
Franz Steiner Verlag	Sonderdruck aus:
----------------------	------------------

**Jahrbuch
für Europäische
Wissenschaftskultur**

**Yearbook
for European
Culture of Science**

6 (2011)



Franz Steiner Verlag 2012

INHALTSVERZEICHNIS / TABLE OF CONTENTS

Fokus / Focus

Flowers of Passion and Distinction: Practice, Expertise and Identity in Clusius' World

Guest editors: Dr. Esther van Gelder & Prof. Dr. Nicolas Robin

<i>Florike Egmond, Esther van Gelder & Nicolas Robin</i> Introductory remarks.....	9
---	---

<i>Brian W. Ogilvie</i> How to write a letter: Humanist correspondence manuals and the late Renaissance community of naturalists	13
--	----

<i>Sylvia van Zanen</i> Jacques Plateau and Carolus Clusius: a shared passion for gardens and plants.....	39
---	----

<i>Valentina Pugliano</i> Botanici e artigiani a Venezia: i (pochi) amici di Carolus Clusius.....	69
--	----

<i>Marrigje Rikken</i> Abraham Ortelius as intermediary for the Antwerp animal trailblazers.....	95
---	----

<i>Angela Fischel</i> The “verae icones” of natural philosophy – new concepts of cognition and the construction of visual reality in Conrad Gessner’s <i>Historia animalium</i>	129
--	-----

<i>Saskia Klerk</i> Teaching the <i>materiae medicae</i> at Leyden University: between natural history, botany and the foundations of medicine	143
--	-----

Freier Beitrag

<i>Patrick Bungener</i> Le réseau épistolaire de Candolle à Montpellier: la lettre au service de la botanique et de la carrière académique	173
--	-----

HOW TO WRITE A LETTER: HUMANIST CORRESPONDENCE MANUALS AND THE LATE RENAISSANCE COMMUNITY OF NATURALISTS¹

Brian W. Ogilvie

ABSTRACT

Humanist scholars from Desiderius Erasmus to Justus Lipsius took correspondence seriously. In treatises on letter-writing they discussed the rhetoric of correspondence, analyzed the distinct kinds of letters, and developed the ideal that correspondence was a sincere, conversational exchange among distant friends. The correspondence of late Renaissance naturalists reveals that this ideal served as a regulative fiction: though often violated in practice, it nonetheless shaped naturalists' expectations about how to write letters and how their correspondents should respond. In an era before natural history was professionalized, the humanist ideal of correspondence helped foster and sustain the community of Renaissance natural history.

1. INTRODUCTION

In the summer of 1561, Carolus Clusius wrote a letter to his new friend, the physician Johann Crato of Kraftheim. Clusius wrote from Mechelen, in the Low Countries; Crato, personal physician to the Holy Roman Emperor Ferdinand, was at his family home in Breslau. In his letter, Clusius denied that their separation could have any serious effect on their developing amity: "Although we are separated by a great distance, and hence cannot strengthen our friendship through mutual conversation, this hindrance can be overcome by letters, which seem to have been invented so that those who are separated might converse [*ut inter absentes colloquium esse possit*]."²

- 1 For their comments on this paper, I would like to thank Esther van Gelder and Nicolas Robin, as well as audiences at the Museum Boerhaave, the Center for Renaissance Studies at the University of Massachusetts, and (on a much older version) the Frühe Neuzeit Interdisziplinär conference and the Five College History Seminar. The following abbreviations are used in the notes: Basel UB = Basel (Switzerland), Universitätsbibliothek, Handschriftenabteilung, Erlangen UB = Erlangen (Germany), Universitätsbibliothek, Handschriftenabteilung, Leiden UB = Leiden (Netherlands), Universiteitsbibliotheek, Bibliotheek "Dousa" (Western manuscripts).
- 2 Clusius to Crato, 1 Aug. 1561, in Carolus Clusius & Conrad Gessner (1830), *Epistolae ineditae*, ed. L. C. Treviranus, Lipsiae: Voss, pp. 14–15.

In one sentence, Clusius listed the basic elements of sixteenth-century humanistic sociability and its hindrances: friendship and conversation, distance and absence.³ Letters served to promote the first two, *amicitia* and *colloquium*, by negating the later. They were the lifeblood of the sixteenth-century Republic of Letters, *respublica literaria*, which bound scholars together in an international community that, at least in principle, transcended the religious, political, and linguistic boundaries of Western and Central Europe. As the old notion of Christendom foundered in the religious violence unleashed by Luther's call for reform, and the aspirations of territorial monarchs rendered the medieval notion of universal monarchy increasingly irrelevant, this Commonwealth of Learning provided an alternate idea of unity for would-be cosmopolitan intellectuals.⁴

Crato's response to Clusius underscored the affective bonds that sustained this Commonwealth of Learning. He admitted that he had been bested in the "pleasant duty of letter writing," since Clusius had sent two long letters in exchange for his one short missive. But he insisted that "even if you excel many of our other friends, I have not been bested in love and benevolence."⁵

It is those affective bonds, and the means by which they were inculcated in humanist epistolary methods, that I wish to explore in this essay. The Republic of Letters was obviously an ideal. More precisely, it served as a "regulative fiction": that is, a norm that structured and governed social interactions and intellectual discourse even as participants in intellectual exchange recognized it was often violated in practice.⁶ Like the nuclear family, another regulative fiction of early modern life in northern Europe, or the patriarchal "stem family" in the south – or, for that matter, ordinary Christians' imitation of Christ – the fact that social actors

3 On *amicitia* and *conversatio* – which included *colloquium* but went beyond it – in a Stoic sense, see Mark Morford (1999), *Life and letters in Lipsius's teaching*, in: Gilbert Tournoy, Jeanine de Landtsheer, & Jan Papy (eds.), *Iustus Lipsius Europae lumen et columen*, Leuven: Leuven University Press, pp. 107–123, p. 110.

4 See the papers in Jeanine de Landtsheer & Henk Nellen (eds.) (2011), *Between Scylla and Charybdis. Learned letter writers navigating the reefs of religious and political controversy in early modern Europe*, Leiden and Boston: Brill, which discuss this ideal. On its limits, see inter alia the paper by Dirk van Miert (2011), *The limits of transconfessional contact in the Republic of Letters around 1600: Scaliger, Casaubon, and their Catholic correspondents*, in: De Landtsheer & Nellen (eds.), *op. cit.*, pp. 367–408.

5 Crato to Clusius, 28 October 1561, Leiden UB, MS VUL 101, s.v. Crato, 2.

6 I have adopted the idea of a regulative fiction from Friedrich Nietzsche, *Die fröhliche Wissenschaft*, §344: "In der Wissenschaft haben die Ueberzeugungen kein Bürgerrecht, so sagt man mit gutem Grunde: erst wenn sie sich entschliessen, zur Bescheidenheit einer Hypothese, eines vorläufigen Versuchs-Standpunktes, einer regulativen Fiktion herabzusteigen, darf ihnen der Zutritt und sogar ein gewisser Werth innerhalb des Reichs der Erkenntniss zugestanden werden, – immerhin mit der Beschränkung, unter polizeiliche Aufsicht gestellt zu bleiben, unter die Polizei des Misstrauens." Friedrich Nietzsche, *Nietzsche Source*, ed. Paolo D'Iorio, <http://www.nietzschesource.org/texts/eKGWB/FW-V-344>, accessed December 14, 2010. My first encounter with the notion was in Frank Kermode (2000), *The sense of an ending. Studies in the theory of fiction, with a new epilogue*, Oxford: Oxford University Press.

often failed to realize its strictures and structures did not rob them of their normative power.⁷

The Republic of Letters involved a concrete set of institutions which transmitted and reinforced its values of conversation and amity. Chief among these was correspondence: the exchange of letters.⁸ I will examine humanists' understanding of correspondence and establish their importance for creating a scholarly community in the sixteenth century, with the community of early modern naturalists as my focus. I will begin with the analyses of correspondence conveyed in humanist correspondence manuals. Although my emphasis is on manuals written in Latin by humanists, vernacular manuals took a similar approach. Then I will turn to scholars – drawing primarily on my research in late Renaissance natural history – to examine how the regulative fiction of sincere friendship served to structure their epistolary relationships. Finally, I will offer some considerations on how that regulative fiction shaped sixteenth- and early seventeenth-century conceptions of the *respublica literaria*, underscoring its coherence but also some crucial ways in which it differed from its Enlightenment successor, the *République des lettres*.

2. CORRESPONDENCE MANUALS AND THE “REGULATIVE FICTION” OF SINCERE FRIENDSHIP

The foundation of the Republic of Letters was the humanist secondary school curriculum.⁹ Humanist control of secondary education goes a long way to explaining

- 7 On the nuclear family see Mary S. Hartman (2004), *The household and the making of history. A subversive view of the Western past*, Cambridge: Cambridge University Press. On the difference between normative family structures and the actual shape of particular families in the face of demographic events, see the classic study by David Herlihy & Christiane Klapisch-Zuber (1978), *Les Toscans et leurs familles. Une étude du catasto florentin de 1427*, Paris: Fondation national des sciences politiques, pp. 491–522, especially pp. 521–22.
- 8 Humanist usage alternated between *epistola* and *litterae* (the plural of *littera*, a letter of the alphabet) to denote a letter. *Litterae* also implied *bonae litterae*, literature; the *respublica literaria* was a literary republic as well as a republic of letters; the term *respublica litterarum* was occasionally used.
- 9 On this curriculum and its spread from Italy to transalpine Europe, see W. H. Woodward (1963), *Vittorino da Feltre and other humanist educators*, New York: Bureau of Publications, Teachers College, Columbia University [originally published 1897]; Eugenio Garin (ed.) (1958), *Il pensiero pedagogico dello umanesimo* (I classici della pedagogia italiana), Firenze: Giuntine and Sansoni; Paul F. Grendler (1989), *Schooling in Renaissance Italy. Literacy and learning, 1300–1600*, Baltimore: Johns Hopkins University Press; George Huppert (1984), *Public schools in Renaissance France*, Urbana and Chicago: University of Illinois Press; T. W. Baldwin (1944), *William Shakespeare's small Latine and less Greeke*, 2 vols., Urbana: University of Illinois Press. The literature on the studia humanitatis is vast, but see Paul Oskar Kristeller (1979), *Renaissance thought and its sources*, ed. Michael Mooney, New York: Columbia University Press, as a starting point. For an overview of Jesuit education in the sixteenth century, with references to the growing literature, see John W. O'Malley (1993), *The first Jesuits*, Cambridge, MA: Harvard University Press, pp. 200–242, esp. pp. 215–227 on curriculum and the “*modus parisiensis*.” On the persistence of the humanist curriculum,

the broad appeal of certain sixteenth-century intellectual developments, such as the rise of historical approaches to law and literature.¹⁰ It also accounts for certain ubiquitous scholarly practices of the late sixteenth century. The commonplace book, an old standby of humanist pedagogy, was one of the foundations of sixteenth-century scientific method.¹¹ Another contribution of humanist education to scholarly method was the letter. The humanist ethos of correspondence was taught to generations of students who were drilled in Ciceronian prose. While imbibing Cicero's sonorous style, they also absorbed their preceptors' view of the letter.

As Judith Henderson has observed, though letter-writing "may seem a trivial genre to the twentieth-century scholar, it was one of the principal composition exercises in Renaissance and Reformation schools."¹² Indeed, no genre was dearer to Renaissance humanists than the letter.¹³ Public letter writing had been well established in the high Middle Ages; however, the formulas of the *dictatores*, authors of medieval "arts of letter-writing," scarcely encouraged the development of the letter as a literary, as well as communicative, form.¹⁴ The *ars dictaminis* had

see R. R. Bolgar (1963), *The classical heritage and its beneficiaries*, Cambridge: Cambridge University Press, pp. 380–393 (quite positive), and Anthony Grafton & Lisa Jardine (1986), *From humanism to the humanities. Education and the liberal arts in fifteenth- and sixteenth-century Europe*, Cambridge, MA: Harvard University Press, pp. 196–200 (rather more critical). Robert Black has emphasized that pedagogical practice often lagged behind humanist ideal: Robert Black (2001), *Humanism and education in medieval and Renaissance Italy. Tradition and innovation in Latin schools from the twelfth to the fifteenth century*, Cambridge: Cambridge University Press.

- 10 See Donald R. Kelley (1970), *Foundations of modern historical scholarship. Language, law, and history in the French Renaissance*, New York: Columbia University Press; Arno Seifert (1976), *Cognitio historica: Die Geschichte als Namengeberin der frühneuzeitlichen Empirie*, Berlin: Duncker und Humblot; Thomas M. Greene (1982), *The light in Troy: Imitation and discovery in Renaissance poetry*, New Haven: Yale University Press. On *historia literaria*, see Frank Grunert and Friedrich Vollhardt (eds.) (2007), *Historia literaria: Neuordnungen des Wissens im 17. und 18. Jahrhundert*, Berlin: Akademie-Verlag. I thank Nicolas Robin for the last reference.
- 11 Ann Blair (1992), Humanism and the commonplace book, in: *Journal of the History of Ideas* 53, pp. 541–551.
- 12 Judith Rice Henderson (1992), Erasmian Ciceronians: Reformation teachers of letter-writing, in: *Rhetorica* 10:3, pp. 273–302, p. 274.
- 13 See John Monfasani (1998), Humanism and rhetoric, in: Albert Rabil, Jr. (ed.), *Renaissance humanism: Foundations, forms, and legacy*, Philadelphia: University of Pennsylvania Press, vol. 3, pp. 171–235, here: pp. 193–195, on the rhetorical dimension of humanist letters and the vogue for letter collections.
- 14 The medieval *ars dictaminis* focused on developing rules for public, diplomatic correspondence, which was often read aloud and thus, by the *dictatores*, assimilated to formal speeches: Ronald Witt (1982), Medieval 'Ars dictaminis' and the beginnings of humanism. A new construction of the problem, in: *Renaissance Quarterly* 35, pp. 1–35. On medieval letter-writing more generally, see Alain Boureau (1997), The letter-writing norm, a medieval invention, in: Roger Chartier, Alain Boureau, & Cécile Dauphin, *Correspondence: Models of letter-writing from the Middle Ages to the nineteenth century*, trans. Christopher Woodall, Princeton: Princeton University Press (the book has a narrower scope than the title implies). Erasmus opened his book *De conscribendis epistolis* with a dig at the *dictatores*: Desiderius

emphasized the formulas appropriate to particular kinds of communication and the relative rank of sender and recipient; its rigid forms were intended for official correspondence, but they were widely employed for private letters as well.¹⁵

Beginning with Petrarch, humanist writers on the art of correspondence emphasized instead the intimate, personal aspects of letters.¹⁶ In a passage that might have come from Juan Luis Vives or even, apart from the style, from Justus Lipsius, Desiderius Erasmus emphasized that a letter should appeal to the character of the individual addressed. "Its aspect will vary according as the person addressed is stern and forbidding, or of a more jovial nature... an intimate acquaintance or a total stranger... a faithful companion or a false friend and ill-wisher."¹⁷ Moreover, it should reflect its author and the topic or topics to which it is devoted. Although these precepts, if taken seriously, would have obviated the need for an epistolary rhetoric, humanist epistolographers in fact spilt barrels of ink on the style appropriate to different sorts of letters.¹⁸

By far the most extensive humanist correspondence manual was Erasmus's *Opus de conscribendis epistolis*, first published in 1522 – a quarto of 415 pages.¹⁹ The *Opus* saw over one hundred editions in the sixteenth century. But it was a bulky work, useful for a teacher with advanced students, or a humanist intent on polishing his style. Those in a hurry turned to other works. Vives's *De conscribendis epistolis*, which quickly acquired the epithet *libellus vere aureus* – worth its weight in gold – was one of the most sophisticated and subtle of the shorter correspondence manuals.²⁰ Since sophistication and subtlety are too often lost on students, and even on teachers, other short works, many based on Erasmus, arose to fill in the gap. Two of these works, by Christoph Hegendorf and Adrian

Erasmus (1985), *De conscribendis epistolis*, trans. Charles Fantazzi, in: Desiderius Erasmus (1974 et seq.), *Collected works of Erasmus*, vol. 25; Literary and educational writings 3, Toronto: University of Toronto Press, p. 19.

15 Witt (1982), *op. cit.*, pp. 14, 19. According to Witt, the lack of revealing personal details in Dante's private letters reflects the weakness of *dictamen* as a model for personal letter-writing, certainly not any lack of personality on Dante's part!

16 Witt (1982), *op. cit.*, pp. 28–34.

17 Erasmus (1985), *op. cit.*, p. 19.

18 See Judith Rice Henderson (2007), Humanism and the humanities. Erasmus's *Opus de conscribendis epistolis* in sixteenth-century schools, in: Carol Poster & Linda C. Mitchell (eds.), *Letter-writing manuals and instruction from antiquity to the present. Historical and bibliographic studies*, Columbia, S.C.: University of South Carolina Press, pp. 141–177.

19 The first authorized edition of *De conscribendis epistolis* (published in 1522 by Froben in Basel) was a quarto of 415 pages: Jean-Claude Margolin (1971), introduction to Erasmus, *De conscribendis epistolis*, in: Desiderius Erasmus (1969 et seq.), *Opera omnia Desiderii Erasmi Roterodami*, ord. I, tom. 2, Amsterdam: North-Holland, p. 200.

20 "Libellus vere aureus," literally "a truly golden little book," was not part of the title in the *editio princeps* of 1534, but it was already in use by 1536. It had earlier been used as the title or subtitle of More's *Utopia*, Erasmus's *Praise of Folly* (e.g. the 1514 Strasbourg edition and subsequent ones), and Agostino Dati's (1526) *Isagogicus in eloquentiae praecepta libellus*, Deventer. It would later be used for Otto Brunfels's (1540) *Epitomen medicinae*, Paris, Caecilius Secundus Curio's (1544) *Araneus sive de providentia Dei. Libellus vere aureus, cum aliis nonnullis eiusdem opusculis*, Basileae, and others.

Barlandus, were often reprinted along with Vives's *libellus*, Conrad Celtis's method for letter writing, and a *Formula* that Erasmus had written around 1499; the last-mentioned was published in a pirated edition in 1521, and Erasmus only grudgingly acknowledged his authorship.²¹ Later in the century, Simon Verepaeus and Justus Lipsius contributed manuals of their own – though in certain regards, Lipsius's *Epistolica institutio* is more of an anti-manual.²²

Aimed at teachers, these manuals set out definitions and classifications of letters, along with theoretical remarks and practical tips on teaching through imitation. They also included more or less extensive model letters or phrases, depending on the author, many of them drawn from Cicero's *Epistolae ad familiares*, a favorite text for humanist teachers.²³ The best of these works are rich sources for exploring several aspects of humanist pedagogy and rhetoric, but here I would like to limit myself to three areas: the letter as a form of colloquy; the practical psychology of correspondence; and the place of friendship in the humanist letter.²⁴

Humanist treatises on letter-writing stressed not only the communicative but also, above all, the 'colloquative' functions of letters. In this they followed classical precedent. A treatise sometimes attributed to Libanius had defined the letter as "a form of conversation of an absent person with another absent person...which says what he would say face to face."²⁵ Humanists quoted and echoed these remarks. "A letter is a conversation," wrote Juan Luis Vives, "by means of the written word between persons separated from one another."²⁶ Simon Verepaeus, too, insisted that "a letter, since it is, as it were, a kind of exchange between absent friends...should be a certain image of our daily, domestic, and familiar speech."²⁷

21 See, e.g., the collection published in 1537 by Johannes Gymnicus in Cologne. It was reprinted, with additions, later in the century, including a couple of London editions.

22 The introduction to Justus Lipsius (1996), *Principles of letter-writing. A bilingual text of Justus Lipsi Epistolica Institutio*, ed. & trans. R. V. Young & M. Thomas Hester, Carbondale: Southern Illinois University Press, for the Library of Renaissance Humanism, is highly problematic, but it does make this point effectively enough. On Lipsius's *Epistolica institutio*, see Morford (1999), *op. cit.*, p. 111ff.

23 Grendler (1989), *op. cit.*, pp. 204–205, 219–229.

24 Other themes include the tension between the letter as communicating thoughts artlessly and the formal rhetoric of the manuals, and the Ciceronian vs. anti-Ciceronian notions. These themes are closely closely related; see Henderson (1992), *op. cit.*

25 Libanius (?) (1614), *Libaniou Sophistou Epistolimaioi characteres*, Lugduni: Typis Ioannis Iullieron, p. 4: "collocutio quaedam absentis cum absente scriptione constans, & utilem finem attingans: quippe cum ea [plane] dicat in ipsa [qui loquitur.] quae praesens apud praesentem diceret."

26 Juan Luis Vives (1989), *De conscribendis epistolis*, ed. & trans. Charles Fantazzi, Leiden: E. J. Brill, §2, p. 23: "epistola est sermo absentium per litteras." Unless noted, I quote from Fantazzi's translation.

27 Simon Verepaeus (1583), *De epistolis latine scribendis et rescribendis*, Coloniae: apud Maternum Cholinum, p. 10: "Sed Epistola, cum sit absentium amicorum veluti quidam internuntius, mittaturque plurimum ad amicos et familiares, ut agat cum illis, de quotidianis ipsorum rebus et negotiis aperte docemur, epistolam debere esse imaginem quondam sermonis nostri quotidiani, domestici & familiaris."

Justus Lipsius elaborated on this definition: a letter is “a message of the mind” which has as its purpose “either to bear witness to a feeling or to bring up a subject.”²⁸ In either case, Lipsius urged his readers to adopt a “conversational style” in their letters.²⁹ Seneca, he thought – echoing Vives – had best expressed the simplicity appropriate to a letter: “Such as my conversation would be if we were sitting or walking together, unlabored and easy – such I wish my letters to be.”³⁰ The word Lipsius and Vives chose to describe the epistolary style, *sermo*, had denoted in classical Latin the spoken word, and by extension those literary works written in a conversational style.³¹

But humanist *sermo* was not artless. In their discussions of invention, Erasmus and Vives, and their followers and epigones, emphasized that the material and style of the letter must be adapted to the character of both author and recipient, and to the nature of their relationship. This, Vives insisted, was a matter of prudence, not art: principles could only go so far. The author should, in particular, consider the addressee’s “family background: plebeian or patrician, well-born or of lowly origins; his personal resources...whether he is outspoken or secretive, of good or bad occupation, leisurely or occupied.”³² The list goes on, but Vives concludes: “All these things may easily be surveyed in a single mental reflection, in a moment’s time.” The letter-writer, in short, should train himself to be an acute judge of character: his own as well as others’. He should be a practical psychologist.

In adopting the ancient notion of the letter as colloquy, and the psychological penetration required to compose a letter, humanists emphasized that letters conveyed not only information but also affect – and often affection – between two separated individuals. Just as speech should be “simple, direct and natural,” so to should the “diction of a letter.”³³ Of course, the simplicity of a professional humanist’s style was never an unstudied simplicity. Turns of phrase which delight the scholar would be inappropriate in a letter to a statesman. Vives distinguished between letters which convey requests, in which the author must fit his style to the taste of the recipient, and letters which request nothing, in which the author is free

28 Lipsius (1996), *op. cit.*, p. 9. Unless noted, I quote from Young and Hester’s translation.

29 Lipsius (1996), *op. cit.*, p. 25.

30 “Qualis sermo meus esset, si una sederemus aut ambularemus, illaboratus et facilis: tales volo esse epistolas meas.” Seneca, *Epistles* 75.1, quoted by Vives (1989), *op. cit.*, pp. 99–101, and Lipsius (1996), *op. cit.*, p. 31 (source of this translation).

31 *Oxford Latin Dictionary* s.v.; cfr. *Rhetorica ad Herennium* 3.23; Cicero, *De officiis*, 1.37.132. Horace’s satires were hence called *sermones* from their conversational style. The modern religious “sermon” derives etymologically from the Latin word, but is often stylistically more akin to the *contentio* or *amplificatio* of classical rhetoric (*Ad Herennium* 3.23). Erasmus’s choice to translate ὁ λόγος in John 1:1 as *sermo* in place of the Vulgate’s *verbum* suggests the importance he placed on familiar conversation.

32 Vives (1989), *op. cit.*, §6, p. 29: “quo genere, plebeius an patricius, honesto an sordido; qua fortuna...opiniuosus an obscurus, bona an malae famae, otiosus an occupatus.... Haec enim uno mentis intuitu facile percurreremus omnia et memento temporis.”

33 Vives (1989), *op. cit.*, §71, p. 97: “simplex esse debet et rectus et naturalis”; “epistolarem dictionem.”

to indulge his own stylistic tastes. Lipsius, more laconically, noted that the requirement of *decorum* in a letter requires fitting the style to the recipient.³⁴ Nevertheless, within the bounds of *decorum* the letter should be written as simply as possible.

Simplicity, in turn, implied sincerity.³⁵ Lipsius required simplicity “both in style and thought.... As for the thought, I take it that a kind of simplicity and forthrightness should shine through the composition, and disclose the special candor of a free mind.”³⁶ Vives was especially opposed to ornament in letters, for he saw it as a substitute for true and sincere content. He held that “courtly and polite [*aulicae et bene educatae*]” letters should be avoided, because they are insincere [*blandum et assentatorium*], and he insisted that such a style arose only because its proponents had nothing better to say.³⁷ For this reason, Erasmus and others censored the “absurd practice” of using the second person plural as a formal address and the “monstrous flatteries” too often used in salutations.

And the simple, sincere letter implied friendship, or the hope of friendship, between the correspondents. For Erasmus, friendship should change the tone and register of epistolary style. Friends might complain about one another’s behavior, or seek to apologize or justify their actions.³⁸ But, he insisted, “whereas with friends we remonstrate, with enemies and ungrateful persons we use reproof” – or even invective.³⁹ Erasmus even gives advice for letters of lamentation, for “among the many advantages conferred by friendship we may mention that when afflicted by grief we may pour out our feelings on a friend’s bosom – a recourse that usually takes away a great part of the sorrow.”⁴⁰ Such letters have their opposite in letters congratulating friends on their triumphs and joys.

A particular kind of letter, which Erasmus called “conciliatory,” aimed, he wrote, “to win over to ourselves men with whom we have had no previous acquaintance or friendship.... This subject often arises among the learned, for though they are at times separated by whole nations, they still invite one another by an exchange of letters to a brotherhood of learning and a covenant with the Muses.”⁴¹ In these letters, too, sincerity was essential. Though it is hard, wrote Erasmus, to set out those reasons “without flattery, still we shall carefully remove any suspicion of it.”⁴² The goal of initiating a correspondence, according to this

34 Erasmus (1985), *op. cit.*, pp. 19–20; Vives (1989), *op. cit.*, §6, p. 29; §74, p. 101; Lipsius (1996), *op. cit.*, p. 33.

35 On sincerity, see John Martin (1997), *Inventing sincerity, refashioning prudence. The discovery of the individual in Renaissance Europe*, in: *American Historical Review* 102, pp. 1309–42, as well as John Martin (2004), *Myths of Renaissance individualism*, Houndmills, Basingstoke: Palgrave Macmillan.

36 Lipsius (1996), *op. cit.*, p. 31; see Morford (1999), *op. cit.*, on letter-writing as a means of forming character for Lipsius.

37 Vives (1989), *op. cit.*, §12, p. 35; §75, pp. 101–103.

38 Erasmus (1985), *op. cit.*, pp. 210–218.

39 Erasmus (1985), *op. cit.*, pp. 218, 221.

40 Erasmus (1985), *op. cit.*, p. 236.

41 Erasmus (1985), *op. cit.*, p. 246.

42 Erasmus (1985), *op. cit.*, p. 203.

line of reasoning, was to make a sincere friendship where there was none. Even if the letter was not sincere it must appear to be so – it must hew to the plot of the regulative fiction. Otherwise, it would fail in its purpose.

Vives placed even more emphasis than Erasmus on the nature and obligation of friendship. And it is instructive to note the *anxiety* surrounding friendship in Vives's treatise. The letter-writer should address a close friend one way, a doubtful friend in another. And Vives gives several examples of how to conciliate a correspondent who might accuse one of straining a friendship: "You regret that this suspicion presented itself to his mind concerning your good will towards him... You will adduce, if you can, some proof of your friendly sentiments towards him; you will cast blame on those who were envious of your friendship, or even on the addressee himself, but in a restrained matter and without any harshness, or on your own imprudence and inexperience; or you will openly confess your guilt, if the circumstances require it, indicating your repentance and your resolution to give some concredited demonstration of how well-disposed you now are towards him."⁴³ Such strictures about how to repair damage to a friendship underscores how sincere friendship served as a regulative fiction for humanist correspondence.

Though I have focused on Latin treatises by humanist scholars, vernacular correspondence manuals explicitly echoed these precepts. In a 1576 work intended for French schoolchildren, Gérard de Vivre summed up the nature and purpose of a letter in words that might have been lifted from Erasmus or Vives: "The letter is our heart's messenger, and as it were a spokesperson for our words, desires, and thoughts, when we are absent. Moreover, the letter declares that which we sometimes don't dare say in person, due to shame or embarrassment; it is the genuine [,] means by which we communicate our most secret thoughts and reflections to absent friends and enemies."⁴⁴ Angel Day, author of *The English Secreterie* (1586), wrote in similar terms that "a Letter therefore is that wherein is expreslye conveied in writing, the intent and meaning of one man, immediately to passe and be directed to another, and for the certaine respects thereof, is termed the messenger and familiar speeche of the absent." Ever since the invention of writing, Day continued, the letter has served as "a faythfull and secrete Ambassadour" of its author.⁴⁵

43 Vives (1989), *op. cit.*, §7, p. 31: "dolere quod in animum eius inciderit ea suspicio de tua in eum voluntate.... Allegabis, si potes, documentum aliquod amicae tuae voluntatis erga illum; culpam reicies in eos qui vestrae amicitiae inviderint, aut in illum ipsum scilicet, sed modeste et sine asperitate, aut in tuma imprudentiam ac aetatem, aut aperte culpam fateberis, si ita res poscat, paenitere te et daturum operam ut re ipsa sentiat quemadmodum sis iam affectus erga illum."

44 Gérard de Vivre (1576), *Lettres missives familières, entremeslees de certaines confabulations non moins utiles que recreatives. Ensemble deux livres de l'utilité du train de Marchandise*, Anvers: Chez Iean Waesberge, fol. 3v.

45 Angel Day (1586), *The English secretorie VVherin is contayned, a perfect method, for the inditing of all manner of epistles and familiar letters, together with their diuersities, enlarged by examples vnder their seuerall tytles. In which is layd forth a path-waye, so apt, plaine and*

Vernacular manuals gave more attention than Latin ones to the proper forms of address between correspondents of different rank. In passages that hark back to the *dictamen* tradition, both Vivre and Day specified the degree of deference to be used for each correspondent. An English duke should be addressed as “the hie and mightye Prince,” whereas an alderman was merely “right worshipful.” Vivre observed that the French placed salutations at the end of a letter, not the beginning; nonetheless, a duke should be addressed as “Monseigneur,” rather than the usual but less honorific “Monsieur,” and instead of using the polite form “vous” one should be even more circumspect and address him in the third person as “your Excellency (*vostre excellence*).”⁴⁶ These vernacular manuals placed less weight on the fiction of sincere friendship between equals than their humanist models. Even so, Day observed, the otherwise rigid rules of salutation might be relaxed “by reason of familiaritie,” especially in exchanges between those of roughly equal station.⁴⁷

Even humanists recognized the *fictive* aspect of this regulative fiction, as Vives’s examples of how to reconcile a friend demonstrate. Any reader of humanists’ letters will recognize flattery and lies, while Erasmus, Lipsius, Muret, and dozens of less famous humanists wrote their letters with an eye on publication. Nonetheless, sincerity and forthrightness were the ideal that teachers urged their students to attain in their epistolary compositions. In their analysis of letters of friendship, and in their own letters to their friends, humanist epistolographers and their pupils tried, as best they could, to live up to the ideal – or if they could not, to excuse themselves for their failings.

3. CORRESPONDENCE AND THE COMMUNITY OF NATURALISTS

To see how the regulative fiction of sincere friendship functioned beyond the prescriptive realm of correspondence manuals, I turn to the community of naturalists in the sixteenth and early seventeenth centuries. Naturalists wrote and sent thousands of letters, often accompanied by seeds, dried plants, name lists, books, and other objects of exchange. These letters are a rich source for the practice of Renaissance natural history. What I would now like to consider, though, is how naturalists’ correspondence reflected the regulative fiction of sincere friendship on which humanist epistolographers insisted, and how that fiction helped sustain a community.

Naturalists’ letters, like those written by humanists more generally, were not simply private communications between individuals. As a genre, the humanist letter was often intended for publication. Petrarch rewrote his earlier letters when he collected them for publication, in order to align them with his later stylistic

easie, to any learners capacity, as the like wherof hath not at any time heretofore beene delivered, London: Printed by Robert Walde-graue, pp. 1–2.

46 Day (1586), *op. cit.*, pp. 32–33; Vivre (1576), *op. cit.*, fol. 7v.

47 Day (1586), *op. cit.*, p. 33.

preferences, while especially after 1514, Erasmus wrote many of his letters with an eye on publication.⁴⁸ Even when letters were not written to be published, they were often revised and issued by their authors, or their authors' friends, as literary monuments.⁴⁹ Carolus Clusius revised the letters written to him from Crete by his friend Onorio Belli before publishing them in his *Rariorum plantarum historia* (Leiden, 1601), as can be seen by comparing the published versions with the autographs, many of which have Clusius's notes for revision on them.⁵⁰ Humanists' letters cannot simply be taken at face value as naïve or unmediated historical documents. This very fact, however, allows us to see how they employed the regulative fiction of sincere friendship in constructing a sense of common interests and pursuits.

Of course, the community – or, better put, intersecting communities – of Renaissance naturalists had its origins outside of correspondence. The existence of a community presumes not only contact but also common interests and methods. Among sixteenth-century naturalists, these interests and methods developed out of common interest in natural objects, along with, in many cases, common training in medical schools and face-to-face contact during travel.⁵¹ Nonetheless, correspondence was a potent glue binding together widely separated naturalists, and the insistence on sincere, friendly conversation meant that letters could forge or preserve strong social bonds as well as serving utilitarian ends. Letters of introduction and recommendation served to initiate amical relationships, while continued correspondence preserved them against the ravages of distance and time.

Common bonds and common purpose, in the sixteenth century as today, could be formed during university training. In university cities like Montpellier, Basel, Padua, Altdorf, and Wittenberg – to name a few – students and teachers formed

48 Witt (1982), *op. cit.*, p. 31; Lisa Jardine (1993), *Erasmus, man of letters. The construction of charisma in print*, Princeton: Princeton University Press, pp. 14, 173.

49 For an example see Jozef IJsewijn (1985), Marcus Antonius Muretus epistolographus, in: *La correspondance d'Erasmus et l'épistolographie humaniste. Colloque international tenu en novembre 1983*, Travaux de l'Institut interuniversitaire pour l'étude de la Renaissance et de l'humanisme, vol. 8, Brussels: Editions de l'Université de Bruxelles, pp. 183–191.

50 Leiden UB, MS. VUL 101, s.v. "Belli."

51 See Brian W. Ogilvie (2006), *The science of describing. Natural history in Renaissance Europe*, Chicago: University of Chicago Press, ch. 2, from which this paragraph and the next are adapted. The community of naturalists, in the sense of those who actively collected, described, and exchanged plant, animal, and mineral material because of an interest in natural history, was probably no more than a few hundred people at any given time in the sixteenth and early seventeenth century, though it intersected with the larger communities of garden fanciers and collectors of curiosities. The complexities of actual relations within the community of naturalists are discussed by, *inter alia*, Paula Findlen (1991), The economy of scientific exchange in early modern Italy, in: Bruce T. Moran (ed.), *Patronage and institutions: Science, technology, and medicine at the European court, 1500–1750*, Rochester, NY: Boydell Press, pp. 5–24; Florike Egmond (2010), *The world of Carolus Clusius. Natural history in the making, 1550–1610*, London: Pickering & Chatto; and Esther van Gelder (2011), *Tussen hof en keizerskroon: Carolus Clusius en de ontwikkeling van de botanie aan Midden-Europese hoven, 1573–1593*, Leiden: Leiden University Press.

affective bonds that lasted, in many cases, the rest of their lives.⁵² The exchange of students between a university town and other communities, near or far, could sustain such contacts for generations. Basel, for example, was a common destination for young students from Nuremberg, which did not have its own university until Altdorf was founded in 1623. As they came and went, and as they visited other universities during the *peregrinatio academica*, the “academic pilgrimage” in which many students participated to wrap up their studies, students bound together Europe’s centers of learning.⁵³

This exchange of young scholars took place within an exchange of letters. No student or scholar left his home to study in a distant land without letters of introduction. When Rudolf Groothuysen, a young man from Groningen who had studied at Leiden and Franeker, set out on his academic pilgrimage in 1612, the Leiden professor Everard Vorst wrote him a letter of introduction to Caspar Bauhin, professor of medicine at Basel.⁵⁴ Vorst’s later letters to Bauhin often commended the letter-carrier to their recipient.⁵⁵ The practice was ubiquitous. At the end of a long letter on the natural history of insects and the progress of his garden, the Nuremberg physician Leonhard Dold recommended Tobias Baursmid, a young man who intended to study medicine at Basel, to Jacob Zwinger, Caspar Bauhin’s younger colleague.⁵⁶ Zwinger himself had profited from letters of introduction to Ulisse Aldrovandi and other Italian notables during his student days at Padua in the early 1590s.⁵⁷

Sincerity was especially important in recommendations: not only did humanists demand it of all their letters, but a false recommendation would damage the friendship between author and recipient. Still, some letters of recommendation were written out of obligation to those with nothing whatsoever to recommend

52 Felix Platter to Joachim Camerarius the younger, 8 July 1593, Erlangen UB, Trew-Sammlung: Plater, Felix, 6. Zwinger correspondence in the Universitätsbibliothek Basel, MS. Fr.Gr. I.12, I.13, I.22; Thomas Platter (1968), *Beschreibung der Reisen durch Frankreich, Spanien, England und die Niederlande, 1595–1600*, ed. Rut Keiser, 2 vols., Basel und Stuttgart: Schwabe & Co., e.g. pp. 154–165.

53 Caspar Bauhin to Joachim Camerarius the younger, 8 July 1593, Erlangen UB, Trew-Sammlung: Bauhinus, Caspar, 11; Bauhin to G. Weyer, 9 December 1587, Erlangen UB, Trew-Sammlung: Bauhinus, Caspar, 54; Leonhard Dold to Jacob Zwinger, 25 January 1598, Basel UB, MS. Fr.Gr. I, 12, 131. On the *peregrinatio academica*, see Heinz Schneppen (1960), *Niederländische Universitäten und deutsches Geistesleben. Von der Gründung der Universität Leiden bis ins späte 18. Jahrhundert*, Münster: Aschendorffsche Verlagsbuchhandlung, pp. 64–67, and Justin Stagl (1992), *Ars apodemica. Bildungsreise und Reisemethodik von 1560 bis 1600*, in: Xenja von Ertzdorff & Dieter Neukirch (eds.), *Reisen und Reiseliteratur im Mittelalter und in der Frühen Neuzeit. Vorträge eines interdisziplinären Symposiums vom 3.–8. Juni 1991 an der Justus-Liebig-Universität Gießen*, Amsterdam and Atlanta: Rodopi, pp. 141–189.

54 Vorst to Bauhin, 30 March 1612, Basel UB, MS. G2 I 1, fol. 220.

55 E.g. Vorst to Bauhin, 25 July 1618 and 11 March 1619, Basel UB, MS. G2 I 1, fol. 225, 226.

56 Dold to Zwinger, 13 June 1596, Basel UB, MS. Fr.Gr. I.13, no. 75.

57 Zwinger to Bauhin, 18 May 1592, Basel UB, MS. G2 I 13b, fol. 197r–198r; Chmielecius to Zwinger, 19 December 1591, Basel UB, MS. Fr.Gr. I.12, 96.

them.⁵⁸ In such instances, Erasmus suggested the “ordinary and cool recommendation which is used when this duty is forced on us”: such recommendations could involve double-entendres or blunt remarks, such as the following: “If I am a nuisance to you, blame him. He was more of a nuisance to me.”⁵⁹ Vives concurred with Erasmus’s list of “epistolary signs” of a recommendation written under obligation, and added more of his own. Nonetheless, he held that the best recommendation built upon the preexisting relationship of friendship between author and addressee: “If the one to whom we are writing regards us highly, and unfeignedly, it will suffice to explain that the person whose cause we are advocating is dear to us and his interests are of great concern to us.”⁶⁰

The experiences of the young Karl Rockol from Basel with Conrad Gessner in Zürich underscore the importance of such unfeigned letters of recommendation, even when the recipient was not especially talented. Rockol left Basel to work, he thought, as Gessner’s assistant. A relative of his had allegedly worked out this arrangement, but on arriving in Zürich he discovered that he had been misled; Gessner had no connection with Rockol’s relative. Nonetheless, the great scholar took him in for a brief period, despite his many preoccupations, on the strength of a recommendation from Theodor Zwinger in Basel. Rockol ended up leaving Gessner’s household, since his abilities did not meet Gessner’s exacting standards, but Zwinger’s introduction had at least secured him the friendship of the Swiss Pliny.⁶¹

Letters also connected naturalists who never met in person.⁶² Clusius knew Joachim Camerarius’s brother, but he had never met Camerarius himself when they began their correspondence, which lasted twenty-two years.⁶³ Clusius’s correspondence with Ulisse Aldrovandi lasted even longer, twenty-seven years, but the two men never met in person.⁶⁴ Nor did Clusius ever meet his Venetian friend Jacopo Antonio Cortuso, to whom he introduced his former pupil Thomas Rehdiger in a 1567 letter.⁶⁵ These correspondents employed the trope of sincere friendship to explain their connections. We have seen Clusius’s assertion that cor-

58 On Justus Lipsius’s recommendations, including some that were at best lukewarm, see Mark Morford (2002), Lipsius’ letters of recommendation, in: Toon Van Houdt, Jan Papy, Gilbert Tournoy, & Constant Matheeußen (eds.), *Self-presentation and social identification: The rhetoric and pragmatics of letter writing in early modern times*, Leuven: Leuven University Press, pp. 183–198.

59 Erasmus (1985), *op. cit.*, p. 184.

60 Vives (1989), *op. cit.*, §§25, 27, pp. 47, 49 (quotation from p. 47): “si nos ille amat cui scribimus, nec fecte, sufficiet aperire illum cuius causa laboramus carum nobis esse et illius negotium magnae curae.” Cf. Erasmus (1985), *op. cit.*, pp. 181–182.

61 Carolus Rockol to Theodor Zwinger, 1564, Basel UB, MS. Fr.Gr. I.12, no. 315.

62 This paragraph is adapted from Ogilvie (2006), *op. cit.*, pp. 80–81.

63 Clusius to Camerarius, 7 October 1573, in: F. W. T. Hunger (1927–43), *Charles de l’Escluse (Carolus Clusius) Nederlandsch kruidkundige, 1526–1609*, 2 vols., ’s-Gravenhage: Martinus Nijhoff, vol. 2, p. 295.

64 Letters from Aldrovandi to Clusius, Leiden Universiteitsbibliotheek, MS. VUL 101, s.v. “Aldrovandi” (7 letters dated from 8 February 1569 to 17 April 1596).

65 Clusius to Rehdiger, 1 March 1567, in: Clusius & Gessner (1830), *op. cit.*, p. 9.

respondence would strengthen his new friendship with Crato. Felix Platter expressed the same sentiment, telling Rennward Cysat repeatedly that “the continuation through writing of maintaining good friendship is very pleasing to me, for I think often about our conversation.”⁶⁶ The frequency of such expressions in sixteenth-century correspondence shows how deeply the regulative fiction of sincere friendship penetrated the late Renaissance community of naturalists.

Given the number of letters they wrote, and the constraints of pen and ink, many naturalists devoted a large portion of their time to correspondence. The physical constraints of writing, when multiplied by the number of letters in the correspondence of an Erasmus or a Gessner, give one pause: even working by lamplight, they must have indeed toiled to have written their books, let alone their letters. Erasmus, Lipsius, and Gessner might write twenty letters in a day: their studies were centers of vibrant communication, not places of solitude.⁶⁷

This vibrancy depended on reciprocal exchange. When they corresponded, naturalists expected to get a response. Breaks in correspondence could lead to indifference or even animosity. Clusius was unaware that his old university friend Laurent Joubert had died in 1583; they had not been in touch for years.⁶⁸ And Conrad Gessner had harsh words for Claude Millet, a former friend who refused to write, despite Gessner’s requests, letters, and even the dedication of a small book.⁶⁹ By spurning Gessner’s advances, Millet violated the rules of reciprocal sociability which bound sixteenth-century students of nature into a community of sentiment as well as of interest.

Of course, perfect reciprocity was a fiction. But when it was revealed as such, naturalists offered excuses for their failure. Crato’s response to Clusius, which I have mentioned already, excused his shortcoming – he had written one short letter in response to Clusius’s two long ones – by appealing to his love and goodwill toward his friend. Students might also feel compelled to excuse themselves to former teachers for their silence. Nicholas Clenardus, whose letters were avidly read by Clusius and his young tutee, Thomas Rehdiger, began the first volume of his letters with such an excuse.⁷⁰

This ideal of reciprocity also structured their reciprocal exchanges of material goods, as Florike Egmond has noted.⁷¹ Whether they gave or received, naturalists

66 Platter to Cysat, 2 July 1596, in: Theodor von Liebenau (1900), Felix Plater von Basel und Rennward Cysat von Luzern, *Basler Jahrbuch*, pp. 85–109, p. 106; see also Platter to Cysat, 12 November 1592, p. 100, and 5 March 1593, pp. 103–104.

67 On solitude and scholarship, see Steven Shapin (1991), ‘The mind is its own place’: Science and solitude in seventeenth-century England, in: *Science in Context* 4, pp. 191–218.

68 Clusius to Camerarius, 5 February 1583, in: Hunger (1927–43), *op. cit.*, vol. 2, p. 395.

69 Gessner to Johann (Jean) Bauhin, 28 October 1563, in Conrad Gessner (1976), *Vingt lettres à Jean Bauhin fils (1563–1565)*, trans. by Augustin Sabot, ed. by Claude Longeon, Saint-Etienne: Université de Saint-Etienne, p. 31.

70 Nicholas Clenardus (1606), *Epistolae libri duo*, Hanoviae: Typis Wecheliani, apud Claud. Marnium & heredes Ioan. Aubrii, p. 9.

71 Florike Egmond, (2010), *op. cit.*, pp. 104–105. This paragraph and the three that follow are adapted from Ogilvie (2006), *op. cit.*, ch. 2.

recognized that exchange created obligations. Ogier de Busbecq, in retirement in France, asked Clusius not to forget him when he divided the riches of his garden. In return, he promised to send *fritillariae*, which he had in great quantity from an apothecary friend.⁷² Requests almost always emphasized the writer's willingness to reciprocate. When Felix Platter requested an *Anemone flore rubro*, he promised other rare plants in return.⁷³ Anselm de Boodt, thanking Clusius for the seeds and flowers he sent, offered bulbs in return, if Clusius wanted them. Boodt, in fact, was not interested in growing plants but exchanging them: "for although I have no garden myself, I give them to my friends; and it pleases me a great deal when I can gratify them."⁷⁴ Even though he was not himself an active naturalist, De Boodt gained social capital from his connections with the famous Clusius.⁷⁵ And the young *érudit* Nicolas-Claude Fabri de Peiresc, whose fastidious tastes led him to ask Clusius for a special copy of the latter's *Rariorum plantarum historia* printed on fine paper, hastened to add – somewhat clumsily, because of the way he emphasized reciprocity: "But I beg you not to send it without demanding something else in exchange [*en contrechange*]."⁷⁶

Naturalists' exchanges of material, like their exchanges of letters, were supposed to be free. Although reciprocity was expected, money had no place in such exchanges. This is best seen in those instances where the rule was transgressed. In 1592 Martin Chmielecius complained to his brother-in-law Jacob Zwinger that Felix "Platter never gives anything away. He sells everything he has, and gives nothing freely, even to friends! He sold a red tulip bulb for a thaler; I won't pay that much. The older he gets, the greedier he becomes."⁷⁷ The next year, Zwinger's fellow student Pascal Le Coq stopped in Basel on his way to Poitiers and gave some seeds and roots to Chmielecius – but expressly not to Platter. "For it is against the duty of a philosopher to give things to sordid and envious men, who have an illiberal and asinine mind, from which they will derive filthy lucre rather than philosophical recreation."⁷⁸ Platter's behavior clearly violated the rules of exchange in the republic of letters, which were consciously opposed to the im-

72 Busbecq to Clusius, 18 July 1585 and 28 April 1586, Leiden UB, MS. VUL 101, s.v. "Busbecq," nos. 3, 4.

73 Felix Platter to [Jacob Zwinger?], no date, Basel UB, MS. Fr.Gr. I.12, no. 272.

74 Boodt to Clusius, 12 October 1602, Leiden UB, MS. VUL 101, s.v. "Boodt," no. 2: "nam licet hortum nullum habui, tamen amicis distribui, quibus cum gratificari possum, non parum gaudeo."

75 I thank Nicolas Robin for emphasizing this point.

76 Peiresc to Clusius, [before 26 May 1603], Leiden UB, MS. VUL 101, s.v. "Peiresc," no. 3.

77 Chmielecius to Zwinger, 22 July 1592, Basel UB, MS. Fr.Gr. I.12, no. 98: "a Platero nam nihil unquam habebimus gratis. Vendit nam sua omnia, gratis ne amicissimis quidem, quicquam dat. Bulbum Tulippae rubrae talero vendit ego tanti non emo. Homo est quo senior, eo avarior."

78 Chmielecius to Zwinger, 27 April 1593, Basel UB, MS. Fr.Gr. I.12, no. 101: "Ast hominib. sordidis, qui illiberali & asinino animo praediti sunt, invidis item, ea communicare, ex quib. illi non recreationem philosophicam, sed turpe quae sunt lucrum, con[tra] officium philosophi est." Chmielecius did not explicitly name Platter, but given the earlier letter, it seems clear whom he meant.

personal transactions of the market. As Egmond has shown, Jacques Plateau was offended by Jean Robin's offer to buy plants.⁷⁹ Clusius, too, railed against the vulgar crowd who would sell flowers instead of giving them away. He had occasionally purchased flowers himself, but thought it shameful for a scholar to sell them: "thus is made vile this study, which used to be generous and liberal – but we must be patient, since the world is getting worse from day to day."⁸⁰ The notion of a liberal study, one which was suited to a free man, also implied freedom from money.

This principle, too, was part of the regulative fiction, for patronage and naturalists' exchange were more closely bound together. Patronage relations were implicit in the system of letters of introduction which initiated contacts within the community of naturalists, and they existed elsewhere in the community as well. Clusius's friend Jean de Brancion sheltered him in Mechelen during the early phase of the Dutch revolt, when marauding Spanish soldiers sacked the town, and put his garden at Clusius's disposal.⁸¹ His patrons Balthasar de Batthyány, Wilhelm IV of Hesse, Marie de Brimeu, and Louise de Coligny had all received his floral largesse. For these connoisseurs, rare and beautiful plants were suitable recompense for political and financial support.

Yet patronage was not Clusius's primary motive for exchanging flowers. One of his long-term correspondents was Lipsius.⁸² Clusius gave advice and material to Lipsius, who reciprocated – in good humanist fashion – with witty cor-

79 Florike Egmond (2007), *Clusius and Friends. Cultures of exchange in the circles of European naturalists*, in: Florike Egmond, Paul Hoftijzer, & Robert P.W. Visser (eds.), *Carolus Clusius. Towards a cultural history of a Renaissance naturalist*, Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen, pp. 9–48, p. 42.

80 Clusius to Matteo Caccini, 8 December 1608, Leiden UB, MS. BPL 2724a, no. 19. He expressed a similar opinion in letters to J. van Hoghelande, 9 January 1592, Leiden UB, MS. BPL 885, s.v. "Clusius", in which he wrote that he had never raised plants to sell them but considered their cultivation to be a liberal art, and to Justus Lipsius: Gyula Istvánffi (1900), *A Clusius-codex mykologiaia méltatása, adatokkal Clusius életrajzához. Études et commentaires sur le Code de l'Escluse, augmentés de quelques notices biographiques*, Budapest: chez l'auteur, pp. 192–93; Istvánffi does not mention the date of the latter letter, but it was written not long after Clusius arrived in Leiden in 1593. Some of Clusius's purchases are documented in letters to Joachim Camerarius of 22 May 1582 and 8 July 1582, in: Hunger (1927–43), *op. cit.*, vol. 2, pp. 388, 390.

81 Hunger (1927–43), *op. cit.*, vol. 1, pp. 101–102, 122. But Clusius did not want to presume too much on his friend's largesse: to disguise his penury, he borrowed money from his former charge Thomas Rehdiger: Clusius to Rehdiger, s.d. and 14 March 1571, in: Clusius & Gessner (1830), *op. cit.*, pp. 11–13. Hunger (1927–43), *op. cit.*, vol. 1, p. 112, dates the first letter in mid-1570.

82 Clusius's surviving correspondence with Lipsius is catalogued by Alois Gerlo (1968), *Inventaire de la correspondance de Juste Lipse, 1564–1606*, Anvers: Editions Scientifiques Erasme, and is being published in Justus Lipsius (1978 et seq.), *Iusti Lipsi Epistolae*, Brussels: Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België. On Lipsius and Clusius, see Mark Morford (1987), *The Stoic garden*, in: *Journal of Garden History* 7, pp. 151–175.

respondence and a famous punning epigram on Clusius's name.⁸³ Lipsius also may have influenced Leiden University's rectors in their choice of Clusius to head their new botanical garden.⁸⁴ But the canons of friendship, the sincere exchange of letters and assistance, were more important in their relationship than any concerns of patronage. And as Gustáv Vámbéry, Florike Egmond, Dóra Bobory, and Esther van Gelder have shown, Clusius's dealings with Batthyány, Marie de Brimeu, and Louise de Coligny were far more than simple patron-client relationships.⁸⁵

This interpretation runs counter to the emphasis on patronage and quasi-economic relations in early modern scientific culture which characterizes much recent scholarship, in particular on Italy.⁸⁶ While such analyses are insightful, they too often reduce claims of friendship to ideologies that mask a symbolic system of exchange and subordination. In general, I find the use of capitalist metaphors to explain social interaction to be problematic, especially when they are used so generally as to exclude other forms of explanation.⁸⁷ I do not mean to deny that many early modern naturalists bought and sold plants – far from it. Rather, the form of exchange – correspondence and material on one side, money on the other – marked membership in the community or exclusion from it. The regulative fiction of sincere friendship permitted the discussion of monetary matters only in the most discreet manner. It aimed to insulate naturalists' exchanges from the patronage, corporate, and economic imperatives of social interaction in early modern Europe. In practice, of course, such imperatives were inescapable, especially in face-to-face exchanges at court, in the university, in town, and in the marketplace; in the world of letters, however, their force could be attenuated.

83 "Ad Clusii nomen lusus. Omnia Naturae dum, Clusi, arcana recludis: CLUSIUS haud ultra sis sed APERTA mihi." ("Play on Clusius's name: When you open, Clusius, all the secrets of nature/you are, to me, no longer CLUSIUS [closed] but OPEN.") Carolus Clusius (1601), *Rariorum plantarum historia*, Antverpiae: ex officina Plantiniana apud Joannem Moretum, sig. *3v, along with a eulogy of the book by Lipsius.

84 Lipsius was, at least, instrumental in persuading Clusius to accept the position: Lipsius to Clusius, 16 February 1592 and 21 March 1593; Clusius to Lipsius, 18 April 1593 (o.s.), in: Lipsius (1978 et seq.), *op. cit.*, vol. 5, pp. 112–113, vol. 6, pp. 120–121, 135–137.

85 Gustáv Vámbéry (1976), *Freundschaft von Carolus Clusius und Balthasar III. Batthyány*, in: *Janus* 63, pp. 185–193; Egmond (2007), *op. cit.*; Dóra Bobory (2007), 'Qui me unice amat': Carolus Clusius and Boldizsár Batthyány, in: Florike Egmond, Paul Hoftijzer, and Robert P. W. Visser (eds.), *Carolus Clusius: Towards a cultural history of a Renaissance naturalist*, Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen, pp. 119–144; Esther van Gelder (2011), *op. cit.*

86 See Paula Findlen (1994), *Possessing nature. Museums, collecting, and scientific culture in early modern Italy*, Berkeley: University of California Press, p. 346ff (with references to recent literature on p. 347 n.5); and Mario Biagioli (1993), *Galileo courtier. The practice of science in the culture of absolutism*, Chicago: University of Chicago Press.

87 See Pierre Bourdieu's account of "symbolic capital" in his (1997) *Outline of a theory of practice*, trans. Richard Nice, Cambridge: Cambridge University Press, for an example.

4. NATURALISTS AND THE *RESPUBLICA LITERARIA*

So far I have described a humanist ethos of correspondence based in the regulative fiction of the letter as a sincere conversation between absent friends. I have shown how a community of naturalists in the later sixteenth century was held together in part by that regulative fiction. But I have only deferred the question of whether there was, in fact, a coherent community of naturalists in the later sixteenth century, or whether, in fact, there were several distinct, non-overlapping communities. It is now time to address that question head-on.

I think the answer is a qualified yes, and that community was instantiated in the idea of the Republic of Letters.⁸⁸ This notion was never static; indeed, its changing connotations trace shifts in the structure and values of European scholarship. As Françoise Waquet has shown, the origins of the *respublica literaria* lie in the fifteenth century.⁸⁹ It is best known in its Francophone variant, the *République des lettres*, that took form in the late seventeenth and eighteenth centuries.⁹⁰ Scholars of humanism are well aware of its earlier, Latin instantiation, however; a generation ago Paul Dibon characterized this earlier *respublica* as being characterized by an ethos of goodwill and communication.⁹¹ I would like to take Dibon's suggestive analysis further, because this ethos appears to be precisely the regulative fiction of sincere friendship that humanist correspondence manuals promoted.

Late Renaissance naturalists situated their exchanges not only in terms of friendship but also of common interests.⁹² Caspar Bauhin reminded his friend Joachim Camerarius the Younger that they were both devoted to the "same interests" when begging a few plants from Camerarius's garden.⁹³ Aldrovandi asked Clusius for anything new or "related to our common interests."⁹⁴ These common interests, in turn, were often framed in terms of the Republic of Letters. Conrad Gessner

88 For an overview of the immense literature on this notion, see Hans Bots & Françoise Waquet (1997), *La République des lettres*, Paris: Belin-De Boeck. Van Miert (2011), *op. cit.*, pp. 369–70, provides a judicious overview of the most important works.

89 Elizabeth L. Eisenstein (1979), *The printing press as an agent of change. Communications and cultural transformations in early-modern Europe*, Cambridge: Cambridge University Press, p. 137 n. 287; Françoise Waquet (1989), *Qu'est-ce que la République des Lettres? Essai de sémantique historique*, in: *Bibliothèque de l'Ecole des Chartes* 1, pp. 473–502.

90 Dena Goodman (1994), *The Republic of Letters. A cultural history of the French Enlightenment*, Ithaca and London: Cornell University Press; Anne Goldgar (1995), *Impolite learning. Conduct and community in the Republic of Letters, 1680–1750*, New Haven and London: Yale University Press; see also Marc Fumaroli (2001), *Quand l'Europe parlait français*, Paris: Éditions de Fallois.

91 Paul Dibon (1978), *Communication in the Respublica literaria of the seventeenth century*, in: *Res publica litterarum* 1, pp. 43–55.

92 This paragraph and the next are adapted from Ogilvie (2006), *op. cit.*, ch. 2.

93 Caspar Bauhin to Joachim Camerarius II, 11 May 1589, Erlangen UB, Trew-Sammlung, Bauhinus, Caspar, 3: "iisdem studiis."

94 Aldrovandi to Clusius, 17 April 1596, Leiden UB, MS. VUL 101, s.v. "Aldrovandi," 7: "a studiis nostris non alienum."

closed the prefatory letter to the first volume of his *Historia animalium* (1551) by expressing “one wish: that anyone wishing to correct me write sincerely and modestly, and that they write neither to increase their own glory nor to reprehend me, but to promote the *respublica literaria*.”⁹⁵ Half a century later, Caspar Bauhin’s correspondent Johann Bachmeister expressed his desire to “adorn, increase, and promote our *respublica literaria*” by contributing to Bauhin’s work.⁹⁶ In 1590, Ulisse Aldrovandi opened a letter to Carolus Clusius by saying that he had worried about Clusius’s health, for his own sake and for that of the *respublica literaria*, but that seeing Clusius’s latest publication had relieved his worries.⁹⁷

As Aldrovandi’s remark shows, publication was an important aspect of the late sixteenth- and early seventeenth-century *respublica literaria*. Gessner’s remark was addressed not only to his correspondents but also to those who might criticize him in print. Print served public utility, as Ole Worm reminded Caspar Bauhin in 1617, referring to Bauhin’s long-delayed *Theatrum botanicum*.⁹⁸ Onorio Belli grudgingly allowed Carolus Clusius to publish Belli’s letters on the flora of Crete, thereby making them part of “public law”: Belli had wanted to publish the descriptions in his own book, but he felt he owed it to the “most friendly” Clusius to agree, given Clusius’s earlier kindnesses.⁹⁹

Belli’s hesitation suggests, at first glance, that late Renaissance naturalists drew a sharp line between their personal correspondence and the public of the *respublica literaria*, in particular, that part of it dealing with natural history. The former was governed by the regulative fiction of sincere friendship; the latter by a distinct regulative fiction of public utility. This distinction is adumbrated by humanist correspondence manuals. Erasmus, for instance, distinguished between the letter and the book precisely on the grounds of the audience for which each was intended and the author’s relationship to them: Letters “must be adapted as far as possible to the immediate occasion, and to contemporary topics and individuals, whereas a book, intended as it is for general consumption, must be contrived to please all men of learning and good will.”¹⁰⁰ Moreover, how could one express sincere friendship toward an anonymous reader, however benevolent he (or, rarely, she) might be?

On closer examination, however, Erasmus’s distinction between books and letters, public and intimate, fails to capture the intimacy of the late sixteenth century community of naturalists. It is true that books were published in editions of several hundred, sometimes even several thousand copies, and that they were commodities in which their publishers had invested substantial amounts of capital

95 Conrad Gessner (1551), *Historiae animalium lib. I. de quadrupedibus viviparis*, Tiguri: apud Christ. Froschoverum, sig. β3r.

96 Bachmeister to Bauhin, 11 July 1603, Basel UB, MS. Fr.Gr. II.1, pp. 29–30.

97 Aldrovandi to Clusius, 3 April 1590, Leiden UB, MS. VUL 101, s.v. “Aldrovandi,” 5.

98 Worm to Bauhin, 8 March 1617, Basel UB, MS. Fr.Gr. II.1, pp. 143–144.

99 Belli to Zwinger, 15 Aug. 1596 (o.s.), Basel UB, MS. Fr.Gr. I.13, no. 52.

100 Desiderius Erasmus (1522), *Opus de conscribendis epistolis, quod quidem et me[n]dosum, & mutilum aediderant, recognitum ab autore & locupletatu[m]*, Basileae: apud Io. Frobenium, p. 9; translation in: Erasmus (1985), *op. cit.*, p. 14.

that needed to be recouped. Nonetheless, the paratextual elements of many late Renaissance natural history books, and in particular, the thicket of letters and epigrams that they contributed to one another's books, shows how the regulative fiction of sincere friendship shaped even the public business of the literary republic.

Valerius Cordus's posthumous *Annotations on Dioscorides* provide one example.¹⁰¹ The work was prefaced by no fewer than five letters, three of them addressed to specific individuals, one to students in the Wittenberg medical school, and one to the reader. Since Cordus had died, these epistolary testimonies were, in part, efforts to cement his reputation as a brilliant naturalist whose career had been cut short. But other works had similar prefatory material. Clusius's *Rariorum plantarum historia* of 1601 contained many laudatory epigrams, including two from his correspondents in Poitiers, François Vertunien La Vau and Pascal Le Coq, which they sent in a letter of 1599.¹⁰²

Such paratexts, as well as dedicatory letters to patrons or friends, and lists of contributors of material or descriptions, situated the natural history book within a specific set of correspondence relationships. Cordus's and Clusius's works were not offered to an anonymous public: rather, their public was, in good part, defined by the correspondents who appeared in the paratext. That is not to say that they published books only for a handful of readers, but rather, that they had a specific audience of similar readers in mind. In this sense, we can usefully differentiate between the humanist *respublica literaria* and the vernacular, largely Franco-phone *république des lettres* of the later seventeenth and eighteenth centuries. The public whose utility was served by the humanist *respublica* was conceived by its members as a relatively homogenous group, characterized by at least passive mastery of Latin prose and by the potential for membership in its networks of correspondence and exchange.

In the late seventeenth- and eighteenth-century *république*, on the other hand, there was a sharper distinction between "active participants and their more passive followers," the *curieux*.¹⁰³ The relationship between the two groups was mediated not only by books but by the new periodical literature that summarized and reviewed them, such as the *Journal des Sçavans*, the *Philosophical Transactions*, the *Nouvelles de la République des Lettres*, the *Histoire des ouvrages des savants*, the *Journal de Trevoux*, and other literary and philosophical journals. As Lorraine Daston observes, citizens of the *République des lettres* placed a high value on impartial criticism as a norm (or at least, we might say, as a regulative fiction), rather than the sincere friendship of the *respublica*.¹⁰⁴ Indeed, the vitriolic exchanges that in the sixteenth century typified interconfessional polemics seemed,

101 Valerius Cordus (1561), *Annotationes in Pedacii Dioscoridis Anazarbei de Medica materia libros V*, Argentorati: excudebat Iosias Rihelius.

102 Vertunien and Le Coq to Clusius, 14 Dec. 1599, Leiden UB, MS VUL 101, s.v. Vertunien.

103 Dibon (1978), *op. cit.*, pp. 43–44.

104 Lorraine Daston (1991), The ideal and reality of the Republic of Letters in the Enlightenment, in: *Science in Context* 4, pp. 367–386.

to some late seventeenth- and eighteenth-century observers, to have become the common currency of the literary republic.¹⁰⁵

5. CONCLUSION

In the late Renaissance, the absence of formal institutions for scholarly communication meant that correspondence, based on a regulative fiction of sincere friendship, sustained a vision of collective scholarship in an age of religious and political strife. In this sense the fiction was productive. The *respublica literaria* was, in fact, a *respublica litterarum*. The scholar's study was not a place of solitude; when he entered his workroom, the sixteenth-century scholar was reminded constantly of his conversations with distant friends.¹⁰⁶ The circular letters and, later, learned journals of the seventeenth century developed out of such affective relationships but never supplanted them. Violations of those norms could result in bitter invective precisely because they threatened to reveal the fiction for what it was.

This Republic of Letters was opposed to the corporate organization of universities and guilds, the social hierarchy of courts, and the economic organization of mercantile exchange. Within its bounds, a noble courtier like Clusius could interact freely, and on a substantially equal footing, with Felix Platter, son of a peasant, and even Pieter Coudenberg, an Antwerp apothecary and gardener. The early modern community of naturalists, both learned scholars and amateur collectors, found its common ground in amity and devotion to "common studies," elements which could, within the borders of the Republic of Letters, attenuate the social and corporate distinctions of late Renaissance Europe.

The regulative fiction of the *respublica literaria* renders the idea of "community" elusive, however. Benedict Anderson's influential work has characterized the nation as an "imagined community": there is no way that every American, or every Netherlander, can know or be in contact with more than a tiny fraction of his or her compatriots, but shared narratives of identity allow them to imagine themselves as part of the same community.¹⁰⁷ The same was true of late Renaissance natural history: the community included hundreds of people who had never met.

But if, as I have argued, the community was a kind of regulative fiction, then the notion of community has serious limits as an analytic framework for continuing our investigations of late Renaissance and early modern natural history. Precisely because it is virtual, the "community of naturalists" can never be defined precisely. Certain naturalists would have been recognized by nearly everyone as

105 Goldgar (1995), *op. cit.*

106 Scholars' frequent requests of portraits of one another to hang in their workrooms or other chambers reflect this sense as much as they do a desire to indicate patronage relationships.

107 Benedict Anderson (1983), *Imagined communities: Reflections on the origin and spread of nationalism*, London: Verso (2nd ed. 1991).

members – but many others would have been known only to their immediate circles. The same is true of any other province of the Republic of Letters.

While the notion of community, in its early modern formulation as a republic of letters, is useful as an actors' category, it has clear limits as we pursue our analysis further. Current research projects on the early modern Republic of Letters are adopting a new framework: that of the network, conceived not as a static set of relationships but as a dynamic composition of nodes and flows of information, material, and individuals between them. Within the limits of the surviving sources, network analysis allows us to develop an objective, descriptive portrait of early modern natural history exchange that complements the normative, regulative fictions of the naturalists themselves. The Clusius Project at Leiden University has already shown how much can be learned from the intensive study of one central node in late sixteenth- and early seventeenth-century correspondence: Clusius appears not as a heroic individual but rather as a consummate, savvy exchanger of knowledge.¹⁰⁸ The resources being developed by the Cultures of Knowledge project at Oxford University and the Mapping the Republic of Letters project at Stanford hold out the prospect of deeper knowledge of scholarly networks in early modern Europe.¹⁰⁹ Nonetheless, even as these projects bring us an increasingly fine-grained picture of scholarly and literary networks as they existed in reality, with their differences, their distinctions, their tensions, and their rivalries, that picture will be incomplete without continued hermeneutical study of the ideals, the norms, and the regulative fictions that gave those structures meaning.

REFERENCES

Archival sources

Basel, Switzerland. Universitätsbibliothek. Handschriftenabteilung.

Erlangen, Bavaria, Germany. Universitätsbibliothek. Abteilung Handschriften und Alte Drucke.

Leiden, Netherlands. Universiteitsbibliotheek. Bibliotheek Dousa (Western manuscripts).

Printed primary sources

Brunfels, Otto (1540), *Epitomen medicinae*, Paris.

Clenardus, Nicholas (1606), *Epistolae libri duo*, Hanoviae: Typis Wecheliani, apud Claud. Marnium & heredes Ioan. Aubrii.

Clusius, Carolus (1601), *Rariorum plantarum historia*, Antverpiae: ex officina Plantiniana apud Joannem Moretum.

Clusius, Carolus, & Conrad Gessner (1830), *Epistolae ineditae*, ed. L. C. Treviranus, Lipsiae: Voss.

Cordus, Valerius (1561), *Annotationes in Pedacii Dioscoridis Anazarbei de Medica materia libros V*, Argentorati: excudebat Iosias Rihelius.

108 Egmond, Hofstijzer, & Visser (eds.) (2007), *op. cit*; Egmond (2010), *op. cit*.

109 Cultures of Knowledge: An intellectual geography of the seventeenth-century Republic of Letters, <http://www.history.ox.ac.uk/cofk/>; Mapping the Republic of Letters: Exploring correspondence and intellectual community in the early modern period, 1500–1800, <https://republicofletters.stanford.edu/>

- Curio, Caelius Secundus (1544), *Araneus sive de providentia Dei. Libellus vere aureus, cum aliis nonnullis eiusdem opusculis*, Basileae.
- Dati, Agostino (1526), *Isagogicus in eloquentiae praecepta libellus*, Deventer.
- Day, Angel (1576), *The English secretorie VVherin is contayned, a perfect method, for the inditing of all manner of epistles and familiar letters, together with their diuersities, enlarged by examples vnder their seuerall tytles. In which is layd forth a path-waye, so apt, plaine and easie, to any learners capacity, as the like wherof hath not at any time heretofore beene deliuered*. London: Printed by Robert Walde-graue, and are to be solde by Richard Iones, dwelling at the signe of the Rose and the Crowne, neere vnto Holburn Bridge.
- Erasmus, Desiderius (1522), *Opus de conscribendis epistolis, quod quidem et me[n]dosum, & mutilum aediderant, recognitum ab autore & locupletatu[m]*, Basileae: apud Io. Froben[um].
- Erasmus, Desiderius (1985), *De conscribendis epistolis*, trans. Charles Fantazzi, in: Desiderius Erasmus (1974 et seq.), *Collected works of Erasmus*, vol. 25; Literary and educational writings 3, Toronto: University of Toronto Press.
- Garin, Eugenio (ed.) (1958), *Il pensiero pedagogico dello umanesimo* (I classici della pedagogia italiana), Firenze: Giuntine and Sansoni.
- Gerlo, Alois (1968), *Inventaire de la correspondance de Juste Lipse, 1564–1606*, Anvers: Editions Scientifiques Erasme.
- Gessner, Conrad (1551), *Historiae animalium lib. I. de quadrupedibus viviparis*, Tiguri: apud Christ. Froschoverum.
- Gessner, Conrad (1976), *Vingt lettres à Jean Bauhin fils (1563–1565)*, trans. by Augustin Sabot, ed. by Claude Longeon, Saint-Etienne: Université de Saint-Etienne.
- Libanius (?) (1614), *Libaniou Sophistou Epistolimaioi characteres*, Lugduni: Typis Ioannis Iullieron.
- Lipsius, Justus (1978 et seq.), *Iusti Lipsi Epistolae*, Brussels: Koninklijke Academie voor Wetenschappen, Letteren en Schone Kunsten van België.
- Lipsius, Justus (1996), *Principles of letter-writing. A bilingual text of Iusti Lipsi Epistolica Institutio*, ed. & trans. by R. V. Young & M. Thomas Hester, Carbondale: Southern Illinois University Press, for the Library of Renaissance Humanism.
- Verepaeus, Simon (1583), *De epistolis latine scribendis et rescribendis*, Coloniae: apud Maternum Cholinum.
- Vives, Juan Luis (1989), *De conscribendis epistolis*, ed. & trans. by Charles Fantazzi, Leiden: E. J. Brill.
- Vivre, Gérard de (1576), *Lettres missives familiares, entremeslees de certaines confabulations non moins utiles que recreatives. Ensemble deux livres de l'utilité du train de Marchandise*, Anvers: Chez lean Waesberge, sus le Cemetiere nostre Dame, à l'Escu de Flandres.

Scholarly literature

- Anderson, Benedict (1983), *Imagined communities: Reflections on the origin and spread of nationalism*, London: Verso (2nd ed. 1991).
- Baldwin, T. W. (1944), *William Shakespere's small Latine and less Greeke*, 2 vols., Urbana: University of Illinois Press.
- Biagioli, Mario (1993), *Galileo courtier. The practice of science in the culture of absolutism*, Chicago: University of Chicago Press.
- Black, Robert (2001), *Humanism and education in medieval and Renaissance Italy. Tradition and innovation in Latin schools from the twelfth to the fifteenth century*, Cambridge: Cambridge University Press.
- Blair, Ann (1992), Humanism and the commonplace book, in: *Journal of the History of Ideas* 53, pp. 541–551.
- Bobory, Dóra (2007), 'Qui me unice amabat': Carolus Clusius and Boldizsár Batthyány, in: Florike Egmond, Paul Hofstijzer & Robert P. W. Visser (eds.), *Carolus Clusius: Towards a cultur-*

- al history of a Renaissance naturalist*, Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen, pp. 119–144.
- Bolgar, R. R. (1963), *The classical heritage and its beneficiaries*, Cambridge: Cambridge University Press.
- Bots, Hans, & Françoise Waquet (1997), *La République des lettres*, Paris: Belin-De Boeck.
- Bourdieu, Pierre (1997) *Outline of a theory of practice*, trans. Richard Nice, Cambridge: Cambridge University Press.
- Boureau, Alain (1997), The letter-writing norm, a medieval invention, in: Roger Chartier, Alain Boureau, & Cécile Dauphin, *Correspondence: Models of letter-writing from the Middle Ages to the nineteenth century*, trans. Christopher Woodall, Princeton: Princeton University Press.
- Cultures of Knowledge: An intellectual geography of the seventeenth-century Republic of Letters*, <http://www.history.ox.ac.uk/cofk/>
- Daston, Lorraine (1991), The ideal and reality of the Republic of Letters in the Enlightenment, in: *Science in Context* 4, pp. 367–386.
- De Landtsheer, Jeanine, & Henk Nellen (eds.) (2011), *Between Scylla and Charybdis. Learned letter writers navigating the reefs of religious and political controversy in early modern Europe*, Leiden and Boston: Brill.
- Dibon, Paul (1978), Communication in the Respublica literaria of the seventeenth century, in: *Res publica litterarum* 1, pp. 43–55.
- Egmond, Florike (2007), Clusius and Friends. Cultures of exchange in the circles of European naturalists, in: Florike Egmond, P. G. Hoftijzer & Robert P.W. Visser (eds.), *Carolus Clusius. Towards a cultural history of a Renaissance naturalist*, Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen, pp. 9–48.
- Egmond, Florike (2010), *The world of Carolus Clusius. Natural history in the making, 1550–1610*, London: Pickering & Chatto.
- Egmond, Florike, P. G. Hoftijzer & Robert P.W. Visser (eds.) (2007), *Carolus Clusius. Towards a cultural history of a Renaissance naturalist*, Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen.
- Eisenstein, Elizabeth L. (1979), *The printing press as an agent of change. Communications and cultural transformations in early-modern Europe*, Cambridge: Cambridge University Press.
- Findlen, Paula (1991), The economy of scientific exchange in early modern Italy, in: Bruce T. Moran (ed.), *Patronage and institutions: Science, technology, and medicine at the European court, 1500–1750*, Rochester, NY: Boydell Press, pp. 5–24.
- Findlen, Paula (1994), *Possessing nature. Museums, collecting, and scientific culture in early modern Italy*, Berkeley: University of California Press.
- Fumaroli, Marc (2001), *Quand l'Europe parlait français*, Paris: Éditions de Fallois.
- Gelder, Esther van (2011), *Tussen hof en keizerskroon: Carolus Clusius en de ontwikkeling van de botanie aan Midden-Europese hoven, 1573–1593*, Leiden: Leiden University Press.
- Goldgar, Anne (1995), *Impolite learning. Conduct and community in the Republic of Letters, 1680–1750*, New Haven and London: Yale University Press.
- Goodman, Dena (1994), *The Republic of Letters. A cultural history of the French Enlightenment*, Ithaca and London: Cornell University Press.
- Grafton, Anthony, & Lisa Jardine (1986), *From humanism to the humanities. Education and the liberal arts in fifteenth- and sixteenth-century Europe*, Cambridge, MA: Harvard University Press.
- Greene, Thomas M. (1982), *The light in Troy: Imitation and discovery in Renaissance poetry*, New Haven: Yale University Press.
- Grendler, Paul F. (1989), *Schooling in Renaissance Italy. Literacy and learning, 1300–1600*, Baltimore: Johns Hopkins University Press.
- Grunert, Frank, and Friedrich Vollhardt (eds.) (2007), *Historia literaria: Neuordnungen des Wissens im 17. und 18. Jahrhundert*, Berlin: Akademie-Verlag.

- Hartman, Mary S. (2004), *The household and the making of history. A subversive view of the Western past*, Cambridge: Cambridge University Press.
- Henderson, Judith Rice (1992), Erasmian Ciceronians: Reformation teachers of letter-writing, in: *Rhetorica* 10:3, pp. 273–302.
- Henderson, Judith Rice (2007), Humanism and the humanities. Erasmus's *Opus de conscribendis epistolis* in sixteenth-century schools, in: Carol Poster and Linda C. Mitchell (eds.), *Letter-writing manuals and instruction from antiquity to the present. Historical and bibliographic studies*, Columbia, S.C.: University of South Carolina Press, pp. 141–177.
- Herlihy, David, & Christiane Klapisch-Zuber (1978), *Les Toscans et leurs familles. Une étude du catasto florentin de 1427*, Paris: Fondation nationale des sciences politiques.
- Hunger, Friedrich Wilhelm T. (1927–43), *Charles de l'Escluse (Carolus Clusius) Nederlandsch kruidkundige, 1526–1609*, 2 vols., 's-Gravenhage: Martinus Nijhoff.
- Huppert, George (1984), *Public schools in Renaissance France*, Urbana and Chicago: University of Illinois Press.
- IJsewijn, Jozef (1985), Marcus Antonius Muretus epistolographus, in: *La correspondance d'Erasmus et l'épistolographie humaniste. Colloque international tenu en novembre 1983, Travaux de l'Institut interuniversitaire pour l'étude de la Renaissance et de l'humanisme*, vol. 8, Brussels: Editions de l'Université de Bruxelles, pp. 183–191.
- Istvánffy Gyula (1900), *A Clusius-codex mykologiaia méltatása, adatokkal Clusius életrajzához. Études et commentaires sur le Code de l'Escluse, augmentés de quelques notices biographiques*, Budapest: chez l'auteur.
- Jardine, Lisa (1993), *Erasmus, man of letters. The construction of charisma in print*, Princeton: Princeton University Press.
- Kelley, Donald R. (1970), *Foundations of modern historical scholarship. Language, law, and history in the French Renaissance*, New York: Columbia University Press.
- Kermode, Frank (2000), *The sense of an ending. Studies in the theory of fiction, with a new epilogue*, Oxford: Oxford University Press.
- Kristeller, Paul Oskar (1979), *Renaissance thought and its sources*, ed. Michael Mooney, New York: Columbia University Press.
- Liebenau, Theodor von (1900), Felix Plater von Basel und Rennward Cysat von Luzern, *Basler Jahrbuch*, p. 106; see also Platter to Cysat, 12 November 1592, pp. 85–109.
- Mapping the Republic of Letters: Exploring correspondence and intellectual community in the early modern period, 1500–1800*, <https://republicofletters.stanford.edu/>
- Margolin, Jean-Claude (1971), introduction to Erasmus, *De conscribendis epistolis*, in: Desiderius Erasmus (1969 et seq.), *Opera omnia Desiderii Erasmi Roterodami*, ord. I, tom. 2, Amsterdam: North-Holland.
- Martin, John (1997), Inventing sincerity, refashioning prudence. The discovery of the individual in Renaissance Europe, in: *American Historical Review* 102, pp. 1309–42.
- Martin, John (2004), *Myths of Renaissance individualism*, Houndmills, Basingstoke: Palgrave Macmillan.
- Miert, Dirk van (2011), The limits of transconfessional contact in the Republic of Letters around 1600: Scaliger, Casaubon, and their Catholic correspondents, in: Jeanine De Landtsheer & Henk Nellen (eds.) (2011), *Between Scylla and Charybdis. Learned letter writers navigating the reefs of religious and political controversy in early modern Europe*, Leiden and Boston: Brill, pp. 367–408.
- Monfasani, John (1998), Humanism and rhetoric, in: Albert Rabil, Jr. (ed.), *Renaissance humanism: Foundations, forms, and legacy*, Philadelphia: University of Pennsylvania Press, vol. 3, pp. 171–235.
- Morford, Mark (1987), The Stoic garden, in: *Journal of Garden History* 7, pp. 151–175.
- Morford, Mark (1999), Life and letters in Lipsius's teaching, in: Gilbert Tournoy, Jeanine de Landtsheer, & Jan Papy (eds.), *Iustus Lipsius Europae lumen et columen*, Leuven: Leuven University Press, pp. 107–123.

- Morford, Mark (2002), Lipsius' letters of recommendation, in: Toon Van Houdt, Jan Papy, Gilbert Tournoy, & Constant Matheeußen (eds.), *Self-presentation and social identification: The rhetoric and pragmatics of letter writing in early modern times*, Leuven: Leuven University Press, pp. 183–198.
- Nietzsche, Friedrich, *Nietzsche Source*, ed. by Paolo D'Iorio, <http://www.nietzschesource.org/texts/eKGWB/FW-V-344>, accessed December 14, 2010.
- O'Malley, John W. (1993), *The first Jesuits*, Cambridge, MA: Harvard University Press.
- Ogilvie, Brian W. (2006), *The science of describing. Natural history in Renaissance Europe*, Chicago: University of Chicago Press.
- Platter, Thomas (1968), *Beschreibung der Reisen durch Frankreich, Spanien, England und die Niederlande, 1595–1600*, ed. by Rut Keiser, 2 vols., Basel und Stuttgart: Schwabe & Co.
- Schneppen, Heinz (1960), *Niederländische Universitäten und deutsches Geistesleben. Von der Gründung der Universität Leiden bis ins späte 18. Jahrhundert*, Münster: Aschendorffsche Verlagsbuchhandlung.
- Seifert, Arno (1976), *Cognitio historica: Die Geschichte als Namengeberin der frühneuzeitlichen Empirie*, Berlin: Duncker und Humblot.
- Shapin, Steven (1991), 'The mind is its own place': Science and solitude in seventeenth-century England, in: *Science in Context* 4, pp. 191–218.
- Stagl, Justin (1992), Ars apodemica. Bildungsreise und Reisemethodik von 1560 bis 1600, in: Xenja von Ertzdorff & Dieter Neukirch (eds.), *Reisen und Reiseliteratur im Mittelalter und in der Frühen Neuzeit. Vorträge eines interdisziplinären Symposiums vom 3.–8. Juni 1991 an der Justus-Liebig-Universität Gießen*, Amsterdam and Atlanta: Rodopi, pp. 141–189.
- Vámbéry, Gustáv (1976), Freundschaft von Carolus Clusius und Balthasar III. Batthyány, in: *Janus* 63, pp. 185–193.
- Waquet, Françoise (1989), Qu'est-ce que la République des Lettres? Essai de sémantique historique, in: *Bibliothèque de l'Ecole des Chartes* 1, pp. 473–502.
- Witt, Ronald (1982), Medieval 'Ars dictaminis' and the beginnings of humanism. A new construction of the problem, in: *Renaissance Quarterly* 35, pp. 1–35.
- Woodward, W. H. (1963), *Vittorino da Feltre and other humanist educators*, New York: Bureau of Publications, Teachers College, Columbia University [originally published 1897].

Contact:

Dr. Brian W. Ogilvie
Associate Professor of History
University of Massachusetts Amherst
ogilvie@history.umass.edu

Fokus / Focus

Physics and Dialectical Materialism

Guest editor: Christian Forstner

Christian Forstner

Einführung.....191

Olival Freire

On the Connections between the Dialectical Materialism and
the Controversy on the Quanta.....195

Alexei Kojevnikov

Probability, Marxism, and Quantum Ensembles.....211

Anja Skaar Jacobsen

“Strife about Complementarity”
and Léon Rosenfeld’s Conception of Marxism.....237

László Székely

Lajos Jánossy’s Reformulation of Relativity Theory in the Contexts
of “Dialectical Materialism” and Traditional Scientific Rationalism.....253

Freie Beiträge

Jürgen Teichmann

Eine neue ‚Landschaft‘ des Unsichtbaren – dunkle Linien
im Spektrum der Sterne.....273