne, to knowe the Tydes or ebyng and flowing of the Sea, how to order theyr Cardes and Compasses for Nauigations, geuing them instructions of the course of the Sunne, and motions of the Moone: teachyng them furthermore the making of Dyalles, both for the day and for the nyght, so certayne, that in all places they shall shewe the true houres without default.

Cortés celebrates what he presents here as an advance in learning – but an advance that is nonetheless rooted in what has come before, though made new through the representational tools at his disposal. He is at pains both to claim the newness of his historical moment, *and* its link to “antiquitie.” The word he uses is “Arte,” meaning an acquired skill or field of learning, or the *practical* application of learning, as opposed to a

naturally occurring phenomenon. At this time this association with human intervention carries with it the suggestion also of cunning and artifice, as it does in current English usage. This does not appear to be the inflection here, and the term “arte” is being used in its older practical, rather than aesthetic, sense. His objective, in presenting the “arte” of navigation in the “brieve compendiousness” of his text, is precisely to lay bare, to set out clearly, or to “shewe” his methods and the “true rules” pertaining to this field of knowing, “so certayne,” without the shadow of trickery or doubt. “Arte,” here, is the fruition of the laudable human intellectual endeavor of learning, for the purposes of “useful” application.⁶⁹ It finds its zenith in the moment of representation, when all is revealed and placed in order. It is the particular representative form, this “brieve compendiousness,” that Cortés claims for himself as the pinnacle of his achievement here – the opportunity to encompass every relevant detail, in brief, and correctly ordered. This “arte,” therefore, and the epistemological achievement Cortés claims, depends on its publication, specifically in the form of this text, for its completion.

An “increase” in knowledge?

Cortés seems to understand developments in navigation in the context of a widespread growth in knowledge. Navigation is “as other Artes” in that, as he puts it, it “doth from day to day increase, and by litle and litle is come to perfection.” This development he attributes to the existence of astronomical instruments with which to trace the movement of the planets, and their representational associate, the map of astronomical tools – instruments such as the “compasse” and the map (“carde of sayling”): “Whereby it is

⁶⁹ Jacob Soll quotes Richelet’s 1680 *Dictionary* definition of “Art” as the “collection of precepts that one practices for useful ends. (Mechanical Arts, Liberal Arts, Those of Logic, Rhetoric, Grammar, Painting, Astronomy, &c.).” See Jacob Soll’s “Introduction: The Uses of Historical Evidence in Early Modern Europe,” (2003) 155.

manifest, that aswell Nauigation, as other Artes, doth from day to day increase, and by litle and litle is come to perfection. For in those daies they had neyther compasse nor carde of sayling whereby to gouerne them selues.”

For explorers to be able to “govern” themselves, he argues, they had to be familiar with the heavens – to be able to locate the Sun, in particular, and anticipate its (purported) movement. Copernicus had by this stage published his ground-breaking thesis *De Revolutionibus* (1543) in which he proposed that the Earth is not stationary or at the center of the universe, but that the planets revolve around the Sun, ushering in a new era of astronomical sophistication and catalyzing a fundamental shift in Western thought and self-understanding. As Kuhn (1957) puts it, Copernicus’s “planetary theory and his associated conception of a sun-centered universe were instrumental in the transition from medieval to modern Western society” (2).⁷⁰

Kuhn’s point goes well beyond a recognition of the significance of Copernicus in the development of modern science and Western thought more broadly. In explicating how a shift in ancient beliefs about the movements of the planets (and, crucially, the Earth’s position in the universe) produced a fundamental shift in ancient self-understanding, Kuhn calls for a recognition of the fact that the knowledge practices of any given society are fundamentally linked to their belief structures, and that this is true of our own scientific “truths” – that the “resolute credence” that “we now give our own” scientific theories (3), is just as much a function of our own need to have our particular

⁷⁰ Kuhn explains: “Copernicus lived and worked during a period when rapid changes in political, economic, and intellectual life were preparing the bases of modern European and American civilization. His planetary theory and his associated conception of a sun-centered universe were instrumental in the transition from medieval to modern Western society, because they seemed to affect man’s relation to the universe and to God.... Men who believed that their terrestrial home was only a planet circulating blindly about one of an infinity of stars evaluated their place in the cosmic scheme quite differently than had their predecessors who saw the earth as the unique and focal center of God’s creation” (2).

questions of the universe answered as was the case with ancient cosmographies, or understanding of the planetary systems.⁷¹ His call to recognize the cultural and political contexts within which major shifts in scientific paradigms occur (made more explicitly in his highly influential critique, *The Structure of Scientific Revolutions*, 1962) spawned countless investigations into the multifarious conditions that undergird scientific thought and practice, historically.

Robert Westman offers a useful critique of Kuhn's argument in "Two cultures or one? a second look at Kuhn's *The Copernican Revolution*."⁷² Westman places Kuhn within the dominant historiography of 1950s, arguing that Kuhn offers too unquestioning a version of scientific disciplines and that he makes twentieth-century, "presentist" (88) assumptions about the degree of specialization involved in astronomy and its separability from astrology. He argues too that Kuhn offers insufficient evidence for the "revolutionary" effect of Copernicus's theories, and traces instead the ways in which Kuhn himself relies on E.A. Burt's influential *Metaphysical Foundations of Modern Physical Science* (1924) in identifying the dominant "conceptual conditions" within which Copernicus's reconceptualisation of astronomy could occur, that of Neoplatonian critique of Ptolemy's two-sphere universe, and attributing them to the work of his "friend and teacher" (as Kuhn put it, 129, following Burt), Dominico Maria de Novara (1454-1504). Westman does not find the evidence to support Kuhn's theory of a "revolutionary" shift following the publication of *De revolutionibus* in 1543. Westman writes:

"Throughout the sixteenth century the dominant 'reading' of *De revolutionibus* was that

⁷¹ See footnote in Chapter Two, below, for a discussion of the term cosmography.

⁷² Westman is a professor of history at the University of California, San Diego, and has written and edited texts which aim to reconsider received understandings of the "scientific revolution," most notably *Reappraisals of the Scientific Revolution*, with David C. Lindberg (1990).

forged by Lutheran astrologer-mathematicians at the University of Wittenburg – a partial acceptance of elements of Copernicus’s theory, an ignoring of its discipline-upsetting physical theses” (Westman 82).

If it is true that Copernicus’s new ideas were born out of what had come before, it is also true that earlier habits of thought extended into the new scientific paradigms – such as the need to find authority, at all, when accounting for the known world. Jacob Soll has argued that, although “historians of science have looked beyond the sciences to understand the shift towards empirical thinking” following Kuhn, there has not been sufficient recognition of the “slower and perhaps more profound cultural revolution” which saw the pre-eminence of what he calls “historical thinking” and the appeal to historical evidence, at a time when empirical method was gaining authority. Soll’s point is somewhat polemical in the face of his own references to illuminating studies of early modern methods and thought.⁷³ Still, his point is taken: that an historical, secular mode of thought influenced the knowledge practices of a range of early modern philosophers, who sought to secure secular, historical, evidentiary authority for their investigations. Soll’s point is that the progressive ascendancy of the empirical method in early modern Europe was as much about finding new authorities – secular, historical, modern, as opposed to ecclesiastical, divine, and ancient – to explain the world (and that this process took centuries rather than decades).

⁷³ Soll draws our attention to the following historians of science: Steven Shapin and Simon Shaffer and their “ground-breaking” study of the conditions that “made the acceptance of experimental possible in England,” in *Leviathan and the Air-Pump: Hobbes, Boyle and the Experimental Life* (1985); Barbara Shapiro in *A Culture of Fact: England 1550-1720* (2002); and Lorraine Daston and Katherine Park who examined the “cultural practices inherent in early modern scientific culture” in *Wonders and the Order of Nature, 1150-1750* (1998).

To return to the Cortés text, it is hard to find evidence in this text of the revolutionary effect of Copernicus that Kuhn identifies as characteristic of this period. Cortés makes no reference to Copernicus's theory, and his is very much an Earth-centered universe. However, in his introduction, Richard Eden does describe as significant the insight that the heavens held the key by which humans could learn to steer themselves, and to treat the heavens as an object of study, rather than the mystical seat of the divine. Eden is careful to distinguish the "supersticious" and, to his mind deplorable, practice of *astrology* which has "contempt" for "Arte and Science," from this current *astronomical* project of studying the heavens (an endeavor which involves, on the contrary, both "the feare [or reverence] of God" and "trust in ... Science"). The difficulty he faces has to do with the fact that both practices (astronomy and astrology) rely on observation of the stars for the primary method of their conjectures. He sets apart *true* astronomical investigations from the "vaine obseruations" of "the supersticious Horoscopers (Astrologiers I meane, and not Astronomers)" who "are accustomed to vse in the elections of houres, times, and dayes, by constellations and aspectes of the Starres and Planets." But his distinction between worthy investigations and superstition are not all that successful, and rely on semantics (in characterizations of the "wise and honest Pilotte" who searches after "true knowledge" versus the "supersticious Horoscopers" who fall prey to the "vanitie and vncertaintie" of what his Cambridge tutor called the "most ingenious arte of lying"). Ultimately his distinction (between worthy and unworthy use of the stars to achieve knowledge) depends upon the promise contained in the "Compassse," that is, in instrumentation. His advice to those seeking advancement in astronomical learning is as follows:

Omitting therefore the superstitious and phantasticall obseruations of the iudicials of Astrologie, it shalbe better and more necessarie for all Pilottes that desyre to excell in their profession, to learne and obserue the principles of this Booke, whereby they may haue such knowledge of the Sphere, as may instruct them the making and vse of diuers goodly Astronomicall instruments pertayning to the arte of Nauigation, by knowledge of the moouings of the Sunne and Moone in their Spheres, and the other Planettes and fyxt Starres: thereby to attayne to the true knowledge of houres, tymes, and tydes, with the variation of the Compasse, and many other goodly naturall obseruations of weather, tempestes, and calmes, by certayne infallible signes and tokens of the same, very necessarie to be obserued, and this by the true principles of Astronomie, and not of Astrologie.

It is only through making and using various “goodly Astronomical instruments,” such as the “Compasse,” that pilots can “attayne” the “*true knowledge* of houres, tymes, and tydes” (emphasis added). Observation emerges as key – but this involves observation that can be turned into quantifiable data: the particular “goodly naturall obseruations of weather, tempestes, and calmes” by means of the appropriate instruments, which can lead to “certayne infallible signes” that are “very necessarie to be obserued” according to the “true principles of Astronomie, and not of Astrologie.” The frequent coupling of the two very different disciplines, in order to emphasize their difference, does not succeed in clarifying the nature of their distinction, just in communicating Eden’s insistence that they are not the same. But Eden has difficulty in articulating why the former is to be trusted, the latter vilified. What is clear, however, is that instrumentation and natural observation are placed, for Eden, firmly on the side of knowledge that is “good” and “certaine” and his presentation of Cortés places his work firmly in the latter category.

The valorization of the mathematical number

Cortés himself goes to great lengths in this document to explain how a mariner might use the “movement” of the sun as a guide. This insight – to look heavenward – is an indication, for Cortés, of progress in what emerges in his version of history as a linear

movement from “ignoraunce” to “knowledge” or, as he also puts it, “perfection.” In “those days” gone by – Cortés is not specific in his historical time-keeping and prefers a more generalized model of historical time, though he does refer to particular discoveries and advances by naming individual adventurers or civilizations – humans “lacked the consideration of the starres, vntil the Phenitians found the knowledge thereof, and were the fyrst that vnderstoode (that to such as should trauallye by sea) it should be necessarie to lift vp their eyes to heauen, and consider the motions thereof.” Here the need to look heavenward is not a quest for the divine. On the contrary, it bespeaks an impulse to find secular explanations for the movements of the planets, relying on practicable investigative methods, affirmed in the text with reference to “the Phenitians.” His reference to the Phoenitians as inspirers of secular investigative methods and the movement from “ignoraunce” to “knowledge” can hardly be said to be a claim for novelty, given that these methods were developed two thousand years before Cortés is writing.⁷⁴

He outlines three methods for finding the “true place of the Sunne” – a position which he calls “a poynt or prick in the Zodiacke.” His methods look to the instruments of geometry: the divider to draw an arc or line between the Sun and the Earth, and the mathematical number, ordered and represented in a table, and made to follow certain, articulable rules:

The true place of the Sunne is a poynt or prick in the Zodiacke, which is thus found: that drawyng a ryght lyne from the center of the world, to the center of the

⁷⁴ The Phoenitians were dominant in an area including modern Lebanon during 1200 – 400 BC and had a reputation as navigators in the Mediterranean world. They colonized part of Greece and North Africa and established profitable trade routes. (They were also known as the Canaanites, the term used in the Bible, where they are feared and disparaged as worshippers of Baal, their fertility God.) See *Columbian Encyclopedia* and the *Encyclopædia Britannica*.

sunne, and caryng the same continually right fourth vnto the Zodiack, where this lyne sheweth or toucheth, that is the true place of the Sunne. This place is found in three maners. One way, by a table: another way, by an instrument: and the thyrde way, by a certayne rule, to be borne in memorie.

The latter refers to a method or formula used to calculate the position of the sun on each respective day of the month. Following on from the piece quoted above is an extended table, listing the days of each month of the year, and the “equation to be added” – that is, the mathematical number referring to the degree by which the sun is presumed to have declined, for each year, from 1540 to 1688 – the number of years in any given cycle, to be repeated, as Cortés explains (“And hauing passed other 136. yeeres, you shall returne to the roote, adding two degrees”).

Cortés invests in the mathematical figure a certainty in the face of the heaving oceans. The number is given an epistemological status – as a method and as an object of knowledge in itself – and is wielded with little qualification or explanation. In the following passage, Cortés sets up a formula in which the number figures as a guarantor of what needs to be known, that is, a guarantor of finding the position of the sun in an uncharted ocean, if the series of numbers can just be held in memory:

And yf by memorie you desyre to knowe the true space of the sunne, without respect of minutes (whiche may sufficiently be done with the Astrolabie) beare in memorie these numbers, 10.9.10.11.12.13.14.13.14.13.12. Of the which the first serueth for Ianuarie, the seconde for Februarie, with theyr signes: and so of the rest. Then to knowe in what degree the sunne is, you shall take away the dayes that are applyed to euery Moneth [month], according to the sayd numbers of the dayes for the which you desyre to knowe the true place of the sunne, and in them that remayne, in so many degreés is the sunne of the signe into the which it entreth the Moneth.

The text invests in this sequence of numbers a remarkable confidence, and the hope of finding one's orientation – both in time and place (by calculating the position of the sun in relation to the earth).

Marie Boas Hall usefully identifies an ascendancy in mathematics as a method and language during the sixteenth century, or, said differently, a key shift in sensibilities, away from Aristotelean discursive practices towards Platonic belief in natural science's dependence on mathematics. She describes the shift in this way:

Though Aristotle had protested that magnitude and body were different things, and natural philosophy and mathematics could not be the same, the Platonic tradition continued to appeal to many minds. The fifteenth century's intensification of interest in Platonic and neo-Platonic doctrine helped to encourage the view that mathematics was not only the key to science, but included within its competence the greater part of what the seventeenth century was to call natural philosophy. One only has to recall that Copernicus wrote for mathematicians to realise how the anti-Aristotelian tendency of the age was apt to express itself by the attempt to treat mathematically what Aristotle had treated qualitatively. (199)

Boas Hall characterizes mathematics, in the neo-Platonic zeal of Cortés's moment, as offering a key to natural philosophy, at a time when the natural world was coming more clearly into focus, in contrast to Aristotelean philosophy – elegant, learned, but removed. Amir Alexander (2001) characterizes mathematics in the sixteenth and seventeenth centuries very differently, arguing that mathematics had “nothing to say” of exploration and discovery of hidden realms of knowledge – it only moves from what is already known: “A system of knowledge in which all truths were logically derived from accepted postulations offered no hope of breaking the established intellectual mould” (4-5). He argues that early modern mathematics could not stand up to the period's appetite for novelty and exploration: “Mathematics, with its rigorous, formal and deductive structure,

was ill-suited terrain for intellectual exploration. No mathematical object, after all, could ever be observed, experienced, or experimented upon. Mathematicians, it seemed, did not seek out new knowledge or uncover hidden truths in the manner of geographical explorers. Instead, taking Euclidean geometry as their model, they sought to draw true and necessary conclusions from a set of simple assumptions” (2-3).

While Alexander acknowledges that early modern “mathematics” was a varied and ill-defined pursuit, he relegates these qualifications to footnotes, and his argument proceeds apace. While his ostensible subject relates to the “sixteenth and seventeenth centuries,” the philosophers quoted are almost exclusively from the seventeenth century, except for an early text by Clavius (1589) and the Dutch mathematician Simon Stevin (1580s), and are therefore not useful in understanding the earlier period of which he writes. He quotes Francis Bacon as saying that mathematicians “delight in the open plain of generalities, rather than in the woods and inclosures of particulars” which was “to the extreme prejudice of knowledge” (“Of the Dignity and Advancement of Learning” 370). But this characterization of sixteenth-century mathematics is too heavily dependent on a select few disparaging characterizations by those with an interest in exploration – such as Bacon, and “the wandering Giordano Bruno” (Alexander 8) who, as Alexander puts it, “viewed himself as Columbus’s intellectual heir” (5) – and is too little supported by careful analysis of representative texts. It is therefore hard to refute or accept these characterizations. His critique of mathematics depends on too great an assumption of methodological cohesion and employs an evaluative method that asks of “science” the capacity to extend insight into the very nature of things and to uncover new realms of

knowledge – thus falling into the same evaluative mode that he identifies as being at work in the period of his study.

The mathematical paradigm of the sixteenth century may not have warranted this kind of language, this sort of expectation, despite the evidence of an increasing tendency to valorize the mathematical number as a key to knowledge. Alexander’s analysis does not account for the ubiquity of the mathematical number and the dependence on this form of representation to translate experience into something graspable within narrative accounts that do not announce themselves as mathematical in their reach while relying on the mathematical integer to render the varied, disparate events out in the world somehow commensurate (or at least comparable) and available for deliberation. In this way texts reach for the more ambitious aims of what a scholar of our time might consider to be the domain of knowledge.

In contrast to Alexander, Jim Bennett is at pains to consider the context informing the mathematical practices of the sixteenth century in his study, and as a result arrives at a more useful scheme with which to understand how mathematics functioned in this period. In a cogently argued piece, supported with reference to a range of mathematical instruments dating from before 1600, Bennett calls for a distinction to be made between instrumentation in support of practically-oriented pursuits (what he calls “doing”) and instrumentation in the pursuit of knowledge (what he calls “knowing”). For the most part, “practical mathematics,”⁷⁵ and the instrumentation that supported it, was directed at

⁷⁵ The Epact project characterizes sixteenth-century “mathematics” as a varied, encompassing arena of practical knowledge, not entirely recognizable to modern day scholars: “In the modern era, neither astronomy, nor surveying, nor gunnery, nor gnomonics (the making of sundials), nor most of the other ‘instruments’ represented in this collection of instruments, could be called a branch of mathematics in any straightforward or unqualified way, even though they all make some use of mathematical techniques. From this simple observation, we already see that the subject represented by these instruments is unfamiliar to us, and that *mathematics was something different in the period before 1600*” (emphasis added).

“solving problems,” that is, “doing” (Bennett 133), rather than crossing the frontiers of knowledge, in the metaphor of “discovery” at play in natural philosophy in this period. Oxford University’s E pact online data-base project (to which Bennett contributed) puts it this way: “The development of mathematics was particularly marked in Europe in the 16th century, and its character was predominantly ‘practical’ rather than ‘theoretical’ or, better, ‘speculative’ ... these instruments solved problems, but they did not discover truths about the natural world.”⁷⁶ In relation to the practitioners themselves – the mathematicians, instrument makers, natural philosophers, and those to whom we might attribute exalted epistemological ambitions because of what followed in the disciplines with which they might be said to have identified themselves – Bennett cautions us not to read retrospectively. The “prominence historians have given” to “the range of mathematical sciences,” which would include astronomy and geography, and even music, (Alexander 3) in the sixteenth century “does not accord well with the priorities of the period” (Bennett 143). “There is no sharp division between makers and mathematicians” in the sixteenth century. Those whom history might have judged to have made significant contributions to how the world is understood (Bennett gives as examples some of the map-makers of the period, like Gerald Mercator, 133), made less ambitious claims about the epistemological significance of their work, presenting themselves as instrument makers and presiding over workshops – “doing” rather than “knowing.” This is a matter of status, and Bennett is careful to avoid simplistic characterizations. (Indeed, he argues that sixteenth-century instrumentation was varied and sophisticated, and fuelled by a complex and diverse economy of knowledge-sharing, where instrument makers made intricate and ornate instruments for wealthy patrons, on the one hand, and for direct use

⁷⁶ <http://www.mhs.ox.ac.uk/epact/essay.php>

on voyages of exploration, on the other.) He cautions modern-day interpreters of sixteenth-century knowledge practices, such as myself, not to evaluate sixteenth-century mathematical work with the status assumptions that attend modern-day theoretical mathematics, on the one hand, or the work of artisan-like instrument making, on the other. Mathematics, as practised in this period, did not aspire to “deliver insights into the nature of things” (143). For in the tradition of “practical mathematics,” the quantifiable makes itself available for ready application, tolerating as it does so a surprising degree of contradiction, for example, in the field of cartography, “where again a range of projections are in use that coexist without incoherence because they inhabit the world of mathematical practice and not of natural philosophy” (138). Cortés’s tables of numbers, one could therefore conclude, did not endeavor to solve the period’s cosmological questions necessarily, or to achieve a theoretical status that in later centuries became associated with a more abstract mathematics. Rather, the tables carefully set out, admittedly with a boldness of address and in great detail, a predictable cosmographic pattern specifically for the use of mariners, but without going further to comment on the place of the earth in the universe.

Bennett’s caution is well placed. But what his division of knowledge (into practical and theoretical approaches to knowing, in keeping with the sensitibilities of the period) does not adequately take into account, is the abstraction that the mathematical figure offers. While we need to remain cautious in interpreting sixteenth-century mathematics as theoretically ambitious, it is not appropriate, either, to relegate it to the sphere of praxis alone. The tables of figures and reduction (or translation) of geographic detail into co-ordinates on a graph of cosmography, offer apparent certainty not only

because they appear fixed and unchangeable; the representative system which valorizes the mathematical figure offers to translate the particular, detailed, awkward, but nonetheless authoritative confusion of experience into an abstractable language which aspires to a greater epistemological status. But of course this translation is not unilinear, and it does not rest here: the mathematical number, as it is deployed in Cortés's text, does not stand alone, and relies on the experience it references for its standing.

Bennett's hoped-for detachment from modern conceptualizations may be impossible to achieve. Indeed, his own division between knowing and doing, for example, is articulated in language that is nonetheless an imposition on the texts, despite his resolute efforts to remain responsive to the particular language and thought of the period. "Knowing" and "doing" are Bennett's terms, used presumably because of the apparent diffidence and open-endedness of the participle form (when compared, say, with the much more assured nouns, "knowledge" and "practice"). Still, they seem to be useful tools of discussion for their acknowledgement of the practical orientation with which knowledge was pursued in the sixteenth century. George Bruner Parks, biographer and scholar of both Richard Hakluyt (1928) and Giovanni Battista Ramusio (1955), makes a similar point with reference to the sequence of an imagined geographer's career: "it was the practical man who learned his geography as he needed it; and when he had become expert he no longer had time to be a practical man and sooner or later he became a scientist" (Parks 16). Other writers about this period have questioned the appropriateness of the term "scientist" to refer to this period, for it inevitably puts in mind a present-day image of the work and achievements of those involved with the learning. Elizabeth Eisenstein, historian best known for her substantial work on the history of early modern

printing, contends with due cause, that in “the early modern era, it may be a mistake to use the label [scientist] at all. The distribution of talents contributing to ‘scientific’ advances in the early modern era hinges on a wide variety of activities. The question of where and how to apply the term ‘scientist’ to men who did not regard themselves as such is open to dispute” (Eisenstein 255).

Knowing and doing

The relationship between “knowing” and “doing,” as it appears in Eden’s translation of Cortés, suggests that the two are mutually edifying, and the boundary between the two not always clearly demarcated. For Cortés, the business of “knowing” is deployed with all the assurance of the noun form, knowledge, come to “perfection.” But knowledge is also presented as a “deede,” an act in service of prosperity and charity:

And thus may it manifestly appeare, that in these prosperous and fortunate dayes of your Maiestie, it hath pleased God to bring the knowledge of Nauigation to perfection, with this my breefe discourse as touching the same, aswell profitable and necessarie for them that trauayle by land, as by Sea. What can be a better or more charitable deede, then to bring them into the way that wander? What can be more difficult, then to guide a shyp engoulfed, where only water and heauen maybe seene?

To further knowledge, as it is presented here, is to save lives. But it is also about pleasure. Cortés concludes his Epistle dedicatorie with the following promise of delight and merit:

If therefore ... it may please you to feede your eyes with these my trauailes, you shall fynde therein many new, delectable, and witty things, with also many profitable and certayne rules, both to reade and vnderstand.

In Cortés's characterization of his travels – his “trauailles,” which refers, of course, to the *document* in which he has staged his experiences but with the implicit mutual reference between the experience and its account, discussed earlier – he seems unable to decide whether or not what the travels offer the reader is, primarily, a feast for the proverbial “eyes,” “delectable” and “witty,” in a dichotomy where “new” is ensconced on the side of pleasure, or whether the significance of the offering is to be found in the “profitable and certayne rules” available here to read and to “vnderstand.” Learning in this form is presented as available for application, in the real world, or the New World which is more real still, and an especially appropriate scene for the gathering and deployment of knowledge than the sequestered environment of the academy.

The last word, it seems, is reserved for the infinitive verb, “to ... understand,” which seems to incorporate both “knowing” and “doing,” at least in the context of this Epistle, where the printed word, read and understood by those who would use it on their own voyages, is considered a “charitable deede,” when it can be made available to “them into the way that wander,” and can “guide” sailors blinded by night and rudderless oceans.

In the chapter that follows I consider how the compilation's knowledge practices provided a rudder of a different sort in providing tools with which to represent and manage difference in the compilations which presented encounters with the New World, in all its strangeness and promise. Specifically, I analyze Richard Eden's translation of Sebastian Münster's compilation, retitled by Eden *Treatyse of the Newe India* (1553), and Sebastian Cabot's “Ordinances,” his instructions to explorers on how to collect information, what information to collect, and how to manage encounters.

Chapter Four

Richard Eden, Sebastian Münster and Sebastian Cabot: establishing the conventions with which to manage difference

In the form of the compilation, “knowing” and “doing” in the sixteenth century have a medium that is larger, more ambitious than any one dedicated instruction tract or manual might have been. As a composite document, the compilation creates a seemingly creditable textual platform, an opportunity for careful framing, and conventions that are understood to accommodate seemingly worthy aspirations, within which to attempt a “knowing” of the New World. Of particular interest, and the focus of this chapter, is the way in which difference and novelty is accommodated within the compilation, and to what effect.

In contrast to Foucault’s characterization of this form as a voluminous container for more of the “Same”, a detailed inquiry into actual examples of sixteenth-century compilations suggests a complex relationship between the different vantage points generated in its abundant pages, and between the different modes of representation compilations typically drew upon, intensifying the dynamic within which difference is named and then reabsorbed into the same, or revalued once viewed through the lens of “learning.” The form did not achieve an unproblematical embrace or a recasting of difference into similitude. Early modern deployment of epistemological tools enabled a complex engagement with the world beyond the borders of what was previously known. The form of the compilation, and the conventions and expectations with which compilers

work, seem to facilitate this movement between already-known paradigms, inherited from centuries of scholarship, and modes that are announced as new.

In this chapter I examine a key compilation of this period, Sebastian Münster's *Treatyse of the Newe India* (1553), which is in fact Richard Eden's translation and reworked edition of Münster's more comprehensive Latin *Cosmographiæ universalis* (1550), framed with Eden's prefatory material and given a title which announces its orientation toward the New World. In the same year as Eden's edition, 1553, a document appeared titled *Ordinances, instructions, and advertisements of and for the direction of the intended voyage for Cathay, compiled, made, and delievered by the right worshipfull M. Sebastian Cabota Esquier*, commonly known as "Cabot's Ordinances," which were a set of instructions for explorers on how to conduct their voyages, organize their crew, manage encounters with local inhabitants, and gather information and, importantly, *what* information to gather. It is of great interest in that it spells out what were considered respectable objects of knowledge in the sixteenth century, and how the anticipated encounter with novelty and difference might be absorbed into Europe's knowledge systems. This chapter will examine in detail the way in which difference is dealt with in Münster's *Treatyse* before turning to Cabot's "Ordinances."

The compilation and the management of difference

Foucault argues that early modern writing sets up a kind of relationship of "equivalence," and he refers to sixteenth-century compilations in general terms to illustrate what he means. Certainly, the form of the compilation, with its orientation towards the "whole," establishes, simply in its structure, a set of relationships that offers a formal basis, "a justification for their words, their classifications, their systems of exchange" (*The Order*

of Things xxiv). But close readings of specific compilations suggests that this process is not at all static, even then. Compilers reach for different registers, different languages and different representational models in their efforts to “bring to light” the new accounts and to explain the new shape of the world. Their treatment of difference is not uniform, and their contradictions do not go unnoticed or untroubled, even in their own texts. Their negotiation of the modes at their disposal produces a curious *mélange* in their texts, but it is in the context of a managed contest, not an indiscriminate welcome. What follows is an examination of the form itself, as the primary instrument with which early modern writing about the newly expanded world appeared, to consider in what way it established a foundation for the shape the New World was to take in the European imaginary. It is instructive to look closely at key texts with which the New World was presented in the sixteenth century, with particular attention to the forms and conventions that were favored, and those that were discarded, and to consider the ways in which the New World was conceived of in Europe.

The forms that sixteenth-century compilers turned to were based on ancient forms established by natural historians such as Ptolemy, Virgil and Strabo. During the course of the century, however, certain conventions were established, others fell away, in keeping with epistemological developments in the period. Generic conventions are not hard to identify: the editor’s *apologia*, the adoption of a modest or even self-effacing voice that facilitates, paradoxically, the editor’s immodest claims to significance, on behalf of his text, in the name of Knowledge; the dedication, or letter to a noble and usually powerful patron whose influence thereby accrues to the text and the claims of its editor; the setting out of the field of influence in a “letter to the Reader” within which the reader is invited

to position himself in relation to the rest of the world; the expository mode in which the ancients are tackled for their ignorance with seemingly iconoclastic conviction; the setting out of new epistemological methods – numbers, tables, diagrams – with unexplained confidence in the truths they yield; and, with increasing frequency over the course of the century, the table in which contents are listed with a corresponding date, rather than page number; the poem, or concluding brief epistle, in which all knowledge, all novelty, is brought under God’s authorizing influence. Even the more forward-looking of these tropes are as much conventions as the obligatory, unsurprising referencing of ancient texts for authority. Compilers’ avowals of innovation are so ubiquitous, they are hard to take at face value. But they cannot be dismissed either, for they speak of an orientation towards the “new” that is nonetheless significant in the period.

Sebastian Münster’s contribution to the form of the compilation

I would like to turn, here, to the work of the German theologian and geographer, Sebastian Münster (1489-1552), whose weighty tome, the *Cosmographiæ universalis* (1550), attempted to set out a full account of the known world, including the “new” Americas. But even this significant text, which stood apart from what had come before in its endeavor to be both compendious and accurate, was substantially based on existing texts – notably, texts by the elder Pliny, Polydore Virgil, Johannes Boemus, Strabo, and Ptolemy. Ptolemy’s *Geographiæ* was especially significant at this time. First published in 1475 with an early fifteenth-century Latin translation by Jacopo d’Angelo, its popularity and influence was expanded still further following the publication of

Münster's own translation and much-enlarged edition in 1542.⁷⁷ Münster's edition of Ptolemy's *Geographica* was enormously popular – as many as four editions appeared in the first twelve years after publication.⁷⁸ Ptolemy's *Geographæ* provided an important model for Münster's *Cosmography*, as did Johannes Boemus, though his text expands and updates what the earlier writers had offered, producing as it does so a “monstrous encyclopedia that only a desk could hold” (Grafton 100).

Münster's *Treatyse of the Newe India* appeared in 1553, the year after his death, in an English translation by Richard Eden.⁷⁹ As an edited and framed extract from the more compendious *Cosmographia Universalis* (1542), it is in fact an entirely new publication, shaped by Eden's hand. Edward Arber includes it as the second of his *First Three English Books on America*, celebrating as he does so Eden's visionary orientation toward the New World and its possibilities.

I focus on Eden's compilation *Treatyse* in this chapter because Eden's treatment of Münster's text, his repackaging of a prior publication, offers a useful example of the work of a compiler, albeit in a small volume. Although the author of this volume – the figure acknowledged as its intellectual source – is Münster, and although Eden is identified only as the translator, in truth the text we will be examining (that is, Eden's edition of Münster) is not at all synonymous with Münster's original. Whereas Münster's *Cosmographia Universalis* reaches for a degree of compendiousness – to put together a “brief” but “complete” account of the whole world – Eden's excerpt, the *Treatyse*, is

⁷⁷ See Grafton (1992) 49.

⁷⁸ See Robert Dickinson, *The Makers of Modern Geography* (1969) 6.

⁷⁹ The full title reads as follows: *A treatyse of the newe India with other newe founde landes and islandes, aswell eastwarde as westwarde, as they are knowen and found in these oure dayes, after the description of Sebastian Munster in his booke of universall cosmographie: wherein the diligent reader may see the good successe and rewarde of noble and honeste enterpryses, by the which not only worldly ryches are obtayned, but also God is glorified, [and] the Christian faythe enlarged. Translated out of Latin into Englishe. By Rycharde Eden.* (Imprinted at London : In Lombard strete, by [S. Mierdman for] Edward Sutton, 1553).

focused only on the new discoveries to the west. The framing he gives to Münster transforms the document into a new text which, though presented as a dispassionate description of newfound lands, in the manner of an authoritative cosmography, is readily seen to be caught up in the fervor with which the New World was pursued, as it were, just as the knowledge-practices of the time (the ways in which knowledge was sought out and represented) were being tested and reconfigured. The compilation is readily available to Eden as a form within which to celebrate Europe's engagement with the New World.

The bravura of his dedication suggests that the single-mindedness required, both of the compiler and of his anticipated readers whom he hopes to inspire to embark on voyages of their own, apparently, can only be achieved with reference to the inflated, masculinist identifications involved in "manlye courage", and a renouncing of emotionalism and the comfort of the domestic realm, characterized here as feminine and incompatible with "manlye courage." He announces that "infinite ryches" await those who engage their "manlye courage" ("to the glorye of God and commodities of our cuntry"), abandon their "soft beddes at home, among the teares and weping of women," and "attempt with new viages to serche [the] seas and newe found landes with the New World," ventures undertaken "to their great praise." This denunciation of the "feminine" is necessary precisely because the fierce opposition between masculine and feminine does not stand secure, and the "feminine" world is registered as threateningly desirable. It must therefore be disavowed in the terms of the text, in favor of wealth, God's glory, and adventuring. So important is the matter of adventuring "in a godly, honeste, and lawful purpose," that he exhorts them "to the death to persist."

A reading of the Dedication suggests that Eden's imperialist impulse brings with it an anxiety. He is mindful of obligations his text does not fulfill and feels the need to apologize for his text's lack of comprehensiveness. This is not to say he does not consider his book commendable: "I thought it worthy my traualye, to their better comfort." Conflating book-learning with its application, he imagines that his translation of "this boke oute of latin into Englishe" is a valuable offering to his fellow citizens, performed out of the "duetie I beare to my natyue [native] countrey and countreyemen" in order to help them "direct their viage" (voyage) to secure their safety and achieve the most success.

However, he is conscious that the book does "not so largely or particulerlye entreate of euery part, region or commoditie of ye sayd new found landes, as the worthines of the thing might requyre." In fact, so great a discrepancy (or "inequalitye") exists between the scope of the document and the task announced in its title, it is as "if a man woulde professe to wryte of Englande, and entreated onelye of Trumpington a vyllage wythin a myle of Cambrydge." It lacks comprehensiveness even in relation to the new-world regions under its focus. Comprehensiveness, as Eden understands it, would involve a more *expanded* and a more *particular* treatment – that is, both quantitatively *more*, and qualitatively more *detailed*, information. The appropriate focus areas, as Eden sees it, relate to *place*, both on a detailed, large scale ("euery part") and on a smaller scale ("region"), and to the *goods* ("commoditie[s]") specific to the new-found lands. A treatment which established these features as its objects of knowledge would be more suitable, "as the worthines of the thing might requyre."

Nevertheless, he hopes, “this smal boke” offers the possibility of clearer sight, “as in a little glasse,” for those who need help directing themselves to the “infinite ryches,” “not only how to learne by the example, dammage, good successe, and aduentures of other, how to behaue them selues and direct theyr viage to their most commoditie” (Dedication 5-6). The “science of Cosmographie, whyche entreately of the descripcion of the worlde,” offers the tools with which to navigate this venture, and also the validation, along with an appeal to the divine. It is in this context that Eden conceives of the enterprise of exploration, and its representation: exploration, for Eden, calls for “manly courage.” It promises God’s favor, and wealth for the edification, also, of the commonwealth; it depends upon, and contributes to, the new sciences in a relationship of mutual dependence that also provides the intellectual and moral foundation that supports the more profit-serving motives behind Eden’s invitation to engage with what is “new” and “forene.”

Identifying exotic “commodities”

Eden presents the “science of Cosmographie” as integral to the endeavor of seafaring, not just, as one might expect, for voyagers to direct their course and avoid disasters at sea but also, more specifically, to direct them “to their most commoditie.” Eden invests in cosmography the hope that it can direct adventurers to the “greate aboundaunce of golde, whiche is engendred almost in al regions neare vnto the *Æquinoctial* line.” He offers a cobbled-together inventory of gold-rich regions based on ancient accounts by “George Agric[ulo], & Albertus Magnus” and King Solomon himself, and proposes, as “a general rule, that nearest vnto the south partes of the world betwene the two Tropikes vnder ye Equinoctial or burning lyne, where the sunne is of greatest forse, is the chieffest place

where gold is engendred.” To add to the plausibility of the rule, he concedes an exception (“although it be sometymes founde in colde regio~s as in Scotland, in Crayford more, likewyse in Hungary”), only to qualify it immediately (“yet nether pure of it self, nor in great qua~tite [quantity]”), thereby underscoring his point. The association he seeks to create is between the climate (specifically, the heat of the sun) and a collection of natural phenomena desired, or at least intriguing to, the Europeans.

The primary categories of differentiation he creates are “north” (where it is cold, with an already-known topography) and “south” (where it is hot and rich in desirable natural products). His use of the “south” is entirely relative, however: he is referring to “the south partes of the world betwene the two Tropikes vnder ye Equinoctial or burning lyne, where the sunne is of greatest forse ... where Golde, Spyces, Apes, and Elephantes are nowe founde” (as opposed to the southern hemisphere as such: Ethiopia is in this “south”). He argues that the vast quantities of gold Solomon accumulated were “brought thether fro~ other countreyes” by “Marchauntes,” along with the spices and camels of which one reads in the third book of Kings. Though the Bible identifies “Tharsis” as the source of this gold, Eden suggests that it “were rather some other cou~trey in the south partes of the world, then this *Tharsis of Cilicia*” which, being on the other side of the Mediterranean Sea, in Judea, would have a similar climate, he argues, to the Island of Sicily, and the city of Seville, in Spain.

It is in this context that he invites his reader (the addressee of this letter) to “co~sider the saying of wyse Salomon, who affyrmeth [that] there is no new thing vnder the Sunne, & that the thing that hath been, cometh to passe again.” Here, novelty is not flaunted, but in fact disavowed. Mary Baine Campbell reads this specific moment, and

the marginal note that gives it emphasis (“nothing new under the Sunne”), as Eden’s attempt to “soften the shock of the new.” In fact this is the effect throughout, Campbell argues, of his extensive edits and the elaborate framing he creates around the firsthand accounts under his charge, which have been “worked up into literature.”⁸⁰ I read it differently: at this moment Eden is flaunting the allure of gold, and it suits his purposes, here, to affirm Solomon’s reassurance that nothing ever changes in creation. Elsewhere he makes a spectacle of what is new and “strange,” as I argue below. But at this specific moment in his text, an allusion to Solomon, legendary for his wealth and his wisdom, prompts the alluring possibility that gold, figuratively and literally, is to be found in the New World.

There are three authorities to which he appeals in making this assumption (that gold is to be found in similarly situated regions “toward the south”): “co~mon experience,” the Bible (“by the auctoritie of these woordes it is playne”), and “the principles of Philosophie” and, as he puts it elsewhere, “the science of Cosmographie,” areas of learning which at this time are not categorically distinct.

The strategies and language of astronomy allow him to slice the globe into regions, as though with a divider; natural history gives him the method with which to differentiate, that is, to allocate particular natural phenomena to climates, which as also spoken of as regions or “partes.” Certain natural phenomena (which, under Eden’s pen, become “commodities”) belong in certain climates, so much so that they will not propagate if removed to another region: if “Elephant and Apes” are not “enge~dred

⁸⁰ See Campbell’s *The Witness and the Other World: Exotic European Travel Writing, 400-1600* (1988) 214-15. Campbell teaches medieval and early modern literature at Brandeis University. Her more recent book on early modern science and literature, *Wonder and Science: Imagining Worlds in Early Modern Europe* (1999), won the James Russell Lowell Prize for 1999 at the Modern Language Association.

farre fro~ the *Æquinoctial* lyne ... nor yet wil [they] engendre yf they be broughte into those partes of the world. The lyke is to be vnderstande of Poppingiayes and spyces, and dyuers other beastes, fruites, and trees, which are engendered in certayne climes of the worlde, and wyll not prospere in other places.” Oranges will not bring forth fruit in England, pepper will not grow in Spain.

Though Eden is not attempting a classificatory system here, his approach to natural history seeks out difference and creates groupings where individual phenomena are understood to belong together (gold, elephants, spices, parrots, silk, and so on). As his explanation continues, the logic of the natural historian that seems initially to direct his discussion, becomes a tool in the pursuit of gold. His approach is that of an outsider, and a speculator, when he speaks of exotic delectables – the items in Eden’s informal inventories are all objects marked for profit. Elephants, for example, are sometimes noted down as the animal itself, but at other times only with reference to the particular part of their bodies that will have commercial value, “elephants’ teeth.” These groupings of exotics follow the traditional categories of Ptolemaic cartography,⁸¹ however, they are used here not in the manner of Münster’s careful genealogies, because the effect of these lists of exotics, following so soon after his discussion of the gold that is to be found, along with other natural phenomena, makes his prose more akin to the speech of a speculator, hoping to entice prospective investors with accounts of exotic delights.

When human beings become objects of natural history

When people are included in his natural history, the assured tone announcing difference and separating the world, and its people, into zones (he refers, for example, to “menne of

⁸¹ See Grafton 99.

the contrarye parte”), is not any less assured but, as I argue below, it does have to share the stage with a gentler, more inclusive voice, a voice assumed when referring to God and man’s place in the universe, and when reflecting on the mistaken conclusions of earlier philosophers. What comes first in Eden’s epistle, however, is a stark statement of difference (“Yet haue we nothinge common wyth them”), asserted in absolutist terms, then retreated from, within a discussion of ancient and modern astronomy. Geometry plays a key role in creating a visual scheme of absolute difference, where the spherical globe itself is shown to put peoples in opposition, standing feet to feet (anti-podeans, literally):

Antipodes are they, whyche walke wyth theyr fete dyrectelye contrarye agaynste oures, and haue the heauen dyrectelye ouer theyr heades as we haue. *Yet haue we nothinge common wyth them, but all thinges contrarye:* for when the Sunne causeth Sommer wyth vs, then is it Myddewynter wyth them: and when it is day wyth vs, it is nyghte wyth them: And when the daye is longeste wyth vs, then is the longeste nyghte wyth them, and the shorteste daye. (emphasis added)

Eden disparages Saint Augustine’s “chyldishe erreure” for refusing to acknowledge the existence of “people called Antipodes,” a mistake Augustine makes for lack of “knowledge in that science.” After explaining away Augustine’s error as the result of his lack of knowledge, Eden goes further. First, he makes Augustine an object of the mockery Augustine himself had directed toward astronomers for thinking the earth round. Now, the notion of a round earth and men “of contrarye parte,” considered by Augustine a “fable,” Eden tells us, has been proven “wyth moste certayne and apparente demonstracions of Geometrye, and vnfayleable experymentes.” There are indeed, therefore, men with whom we have nothing in common, who stand on the other side of the world, feet-to-feet with us. He establishes the truth of this with (vague) reference to

geometrical proofs and sure experiments, and then goes on to revalue this condition of being diametrically in opposition (“almost as directly as a diametrical lyne”), by placing hallowed biblical figures in opposition to each other, before listing the Spaniards and “Indians” as *mutually* in opposition to each other.

Notwithstandinge (sayeth Apianus)⁸² putte thou no doubtte Gentle Reader, that the Apostles of Christe were Antipodes the one to the other, and stode feete to feete the one agaynste the other, when James thelder and brother to Iohn the Euangeliste, the sonne of Zebedens, was in Spayne in Galitia, and Thomas the Apostle in the hygher India, they were mooste certaynelye Antipodes, walking feete to feete one agaynste the other, almost as directly as a diametrical lyne. For the Spanyardes are Antipodes to the India~s, and the Indians in lyke maner to the Spanyardes. Which thinge also the excellente and aunciente Auctour Strabo confyrmeth to bee true, and lykewise Plinius *Nat. Hist. lib. 2. Cap. 67* Volateranus also, and all other Cosmographers & Astronomers. Hetherto Apianus: and to declare my opinion in fewe woordes, I thinke it no greate marueyle [marvel] that Saincte Augustyne shoulde fall into an erreure *in the science of Astronomie in whiche he trauayled but as a straunger*, forasmuche as he erred in many thinges in diuinitie which was his chief profession.

The term “Antipodes” is an interesting one, inviting further probing.⁸³ Here Eden takes it literally, explains it, and then turns it on its head. All humans have others in relation to whom they are in opposition. And even a revered philosopher such as Augustine can be shown to be a “*straunger*” when viewed from the perspective of an unfamiliar discipline. Eden comes to these insights, or at least stages it thus in his Epistle, with reference to astronomy’s geometrical demonstrations of the spherical globe, and by invoking

⁸² Eden quotes the prominent astronomer and cartographer, Peter Apian, (1495-1552), whose works, *Astronomicon caesareum* and *Cosmographicus liber* (1524), are identified as amongst the “chief standard theoretical works” of the sixteenth century. See Dickinson 5.

⁸³ In her study of discourses of strangeness, Julia Kristeva describes “Antipodes” as a general sixteenth-century term, used to refer to “men living in distant lands,” a term that then brought with it the kind of fascination that terms like “savage” would have in later years. See *Strangers to Ourselves* (1991) 124. The manner it is used in this passage demonstrates that, paradoxically, when taken literally the difference it announces could be more readily up-ended, as it were.

disciplinary distinctions – the “profession” of “divinitie” versus the “science of Astronomie.”

Geometry also grants to Eden the visual image of a single whole earth, with one “face,” created by God to give sustenance to a universal human population, “made of one bloudde, all nacions of menne.” He turns to this featureless, universalized notion of a brotherhood of man, in which all difference is absorbed into the notion of “one bloudde,” when trying to conclude his Epistle:

That GOD made of one bloudde, all nacions of menne, to dwell vpon the hole face of the earth.

In the end he pulls back, he tells us, from his intended discussion of the “straunge thynges and Monsters” that populate Münster’s book, but not before suggesting that it is only the “narownes of theyr vnderstandinge” that leads to people’s incredulity and fascination with what seems “straunge,” and that deference to God’s creative purposes should be enough, even for curious readers.

During this period there is, of course, a market for tales of the extraordinary. Extracts of Münster’s text find their way into print again in 1572, compiled by a Thomas Marshe, with exactly this as his focus, the strange habits of “*sundry nacions*” and “*a short reporte of straunge histories of diuerse men,*” along with the “*nature and properties of certayne fovvles, fishes, beastes, monsters, and sundrie countries and places,*” as indicated in his title.⁸⁴ At this time too the terms “sundry” and “diuerse” both carry the dual meanings, “of various kinds” (sundry) or “varied” (diverse), on the one hand, *and*

⁸⁴ The full title reads as follows: *A briefe collection and compendious extract of the strau[n]ge and memorable things, gathered oute of the cosmographe of Sebastian Munster. Where in is made a playne descrypsion of diuerse and straunge lavves rites, manners, and properties of sundry nacio[n]s, and a short reporte of straunge histories of diuerse men, and of the nature and properties of certayne fovvles, fishes, beastes, monsters, and sundrie countries and places.*

“different” or “distinct” (sundry), on the other. The *O.E.D.* describes the early-modern inflection of “diverse” as “not of the same kind,” “unlike in nature or qualities.” The suggestion of otherness is underscored most emphatically by Marshe’s repeated reference to strangeness in his title, and in the fact that he does not distinguish between humans and “certayne fovvles, fishes, beastes, monsters, and sundrie countries and places” in his list of marvelous natural phenomena.

Strangeness transformed through faith and learning

For Eden, however, due learning and proper Christian faith transform what would, to an uneducated mind, be deemed “straunge,” into the proper handiwork of the creator God. With that, all strangeness vanishes in the face of God’s manifest creative purposes. With all the vagueness of a dangling participle (“[b]eing at thys tyme otherwyse hindered”), he evades an explanation of why he did not give a fuller account of the “straunge thynges” contained in “thys Booke,” and affirms only that “whatsoever the Lorde hath pleased, that hath he done in heauen and in earth, and in the Sea, and in all depe places” and that that alone should “suffise”:

I hadde entended here (well beeloued Reader,) to haue spoken somewhat of suche straunge thynges and Monsters, whereof mencion is made in thys Booke, to the ende that suche as by the narownes of theyr vnderstandinge are not of capacitie to conceaue the causes and natures of thynges, myghte partely haue been satisfied wyth some sensyble reasons. But beyng at thys tyme otherwyse hindered, it shal suffise al good and honest wittes that whatsoever the Lorde hath pleased, that hath he done in heauen and in earth, and in the Sea, and in all depe places.

Eden ends his Epistle with this call to further study, and to faith: “The eye is not satisfied with syght, & the eare is not fylled with hearinge.” It is not enough to see and hear.

Experience alone is inadequate, and not satisfying. It needs reason and the perspective of

faith. Natural history is part of God's manifest purpose. As Münster puts it in his report on Magellan's expedition in the section that follows,⁸⁵ "most prudente and beneficiall nature, ... worketh al thinges with most high prouidence." Read in this way, the natural world – and our understanding of it – is an expression of "prouidence."

For Eden, then, what is "straunge" and monstrous in narratives of encounters with new lands and peoples, becomes reasonable and manageable (if not familiar) with better "vnderstandinge" of the "causes and natures of thynges," with "sensyble reasons," and with deference to the tenets of Christianity which call for commendable faith in the face of the unfathomable. Read in this way, a judgment of strangeness is a reflection of a lack of learning, or a lack of faith, on the part of the reader, rather than a reliable and enduring assessment of what is being described.

This is not to say the text as a whole does not engage in chauvinism of the bluntest sort in describing encounters with people, or the lands themselves, applying labels such as "barbariens" or "idolators," who are "peculier" in relation to their "maners" and "straunge customes" or their physique (some are "giauntes," others "of grosse and shorte stature," others still have "great eares and cruell eyes"). While it is true to say that these terms originate from Münster's report (which in turn is based on the accounts of others), Eden, as translator, settles on the terms of the text under our consideration, thereby creating a vantage point from which the reader is invited to view

⁸⁵ Ferdinand Magellan (1480-1521) was a Portuguese explorer who discovered the Magellan Straits and proved that the Earth was indeed round by circumnavigating the globe for the first time in 1520. Magellan himself did not complete the journey, however. He was killed when he involved himself in a fight between warring groups on Mactan Island in the Phillipines (*Encyclopædia Britannica*).

the New World and its “innumerable & marueilous thinges,” becoming vicariously, from the comfort of his armchair, “monarch of all I survey,” as Mary Louise Pratt puts it.⁸⁶

Managing difference

In the section that follows I analyze the way Eden’s text treats difference – how it represents the encounters, which terms it reaches for in doing so, how difference is explained and managed, and to what effect, in establishing identifications with which his European readers may know the New World, and themselves in relation to it.

After the (considerable) prefatory material has been presented – the beautifully fashioned title page; the grandiloquent dedication to the “right hyghe and mighty Prince, the Duke of Northumberlande, hys grace”; an even more immoderate epistle “Rychard Eden to the reader” which makes bold claims on behalf of his generation and sets out the epistemological landscape – a seemingly straightforward, nominative “Table” appears, a simple list of the subheadings as they appear in the text. The list of topics immediately demonstrates an uncertainty about which regions constitute “*the Newe India*” of the title. In the account of Magellan’s achievement of finding a passage to the East via the West (thereby circumnavigating the globe for the first time in 1520), it is clear that the American continents are understood to be distinct from the Orient. However, the inclusion of both the “newe India” and the “old” under the title *A treatyse of the newe*

⁸⁶ Mary Louise Pratt’s influential study, *Imperial Eyes: Travel Writing and Transculturation* (1992) argues that the travel writing of this period produced “the rest of the world” for their Europeans readers through the seemingly innocuous, detached terms of natural history (5) and that this produced, simultaneously, a platform of mastery for the European subject (201). See Chapter One for a fuller discussion of Pratt.

India suggests that the matter is not quite yet settled, and the association between the two regions persists.⁸⁷

What is most striking about this list of narrative entries, however, is the relationship it sets up to the object of this narrative. Of the 43 items listed, 27 are in the genitive case, beginning “Of the ...,” typically identifying the particular natural historical object under discussion. This construction is used in relation to fauna and flora, place, or human subjects, for example, “Of the byrdes and beastes which are found in the Region of Calicut” and “Of the Canibales, which eate mans fleshe.” The title, “Of the maners of the inhabitantes of Hispana” introduces a quasi-ethnographic discussion – here, “maners” and “customs” are under discussion where even human activity is presented as an object of study. There is one title in which humans actors are positioned as active subjects, but even here the active verb (“dwell”) functions only to announce a notable passivity on the part of island inhabitants: “Of the two Ilandes in the which men and women dwell a sunder.” For the rest, where there are verbs, they appear without exception in the passive voice, for example, “Of the newe India, as it is founde and knowen in these oure dayes.”

By contrast, the few headings which promise to deal with European (specifically, Spanish or Portuguese) subjects are either expressed by a simple nominative phrase (“The fyrste viage of Uesputius” and so on), or a subheading which reads as an adverbial clause introduced with the conjunction “how.” These subheadings are written in the active voice, where named subjects act on others. For example, one chapter promises the account of “How Christophorus Colu~bus, after that he had founde the newe Ilandes,

⁸⁷ This is how Eden (rather than Münster) articulates it in the body of the text when the South Asian sections are finished and the New World sections are about to begin: “Here endeth the descripcio~ of the Nauigacions from Spayne to the newe India Eastward, & foloweth of the newe Ilandes and India found in the West Ocean sea, from Spayne Westward and Southweste.”

returned to Spayne: and preparing a new nauie, sailed agayn to ye Canibales.” There are no less than four active verbs in this single subheading (admittedly found in differing forms and tenses, among which I include the present participle). Columbus is identified by name; the people of the New World to whom he sails, are represented by the generalized, and somewhat frenzied term, “Canibales.”⁸⁸ This discrepancy (where the New World entity is represented by a vague and generalized stand-in term, while the Old World entity is named and acknowledged) is evident also in the handling of New World space, on the one hand, and Europe, on the other. Though both “the newe Ilandes” (of which there are many, as the text goes on to demonstrate) and “Spayne” are objects of Columbus’s action, only the latter is identified specifically by name, as a politically distinct place. The only subheading which makes a European the subject of a passive verb, applies to the death of Magellan. However, this comes after the announcement of Magellan’s lauded feat of sailing via the West to the East, and even this passive verb, reporting that he “was slayne,” in conjunction with the heroic first clause, has the effect of affirming his status as hero: “Howe Magellanus by a strayght or narrow arme of the Sea, sayled by the Weste into the Easte to dyuers Ilandes, where also he was slayne.” Of course this insistence on making Spaniards the agents of their actions does not always work in their favor. One subheading promises to tell of “Howe the Spanyardes abused the submission & frendship of the inhabitauntes of the Ilandes.”

The fuller reports themselves do little to change this orientation towards the people of the “south” (as Münster puts it), and they emerge, in this text as in countless others of this period, as two-dimensional objects of a myopic, though not uniformly

⁸⁸ See footnote 102, below, for a fuller discussion of the complexities of this term and critical disagreement over how to read it.

unsympathetic, gaze. The section about the Island of Banda, near Sumatra, describes it as “but rude and barren” and its inhabitants similarly, because of the modesty of their dwellings and short stature:

From Sumetra to the Iland of Banda, which is but rude and barren, and of playne and lowe grounde, whose inhabitantes are barbarous, & little differinge from beastes, hauing lowe houses, and no apparell but shertes, barefoted and bareheaded, with long heare, of despicable stature, dulle witted, of no strength, and Idolaters. The soyle of this countrey, bringeth forth nothi~g but nutmegges, & a few other fruites.

Here what is different is judged with terms like “despicable” and “dulle witted.” The barrenness of the land – a judgment that fruitfulness is lacking – is echoed throughout the description, which sees deficiencies and absences everywhere on this island: “lowe houses” which render the islanders like “beastes”; the inhabitants wearing “no apparell,” going “barefoted and bareheaded,” “dulle witted” with “no strength”; the soil yielding “nothing but numegges,” and so on.

In descriptions of the “greate and ryche Ilande of *Sumatra*,” on the other hand, the theme is magnitude, but this is not characterized favorably. Largeness (of stature) is attached to the adjectives “cruell” (“countenaunce”) and “terrible” (“voyce”), and is mirrored in the “monstrous bignes” of the whales which can “swallowe whole shippes.” The men “exceede all other men in bignesse of bodie” and can “lyue euen vntyl an hundreth yeares of age.” Whether the inhabitants are presented as deficient or in excess, the structure of the descriptive mode is generally one where difference is identified, made absolute, and interpreted unfavorably in relation to a European norm, though this is only occasionally made explicit. For example, when Münster lists some of the fruits and shrubs of Calicut, he resorts to a second list of European equivalents which have the same

“taste and sauours” as fruits familiar to his readers, in order to give flesh to what would otherwise be a forbidding or at least meaningless list of unfamiliar foreign names: “diuers other frutes & shrubbes vnknownen to vs, as *laceri*, *graccara*, *amba*, *Carocapel*, *Comolanga*, and such other of which some haue the taste and sauours of quinces, some of peaches, some of damaske prunes, some of melones, and some of figges.”⁸⁹ We see evidence here of an unidentified interpretative group, including the author and his readers (“vs”), in relation to whom the text constructs its categories and its meaning. When he describes the manner in which “That which we commonly call Cinomome” is gathered in the Island of Zaylon, there is evident satisfaction in the natural historian’s capacity to demystify what may appear special or exotic to this group, as being “nothings els but the barke or rynde of a tree.” Whether it be as natural history in the manner of Pliny (demystifying, describing, cataloguing), or somewhat closer to fable in the manner of Mandeville (offering descriptions about exotic worlds that are astonishing, shocking, derisive or condemnatory), the text relies on a system of implied or explicit exclusion and inclusion, where what is most markedly different becomes what is most worthy of mention and most in need of translation into the idiom or framework with which a reader might be familiar. (The distinction I make between natural history and fable, however, is an artificial one for, as Münster’s text suggests, natural history at this time is precisely an inventory of what is strange and remarkable, even as it grapples with the need to produce verifiable data.)

The first statement about the Island of Zanzibar relates to its “peculier Kinge and language,” and what follows is a recounting of the instances of peculiarity:

⁸⁹ The repetition of the preposition “of” places each of the familiar fruits in a descriptive role only, clarifying that they refer back each time to the original list of exotic fruits that have the taste “of peaches,” “or melones,” and so on.

The inhabitantes are idolaters, & are of grosse and shorte stature: but yf their heygth dydde aunswere to theyr thickenesse and breadth, they mighte seme to be giauntes. They are all blacke, and goe naked, onely couering theyr pryue partes. The heare of theyr heades, is merueylouslye corlde. They haue greate mouthes, nosethrilles flyrtting vpwarde and wyde, with great eares and cruell eyes. Their women are deformed by reason of theyr greate eyes, greate mouthes, and greate nosethrilles. They liue with milke, flesshe, ryce, and dates.

Their stature (“grosse,” that is to say, big, *and* “shorte”) renders them odd, rather than gigantic. Their skin color, their nakedness, their hair and other physical features, albeit in the form of a list, are offered as further signs of what is “peculier,” though in some instances this label is amplified: their hair is “merueylouslye corlde [curled]”; they have “cruell eyes”; the women are “deformed.” Though the dichotomous structure is not always spelled out in reductive terms, many of the adjectives used have an implicit corollary (“shorte” versus tall), implying a comparison with an unidentified, unseen (and therefore shielded from judgment) control group that sets the norm against which labels such as “deformed” are judged.

Even when he describes the people of “*Cathay*, ... the nacion of the~ which in tyme past were called *Scythians*, a kind of men (as saith *Haitho*) of subtill wyt,” a long-known people whose intelligence is commended in ancient texts, he finds reason to deprecate what would seem, on the face of it, to be cause to esteem them: “Theyr quickenes of witte is great, but their boasting is more. The hole nacio~ is perswaded that they greatly excel all other me~ in subteltie of wit and knowledge.” A sign of the absurdity of the inhabitants’ over-inflated self-esteem is to be found in their insistence that only they are able to see with two eyes. So wrong-headed and overconfident is their cleverness, that it flips over into stupidity, for example, in their insistence that “onely they see with two eies, & that all other men besyde them are blind of the one eye.”

Moreover, their intelligence does not lead them to “godly knowledge” and as a result, they fear death. We are given an image of men “with small eyes” and bizarre, capricious religious practices, born out of “phantasticall supersticion” and fear:

The inhabitantes are whyte men, with small eyes, withoute beardes, & vtterly voyde of all godly knowledge. For some of them pray to the sunne, some to the mone, some to Images, some to an oxe, and some to other monsters of theyr phantasticall supersticion. They haue no law written, and are of no faith. And albeit that in workema~ship and artes they are marueylous wyttie, yet haue they no knowledge of dyuine or godly thinges. It is a timorous kynde of men, and greatly fearinge death.

The human as a category of natural history

All this is not surprising. The descriptive categories available to Münster and his translator keep them fixed in the old dichotomies that pit Christians against “idolators,” the clothed against those who go naked, those who are “full of gentlenesse and humanitie” against the “barbarous.” There are any number of ignominious adjectives (such as cruel, evil or dull-witted) set against their implied, commendable opposites. At times the primary descriptive mode is one of wonder or astonishment – no more likely to render a connection with or insight into the inhabitants thus described, for it has more to do with the paradigm within which the viewer operates, and with the structures of difference within which his own subjectivity is constituted, than with the object herself, as I argue below.

When Münster comes to the end of the section on the India of old, he finishes off with a vague reference to the many “other innumerable & marueilous thinges” that “*Paulus Venetus* ... hath sene and founde in his nauigacions into these partes: of whom also I haue gathered thus muche, lettenge passe manye other thinges whereof he speaketh more at large.” There is much more to say, he maintains. His characterizations of the

“landes and islandes” thus far, he would have us believe, have been based in the accounts of navigators, and yet no single entry identifies a source, and many of the entries read as formulaic catalogues of each place’s typical features, relating generally to natural phenomena as they might be experienced by human beings. These typically include phenomena such as soil quality (barren, or fertile, in keeping with a general characterization of the region); birds and animals (“poppingiayes” [parrots], “Elephantes in greate plentie”; “foules ... whose vpper beakes are of suche bignes & hardnes, that handles for sweordes are made thereof,” a serpent whom they hold “in great reuerence”; byrdes vnlyke vnto oures” who make “suche a harmonie & so swete a noyse, that... the inhabitauntes lyue in greate pleasure, as though they were in an earthly paradise”); natural vegetation and fruits (“a kynde of walnuttes,” “dates lyke vnto the Palme tree”); spices, that is, the form of food as it is conceived in the practice of cooking (such as pepper, ginger, cinnamon); goods produced (typical items include cotton, called *Gossampine*, silk, “softe cloth, wine, oyle, and suger,” “smal roopes or cordes” made from flax); commodities found, such as precious stones and pearls; diet (specifically, if this include human flesh); and other habits and customs of the inhabitants, such as what they wear (if anything), how they relate to their wives (for the standard citizen is always male, in these accounts), what kind of religion they practice (though this typically amounts simply to a denunciation of their “idolatory”) and matters pertaining to their rulers, such as how succession is decided. In many instances it is striking that the descriptions relating to human activity blend almost imperceptibly into the cataloguing of natural phenomena and are not separate or distinguishable facets of the natural historical mode of Münster’s treatise.

Anthony Grafton writes of Münster, that his use of Ptolemy's ancient model, albeit substantially added to and made more comprehensive, "imprisoned him": "He could imagine strange races only in terms of the ancient oppositions between gentleness, nudity, and the Golden Age and savagery, monstrosity, and murder" (1992, 111). Certainly this seems to be true when we consider the perfunctory manner with which the features of each region or island are described, though this is not always the case, and at times the typical pattern has to accommodate less pliable material, or adjudicate a conflict between differing data which calls into question its own epistemological system. For example, Münster's entry for Calicut begins by quoting Pliny, as he does frequently elsewhere in the text, "(as saith Plinie)." In this case the point at issue does not originate with Pliny himself, but with his unspecified informants: "Plinie sayth that the trees of pepper are lyke vnto oure iuniper trees. And that in his time, some affyrmmed [that] they were brought fourth only in the front of ye mount *Calicasus* on the southsyde toward the sonne." This conclusion is immediately challenged on the basis of the more recent testimony of "the Portugals," albeit anonymous: "But the Portugals, whiche in this our daies sayle into the Eastpartes, haue found it otherwise." The ancient writers are indeed important sources, but their conclusions have to answer to new accounts. While this does not necessarily involve a significant change in the ancient model of description (but only a need to accommodate new sources), it does affect what emerges as a worthy object of knowledge. With the greater number and frequency of voyages, compilers were able to reference more recent witnesses as authorities and provide more contemporaneous and therefore compelling data.

Encounter: unsettling the categories of identification

When Münster comes to write of the New World, referring as he does so to specific narratives of specific navigations (albeit in summarized form), the conventional model is further moderated by the dynamic of encounter, and the more complex speaking position which inevitably results. For in announcing the feat of having encountered and engaged with New World inhabitants, (which is to say, as prospective trading partners, and potential sources of learning), it is almost impossible to control and enforce a set of relations predetermined by centuries-old narrativization with over-determined and unyielding categories of identification. In recounting the narratives of Columbus, Vespucci and Magellan, we read of the interaction between the Spanish and the people of the “south” and find that the crude dichotomies break down, if only for a moment.

Take for example the following account of Magellan’s successor, Captain Serranus, and his ill-treatment of Magellan’s slave on whom the new captain, in his wounded state, depended utterly, and his indignation when the (unnamed) slave betrays him to the local leader. It is worth quoting the account in full:

When the Spaniardes hadde thus lost theyr captayne [Magellan, killed in combat], they elected a new gouernoure of theyr nauie, appointing one *Iohannes Serranus* to that office. *Magallanus* had also a bond man borne in the Ilandes of *Molucca*, whom he had bought in the citie of *Malaccha*. This bondman vnderstode the Spanishe tonge: and where as the captayn *Serranus* could do nothing without him, who now lay sicke by reason of the wou~des [wounds] which he had receaued in the said conflicte, so that he was fayne [fain, that is, wont] to speake sharply to him and threaten to beate him or he could geat him out of the shyppe, he here vpon conceaued so great hatered and indignacion agaynste the Spanyardes, that he wente immediatlye to the Kinge of *Subuth*, declaring the couetousnes of the Spaniardes to be vnsaciable, & yt [that] thei wold shortely vse crueltie against him also, and bring him into subiectio~ and seruitude. The barbarous king beleued his wordes, & therwith pryuelye [privately] with the ayde of the other Ilandes, conspired against the Spanyardes, and toke or slew as many of them as came to a banquet [banquet] whereunto they were bidden vnder pretence of frendship. Amo~g the which also, Serranus the Captaine was taken priesoner. But the

resydue of the Spanyardes which remayned in the shippes, beyng taught & warned by the euyll chaunce which befell to theyr co~panions, and fearing greater deceytes and conspiracies, lyft vp their ankers [anchors] and gaue wind to their sayles. In the meane tyme was Serranus brought bound to the sea bankes, desiring his companions to delyuer or redeme him fro~ that horrible captiuitie of hys enemies. But the Spaniardes, albeit they toke it for a dishonour, to leaue or forsake theyr Captayne, yet fearing fraude or further dissimulacio~, they sayled asyde from that Iland, and came to the Ilandes of *Gibeth & Porne*. The inhabitantes of Porne honoure the sunne and the mone: they keepe also a certayn ciuile iustice & fre~dly loue one to another. And aboue all thinges, desyre peace and ydlenes. Therefore their chiefe studie is, in no case to moleste their neygboures or straungers, or to be iniurious to anye man. (emphasis in original)

The text is full of strongly stated reproofs of the “bondsmen” and his allies, the local people, for their duplicity – for luring the Spanish to a banquet under “pretence of friendship” to carry out their “euyll” (evil) plans, for their “deceytes and conspiracies,” “fraude” and “dissimulacio~.” They are also rendered the more wicked simply by comparison with the peace-loving inhabitants of the Islands of “Gibeth & Porne,”⁹⁰ a description of whom the text moves onto without a break. Interestingly, by giving voice to the outlook of the islanders, the text casts the European visitors into the category of “stranger” (albeit welcomed strangers) in relation to the islanders.

More significant, however, is what the text has already given away, of the dynamic between the Spanish captain and the slave he inherits with his captaincy. In describing the extent of the betrayal, the text elaborates on the extent of the erstwhile relationship, which has the effect of showing up the *Spanish* ill-treatment and exploitation. The unfathomable breakdown in logic, that sees the intolerably dependent captain threaten and mistreat the slave on whom he relies so heavily, is given expression in the text’s subtle choice of conjunction: instead of “*because* the captain could do

⁹⁰ The association of the name of this island with illicit sex is probably unintended, though it replicates almost exactly the Greek word *pornē*, meaning prostitute. However, it may be that the text’s reference to the inhabitants’ keeping “a certain fre~dly love one to another” is a playful, or discreet, allusion to sex.

nothing without him” he kept the slave in onerous subjugation, the word chosen is “*where as,*” meaning “although,” or “on the contrary” – contrary to what one might have expected. The source of the slave’s “great hatred and indignacion” (“*here vpon conceaued*”) is expressed as a logical follow-on from this ill-treatment.

In the more nuanced version of events that precedes the strongly expressed reproof of the islanders, the Spanish emerge as complicit in the dynamic which leads to their defeat. Their “*vnsaciable*” “*couetousnes*” and “*crueltie*” (and the spinelessness of the crew who leave their new leader to his fate, despite the dishonor in which it casts them) remains, long after the account has moved on to the next island, and with it, cracks in the veneer of Spanish ascendancy, moral or otherwise.

This is not to say we are any closer to the “real” islanders, or that the Caliban-like “bondman” has been allowed to speak for himself, whether in his own language or a broken Spanish, deployed if only to curse, as with Shakespeare’s character. What occurs here, in the text’s acknowledgement of Spanish cruelty and avariciousness, is an unsettling of the assured vantage point with which the objectivizing, ethnographic voice of the (imperial) narrator speaks,⁹¹ only to have this space for critique closed down again, with vigor, in the characterization of the islanders’ devious ambush of the Spanish.

In a second example, from Vespucci’s second voyage, Vespucci describes an encounter with “two old women, and three young wenches, whiche were of so greate

⁹¹ I use the term “ethnographic” only in a general sense (and perhaps ill-advisedly, given that the term “ethnography” was the product of a discipline developed in the twentieth-century which has subsequently been subjected to intense scrutiny and critique) to refer to an objectivizing orientation towards human subjects in which their (grouped) habits and cultures are rendered material for study, in the mode of natural history. Mary Baine Campbell quite correctly reminds us that “the word refers to a genre that did not exist in the sixteenth century” (*Wonder and Science* 48).

stature, that they marueyled thereat” who defend themselves when the Spaniards try to carry them off, as the text puts it, to Spain:

And whereas oure menne stryued with them to bringe them to the shyppes, to thintente to haue caryed them into Spayne, they espyed cominge toward them syxe and thyrtye men, yet of muche greater stature then were the women, bearing with the~ bowes, arrowes, and great stakes lyke vnto clubbes: at the syghte of whome, oure menne beinge afrayd, made haste to theyr shyppes. But these Gyauntes folowinge them euen to the Sea syde, bended theyr arrowes towards the Spanyardes, vntyll they [the Spaniards] discharged two pieces of ordinaunces, wyth the horryble sounde whereof, they were immediatly driuen to flight.

The source of the narrator’s wonder (the women’s unusual size) is also the reason why the Spaniards want to imprison the women and transport them “into Spayne,” a moment in the account which carries the menacing suggestion of sexual violation, or, at very least, demonstrates the chilling overlay of violence on imperial data-collection and seemingly innocuous wonderment at New World alterity. Not surprisingly, Spanish aggression towards the women results in an attack by the (even larger) male islanders, which the Spaniards find even more shocking. As the account progresses, the women go from being “of so greate stature” they are “marueyled” at, to being fearful “Gyantes,” and in that capacity, the source of the name, “the Ilande of Giauntes,” which is finally how the account leaves it. But not before we have witnessed the Spaniards’ own short journey from an encounter with identifiable humans (“two old women, and three young wenchess”) to brutality. In another instance, too, we read that (in this case) the Portuguese response to what seems marvelous (the sheer size of the people they encounter) is to attempt to capture them and return with them to Portugal, but they fail to do so because the “Gyauntes” all escape: “Our men ente~ded to haue brought some of these Gyauntes wyth them into Spayne *for the straungenes of the thinge*: but they all escaped oute of

theyr handes” (emphasis added). Here the reported rationale for this attempted capture involves only the fact of the giants’ strangeness to the Portuguese men. Aggression needs no further justification than wonderment.

But of course this is just an aspect of a more complex impulse at work here. The Europeans’ amazement at the sheer size of the women (and, in the second instance, at the “Gyauntes”) sets off a desire to capture them, as specimens, and return home with this portion of their New World collectables. This impulse to bring back to the Old World objects of natural history (albeit human objects), is caught up with the belief that the women will inspire awe, as much as understanding about the world, when presented in Europe. They are viewed as a curiosity, objects which the Portuguese and Spanish explorers anticipate will generate both instruction and pleasure. The fact that these are human beings undoubtedly heightens both the learning value, and the interest, though the two are not spoken of separately: we are told only that it is “for the straungeness of the thinge” that the Portuguese men hope to capture the giants. By *strangeness* we might understand a step beyond a mere acknowledgement of *difference* into a recognition of difference so great (from a particular vantage point, of course) that it is judged bizarre or uncanny, and overlaid with a pejorative tenor.

Myra Jehlen explains the distinction between the words “difference” and “other” in this way:

“[D]ifference” glosses another key word, “other,” glosses it by attempting to replace it as oppressive to those so designated. Naming them “other” seems to cast the speaker’s cultural interlocutors in an inferior position by rendering them mere negative quantities defined by an opposition to which they do not contribute. The term “different” proposes to right this imbalance by granting others identities of their own. With the substitution of “difference” for “otherness,” it is hoped that the imperial monologue becomes a two-sided exchange. Describing oneself or one’s kind as “other,” one would not only represent the very meaning of

alienation but be incapable of further self-definition and even speech; while to declare oneself “different” leads logically to self-description, even to monologue. (*Readings at the Edge of Literature* 150)

The subtle, but key distinction between the two terms, and the critical approach they imply, is worth making. But while this may hold when the terms are of the subject’s own choosing, the distinction becomes so porous when the naming of “difference” or “otherness” is at the volition of a hostile outsider, as the Europeans undoubtedly were, that it becomes all but meaningless. In the texts of this discussion, there can be no question of a two-sided exchange, unfortunately, and the Americans remain curiosities of a European system of naming. The identification of “difference” is without a doubt complicit, here, in the establishment of inimical hierarchies.

One could reason that the impulse to bring the specimen home has to do with a commitment to investigative accuracy – for what could be more accurate than presenting the thing itself (not just demonstrably material, but alive). But there is little to support this. The text as a whole is not at pains to present verifiable data, and only superficial attempts are made to reference an array of authorities, whether it be ancient scholars (“as Plinie sayeth”), common sense, the logic of what Michael McKeon calls “strange, therefore true,” current astronomical thought regarding the division of the earth into zones, or eye witnesses (though for the most part these are not named, and remain at a remove).⁹² Though the text reads with a certain earnestness, descriptions of regions are far too glibly alike to suggest an earnest and palpable engagement with the worlds being “discovered.”

⁹² See Michael McKeon *The Origins of the English Novel, 1600-1740* 111.

The Spanish impulse to possess the women, though disturbing for the degree of coercion it triggers, is interesting for what it suggests of their own projections and identifications, in the context of sixteenth-century thought and politics. For the women themselves are not available to us as subjects through this text, though we may wish it otherwise, and nor are they accessible to the men as subjects in any meaningful way. Rather, the Spanish explorers hope to bring the women back to Europe in order to inspire wonderment as curiosities from the New World. This is what possession promises. It is this historical context (where there is a sure marketplace, intellectual, textual, and commercial, into which New World collectibles will be welcomed) that I will explore further, below, for it is crucial to an understanding of the discursive context within which labels such as “strange” and “marvelous” were invoked. For they feed into a particular historical context, where what is “marvelous” is also a source of patronage and status, in a European practice of assembling curiosities in the name of natural history, of “Truth.”

The cabinet of curiosities

The phenomenon of the cabinet of curiosities, a practice which only marginally related to the pretension to systematic learning, bears relevance here. Though gained particular popularity in the seventeenth century, it was already a recognized phenomenon in Europe in the second half of the sixteenth-century, with articulated features. For example, in 1587 Gabriel Kaltemarckt identified three key features of a “kunstkammer” in advice to his royal pupil, Christian I of Saxony: it should include paintings and sculptures; “curious items from home or abroad”; and items of natural history, specified as “antlers, horns, claws, feathers and other things belonging to strange and curious animals” (qtd. in Gutfleish and Menzhausen 11). These collections did not only exist in material form, but

found their way into print in the form of inventories or catalogues. Also in 1587, the first inventory of the Dresden collection was drawn up.⁹³ Sven Dupré and Michael Korey argue that the Dresden Kunstkammer, and its extensive display of curiosities and instruments, was not only “a symbolic expression of the elector’s mastery of his territories” (19) but an indication of the extent to which the “marvelous” had become “a central part of the aristocratic model of knowledge,” made much of by mathematicians and naturalists, alike, in their pursuit of “knowledge and patronage” (15, 16).⁹⁴

It is worth tracing the ongoing life and visibility of collections of “curiosities,” as more formal structures of knowledge-production developed. The first public museum to display a cabinet of curiosities in England was known as the “Musaeum Tradescantianum,” a collection of natural historical specimens assembled by the English naturalist, John Tradescant (1570s-1638) and housed in a building called “The Ark.”⁹⁵ The collection became known as “Tradescant’s Ark,” its name evoking the promise both of a (comprehensive) multitude of specimens, and the comfort of the Biblical myth of origins. Tradescant began his working life as a gardener of a series of English aristocrats, such as the Earl of Salisbury and the Duke of Buckingham, and in 1630 Charles I appointed him “Keeper of the King’s Gardens.” The Duke of Buckingham sent him on

⁹³ For a detailed discussion of this inventory, and its effects, see Menzhausen, “Elector Augustus’ *Kunstkammer*: An Analysis of the Inventory in 1587” in Impey and MacGregor 1985.

⁹⁴ Dupré and Korey read the curator’s layout of optical instruments (such as telescopes) alongside perspective instruments and an anamorphic image of the Kunstkammer itself, as playful invitations to discover what is “marvelous.” They suggest that the telescopes were not intended for use astronomically but for playful enjoyment of “the jokes of nature” and argue that “instruments (and the objects they produced) were appropriated to this category of the marvelous” (18, 19). Dupré is a founding member of the Centre for the History of Science at Ghent University and on the editorial board of Cambridge University’s journal, *Science in Context*. He is currently a visiting research fellow at the Centre for the Foundations of Science at the University of Sydney. Korey is curator in the history of mathematics and physics at the Mathematisch-Physikalischer Salon, Staatliche Kunstsammlungen Dresden, Germany, and a specialist in the history of mathematical instrumentation.

⁹⁵ I was first alerted to “Tradescant’s Ark” by a brief discussion by Mary Baine Campbell in *Science and Wonder* (80). For more on the phenomenon of the cabinet of curiosities, see Impey and MacGregor (1985).

foreign trips (to Paris, Holland, “Muscovy,” and Algiers), in search of botanical specimens for the gardens under his care, but he gathered much of the material for his collections on these trips and through relationships to colonists. Tradescant was a friend of John Smith, who bequeathed a quarter of his library to Tradescant. The collection was substantially enlarged by the efforts of his son, also John Tradescant (1608-1662), who gathered material himself on voyages to Virginia between 1628 and 1637, including the ceremonial cloak of Chief Powhatan.⁹⁶ Tradescant (junior) bequeathed the collection to Elias Ashmole, who in turn gave it to Oxford University “as a major scientific resource” according to current Ashmolean literature.⁹⁷ It formed the basis of the Ashmolean Museum where Powhatan’s cloak can be seen today, catalogued as “Powhatan’s Deerskin Mantle with Shell Map, ca. 1608” and prominently featured in Ashmolean writing. Online advertising for the current exhibition (May 2006 to December 2008) at the Ashmolean Museum, titled “Treasures: Antiquities, Eastern Art, Coins and Casts,” displays a single, emblematic photograph, that of Powhatan’s Mantle. The Tradescants’ “curiosities” continue to have currency, albeit of a different sort, in one of natural history’s esteemed exhibition spaces, into the twenty-first century.⁹⁸

What began as a collection of natural specimens and “curiosities,” went on to form a substantial part of what was considered “the first scientific museum in England

⁹⁶ For more on the Tradescants, see Jennifer Potter, *Strange Blooms: The Curious Lives and Adventures of the John Tradescants*, 2006 and Arthur MacGregor (Editor), *Tradescant's Rarities: Essays on the Foundation of the Ashmolean Museum* 1983.

⁹⁷ “By the time it passed to Ashmole by deed of gift, the Tradescants' collection of miscellaneous curiosities had grown in scale and stature to the point where its new owner could present it to the University as a major scientific resource.”

⁹⁸ With the separation of the sciences into distinct disciplines, the collections in the Ashmolean became increasingly focused on archaeology and the natural specimens were removed to the Oxford University Museum of Natural History in the middle of the nineteenth century. For a more detailed discussion of the history of the Ashmolean collections, see <http://www.ashmolean.org/about/historyandfuture/>.

established on a substantial basis.”⁹⁹ But the paradox I identify here (the incongruous association between what will later be considered “scientific” and what is plainly of interest as “curiosities”) is a false one. The Tradescants themselves were not without scholarly aspirations, as is evident in the son’s boast of the significance of their work in his preface to the catalogue he publishes after his father’s death, in part to honor his work, a catalogue of “those Rarities and Curiosities which my Father had [scrup]ulously collected, and my selfe with continued diligence have augmented, & hitherto preserved together.” The argument he presents in favor of a printed catalogue is threefold: it “would be an honour to our [English] Nation”; it would advance the study of natural history in that it offers a greater “enumeration of these Rarities, (being more for variety than any one place known in Europe could afford)”; and it would benefit “such ingenious persons as would become further enquirers into the various modes of Natures admirable workes, and the curious Imitators thereof.” The Tradescants sought to order the collection, dividing it into natural objects and artefacts. As Tradescant explains in his preface, “To the Ingenious Reader,” the category “Naturall” includes birds, four-footed beasts, and fishes. But it also extends to those without “apt English termes,” such as “the shell-Creatures, Insects, Mineralls, Outlandish-Fruits, and the like, which are part of the *Materia Medica*” (that is, natural specimens that have medicinal properties for human beings). The category “Artificialls” includes “Vtensills, Householdstuffe, Habits [clothing], Instruments of VVarre used by severall nations, rare curiosities of Art, &c.” He also includes the “Catalogue of my Garden” in Latin and English.

⁹⁹ See “Tradescant, John” in *Encyclopædia Britannica* (Chicago: Encyclopædia Britannica, 2007). For a more detailed account of the prehistory of the Ashmolean collection, see R.F. Ovenall, *The Ashmolean Museum 1683-1894*.

What is evident, is that “curiosities” are both “rare,” or “special,” *and* ordinary, exemplary only in their quotidian typicality. A perusal of Tradescant’s printed catalogue suggests that, first, the objects are understood to speak for themselves, needing no narrative structure and framed only in so far as it relates to the recounting of the context. John Tradescant introduces the catalogue with a hagiographic account of his father’s work (beginning with an anagram of his name, John Tradescant, “Had inocent Artes”) and the story of how and why he came to produce the catalogue, but the inventory itself is non-narrative, part of the said innocence. Second, the items listed are not divided, as one might expect, into distinguishing categories, such as “foreign” and “English,” and though it is announced as an inventory of “rare” and “straunge” items, in truth the “specialness” of each item awaits interpretation. For example, on one arbitrarily chosen page (49), the list under the heading “Garments, Vestures, Habits, Ornatments” includes items that are foreign, but typical (“Girdle, Indian” and a “Turkish shash”); clothing presumably English because its origins are not identified (“A linnen Shirt woven without either seam or stitch, 2 yards long,” “Handkerchiffs of severall sorts of excellent needle-work” and “A vestall Nunnes head-dresse, of tiffany curiously crisped”); and clothing belonging to individual royals (“Anne of Bullens Night-vayle embroidered with silver” and “Duke of Muscovy’s vest wrought with gold upon the breast and armes”). The admiration it invites is in relation to its perceived *singularity*, in the case particularly of English items (for example, well-made, unusual or belonging to royalty), but in relation to its *typicality* in the case of identifiably foreign items. What appears to be a simple inventory, “innocent” of a questionable narrative agenda, nonetheless creates worth with reference to what the brief catalogue entries identify as significant.

Mary Baine Campbell has this to say about Tradescant's inventory:

The items in Tradescant's catalogue refers to individual objects rather than "species," and thus the catalogue, though divided into chapters on the basis of some concept of category, is more like a merchant's inventory or a detailed will. It has reference to property rather than, or anyway more than, to knowledge. And of course wonder is more properly a response to the singular and potentially palpable than to the general and categorical. (*Wonder and Science* 80)

Campbell makes a compelling case for an acknowledgement of wonder as a key element in early modern pursuit of knowing more. However, in this instance the oppositional relationship she sets up between individual objects of natural history and what is categorized in general, as "species," that is, between material goods ("property," as in "a merchant's inventory") and "knowledge" on the level of "concept" does not hold up to scrutiny. Certainly, the catalogue, and the collection on which it is based, trade on the ability of these objects to inspire wonderment. However, their ability to do so is not uniformly attributable to their singularity, as individual items, for in some cases they are remarkable precisely in their function as representative, that is, as putative guarantor, or stand-in, of an exoticized culture whose existence feeds back to an unnamed England, as the unmistakable centre, an image of itself as the norm that needs no further explanation.

Moreover, the seriousness with which this collection and its catalogue were gathered together, prepared, presented, preserved and reported on by the Tradescants, and the seriousness with which it was received and curated by Oxford University, suggest that it functioned as much more than a list of individualized and celebrated items of property. As discussed above, for John Tradescant, the collection's value (for learning) lies precisely in the extent of its "variety" (better than in all of Europe), for it affords the "ingenious Reader" the opportunity to observe "the various modes of Natures admirable

workes.” The many individual curiosities, when gathered together, are treated as epistemologically significant – they are opportunities for learning, ever more formalized, as is evident in Oxford University’s literature about this, its “first scientific collection.” Indeed, Tradescant imagines the significance of the collection, in its incarnation as a published catalogue, as a honor to “our Nation.”

It is significant that the catalogue ends with no less than five pages of listed patrons, a catalogue, if you like, of his benefactors. This amounts to over a hundred people who chose to support the work and be publicly associated with it. It suggests that the Tradescants valued and needed the patronage, and that in the early seventeenth century there was an established market for (at least the kudos of being associated with) collections of “curiosities.” All the texts discussed in this dissertation thus far acknowledged patronage, but typically through the convention of an effusive dedication addressed to an individual patron, often royalty or aristocracy.

It is not within the scope of this project to trace the early history of natural history collections more thoroughly as would be necessary to stage a careful argument, but the life of the Tradescant collection suggests that a strong relationship existed between particular, prized objects, celebrated as singularly “rare,” “special” or “curious” (however arbitrarily gathered they may have been), and the “generalized categories” upon which early scientific work based its poise.

Curiosity and mastery

The status of human beings as objects of “curiosity” is worth pondering, in relation to the women of our earlier discussion, given that it contributed to the practices of knowing about the world. The otherness of natural historical objects is such that it transforms the

physical force to which the women are subjected (“oure menne stryued with them”) into a seemingly legitimate act of inquiry without need of rationalization, (the “intente to haue caryed them into Spayne”) on the part of the Spanish men. Significant, too, is the fact that the objects of curiosity are women, who in the telling of this narrative are unproblematically cast as fair prey of the Spanish men’s apparent curiosity, until their masculine protectors arrive and assert a presence Spanish men would rather not meet head-on. The Spanish self-assurance takes form in relation to seemingly passive female objects.

A further violence here is brought about by the uninterrogated positioning of self and other, what post-colonial theorist Gayatri Chakravorty Spivak refers to as the “epistemic violence” with which Europe’s totalizing perspective turns the “native” of foreign shores into a “self-consolidating other” in relation to whom the European subject can construct a self-affirming identity. The language and systems deployed by the west (or, to extend Eden’s relational terms, the “north” in relation to what he describes as the “south”) to establish its dominance and refine its “knowing,” are fully implicated in this “violence.” For they disallow the possibility of a “reinscription” of subjectivities overwritten in imperialism’s terms and taxonomies because, as Spivak puts it, “the imperialist discontinuity or fracture” is “covered over by an alien legal system masquerading as Law as such, an alien ideology established as only Truth, and a set of human sciences busy establishing the “native” as self-consolidating Other” (“Three Women’s Texts and a Critique of Imperialism” 254). There is no possibility to capitalize on the faultlines and vulnerabilities in imperial dominance, no possibility to contest its assignments, when the dominant can refuse all contestation and invoke the totalizing

monoliths of its knowledge systems (under the banners, “Law,” “Truth,” “the human sciences,” and one might add to Spivak’s list, “religion” and “commerce”).

In the experience of encounter, it is these monoliths through which the European adventurer/natural historian/nation-specific colonial scout is empowered (indeed, obliged) to label and organize his world. They are the systems providing the terms and context within which these particular Spanish explorers respond to the women-specimens. The effect of the marvelous is at work, of course, averting a more critical view of the coercion (which becomes the more laudable “striving”), in the hope of returning with a find that flies in the face of what is “known.” But the mode of wonderment, to use Mary Baine Campbell’s language, or of marveling, to use the text’s, is wrongly understood as a matter, simply, of the *frisson*, a shiver in response to an excess of feeling which springs from a hidden place beyond the realms of structured knowledge. Campbell describes her understanding of “wonder” as “a pleasurable emotion, or relation to knowing, that requires the suspension of mastery, certainty, knowingness itself” (*Wonder and Science* 3). She explains that her own critical approach to her indubitably fascinating material is to take it “on its own terms, not as or not only as a rhetorical masking or a deflection of ‘reality’” (3). She calls for those who are “curious historians of culture, [not] to dismiss the element of true desire in the false consciousness of colonial empire” (1). Of her book, she writes: “Without closing its ears to the din of the real, the book wants to render an account of wishes, pleasures, excitements, sublimities, and, above all, possibilities” (2). For Campbell the relationship between “wonder” and “knowledge” is “crucial, but largely oppositional” (5).

On the contrary, the appeal to awe and curiosity is a key aspect of the establishment of the knowledge practices of this time, and after, as was demonstrated in the discussion, below, of the Tradescant collection of objects of natural history. Wonder is not without its structuring context, or its history and its politics, and a critical scrutiny of this visceral, other-worldly experience which seems to defy representation's best efforts, need not amount to a high-handed "dismiss[al]," as Campbell fears. Moreover, her appeal to a more sympathetic reading of "true desire" in the colonial encounter, wrongly suggests that "mastery" is suspended at the moment of tremble, except in the narrow sense of surrender. To be fair, Campbell is careful to distance herself from a nostalgic, or "sentimentalized" (3) treatment of wonder, and her own critical discussions of early "science" are fascinating, critically rigorous and alert to the ravages of imperialism. Even so, her attempt to clear space for a less damning assessment of moments when the *frisson* gives life to a less easily articulable yearning for what lies beyond "the bounds of the known and approved" (2), albeit at times in a colonial history etched in blood, nonetheless relies on a discomfiting sequestering of the worlds of the imagination and of learning, as though the imaginative operates outside of the effects of knowledge and power. Wonder, and desire, do not operate in this way. The shudder is an affirmation of subjectivity, even as it seems to suspend self-control. To be moved by the other, even in glorious amazement, even in an act of surrender to the imagination, does not take one outside the effects of power.

This is not cause for alarm, or damnation, or even surprise. Neither of the two figures involved in this scene of viewing – neither the enthralled imperialist, nor the

dispossessed “native” who is the object of his gaze and “striving,” as it is recounted in this European text – can be rescued from history by the concerned critic.

What to do, then, as critic? Spivak trounces the critic-as-advocate, or warrior. For to censure the brutality or the bigotry of the Spanish, to denounce their impulse to dominate the people they encounter, is not to undo imperialism’s violence or to liberate their would-be captives from Spanish subjugation, linguistic, epistemic, or otherwise:

No perspective critical of imperialism can turn the Other in to a self, because the project of imperialism has always already historically refracted what might have been the absolutely Other into a domesticated Other that consolidates the imperialist self. (“Three Women’s Texts and a Critique of Imperialism” 253)

We do not have access to the “real” women of this tale as subjects who might construct the shape of their own otherness. Criticism is not in a position to rescue, or amplify, the voice of the dispossessed, or to try to identify agency in a text which makes humans objects of the imperialist naturalist’s search for novelty and learning. Rather, we are invited to challenge the coherence of the imperial project, to show up its contradictions, in a project of “unlearning,” as Spivak puts it, that is, of unlearning privilege and the epistemological hegemony which have fed into our own knowledge practices. I doubt even this is possible, and prefer to think of it therefore as a project of “learning about learning” – of making visible what has gone into the constitution of Knowledge in order, perhaps, to loosen the unyielding certainties of its Truth claims. What this would involve is a critical engagement which avoids moralizing and embarks on a rigorous, unsentimental review of the position of the adventurer/scientist/publicist and the practices and world-view informing his prose.

One way to do this is to seek out sixteenth-century texts which articulate explicitly how the adventurer should go about his adventuring and what his objectives should be, and how the texts recording and recounting these experiences should be structured. The wordy prefaces to compilations offer some of these opportunities for “learning about learning” – opportunities for seeing how those caught up with the production of knowledge at this time conceived of and formulated this task. Another opportunity is in the instructions to explorers articulated in Sebastian Cabot’s “Ordinances.”

Cabot’s “Ordinances”

In the same year as Eden’s English edition of the Münster compilation, there appeared a publication, little more than a pamphlet, but with the following assured title:

Ordinances, instructions, and advertisements of and for the direction of the intended voyage for Cathay, compiled, made, and delievered by the right worshipfull M. Sebastian Cabota Esquier, governour of the mysterie and companie of the Marchants adventurers for the discoverie of Regions, Dominions, Islands and places unknowen, the 9. day of May, in the yere of our Lord God 1553. and in the 7. yeere of the reigne of our most dread soveraigne Lord Edward the 6. by the grace of God, king of England, Fraunce and Ireland, defender of the faith, and of the Church of England and Ireland, in earth supream head.

These guidelines, commonly known as “Cabot’s Ordinances,” instruct explorers on how to set about their expedition in order to secure the greatest success – how to equip themselves, how to manage the crew, how and when to make notes, and of what, and how to treat the indigenous people in order to elicit information on natural history and how to establish successful trade relations. The document is structured as a series of numbered paragraphs, each beginning in a rather conspicuous manner: the paragraph numeral is followed by the word “Item” and, without the interruption of punctuation, the

continuation of a phrase, rendered in this way not a sentence, with its suggestion of narrative, but an entity, an object in an inventory. (Most of the paragraphs, however, are indeed made up of a number of fluent sentences. This is not, in fact, a catalogue.)

A careful read through these guidelines is illuminating, for it sheds light on what is considered important when engaging with new worlds, and gives a sense of the moral and institutional underpinning of (this moment of) imperialist expansion, evident not so much in self-justifying explanations (for there is no attempt at self-justification), but in the appeal to authority and community, as I show below. The document sets out in clear terms what is deemed a worthy object of investigation at this time, and demonstrates that encounter played a key role in generating both the methods and what they yielded. But it is worth examining the whole document, and its context, to get a sense of the complexity of its purposes.

A brief biographical sketch: Sebastian Cabot (c.1476-1557) was a map-maker and explorer, son of the Italian-born navigator, John Cabot (c.1450-c.1499), whose expedition in 1497 on behalf of English King Henry VII, was the first English expedition to reach North America, specifically an area still today known as “Newfoundland” in modern-day Canada, though at the time Cabot (senior) thought he had reached Asia, as hoped. His son Sebastian was cartographer to King Henry VII in 1512 when he accompanied the English army, sent to aid Ferdinand II against the French. Cabot became a captain in the Spanish navy, serving Ferdinand and, on his death, Charles V. He returned briefly to England, but in 1520 was in charge of a three-fleet expedition to Asia which Cabot diverted to South America after hearing reports of wealth to be found in that region. Hereafter followed three years of disaster which he was later held responsible for, and banished to North

Africa for 2 years, before being allowed to return to his old post of “pilot major” in Spain. He returned to England, however, initially in King Edward VI’s navy, and thereafter as governor of the Merchant Adventurers. He produced a still well-known map of the world in 1544.

The “Ordinances” were published towards the end of Cabot’s life, while serving in the influential position of governor of the Merchant Adventurers.¹⁰⁰ The institutional context is evident at the start: Cabot’s position as governor of the Merchant Adventurers “for the discoverie of Regions, Dominions, Islands and places unknowen” is spelled out immediately following the first mention of his name as author. The reference and applicability of this document to the material world (that is, the business of voyaging with a view to making “discoverie[s]” and securing “Dominions”) is broadcast within the first line or two of the title, wherein we are informed that these rules were written “for the direction of the intended voyage for Cathay” by privilege of King Edward VI of England. Not surprisingly, therefore, the first few entries relate to the need for “unitie, love, conformitie, and obedience” so that no “dissention” or “contention” should arise between the “mariners of this companie, to the damage or hinderance of the voyage.” He calls for every person involved in the voyage to be a faithful and loyal subject – to the crown and his heirs, primarily, but also to “the Realme,” and “this present voyage.” He calls for obedience and good-natured diligence (to work “effectually and with good wil”) from the sailors, and suggests that “this present booke” be read to the entire company weekly, so that “every man may the better remember his othe, conscience, duetie and charge.” What he is trying to generate here is not a form of blind, servile duty, likely to be resented. Rather, it is a “conformitie” of willing subjects, based on “love,” “conscience,” and

¹⁰⁰ See Chapter Three, above, for a discussion of the Merchant Adventurer Company.

allegiance to “the Realme” and its endeavors. He even imagines consensus in the matter of navigation, though the Captain is allowed “a double voyce” in all decision-making gatherings.

Having established this premise, he describes their knowledge-gathering tasks in relation to the voyage itself. The first few entries pertain to navigation and astronomy, with instructions to make regular observations of quantifiable data (“points” or coordinates, the “altitude of the sunne,” and so on) and upon writing these down, to “put in memorie.” For example, entry 5 charges that “all courses in Navigation ... be set and kept” and entry 7 instructs that the navigational information be written down:

7. Item, that the marchants, and other skilful persons in writing, shal daily write, describe, and put in memorie the Navigation of every day and night, with the points, and observation of the lands, tides, elements, altitude of the sunne, course of the moon and starres, and the same so noted by the order of the Master and pilot of every ship to be put in writing, the captaine generall assembling the masters together once every weeke (if winde and weather shal serve) to conferre all the observations, and notes of the said ships, to the intent it may appeare wherein the notes do agree, and wherein they dissent, and upon good debatement, deliberation, and conclusion determined, to put the same into a common leger, to remain of record for the company: the like order to be kept in proportioning of the Cardes, Astrolabes, and other instruments prepared for the voyage, at the charge [command] of the companie.

While the techniques of arriving at this data (tides, elements, altitude) are not explained here, what is elaborated on is the way to deal with the data: that it should be noted down in writing, daily, presented (“conferred”) to all the “Masters” of the fleets in a general gathering, checked for discrepancies, debated, and agreed upon, before finally committing to a “common leger” for the company records.

The Ordinances do not only address themselves to data collection. Many of the entries concern management of the “companie” and the establishment of a cooperative

environment. They prescribe morning and evening prayer daily and forbid blasphemy, “ungodly talke” and “divelish games” (200). They recommend appropriate action to be taken in the event of misdemeanours (“worthie punishment” and “discharge”). A number of entries concern proper accounting of resources – food (by the cook); gunpowder (every officer); sailors’ clothing (to be kept by the merchants); the personal effects and wages owing to those who die (to be inventoried and duly passed on). The sick are to be attended to, and comforted, and every man is to bear another’s burden “for the most benefite, and publicke wealth of the voyage” (200). Some rules pertain to the management of the commercial goods: the merchants are not permitted to show or sell any of their merchandize on board, as it is to be “booked . . . , wel ordred, packed, and conserved in one masse entirely” and an inventory presented to the Governor (of the Merchant Adventurers) in London (201). The Ordinances stipulate that ships be kept clean, for two reasons primarily: “for the better health of the companie” and for the sake of the “pages to bee brought up according to the laudable order and use of the Sea . . . in learning of Navigation” (199). Cleanliness is envisaged as a protection of the learning that will take place, and an expression of the discipline that the Ordinances rate as essential for a successful expedition.

The many entries which relate to managing the encounter with indigenous people to best effect, suggest both a refined sense of the complexities involved in coming together as mutual strangers, and a certain cynicism regarding the need to win over the local people to secure their trading interests. But its stance is not unchanging or consistent. At the same time that the text anticipates duplicity and falsity on the part of the local people and advises caution (warning its readers “not to credit the faire words of

the strange people which be many times tried subtile, and false”), it recommends that the English explorers themselves deploy stealth and dishonesty: for example, they are advised “not to disclose to any nation the state of our religion, but to passe it over in silence, without any declaration of it, seeming to beare with such lawes and rites, as the place hath” (202). This is seemingly part of a scheme to downplay difference and to stage familiarity in order to win over trust (and, thereby, opportunities to trade), rather than a fear of exposure. The text is not troubled or self-conscious in proposing deception: in another example, it speaks of trying to “allure” (that is, lure) a person aboard, to be “entertained, used, and apparelled, to be set on land” with “the intent that he or she may allure other[s] to draw nigh to shewe the commodities.” And “if the person taken may be made drunke with your beere, or wine, you shal know the secrets of his heart.” But there are limits to what is permissible in carrying out this agenda “to learne as you may”: it should take place “without violence or force, and no woman [is] to be tempted, or intreated to incontinencie, or dishonestie” (202).

Encounter, as envisaged here, is an opportunity for learning – the “secrets of their hearts,” “their natures and dispositions,” and the natural features of each new place.

These are the details to be noted down:

[T]he names of the people of every Island, are to be taken in writing, with the commodities, and incommodities of the same, their natures, qualities, and dispositions, the site of the same, and what things they are most desirous of, & what commodities they wil most willingly depart with, & what mettals they have in hils, mountaines, streames, or rivers, in, or under the earth.

This is natural history of a particular sort, where the “natures” and “dispositions” of a group of people, treated as a single entity, are to be noted down (“taken in writing”) as objects of study, along with their names and the particularities of the natural

environment. But the context of the document makes it clear that the objective of this study is improved trade, and that these objects of knowledge are imagined as trading partners, albeit somewhat cynically, and the natural environment a source of “commodities.” The first instance of the word “commodities” here suggests the sense of “advantages” rather than goods for trade, by dint of its association with its opposite, “incommodities” (that is, disadvantages), but in the second instance it has already shifted in emphasis to suggest an item for trade (“what commodities they wil most willingly depart with”). From Middle English the term had referred to both “a thing of use or value,” particularly a “raw material or agricultural crop,” and the property of being suitable or of benefit (*O.E.D.*). But it gained its sense of being an item for commerce (“a thing one deals in or makes use of”), as in current usage, in the late sixteenth-century, precisely the period of this text (*O.E.D.*).

What this text understands is that “commodities” (in the more modern sense) is a matter of subjective value. Instruction 28 details how to identify what the local people *themselves* consider to be most valuable: if people appear to be gathered around stones, gold, metal and “other like,” the explorers should draw near, playing an instrument or singing, to gain the islanders’ attention. Without getting close enough to be in danger or to seen as threatening, they should try to identify which items the islanders gather first, in their hurry to listen. In item 25 the reader is given advice about how to increase the value of his own goods (“esteeme your owne commodities above al other”) and undermine the value of the goods he is being offered, by respectfully feigning disinterest (“in countenance shew not much to desire the forren commodities”). What is deemed desirable is a matter of perspective, as is the case with what is seen as “forren” and

“strange.” For though the text freely refers to the people encountered as “the strange people” and as “forren,” it acknowledges that this is a matter of where one stands in relation to the other: “for as much as our people, and shippes may appeare unto them strange and wonderous, and theirs also to ours: it is to be considered, how they may be used, learning much of their natures and dispositions, by some one such person” – as quoted before. It advises care: “26 Item every nation and region is to be considered advisedly, & not to provoke them by any disdain, laughing, contempt, or such like, but to use them with prudent circumspection, with al gentlenes, and curtesie.” The verb “use” in this context does not mean self-interestedly taking advantage of them, as it would seem to a present-day reader: up until the late sixteenth century “to use” also meant, when taking a person as its object, to “frequent the company of” another, though the modern sense of taking advantage of someone, particularly for sex, did obtain during the sixteenth century too (*O.E.D.*). The Ordinances encourage the establishment of ongoing relationship, of a sort – to be conducted regularly, and with respect and gentleness. Explorers should resist the impulse to ridicule what is different. In this particular admonition, to approach without scorn, the text paradoxically concedes that the foreigners may well be totally alien. So in setting up the relationship, there is a need for circumspection, and to avoid unnecessary familiarity (“not to tary long in one place”). The other should not be mistaken for one of the same.

For the threat of the truly monstrous is always present. There is a need to keep “diligent watch ... both day & night,” the text warns:

31 Item there are people that can swimme in the sea, havens, & rivers, naked, having bowes and shafts, coveting to draw nigh your ships, which if they shal finde not wel watched, or warded, they wil assault, desirous of the bodies of men,

which they covet for meate: if you resist them, they dive, and so will flee, and therefore diligent watch is to be kept both day & night, in some Islands.

The passage is full of fearful allusions to dark desire which threatens to consume them, literally. The people swim “naked.” Their desire to approach the ships is articulated as “coveting,” not simply “wanting,” with undertones, therefore, of deeper, illicit urges.¹⁰¹ They assault because of their desire “of the bodies of men.” They “covet” these bodies “for meate.” The text does nothing to help explorers identify more specifically the source of this threat, which is only relevant “in some Islands,” except to associate it with the skill of swimming. It is therefore potentially everywhere, requiring continual vigilance, ruling out any possibility of real engagement with people recognized as human, as fully constituted subjects – though the accusation of “cannibalism” has a paradoxical effect, as Myra Jehlen has shown. The damning judgment functions as “self-justifying condemnation” on the part of the explorers, who need to move the Islanders into a less sympathetic category of subjecthood precisely because they have recognized that, even in their depravity, the Islanders are human, not inanimate.¹⁰²

¹⁰¹ The *O.E.D.* explains “covet” with reference to “inordinate or culpable, especially sexual, desire.”

¹⁰² Critics have debated the signification of cannibals in the New World. See, in particular, Frank Lestrinant’s *Cannibals: The Discovery and Representation of the Cannibal from Columbus to Jules Verne* (1997) for a consideration of how the figure of the cannibal was deployed by European explorers, in a discussion which also does not shy away from the possibility that the Caribs were indeed flesh-eating. See Myra Jehlen (2002) for an astute account of the circularities of the critical approach which seeks to liberate inhabitants of the New World from this dreadful signification by denying the historical likelihood of cannibalism and by treating the issue as a matter of projection and “entirely discursive” (169), as Jehlen describes Peter Hulme project (1986). Jehlen contends that the “question of whether cannibals existed in the pre-Columbian Caribbean is exceptionally resonant” and refers to Montaigne’s prescient essay, “Of Cannibals,” to argue that “the cannibals are ineradicable markers” of an “alterity” and opportunity for “self-definition” that is lost (or worse: written over) in Hulme’s well-intentioned attempts to recuperate, with all the scholarly authority of a revisionist historian, a more respectable subjectivity for those cast as “cannibals.” In critiquing Hulme’s methods, Jehlen proposes a way of reading which is careful not to assume the inevitability of hindsight, available to us after the terms and methodologies of historiography have been proposed and accepted. Instead she advocates a critical attempt to read with the uncertainties of a prior moment of historical witness, what she calls “history before the fact” (176). The particular challenge of this approach is that it recognizes, too, the inescapably questionable authority of the scholar.

But this fear of the threat represented by the other is reinscribed into the call to duty and loyalty with which the Ordinances began. Interestingly, the loyalty called for in this text functions specifically and on a national scale: it is conceived of as loyalty to the whole “Realme,” not just to an individual, named benefactor, or even an individual king, but to the (English) nation. The burden of duty is addressed towards an array of worthy entities: God, the King, the “Lords of his honorable Counsel,” the “companie” of Merchant Adventurers, as well as his own personal sphere (“your wives, children, kinsfolkes, allies, friends and familiars”). But with this duty comes a special status, for adventurers are “naturally” close to “God, under whose mercifull hand navigants above all other creatures naturally bee most nigh” and, through their endeavors, significant in matters of “worldly pollicie.” Adventuring is understood to lead to the greater good, through the establishment of markets and trade in valuable commodities, that is, in a “beneficiall traffike” (204). The work of the company is characterized as being “good and beneficiall for the publike wealth” (204) and the adventurers are assured of the significance of their work, of the “great importance of [each] voyage, the honour, glorie, praise, and benefite that depend of, and upon the same, toward the common wealth of this noble Realme.”

The gathering and noting down of data here is not just about “learning,” but has an essentially polemical role: the prospective adventurer is encouraged to send word of the success of his voyage if at all possible, to persuade those who would otherwise be

My own project is different: I do not attempt to address whether or not cannibals might have existed in fact, nor do I attempt to read in these texts signs of the agency of the New World inhabitants, a task which requires careful scholarship of a different order. I do not offer an alternative reading of colonial history. My concern has been to examine in particular detail the terms, the methodologies, the formal aspects, the historical contexts, and so on, of the narratives with which the New World was presented to the Old, in particular through the form of the compilation, and to consider the ways in which the accumulation of the knowledge by which the “north” managed its own self-understanding was caught up with the history of “discovery” in the hope, perhaps, of loosening the stranglehold of its truth claims.

“disswaded” about the likely success of voyages, based on the “suspition” which ancient writers had put into their heads by telling of “such dangers of the seas, perils of ice, intollerable coldes, and other impediments,” now shown to be false. To the adventurer Cabot ascribes a superior knowing, based in experience, now called “trueth,” and creditable enough that the would-be adventurer is called an “expert,” here given as a verb in the putative future imperfect tense (“you shall have experted”), though his access to expert knowledge depends also upon the “common assent,” outlined above: “the *certaintie* wherof you have tried *by experience*, (*most certaine Master of all worldly knowledge*) then for declearation of the *trueth*, which you *shall have experted*, you may by common assent of counsell” (204). With the rules here set out – rules for managing the voyage, the information, the encounter when it happens – “certaintie” and “trueth” become within reach.

What structures the practices of knowledge-gathering is a complex *mélange* of commerce and duty, and the confidence that accrues to the “most certaine Master of all worldly knowledge” who can see and feel for himself the shape of the world. His imagined engagement with the people of the New World – presented here as a task requiring a contradictory array of discipline, self-restraint, respect, cunning, familiarity, watchfulness, and the savvy to recognize that “our people” are strange to them too – is understood to bear the hope of both commercial success and true learning, based not in sentiment or fancy, but in the experience of engagement. The orientation established in these instructions is distinct from what we read in Münster’s *Cosmographiae*, and they and their goods are not envisaged as “curiosities” to be collected and shown, simply for the wonder of it. This is not to say they are imagined as equals or “partners” in the

“beneficiall traffike” hoped for, and or that the anticipated accounts are likely to represent the Americans as subjects with any depth or validity. The explorers arrive with a self-interested agenda, spelled out explicitly, and reinforced with reference to God and nation. But their job, as stipulated here, is to engage, and befriend, and observe, (albeit while remaining ever watchful for the threat of the Americans’ blood lust), and this produces the possibility for a less sentimentalized and more nuanced version of the New World, along with the acknowledgement that strangeness is a matter of perspective. The methodology that emerges here cannot be said to anticipate yielding nothing but the same thing.

In the following chapter I examine the work of Richard Hakluyt, who nurtures the possibility of a nation-specific identification through the gathering of “English” texts and, with that, the idea of empire. As he presents it in this time of competitive colonization, the New World, for all its differences, figures as an eminently inhabitable world, worthy of enthusiastic promotion as a potential colony.

Chapter Five

Hakluyt and the role of the compilation in the development of national sensibilities

The best-known compilations of the sixteenth century written in English are Richard Hakluyt's enormous volumes, *The Principall Navigations, Voiages, Traffiques and Discoveries of the English nation, made by Sea or over Land, to the most remote and farthest distant Quarters of the earth at any time within the compasse of these 1500 yeeres* (1589) and its substantially enlarged second edition, *The Principal Navigations, Voyages, Traffiques and Discoveries of the English Nation* (1598), in which Hakluyt presents the narratives that will be taken up as the grand narrative of English expansionism. His first compilation, *Divers voyages touching the discovery of America and the islands adjacent* (1582), was less ambitious in its scope, though in its objective, perhaps more so: it sought to compile accounts of the discovery of the New World and, in doing so, to make a case for an English colony, at this stage not yet a *fait accompli*. Certainly it offers an instructive example of the usefulness of the compilation as a genre for establishing the impetus with which colonization might be hoped to flourish – creating the identifications, the intellectual kudos, the myths of historical epics, which might bolster colonization.

In the work of Hakluyt's predecessors we find evidence of an early nation-centered consciousness, though less insistent than Hakluyt's. Although Richard Eden's earlier compilations also included works by explorers who were not English and are not

explicit celebrations of English navigational prowess in the way that Richard Hakluyt's 1589 and 1598 compilations were, Eden nonetheless foregrounds the achievements of his "countrymen" and establishes his own work as compiler as an act of patriotism. In Eden's "Dedication" to his edition of Sebastian Münster's *A Treatyse of New India* (1553), addressed to the Duke of Northumberland, Eden writes that though it was his "affection" for "the science of cosmographie" that inspired his efforts, he brings Münster's work to the attention of his praiseworthy "countreymen" out of a sense of duty ("whych of duetie I beare to my natuere countrey and countreymen, which have of late to their great praise ... attempted with new viages to serche ye seas and newe found landes"). He writes of the explorers' "manlye courage like unto that which hath ben seen and proved in your grace, aswell in forene realmes, as also in this oure countrey ... if it had not been wanting in others in these our days, to such time as our sovereign Lorde of noble memorie Kinge Henry the VIII furnished and sent forth certen shippes under the governance of Sebastian Cabot yet living." In his 1577 edition of Eden's translation of *The Decades of the World* Richard Willes is able to lay claim to some of the prestige of Portugal's early achievements in discovery by pointing out the blood relationship between the first Portuguese discoverer and England's King Henry IV.¹⁰³

The publication of natural histories and explorers' accounts did not only announce England as a contestant in the territorial race of discovery. It also had the effect of establishing a seamless link with the natural world that secured a mythic, unquestionable

¹⁰³ "It is nowe almost one hundred & fiftie yeeres agoe, that Don Henrico, sonne of John the fyrst of that name Kyng in Portugale, and Nepheu unto our Kyng Henry the fourth, made his voyage after the conquest of Septa to the Canaries, and encouraged the Portugales to searche the coasts of Africa, and to seeke the landes thereabout not spoken of to fore."

raison d'être for English political self-understanding. Hakluyt's publications went beyond their predecessors in bringing into being that national consciousness.

As we see from the title, above, the first *Principall Navigations* (1589) claims to be able to provide a 1500-year-long prehistory to English exploits, taking us back almost to the auspicious time of Christ's birth.¹⁰⁴ The compilation, as Hakluyt uses it, is still astonishingly bold in its ambition to account for its world. Here, however, it is not concerned with the "whole" world, but rather with providing an encompassing, originary account of the "English Nation" as a potential colonizer. This has the effect of bringing it into being as "nation," rather than "realm," and therefore a political entity worthy of its colonizing ambitions. In the discussion below I hope to examine this shift – from "realme" to "nation" and from "whole world" to "our countrey" – through a close reading of his first compilation, *Divers voyages*. I will also look into the context within which Hakluyt's work appears, in relation specifically to the politics, religious dissension, and publishing industry at this time, and reflect on his later work.

Richard Hakluyt was nothing if not an ideologue. From an early age he became convinced of the benefit of the establishment of an English colony in the New World. He did a great deal, himself, to advance that ideal, so much so that George Bruner Parks calls him "one of the engineers of English colonization in America" (53). Hakluyt deploys the form of the compilation, in his careful arrangement of texts in a single volume where the rhetorical clout of one can be made to strengthen the claims in another by virtue of the compiler's (almost) imperceptible management, to great effect, as I will argue below.

¹⁰⁴ The full title of Hakluyt's 1589 compilations reads as follows: *The Principall Navigations, Voiages, Traffiques and Discoveries of the English nation, made by Sea or over Land, to the most remote and farthest distant Quarters of the earth at any time within the compasse of these 1500 yeeres.*

In 1589 Hakluyt published the much larger collection, *The Principall Navigations, voiages and discoveries of the English nation*, a single volume compilation focusing exclusively on the seafaring feats of the English, apparently in order to generate national confidence in English colonizing efforts in the face of Spain's prior and more assertive presence in the Americas. What is striking about this work, though, is not simply the determined focus on *English* exploits, and the way it consequently brings into being a particular notion of Englishness – patriotic, imperial, godly, in the service of learning – but that it does so in part through its arrangement of the contributing texts, organized and presented with an impression of their generic distinctions and a feeling for their distinct voices. It is necessary to attend to Hakluyt's deployment of texts in structuring his compilation, as a compilation, in considering the compilation's role in establishing identifications.

What follows is a discussion of Hakluyt's early compilations, *Divers voyages* and *Principall Navigations*, with a view to identifying the ways in which the structure of the compilation became available as a site for asserting the increasingly national ambitions and identifications of the period, given expression not only in the compiled narratives themselves, but in their structuring and prefacing which introduces the New World as eminently knowable and inhabitable.

Hakluyt's interest in colonization and learning

Hakluyt's own life and work bespeak colonialism's dependence on and contribution to the tools of learning.¹⁰⁵ For this reason, it seems appropriate to consider both his

¹⁰⁵ For a lively and detailed account of Hakluyt's biography and career, see George Bruner Parks (1961). See also E.G.R. Taylor's edition of *The Original Writings and Correspondence of the Two Richard Hakluyts* (1935).

professed delight in learning and his substantial personal investment in English colonization, particularly evident in his early work. In the Introduction, above, I reflected on Hakluyt's account of the experience in his cousin's chambers that drew him powerfully into the tantalizing field of cosmography, inspiring his conviction that he should "prosecute that knowledge and kinde of literature" that might take him onward in the discovery of God's world, as scholar and, vicariously, through the explorations his texts might inspire. Elsewhere, too, his delight in learning is palpable, as evident in the following passage from *Principall Navigations* (1589). Here the ability to *read* of Nature's bounty is presented as merely an opportunity for "great pleasure," whereas the ability to *observe*, himself, the "excellent cabinets" of curiosities assembled by certain gentlemen produced a "singular delight" which "ravished" him:

And whereas in the course of this history often mention is made of many beasts, birds, fishes, serpents, plants, fruits, herbs, roots, apparel, armor, boats, and such other rare and strange curiosities, which wise men take great pleasure to read of, but much more content to see: herein I myself to my singular delight have been as it were ravished in beholding all the premises gathered together with no small cost, and preserved with no little diligence, in the excellent cabinets of ... M. Richard Garth, one of the Clerks of the petty Bags, and M. William Cope, Gentleman Usher to ... the Lord Burleigh. (qtd. in Parks 167)

The source of his pleasure (a ravishment) is not in an experience of nature directly, but at a remove, in the experience of "beholding" the collected objects of natural history in the cabinets of gentleman naturalists. It is the collection ("all the premises gathered together"), not the things themselves, in their natural settings, that he most prizes. This is not just a boast. Implicit in this account of his ravishment is the hope that his own "singular delight" in having set eyes on the natural objects described here would

somehow infuse the narratives wherein they are described, over and above the great pleasure that typically results from reading of “rare and strange curiosities.”

He had a personal fascination for geography and believed it was invested in the greater good. He established connections with other geographers in Europe in a seemingly non-partisan collaboration. For example, he initiated correspondence with the much older Gerald Mercator in 1580, asking about the Siberian seas (see Parks 63) and the possibility of a northwest passage to the East. In *Divers voyages* he claims Mercator’s son, Rumold Mercator, as a personal friend, who “shewed mee in his letters, and drewe out for mee in writing” (“Dedicatorie” 13) his father’s conjectures about the likely existence of a northwest passage. Hakluyt thus shows himself to be part of a community “of wise men” seeking, through geography, to advance the greater good.

But, even in this his first compilation, the establishment of a non-partisan community of learned men (and himself as a part thereof) is subtly deployed in a race to establish the religious and political upper hand. In a passage analyzed more fully below, Hakluyt claims to have a special insight into Portuguese plans,¹⁰⁶ thereby demonstrating that Portugal is better organized, more conscious of the need to put in place mechanisms to support the work of colonization, such as “a lawe made of late” by King Philip, and the appointment of John Barros as “their chiefe Cosmographer” which then led to Portuguese inhabiting of Brazil (“Dedicatorie,” *Divers voyages* 9). These mechanisms, Hakluyt suggests, will mean that “they shall gather the most noble merchandise of all the worlde,

¹⁰⁶ As he recounts it: “It chaunced very lately that vpon occasion I had great conference in matters of Cosmographie with an excellent learned man of Portingale, most priuie to all the discoueries of his nation, who wondered that those blessed countries from the point of Florida Northward were all this while vnplanted by Christians protesting with great affection and zeale, that if hee were nowe as young as I ... hee woulde sel all hee had ... to furnish a conuenient number of ships to sea for the inhabiting of those countries, and reducing those gentile people to christianitie” (9).

and shall make the name of Christ to bee knowne vnto many idolatrous and Heathen people” (13). Hakluyt’s story, here and as it proceeds, reads as conspiratorial hype rather than level-headed cosmography in its creation of an in-group of listeners (identified earlier as “wee of Englande”) who need to take swift action to thwart the ambitions of rivals who are equipping themselves to reach the best treasure first.

And there *was* treasure to be found, both in the agreeable natural features of North America, characterized in his work as “fertile” and “temperate,” and in its capacity to improve England’s domestic economy by providing alternative markets for England’s embattled wool and textile industry, which at the time was too dependent for its markets on increasingly strained relationships with Europe. Hakluyt put forward an argument for England’s right to a presence in North America, on the basis of John and Sebastian Cabot’s “discovery” of Newfoundland in 1497. This is articulated most explicitly in the preface to John Florio’s translation of Jacques Cartier’s account of his voyage to Canada, which Hakluyt attached to the end of his 1582 compilation, *Divers voyages*. Hakluyt had a significant hand in Florio’s publication, though his name does not appear in the publication itself. In his preface to *Divers voyages*, to which it is attached, he claims to have been behind the Cartier volume: “at my charges and other of my friendes, by my exhortation, I *caused* Jacques Cartiers two voyages of discovering the grand Bay, and Canada, Saguinay, and Hochelaga, to bee translated out of my Volumes, which are to be annexed to this present translation” (17, emphasis added). According to this account, the idea, financial support, and facilitation of the Cartier publication came from Hakluyt himself, and it is easy to see his hand in it, as will be discussed in greater detail, below.

He is able to deploy print – in this case not even his own publication – to develop and authorize the English colonial cause through the careful use of texts.

Hakluyt's belief in the virtues of English colonization was also articulated in a contemporaneous secret document outlining the economic and political benefits, and the most promising method, of establishing an English colony in North America. "A Discourse of Western Planting" was published for the first time only in 1877 and titled, in full, "A particuler discourse concerninge the greate necessitie and manifolde comodyties that are like to growe to this Realme of England by the Westerne discoueries lately attempted." It was commissioned by Sir Francis Walsingham, as an appeal to Queen Elizabeth for her financial backing and official sanction of Walter Raleigh's exploratory Roanoke voyages (1584-8), attempting to establish an English colony. Hakluyt was not just scribe: he was granted an audience with the Queen (1583), who rewarded him with a position at Bristol cathedral (though she did not support Raleigh's venture). All this to say, Hakluyt's interest in the business of colonization was not merely intellectual or scholarly. He was personally invested in promoting colonization and, in particular, the Virginian settlement from its inception, though he himself never ventured further than France (Milton 192). A document dated 1606 names Hakluyt as one of only four London patentees in the first Virginia Company Charter, and another, from 1609, names him as one of a number of patentees in the second Virginia Charter, licensed to receive revenue from the Virginia Company, as an investor.¹⁰⁷ Moreover, his interest in England's ability to establish new sources of dye, raw materials and new markets for their textiles, was not

¹⁰⁷ See Parks 256, 257. Parks quotes Alexander Brown (*The Genesis of the United States*, II 908), as saying that Hakluyt made a financial investment of £21 in the Company.

just as a loyal subject.¹⁰⁸ He received an annual income from the Clothworkers' Company from 1578 to 1586, even during the years he lived in Paris.¹⁰⁹

But it would be too simplistic to infer that his pro-colonization sensibilities were merely mercenary. There is a complex web of convictions and allegiances contributing towards a pro-colonization stance, including the desire to reinforce post-Reformation England's national identity in the context of a more embattled Europe and to establish a demonstrable lineage for contemporary English exploits, thereby creating both a past and the anticipation of a future narrative within which to interpret English imperial endeavors. Hakluyt's genius was to recognize the role that print could play in creating this lineage. He has been referred to as "the intellectual progenitor of the Empire," as David Armitage reports, though Armitage astutely recasts this idea as the result of a *later* conception of the origins of the British Empire of which Hakluyt was the "major beneficiary" (70).¹¹⁰ This seems to be borne out by the way in which his work was celebrated in nineteenth-century imperialist discourse. In 1852, for example, literary historian J.A. Froude, whom Quinn calls "the prophet of imperial revival" in the nineteenth century, describes Hakluyt's *Principal Navigations* as "the Prose Epic of the modern English nation" (qtd. in Quinn *Hakluyt Handbook* 149). Edward Arber's 1885 compilation, *The First Three Books on America*, discussed earlier, is part of this nostalgic revival. But it would not be correct to read Hakluyt as a passive recipient, in the light of Armitage's recognition that he was the "major beneficiary" of the search for origins of a later period of imperialism. Hakluyt did a great deal not only to further the prospects for

¹⁰⁸ See Scammell for a fuller account of the English economy's dependence on the textile industry and its ability to secure better dyes and wider markets.

¹⁰⁹ From 1585 to 1588 he served as chaplain to the English ambassador. See David Armitage 71.

¹¹⁰ David Armitage is a professor of history at Harvard University's Center for European Studies. He has written and edited books on the history of British thought and imperialism.

colonization, but to establish a narrative within which to interpret English exploits as English, legitimate and part of a praise-worthy lineage, past and future. In his own words (in the “Dedicatorie” of his 1587 compilation of Peter Martyr’s *De orbo nouo*, addressed to Walter Raleigh), Hakluyt describes his desire to bring “to the light of day” and to “posterity” the “maritime records of our own countrymen” so that future generations may know that they owe a debt of gratitude to “their fathers”:

We shall endeavour moreover, with heaven’s help, to collect in orderly fashion the maritime records of our own countrymen, now lying scattered and neglected, and brushing aside the dust, bring them to the light of day in a worthy guise, to the end that posterity, carefully considering the records of their ancestors which they have lacked so long, may know that the benefits they enjoy they owe to their fathers, and may at last be inspired to seize the opportunity offered to them of playing a worthy part. If we succeed in this, we shall have achieved a long-cherished desire and a wish that we have often prayed for; if we fall short of this, we shall at any rate show that the desire to please was not lacking. (Taylor *Correspondence* 362, 369)

As it transpires, the business of “bringing to light” (a rather passive construction of the work of a compiler) involves a great deal of active construction – collect, order, brush aside the dust (whatever that may involve), cast the texts in a “worthy guise.” The gathering of texts itself involved some active soliciting more akin to commissioning, and the brushing off of dust involved seeking texts in surprising places, in order to collect unwriterly, but demonstrably “true” texts, relating to actual voyages (“records,” not fables). Though the voices are unsophisticated, the tale they will be shown to be telling is one of the birth of the English nation itself, a romance more powerful than fiction’s most stirring prose. There is also need to establish the prior right of colonization with reference to actual voyages: Hakluyt’s skill as compiler is to allow the texts under his arrangement to make the claim for England themselves. In this sense, the compilation, as deployed by

Hakluyt, becomes now caught up in creating the identifications with which England could “go abroad,” girded with a story with which to identify its own subjecthood.

Controlling the presses: censorship, religion and nationalism

Crucial to an understanding of Hakluyt’s work is a discussion of the context of severe censorship that obtained in England at this time, not easily inferred from the texts themselves, and the role of religion in matters of state. What follows is a brief discussion of this history (as demonstrated through the regulations relating to printing), before I turn to a detailed analysis of *Divers voyages*.

The laws controlling the licensing of print testify to a growing awareness of this power of print and its importance in establishing national interests. Previously, a 1484 Act of Parliament had restricted the conditions under which those who were not English by birth could trade or work in England, but made an exception of the book trade. Admittedly, the publishing industry in England depended on skills imported from France, the Netherlands and Germany.¹¹¹ But what the 1484 Act also suggests is a willingness to share the fruits of technological (and historical) discovery. However, when colonization became a competitive objective, England became increasingly territorial, in keeping with the trend in Europe. In 1534 the 1484 publishing exception was withdrawn, suggesting a new desire to protect and control local print technology and local publications.¹¹² But while the European presses were active in the first half of the sixteenth century (producing, inter alia, Johann Huttich's *Mundus Novis* in Basel, 1532 and Ramusio’s *Raccolta Della Navigazioni et Viaggi* in Venice in 1550) the first English compilations of

¹¹¹ Germany’s Johannes Guttenberg had developed his printing press mid-century, producing his famous Bible by 1455. William Caxton’s first printed book is dated 1477, not many years before the Act’s exception is allowed.

¹¹² See Cyprian Blagden, *The Stationer's Company: A History, 1403-1959* (1960).

explorers' "histories" came later – Richard Eden's translations of Sebastian Münster's *Treatyse of Newe India* (1553) and Peter Martyr's *The Decades of the New World* (1555) which included an account of the English explorer Sebastian Cabot's self-consciously patriotic journey to China, sponsored by King Henry VIII.

Censorship was empowered by a series of Parliamentary Acts and Decrees by the successive, mutually opposed regents, and enforced through the church, and through the Stationers Company. Edward Arber produced over twenty years (1875-1894) an enormous five-volume record of the Stationers' Registers (*A Transcript of the Stationers' Registers 1554-1640*) which documents the affairs and decision of the Stationers' Company, and the legislation that directed it. He contends that the "fact of the potent Episcopal censorship of the English press during the whole period of the *Transcript* is not to be lost sight of for a moment. There are, however, but few traces of this sway over the Literature by Anglican Bishops to be found in the Text itself.... But their control was continuous, and so unquestioned that it needed not any legal process to enforce it" (VII, 27).¹¹³

Ironically this iron grip on publishing became formalized in response to the highly unpopular, brief reign (1553-1558) of the Catholic Queen Mary, daughter of Henry VIII and Catharine of Aragon (daughter of Isabelle and Ferdinand of Spain). In 1554, Parliament moved to protect her unpopular marriage to Philip II of Spain, by threatening the loss of the right hand as a penalty for slander or reproach of "the King or Queen." Then in 1556 the Stationers Company was established by Charter of Philip and Mary that

¹¹³ Arber describes the unquestionable power of the Bishops, as murderous: "We must go to the forbidden Literature of the time to find out the weight of the Bishops' hands: as in the *Martin Marprelate tracts* (the whole of which we are now preparing to reprint): wherein some of the Puritans pitted reason, logic, and syllogisms against the Bishops' secular power; and were smitten to the earth for their pains" (VII, 27).

granted vast powers to the Company: to license the printing of all books and to search, seize and destroy all unlicensed books (Arber V, xl). In its own words, it is a response to the royal perception “that certain seditious and heretical books, rhymes, and treatises are daily published and printed by divers scandalous, malicious, schismatical, and heretical persons, not only moving our subjects and lieges to sedition and disobedience against us, our Crown and dignity, but also to renew and move very great and detestable heresies against the faith and sound doctrine of Holy Mother Church, and wishing to provide a suitable remedy in this behalf” (qtd. in Arber V, xxxviii). The statement is sufficiently vague (directed against “certain” books published on the quiet and “divers ... persons” plotting sedition), paranoid (“against us, our Crown and dignity”) and morally outraged (“against the ...sound doctrine of Holy Mother Church”) to seem to justify the crushing censorship laws which were to control the publishing industry for decades, but its choice of language announces its particular and partisan loyalties (the “Holy Mother Church” representing the Catholic Church rather than Henry VIII’s Church of England), in respect of the most contentious political issue of the day.

But this climate of anticipated sedition did not change following Mary’s death in 1558. Even under Elizabeth I an Act of Parliament established a “Court of High Commission” to “refourme redres order correcte and amende all sluch Erroures Heresies Scismes Abuses Offences Contemptes and Enormitees whatsoever, whiche by any maner Spirituall or Ecclesiasticall Power Authoritee or Jurisdiccon can or maye lawfully bee reformed ordered redressed corrected restrained or amended, to the Pleasure of Almighty GOD the encrease of Vertue and the Conservacon of the Peace and Unitie of thie Realm” (qtd.in Arber III, 12). The suspicion that print has the capacity to undermine the integrity

of the government and the commonwealth is thus continued under Elizabeth I, even after the Spanish Armada in 1588, specifically with respect to heretical religious thought (whether from the Protestant reformers or those loyal to Rome). All books had to be granted permission, (an “Allowance”), whether by means of a license granted in respect of a specific text only or a general “Patent” granted to a publisher for a period of time – though this could be withdrawn in an instant if liberties were taken. According to Arber, censorship became more stringent under Stuart rule in the seventeenth century, and printing patents became harder to come by, and concentrated largely in the presses of the Stationers’ Company (III, 12). Elizabeth Eisenstein also draws attention to the “often overlooked” question of the struggle not only for a free press, but for sufficiently courageous patrons, in the context of clerical control of print in the sixteenth and seventeenth centuries (275). She argues that censorship in this period “had an inhibiting effect” not only on freedom to articulate religious dissent, but also on “scientific publication” in particular, lest it be seen to conflict with Scripture. Her point is that it is important to recognize what she calls “‘external’ forces” when evaluating pioneering work of this period. It may also explain the ubiquitous references to God – as “Prouidence,” for example – which seem tangential to a text. For example, in John Florio’s brief work about how to recognize that rain is imminent, *Perpetvall and Natvrall Prognostications of the change of weather* (1591), discussed below, Florio concludes with an entire page devoted to a call to faith.

Religion in sixteenth-century Europe was the focus of fierce political contestation, and of self-identification. As will be evident in the discussion below, the position for colonization in Hakluyt’s texts was argued, in part, with reference to God’s purposes.

Conversely, success in the colonial enterprise, or failure, was interpreted as a sign of God's favor, or not. But David Armitage warns against an uncritical application of the facile traditional understanding of the role of God, and religion, in the origins of the British Empire, and specifically of the unifying role of Protestantism, viewed traditionally as "the only thread," and crucial to the formulation of Englishness, Britishness, *and* the British Empire (62). Historians, Armitage argues, have been too quick to assume that Hakluyt's role, specifically, in providing "a useful resource for [the] simplifying narrative" of the legitimacy of a united Protestant, British empire (66), was born of his own strong investment in the (Protestant) church, as a clergyman. In fact, he contends, Hakluyt was useful precisely because he "betrayed no interest at all in the British problem of the relations between the Three Kingdoms" of England, Scotland and Wales, and in the vexed possibility of a united Britain (66), and, unlike Samuel Purchas to whom he is so often compared,¹¹⁴ the "theologically reticent" Hakluyt was strikingly *uninvested* in the foundations and philosophy of Protestant thought and life (90). Rather, his own philosophical influences can be traced to the Aristotelianism of his Oxford education – Armitage is the only scholar I am aware of to have made a link between Hakluyt's publication of an "Analysis" of Aristotle's *Politics* (in 1583) and his contemporary "Discourse on Western Planting," discussed above, which he views as "an attempt to frame English overseas activity within the context of classical civil philosophy" (72). A colony in North America seemed to promise to move the

¹¹⁴ See Steele (1974) for a fuller account of critics' tendency to compare the two compilers, to the detriment of one or the other: "The historical reputation and image of Samuel Purchas, 1577-1626, has suffered from a constant comparison with Richard Hakluyt" (74) Steele quotes George Bruner Parks who writes that "to dwell on the contrast is to discover a growing dislike to Purchas" (74). Armitage himself reads their differences, more interestingly, as deriving from their very different "conceptions of Britain, of empire, of history and time" (81).

commonwealth closer to the Aristotelian self-sufficiency of a “*societa perfecta*” which realizes the ideal of the *vita beata* (73, 74). And more than anything else it is Hakluyt’s thoroughly *English*, rather than British, sensibilities that shine through his work (80). Scotland and Wales, and the possibility of British unity, feature not at all.

Armitage therefore resists reading Hakluyt as an apologist for Protestant propaganda that the English were God’s “elect,” or even as “an English nationalist” (80). On this latter point I disagree with Armitage: Hakluyt’s language registers a distinct shift from earlier articulations of an English “realm.” In Sebastian Cabot’s mid-century writing, his focus on England, admittedly, as a specific political entity, is articulated in the name of a monarch, in his case Edward VI. In the fifteenth century and the first half of the sixteenth century explorers promised allegiance to whichever crown offered them patronage, as did the Italian Columbus, born in Genoa, who made his “discovery” in 1492 in the name of his Spanish patron, or Cabot’s own father, John, born in Venice, who sailed to Newfoundland in 1497 in the name of the English King Henry. Hakluyt’s rhetoric (at the end of the sixteenth century) appeals to a more tenacious notion of nationhood. Despite the fact that it is vague and negatively conceived in reaction to the more assertive and better organized Catholic nationalisms of Spain and Portugal, it nonetheless asserts a nation-based identification which gains intensity, loses fluidity, with the heightened competitiveness of European colonization in the late sixteenth century. Hakluyt’s work is, by his own admission, dedicated to establishing the primacy of specifically “English” exploits and, with that, English identifications by which “wee of Englande” may direct their course.

What follows is a more detailed discussion of Hakluyt's first compilation, with a view to understanding better how Hakluyt goes about creating, out of the gathering and arranging of texts, the possibility of an English identification, in relation to other nations – an “us” and a “them.”

Divers voyages

The first of Hakluyt's independent compilations, and the focus of this chapter, is the small volume, *Divers voyages touching the discoverie of America*, published in London in 1582. It is not an enormous book (about 38,000 words) and its scope is limited to material pertaining to North America. Nevertheless it is significant for what it suggests of Hakluyt's thinking before his more substantial works appeared; it functions as a precursor to the more comprehensive 1589 compilation, *Principall Navigations* by which time Hakluyt's concern to document the expeditions specifically of the “English nation” had found its expression.

His youthful fascination with cosmography and his idealism regarding the role of navigation in furthering the godly (and, at this stage of his life, inclusive) ideal of pursuing knowledge (as he describes it in his 1589 dedication) had settled as an adult into a preoccupation with *English* colonization, and, in particular, westward. For example, the full title of *Divers voyages* gives immediate priority to the voyages of the English, though the compilation itself does include accounts of the exploits of other nations (“*made first of all by our Englishmen, and afterward by the Frenchmen and Britons*”). In his later compilations he goes so far as to include *only* the accounts of English navigations, and the same impulse is evident in this earlier work. *Divers voyages* represents Hakluyt's first

explicit attempt to encourage new voyages westward by publicizing the successes (or, at least, the inspiring stories) of previous voyages.¹¹⁵

Hakluyt's early publications, and his correspondence, suggest that he spent many years actively gathering and publicizing information on the colonial project. Certainly his investment in the colonial project was not simply as a gatherer of information, as is evident in the directness of his address in extolling the merits of the colonization of North America in the promotional pamphlet referred to above, "The Discourse of Western Planting." Whereas the pamphlet is clear in its intentions and up-front about its desire to persuade, the compilation is a bit more understated in its method. In *Divers voyages* the overt arts of persuasion are set aside, explicitly, in favor of an apparent detachment. The texts on display are said to speak for themselves: Hakluyt's point in his *Divers voyages* dedication is that the importance – and right – of English settlement "shall appeare most plainely" in "the discourses that followe"; his role as compiler is underplayed (paradoxically, a highly persuasive gesture, as he would surely have known). In his dedication to Philip Sidney,¹¹⁶ which appears immediately following the lists of travelers and writers in *Divers voyages*, Hakluyt is bold in his assertion not only that possession in the New World is an English right, but that the texts themselves will prove this: "the possessing of those landes, whiche of equitie and right appertaine vnto vs, as by the discourses that followe shall appeare most plainly" (facsimile edition 8). His verb choice ("shall appeare") creates the impression that the merits of his (contested) assertion (that

¹¹⁵ Because of its significance as Hakluyt's first and most self-conscious compilation, *Divers voyages* was the first publication chosen for publication when the Hakluyt Society was formed in 1846. Publication was delayed by four years because an American publisher, a Mr Rich, had prepared a template in anticipation of publishing the same text, though he eventually abandoned the idea, as John Winter Jones explains in his introduction to the 1850 facsimile publication. I read this choice as evidence that the Hakluyt Society views this work, too, as particularly significant amongst Hakluyt's work and particularly relevant to its own context, in America in 1907.

¹¹⁶ Hakluyt's choice of Sidney is discussed further, below.

English explorers have a undeniable “right” to take possession of land in the Americas) emerge passively within the text, as though self-evident, rather than being the handiwork of a skilled rhetorician.

This discussion aims to identify some tools and effects that the form of the compilation makes available, as a genre distinct from, say, the pamphlet or a single narrative published in isolation, by examining in greater detail the components of the 1582 compilation, and the volume as a whole. It is necessary to pay attention to Hakluyt’s role as compiler too. For though the respect with which he handled the material is evident, it is useful to examine how the “originals,” as he puts it, are altered, if only by the subtle effects of being situated within a compilation, and by the more easily identifiable editorial notes and glosses which direct the reading.

Hakluyt begins with two lists, of “certaine late writers of Geographie” and “certaine late traуaylers” respectively, compiled largely from Giovanni Battista Ramusio’s *Delle navigationi et viaggi*, the influential Italian three-volume compilation published in the 1550s. E.G.R. Taylor writes that Ramusio’s compilation “formed the foundation of [Hakluyt’s] cosmographical studies” and certainly one can see Ramusio’s influence in the kind of ordering that Hakluyt institutes, and the degree to which Hakluyt lays claim to the immediacy and primacy of first-person narratives.¹¹⁷ Ramusio took the compilation to a new level of comprehensiveness and editorial organization. *Delle navigationi et viaggi* was more substantial than any previous compilation, including Sebastian Münster’s *Cosmographiae*. The three volumes of *Delle navigationi et viaggi* (appearing in 1550, 1556, and 1559 respectively) arranged the collected narratives by region, and within each region, by chronology. Quinn calls it “a higher level of

¹¹⁷ See her “Introduction” to *The Original Writings and Correspondence of the Two Richard Hakluyts* 171.

accomplishment” than what had been seen before (2). This regional grouping became the model for compilations in the sixteenth century and Hakluyt repeats this organizing system in his more voluminous 1589 and 1598 publications (as discussed below). Most significantly, it was Ramusio who had recognized the effect of allowing the explorers themselves to articulate their stories, bringing a perceived directness and a credibility to what could otherwise be enjoyed simply as “adventure tales,” and thereby shifting narrative conventions and sensibilities. It is likely that Ramusio’s work inspired Hakluyt’s elevation of first-person narratives, his foregrounding of the presence-assertions of “the meanest” of ordinary sailors (as Hakluyt put it), whose sensory experiences of the new lands they were describing could secure the “truth” and create vivid images of the world they were describing. But these accounts on their own carried little clout. It was in their arrangement and compilation that they grew in significance.

Anthony Pagden’s analysis of Ramusio’s project bears relevance, also, to what Hakluyt was reaching for.¹¹⁸ Pagden demonstrates that in commissioning and collecting narratives from the travelers themselves, Ramusio was introducing the “raw material” (Pagden 84) with which the New World could come into being in the imagination and understanding of the Old World, but that it took the apparent detachment of “the natural historian” to build something more significant out of this raw “data” (84). “The authors of such histories stayed at home” (86) in order to craft this “raw material” into a purposeful treatise. Pagden uses Samuel Purchas (writing in 1625) to articulate this two-stage conception of representing the New World, first through the building-block “data”

¹¹⁸ Pagden teaches both history and political science at the University of California, Los Angeles. His primary area of research is the centuries-long contact between Europe and the New World. He has approached this relationship from both vantage points, having published about Spanish America *and* about *The Idea of Europe* (2002).

laid out by those who “have by their own eyes observed” (as Purchas puts it) and then the “detachment” of the historian who will interpret this data, now made available. What Pagden does not spell out, here, is the extent to which this apparent laying out of raw material is itself the result of an interpretative function, though he recognizes that “the guarantee of objectivity,” according to the implicit pledge of the text, “would be the detachment and scientific probity of the *collector*, not the status of the observer” (84). The packaging with which Hakluyt offers his raw material is all important in the meaning it takes on and it is his controlling presence, as compiler, that secures the status of the texts, even when they are being shown to speak for themselves, as it were.

David Quinn’s introduction to a 1967 facsimile edition of the 1582 text suggests three possible objectives in publishing *Divers voyages*: first, to demonstrate what foreign navigators knew of America in the hope of inspiring new voyages and new investments in the colonial project; second, “to find historical justification for English enterprises in the west” in case Humphrey Gilbert’s planned 1582 voyage provoked any foreign counter-claims (in particular from Spain which had been establishing its dominance in westward colonization for some time);¹¹⁹ third, to make available advice to those planning new voyages.¹²⁰ Hakluyt’s “Dedicatorie” spells it out differently, setting out upfront a religious framework within which colonization can be justifiably pursued. He explains away the English failures in North America with reference to an avariciousness that is devoid of godliness: “a preposterous desire of seeking rather gaine then Gods glorie” (13). He affirms that wealth will only proceed as a lucky benefit from single-

¹¹⁹ The Gilbert voyage is noted as having taken place in the list of “certaine late trauaylers” though in fact it was delayed until 1583. Anthony Brigham did not accompany Gilbert, as stated in the list.

¹²⁰ See David B. Quinn, *Richard Hakluyt, Editor: A Study Introductory to the Facsimile Edition of Richard Hakluyt’s Divers Voyages (1582)*, (1967), 9, 12. Quinn (1909-2002) was an Irish historian and a major contributor, as editor, translator and commentator, to the available body of Hakluyt’s published works.

minded pursuit of the latter: “wee forgotte that Godlinesse is great riches, and that if we first seeked the kingdome of God all other things will be giuen vnto vs, and that ... lasting riches do waite vpon them that are zealous for the aduancement of the kindome of Christ and the enlargement of his glorious Gospell” (13-14). Here after quoting the Bible directly,¹²¹ he adds “enlargement” to its message. Rewriting the history of Spanish and Portuguese colonization (which he says was thwarted by their “pride and auarice”), Hakluyt hopes “our men will take a more godly course” (14). For the Spanish and Portuguese, “pretending in glorious words that they made their discoueries chiefly to conuert Infidelles to our most holy faith (as they say) in deed and truth, sought not them but their goods and riches” (14). God will detect hypocrisy and will “turne even their couetousnes to serue him” (14) – that is to say, by undermining Catholic efforts to proselytize, and bolstering Protestant efforts.¹²² And the best means to achieve this, Hakluyt declares, is “the increase of knowledge in the arte of nauigation and breeding of skilfulnesse in the sea men” (14). Learning – specifically in the practical knowledge of navigation – is invested with all the goodness of a Godly mission. The wealth that may result from exploration is simply a sign of God’s approval. This has the dual effect of associating Hakluyt’s labors with the work of God himself, and similarly affirming the aspirations of potential explorers.

English claims to North America are made by means of seemingly authentic texts that relate to the demonstrably material world, that is, “histories” penned by actual adventurers or in relation to actual voyages. Two key documents, “Notes in writing

¹²¹ This is a verbatim quotation from Matthew 6:33: “Seek ye first the kingdom of God, and his righteousness, and all these things shall be given to you.”

¹²² In reading this passage in this way I disagree with David Armitage who argues that Hakluyt identified, with concern, “God’s greater care for the Catholic monarchies” (79) whose colonizing efforts began earlier and yielded greater success in converting souls.

besides more priuie by mouth that were giuen by a Gentleman”¹²³ and “Notes framed by a Gentleman heretofore to bee giuen to one that prepared for a discouerie, and went not”¹²⁴ were later identified as having been penned by Hakluyt’s elder cousin when Hakluyt the younger reprinted them in the 1589 compilation. This latter document, “Notes framed by a Gentleman,” is understood to have been prepared by Hakluyt the elder for Humphrey Gilbert’s voyage.¹²⁵ What is striking about both these texts is the way in which their titles announce, and therefore invest with value, the fact that they relate to *actual* navigators, both as the source of the “notes” and as the intended audience. This is obviously an attempt to vouch for the facticity of the material. But in addition, the effect of this display of apparently demonstrable authenticity – the reference to real voyages and real navigators, returned and intended – is to infuse the texts with a palpable sense of significance and, arguably, allure. Though presented in writing, it is the orality of these notes that is foregrounded and honored – they are “more priuie by mouth” and therefore more intimate, more immediate, more authentic than a secondhand account or official document, one step removed. The second text, the notes “framed by a Gentleman heretofore to bee given” to an intended voyager, though not oral at root, are also shown to be part of an actual exchange, a “conversation” as it were, between an experienced and an inexperienced navigator. The description of the texts as mere “notes” has a disarming effect: they forgo the prestige of texts which promise more polished prose, but in doing

¹²³ The full title is: “Notes in writing besides more priuie by Mouth that were giuen by a Gentleman, Anno 1580, to M. Arthure Pette and to M. Charles Jackman, sent by the Marchants of the Muscouie Companie for the discouerie of the northeast strayte, not altogether vnfit for some other enterprises of discouerie, hereafter to bee taken in hande.”

¹²⁴ The full title is: “Notes framed by a gentleman heretofore to bee giuen to one that prepared for a discouerie, and went not: and not vnfit to be committed to print, considering the same may stirre vp considerations of these and of such other thinges, not vnmeete in such new voyages as may be attempted hereafter.”

¹²⁵ See E.G.R. Taylor, 116n. 1.

so these seemingly unassuming texts lay claim to a certain moral and epistemological stature associated with unadorned truthfulness. The choice of form, made visible in the titles of these brief pieces, lends significance to the otherwise prosaic content. Decades later Hakluyt articulated this seemingly iconoclastic impulse – to value the unpolished but demonstrably “true” accounts of ordinary sailors above more elegant prose written by learned men without experience in the real world. In his “Introduction” to his most voluminous work, the 1598 edition of *Principal Navigations*, Hakluyt writes that “I had rather heare the meanest of Ulysses his followers relating his wanderings, then wander from the certaintie with Homer after all his readings and conjectures” (1).

Divers voyages is divided into three parts, each of which corresponds with one of Quinn’s imputed objectives. (Ramusio’s organizing principle of dividing texts into regions does not apply here, this particular compilation includes only texts “touching the discovery of America.”) The three sections are not identified in the front of the book, and no contents page appears as a guide. However, each grouping of texts is closed off with the simple word “Finis” and is followed by one or two blank pages to separate them from the next group of texts. The first group concerns the Cabot “discovery” of the North American continent on behalf of the English (Newfoundland) and seems to be designed to establish an English claim of discovery. This first section is assumed by modern commentators to have been prepared initially as a propagandistic pamphlet or “promotion literature” designed to attract domestic support for the English colonial enterprise.¹²⁶ Hakluyt includes the royal patent given to John Cabot and his sons by King Henry VII. Cabot was believed to have reached North America first in 1497, though the English hadn’t yet followed up with subsequent voyages or settlement of any sort and at the time

¹²⁶ See, for example, David Quinn’s “Introduction” to *Divers voyages* 17.

of publication the matter was still unresolved. (Ramusio's *Delle navigationi et viaggi* in 1556 included an account of uncertain "discoveries" attributed to John Cabot but this did not amount to conclusive proof, and certainly no land had been claimed by the English crown, or indeed settled.) But the Cabot patent, published conspicuously as the first document after the dedication in this compilation, and followed by Robert Fabian's account of the Cabot voyage ("written vnto me by Sebastian Gaboto") and the Frenchman Jean Ribault's narrative in which Cabot is acknowledged to have reached North America first, gave compelling authority to the English claim of priority. According to David Quinn, the patent "gave royal sanction for the discovery and annexation of new lands and ... powerfully reinforced the documentation in Ramusio. It gave good grounds for the claim that the English had been the first to reach North America and had established their claim under royal authority before the end of the fifteenth century" (10). Quinn's argument seems correct, but can be taken further into a recognition of the rhetorical force of the particular structuring of the text in which it appears. For it is not the patent itself which alone confers this authority, retroactively. The more powerful reinforcement of the English claim to North America comes from Hakluyt's careful collection and unannounced arrangement of texts. It appears undisputed and self-evident by virtue of the way in which the texts are set out.

Hakluyt the editor knew that a firm relationship existed between the publication of navigational documents and national colonial claims. The event of a voyage or discovery is only brought to life for a wider audience in the narrative through which it is related. His prefatory material clearly demonstrates his particular support of England's colonial ambitions. The arrangement of the documents foregrounds the Cabot patent. But

even before that, in his dedication to Sir Philip Sidney, Hakluyt celebrates the English prior claim to North America. He lays out an argument about England's right to its colonial enterprise and the great advantage to England of such an endeavor. In a skillful rhetorical gesture, he identifies Spain and Portugal as obstacles to England's rightful possession of the land they first discovered, though the question of who is responsible for the lengthy delay in taking possession seems initially to be left open in the flourish of his prose: he invites the honorable reader, "(right worshipfull)," to "[marvell]" that so many years have passed since the "discouerie of America," during which time the Spanish and Portuguese have made so many "conquests and plantings" that "wee of Englande ... are left as yet vnpossessed" of America's "fertill and temperate places":

Maruaile not a little (right worshipfull) that since the first discouerie of America (which is nowe full fourescore and tenne yeeres) after so great conquests and plantings of the Spaniardes and Portingales there, that wee of Englande could neuer haue the grace to set fast footing in such fertill and temperate places, as are left as yet vnpossessed of them. But againe when I consider that there is a time for all men, and see the Portingales time to be out of date, & that the nakednesse of the Spaniards, and their long hidden secretes are nowe at length espied, whereby they went about to delude the worlde, I conceiue great hope, that the time approacheth and nowe is, that we of England may share and part stakes (if wee will our selues) both with the Spaniarde and the Portingale in part of America, and other regions as yet Vndiscovered.

Nothing is offered to substantiate the claim that the Portugal's time is passed ("out of date") or that the Spaniards deceived ("went about to delude") the world. Hakluyt's rhetoric relies on (and reinforces) an adversarial, competitive relationship with Spain and Portugal. It works to inspire the nationalistic ambitions of English adventurers (and their patrons), tantalizingly suggesting that there remain "other regions as yet Vndiscovered" and that England's time "approacheth and nowe is" if "wee will our selues." It is a matter of having the political will, and the tools, to claim an English title in the New World.

And, most clearly, the consciousness that “wee of Englande” are an entity to be distinguished from other claimants to title in the New World.

Editorial role in setting up identifications

As editor, Hakluyt was notable for the respect with which he treated “vernacular texts” (Quinn 39). He generated new first-person accounts by interviewing sailors and transcribing their narratives which he then published in their own names. In this way he obscured his own critical role in the creation of these texts and bolstered the allure of the more direct eye-witness account that Ramusio’s editorial style had made so popular in *Delle navigationi et viaggi* in the middle of the century. In his own description of his editorial role, Hakluyt played down the extent to which he had “interfered” with the narratives and was at pains to uphold the textual integrity of the documents he included. At the same time he spoke of his great toils, though the verbs he chooses to describe his labors, for the most part, put him in a relatively passive position in relation to the texts: “collect,” “set in orderly fashion.” The truth lies no doubt somewhere between active and passive: the manner in which he introduces and presents the narratives does indeed accord them a particular ontological status apart from his relationship to them, and he seems to have taken pains to publish as accurate a version as possible. For example, he refers to the narratives he collects as “my originals,”¹²⁷ drawing attention to their existence in the real world, quite apart from him (though he cannot resist the possessive pronoun, indicating his proprietorial investment in them). However, that ontological status derives precisely from the compiler’s own labors – in his own words, “collecting”

¹²⁷ See “Epistle dedicatorie,” *Principal Navigations* Vol 1, xix.

them,¹²⁸ “ordering” them, including his own introductions and including as prefatory material other texts which draw his chosen documents into a particular purpose, as discussed above.

Whereas preceding and succeeding compilers saw fit to make substantial changes to the documents of their collections – for example, Richard Willes in 1577 thought it necessary “if not to amende, at least to augment” the texts under his pen, and Samuel Purchas writes in 1625 of the “prunings” and the “lopping of ... superfluties” required to create a more readable narrative – Hakluyt himself makes remarkably few silent changes. He corrects only occasional mistakes, though not always accurately (as David Quinn shows in his “Introduction” to *Divers voyages*) or consistently. Even so, he does contrive to set up the narratives all the more eloquently to “speak for themselves,” as it were, sometimes at the expense of contextualizing documentation. Quinn compares the last narrative in *Divers voyages* (Jean Ribault’s account of his 1562 expedition to Florida on behalf of France, translated by Thomas Hacket) with the version of the same narrative published in London immediately after the expedition, in 1563. Hakluyt’s 1582 text follows the original publication closely, though it is given a new title and is stripped entirely of its prefatory material. Quinn rightly notes that this practice, which Hakluyt follows in his later work too, results in the potential loss of valuable prefatory material that may be integral to the text as a whole and neglects acknowledgement that the work had been published previously (38-9). Hakluyt’s role as editor here is not fully acknowledged and the narrative, removed in this way from its particular publication context and inserted into a new textual context, takes on a different effect and purpose: in this case, Thomas Hacket’s translation of Ribault forms part of Hakluyt’s assertion of a

¹²⁸ Ibid. xxxi.

prior English presence in the Americas, here rendered as part of God's purpose for England. With the help of the many side notes which direct the reader's attention and emphasize geographical features which would enable human habitation, settlement is rendered all the more attractive a possibility. Just one double page, for example, includes the following enticing editorial notes: "Great fertilitie" (in this case the note functions less as an explanatory note and more as a summary of Ribault's text, "It is a wonderfull fertill, and of strong situatiō, the ground fat, so that it is likely that it would bring forth Wheate and all other corne twice a yeere, and the commodities for liuelihood and the hope of more riches"); "Heardes of tame hartes"; "Good hauens and riuers"; and "great and good riuers" (108-9). An early paragraph points out the following enticements: "Golde, silver, and copper, in Florida"; "Turquesses and aboundance of pearles"; "Marshes"; and "Pearles as big as acornes" (104). The compiler's perspective on Sebastian Cabot's expedition sets up an interpretative lens for the reader, simply by drawing attention to the Frenchman Ribault's early reference to Cabot's prior expedition with the side note "Sebastian Gabota." In Ribault's account, settlement emerges as the self-evident answer to the problem of costly and precarious expeditions whose achievements are questionable. The Cabot expedition is identified by date and shown to have had the English king's sanction, and Cabot himself is lauded as a "very famous stranger ... an excellent Pylot," but the expedition is said to have failed because he was not able to "attaine to any habitation":

For if it were needfull to shew howe many from time to time have gone about to find out this great lande, and to inhabite there: who neuertheless haue alwaie failed & beene put by from their intention and purpose: some by feare of shipwrackes, and some by great windes and tempestes that droue them backe to their merueilous grieffe. Of the which there was one a very famous stranger named Sebastian Cabota an excellent Pylot sent thither by king Henry, the yeere 1498

[sic]. and many others, who neuer could attaine to any habitation nor take possession thereof one only foote of grounde, nor yet approche or enter into these partes and faire riuers into the which God hath brought us. Wherefore (my Lorde) it may bee well saide that the liuing God hath reserued this great lande for your poore seruantes and subiectes, as well to the ende they might bee made great ouer this poore people, & rude nation: as also to approue the former affection which our kings haue had unto this discoverie.

Thomas Hacket's translation of Ribault goes as far as to shift his address so that it too directs itself to the (English) benefactor and addressee of Hakluyt's text, Sir Philip Sidney. Ribault's text functions to affirm the English colonial claim, here rendered as a God-given privilege "reserued" for the English ("for *your* poore seruantes and subiectes") as the fulfilment of French interest in the region ("to approue the former affection which *our* kings haue had unto this discoverie"). Under Hakluyt's editorial management, even the non-English texts approve English title to settlement in the New World.

Hakluyt attaches to his publication of *Divers voyages* John Florio's translation of a *Shorte and briefe narration of the two Naiugations and Discoveries to the North west partes called New Fravnce* by the French explorer, Jacques Cartier, along with Florio's assured dedication and letter "To the Reader" in which he makes a strong case for the virtues of colonization. What is striking is that authority for the pro-colonization position is referred ever onwards to another tier of textual authority repeatedly: Hakluyt includes Cartier, who is introduced by Florio, who in turn quotes the pioneering Italian compiler Ramusio, who by the 1580s had an enormous reputation in Europe as a geographer and compiler. This allows Hakluyt the ideologue to defer to the considered opinion of other, seemingly worthier authorities (whether more learned or experienced), in making his case for colonization. The tone of Florio's "Preface" is notably propagandistic, and it displays a familiarity with contemporary cosmography which, commentators such as E.G.R.

Taylor (1935) and David Quinn (1967) suggest, casts doubt on the authorship of this work: Florio himself was a grammarian, not a geographer, whose apparent interest in colonization was never taken further, during the course of his career.¹²⁹ Neither Taylor nor Quinn refer to Florio's work on climate, *Perpetvall and Natvrall Prognostications of the change of weather* (1591), admittedly a modest publication elaborating on "signes and tokens signifying raine" (that is, the activity of various animals, the appearance of clouds, and so on) articulated with reference to the demonstrable natural world (but gleaned from ancient writers, listed on the last page), suggesting nevertheless that he had been interested in the natural world, enough to make a book about it. Still, Florio's primary area of interest is undoubtedly Italian literature and it is not unlikely therefore that Hakluyt himself provided the inspiration, if not the words themselves, for this "Preface."

As an Oxford graduate (and Hakluyt's friend), Florio had some intellectual standing, though the manner of his address is demure, as per convention: "I holde myselfe farre inferiour to many," though this is said only after we are told of the "requests and earneste solicitations of diuers my very good friends heere in Oxforde" ("Dedication" 123), so we gather that he is an intimate and well-regarded member of Oxford University. The hope which he invests in his work is certainly not modest, that it "may be an occasion of no smal commoditie and benefite to this our Countrie of Englande. And heerein the more to animate and encourage the Englishe Marchants, I doe onely (for breuitie sake) propose unto them the infinite treasures (not hidden to

¹²⁹ E.R.G. Taylor describes him as an "Italian tutor and writing-master" at Oxford at the time of his translation of Cartier (21). By this time he had already published *Florio his First Fruits* (1578), a grammar and series of Italian-English dialogues. He went on to publish a second volume (1591), an Italian-English dictionary, *A Worlde of Words* (1598) and, most famously, a rather flowery translation of Montaigne's *Essais* (1603 and 1613). See also George Bruner Parks (64) and *Encyclopaedia Britannica*.

themselves) which both the Spaniards, the Portugales, and the Venetians have severally gained by their such navigations and trauales” (123). He refers also to the benefit that would accrue to “hir highnesse common weale” (that is, under Elizabeth I) as a result of his text and the stimulus it might give to English colonization. This hope is expressed with even more directness (and with less of the self-effacing tone) in his epistle, addressed in its title “To all Gentlemen, Merchants, and Pilots.” This is the readership he envisages, and the objective of his publication is equally explicit, “which I did for the benefite ... of those that shall attempt any newe discoverie in the Northwest partes of America” (125), specifically.

For here is the Description of a Countrey no lesse fruitful and pleasant in all respects than is England, Fraunce, or Germany, the people though simple and rude in manners, [that is, unpolished, or unsophisticated] and destitute of the knowledge of God or any good lawes, yet of nature gentle and tractable, and most apt to receive the Christian Religion, and to subiect themselves to some good government: the commodities of the Countrey not inferiour to the Marchandize of Moscouy, Danske, or many other frequented trades. (125)

He moves deftly between dichotomies, pronouncing America both “same” and “different,” without overstating anything, other than the advantages of colonization. It is “no lesse fruitful and pleasant” and its “commodities” not inferior to Europe’s finest. The people are “simple” and unsophisticated – in this sense “other,” but not so much so that they are not able to be domesticated and Christianized, to be made subjects of the good governance of England. They are unsophisticated, but tame. He makes it clear that he is advocating settlement, not just trade: “to induce our Englishmen, not onely to fall to some traffique wyth the Inhabitants, but also to plant a Colonie in some convenient place, and so to possess the Countrey without the gainsaying of any man, which was the judgement and counsell of John Baptista Ramusius, a learned and excellent

Cosmographer, & Secretary to the famous state of Venice,” whom he now quotes at length. It is possession that he is calling for, with the help of Cosmography’s pre-eminent spokesman, Ramusio himself. The power to “possesse the Countrey,” without encountering resistance, is presented as eminently possible, and this celebration of European muscle in the New World is bolstered further with reference to a learned Cosmographer, who calls for “the Princes” to “sende forth two or three Colonies to inhabite the Country & to reduce this sauage natiō to some ciuilitie?” (126). Ramusio then refers to the “fruitfull soyle,” “all kinde of graine,” “al sortes of Byrdes and Beastes, wyth such faire and mighty Riuers.” On the basis of Cartier’s relations, it cannot be said to be an uninhabited landscape: on the contrary, they found the country “peopled on both sides [of the river] in greate abundaunce,” and conjectured that there is more to be discovered, more land, more people, and more knowledge: Ramusio speculates that the French explorers could have found the northwest passage, had they ventured further up the river.

When Hakluyt draws up a list of “The names of certaine commodities growing in part of America, not presently inhabited by any Christians,” this list is divided into categories not unlike those we have seen before in the natural histories of Münster who was not advocating colonization quite so explicitly, but rather expanding the scope of the “known” world, gleaned from the accounts of explorers. The categories that are available for deployment are based on the use-value perspectives of those who first described them. Here Hakluyt writes that the commodities he describes are “gathered out of the discourses, of Verarzanus, Thorne, Cartier, Ribalt, Theuet & Best, which haue bin personally in those Countreys, and haue seene these things amongst many others.” Like

these explorers, Hakluyt reaches for existing knowledge categories in creating his inventory of American “commodities,” where the natural world is understood in terms of its relationship to human use: “Beastes,” “Birdes” “Wormes,” “Trees,” “Fruites,” “Gummes,” “Spices and Drugges” (that is, medicinal plants), “Hearbes and floures,” “Grayne and Pulse,” “Metalles,” “Precious Stones,” “Other Stones,” “Colours” (that is, dyes, crucial to England’s primary industry, textiles, which at this time was suffering from the cheaper, more vividly colored textiles available in Europe, thanks to their prior access to New World dyes). What is evident in these descriptions is the anticipated self-referencing of the imagined European reader – evident when the text suggests how an item can be used in the following conceivable manner; this natural substance is “like” ours, or “unlike ours,” and so on. For example, under the category “colours” we read of “Deare skinnes wrought like branched Damaske” (120). Under “Hearbes and floures” (the labels in themselves evidence of this – they are not, simply, botanical items, but are listed for their use value as herbs for cooking or medicine, and as flowers), there are “Many sortes of herbes differing from ours” and “Many simples like those of Fraunce” (120). The identity categories set up here in the language of natural history invite the English into a world that is not totally different and unknowable. Even when New World commodities are “unlike ours,” their difference can be expressed in terms familiar enough to render them comparable and knowable. And in all, the reception of commodities – their perceived value (“preciousnesse”) and how they are understood – is “measured” in the “distance” and the “appetite” of the beholder. Robert Thorne presents this insight in his account of his voyage, included as the second document of *Divers voyages*. He describes his encounter with the inhabitants of an island where the value of

objects is “set” not in relation to gold, but iron, in the form of implements such as “a knife” and “a nayle,” and “with reason,” he writes, given how much more necessary, and therefore valuable, such items are.

And I see that the preciousnesse of these thinges is measured after the distance that is betweene vs, and the things that we haue appetite vnto. For in this nauigation of the spicerie was discouered, that these Ilands nothing set by golde, but set more by a knife and a nayle of yron, then by his quantitie of Golde: and with reason, as the thing more necessarie for man seruice. And I doubt not but to them shoulde bee as precious our corne and seedes, if they might haue them, as to vs their spices: and likewise the peeces of glasse that heere wee haue counterfayted, are as precious to them as to vs their stones: which by experience is seene daylie by them that haue trade thither. (34)

In Thorne’s words, the value of “our” commodities are imagined through the eyes of the islanders – counterfeit glass becomes precious, their gold is shown to have little value to them, which in turn hints at a question regarding its value to the English, too.

Both the “planting of Colonies” and the ability “to discouer” unknowen Seas and lands, that is, “to come vnto the knowledge of the Countries adiacent,” can never be “atchieued” without inhabiting the new colonies. Florio makes the case for settlement by referring to Spanish and Portuguese prosperity in the region, which their own writers attribute to their having “planted”: “as dyuers other Spanishe Authors affirme, the Spanyards neuer prospered or preuailed, but where they planted: whych of the Portingales maye also be verifyed, as in the Histories all theyr Conquests and Discoueries doth manifestly appeare” (127). His case for the importance of settlement is followed by an argument of specifically English primacy in the region, on the strength of the Cabot voyage:

And as there is none that of right may be more bolde in this enterpryce than the Englishmen, the land being first found out by Iohn Gabot the Father, and

Sebastian Gabot, one of hys three sonnes, in the yeare 1494. [sic] in the name and behalfe of King Henry the seauenth, as both by the foresaide Ramusius in his first Volumes, and our owne Chronicles, and Sebastian Gabots letters patents yet extant, and in his Mappe maye be seene.

The fact that John Cabot was not himself born in England is not relevant. His expedition was carried out in the name and on behalf of King Henry VII. Florio can refer to Ramusio's volumes and "our owne Chronicles" for authority. But two documents are especially unimpeachable: the letters patent, and Cabot's map. In these textual formats the claim is simply, passively, there to behold.

Implicit in these identifications is the subject and object relation of an Englishman abroad. But what is striking is that "those poore rude and ignorant people" (128), as they appear here, are not represented as absolutely "other" but, rather, lacking in instruction – about God and the European agricultural methods which would render them eminently assimilable and productive ("to teache them how to manure and till the ground" so that European cattle can be introduced into "those large and champion countreys"). They are also a potential source of secret knowledge about the rivers and passages (specifically with a view to finding the northwest passage). In this they would be potential partners with the English who have been excluded from the "secret" knowledge available to the Italians, through Ramusio.

This knowledge, Florio suggests, is available in "the third Volume of Voyages and Nauigations, gathered into the Italian tongue by Ramusius: whiche Bookes, if they were translated into English by the liberalitie of some noble Personage, our Sea men of England, and others, studious of Geographie, shoulde know many worthy secrets, whiche hitherto haue beene concealed" (128). What is clear is that when the lines of demarcation are drawn, the English would be better served by dominating, and assimilating, a "poore

rude and ignorant people,” for the furtherance of their knowledge and prosperity, than aligning themselves with their European competitors. The English category of “us” is established in relation to their competitors’ “them.” The differentiation is no longer so much between New World and Old, “savage” versus “civilized,” “heathen” versus “Christian” – though these terms are indeed deployed in his texts. But Hakluyt’s project is to imagine the possibility, for England specifically, of transforming difference into same through a process of self-serving assimilation that is only possible when it can be acknowledged that absolute difference, in fact, is not quite so absolute, and can shift with perspective. The delineations of difference are turned “inward” on Europe itself, indeed on England itself, and the New World “heathen” becomes, variously, a *raison d’être* for English imperialistic ambition, and the domesticated other whose difference becomes reinscribed in a much more compelling venture.

Colonization and the dissolving of difference

The approach to New World inhabitants in *Divers voyages* does not amount to the thrilling, and often disparaging, fascination with difference, evident in Münster. To put it simplistically, New World inhabitants are either gentle and easy to subdue, or not. Their “curiosity” has become absorbed into the more pressing concern with colonization that infuses this text, and into a more pluralist treatment of difference. Included in *Divers voyages* is an account of Sebastian Cabot’s 1497 voyage (not Cabot’s own account, but a version of the Cabot voyage “written by Robert Fabian, sometime Alderman of London” and undated), in which is described two encounters with utterly brutish New World men in London. The first encounter takes place soon after their arrival in England, when they

are clothed in “beastes skinner, and ate rawe fleshe,” the second two years later, when they are indistinguishable from any other Englishman:

This yeere also were brought vnto the king three men, taken in the new founde Iland, that before I spake of These were clothed in beastes skinner, and ate rawe fleshe, and spake such speech that no man coulde understand them, and in their demeanour like to brute beastes, whom the king kept a time after. Of the which vpon two yeeres past after I saw two apparelled after the maner of Englishmen, in Westminster pallace, which at that time coulde not discerne from Englishmen, till I was learned what they were. But as for speech, I heard none of them vtter one worde. (23, 24)

This extraordinary passage begins with a strong statement of the damning and manifest difference in the American human specimens brought to England. They are clothed in animal skins and accustomed to eating raw flesh (both points highlighted and sensationalized in marginal notes, “Rawe flesh” and “Beastes skins,” excerpted tantalizingly out of context, hinting at cannibalism and perhaps even bestiality, or at least their own beast-like forms). More especially, their “speech” is such that “no man coulde understand them,” a partisan overstatement (presumably their speech, while devoid of meaning to the English, were intelligible to their own communities) that renders them more animal-like than the comment immediately following, that in their “demeanour” they were “like to brute beastes.”

When he encounters the same Americans two years later in Westminster palace, clothed “after the maner of Englishmen,” the writer tells us, he could not distinguish (“discerne”) them from Englishmen, until he is told who they are. Their assimilation is complete. All difference has been dissolved, which has the effect of rendering the previous avowals of seemingly absolute difference suddenly fluid, changeable, and not attributable to immutable nature. The cost to the men for this normalization into English

society, however, is silence. The men have lost all language: “I heard none of them vtter one worde.” It is a cost that the text registers, in its emphatic turn of phrase (not one word).

Anthony Pagden makes the following observation on the transportability of human specimens from the New World to what Bruno Latour, in his analysis of the hegemonic scientific enterprizes of the west, has called the “centres of calculations”:¹³⁰

Samples of minerals and plants, once relocated in their new “centres of calculations,” can be made intelligible by reference to other minerals and plants. Humans, however, rarely transport so well. They die or become meaningless in their new contexts. What, in fact, happened to the savage as he disappeared into the thickets of European civilization? We have records of very few cases. Most vanished without trace. (31)

The men of Fabian’s account might well be said to have “vanished without a trace,” their otherness having been refashioned into a disquietingly mute form of similitude. But not before their story can be deployed to demonstrate the civilizing prowess of Englishness in a composite text that (almost) never loses sight of its persuasive end point.

The nation-specific publication of “our mens travailes”

By the time Hakluyt published Antonio Galvano’s *Discoveries of the World from their first original unto the year of our Lord 1555* (1601), his work is so nation-specific that he feels the need to apologize that English explorers barely feature in this text which presents itself as a complete account of all European “discoveries” up until 1555. He does this with reference to the date of Galvano’s original text (1555), and makes a virtue of the fact that his own efforts, as prolific compiler and commissioner of English texts, have

¹³⁰ Bruno Latour uses this term in his critique of the history of science. The hierarchy within which knowledge was gathered and produced as knowledge, had the effect of creating Europe as a center and “the distant frontier” as mobile and knowable in terms constructed by the center. See Latour (1993).

transformed that state of affairs, in that his publications have brought to light the English successes, and, more significantly, that they have generated new expeditions:

Now if any man shall marvel, that in these Discoveries of the World for the space almost of fower [four] thousand yeeres here set downe, *our nation* is scarce fower [4] times mentioned: hee is to understand, that when this author [Galvano] ended this discourse, (which was about the yeere of Grace 1555) there was little extant of *our mens travailes* [sic]. And for ought I can see, there had no great matter yet come to light, if myselfe had not undertaken that heavie burden, being never therein entertained to any purpose, until I had recourse unto yourselfe, by whose speciall favour and bountiful patronage I have been often much encouraged, and as it were revived. Which *travailes of our men*, because as yet they be not come to ripenes, and have been made for the most part to places first discovered by others, when they shall come to more perfection, and become more profitable to the adventurers, will then be more fit to be reduced into briefe epitomes, by my selfe or some other endued with an honest zeale of *the honour of our countrey*. (vii; emphasis added)

In a clever rhetorical maneuver Hakluyt associates the future (hoped for) success (their “perfection” and profitability) with the foresight and patronage of his dedicatee, Sir Robert Cecill.¹³¹ But not before identifying himself as the originating source of a record of English travels (because “for ought I can see,” “no great matter” would have “yet come to light,” if he himself “had not undertaken that heavie burden”).

Hakluyt did not only publish texts in English. By the time he had published the English collections for which he is most famous he had already translated and published a number of foreign texts, and he went on to do so even after his promotion of English narratives. In 1586 he published a reprint of Antonio Espejo’s *El viaie que hizo Antonio de Espeio en al anno de ochenta y tres* and Laudonnière’s *L’histoire notable de la Floride*. The following year he put together a single-volume edition of Peter Martyr’s

¹³¹ Cecill is identified in the Epistle Dedicatorie’s address as “Knight, principall Secretarie to her Maiestie, Master of the Court of Wards and Liveries, the worthy Chancellour of the Universitie of Cambridge, and one of her Majesties most honorable privie Counsell” (iii).

Decades, which included significant material about the Americas – “the new world” (*De orbo nouo*).¹³² Hakluyt’s dedication of this Latin edition of the *Decades* to his patron Walter Raleigh, includes Hakluyt’s first acknowledgement in print of his abiding passion (“long-cherished desire”) to gather together “in orderly fashion” and disseminate (“bring them to the light of day”) accounts of westward exploration, just two years before *Principall Navigations* appeared. This task is imbued with the mandate of filial duty and the “inspiration” that comes with “playing a worthy part,” rather than the more specifically patriotic impulses of his later works. Nevertheless, his national loyalties and self-identification as English infuses this early work.

By 1598 Hakluyt had collected even more narratives and documents which he put together in a three-volume compilation, *The Principall Navigations, Voyages, Traffiques and Discoveries of the English Nation* (similarly titled but usefully distinguishable from the earlier, substantially different edition by the omission of the second “l” in “Principall”). The 1598 *Navigations* included many more texts, but interestingly also omitted a number of texts that appeared in the 1589 compilation (such as Mandeville’s entertaining, but incredible, *Travels*). Both texts have been made available in more easily readable multi-volume forms published by the Hakluyt Society in facsimile and by publishers such as James MacLehose (publishing in Glasgow in the early 1900s). But at the end of the sixteenth century they constituted tomes, weighty but not too large to handle, so that navigators could take the texts with them to consult on their long journeys westward (Armitage 78). The omission in the later volume of ancient fabulous tales

¹³² Published as *De orbe nouo Petri martris Anglerii Mediolanensis .. decades octo .. vtilissimis annotationibus illustratae ... labore ... Richardi Hackluyti* (1587) and available in English in Edward Arber (1885).

suggests that the publications aspired not just to being credible, but to being accurate and therefore of use on the high seas.

Principall Navigations

Though smaller in length and less polished than the much larger 1598 edition, the 1589 *Principall Navigations* is noteworthy for being the first publication of its kind to isolate and publicize English seafaring accomplishments. In this sense it was part of a broader contemporary patriotic endeavor, timely not because English patriotism was high or its empire-building feats self-evident but, on the contrary, because the ambitions of other nations, the Spanish in particular, were particularly visible at the time. It is an important text for other reasons too. The volume is organized around key literary narratives, but Hakluyt also includes many supporting documents which speak to a more historical, documentary impulse. Being the first of its kind, this compilation is at pains to explain its purpose and set out clearly, if crudely, its organizing principles. The “rough edges” and lack of polish offer the modern day reader an opportunity to identify key elements of an emerging nationalism and the literary genre through which it was articulated. Hakluyt’s treatment of these supporting texts, and the texts identified as the primary narratives, suggests that he had in mind a sense of their generic differences. In this instance, certainly, the evident work involved in managing these differences suggests that it was not a case of nothing but the same thing, as Foucault characterizes the literature of this period. Though to a certain extent Hakluyt’s compilation involves “the infinite accumulation of confirmations,” these confirmations result from a deft handling of recognizably distinct material and forms. Under Hakluyt’s organization, the texts’ generic distinctions are available to be utilized both to foreground the factual event and thus

establish the credibility of the narratives, and at the same time to privilege the literary appeal and status of the narratives whose energy, it would seem, had the ability to bring to life the New World, and England's relationship to it. For this reason, it is worth attending closely to Hakluyt's arrangement of the abundant material in the *Principall Navigations* in order to demonstrate, in the light of Foucault's conception of the material of this period, the subtle distinctions at play, and the way in which they are available to be deployed in the service of the nation and its emerging imperialism.

The title page of *Principall Navigations* spells out the publication details, including the lengthy title (in full), the compiler, and the printers, "George Bishop and Ralph Newberie, deputies to Christopher Barker, Printer to the Queenes most excellent Maiestie." This act of name-dropping demonstrates Hakluyt's respectability and the acceptance he and his project enjoyed within official circles.

The title itself establishes one of the two key ordering principles upon which Hakluyt relied: the materials are divided into the "positions of the Regions whereunto they [the voyages] were directed" – that is, their geographical destination. There are just three areas, following the same pattern used by Ramusio earlier in the sixteenth century: first, "voyages ... to the South and Southeast regions," as it is put in the contents page, that is, what would today be called the Middle East, North Africa and Asia; second, "the North" (extending as far east as Russia); and third, "the English valiant attempts in searching almost all the corners of the vaste and new world of America." The contents page puts it more succinctly as "voyages ... made to the West, Southwest, and Northwest regions" (respectively). Though chronology is not the primary ordering principle (with works being drawn from "any time within the compasse of these 1500 yeeres"), it

emerges as one of two key criteria in the ordering of texts within each regional section. In the seven contents pages (all densely packed with close, small text) documents are listed chronologically, starting with “The voyage of Helena, the Empresse, daughter of Coelus King of Britaine, and mother of Constantine the great, to Ierusalem. Anno 337” from the first section. The third section is dominated by sixteenth century texts – of the 37 narratives listed, just the first two were written before 1500, that is, the “voyage of Madoc ... prince of Northwales to the West Indies” in 1170 and the “voyage of Sebastian Cabot ... to Florida” in 1494.¹³³ Documents are arranged in chronological order, with the date given at the end of the entry in the contents list, though the date is not noted again when the narrative itself appears in the body of the compilation. This suggests that chronology is deemed important particularly for appropriate ordering, and for drawing attention to the factual event and its role in securing England’s primacy in the seas, rather than for the contextualization of each particular narrative at the time of reading.

Perhaps the most interesting ordering criterion is to be found in the absolute separation of the more literary narratives – the accounts, mostly firsthand, of navigators and sailors, appearing under the heading, the “voyages” – and the ancillary documentation, that is, “discourses, letters, priuiledges, relations and other materiall circumstances incident to the voyages,” as it is explained in the third section. Not every “voyage” has supporting documentation, while others have many ancillary documents. For example, there are five supporting documents relating to “The voyage of Sebastian Cabot,” “1494,” some of them identified in the contents page as “touching Sebastian

¹³³ This date is incorrect. The first letters patent was issued by Henry VII in 1496, and Cabot set sail from Bristol that year, only to return within weeks due to poor weather and disputes with crew. He set sail again in May 1497 and on 24 June reached land – though the exact location has never been established without doubt. He returned to Bristol in August. Then in February 1498 he received a second letters patent and set off again, this time with a fleet of 5 ships. See *Encyclopaedia Britannica*.

Cabot.” In Hakluyt’s attempts to create order, here, there emerges a sense of the documents’ generic distinctions. The contents section separates the primary and secondary material entirely by creating separate lists. However, in the body of the compilation itself (as opposed to the contents pages) the material is ordered differently. Here, ancillary material appears immediately after the primary narrative to which it refers. The separate inventories suggest a keenly developed sense of the difference between literary narrative on the one hand and supporting documentation. On closer examination it is not always clear why one narrative should be identified as a primary text and another as a secondary text. It may be an historical issue: the narratives identified as “voyages” tend to be those texts that were already circulating, if only as manuscripts, at the time of producing the compilation. The secondary texts are generally extemporaneous. Many are identified as oral in origin, perhaps the result of interviews conducted by Hakluyt himself or an assistant, Philip, who is known to have interviewed sailors at the dockyards. They are given titles such as “the confession,” “a testimonie” , “a record” or “the discourse.” Even if they are written in origin, they have an unrehearsed, spontaneous, vernacular quality to them, as is evident in the choice of the terms used to describe them: “an accompt” [account], “certaine notes,” “an assignement,” “certaine wordes of that naturall language,” or “a letter” or “a verie exact and perfect description of the distances from place to place.” With their apparent lack of literary purpose and the consequent lack of polish comes a hint of greater empirical authority: notes taken in the moment, as it were, can be “verie exact.” They can function as “a record” because they are somehow closer to the source and therefore seemingly unsullied by a human attempt to please or influence. The letter offers a signature, a convention

which promises most self-consciously that what follows can be vouched for. Even so, it is the “voyages” themselves, that are set apart in the contents pages as the apparent *raison d’être* of the collection.

This message of ascendancy is evident not only in that the material identified as primary appears before the lists of supporting documents. The font size of the first list, in each of the three geographical sections, is also noticeably larger than the font size of the second list. The secondary material therefore supports the primary: the two are not at odds and they are not equal. The ability to refer to less polished, more verifiable secondary material works ultimately to underscore the veracity of the primary narratives. True, there is a clear, structural separation of primary and secondary texts, whose real-life references are more readily identifiable than the more subjective perspectives of the primary narratives which are more polished, but credible only because of the individual who gives his word, as eye-witness narrator of the events. This separation between primary and secondary texts suggests that first-person narratives are not understood to be able to stand on their own plausibly; they need the more easily verifiable secondary texts to support their claims. But these secondary materials are only meaningful, the formal structure would seem to say, in relationship to the primary, more weighty narratives, whose persuasive force is carried by the narrative energy of a (verified) adventure. In effect, the separation is all but undone by the repositioning of the primary and secondary materials as partners in the body of the compilation – partners in the endeavor to convince the reader of the veracity, and the thrilling significance, of these new tales of exploration. The accounts are offered as entertaining *and* true, but the word of their authors alone cannot be vouched for without reference to other materials, would seem to

be the message. This gesture – the production of supporting documents, relegated to secondary status – has a paradoxical effect. It lends status to the primary tales and underscores their veracity, while simultaneously suggesting that the more literary narratives may not be credible on their own and may in fact need verification by a different genre of text.

Evident in the organization of this compilation is a consciousness of, and an anxiety about, the plausibility of first-person exploration narratives which relate to events sensational enough to be worthy of fables in the highly competitive arena of colonial expansion. An emergent empirical practice is evident in the reliance on apparently authenticated secondary texts, with a simultaneous valuing of the primary, more literary narratives – the “voyages” themselves. Thus equipped, these “voyages” carry the narrative energy with which the English armchair adventurer could identify a hero, in his national colors, who can carry the hope of an English home-from-home.

Epilogue

To present a conclusion, at least in the sense of presenting a final word on the significance of this research, feels premature, though somehow unavoidable. My conclusion resists being written partly because there is no single conclusion to be drawn from this array of disparate texts, each reaching for a notion of cohesion but each of them floundering in the face of contradictory forms and objectives which pull them in different directions. However, there are some observations that are worth making as an afterword, if only in order to suggest further consideration.

Immersion in these texts would seem to bear out Foucault's contention that the sixteenth century compilation has an endless capacity to amass component materials and to present them under a single title as though coherent. Certainly the compilations of this study manifest a capacity to work with difference, albeit as a means to contain it. But this is a very different matter from surrendering to "monotony" and, as Foucault puts it, to "condemn[ing] themselves to never knowing anything but the same thing" (*Order of Things* 30). True, their assertions of coherence may well be said to unify their components into one purpose and we have seen how a compiler such as Hakluyt is able to deploy the form, through features such as the marginal notes, prefatory material, tables, and ordering of the material, to present a case for colonization and give life to a particular notion of Englishness. But Foucault's characterization of the literature implies that compilations of this period are not troubled by difference and by what is not containable in the terms and structures most readily available to their compilers, as though coherence is unproblematic and achievable (at least, in terms of the norms of the period), whereas it

becomes more elusive, more troubled, in a later period when *difference* emerges as the most compelling figure, evoking the need for ordering, and when coherence becomes achievable only with reference to endless division and categorization. His analyses seem to take their lead from the periodization to which they are wedded, rather than from close engagement with the material itself, in its own terms.

What Foucault's methods have helped to make visible is that coherence is part of the tool kit of the academy, a cornerstone of the edifice of our own knowledge base, and that it has a long history, subject to critique now as before. Coherence is born of a knowledge practice that values abstraction as one arm of its process. But there is another arm, that is, the return to the particular, to the return to the "field" of investigation, with which abstraction's apparent coherence might be tested, before being formulated again. Even today, epistemological practice involves what we might call a "knowing" and a "doing" (to borrow, as a metaphor, the vocabulary Jim Bennett uses to characterize sixteenth-century knowledge practices). When this movement back and forth between abstraction and investigation becomes uncomfortable for its instability, and at the point where modern-day epistemological confidence becomes discomfitingly unsettled, as I too found, the tools and insights of post-structuralism extend the uncertain comfort of ineluctable provisionality and the insight that certainty is always inevitably elusive, and rightly so.

But this is a productive uncertainty, now as before, an uncertainty that is generative of possibility, even as it undoes the coherence of existing paradigms and troubles what is known – whether that be on the heaving oceans where an explorer suddenly realizes the ancient philosophers were wrong, or in encounter with inhabitants

of foreign lands who unsettle received ideas of difference and identity, or in the critical engagement in antiquated texts whose vast scope and formulaic methods seem forbidding and critically unrewarding. New possibilities of knowing emerge precisely in the experience of engagement, though the refusal of a secure place from which to stand is undoubtedly discomfiting.

The texts of this study, my own compilation of diverse material, if you like, suggest that there is a great deal more fluidity in sixteenth-century textual practice – in the notion of authorship, in approaches to investigating nature’s secrets, in the techniques with which representation establishes and then also questions truth – than strict periodization would allow for. To identify a dramatic shift in representative practice or approaches to learning – to speak of “revolution” or to name the year 1600 as the moment at which a shift in sensibilities occurred with an uninterrogated commitment to periodization – will inevitably be flawed. Conclusions of this sort are, at best, likely to need serious qualification and remain hollow without the acknowledgement that texts, and ideas, do not respect strict chronology. Nor do they develop in a linear, progressive manner. Texts look back, as well as forward, sometimes in the same breath, as it were, in their bid to account for the world. Novelty and innovation depend on old forms and assumptions, and their claims – to be true, to be new, to be “ours,” to be consistent – need to be read with skepticism and with due sensitivity to the historical and political context within which they are made. Admittedly, their informing context will not always be evident on first reading or without recourse to other texts. At very least, therefore, attempts to read major shifts in intellectual history and knowledge practices call for a degree of circumspection, and a recognition of the inescapable provisionality of analysis,

even though this circumspection may seem to deflate a critic's conviction, and excessive qualification may seem to render insights gained in analysis all but meaningless.

Here I would like to make one more brief foray into the texts. When Peter Martyr in his *Decades of the New World* (1555) contemplates the phenomenon of color in a brief discussion "Of the colour of the Indians," he transforms the manifest absurdity of referring to race with reference to skin color, into an opportunity to pay reverence to God's creative powers. Difference, under his pen, becomes "one of the marueylous things that God vseth in the composition of man."

The passage is remarkable for the way it moves from an identification of absolute difference, "in holding one to be white, and another blacke, being colours *vtterly contrary*" (emphasis added), to a sense of difference as multiple and subtle, "as it were by degrees." He identifies difference also *within* the categories of distinction – "as some men are white after diuers sorts of whitenesse, yelow after diuers manners of yelow, & blacke after diuers sorts of blackenesse," and goes on to enumerate various gradations of color, including "purple." At this point the sense of the bizarre is mine, not his. His tone is measured in its explication of the phenomenon of color which, he clarifies, is not attributable to sun exposure "as manie haue thought." He refers to lines of latitude in drawing this conclusion – for "the men of Affrike and Asia, that lyue vnder the burnt lyne (called Zona Torrida) are blacke: and not they that lyue beneath, or on this side of the same lyne, as in Mexico ...and Peru, which touch in the same Æquinoctial." He concludes therefore that "such varyety of colours proceedeth of man, & not of the earth." But this is where his reasoning breaks down, in the face of his Bible-based cosmology:

“although we bee all borne of Adam and Eue, and knowe not the cause why God hath so ordeyned it, otherwise then to consider that his diuine maiesty hath done this, as infinite other, to declare his omnipotency and wisdom, in such diuersities of colours.” When his reasoning reaches its limit, he defers to God and his passage becomes an expression of faith in the face of not knowing.

But it does not end there. With a marginal note for emphasis, declaring that “Gods wisdom and power is seene in his workes,” he directs the reader to the study of nature and to natural philosophy to understand what has been, up til this point, beyond comprehension. The “secrets of nature” may be unfathomable and cause for reverence and faith, but they are worth searching out through learning. The place to search out these “secrets” that bear on human understanding of the very nature of things is, notably, in “the nouelties of the newe worlde”: “All which things may give further occasions to Philosophers to search the secrets of nature, and complexions of men, with the nouelties of the newe worlde.”

Rather than a place of disconcerting strangeness, the home of human-eating and threatening Caribs, as presented by Thomas Marshe in 1572, Peter Martyr’s *New World* is identified with learning. Strangeness, in its encounter, is transformed into novelty and filled with possibility and with interest, not so much for its exoticism, but for the light it may shed on the nature of being human.

This passage (1555) to a certain extent unravels the expectation that ways of knowing and presenting what is known, follow a progressive trajectory across time. True, we may be able to discern a shift over the course of the century – certainly by the end of the sixteenth century Hakluyt has turned the form of the compilation into a vehicle for

constructing a nation-specific consciousness and has used the idealized view westward – Martyr’s assumption that new learning, and the “secrets of nature” are to be found “in the nouelties of the newe worlde” – into an opportunity for promoting, at length, the benefits of English colonization of America, as he saw it. His careful handling of texts – how he introduces them, arranges them, annotates them, celebrates them – licenses his position, while allowing them to appear to be speaking for themselves. In his more careful handling and differentiation between contributing texts, they are able to be used for a more obviously nationalistic end.

My need to stand back from the texts and conclude flows from my own disciplinary commitment to periodization, in evidence here despite my conviction that rigid temporal demarcations produce distorted analyses and make it impossible to generate other, possibly more interesting interpretations. My own choice to move chronologically through the period bespeaks the anticipation that the movement of time can be shown to produce identifiable shifts. A comparison between Peter Martyr (1555) and Thomas Marshe (1572), and between Martin Waldseemüller (1507) and Van Doesborch (1511) would suggest that this anticipation of linear progression is not necessarily rewarded without qualification. As an identification of when to stop, the year 1600 is arbitrary, a point at which to draw a line in the sand. Usefully, for my project, Columbus and Vespucci were writing at the end of the fifteenth century, just in time to be published at the beginning of the 100-year period I have chosen to study. To be able to begin with a text from 1507 and end with a three-volume text of 1598-1600 is satisfyingly neat. But I have tried to demonstrate in my analysis of specific texts that texts have a longer prehistory than is suggested by their date of publication and their reach

extends beyond a narrow temporal frame. Texts reference earlier texts and rely on existing forms and conventions, even when they mark their significance by announcing themselves as “new” and even when their effect is to shift or complicate what has come before. To accept their claims at face value, or to conclude, prematurely, that the texts of any given period are uniformly structured around similitude and have no concept of difference, in order to characterize a later period differently, is to forfeit a wealth of more nuanced insights.

However, it may be necessary for criticism to step back in this way in order to hypothesize larger movements that too detailed or cautious a reading will fail to see. Abstraction is not possible without taking on the removed view of the Creator, as did Waldseemüller’s astronomical methods, in reaching for a language and for representational tools that operate at a remove from the awkward details that resist categorization and sweeping generalizations. Modern-day criticism, invigorated by a revisionist impulse, can be a powerful tool. As Foucault has shown us, and with such dexterity and critical verve, there is exhilaration in being able to unpack hegemonic narratives upon which centuries of exploitative western knowledge systems have been based. But these critical tools, too, warrant a recognition of the inevitably provisional nature of their abstractions and of their particularized investigations and that, today as in the past, what we “know” to be “true” is a function of our institutional and political context. The coherence of our insights is always, inevitably, open to question, always provisional.

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the 6. by the grace of God, king of England, Fraunce and Ireland, defender of the faith, and of the Church of England and Ireland, in earth supream head." 1553. *Principal Navigations*. Ed. Richard Hakluyt. Glasgow: James MacLehose and Sons, 1903. 195-205.

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Curriculum Vitae

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Education

- 2000 MA (English Literature, Rutgers)
- 1996 MA (English Literature, University of Cape Town), with distinction.
- 1991 BA (Honors in English Literature, University of Cape Town), in the first class.
- 1990 BA (Law) (University of Cape Town)

Positions Held

- 2005, 2006 Tutor: "Life Writing by South African Women," an independently developed seminar for second-year undergraduates in the Department of English at the University of Cape Town (UCT).
- 2002 Lectured the Social Sciences Foundation course at the University of the Western Cape (UWC) in the Department of Social Sciences and Anthropology.
- 2000 Teaching Assistant (TA), Rutgers University, Expository Writing.
- 1996 Tutor: second-year English Literature course, which ranges from Shakespeare through Eighteenth-century studies to colonial literatures and recent South African fiction, UWC.
- 1995 Tutor of first-year English Literature course at UWC. Students are introduced to various linguistic concepts before moving on to study some South African novel and drama, nineteenth-century British fiction and Shakespearean drama.
- 1995 Tutor: "Women and Writing in South Africa," an independently developed seminar for senior under-graduate students in the Department of English and in African Studies, UCT.
- 1995 Tutor: "Introduction to English," a precursor to first-year English at UCT for second-language students of English.
- 1994 Tutor: "Gender and South African Literature," a third-year seminar in the Department of English Language and Literature, UCT.
- 1993 Assistant Lecturer in the Academic Development Programme, lecturing in the first-year "English for Academic Purposes" course at UCT.
- 1992 Tutor in first-year English literature course, UCT, in the South African Literature and Renaissance Literature blocks.
- 1992-3 Research assistant to Professor Dorothy Driver in compiling the South African section of the *Journal of Commonwealth Literature* bibliographies, 1993, 1994.

Publications

- “Narrative and Healing in the Hearings of the South African Truth and Reconciliation Commission.” *Biography* special issue: *Personal Effects: Testimonial Uses of Life Writing*. 26.3 (Fall 2003): 143-159.
- Robben Island: A Living Memory*. Pietermaritzburg: Shuter and Shooter Publishers, 2004.
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- “Academics and the Community.” *Current Writing: Text and Reception in Southern Africa*. 7.2 (October 1995): 155-162.
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- “The Dynamic of Interrogation in Prison Narratives: the Position of the Reader in the Reconstruction of the Subject.” *Inter Action: Proceedings of the Third Post-Graduate Conference of the Department of English*. Cape Town: University of Cape Town, 1995: 16-26.
- “Autobiographical Subject Positions: A Discussion of the Autobiographical Texts of Some Black South African Women Writing in English.” *Inter Action: Proceedings of the First Post-Graduate Conference of the Department of English*. Cape Town: University of Cape Town, 1992: 196-215.