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(eds.)

The MAKING of the HUMANITIES

VOLUME I

Early Modern Europe

THE MAKING OF THE HUMANITIES - VOL. I

The Making of the Humanities

Volume 1: Early Modern Europe

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Introduction: Historiography of the Humanities

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This volume brings together scholars and historians who share a common goal: to develop a comparative history of the humanities. Although separate histories exist of some single humanities disciplines – such as the history of linguistics or the history of history writing – we feel that a general history of the humanities would satisfy a long-felt need and fill a conspicuous gap in intellectual history.

In the field of the history of the natural sciences, overviews have been written at least since the nineteenth century (e.g. William Whewell's well-known History of the Inductive Sciences). It may thus be surprising that no such history exists for the field of the humanities. The lack of such a history constituted one of the major motivations for organizing the First International Conference on the History of the Humanities: The Making of the Humanities, held at the University of Amsterdam from October 23rd to 25th, 2008. As the first conference of its kind, we felt the need to create sufficient coherence and focused on one period only: the early modern era. The Call for Contributions attracted far more papers than could be accommodated: we received 89 submissions, of which only 20 could be accepted. In addition to the submitted papers, we had 4 invited talks by Floris Cohen, David Cram, Anthony Grafton and Ingrid Rowland, resulting in a total of 24 papers divided over 3 days. We decided to have no parallel sessions, so that all conferencees could attend each other's talks and participate in the general discussions. By the end of the conference, there was an increasing awareness that a general history of the humanities could and should be written.

Defining the humanities and their historiography

What are the humanities? It is as with the notion of 'time' in St Augustine's philosophy: if you don't ask, we know, but if you ask, we are left with empty hands. Since the nineteenth century the humanities have typically been defined as those

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disciplines that investigate the expressions of the human mind (Geisteswissenschaften). Thus, the study of music, literature, language, visual arts all belong to the realm of the humanities, in contrast to the study of nature which belongs to the domain of the natural sciences. And the study of humans in their social context belongs to the social sciences. But these definitions are unsatisfactory. Mathematics is to a large extent a product of the human mind, and yet it is not considered a humanities discipline. A pragmatic stance may be more workable: the humanities are those disciplines that are taught and studied at the various humanities faculties. According to this definition, the humanities usually entail: linguistics, musicology, philology, literary theory, historical disciplines (including art history) as well as more recent disciplines such as film studies and media studies. In some countries theology and philosophy are also taught in humanities faculties, whereas in other countries they constitute faculties on their own.

But why should one wish to separate the history of the humanities from the history of the sciences - rather than aiming at a history of all scientific activities, from the natural and the social to the humanistic? The endeavor to write a history of all sciences was attempted by George Sarton in the 1930s.2 However, the result of his work, which is based on a strongly positivistic concept of progress, does not go beyond the fourteenth century, and even within that period, the humanities occupy a severely marginal position in Sarton's history. Although Sarton includes linguistics and musicology to some extent, he leaves out other humanistic disciplines such as art history and literary theory. According to Sarton, the history of the visual arts (painting, architecture and sculpture) only throws light upon the sciences from 'the outside' and does not contribute to scientific 'progress', in contrast to the study of music.3 Sarton does not elaborate any further on this issue, but it seems that he is pointing to the history of art itself rather than art history as a discipline. Of course, for a history of the humanities, we need to include both art history and the study of music (musicology). Of these two, Sarton only accepts musicology, mainly because of its importance for scientific progress. There is no attempt to come up with a general history of all sciences in his work, despite Sarton's lofty intentions. After his death, no-one seems to have picked up Sarton's goal.

Both in content and period, the history of the humanities has remained underexposed. This is all the more striking because many histories of the natural sciences were written during the last two centuries.⁴ And more recently, the history of the social sciences has also been taken up.⁵ Thus, from a historiographical point of view, a history of the humanities is dearly missing. While various histories of some *single* humanistic disciplines have been written, such as the history of linguistics⁶ or the history of literary theory⁷, connections between methods and principles in literary theory and those in art history or between musicology and linguistics are rarely made – perhaps because of the notorious fragmentation of the humanities during the last century.

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Fig. 1: Egidius Sadeler after Hans von Aachen, Minerva Introduces Painting to the Liberal Arts, engraving, Rijksmuseum Amsterdam.

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2 Towards a first history of the humanities: this book

A comparative, interdisciplinary history of the related humanistic disciplines is thus badly needed. But how can we make a selection of such an overwhelming amount of historical material? This collection, which gathers some of the best papers presented at The Making of the Humanities conference, wishes to make a start in investigating the comparative history of the various humanistic disciplines. They range from art history to poetics and from musicology to philology in the early modern period. Each paper proposes and elaborates on a different approach to the history of the humanities. These approaches range from externalistic (focusing on the socio-cultural context of a discipline or person) to internalistic (focusing on the internal methodologies of a specific discipline). The papers not only cover historiographical overviews, but also make comparisons between disciplines and other sciences. Moreover, each contribution ends with a discussion of the pearls and perils of writing a comparative history of the humanistic sciences – and some of the papers are fully immersed in such a discussion. In this way we also hope that the book will contribute to the methodological problem of writing a history of the humanities.8

The first part of the book, entitled "The Humanities versus the Sciences', dives directly into some of the methodological issues. It contains three essays that position the humanities in their historical relation with the natural sciences. In the first essay, Michiel Leezenberg argues for a worldwide perspective on the history of the humanities, as is becoming common practice in the historiography of the natural sciences. He illustrates his arguments with a case study of the non-European influence on Spinoza and his circle. Cynthia Pyle's essay shows that many bridges existed and still exist between the humanities and the natural sciences: not only did early fifteenth-century scholars like Lorenzo Valla and Leon Battista Alberti use methods that have later been termed 'scientific', they often contributed directly to the sciences themselves as well. Floris Cohen's contribution shows that the study of music had humanistic as well as scientific dimensions, both of which were investigated and discussed in the early modern period. He points out that the disruption of the Pythagorean cosmic harmony came about due to developments in the exact sciences and in the humanities alike.

The second part of the book, "The Visual Arts as Liberal Arts," starts out with an essay by Ingrid Rowland showing that the aim of describing the world was carried out in both the sciences and the humanities, especially in the visual arts. Artists increasingly represented information in a graphic form, like Raphael's School of Athens, where allegory made room for expository habits of thought. The essay by Marieke van den Doel further explores the relation between the visual arts and philosophy, in particular Ficino. She shows how Ficino's varied and frequent

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remarks on the supremacy of painting over music were used by art theorists and historians such as Vasari. Ficino effectively wielded a view of the hierarchy of the arts in which scholarship and science were subordinate to beauty. Thijs Weststeijn's contribution then investigates the relations between the visual arts and pictography with particular focus on Chinese characters as universally intelligible ideograms. The heated discussions about pictography reveal how seventeenth-century scholars were keen on combining widely different disciplines, bringing together linguistics, art theory, archaeology and political thought.

In part three of the book, entitled 'Humanism and Heresy', Hilary Gatti analyzes Giordano Bruno's concept of metaphor and its impact on the Renaissance.9 Bruno's metaphor seems to define what may be 'the humanities' for Bruno as opposed to natural philosophy or science: the universe of words and images through which the mind conducts its search for truth. According to Gatti, Bruno can be seen as attempting to dissolve the orthodox Renaissance tradition of the humanities which tended to stress fidelity to classical rules and models. The essay by Bernward Schmidt examines the specific conditions of the humanities in Baroque Rome between ca. 1670 and 1760. Most Roman scholars were concurrently members of the Republic of Letters and of the Roman Inquisition or the Congregation of the Index. They had to censor books which they loved to read for their private studies. Schmidt argues that there existed no contradiction between learning and censoring in Baroque Rome.

In part four, 'Language and Poetics', Juliette Groenland examines the pedagogic practice of northern humanists, in particular Murmellius, whose Latin manual for beginners spread as far as Poland and Hungary. She shows how the humanist credo 'morality through orality' was put into practice and how the humanist reformers created independent minds vouching for tolerance and emancipation. Cesc Esteve reviews the history of early modern literary criticism, showing that the humanist discourse on the ars poetica evolved towards more secular and 'scientific' approaches to the literary past. He argues that literary historiography has much in common with the cognitio historica as prescribed and practised in history writing in the early modern period. The essay by Paivi Mehtonen explores the emergence of the eighteenth-century Literaturwissenschaft. She analyzes the German and British conflicts in which the opposing camps gathered the sciences of word on the one hand and the 'solid' studies of objects, perception and thought on the other. She argues that the discipline of Literaturwissenschaft emerged decades before the dawn of Romanticism.

Part five, 'Linguists and Logicians', starts out with an essay by *David Cram* on the changing relations between grammar, rhetoric and music in the early modern period. He discusses language and music from the perspective of philosophical languages and combinatorics. The main thrust of the paper is that the shift of

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music from the quadrivium to the trivium is the result of a complex process that involves all disciplines, and whereby a new division between the humanities and sciences emerges (see also Cohen's contribution). Jaap Maat investigates the relations between grammar, logic and rhetoric in early modern Europe. While the upcoming natural sciences were particularly harsh for the disciplines that were traditionally concerned with language, Maat argues that the three disciplines survived the seventeenth century undamaged and that even new approaches to the study of language emerged, which gradually superseded the traditional arts.

In part six, 'Philology and Philosophy', Már Jónsson analyzes philological practice in Northern Europe, showing how insights from fifteenth- and sixteenth-century Italian humanists were further developed into a new practice on philological, linguistic and historical matters. He shows that some of the methods and ideas developed in these years still retain their validity and have hardly been improved. The essay by Piet Steenbakkers explores the circulation of knowledge with respect to Spinoza's role as a philologist and his place in the history of biblical scholarship. Spinoza's interest in the Bible was not strictly philosophical but had strong philological and linguistic penchants, too. Steenbakkers shows how Spinoza played a crucial role in the dramatic decline of the status of the Bible in western civilization. Martine Pécharman continues on the issue of philological criticism of the Bible, especially of the New Testament. Focusing on the debate between Simon and Arnauld, she examines the rules of critique in the humanities, which involved linguistics, philology and philosophy.

The last part of the book, "The History of History" starts out with an essay by Jacques Bos on the development of historiography in early modern Europe. He argues that Machiavelli and Guicciardini created a new mode of historical experience that actually turned the past into an object of study. He compares the historical work of the sixteenth century with other disciplines, in particular philology and philosophy, and maintains that nineteenth-century historicists like Ranke were involved in a very similar project which turned history into an academic discipline. Wouter Hanegraaff investigates the historiography of thought which began to emerge during the seventeenth century, as German protestant authors sought to distinguish the history of rational thought from biblical revelation and pagan superstition. Hanegraaff focuses on Jacob Brucker's monumental history of philosophy and argues that his legacy is still with us today: Brucker managed to demarcate the history of philosophy, as based solely upon human reason, from the history of religion.

Together, the seven parts of this book illustrate the width and depth of the history of the humanities in early modern Europe, as well as their mutual intertwining and connection with the exact sciences. The humanities instigated a new secular world view (Steenbakkers, Leezenberg, Hanegraaff, Gatti), they rebutted

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forgeries that no-one dared to question before (Pyle, Steenbakkers, Pécharman), and with their standard of precision, consistency and criticism (Pyle, Jónsson, Rowland, Cohen, Groenland), the humanities deeply influenced the exact sciences (Pyle, Cram, Maat, Cohen). Many papers in this volume also suggest that discipline formation had its roots well before the nineteenth-century development of the Geisteswissenschaften (Mehtonen, Esteve, Jónsson, Bos, Hanegraaff). Not only was there a wide circulation of knowledge in the early Republic of Letters (Gatti, Rowland, Schmidt, van den Doel, Groenland, Weststeijn), there was also a far-reaching institutionalization of disciplines such as philology, historiography, poetics and the arts (van den Doel, Mehtonen, Steenbakkers, Bos). Their relation with the New Sciences indicates that the humanities not only preceded the sciences but also shaped them to a very large extent via the formal and empirical study of music, art, language and texts (Cohen, Rowland, Pyle, Weststeijn, Cram, Maat).

Thus, a comparative history of the humanities sheds new light from both within and outside the humanistic disciplines. Of course, we have focused in this book on only one period in the history of the humanities. The next conference (autumn 2010) and book (planned in 2012) will focus on the subsequent period of this history and relate it to the previous one, that is: the transition from the early modern to the modern period, including influences from outside Europe.

This volume could not have been produced without the success of the original conference, The Making of the Humanities, in 2008. A special word of thanks needs to go to two persons who were involved with the conference organization from its start back in 2007: Peter van Ormondt and Karin Gigengack of the ILLC bureau (Institute for Logic, Language and Computation). Without their organizational expertise and support, this book would not be here. We would also like to thank Martin Stokhof who brought this conference to the attention of the European Science Foundation that turned out to be of great help in distributing the Call for Papers. We are indebted to NWO, the Netherlands Organization for Scientific Research, whose generous funding scheme supports two of the editors. We are grateful to the former Mayor of Amsterdam, Job Cohen, for receiving all participants on the first conference day in the Mayor's Residence, one of the finest canal houses of Amsterdam. And we thank the University of Amsterdam for making its facilities freely available, as well as the Spui 25 Academic Centre that hosted the public event at the end of the second conference day, entitled Discoveries in the Humanities that Changed the World. We are most appreciative of the excellent editorial help we received from Amsterdam University Press in turning the conference papers into the current book. Finally, we wish to thank all conference speakers for their marvelous talks, all session chairs for their beautiful introductions that were often papers on their own, the dean of the Faculty of Humanities José van Dijck for opening the conference with a splendid speech, and

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not to forget all participants who actively engaged in the fascinating discussions. They all were the persons who turned the conference into a success. They can be found at http://www.illc.uva.nl/MakingHumanities/program.html.

Notes

- Wilhelm Dilthey, Einleitung in die Geisteswissenschaften. Versuch einer Grundlegung für das Studium der Gesellschaft und der Geschichte (Teubner 1883, reprinted: 1979).
- 2 George Sarton, Introduction to the History of Science, Volume I, II, III (Baltimore: Williams and Wilkins, 1931/1947).
- 3 George Sarton, ibidem, Volume I, 5.
- 4 Among the many histories of the natural sciences, one of the first is William Whewell, History of the Inductive Sciences (three volumes, 1837). Later classics are Stephen Mason, A History of the Sciences (MacMillan, 1962); William Dampier, A History of Science and Its Relation to Philosophy and Religion (Cambridge University Press, 1966). Some more recent ones include James McClellan and Harold Dorn, Science and Technology in World History: An Introduction (Johns Hopkins University Press, 1999); Frederick Gregory, Natural Science in Western History (Wadsworth Publishing, 2007).
- 5 Examples of histories of the social or human sciences (not to be confused with the humanities) are Roger Smith, The Norton History of the Human Sciences (Norton and Company, 1997); Scott Gordon, The History and Philosophy of Social Science: An Introduction (Routledge, 1993); Theodore Porter and Dorothy Ross, The Cambridge History of Science, Volume 7, The Modern Social Sciences (Cambridge University Press, 2003).
- 6 e.g. R.H. Robins, A Short History of Linguistics (Longman, 1997).
- e.g. Richard Harland, Literary Theory from Plato to Barthes (Palgrave Macmillan, 1999).
- 8 See also Rens Bod, De Vergeten Wetenschappen: Een Geschiedenis van de Humaniora ('The Forgotten Sciences: A History of the Humanities') (Prometheus, 2010).
- 9 Gatti's contribution will also appear in her monograph Essays on Giordano Bruno (Princeton University Press, 2011). We gratefully acknowledge Princeton University Press for their generous permission to reprint it here.

The Humanities versus the Sciences





How Comparative Should a Comparative History of the Humanities Be? The Case of the Dutch Spinoza Circle

MICHIEL LEEZENBERG

1 Introduction

The history of the humanities, or *Geisteswissenschaften*, lags far behind the historiography of the exact or natural sciences. Therefore, one may fruitfully look for models or examples in the history of the natural sciences in order to avoid reinventing the wheel, or running into difficulties that have already been encountered elsewhere, and perhaps even solved. There are also more principled reasons, however, for thematizing the rise of a strict disciplinary opposition between the humanities and the natural sciences, an opposition which is more recent and less stable than one might think. A strict distinction between them (e.g. as concerned with distinct objects of study or employing different methods of research) was unknown to Aristotle and to medieval scholars, and only started being made, amidst fierce discussion and contestation, in the seventeenth century; it did not stabilize until around 1800.

Below, I would like, first, to discuss one famous exercise in the comparative history of the humanities, Michel Foucault's *The Order of Things* (first edition 1966), to raise some outstanding questions that I think deserve more attention. Most importantly, I will discuss two kinds of considerations, to do with spatiality and language, respectively. Second, I will devote more detailed attention to a subset of questions concerning language. Intellectual history, I will argue, should pay attention not only to changing vocabularies but also to shifts in what are usually called 'ideologies of language', i.e. folk theories of what language is and how it functions. This becomes especially clear in the case of the so-called 'vernacularization', or gradual shift towards vernacular languages as the means of literary expression and philosophical and scientific inquiry, that marks early modern Europe and indeed the early modern world at large. Finally, I will try to show in a preliminary manner the potential usefulness of these emphases on language and on long-distance connections, taking as a kind of case history the writings of Spinoza and the circle surrounding him in the seventeenth-century Dutch Republic.

2 History, archaeology, or anthropology?

Existing exercises in the history of the humanities typically trace the development of an individual discipline, starting either in classical antiquity or in the Renaissance, and confine themselves to developments in Europe (or part of it) and, from the late nineteenth century onward, North America. This pattern can be seen in – deservedly famous – studies such as R.H. Robins's history of linguistics (1997) or Rudolf Pfeiffer's multi-volume history of classical scholarship (1968-1976).¹ Compared to overviews of the history of the natural sciences, however, these books are somewhat old-fashioned in their approach. Histories of science, backed by decades of solid scholarship on individual scientists, disciplines, and periods, can boast of various textbooks that are both empirically rich and methodologically sophisticated; moreover, almost as a matter of course, they take into account developments in non-Western traditions and of the contributions they have made to the development of Western science.²

A more substantial problem of histories that confine themselves to individual disciplines is that they risk overlooking similar patterns of development occurring in other fields or, even more importantly, the fact that these disciplines did not emerge as autonomous fields of study characterized by distinct objects and methods, let alone autonomous institutions and social networks, until relatively recently. Hence, it may be fruitful, if not preferable, to take a broader perspective that systematically thematizes or questions the very disciplinary and territorial boundaries that we tend to take for granted. Even the unquestioning use of the distinction between the natural sciences and the humanities, or between physical science and humanistic scholarship, risks projecting all kinds of disciplinary and institutional boundaries that only solidified at a much later date onto a period in which they did not yet have a widely accepted existence, and hence risk seriously distorting our picture. Most famously perhaps, Steven Shapin and Simon Schaffer's Leviathan and the Air-Pump attempts to question these boundaries (as well as those between scientific texts and social contexts) by reopening the debate between Thomas Hobbes and Robert Boyle concerning the existence of a vacuum.3 At first sight, they argue, this might seem a debate between a political philosopher and a natural scientist about the merits of experimental science, which, predictably, was won by the scientist. On closer inspection, however, rather more appears to be at stake: the question of whether the experimental results produced in the Royal Society yield proper natural-philosophical knowledge turns out to reflect much wider debates on the nature of reliable testimony, social order, the political implications of metaphysical claims, and authority in matters political and epistemological. By reopening the debate between Hobbes and Boyle, and capturing the terms in which it was actually conducted, Shapin and Scheffer show how

the apparently obvious distinction between experimental science as dealing with natural facts and political philosophy as being in the realm of opinion was the result of a complex, and fiercely contested, array of social practices and rhetorical strategies.

In other words, approaches that systematically ignore, transcend, or thematize present-day disciplinary boundaries and try to uncover earlier debates or controversies in the terms in which they were actually conducted may be at least as fruitful or promising as attempts at tracing the earlier past of a modern discipline. For the history of the humanities, several such approaches can be imagined, and have in fact been tried out. On the one hand, there are Anthony Grafton's systematic attempts at combining social and intellectual history. Among other issues, this combination raises complex questions of spatiality: social history often focuses on relatively well-delineated local arenas for competition (say, individual cities or states), whereas intellectual developments tend to have a geographically (and in this period, linguistically) rather more diffuse and long-distance character. But as important as these matters are, I will not address them here, especially as this undoubtedly important and fruitful approach has not yet yielded a full-blown comparative history of the humanities anyway.

However, another attempt at an interdisciplinary or comparative history of the humanities has already been made. I am, of course, referring to Michel Foucault's The Order of Things (Les Mots et les choses), one of the unlikelier bestsellers of the 1960s.5 The author himself calls it an 'archaeology of the human sciences' (which include economics and biology), in order to distinguish it from more conventional approaches to the history of ideas like, most importantly, Lovejoy's. Foucault has been heavily criticized by historians for his sweeping and aprioristic attempts at periodization. One should keep in mind, however, that he was mounting at least as much a philosophical, if not political, argument against then-dominant Marxist philosophies of history as engaging in a historical exercise in the stricter academic sense of the word. More positively, its philosophical bias allows for a rather more explicit methodological signposting (taken to much greater lengths, if not extremes, in Foucault's 1969 The Archaeology of Knowledge⁶) than is usual in works of historiography. With the benefit of over four decades of hindsight, I would like to discuss some of the most significant descriptive and methodological aspects of this important book.

Most famously, Foucault does not look at individual authors or doctrines; he does not describe scientific change as the result of individual discoveries in terms of originality or influences; rather, he explores radical changes in the underlying beliefs or, more properly speaking, statements. These are what he calls the 'historical a priori': this underlies or characterizes an entire, historically contingent, arrangement of knowledge or, as Foucault calls it, episteme. It consists of state-

ments or propositions held to be self-evidently true a priori, but it appears to undergo radical historical changes. The radical replacements of the entire historical a priori amount to what he calls 'epistemic ruptures' (broadly comparable to, but wider in effect, than what Thomas Kuhn calls scientific revolutions); these occur not only in individual disciplines, but in the knowledge or learning of a period as a whole. Thus, they can be equally well traced in almanacs; in literary texts like *Don Quixote* and the writings of the Marquis de Sade; and in the scientific or scholarly texts of a period. Foucault argues for two such epistemic breaks in early modern Europe: the former occurs around 1600 and includes what is usually called the Scientific Revolution, although it is much wider in scope; the latter occurs around 1800 and amounts to what one might call the 'human-scientific' or *geisteswissenschaftliche* revolution. In such ruptures, Foucault argues, the very architecture of knowledge is radically reorganized; this makes it difficult to speak of, say, seventeenth-century writings on wealth or words as anticipating, respectively, modern economics and linguistics.

Words or linguistic signs are a crucial, if not the major, topic of concern in Foucault's archaeology. This concern has been one of the causes of the widespread misunderstanding that his book is an exercise in structuralism. Foucault's historicizing method, however, is quite different from the structuralist emphasis on synchronic analysis of systems of signs. For him, apparently, the most important or interesting changes in the historical a priori involve our beliefs about words or signs. In fact, he repeatedly called the manuscript of what was to become Les Mots et les choses a'livre sur les signes' ('book on signs').7 In the Renaissance, he argues, signs were not thought of as standing outside the world, but as part of it, and based on different kinds of relations of analogy or similarity with particular objects in the world. In the classical episteme, or constellation of learning that emerged around 1600, words were seen as more or less adequately representing (and by implication standing outside) the order of things in the world, whereas in the modern episteme emerging around 1800, languages came to be seen as historically developing organisms that primarily express an individual or collective 'spirit' or subjectivity. I will return to the topic of words or signs below.

Much like Thomas Kuhn's near-contemporary writings, Foucault's *The Order of Things* emphasizes the discontinuous character of the more radical or revolutionary changes in the sciences. One might qualify the approaches of these two authors as neo-Kantian, in so far as both treat systems of knowledge as constituted by a well-circumscribed set of historical beliefs or statements: what Foucault calls the historical a priori and what Kuhn in later writings calls quasianalytic statements. This attention to discontinuity has the effect (or intention) of exposing teleological or Whig-historical projections of insights (and indeed, disciplinary boundaries) of a later era onto the periods under investigation.

Foucault further argues that these ruptures occur simultaneously in all areas of knowledge, and hence cannot be explained as resulting from new scientific discoveries or insights, or as the work of particularly brave or clever individual scientists. However, they are not simply the result of external (read: socio-economic) factors either. Indeed, in the preface to the English translation of his book, Foucault explicitly denies the possibility, or even desirability, of explaining epistemic ruptures in terms of social or cultural factors such as changing class relations or modes of production. In his own later work, however, which marks a gradual shift from a neo-Kantian to a more practice-oriented approach which de-emphasizes the role of language and in particular the historical a priori as constitutive of knowledge, Foucault comes to explore the interrelations between discursive and non-discursive practices. As a result, the earlier emphasis on historical discontinuities becomes less prominent, and Foucault becomes less reticent in suggesting possible causal links.⁸

But these considerations are nowadays perhaps not very novel or challenging anymore. More problematic, and more relevant to our present discussion, are two sets of questions that Foucault's work raises. These concern, respectively, spatiality and language. To begin with the former: Foucault is not very explicit about the geographical delimitation of the epistemic or discursive formations he is investigating. It is, of course, crucial to his argument to look beyond the boundaries of individual disciplines; but how far his argument holds across linguistic boundaries is far less obvious. Although he uses textual sources from different modern languages of Western Europe, including German, English, and Spanish, there is a pronounced emphasis on French texts, especially for the classical era (1600-1800). Hans Aarsleff already noted the French bias of The Order of Things, a fact that he sees as complicating the possible generalization of Foucault's findings to other geographical regions.9 In view of French intellectual pre-eminence in the seventeenth and eighteenth centuries, a focus on French texts is obviously defensible; but Foucault does not present us with a principled reason for the particular choices he has made, let alone for the geographic delimitation of the phenomena he is discussing. Are the epistemes and epistemic ruptures that he claims to have uncovered worldwide phenomena, or are they restricted to specific parts of Europe? If the latter, do they include Eastern Europe, in particular the Russian empire? If not, where should one draw the boundary, and how should epistemic divergences between different parts of the world be explained?

There are a number of answers to these questions. Some approaches proceed from an a priori assumption of a 'world time'. This notion originates in Martin Heidegger's philosophy but developed into the very un-Heideggerian doctrine that historical developments must occur simultaneously worldwide, which at times leads to a mechanical search for near-equivalents for, say, some of the

prototypical features of the European Enlightenment in other civilizations or traditions. Another, initially more plausible and long dominant approach has it that modernity originated in Europe, from which it gradually spread to the rest of the world. This 'diffusionist' approach was, of course, part and parcel of a self-congratulatory narrative of a European mission civilisatrice; but it down-played or ignored the internal dynamics of non-Western societies. It also failed to account for some processes of modernization that occur too quickly to allow for an explanation in terms of a relatively slow process of cultural diffusion. A third approach, which may be called 'interactional', has been suggested by the likes of Cambridge historian Christopher Bayly, who argues that similar historical patterns of modernization have emerged in different parts of the world, at first largely independent of each other, but increasingly through intensive forms of – often asymmetrical – contact." But, undoubtedly, it is far too early to search for explanatory schemes when even our more empirical investigations in non-Western intellectual history are only in the initial stage.¹²

Another way of tackling these questions is by focusing on the changing character of the specific languages in which knowledge is formulated, and on the linguistic boundaries across which intellectual contacts and influences may evolve. I think that in this respect, it is highly significant that Foucault only discusses questions of signs in the abstract, and does not study the changing roles and status of individual languages of learning, or the role of cultural translation. Indeed, it is the topic of language that most deserves rethinking in the light of his analyses. Foucault has argued that the classical episteme did not involve any notion of time or history as in any way essential to things human. It has been argued, however, that the allegedly monolithical classical age itself contained a significant rupture. Broadly speaking, the seventeenth century was dominated by debates concerning artificial languages as the optimal means of representation (see, for example, the discussions in authors like Leibniz, Wilkins, and Dalgarno, and the theories about pictography analyzed elsewhere in the present book), whereas in the eighteenth century the question of the origin of language took center stage, as witnessed in discussions in Condillac, Rousseau, Herder, and many others.¹³ In the seventeenth as well as in the eighteenth century, moreover, a rather more complex awareness of history and temporality was in existence than is allowed for by Foucault's suggestion that the classical period as a whole is marked by an ahistorical order of knowledge representing an equally unchanging order of things. Thus, Aarsleff has noted that during the seventeenth century, Adamicism, or speculation about the original language spoken by Adam and Eve, is in fact a more fundamental notion than representation.¹⁴ Pace Aarsleff, however, the influential eighteenth-century thinker Etienne de Condillac, in his Essai sur les origins des connaissances humaines (1746), does not quite make 'time and progress into the

foundations of the human sciences'; for example, he describes linguistic change as a succession of discrete stages rather than as a truly diachronic or historical development.¹⁵

But perhaps more important than these descriptive aspects is the complex analytical role of language in the period studied by Foucault. In fact, Foucault does not systematically question the role of specific languages at all; despite his focus on signs, Foucault appears not to explore how specific languages may in fact be constitutive of specific knowledge systems. 16 Foucault only makes his own linguistic turn more explicit and systematic in The Archaeology of Knowledge, where he talks of discursive formations rather than systems of knowledge; but the discussion in this work proceeds at a very high level of abstraction, merely talking about discursive formations in general, without noting phenomena such as language shifts, multilingualism, and the like. There are reasons to think, however, that a more consistent 'linguistic turn' and a more analytical concern with the languages used to articulate knowledge may yield some valuable new insights in the historiography of the humanities. In particular, the study of 'language ideologies' seems promising here, i.e. the changing ways in which language is constituted and rearticulated as both a means and an object of knowledge and simultaneously as an object of social or even political concern. Thus, it has recently been argued that changing political conceptions of language, culture, and tradition have been crucial for the articulation of Western European modernity, and for the specific forms of inequality (Eurocentrism, racism, and the like) that have accompanied it.17

In short, an archaeological account of discursive formations can be fruitfully supplemented by an anthropological account that systematically explores the changing interrelations between structural or grammatical factors, linguistic usage (roughly, what Foucault would call discursive practices), and folk beliefs about language, or what have elsewhere been called 'language ideologies'. It has been argued that fully fledged explanations of changing linguistic practice should pay attention to the complex interaction between linguistic structure, language usage, and linguistic ideology. This would seem to be especially relevant for a history of the humanities, in which specific languages, and language in general, are not only the medium but often the object of learning.

Ironically, even though *The Order of Things* is very much about signs and the sciences of language, Foucault fails to thematize one crucial linguistic development of the long period he is discussing: the shift from Latin to vernacular languages in early modern Europe and similar linguistic shifts occurring elsewhere in the world at around the same time. This point is so crucial that I will elaborate on it in more detail.

3 Vernacularization and the rise of the humanities

For the analysis of the rise of the humanities – and indeed the natural sciences – in early modern Europe, one would like to have a systematic discussion of the hugely important – if complex and contradictory – gradual shift from Latin to vernacular as languages of learning, which was anticipated by the shift to vernacular languages like Italian, French, and English as languages of written literary expression that had been prepared by developments as early as the eleventh century CE, but gained pace from the fourteenth century onwards. In this respect, developments in the humanities may have anticipated, and perhaps even shaped, developments in the natural sciences. Thus, it has been argued that one of the reasons for Galileo's success in promoting the new science of physics was the fact that he wrote in Italian, that is, in a language that was accessible – and convincing – to a wider audience. If this suggestion is correct, Galileo's success was at least in part predicated on the changing practices and ideologies of vernacular language of early modern Europe.

This process of the promotion of spoken vernaculars that had hitherto not been considered worthy of the written expression of learning and high literature has been called 'vernacularization'.20 These processes have been relatively well documented; in the case of Europe, the period concerned began with the emergence of the Romance languages around 1000 CE. Remarkably, however, as Sheldon Pollock observes, similar processes of 'vernacularization' took place elsewhere in the world around the same time and apparently uninfluenced by developments in Europe.²¹ Another, and for our purposes more directly relevant, wave of vernacularization occurred around the seventeenth and eighteenth centuries, when vernacular languages also became languages of learning. Again, these processes were not unique to Europe. In the eighteenth century, South Asia witnessed the emergence of Urdu as a new language of high culture (involved in poetry as well as learning) that was distinct from Persian, which had hitherto been the language of the court, and from the languages of Muslim and Hindu learning (Arabic and classical Sanskrit, respectively). The rise of Urdu implied a cultural convergence and the development of a common language of high culture among Hindus and Muslims alike.

These non-Western processes of vernacularization can only partly, if at all, be explained as inspired by European ideas or pressures, since they occur too early for any explanation in terms of a hegemonic influence of Western imperialism. Thus, in the eighteenth-century Ottoman empire, the earliest Greek linguistic innovators, although they were undoubtedly familiar with European Enlightenment scholarship, were primarily driven by a domestic revolt against church-controlled learning. Their attempts at linguistic reform were hesitant, contradictory, and fiercely contested. At first, Eugenios Voulgaris (1716-1806) attempted

to revive the ancient language of Plato and Aristotle as distinct from the church *koiné*, ironically for the purpose of translating the modern Lockean epistemology; not much later, Iosipos Moisiodax (approx. 1725-1800) tried to make the 'vulgar' dialect spoken by the uneducated population into the basis for a modern language of learning that could be more quickly learned than the *koiné* of the church with its complex and archaic grammar. More successful than either of these attempts, however, was the project of creating a new and purified language (later called *katharevousa*, literally 'purified'), pioneered by Adamantios Korais (1748-1833). These new language varieties were closer – but not identical – to the dialects spoken in the empire. They reflect not only changing concerns of the state, but also the educational aspirations of an increasingly self-conscious and secular, Greek-speaking Ottoman merchant bourgeoisie.

This project of creating a new public language as the adequate basis for a new Greek civilization involved not only a language purified of colloquial elements and Ottoman Turkish borrowings, but also the creation of neologisms for various concepts of education and science, politics, and culture, rather than the promotion of colloquial forms to the new standard.²² There are some indications that these Greek attempts at modernization also inspired other linguistic reform movements in the Ottoman empire. Thus, Serif Mardin observes that the expansion of the state bureaucracy led to a desire for a simplified Turkish as a language of administration, which was at least in part stimulated by Greek officials, or dragomans, in the Ottoman administration.²³

Elsewhere, I have argued that new public uses of vernacular languages like modern Greek and Turkish were crucial to the emergence of a 'public sphere' in the eighteenth- and nineteenth-century Ottoman empire. What is more, the multilingual character of this new Ottoman public sphere considerably complicates existing historical analyses of the public sphere, which generally ignore such questions of language.²⁴ Here, however, I would like to call attention to the importance of such early modern processes of vernacularization for the emergence of the modern humanities in Europe.

The process of vernacularization was not only crucial for the history of the humanities, it also paved the way for the emergence of the modern nation state. Famously, Benedict Anderson has argued that sacred languages like Latin and Hebrew (to which one could, and indeed should, add Sanskrit, Classical Arabic, Persian, and Classical Chinese or Wenyan) were gradually replaced by 'a motley plebeian crowd of vernacular rivals', which by implication were no longer religious but secularized.²⁵ But vernacularization involves changing attitudes not only to languages of religious scripture, but also to languages of classical literature. In the European case, Greek and especially Latin also served as topics for classical literary education. This more worldly or secular literary importance became

especially pronounced in Renaissance humanism. But also elsewhere, the great cosmopolitan languages, like Sanskrit among Hindus in South Asia and Persian in large parts of the Islamic world, had a status that was literary as much as religious. This literary dimension of both classical and vernacular languages considerably complicates the picture that Anderson sketches of the rise of modern nationalism, in which vernacularization is treated as virtually identical to, or at least a parallel development to, secularization. But I will not enter into a discussion of these matters here.²⁶

Another way in which the early modern humanities may have shaped modern nationalism is through the changing role of classical learning in higher education. Most famously, in nineteenth-century Prussia, the Greeks became the model for the Humboldtian (and, increasingly, German nationalist) educational ideal of Bildung in the service of the modern state. The classicist appreciation of ancient Greece had gained a new impulse in the mid-eighteenth century, when classical Athens increasingly gained prominence over the Roman empire as an educational and cultural (and indeed political) model. Although Anderson points out the role of classical scholarship and the development of neo-Hellenic nationalism from the late eighteenth century onward, he does not discuss the changing role of humanism and later classical scholarship in the articulation of secular nationalism in Western Europe.²⁷ His picture of modernization as secularization, and of the replacement of the sacred language of empire by the secular vernacular of the nation, is undoubtedly attractive. It overemphasizes, however, the religious dimension of the classical languages. In fact, in Europe, humanistic as much as religious concerns gave Latin such a central place in higher education. Thus, in the eighteenth century, it was a new appreciation of classical Greece, and in particular Periclean Athens as opposed to imperial Rome, that informed the French patriotism that was to culminate in the French Revolution. It also paved the way for the later Romantic nationalism of Germans and of other nation states that were emerging.28

One crucial feature of vernacularization, and perhaps a crucial aspect of the Enlightenment at large, is the steady growth of the reading public. As a result, the long-standing opposition between the educated elite and the illiterate masses started breaking down. Many earlier philosophers, ranging from Plato to Saint Thomas Aquinas and Ibn Rushd (Averroes), had held that philosophy was not to be taught to the masses. The process of vernacularization allowed for language varieties much closer to the spoken dialects to be taught at school, thus making it feasible for increasing numbers of children to acquire modern learning. Thus, vernacularization paved the way for mass education and indirectly for the concomitant nationalism. At present, this process is incompletely understood, as is the role of the humanities in it. However, it may well be that the importance of the humanities for the rise of the modern nation state is rather greater than is generally thought.

4 Islam in the Dutch Enlightenment: the case of the Spinoza circle

I would like to illustrate some of the general claims outlined above with a few brief and preliminary remarks on the circle around Spinoza. This circle was not only an important intellectual force in the Dutch Republic. Recently, a decisive international intellectual-historical role has been claimed for it as well, as the epicentre of what has come to be called the 'Radical Enlightenment'. In his 2001 study, Radical Enlightenment, Jonathan Israel argued that these views found their most coherent and most influential formulation in Spinoza's writings, and that the full extent and importance of this radical movement can only be noted when we systematically look across national and linguistic boundaries. Further, in his later Enlightenment Contested (2006), Israel calls attention to Enlightenment views on, and appreciation of, the non-Western world.29 Here, I would like to take these claims a bit further yet, and suggest that a case can be made for the hypothesis that the experience of the non-Western world exerted a constitutive influence on many Enlightenment thinkers and indeed on Spinoza himself. I would like to sketch a preliminary argument along these lines, focusing on the Spinoza circle's interest in things Islamic, and on some aspects of Spinoza's political philosophy.

The Spinoza circle did indeed display a remarkable interest in things Islamic. This interest becomes clear from the translations of Islamic works undertaken by its members. Most importantly, in 1657 Jan Rieuwerts (1639-?) published a Dutch translation of the Qur'an based on the French version; remarkably, the translator, Jan Hendrik Glazemaker (1620-1682), was also the first to have translated the works of René Descartes into Dutch.30 Other early translations concerned the Persian poet Saadi (pen name of Abu Muslih bin Abdallah Shirazi (d. 1283 or 1291), whose Golestan was rendered in Latin in 1651 (significantly titled Rosarium politicum, in an apparent attempt to emphasize the work's extensive discussions of the morality of government), and published in a Dutch version by Jan Rieuwertsz in 1654; and, perhaps most famously, Ibn Tufayl's (1105-1185) philosophical tale, Hayy ibn Yaqzân, by an anonymous translator whose initials 'S.D.B.' have been read as standing for Baruch de Spinoza's name in reverse. The translation was probably made at the behest of the study circle Nil volentibus arduum, which counted many close friends of Spinoza's among its members; it has even been suggested that the translation was even undertaken at the request of Spinoza himself.

This is not to say, of course, that Spinoza or the members of the social networks he belonged to were necessarily sympathetic to the religion of Islam, the prophet Muhammad, or the Islamic powers of their own era (most notably, the Ottoman empire). Thus, in a 1671 letter to Jacob Ostens, Spinoza argues that his philosoph-

ical doctrines imply that Muhammad is an impostor because he abolishes the freedom allowed by the religion revealed to us by natural and prophetic light. In the same letter, Spinoza admits that the 'Turks' [i.e. the Ottomans] possess the spirit of Christ in so far as they honor God by practicing justice and love towards one's neighbours. Elsewhere, however, most importantly in the Tractatus politicus, he suggests that the Ottoman empire owes its stability to an absolute monarchical rule that reduces the population at large to a state of 'slavery, barbarism, and solitude',32 It seems that Spinoza owes much of these and other observations on the Ottoman empire to the extensive discussion of this country in Jan and Pieter de la Court's Consideratien van staat, more usually called the Polityke weegschaal or Political Scales (1661); but the stereotype of Oriental despotism and slavery as the rhetorical opposite, or Other, of Western republicanism based on liberty was much more widespread.33 Spinoza's indebtedness to both De la Court's Polityke weegschaal and Franciscus van den Enden's Vrije politijke stellingen (1665) has been noted before; but the concern with Islam as a religion, and with the image of the Islamic world of the age, that is very much present in the republican writings of the wider Spinoza circle of the time has not yet been explored.³⁴

This holds true even of Spinoza himself: despite this open criticism of both the religion and politics of Islam, Spinoza is rather more indebted to Islamic sources than he might appear at first sight. Indirect traces of Islamic philosophical traditions may be found in Spinoza's thought, especially as mediated by medieval Jewish thinkers like Maimonides and Gersonides, whose work was shaped decisively by the elitist and quietist political-philosophical tradition of Muslim Spain. Spinoza, too, was a Jewish philosopher, obviously not in the sense of being either an observant Jew or a recognized member of the Jewish community, but in the sense of belonging to, or reacting to, a Jewish philosophical tradition. As the latter is literally unthinkable without its own background in the Arabic-Islamic philosophical tradition (Maimonides even wrote his main work, the 12th-century Guide of the Perplexed, in Arabic), Spinoza may be said to derive at least part of his own philosophical preconceptions directly or indirectly from this Arabic-Islamic philosophical tradition. These traces were explored in some detail in H.A. Wolfson's 1934 study The Philosophy of Spinoza, but this author's treatment suffered from a number of methodological problems.³⁵ Here, I can mention only a few preliminary points, intended to suggest the fruitfulness of exploring these lines of investigation rather than to conclusively establish my case. I will discuss, first, the question of prophecy, and second, the relation between mass and elite. On both counts, Spinoza appears clearly indebted to Maimonides (even though he largely rejects much of the latter's particular convictions on these matters) and, through him, indirectly to Arabic-Islamic thinkers such as, most importantly, al-Fârâbî.36

Much like Spinoza, al-Fârâbî sees religion as involving laws rather than philosophical doctrines and arguments, and as such it is intended for the illiterate or uneducated masses. Equally familiar to Spinozists will be al-Fârâbî's distinction between mass and elite, and the suggestion that the latter have no need for the revealed laws of religion. Common to both al-Fârâbî and Maimonides is the conviction that religious prophecy is an emanation from the supra-human active intellect that primarily works on the human imagination rather than on the intellect, even though the latter may be involved as well.³⁷ Concomitant to this epistemological doctrine is the claim that the sacred texts of revealed religion contain a rhetorical formulation of abstract philosophical truth.³⁸ Maimonides, however, staying rather closer to the narrative of revelation than al-Fârâbî does, singles out Moses as the only prophet to whom God spoke directly, the others receiving their prophesies merely through an intermediary angel. This distinction does not appear in al-Fârâbî; in fact, the latter's book al-madîna al-fâdila is remarkable for the absence of any explicit reference to Islamic revelation or Muhammad's prophecy. Nowhere in this work does al-Fârâbî suggest that Islamic revelation is qualitatively distinct from, or superior to, any other prophecy; instead, we find not only the doctrine that all revealed religions are mere rhetorical formulations of an abstract philosophical truth, but also the claim that cities with different religions may all be virtuous. Like Spinoza, al-Fârâbî and Maimonides also see religious revelation, as communicated through prophecy, as a matter of laws.

The main difference with Spinoza is that al-Fârâbî and Maimonides treat religion and rhetorical argument as not fundamentally different from the demonstrative proofs of philosophy; they do not maintain a strict distinction between philosophy as sole domain of truth and rhetoric as, by definition, the domain of falsehood. For Spinoza, rhetoric belongs to the domain of fantasy and the passions, which are also the sources of superstition; hence, rhetoric is excluded from the domain of knowledge proper. On this point, Spinoza shares the generic distrust of rhetoric that also emerges in contemporaries like Descartes and Hobbes.

A second common feature of prophecy, according to Spinoza, is that it is formulated in simple and concrete language rather than general and abstract philosophical terms. It also works through the imagination rather than through the intellect. A social-political corollary of this linguistic doctrine is the idea that religious revelation is intended for, or addressed to, the uneducated masses (vulgus, in Arabic 'âmma) rather than the schooled elite (Arabic khâssa), and in the form of laws rather than philosophical doctrines. To this, Spinoza adds that laws have a different linguistic status, in that they are to be obeyed rather than believed.

On all of these points, Spinoza in fact appears closer to al-Fârâbî than to Maimonides, whose arguments often rely on the authority of Biblical narratives rather than that of philosophical argumentation. It should be added, however,

that we have no hard evidence of him being directly acquainted with any Islamic philosopher. In fact, he cannot even have known Ibn Tufayl's *Hayy ibn Yaqzân* prior to developing at least part of his own philosophical doctrines, as it was only translated into Latin in 1671, and into Dutch in 1672.

Spinoza's articulation of mass and elite is also informed by his work in areas other than philosophy proper, which may thus be of considerable relevance both to his philosophical work and to an appreciation of his historical role in the history of the humanities. Spinoza, after all, was not only a philosopher and scientist who attempted to introduce a geometrical method into philosophy and entered into a correspondence with Robert Boyle's colleague in the Royal Society, Henry Oldenburg (1619-1677), on the merits of experimental science. He was also a philologist and a grammarian (one is tempted to say, a humanist scholar) dealing with questions of language, rhetoric, and religion. This once again suggests that present-day disciplinary distinctions should not uncritically be projected onto earlier periods: by reading authors like Hobbes, Locke, and Spinoza as only, or primarily, philosophers, we risk ending up with a biased and distorted picture of their work.

Most importantly in the present context, Spinoza also wrote a Hebrew grammar, the Compendium grammatices linguae hebraeae, reportedly at the request of his friends from Nil volentibus arduum who wished to study the holy language (discussed elsewhere in the present book by Piet Steenbakkers).³⁹ Presumably started around 1670, this grammar was still unfinished at the time of Spinoza's death in 1677; it was subsequently published in the Opera posthuma. This work is not only written in Latin; it also uses Latin as a model for Hebrew, as appears for instance from his remark that Hebrew nouns are indeclinable and that grammatical case is expressed by 'so-called nouns' rather than by case endings as in Latin (Compendium, Chapter 9). For Spinoza, Hebrew does not quite qualify as either a 'plebeian vernacular' or a classical sacred language: he explicitly states that he sets out to present the grammar of the Hebrew language, not of the sacred language of the Bible, thus suggesting that this exercise involves less a vernacularization than a secularization of classical Hebrew. Moreover, he notes that he has written this work for those who want to speak the Hebrew language, not just chant it' (Compendium, Chapter 4), suggesting that he wants the use of a classical language to be informed by knowledge of its grammar, without necessarily striving for the education of the vulgus, or the uneducated people.

The latter quote points to a central concern in the Compendium: the problem of the normative and rule-governed character of language. The Bible, he argues, does not supply normative criteria for correct linguistic usage; for those criteria, an explicit and systematic grammar is necessary. But Spinoza's own grammar does more than specify the rules of grammar; it also appears to reflect, or imply, points of philosophical import. Thus, it is both linguistically and philosophically

significant that the Compendium gives a central place to the noun, whereas Spinoza's predecessors, such as Rabbi David Kimchi (1160-1235) and Johannes Buxtorf (1564-1629), proceeded from the verb. Departing from the emphasis on the verb and on the verbal root consisting of three consonants, which Hebrew shares with the other Semitic languages, Spinoza describes Hebrew as a noun-based language. Some commentators have read this preoccupation with the noun as a projection from the centrality of substance in Spinoza's philosophical doctrines.⁴⁰

But we may consider Spinoza's grammatical doctrines not only as inspired by philosophical conceptions; we may also conversely explore to what extent his philosophical doctrines were informed by his linguistic beliefs. This question has not received much attention since the polemical exchanges between Stuart Hampshire, David Savan, and G.H.R. Parkinson in the 1950s; but it is central to a comparative approach to the history of the humanities. 41 Hampshire argues that the geometric method of Spinoza's Ethics amounts to an attempt to free language of the imagination, thus enabling it to express philosophical truth clearly and distinctly; against this, Savan proposes the radical reading that according to Spinoza, words - including philosophical or geometrical ones - cannot adequately express philosophical truth. Parkinson in turn rejects Savan's reading as too radical, arguing that Spinoza himself appears unaware of the complications of his own doctrines on language and thus does not even try to explain how words can convey truth. On Parkinson's account, only some, but not all, uses of universal words' are objectionable. Clearly, the last word on Spinoza's views on language has not yet been said.

Spinoza's linguistic practices and ideologies are also relevant to the processes of vernacularization discussed above, and to the slowly changing conceptions of the appropriate public for philosophical and scientific learning. Most important to our present discussion is the fact that Spinoza wrote his main philosophical works in Latin. This might not seem worthy of attention if Spinoza had not also written several shorter treatises in Dutch, as well as a grammar of Hebrew as discussed above. Initially, one might ascribe his predilection for Latin to a lack of familiarity with Dutch, or a wish to communicate with members of the Republic of Letters living outside of Holland for whom Latin was the obvious language of communication. This seems to be confirmed in an early letter written in Dutch, where he expresses a wish to write down his philosophical thoughts in the language with which [he] was brought up' so that he would be better able to express his thoughts. Presumably, this native language was Portuguese or, perhaps, Hebrew.⁴² His mature philosophical writings, however, were intentionally written in Latin instead of Dutch, Portuguese, or Hebrew for quite another reason also. Spinoza's unwillingness to write - or more importantly, publish - in Dutch resulted in part from prudence vis-à-vis the authorities: works in Latin were less

likely to attract the attention of the censors, or even to lead to prosecution, than Dutch-language publications, which could reach a much wider audience. Others, like his friends Franciscus van den Enden (1612-1674) and Adriaan Koerbagh (1632-1669), were less prudent in this respect and published their more radical ideas in Dutch. Thus, Koerbagh formulated the essentials of Spinoza's ideas in plain Dutch in *Een bloemhof van allerley lieflijkheyd* and *Een ligt schijnende in duystere plaatsen* (both published in 1668); as a result, he was arrested and locked up in the Amsterdam Rasphuis, where he died in 1669. Undoubtedly in connection with these events, Spinoza was adamant in opposing the spread of his own doctrines in Dutch (as distinct from, say, his Dutch-language introduction to the philosophy of Descartes): when, in 1671, he heard of plans to publish a Dutch translation of the *Tractatus theologico-politicus*, he urged his friend Jarig Jelles (approx. 1620-1683) to do whatever he could to prevent its publication; publishing that work in Dutch, he writes, could only result in its being banned.⁴³

Apparently, however, it was not only fear of the authorities that prevented Spinoza from disseminating his views in Dutch, but also fear of the masses, or at the very least the conviction that it is useless to try to communicate philosophical truths to them in a language they can easily understand. In this respect, Spinoza stands closer to the premodern distinction between mass and elite than to modern conceptions of the public sphere. This view of the masses as unfit for being educated also shapes and informs Spinoza's philosophical doctrines, most notably in the Tractatus theologico-politicus. Thus, in his preface, Spinoza writes that the bulk of humanity will always be driven by irrational fears, implying that it is useless to try to educate them concerning religion, morality, and happiness. 44 Virtually absent in this work are the later Enlightenment belief or hope that the masses can be liberated from their irrational fears through education and the later liberal idea that education, rather than economic independence, is a main prerequisite for citizenship. This suggests, among other things, that classical republicanism not only maintains views on education different from those of liberalism, but also a distinct ideology of language.

Implicitly, Spinoza treats Latin as the language of the educated elite that is open to philosophical and rational thinking, and Dutch as the language of the masses for whom only revealed religion formulated as a body of laws is suitable. Hebrew takes up an uneasy position between them, being for Spinoza neither an ontologically privileged sacred language – or a language of learning – like Latin, nor a vulgar or vernacular medium like Dutch. Thus, Spinoza's strict, and for all practical purposes unbridgeable, opposition between mass and elite can be traced back to thinkers from the Arabic-Islamic philosophical tradition, such as Maimonides, Ibn Tufayl, Ibn Bâjja, Ibn Rushd (Averroes), and al-Fârâbî, while it also reflects a distinct, and early, phase in the process of vernacularization.

As noted above, Spinoza also displays a far more negative attitude to rhetoric than do al-Fârâbî, Maimonides, and the scholastic tradition more generally. In fact, Spinoza's (and others') strictures against rhetoric are indicative of new attempts to regiment language and purify philosophy and science, as domains of literal language and truth, and concomitantly to dismiss rhetoric as a domain of the figurative, that is, of falsehood and the passions. Spinoza thus appears to be engaged in an attempt to purify speech from the imagination and the passions, and thereby to constitute an entirely novel entity called 'language' that primarily serves purely factual and descriptive rather than emotional or rhetorical purposes. Similar attempts were made by his contemporaries Hobbes and Locke; the very contradictions in their attempts suggest that this process of purification was only in a hesitant initial stage at the time.⁴⁵

Like other authors of his age, Spinoza displays a concern with the emergence of the vernacular languages as a medium of learning; but his attitude to this process clearly reflects a premodern distinction between mass and elite. In this respect, Spinoza may be less 'modern' than he is held to be by the likes of Jonathan Israel. For the history of the humanities, the case of Spinoza and his circle suggests that the process of vernacularization did not automatically lead to an expansion of the intended public for humanistic and other learning; rather, this process was rendered more complex by the slowly changing – and possibly contradictory – ideologies of language and of the mass-elite opposition.

5 Conclusion

Several more general conclusions and preliminary suggestions for the study of the history of the humanities emerge from the above considerations. First, I have argued that the units of analysis should be spelled out, and motivated, rather than implicitly assumed. Thus, one should not project back in time the present-day distinction between the humanities and the natural sciences, or between individual disciplines like philosophy, philology, and religious studies, onto a period when these distinctions were not made, or not systematically or consistently made. Nor should the notion of the linguistic area, let alone that of the nation state, simply be assumed as given, or projected back onto a past in which the relation between the vernacular and languages of learning was articulated in very different terms. In fact, the very things that need explanation are precisely the rise of new national identities, based on vernacular languages, and the emergence of nation states with clear territorial boundaries and a sense of identity, based on the ideology of a shared language, a distinct culture and literature, and a common past. The disciplines of the humanities, notably the study of language, folklore, and history, played an important, if not cru-

cial role in the formation of these national identities. These processes themselves did not occur until the nineteenth century, but the earlier process of vernacularization paved the way for them. One way of thematizing such changing disciplinary, linguistic, and political conceptions and distinctions is by tracing the rise and contestation of individual disciplines; another is by exploring long-distance intellectual contacts that cross, or even challenge, national and linguistic boundaries.

Second, I have argued for paying more detailed attention to the constitutive, if highly variable and contested, role of language in the changing constellations of knowledge systems or epistemes. Not only does the worldwide process of vernacularization and the more specifically Western changing relation between rhetoric and philosophy, or between eloquence and knowledge, merit further exploration; the study of language ideologies, or folk beliefs about words and their societal and political roles, may also yield new insights into the changing epistemological and political aspects of the humanities, varying from the relaton between logic and rhetoric to the shift from premodern polis, empire or republic to the modern nation state.

Third, I have made a brief foray into the study of such long-distance connections and changing concerns with language among the seventeenth-century circle around Spinoza, focusing on signs of interest in things Islamic, and on possible sources of inspiration for Spinoza's thought in Islamic philosophy. Spinoza's rearticulation of the oppositions between rhetoric and philosophy, and between mass and elite, not only hints at the complexities of the process of vernacularization during this period, it also suggests that the experience of non-Western traditions may have contributed to the shaping of the humanities in early modern Europe as much as they have arguably shaped the early modern natural sciences. 46 For this reason, one should beware of tacitly imposing either disciplinary, linguistic, or geographical boundaries on one's analyses. Although the above discussion presents only a preliminary account of these questions, I hope that it suggests an example for fruitful future research. A comparative history of the humanities, in short, may profit from an approach that takes neither disciplinary nor national or linguistic boundaries as given, but which instead focuses precisely on the constitution and contestation of such boundaries.

Notes

- R.H. Robins, A Short History of Linguistics (4th ed.) (Longman, 1997); R. Pfeiffer, A History of Classical Scholarship (3 vols.) (Clarendon Press, 1968-1976).
- Thus, to mention only two recent examples, James McLellan and Harold Dorn's Science and Technology in World-History (Johns Hopkins University Press, 2006) places the development of the natural sciences in a world-historical framework that involves extensive

- discussion of the sciences in Ancient Egypt, China, the Islamic world, and India; and David Lindner's *The Beginnings of Western Science* (2nd ed. University of Chicago Press 2008) discusses at length the Islamic sciences and their paramount importance for the development of science in Europe up to 1450 CE.
- 3 Steven Shapin and Simon Schaffer, Leviathan and the Air-Pump: Hobbes, Boyle and the Experimental Life (Princeton University Press, 1985).
- 4 Cf., in particular, A. Grafton & L. Jardine, From Humanism to the Humanities: Education and the Liberal Arts in Fifteenth- and Sixteenth-Century Europe (Duckworth, 1986); A. Grafton, Defenders of the Text: Traditions of Scholarship in an Age of Science, 1450-1800 (Harvard University Press, 1991).
- 5 M. Foucault, Les Mots et les choses: une archéologie des sciences humaines (Gallimard, 1966); English translation The Order of Things: An Archaeology of the Human Sciences (Tavistock, 1970).
- 6 M. Foucault, L'Archéologie du savoir (Gallimard, 1969).
- Quoted in M. Foucault, Dits et écrits (Gallimard, 1994), vol. I, 25-27.
- See especially M. Foucault, Surveiller et punir (Gallimard, 1975). Later studies taking a practical perspective of the history and anthropology of the sciences are, most famously, Shapin and Schaffer's Leviathan and the Air-Pump already mentioned above, and the various writings of Bruno Latour like, most relevantly in the present context, We Have Never Been Modern (Harvard University Press, 1993); the latter, however, is strangely silent on the humanities, and indeed on the topic of language, even though Latour mentions language or discourse as a crucial aspect or dimension of what he calls the 'modern constitution' along-side nature and politics, and which he elsewhere describes as 'the three axes of modernity'.
- 9 H. Aarsleff, From Locke to Saussure: Essays on the Study of Language and Intellectual History (Athlone, 1982): 23.
- 10 See e.g. R. Schulze, 'Was ist die islamische Aufklärung?', Die Welt des Islams 36 (1996), 276-325.
- 11 C.A. Bayly, The Birth of the Modern World, 1780-1914 (Blackwell, 2004); for criticism of such an approach, alleging that it downplays and thereby trivializes the often destructive effects of imperial rule, see Partha Chatterjee, The Nation and its Fragments (Princeton NJ, 1993), esp. 27-29.
- 12 For more detailed statements on the Chinese, Indian, and Islamic world, see the various papers presented at a 2006 workshop on comparative intellectual histories of early modern Asia, IIAS Newsletter 43; available electronically at URL: http://www.iias.nl/?q=newsletter-43 (last accessed January 22, 2008).
- 13 Aarsleff, From Locke to Saussure; cf. U. Eco, The Search for the Perfect Language (Blackwell, 1995).
- 14 Aarsleff, From Locke to Saussure, 22-23.
- 15 Aarsleff, From Locke to Saussure, 13; cf. E.B. de Condillac, Essay on the Origin of Human Knowledge (Cambridge University Press, 2001), esp. 176-179.
- 16 Foucault seems to conflate this problem with the neo-Kantian claims of Whorfian relativism. Thus, in a 1966 letter, he writes that for him, 'the problem is not language, but the limits of what can be said' (*Dits et écrits*, I: 28).
- 17 R. Bauman & C.L. Briggs, Voices of Modernity: Language Ideologies and the Politics of Inequality (Cambridge University Press, 2003). Cf. my review article in Journal of Pragmatics 41 (2009), 173-179.
- The key text calling attention to the explanatory importance of linguistic ideologies is undoubtedly M. Silverstein, 'Language structure and linguistic ideology', in P.R. Clyne a.o.

- (eds.), The Elements (Chicago Linguistic Society, 1979). For an overview that emphasizes the joint importance of ideology and structural and pragmatic factors, see William F. Hanks, Language and Communicative Practices (Westview, 1996), esp. chapter 9.
- 19 Paul Feyerabend, Against Method (Verso, 1975), chapter 11.
- 20 Cf. in particular S. Pollock, 'Cosmopolitan and Vernacular in History', Public Culture 12/3 (2000), 591-625.
- 21 Pollock, 'Cosmopolitan and Vernacular', esp. 607-608.
- 22 For the vagaries of the Greek attempts at linguistic reform, see G. Horrocks, Greek: A History of the Language and its Speakers (Longmans, 1997), esp. 344-365. For the wider intellectual history of the so-called 'Neohellenic Enlightenment', see G.P. Henderson, The Revival of Greek Thought, 1620-1830 (State University of New York Press, 1970).
- 23 S. Mardin, 'Some Notes on an Early Phase of the Modernization of Communications in Turkey', Comparative Studies in Society and History 3 (1961), 250-271.
- 24 Cf. my 'Comparatieve filosofie van het koffieleuten', Krisis 2 (2007), available online at URL: http://www.krisis.eu/#htmlpart=issues.php?issue=2007,%20issue%202 (last accessed July 21, 2009); contra J. Habermas, The Structural Transformation of the Public Sphere (MIT Press 1989).
- 25 B. Anderson, Imagined Communities: Reflections on the Origin and Spread of Nationalism (2nd ed.) (London: Verso, 1991), 70.
- 26 Cf. Anderson, Imagined Communities. For more criticism of Anderson's account of the rise of vernacular languages as paving the way for nationalism, see e.g. M. Silverstein, 'Whorfianism and the Linguistic Imagination of Nationality', in P.V. Kroskrity (ed.), Regimes of Language: Ideologies, Polities, and Identities (School of American Research Press, 2000), 85-138.
- 27 Anderson, Imagined Communities, 72.
- There was another factor contributing to the rise of ancient Greece as a model: the Philhellenic movement of support for the Greek independence movement in the late eighteenthand early nineteenth-century Ottoman empire. In other words, a good case can be made for the claim that Western European (and in particular German) Romantic nationalism was inspired by the Greek national liberation movement rather than the other way around.
- 29 Cf. J. Israel, Radical Enlightenment (Oxford University Press, 2001); Israel, Enlightenment Contested (Oxford University Press, 2006), esp. chapter 24.
- 30 Mahomets Alkoran, door den heer Du Ryer uit d'Arabische in de Fransche taal gestelt; beneffens een tweevoudige beschryving van Mahomets leven. Alle van nieus door J.H. Glazemaker vertaalt, en te zamen gebracht (Amsterdam: Houthaak, 1657).
- 31 Epistle 44.11, in B. de Spinoza, Briefwisseling (Amsterdam 1977).
- 32 Spinoza, Tractatus Theologico-Politicus, VI.4.
- According to Wim Klever, URL: http://www.fogliospinoziano.it/artic17b.htm (last accessed July 21, 2009), Spinoza employed the second edition of this work. For the rhetorical opposition between Western liberty and oriental despotism, see e.g. P. Springborg, Western Republicanism and the Oriental Prince (Polity Press 1992).
- Van den Enden's Vrije politijke stellingen were rediscovered in the early 1990s and published in 1992 by Wim Klever. For discussions of Spinoza and republicanism, see E.G.O. Haitsma Mulier, The Myth of Venice and Dutch Republican Thought in the Seventeenth Century (Assen, 1980), and more recently R. Prolhovnik, Spinoza and Dutch Republicanism (Palgrave MacMillan, 2004).
- 35 H.A. Wolfson, The Philosophy of Spinoza, 2 vols., (Harvard University Press, 1934); for another preliminary statement emphasizing the parallels between Spinoza and the An-

- dalusian thinker Ibn Bâjja, cf. R. Arnaldez, 'Spinoza et la pensée arabe', Revue de synthèse 89-91 (1978), 151-172. For Spinoza as a thinker standing in a specifically Jewish tradition, see S. Nadler, 'Is Spinoza a Jewish Philosopher?', Studia Spinozana 13 (1997), 64-80.
- For an edition and translation of al-Fârâbî's main work, al-madîna al-fâdila (The Virtuous City), see R. Walzer, Al-Farabi on the Perfect State (Clarendon Press, 1985).
- al-Fârâbî, al-madîna al-fâdila, Chapter 9, 15; cf. Maimonides, Guide of the Perplexed II.36: 'Prophecy is, in truth and reality, an emanation sent forth by the Divine Being through the medium of the Active Intellect, in the first instance to man's rational faculty, and then to his imaginative faculty; it is the highest degree and greatest perfection man can attain: it consists in the most Perfect development of the imaginative faculty.'
- 38 al-madîna al-fâdila, Chapter 15; Guide to the Perplexed, II.32-48.
- For an English translation, see e.g. M.J. Bloom, Hebrew Grammar (Compendium Grammatices Linguae Hebraeae (New York, 1962).
- 40 Z. Levy, 'Normativity in Spinoza's Hebrew Grammar', Studia Spinozana 3 (1985), 351-390. Cf. A.J. Klijnsmit, 'Spinoza and the Grammatical Tradition', Mededelingen vanwege het Spinozahuis 49 (1986).
- 41 S. Hampshire, Spinoza (Pelican Books 1951), esp. p. 18-20; D. Savan, 'Spinoza and Language', Philosophical Review 67 (1958), 212-225; G.H.R. Parkinson, 'Language and Knowledge in Spinoza', Inquiry 12, 15-40.
- 'Ik wenschte wel dat ik in de taal, waar mee ik op gebrocht ben, mocht schryven. ik sow mogelyk myn gedaghte beeter konnen uytdrukke' (Epistle 19, January 5, 1665); in Spinoza, Briefwisseling, 163.
- '[I heard] that my Tractatus theologico-politicus had been translated into Dutch, and that someone planned to have it printed. I therefore ask you urgently to take the effort of inquiring about this, and if possible to prevent its being printed. This is not only my request, but also that of many of my friends and acquaintances, who would not like to see the book being banned, as will undoubtedly happen when it is published in Dutch' (Epistle 44, February 17, 1671); in Spinoza, Briefwisseling, 292.
- 'Novi deinde aeque impossibile esse vulgo superstitionem adimere quam metum ... Vulgus ergo et omnes, qui cum vulgo iisdem affectibus conflictantur, ad haec legenda non invito.' ('I also know that it is equally impossible to take away the masses' superstition as their fear ... Hence, I do not invite the uneducated masses, and all those who share the same affects with them, to read this.') Cf. Y. Yovel, 'Spinoza: The Psychology of the Multitude and the Uses of Language', Studia Spinozana 1 (1985), 305-333.
- 45 Cf. Bauman & Briggs, Voices of Modernity, esp. chapter 2, 'Making Language Safe for Science and Society: From Francis Bacon to John Locke'; cf. also P. Pettit, Made With Words: Hobbes on Language, Mind, and Politics (Princeton University Press, 2008).
- 46 For the latter argument, see e.g. George Saliba, Islamic Science and the Making of the European Renaissance (MIT Press, 2007).

Bridging the Gap

A Different View of Renaissance Humanism and Science

CYNTHIA M. PYLE

I was overwhelmingly dominated by two passions, a passion for science and another equally ardent one for the humanities.
... [I]t is impossible to live reasonably without science, or beautifully without arts and letters.

George Sarton'

The humane sciences

The topic and goals of this conference are admirable ones: to initiate an ongoing investigation of the history of the humane sciences not unlike that of the history of the physical and natural sciences conceived of and promoted by George Sarton at Harvard in the first half of the twentieth century. Of course there has long been a field of the history of scholarship,² but this promises to be more accessible than that, in its implicit nod in the direction of pedagogy through the humanities curriculum, already studied for the Renaissance by such eminent scholars as Eugenio Garin, Paul Oskar Kristeller and Augusto Campana (the latter two of whom independently pointed out in the 1940s the development of the *studia humanitatis* from the *trivium* of the medieval *artes liberales*).³ I wish to add a somewhat different perspective to these questions by calling attention to bridges between the two, in particular the scientific spirit behind these last-mentioned changes – a spirit born, I believe, of the arrival of the license to doubt on the wave of the calamities (plagues, territorial encroachments, the Avignon papacy) of the thirteenth and fourteenth centuries.⁴

I moved into the humanities from biology in the mid-1960s – having decided I wanted to work on broader questions and on a period with which I felt kinship. I then made a discovery regarding the Italian humanism I was learning about: there was a clear analogy between the work that was done in the sciences as I had been

trained to work in them and the work that the Italian humanists were performing on texts. Few scholars at the time, besides the historian of philosophy Eugenio Garin, understood this scientific nature of humanism, which he embedded in the Platonic and historicizing currents of the time, but which he also related to the empirical explorations and technological advances of the Renaissance.⁶

In the laboratory, we had been seeking to learn how things work in the world we live in. We were not seeking – at least not directly – *causes* (philosophical or religious) behind the working of things. We were trying to understand the functioning and mechanisms of things. Experiments were devised to isolate functions and portions of functions from more complex questions, paring down variables to a minimum so that we could see each portion in as little contaminated a way as possible. There was also an attempt – mythologized and idealized for a long time – to abstract ourselves and our views away from the scientific undertakings we were engaged in, to pretend that we were actually capable of *not* interfering subjectively with our experiments.

Ours was a quest for reality: the reality that exists independently of the fact that we see it or how we see it. And we today are coming to know that reality to an increasing and amazing extent, especially through the natural and physical sciences, but also through the humanities. For there are portions of humanistic work – in the sense of work on the humane sciences like literature, philosophy and the various histories – that also give us insight into the world as it really is. As in science, these are often the less visible portions. Small discoveries are made about a painting, a text, a piece of music that give us insight into the workings of the human eye, ear and mind. These discoveries, made in the laboratory of scholarship, infuse the interpretive works of essayists and critics – even novelists, poets, composers and artists – but they are also intrinsically interesting, as manifestations of the human mind at work. (For it is not only psychologists, or even neuroscientists, who study the human mind.)

Because our brains, for anatomical or physiological reasons, like to think in dichotomies and tease out concepts dialectically (to use the modern term), there have long (perhaps always?) been two cultures (as C.P. Snow liked to call them).⁷ Often one culture (in Snow's examples, that of creative writers and artists) is distinguished by its more metaphorical way of thinking; the other (in Snow's examples, that of physical scientists) proceeds analytically and empirically. Both will reach syntheses from these different approaches. The classic examples are of course Plato and Aristotle. Plato had a distinctly metaphorical way of conceiving the world, thinking and writing in moral parables. His student Aristotle moved away from this, to empirically based thought, especially in his zoological work during two years spent on the island of Lesbos, where he dissected and analyzed, in words and drawings, specimens from the sea, with a precision that is extolled

by scientists to this day. What we may decide to call the 'virtual' – but perhaps actually intrinsic – antagonism of these two viewpoints persisted and persists throughout human thought (Western and Eastern).

And yet there are more bridges between these two ways of thinking than many realize, and many people in our own day practice and epitomize both. Numerous scientists of my acquaintance are versed in literature, art, music or history. Fewer of today's humanists (in the loose sense of that word) are versed in science or technology. Yet many humanists practice precise and critical thought, thought of a nature that might be termed scientific, based on its use of logic and rigorous critical reasoning, exposing their thought to the realities of surrounding circumstances and to contradictory ideas.

Years ago, I had the privilege of working on a manuscript in the Biblioteca Apostolica Vaticana which embodies this interdisciplinarity. MS Urbinas latinus 276 is a natural history spanning three centuries. It was written in 1460 and corrected by its author, the humanist Pier Candido Decembrio (1399-1477), who based his text on the thirteenth-century encyclopedia of Thomas of Cantimpré; it was illustrated 130 years later by Teodoro Ghisi, who based himself on the woodcuts of Conrad Gessner of Zurich.⁸

While relying heavily on Cantimprés text, Decembrio exercises a critical spirit, at two levels. First, although his copying of the words of the text is nearly verbatim, his rejection of its syntax is constant and consistent; he considers the text's Latin style inelegant, and he revises it throughout his own book to conform more with classical Latin syntax. In this, he exhibits what many consider to be the quintessential characteristic of Renaissance humanism: an insistence on rhetoric. But there is another level of critique at work here. While Decembrio's use of his source would be thought plagiaristic today, he does weigh the information it presents with a critical eye; his acceptance of the subjects treated by the text is not slavish. He is not bowing to the text's authority because it is old; he is interacting with it, in a dialogue across the ages. Just so, Francesco Petrarca and Niccolò Machiavelli corresponded with their sources in an epistolary dialogue across the ages.

This sort of interaction with the past has something in common with the practice of *imitatio*. *Imitatio* is an important concept in the study of literature, and perhaps especially Renaissance Italian literature. Its singular metaphor is Petrarch's poet, in his *Familiares* (XXIII, 19, 13-14), who, like the bee collecting nectar to make honey, can avail himself of the genius and the style of others, not merely apeing their words, but blending separate elements into one, different and better. This concept is not one of merely copying; it is a vying with others – in this case the authors of antiquity. Again, a kind of dialogue with the past.

Such *imitatio* exists, not only in literature, but in the other arts as well. Josquin des Prez took a folk song, 'L'homme armé', and made it into a great mass. Even in today's popular culture, *imitatio* is at work, unbeknownst to most people: I once heard a man whistling Guillaume de Machaut in an elevator in New York City, and when I commented on that wonderful fact to the whistler, he didn't have the foggiest idea of what I was talking about – he was whistling a pop tune (which I, in turn, had never heard of)!

And (but this is seldom articulated) *imitatio* exists in all fields throughout intellectual history, including the history of the natural and physical sciences. In these sciences, we have imitation of methodologies across disciplines: there is cross-pollination from physics into chemistry and, *ipso facto*, on into biochemistry; certain areas of biology (such as population genetics) and even the so-called social sciences, must use statistical analysis, originating in seventeenth-century probability theory, to arrive at their conclusions.

What we must begin to realize is that the humanists of Renaissance Italy, like writers and artists of all times, were indeed imitating and even emulating their sources, but their imitation was of habits of thought and of approaches to the world, in their quest to learn more and more about that world. This was, in other words, not merely a literary or artistic movement, but an intellectual revolution.¹¹

2 Science and history

I have recently explored the case of a near-contemporary, the art historian Edgar Wind, 12 who, as few may realize, actually embodied a bridge between scientist and historian. Wind was professionally trained as a philosopher, by Ernst Cassirer in Berlin, and wrote his first thesis in 1924 on aesthetics. 13 In his contribution to the 1936 Festschrift for Cassirer, he explored 'Some Points of Contact Between History and Natural Science. 14

In the section of his essay entitled 'Document and Instrument', Wind noted the normality of circular argument in producing documentary evidence, for it is necessary for the historian to know what he is looking for among myriad documents. This is a phenomenon that can perhaps today more acceptably be thought of cognitively as a ricochet or feedback process, ¹⁵ and which Wind compares to the 'dialectic of the historical document'. Wind also understood that laboratory science entails similar circularity or cyclicity in its procedures and thinking.

Interestingly, the sort of dialectic – or argument with one's sources – to which Wind referred can further be compared to many types of what we today call dialectic, from Hegel's (which of course travels in a sort of spiral, evolving through

time into further understandings) all the way back to the *agon* that Jacqueline de Romilly has defined as the necessary element of Athenian democracy.¹⁶ Versions of dialectic are also essential not only to the active doing of laboratory science – in practice a quintessentially democratic, and argumentative, undertaking – but even in the scientist's or the humanist's solitary moments, during the processes of mental feedback already alluded to. Nor, of course, are they unrelated to Kant's antinomies, which underlie his philosophy of history.¹⁷

Wind goes even further (in the second section of his short essay) to explicitly analyze the subjective element so necessary to the doing of science of all kinds. And he is aware that it is never 'pure mind' (which cannot exist independently, in that mind is generated by the brain¹⁸), any more than it is pure material contact, that engages scientific problems. Wind is himself conscious of the subjective intrusion (and even disturbance) implicit in any contact with the researcher's material or object of study, either in the archive or in the laboratory.

Conversely, Wind points out the effects of that research on the researcher and on subsequent events – on history. In the last section of his paper, Wind himself, like Kant before him, brings out the need for the scientist/scholar to dare to become the creator, the poet (no doubt thinking of the Greek *poiein*) and to risk recognizing and glorying in his or her own power to transform.

Wind ends his essay with a call to combine scientific and historical research. And today, that is becoming possible, through the cognitive sciences, in ways he could not have imagined.

3 History and the life sciences

Wind concentrated on the doing of physics. But if instead we consider the historical natural sciences, such as astronomy, geology, palaeontology, and especially the life sciences, natural history and evolutionary biology, we discover a more compatible analogy with the historical and philological sciences of the fifteenth and early sixteenth centuries in Europe. The historical natural sciences deal with phenomena that develop over time; like history itself, their subject matter cannot be experimented on but must be considered as nature's experiments (as the evolutionary biologist Ernst Mayr²⁰ put it).

We may call these natural sciences 'historical' for they all treat of subject matter which unfolds over time: astronomy and cosmology, of the universe; geology, of the earth; evolution, of the myriad forms of life on our planet; palaeontology and natural history, of the particular species of plant and animal life which have evolved over time; and I would add the more literally historical science of archaeology, the study of the traces of human settlement on our planet, begun in the

fifteenth century by Leon Battista Alberti and his contemporaries, as Roberto Weiss pointed out.²¹

This introduction among the sciences of the concept of succession through time places history itself in the company of more compatible areas of natural and physical science than did positivistic attempts to discuss history as a physical science, such as that of Auguste Comte. It will be noted that these other areas in my argument are not what are commonly termed 'social sciences' (branches of social psychology, sociology, anthropology and the like) but, I repeat, historical natural sciences. Even archaeology, though not perhaps a natural science (unless one considers the artifacts of human animal life a part of nature), is a highly technological undertaking, conducted (when possible) under the strict rules of a very literal sifting of data and the location of these data geometrically in grills and layers, along with their analysis and interpretation.

Of course, as with the social sciences, history (again, to an extent, like archaeology) deals with situations and phenomena created by human beings: political, military, social, artistic, musical, literary, theatrical, intellectual phenomena. History must also, like the social sciences, deal with an unmanageably large number of variables.

But while the truly social sciences (sociology, anthropology, psychology) seem to be still struggling with the management of those often intangible variables (emotions, beliefs, visions, human interactions) and how to study them scientifically (though they are now at last able to rely increasingly on the hard evidence of brain physiology – far more reliable than statistics), history itself has long had ways of handling its variables – in part of course by stringing them out chronologically over time in a narrative (in keeping with the way they occur), but more pertinently by seeking out and using evidence which is empirically verifiable (except in extreme cases of expert forgery – and, in fact, even in such cases, once moderate skepticism has entered the picture). Such evidence is of course subject to the vagaries of time: it can be lost, mutilated by fire, water or breakage, or, now, by digital losses in computers. And the record is always incomplete, as it is in the historical natural sciences of palaeontology and evolution.

As far as laws and predictability – so often associated with the physical sciences – are concerned the evolutionary biologist Ernst Mayr first addressed these questions in 1982. He pointed out that biologists seldom ask for laws or generalizations, being intent on learning facts, and that, in fact, applying mathematization or mechanization to the life sciences can result in confusing the issues. He noted that laws lack the flexibility necessary for dealing with the complexity of the life sciences, and that biologists deal instead in concepts – concepts like classification, species, and taxon in systematics; or like descent, selection, and adaptability in evolutionary theory. Such intellectual units are open-ended – open to

revision as new discoveries are made or old ones matured. It is this very revisability that appears blocked when dealing with 'laws' – though there may well be laws on the horizon for the life sciences.

Mayr also discussed predictability, making the distinction between the philosophers' logical prediction and the scientists' temporal prediction. The former can apply, for example, to evolutionary theory and be tested, but it is far more commonly applied in the physical sciences. Temporal (real-time) prediction from laws is rarely possible in the unpredictable life sciences.²²

While admitting the existence of paradigm shifts and revolutions in special cases, like that of the publication of Charles Darwin's *Origin of Species* in 1859, Mayr resisted applying Thomas Kuhn's paradigmatic thesis regarding the history of science, as originally stated, to either the biological sciences or history itself. Rather than a long, steady development of scientific knowledge, Kuhn proposed dramatic and sudden shifts in thinking that interrupt normal science and change its course (I would add, in ways resembling those punctuated equilibria proposed as mechanisms of evolution by Niles Eldredge and Stephen J. Gould²³ in 1972). By means of these shifts, new paradigms of methodology are created within a given science. Yet in Mayr's view, even large discoveries can result in no conceptual changes, and both discoveries and conceptual changes are built on earlier findings and insights. Furthermore, once a paradigm shift has occurred, it coexists with the older ways of thinking and working for varying periods of time – as we in history know only too well.²⁴

We can ask ourselves today, perhaps preferring Mayr's more gradual (but by no means smooth) distinctions, whether the question of the rhythm of discoveries and concept shifts is not, after all, very similar among the different sciences. And in history, we all admit that smaller discoveries and understandings pave the way for large breakthroughs – if not in a black-and-white, dramatic fashion as Kuhn is accused of thinking early in the development of his thesis.

For that matter, is this not the way in which intellectual developments occur in the doing of history (historia rerum gestarum)?²⁵ Must we not seek out the seminal stages of any great shift in the way of looking at things – the point of view – that occurs in a given culture? And, indeed, throughout the unfolding of history itself (res gestae), as in the evolutionary record described by Mayr's work in evolutionary biology and in Eldredge and Gould's hypothesis, do we not see that such shifts coexist over long periods with the cultural matrices they eventually displace (sometimes, as in island population genetics, leading to the development of new species)?²⁶ Is that not the very essence of what are called 'transitional periods' (as if all periods were not transitional)?

4 Renaissance humanist practice

In considering history as science, then, while we remain conscious of the two meanings of 'history' – that of the development of historical events (res gestae) and that of the development of our study of those events (historia rerum gestarum) – we are here concerned, as I have said, with the process, especially the non-narrative portions, of the study of those events rather than their actual occurrences through time. (We shall consider the substantive revelations that occur in the process of writing – the intellectual feedback, rather than stylistic revisions – as part of the analytical phase of the doing of history.)

Now, in our study of history as it was practised in the Renaissance, we must furthermore consider both the context and the techniques of the doing of history. The context is one of great enthusiasm and excitement (and competition) over the rediscovery of lost texts in manuscript, given enormous impetus in the fourteenth century by Francesco Petrarca, or Petrarch (1304-74), but carried to heights in the fifteenth century by the Italian humanists, including Lorenzo Valla (1407-57) and Angelo Poliziano (1454-94), and later by humanists in other countries.

The early part of the fifteenth century witnessed humanists like Valla following in Petrarch's footsteps – working, in fact, on some of the very same codices. The pioneering work on these humanists' scholarship was done in the twentieth century by scholars including Giuseppe Billanovich, Alessandro Perosa, Lucia Cesarini Martinelli, Silvia Rizzo and Mariangela Regoliosi.²⁷ Their original work enabled them to compare the critical, or what we may call the scientific, methods of Petrarch and Valla at work on the same texts. This is the case for both Quintilian and Livy, for both of whose texts we have annotated manuscripts by both Petrarch and Valla.²⁸

Taking the work of these two at least partially Paduan-oriented scholars, Petrarch and Valla, on the Paduan historian, Livy, as an example (while recognizing the thirteenth-century Paduans' – Mussato's and Lovato's – knowledge of and reference to the text, which formed a partial basis for, but did not equal in quality, the intellectual breakthroughs of their successor Petrarch²⁹), we can recognize Petrarch's own substantial work on the text in the two Livy manuscripts he owned.³⁰ Not only did he know enough to acquire these two important manuscripts (in Wind's sense of circular knowledge, or what I am calling a sort of spiralling dialectical, or feedback, knowledge of context and specific case), but he was able both to emend the text through educated guesses and to fill in long passages (in his own hand) from other manuscripts, including one from a different textual tradition.

To consider more specific instances of textual criticism, let us look briefly at Lorenzo Valla's work. Following in Billanovich's footsteps, Rizzo, Cesarini Martinelli and Regoliosi have studied Valla's emendation marks in his copies of both Quintilian and Livy and expanded them plausibly, or suggested possible expansions, in the process uncovering particular techniques used by Valla in his textual criticism.³¹ Regoliosi finds him adopting some abbreviations similar to Petrarch's, but she is also able to confirm his choices through reference to the fiercely invective polemic between Valla and his two colleagues in the Aragonese court of Naples, Bartolomeo Facio and Antonio Panormita.³²

Regoliosi has confirmed Valla's preferred use of ope ingenii, or what we might call the use of the highly educated guess, as opposed to Facio's and Panormita's preference for ope codicum, or a fairly mechanical collation of manuscript sources. She has compared their readings with today's text and decided clearly in favor of Valla's procedure (as have modern editors of Livy). While Valla may or may not have collated manuscripts too, Regoliosi's point is that his scholarly (scientific) emendations of Livy have the advantage of a seemingly subjective procedure - we today might call it intuitive - based on judgments of a paleographical nature. Such judgments can be made by Valla on the basis of his deep knowledge of the Latin language, especially that of Livy, and of the characteristics of scripts from different epochs of the Middle Ages. So they become more than mere expansions of abbreviations; each expansion becomes a thought experiment itself, one informed by previous experience of written shortcuts, and knowledge of Roman history, culture, language and usage. Occasionally, Valla did have to admit that Facio's and Panormita's more mechanical emendations from the collation of several mss reached an acceptable solution; he admitted this through clenched teeth, as Regoliosi puts it. In the end, after Valla's manuscript publication of his Emendationes in 1446-1447,33 the others were so mortified that they actually destroyed the 3rd Decade of the Codex Regius (given to Alfonso d'Aragona by Cosimo de'Medici), which they had corrected by hand, and Alfonso had another copy made.

It must be borne in mind that these skills used by Valla are not merely or even only paleographic or codicological. They are based on an extremely solid and detailed knowledge of the Latin of Livy and his contemporaries (this after all is the author of the lasting tour de force of philology: De linguae Latinae elegantia from about 1440-1444³⁴), as well as an extremely solid and detailed knowledge of the history of Rome itself.

As is well known, he had already (in about 1440) tackled a detective story fraught with political implications: the forged document (uncovered by Cusanus before him in 1433) claiming to prove the donation by the Emperor Constantine of a great part of the Roman Empire to the Church of Rome, supposedly made in gratitude for Constantine's discovery of the Christian faith. This document was forged in the 8th or 9th century, possibly under the aegis of Pope Paul I (757-767),

either by a member of the papal curia or by a sympathizer close to the curia. It masqueraded as a document from the 4th century. Valla was able to consult consular records to expose the rather glaring errors of the forger about, for example, consular dates — who was consul when and for how long — and about Roman Latin usage; developing a most sophisticated technique, he probed the linguistic usages of the document (he knew, for example, as many have noted, that the word satrap, or nobleman, was misused in the document), many of which he recognizes as anachronistic, and some of which he was able to place in the Middle Ages.³⁵

Here, Valla is using methods similar to what Mayr has termed the observational-comparative methods of the observational sciences, including many of the life sciences. While Valla, like practitioners of the historical natural sciences, is unable to perform laboratory experiments on his discontinuous historical records, he is able (with his great intelligence – demanded of today's significant scientists as well, and the quality that makes Petrarch's and Darwin's intellectual feats more significant than those of their predecessors) to make sound conjectures on the basis of past understandings, and to test them against the concepts unfolding in the text before him. This is what Mayr might term controlled observation, and it is as valid in the investigation of history, it seems to me, as in research into what we call the natural sciences today.

In trying to think about history as a science, and to draw parallels between historical and natural scientific methodologies, we must recall that in the natural sciences, hypotheses are formed and tested under various conditions. Ernst Mayr made the point that in the life sciences, nature (meaning circumstances) creates the experiment, the scientist observes it, often from artifacts like fossil bones or the geological record, and draws or infers conclusions. In human history as well, the experiment is created by sometimes very complex circumstances, which leave uneven clues. These clues are read by the historian who draws inferences from them. The difficulty comes in the testing, for, like Valla's emendations, historical interpretations must be inferred from an incomplete historical record – though with gaps less extensive than those in the fossil record.

Like the life sciences, too, history is not obviously amenable to the development of laws from which predictions about future events can be extrapolated – though there are perhaps general trends that can be perceived by astute observers, just as there were trends that could be analyzed by Darwin and that form a synthetic part of his multifarious theory of evolution.

It may be well to realize that since we are (highly developed) animals – even Valla's equally brilliant successor Angelo Poliziano refers to us as a type of animal³⁷ – our social, cultural and intellectual history really is a complex form of natural history, and the only sensible model for whatever science can be discerned in either our making of history or our doing of history (in the sense of analyzing

and interpreting it) will, indeed must, come from the life sciences. However rational we may be, we behave fundamentally as animals – in their excellent as well as their less excellent manifestations.

That other Italian humanist polymath, Poliziano, participated fully in both cultures. Finding himself as a child, after the murder of his father, in the poetically Platonizing and metaphorizing surroundings of Lorenzo de'Medici's circle, Poliziano followed the trends he was taught. The production of his early years was entirely literary, much of it in the vernacular. Its limpid descriptive power and its mythological tropes have been explicitly related to the Platonic mood of the times, and of course to the art of such clearly Platonic colleagues as Botticelli and Michelangelo – one need only think of Botticelli's *Primavera* and *Birth of Venus* (both closely related to Poliziano's imagery), or Michelangelo's poetry, or his feeling for the essence of stone – not to mention Lorenzo's own poetry. Behind all of this was of course the figure of the great Platonist, Marsilio Ficino, whose own works and translations of Plato set the tone for Florentine culture of the time.

Yet, alongside all this metaphor, we can see an empirical bent in the thought of Angelo Poliziano from an early age. It manifested itself even in his youth by an interest in the medical learning of his friends and protectors the Benivieni, and in the ode he wrote on the death of his contemporary, Albiera degl'Albizzi in 1473, when he was 19, including specific references to her symptoms. And in his poetry of the 1470s, while the philosophical context is Platonic to the highest degree, the limpid imagery is concrete and crystaline. This early vernacular poetry was written under the influence of the equally limpid classical poetry of Claudian, Vergil, the *Greek Anthology*, and of Petrarch's own vernacular verse.

At the age of 26, upon his return to Florence from a trip to northern cities, Poliziano left behind the world of Neoplatonic vernacular poetry and, taking up a position at the Studio Fiorentino, was able to devote himself to his new and deepest interests. We find him lecturing on Quintilian and Statius in 1480-1481.³⁸ In his prose introduction to that course, he tells his students (to paraphrase): Go out and do as Cicero did. Cicero went to study the rhetorical methods of the Greeks and, beyond them, those of Rhodes, those of Asia, to make them his own. Follow the practice of Cicero, not merely his style; go out and find your own models.³⁹ It would, I believe, be hard to find a scholastic pedagogue suggesting this.

Even more excitingly, his vision of the Latin language itself is not normative, but historical and, furthermore, evolutive. He tells his students, in essence: Don't think of late Latin as degenerate, decadent, corrupt, or worse; think of it as different!⁴⁰ Linguists of our own day (who pride themselves in their scientific approach to language) speak in exactly these terms.

In his later *Praelectio, Nutricia*, for another course at the Studio Fiorentino on poets and poetry, Poliziano relates the concept to the figure of Orpheus, the semi-

divine son of Apollo and the muse Calliope, at the origins of both poetry and music, and the civilizer of humankind. Poliziano's metaphorical stance is always present, but it is accompanied by his scientific one. His discussion of music, for example, is heavily Platonic, but it is not only Platonic. In *Nutricia*, and even more explicitly in his *Panepistemon* of 1490, Poliziano is concerned with the practical – the mechanical arts, the technical side of music – and with subjective judgment. He points out that Aristoxenus (of the 4th c. BCE) and Ptolemy (whose *Harmonica* he had transcribed two years earlier) had both advocated judgment by ear (that is, by a subjective standard) as a substitute for, or at least a complement to, judgment based on mathematical relations and Pythagorean intervals of the 6th c. BCE.

This insistence on the validity of subjective judgments of various kinds is significant for, as we have noted, subjectivity is no stranger in the doing of science even today – nor should it be. It also goes hand in hand with the individualism so often (and correctly) identified as a principal characteristic of Renaissance thought.

In all of these contexts, Poliziano is, in a sense, imitating the classics. But note that he is not imitating them simply for style or ornament: he is imitating their methods of thinking and of approaching their objects of study.

In this spirit of creative *imitatio*, the fifteenth-century humanists recognized not merely a vague 'kindred spirit' in their classical predecessors, but a need to learn from their methods of investigation. And what they did falls under methodology. Even rhetoric, which has recently been conceived as being in opposition to methodology by at least one scholar, can be seen to be a technique, a method, of systematically analyzing and addressing questions and problems of civic, political, philosophical, religious moment: in essence, a method of teaching and persuading.

5 Other bridges

Like Valla and Poliziano, men in other fields combined craft with intellect. Architects like Brunelleschi or Alberti had to have theoretical as well as mechanical skills to build the buildings they did and have them last as long as many of them have. In both Brunelleschi's Dome and the creation of his perspective, there is clearly an intellect behind the craftsman. And it is crucial to note that Alberti used his varied skills in the service of historical research as well as of building anew. He went out into the field (of Rome) to see for himself, and to *measure* for himself. Alberti, like his philological counterparts, devised criteria for judging the antiquity of his specimens: types of stone, mortar, styles of sculpture, dimensions, inscriptions and, where possible, descriptions of Greek antecedents found in ancient texts.⁴³

Leonardo da Vinci, too, was intent on deriving knowledge first-hand and investigating with his own eyes and hands, developing a clearer understanding of the human brain through dissection and drawing, as has been shown in recent dissections.⁴⁴

Nicolaus Copernicus (1473-1543), another humanistically trained observer, relied on his own eyes for his observations. He was able to cite the authorities of antiquity for the benefit of his conservative readers, yet, again, he was imitating the ancients not for their information, but for their empirical methods of observation.⁴⁵

Georgius Agricola's first publication was a Latin grammar. He then went on to study theology and medicine, and assisted with the Aldine edition of Galen (1525) in Venice (another technological undertaking) and possibly that of Hippocrates as well (1526). He became the author of *De re metallica*, still read today for its balanced approach to technological, scientific and historical questions of metallurgy.⁴⁶

Andreas Vesalius (1514-64), whose *De humani corporis fabrica* was famously published in the same year as Copernicus's *De Revolutionibus*, was another who relied on his own observations of the human body, which can be likened to the text to which the philologist attempts to return.⁴⁷

His near-exact contemporary, Conrad Gessner of Zurich (1516-65), epitomizes the humanistically educated scientist, whose first scholarly/scientific work was a critical edition of Claudius Aelianus and who, besides serving as the town physician of Zurich, became the foremost naturalist of early sixteenth-century Europe. I will end with Gessner's explicit statement epitomizing how science/scholarship is done: 'Thus [Caius], with whose conjectures I agree, until such time as something more certain shall be ascertained by us.'48

Thus it is that we have come full circle from history to natural history, meeting Garin's insight that it was the humanists' injection of historical understanding into the mix that destroyed reliance on earlier *auctoritates* and allowed the crucial scientific component into the making of the humanities. It is my view that this development, occurring as it did in an intellectual, cultural and social climate more open to doubt (but that is another question altogether), is what permitted the sciences, both the natural and the humane, to be reborn in the Renaissance, in a way that would resolve C.P. Snow's – and our – conflict of two disparate cultures. Perhaps the best of the Renaissance humanists, especially in their philological, historical, archaeological undertakings, were better at integrating the scientific spirit with the humane sciences than has previously been recognized: better, perhaps, than many of us are today.

Notes

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- Quoted by Anonymous, 'The George Sarton Medal', Isis 47 (1956), 31-34.
- R. Sabbadini, Le scoperte dei codici latini e greci ne' secoli XIV e XV, 2 vols. (1905, 1914), ed. E. Garin (Florence: Sansoni, 1967) (and see Garin's introduction at pp. vii-xxviii); Sabbadini, Il metodo degli umanisti (Florence: Le Monnier 1920); U. von Wilamowitz-Moellendorff, History of Classical Scholarship, tr. A. Harris, ed. H. Lloyd-Jones (Baltimore: Johns Hopkins, 1982, ed. princ. 1921) (for some remarks by Lloyd-Jones pertinent to discussions of education today that took place during the present conference, see his introduction, v-xxxii, esp. xxx); G. Pasquali, Storia della tradizione e critica del testo (Florence, 1934); E.J. Kenney, The Classical Text: Aspects of Editing in the Age of the Printed Book (Berkeley, 1974); R. Pfeiffer, A History of Classical Scholarship (3 vols.) (Clarendon Press, 1968-1976).
- P.O. Kristeller, 'Humanism and Scholasticism in the Italian Renaissance' (lecture given at 3 Brown University on Dec. 15, 1944), first published in Byzantion 17 (1944-1945), 346-374, then in Humanitas V (1950), 988-1015; reprinted in his Studies in Renaissance Thought and Letters, I (Rome, 1956), 553-583, and revised in his Renaissance Thought. The Classic, Scholastic and Humanist Strains (Harper & Row, 1961), 92-119, 150-163 (see also 9-11); Augusto Campana, 'The Origin of the Word "Humanist", Journal of the Warburg and Courtauld Institutes IX (1946), 60-73; cf. Eugenio Garin, 'Sull'uso della parola "umanista" Giornale critico della filosofia italiana 33 (1954), 127-128 and his Medioevo e Rinascimento (Bari, 1966 et seq.), 5, n. 2. In English: William Harrison Woodward, Studies in Education during the Age of the Renaissance (Cambridge, 1906); P. Grendler, Schooling in Renaissance Italy. Literacy and Learning, 1300-1600 (Baltimore and London: The Johns Hopkins University Press, 1989). Anthony Grafton and Lisa Jardine, From Humanism to the Humanities (Cambridge, MA: Harvard University Press, 1983) (on which see the paper delivered at this conference by J. Groenland), seem not to take into account Kristeller's and Campana's finding of John Florio's 1598 definition: 'Humanista, a humanist or professor of humanitie' in his Italian-English dictionary (A Worlde of Wordes, London), or especially Kristeller, 'Humanism and Scholasticism, 160, n. 61, where he cites a letter of 1490 by the rector of the university at Pisa, referring to students who have come 'per udire humanità.'
- C.M. Pyle, 'Text as Body / Body as Text: Humanists' Approach to the World Around them and the Rise of Science,' Intellectual News (8) 2000, 7-14; Pyle, 'The Renaissance Rediscovery of the Classical Approaches to the World: Reflections on History and Science, Then and Now,' Building the Past / Konstruktion der eigenen Vergangenheit, eds. R. Suntrup, J.R. Veenstra (Frankfurt am Main, Berlin, New York, etc.: Peter Lang, 2006) (Medieval to Early Modern Culture, 7 / Kultureller Wandel vom Mittelalter zur Frühen Neuzeit, 7; Dir. M. Gosman, V. Honemann), 3-31 (henceforth 'Approaches'), esp. 23-27. Lisa Jardine's important article, 'Lorenzo Valla and the Intellectual Origins of Humanist Dialectic', Journal of the History of Philosophy XV (1977), 143-164, revised as 'Lorenzo Valla: Academic Skepticism and the New Humanist Dialectic', in The Skeptical Tradition, ed. Myles Burnyeat (University of California Press, 1983), 253-286, provides philosophical weight to these arguments by analysing Valla's skepticism and logic (dialectica); see also her 'Humanist Logic', chapter 7 of The Cambridge History of Renaissance Philosophy, Gen. Ed. C.B. Schmitt, Co-editors Q. Skinner & J. Kraye (Cambridge, 1988), 173-198. Jardine's work was stimulated by Jerrold E. Seigel, "Civic Humanism" or Ciceronian Rhetoric?' Past and Present 34 (1966), 3-48, revised in his Rhetoric and Philosophy in Renaissance Humanism. The Union of Eloquence and Wisdom, Petrarch to Valla (Princeton, 1968).

- There is a difference between the anachronistic teleology of whiggish history and studying past thought because we feel a kinship with it or because we wish to investigate the roots of our present concepts. On the various aspects of whiggish history, a concept advanced by Herbert Butterfield in a youthful essay: C.M. Pyle, 'Approaches' (n. 4, above), 11-14. I also believe, with other historians, including Charles B. Schmitt and Paul Lawrence Rose, that we are entitled to investigate the origins or 'roots' of what we today call science and scientific thought, referring to the natural sciences; see C.M. Pyle, 'Renaissance Humanism and Science', Res publica litterarum XIV (1991), 197-202; published simultaneously in: Studi umanistici Piceni XI (1991), 197-202.
- 6 E. Garin, Der italienische Humanismus (Bern: Francke, 1947), translated as L'umanesimo italiano. Filosofia e vita civile nel rinascimento (Bari: Laterza, 1952), 2nd ed. 1958; Italian Humanism. Philosophy and Civic Life in the Renaissance (New York: Harper and Row, Oxford: Basil Blackwell, 1965). See, too, Garin's endlessly fruitful article, 'Gli umanisti e la scienza', Rivista di filosofia LII (1961), 259-278, reprinted in his L'età nuova. Ricerche di storia della cultura dal XII al XVI secolo (Naples, 1969), 451-475.
- 7 C.M. Pyle, 'The Two Cultures and Renaissance Humanism', Interdisciplinary Science Reviews 33 (2008), 121-133.
- 8 C.M. Pyle, Das Tierbuch des Petrus Candidus. Codex Urbinas Latinus 276. Eine Einführung, transl. T. Honref, J. Schlechta (Zurich: Belser Verlag, 1984) (Codices e Vaticanis Selecti, LX); see also Pyle, 'The Art and Science of Renaissance Natural History: Thomas of Cantimpré, Pier Candido Decembrio, Conrad Gessner and Teodoro Ghisi in Vatican Library MS Urb. lat. 276', Viator 27 (1996), 265-321.
- 9 Albertus Magnus's use of his contemporary Cantimpré's text was at least equally so; see P. Aiken, 'The Animal History of Albertus Magnus and Thomas of Cantimpré', Speculum (1947) XXII: 205-225.
- '... ut scribamus scilicet sicut apes mellificant, non servatis floribus sed in favos versis, ut ex multis et variis unum fiat, idque aliud et melius.' *Le familiari*, ed. crit. Vittorio Rossi, 4 vols. (Firenze: Sansoni, 1933-1942), Edizione anastatica 1968 (Edizione Nazionale delle opere di Francesco Petrarca, 10-13), vol. IV, 206. Rossi refers us to: Seneca, *Ad Lucil.*, LXXXIV 3-10; Horace, *Carm.*, IV ii 27-32; cfr. *Fam.* I 8, 3.
- 11 Pyle, 'Approaches' (n. 4); cf. E. Garin, Rinascite e rivoluzioni. Movimenti culturali dal XIV al XVIII secolo (Milan: Mondadori, 1992).
- 12 In addresses before the International Society for Intellectual History (London, April, 2007) and the Columbia University Seminar in the Renaissance (New York, February, 2008); see 'History as Science? The Question Revisited with Reference to the Life Sciences and Renaissance Humanism', forthcoming in *Intellectual News*, 16 and in a volume of my essays.
- Aesthetischer und kunstwissenschaftlicher Gegenstand. Ein Beitrag zur Methodologie der Kunstgeschichte (Hamburg, 1924); see too Wind's address to the Columbia University Departmental Philosophy Conference (April 28, 1925), published in The Journal of Philosophy XXII (1925), nr. 18, 477-493, nr. 19, 516-530. On his philosophical studies, see H. Lloyd-Jones, 'A Biographical Memoir', in E. Wind, The Eloquence of Symbols. Studies in Humanist Art (Oxford: Clarendon Press, 1993, ed. princ. 1983), xiii-xxxvi; Creighton Gilbert's review article of that book appeared in The New Criterion 3, no. 2 (October 1984), 36-41: 'Edgar Wind as Man and Thinker', reprinted in The New Criterion Reader. The First Five Years, ed. H. Kramer (New York: Free Press, 1988), 238-243; see also Matthew Rampley's Introduction to Wind, Experiment and Metaphysics. Towards a Resolution of the Cosmological Antinomies, tr. C. Edwards (Oxford: European Humanities Council, 2001) (transl. of Das Experiment und die Metaphysik. Zur Auflösung der kosmologischen

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- Antinomien (Tübingen: Mohr, 1934), reedited with an afterword by B. Buschendorf and an introduction by B. Falkenburg (Frankfurt-am-Main: Suhrkamp, 2001) (not seen). See further the recent volume, *Edgar Wind. Kunsthistoriker und Philosoph*, eds. H. Bredekamp, B. Buschendorf, F. Hartung & J.M. Krois (Berlin: Akademie Verlag, 1998).
- 14 Philosophy and History. The Ernst Cassirer Festschrift, eds. R. Klibansky, H. J. Paton (New York: Evanston, London: Harper and Row, 1963, ed. princ. 1936), 255-264.
- 15 C.M. Pyle, 'Art as Science: Scientific Illustration, 1490-1670, in Drawing, Woodcut and Copper Plate', Endeavour 24 (2000), 69-75, esp. 69; cf. Ernst Cassirer, The Individual and the Cosmos in Renaissance Philosophy, transl. M. Domandi, (Mineola, New York, 2000, ed. princ. 1963), esp. chapter 4.
- I. de Romilly, *Pourquoi la Grece*? (Paris: Ed. de Fallois, 1992); Pyle, 'The Two Cultures and Renaissance Humanism' (n. 7, above).
- 17 See Ernst Cassirer, Kant's Life and Thought (New Haven and London: Yale, 1981), esp. 223-231.
- As a former biologist, I have no trouble accepting what seems to me a self-evident and necessary connection, though it is called 'reduction' by philosophers. While mind is dependent on neurophysiology, one can, nonetheless, refer to it as an ephemeral manifestation of the brain's functioning (cf. Pyle, 'Art as Science' [above, n. 15], 69), which can exist once projected by a brain, and which can communicate with other brains through equally ephemeral but real ideas. Without brains, it seems clear that there would be no minds or ideas (but then, I am not a philosopher). On mind itself, see Hilary Putnam, Reason, Truth and History (Cambridge University Press, 1982), Ch. 4, 'Mind and Body', 75-102, esp. 82-84; and for an up-to-date overview, now see The Matter of the Mind. Philosophical Essays on Psychology, Neuroscience, and Reduction, eds. M. Schouten & H. Looren de Jong (Oxford: Blackwell, 2007).
- I now believe that one must specify 'historical natural sciences', though as recently as 2006 ('Approaches', above, n. 4) I termed these fields the 'historical sciences', as has the historian of science Rachel Lauden in speaking of similar categories: 'What's So Special about the Past?' in *History and Evolution*, eds. M.H. Nitecki & D.V. Nitecki (Albany: State University of New York Press, 1992), 55-67, esp. 57.
- 20 Ernst Mayr, The Growth of Biological Thought (Cambridge, MA: Harvard University Press, 1982), 57-58; see also his Toward a New Philosophy of Biology. Observations of an Evolutionist (Cambridge, MA: Harvard University Press, 1988), 18-20.
- 21 Roberto Weiss, *The Renaissance Discovery of Classical Antiquity*, Second Edition (Oxford: Basil Blackwell, 1988), esp. 203-207; Joan Kelly-Gadol, *Leon Battista Alberti, Universal Man of the Early Renaissance* (Chicago, 1969); Pyle, 'Approaches', 18-20 and Plate 1.
- 22 Mayr, Growth (n. 20, above), 57-58; Mayr, Toward a New Philosophy of Biology, 18-20.
- Niles Eldredge and Stephen J. Gould, 'Punctuated Equilibria: an Alternative to Phyletic Gradualism', in: *Models in Paleobiology*, ed. T.J.M. Schopf (San Francisco, 1972), 82-115; S.J. Gould, *The Structure of Evolutionary Theory* (Cambridge, MA, 2002), 745-1024; see the seminal ideas relevant to their theory in Ernst Mayr, 'Change of Genetic Environment and Evolution' (1954), in *Evolution as a Process*, eds. J. Huxley, A.C. Hardy & E.B. Ford, reprint, (New York, 1963), 188-213, esp. 208-211.
- Thomas Kuhn, The Structure of Scientific Revolutions (Chicago, University of Chicago Press, 1962). Cf. Ernst Mayr, 'Do Thomas Kuhn's Scientific Revolutions Take Place?' Journal of the History of the Behavioral Sciences 30 (1994), 328-334, reprinted and revised in What Makes Biology Unique? Considerations on the Autonomy of a Scientific Discipline (Cambridge University Press, 2004), 159-169. It must be said that Kuhn modified his

- thinking to accommodate continuities in response to such criticisms, for example in a talk given in Paris in 1985 (which I attended) in which he proved himself a pragmatist. Mayr points out (What Makes Biology Unique?, 159) that he introduced the term 'disciplinary matrix' to replace 'paradigm'. See now Thomas S. Kuhn, The Road Since Structure. Philosophical Essays, 1970-1993, with an Autobiographical Interview, eds. J. Conant, J. Haugeland (Chicago: University of Chicago Press, 2000).
- On this historical terminology: A. Nuzzo, 'Science, History and Philosophy in Kant and Hegel', in *History, Historicity and Science*, eds. T. Rockmore & J. Margolis (Aldershot, U.K. and Burlington, Vermont: Ashgate, 2006), 77-94, 84; Pyle, 'History as Science?' (n. 12, above).
- 26 Mayr, 'Change of Genetic Environment and Evolution' (n. 23, above).
- See, for example, Giuseppe Billanovich, 'Petrarch and the Textual Tradition of Livy,' Journal of the Warburg and Courtauld Institutes 14 (1951), 137-208; Idem, La tradizione del testo di Livio e le origini dell'umanesimo, 2 vols. (Padua: Antenore, 1981); Silvia Rizzo, Il lessico filologico degli umanisti (Rome: Edizioni di Storia e Letteratura, 1973); L. Valla, Antidotum in Facium, ed. M. Regoliosi (Padua: Antenore, 1981) (Thesaurus Mundi, 20); L. Valla, Le postille all'Institutio oratoria' di Quintiliano eds. L. Cesarini Martinelli, & A. Perosa (Padua: Antenore, 1996) (Medioevo e umanesimo, 91).
- 28 G. Billanovich, La tradizione (n. 27, above); L. Cesarini Martinelli, Le postille di Lorenzo Valla all'Institutio oratoria di Quintiliano, in Lorenzo Valla e l'umanesimo italiano. Atti del Convegno internazionale di studi umanistici (Parma, 18-19 October 1984), eds. O. Besomi & M. Regoliosi (Padua: Antenore, 1986), 21-50; M. Regoliosi, Le congetture a Livio del Valla: metodo e problemi, Ibidem, 51-71.
- Pace Ronald B. Witt, In the Footsteps of the Ancients. The Origins of Humanism from Lovato to Bruni (Leiden: Brill, 2000); despite the admirable erudition displayed in this book, on close reading one cannot help notice the emphasis on style over substance and rhetorical over critical acumen; see also the review by Ugo Dotti in Belfagor LXI (2006), 97-102.
- Now BNF latin 5690 and BL Harley 2493, as discovered by Pierre De Nolhac and Giuseppe Billanovich, respectively: see P. de Nolhac, Pétrarque et l'humanisme, 2 vols., (Paris: Champion, 1965, second edition 1907), vol. II, 14 ff.; G. Billanovich, 'Petrarch and the Textual Tradition of Livy', and Billanovich, La tradizione del testo di Livio (n. 27, above).
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- 36 Mayr, Growth (n. 20, above), 30-32.
- 'Angeli Politiani Oratio / Super Fabio Quintiliano, et / Statii Sylvis' in Angeli Politiani Opera Omnia (Basel, 1553), ed. I. Maïer, 3 vols. (Turin, 1971), vol. II, 492-498, esp. 496 ('in quo homines ipsi caeteris animalibus antecellant'); cf. Prosatori latini del Quattrocento, ed. E. Garin (Milan & Napels: Riccardo Ricciardi, 1952), 870-885 (esp. 882).
- 38 Ida Maïer, Ange Politien. La formation d'un poète humaniste (1469-1480) (Geneva, 1966), 389-390, 423; C.M. Pyle, 'Historical and Philological Method in Angelo Poliziano and Method in Science: Practice and Theory,' Poliziano nel suo tempo. Atti del VIº Convegno Internazionale (Chianciano Montepulciano, Italy, 18-21 July, 1994) (Florence: Cesati, 1996), 371-386.
- 39 Opera Omnia, 1553, 495 (Prosatori latini, 880) (n. 37, above).
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Music as Science and as Art

The Sixteenth/Seventeenth-Century Destruction of Cosmic Harmony

H. Floris Cohen

On the one hand, there is music. We make it ourselves. Music reaches us through our ears, and it may affect us quite powerfully, to the point of making us join the rhythm in dance, or join the mood and burst into tears of joy or sorrow, on occasion profusely so. Music is definitely a sensual phenomenon.

On the other hand, there are numbers. Numbers are given to us, we do not make them. For first inventing, then recognizing and manipulating them, we rely on our intellect. There is nothing sensual about numbers as such. Few things, then, look more opposed to each other than music and number.

And yet they are connected, and very closely so – in one sense, music is numbers. In 1712, in a letter he wrote on 17 April to his fellow-mathematician Christian Goldbach, Gottfried Wilhelm Leibniz defined music thus: Musica est exercitium arithmeticae occultum nescientis se numerare animi ('Music is a hidden arithmetical exercise of the soul, unaware that it is counting').

What, then, is the connection between music and number? The discovery of that connection is traditionally credited to Pythagoras or ar least to the sect of the Pythagoreans. Take two wholly arbitrary musical sounds – not necessarily selected from the scale, but just two musical sounds of arbitrarily chosen pitches – and sound them, either simultaneously or one right after the other. As a rule, the combination of two musical notes will not sound very pleasant. They seem almost to collide, they jangle, they do not fit, they are, in a word, dissonant. However, as you keep selecting from the full spectrum of musical sounds and try any arbitrary combination, from time to time you will encounter a different kind of pair – now for a change the two musical sounds go well together, they seem to some extent to blend, to melt as it were into each other. A pair of notes sounded together or in quick succession is called an interval, and these rare, blending intervals are called consonant – a Latin expression which just means sounding well together.

Naturally, the Pythagoreans had the rules and peculiarities of Greek music to go by, and they were familiar with four such consonant intervals. One is the

unison – two musical notes of the same pitch, though not of course necessarily of the same loudness or timbre. On the modern piano you may get the unison just by striking the C key twice. So far, this looks pretty obvious, but only so far. Also consonant, yet a little less so, is the octave. You get it by sounding the same C together with the next higher c, which you find on the piano by moving up seven white keys and then hitting the octave, also called the eighth because it is eight steps up in terms of the white keys of the piano. Here the sense of blending is not quite so complete as with the unison. Still, it is there, to the point of the musical scale being universally reckoned to start all over again from this higher c to the next higher one. Going on in the same vein, you encounter among the consonances the fifth, which on the piano is represented for instance by C-G. Finally, an interval like C-F, which is called the fourth, is also consonant.

So much for the musical phenomenon of consonance as just a given in terms of our auditory experience. But here is Pythagoras's great discovery: It so happens that these consonant intervals correspond to the first few integral numbers 1, 2, 3, and 4. 'Correspond', what does that mean? Take a taut string, and pluck it or bow it. Evidently, if you do this twice while leaving the length of the string the same, you get the unison. Thus, the unison is given by a ratio of string lengths 1:1. Much more remarkably, if you first sound the entire string and then that same string halved or doubled, so that the ratio of string lengths is as 1:2, then you get the octave. In similar fashion, the consonance that we call the fifth is given by a ratio of string lengths 2:3. Finally, the ratio that produces the fourth is 3:4. To sum up: As the Pythagoreans found, the few consonant intervals encountered in the full panoply of possible musical sounds are precisely those intervals that are produced by strings in ratios given by the simplest integral numbers, 1 to 4. But how can that be? How is it that consonance, a sensual phenomenon, matches in so precise a manner with numbers, which are produced only in the intellect?

In one sense, this is still a problem. Over twenty-five centuries or so have passed between the Pythagoreans and us, and the problem of consonance has repeatedly and sometimes quite drastically been redefined – three major redefinitions form the principal subject of the present paper. But, for all the ongoing redefinition of the problem; for all the enlightening, highly detailed investigations devoted to the problem of consonance over the last four centuries especially; indeed, for all the claims made over centuries of assiduous research that it has finally been solved, most experts still regard the close correspondence between musical sound and numbers as an enigma, at bottom and in the final analysis.

Not that those who first discovered the phenomenon failed to hit upon a splendid and also very bold explanation. They decided in the first place that there is something special about those first four integral numbers. If you add them up, you arrive at 10, which for the Pythagoreans was, or became, the sacred number.

But also, they accounted for the correspondence between sound and number by declaring the whole wide world to be nothing but number. All early Greek, pre-Socratic speculators about the constitution of the world used to ascribe some fundamental principle to the world, be it water, as with Thales, or the indefinite, as with Anaximander, or fire, as with Herakleitos.² In similar fashion, the Pythagoreans declared number to be the fundamental principle that holds the world together and that, as such, inheres in all empirical phenomena. Among those empirical phenomena, the heavenly motions stand out. The Sun and the Moon and the planets represent these ratios, and the entire cosmos is pervaded by consonant, harmonious, musical sound. Why, then, do we not hear it? Because, paradoxically, we hear it all the time, from the very moment of birth onward. As a result, we are so used to it that we fail even to notice it any more – a psychologically very astute argument to counter an obvious objection.

Objections of quite a different nature came from a disciple of Aristotle, some two and a half centuries later than Pythagoras. This musical theorist was Aristoxenos.³ He rejected not just Pythagorean cosmic harmony, but the entire idea that music can usefully be analyzed by focusing on harmonic relations. To Aristoxenos, it is rather the ongoing flow of the melody that is constitutive of the major effects of music. In his view it is not so much the intellect *per se*, but rather our musical experience that must guide any effort to come to terms with what music does to us and to provide us with a reasoned account of its effects.

This opposition, between an approach by means of numbers that stand for ratios of string lengths and an approach that rather centers on the melody, has remained alive for many centuries. Still, in spite of an increasing sense that harmonic analysis alone cannot exhaust the investigation of the effect that music has on us, harmonic analysis has very much dominated the scene. It did so not only with the Greeks, but also in those civilizations that later adopted Greek thought about the constitution of the world, notably Islamic civilization and medieval and Renaissance Europe.⁴

In Europe the idea of cosmic harmony took shape by means of a threefold classification— musica mundana or cosmic harmony, musica humana, which reflects the harmonious way in which our body and soul are bound together, and musica instrumentalis, or music in our restricted, present-day sense of the performance of singers or instrument players. The first two are perfect and attainable only by way of the intellect; the latter is an audible, necessarily imperfect imitation of the former. This division into three stems from a late Roman scholar, Boethius. In the early Middle Ages Boethius's conception became the standard educational tool of use all over Europe in teaching the discipline of musica. Harmonic theory figured as one of the four liberal arts that, together with arithmetic, geometry, and astronomy, made up the quadrivium, alongside the trivium, dialectic, grammar,

and rhetoric. As part of the quadrivium, *musica*, most closely allied to *arithmetica*, was concerned chiefly with the strictly numerical manipulation of numbers and figures derived from the ratios for the consonances, and with their actions on the three levels of music that Boethius distinguished.

As for the practice of music, the scale in use in musical composition was naturally in accordance with the Pythagorean schema of the consonances. That schema does not encompass all consonances as we know them today. Notably, the major and minor third and sixth are missing. That is why, for instance, the earliest pieces of organ music that have been preserved, dating from mid-fourteenth century, sound strange in a way that the musically adept recognize at once as the absence of the triad in its customary role. Dissonances, or even the triad itself, are in need of being resolved on chords on the fifth or fourth, not on chords involving the third or sixth.

Why indeed are the consonant third and sixth missing from the Pythagorean scale? This is not only because Greek music had no use for them. There is another reason as well, which has to do with some basic arithmetic. The only preliminary thing one must know to get the point is that our sense of hearing works logarithmically. When we add intervals on the piano (e.g. a fifth like C-G added to a fourth like G-c gives the octave), we arrive at the numerical result by multiplying their ratios – 2:3 (the fifth) times 3:4 (the fourth) equals 1:2 (the octave). For the musical notes in the scale, this means that the whole tone, C-D, which is the difference between the fifth and the fourth, is represented by the ratio 2:3 divided by 3:4, which equals 8:9. Next, adding two whole tones so as to get C-E, which is the major third, we arrive at 8:9 squared, which yields 64:81 for the major third in the Pythagorean scale. This is a harsh dissonance. It could be used in music making only if resolved on a truly harmonious chord that figures only the octave, the fifth, and the fourth.

Still, musical composition went its own way, without much regard for theory. Two major medieval developments are decisive here. One is the emergence of polyphonic music, that is, the composition of pieces that consist of two or more melodic lines which run relatively independently of each other. As a consequence, harmonic relations become a good deal more critical than before, because it is now the simultaneous, rather than just the successive sounding of musical intervals that determines the sweetness of a musical piece and the kind of effects that can be attained using the consonant intervals. The consonances now truly became the backbone of musical composition. Even more importantly, originally Pythagorean polyphony, while flourishing for a couple of centuries, was invaded in the fourteenth century by the major third now treated as a consonance in its own right. John Dunstaple is the composer usually credited with this innovation, which has colored musical composition for many centuries, and in many ways

still does – fairly quickly the triad became the standard chord around which to organize a piece of music.⁵

As musicians went ahead, musical theorists felt a need to follow suit. How to account for the usage of the thirds and sixths as consonant? Clearly, another ratio was at play here than the one given in the Pythagorean schema, 64:81. It began to dawn on theorists that the major third now in regular use is given rather by the ratio 4:5. But as we readily see from the presence of the number 5 in this particular ratio, this goes beyond the Pythagorean range of consonance-producing integral numbers, which runs only from 1 through 4. Cosmic harmony was apparently richer than the Pythagoreans had conceived it to be. How, then, to fit these major and minor thirds and sixths into it?

The theorist to bring this about by mid-sixteenth century was Gioseffo Zarlino, maestro di capella at San Marco Cathedral in Venice. He was a very learned man, drenched in the waters of contemporary humanism, and well read in musical theory and in Platonic and Aristotelian philosophy. He acutely perceived cosmic harmony itself to be at stake. Since musica mundana, musica humana, and musica instrumentalis formed one coherent, closely knit whole, a major anomaly in the latter inevitably meant that cosmic harmony or at least the reigning concept thereof had to be restored as well. Zarlino restored it by redefining it. He made cosmic harmony dependent on the senario, that is, the range of the first six integral numbers, not I through 4 but I through 6. Why six? Zarlino enveloped his argument in a vast synthesis of theoretical, practical, and philosophical considerations, but the core was a defense of the senario by pointing out the special character of the number six. For instance, it is the first of the perfect numbers – those rare numbers that are equal to the sum of their divisors, as here with I + 2 + 3.

Zarlino realized that the Pythagorean scale, with its whole tone 8:9 and its resulting major third 64:81, can no longer be maintained once we wish to incorporate into musical theory and practice the pure major third 4:5. The difference between the Pythagorean and the pure major third, which of course is given by 80:81, is quite noticeable. How should we handle it? As a true humanist, Zarlino cast about in the available ancient literature and came up with a scale he encountered in Ptolemy's treatise on harmony. Ptolemy (second century) had sought to reconcile the Pythagorean concept of the primacy of harmony in music with Aristoxenos's insistence on the flow of the melody as the major component of music, irreducible to harmonic analysis of the Pythagorean kind. This theoretical scale of Ptolemy's has two mutually different whole tones, one with the ratio 8:9, the other with 9:10. Zarlino felt that singers follow this scale, in other words, they manage to sing all consonances as pure, or, in other words, they remain in tune with cosmic harmony. Only with instruments with fixed pitch, notably keyboard instruments, some adaptation will prove necessary in practice, Zarlino thought.

At the time when Zarlino first wrote his treatise, Le istitutioni harmoniche of 1558, the musical style now known as 'Renaissance polyphony' was at its high point. It might have seemed for a little while as if coherence in all three divisions of musica had been restored by means of Zarlino's concept of the senario as the true sonorous number, thus incorporating the triad into the whole of musical theory. However, for all the impressive coherence attained again between music as played or sung and music as conceived in theory, both cosmic and in terms of musical arithmetic, Zarlino's synthesis began to fall apart during his own lifetime. The downfall took place in two major stages.

Inspiration for the first stage came from the humanist movement in which Zarlino himself was rooted. When in 1562 a Latin translation of Aristoxenos's treatise came out, it led to an attack on Zarlino's reconstruction of cosmic harmony that called into question some of its major components. A former pupil was the instigator, the composer and musical theorist Vincenzo Galilei. He belonged to a group of clients maintained by a Florentine nobleman, Count Bardi, who jointly formed the so-called Camerata.7 In typical humanist fashion, with its urgent desire to return ad fontes (back to the sources), these men aimed to reconstruct the music that the ancient Greeks had played. In the absence of any real knowledge of the subject, they had to reason their way to such a reconstruction, which they did using Aristoxenos. They sought to replace the intricate polyphonic style that dominated all musical composition from Dufay to Lasso with what they called the monody, one sole melody sustained by a figured bass. A few compositions for lute by Vincenzo Galilei are still extant, but the first major works in monodic style were the earliest operas, with Monteverdi's Orfeo as the first masterpiece to be composed in the new style. Thus, a search to recover ancient music led to major innovation – to a new genre, the opera, and to a new style, to which a later age has affixed the adjective 'baroque'. But there was also an important theoretical counterpart to these new developments. Zarlino's claim that singers sing all consonant intervals as pure, that is, in accord with cosmic harmony, appeared less and less tenable.

This was the subject to which his former pupil Vincenzo Galilei directed his attack originally. It soon became apparent that the scale that Zarlino had taken from Ptolemy, the one with pure fifths and thirds, but also with those two distinct whole tones 8:9 and 9:10, is irreparably unstable. It can even be calculated that certain simple sequences need only occur nine times in a musical piece for the note on which the singers started (the *tonic*) to be raised by one whole tone. In other words, in so-called just intonation, one may easily end a full note higher, or lower, than where one started. The fact that this does not happen in practice is due to the circumstance that singers unwittingly temper the purity of the notes they sing to some small extent.

Or do they? Vincenzo maintained in lengthy polemics against his one-time teacher that they do indeed, but of course it is not so easy to prove such an assertion. By the early 1580s Vincenzo changed his basis, and he set up a range of experiments that concerned the material make-up of the strings whose various lengths determine the ratios of intervals. If we take two strings of the same length but made of different materials as, for instance, steel and gut, and if we then produce the same note with both, we find that the resulting unison is only approximate. Even more damaging was Vincenzo's discovery that if one compares, not the *lengths* of strings, but rather their *tensions*, the traditional ratios no longer hold. If one and the same string is successively stretched by different weights, in order to get the octave one must suspend a weight four times as heavy as the first from the string, not twice as heavy. Similarly, in order to get the fifth, the weights must be in a ratio of 4:9, that is, 2²:3². In terms of string tensions, then, the intervals are in a *squared* proportion to the weights; hence, what ratios appear depends on what one decides to measure, and the simplicity of Zarlino's *senario* dissolves.⁸

Musical practice raised further problems with the senario and the alleged purity of the consonances. Zarlino had already conceded that on keyboard instruments, which are not of course as flexible as the human voice, the purity of the scale cannot be maintained. Church organs and harpsichords were tuned by means of some practicable compromise, technically called temperament. Nowadays, apart from the practice recreated by the early music movement, all tuning of keyboard instruments is routinely done in equal temperament, which makes all semitones equal at the cost of the purity of all consonant intervals, the thirds and sixths most of all. Between roughly Zarlino's and Beethoven's time, a great debate raged over temperament and how to preserve more purity than equal temperament allows. The point of this prolonged debate for our subject is that it helped undermine the viability of cosmic harmony: the very instrument that is meant to symbolize cosmic harmony, the church organ, apparently uses most consonant intervals by approximation only. Also, in a more theoretical vein, what remains of the strict distinction between consonance and dissonance if, apparently, the human ear is well able to put up with minor deviations? Take for instance so-called mean-tone temperament. It has one whole tone, which is defined by splitting the difference between the two whole tones that one gets when one maintains both the fifth and the major third as pure, namely, 8:9 and 9:10, respectively. This results in a fifth that is no longer quite pure, albeit to so small an extent that many a non-professional does not even hear the deviation. But this means that our ear is willing to accept as consonant not only the simple ratio 2:3, but also a highly irregular ratio like 2:3.01. What, then, remains of the supposedly exact match between music and number in the sense of the consonances being given by ratios composed of the simplest integral numbers?

The absolute opposition between consonance and dissonance was undermined as well by the musical development just sketched, the rise of the monody, to which Vincenzo also contributed. Increasingly, composers like Monteverdi began to create novel musical effects by using chords at prominent places that are forbidden in strict Renaissance polyphony because they involve too much dissonance, such as notably the so-called dominant-seventh chord. A vigorous polemic arose, also in Italy, over the usage of such chords, and here the menace of cosmic harmony going to pieces formed one major motive of the defenders of the traditional style. A well-known event was the fierce debate between the critic Artusi, who stuck to the standard rules of polyphony for that very reason, and those who came to the rescue of Monteverdi's daring usage of such unheard-of chords, which were now subjected to analysis and assessment in other, more purely aesthetic terms. The turn away from *ratio* to *sensus*, that is, from grounding musical judgment in the intellect toward doing so by auditory experience, was greatly enhanced by these very developments.¹⁰

Further complicating the issue of the tenability of the pure scale was the increasing usage in art music of accidentals or chromatic semitones, that is, the notes produced by the black keys on the piano. In our present-day equal temperament, all semitones are made equal so that we can use the same black key on the piano for e.g. both C sharp and D flat. But in Zarlino's pure scale, semitones like these are different, and the relations between them made for all kinds of further complications.

By the turn of the seventeenth century, then, cosmic harmony was already in dire straits. Evidently, the humanist movement was a major agent of its distress. The recovery of Aristoxenos's treatise not only initiated, and served as a banner for, the theoretical dispute between Zarlino and Vincenzo Galilei over the true nature of consonance. The humanism-inspired search for the true nature of Greek music also inadvertently opened the gates toward a major change of musical style, with profound consequences for musical practice. This made for a further blurring of the distinction between consonance and dissonance.

Still, the account so far does not exhaust all that went wrong with Zarlino's vast synthesis of Renaissance polyphony and cosmic harmony as restored by means of the *senario*. Around the turn of the seventeenth century, the kind of reasoning behind the *senario* itself came under increasingly sharp attack. This time the attack was led not by musical humanists, but by certain scholars whom we nowadays call scientists but who, in the absence of something like our present-day science, regarded themselves as natural philosophers, albeit of an especially innovative, most often experimental kind. These men turned against what they perceived as two major weaknesses in Zarlino's derivation and justification of the *senario*. What was so special about the number six? And did the demarcation thus

allegedly accomplished between consonance and dissonance really encompass all consonant intervals while duly banning all dissonant ones?

To take up the latter question first, Zarlino himself had already realized that one consonant interval, the minor sixth, presented a difficulty. Its ratio is 5:8, so it seems to fall outside the compass of the senario, which after all is the range of the first six integers. But if Zarlino had from the outset declared the ottonario, or range of the first eight integers, to be the truly sonorous, consonance-generating number, he would in that very act have included the number in between six and eight, which of course is seven. However, this was not regarded at the time as producing any consonant intervals at all, but only harsh dissonances. So Zarlino took refuge in some special pleading for the ratio 5:8, where the 8 should really be regarded, so Zarlino argued, as twice four. This was not the kind of reasoning that could find favor with scholars like Johannes Kepler or Galileo Galilei or Marin Mersenne, whose novel thinking habits hardly allowed room for what they perceived as a mere play with numbers. Their concern was rather with finding geometric proportions in physical entities. In the case of the musical consonances, these men did so in quite different ways. In his book of 1619 on the harmony of the world, Kepler replaced the merely numerical senario with a geometric derivation of the consonances, so as to show next how their ratios served as constraints on the spacing of the orbits of the planets. That is, he restored the hoary Pythagorean idea of cosmic harmony in his own way, which incidentally yielded his third law of planetary motion as one by-product.

Galileo handled the consonances differently, in a quite novel manner that was soon to banish all remaining speculation on cosmic harmony to the margin rather than near the center of natural philosophic thought. In the few pages he devoted to the problem of the consonances, he went farther down the pathway opened up by his father, while to all appearances, and quite paradoxically so, reinstating the range of the consonances that Vincenzo had sought to invalidate. Vincenzo had found, after all, that if one considers not string length but string tension, a consonance like the fifth is not given any more by 2:3 but rather by 4:9. His son now showed that the primary agent of musical pitch is neither string length, nor string tension, but the number of vibrations that a string executes in a given period of time. That is, unlike with the Pythagoreans or Zarlino or even his own father, Galileo did not consider just the numerical properties that may be derived from the vibrating string. Rather, he focused on the vibrating itself. He adopted a pulse account of sound production. He held that musical sound is yielded by the successive pulses (which he called 'shocks' or 'percussions') transmitted from the vibrating string through the air to our sense of hearing. This implies that if two different notes are made heard simultaneously, pulses coincide in those cases when the intervals in question happen to be given by ratios of the first few inte-

gers. In the case of the octave (1:2), every second pulse yields such a coincidence; with the fifth (2:3), every sixth one, and so on, up to and including the minor sixth (5:8). As a result, the traditional range of consonance-yielding ratios is reinstated, but now linked solidly to the real-world parameter of vibrational frequency. This novel connection, in view of which it is held that consonance comes from the coincidence of vibrations, spelled ruin to cosmic harmony in the slightly longer run. For it quickly turned out that with these physical parameters, a veritable can of worms had inadvertently been opened. Here are a few.

The coincidence account of consonance implies that the more often those 'strokes' coincide, the more consonant the interval in question is. But look now more closely at the last of the consonances, the minor sixth. Here the strokes coincide every 40th time. Would not on this account the interval 4:7, which does not even appear in the scale, have to turn out more consonant than the minor sixth? Also, why should the minor sixth keep marking the boundary between consonance and dissonance? For what is so qualitatively different between a coincidence every 40th time and a coincidence every 72nd time, as with the whole tone 8:9? Has not the entire, venerable distinction become blurred now beyond possible repair?

To be sure, answers to questions like these could be sought, yet investigators found soon enough that these moved them ever farther into new territory where no longer musical effects, but rather the properties of sound in general counted the most. Throughout the century, experimental research uncovered as yet unknown or unrecognized phenomena like beats, or the higher partials, or multiple vibration. An awareness further arose that between the sounding of a string or pipe and our aural perception, several processes intervene which may affect the outcome, notably, how the vibrations of our eardrum are transmitted to the inner ear and from there to wherever in our brain perception actually takes place. None of this was easily or in some obvious manner to be squared with the basic setup of cosmic harmony. Small wonder, then, that in the ongoing analysis, the latter conception was increasingly lost sight of.

Even more basic in this process of marginalization of cosmic harmony and this turning away from the customary manner of accounting for musical effects in actual musical practice was the very mode of thought which animated these dozens of innovative natural philosophers. Rather than aiming all over again for some grand schema meant to encapsulate the very essence of the world, investigators sought to solve problems piecemeal. They strove to elucidate specific effects, not some faraway whole but just this or that particular part of it. As a consequence, the more mathematically minded among them henceforth focused their musical theorizing on the intricacies of the scale, with most often elegant yet practically useless solutions to all kinds of problems of tuning and temperament. At the

same time, those who cared more for the experimental discovery of properties as yet unknown jointly ushered in a new, specialized discipline that by the early eighteenth century became known by the name of acoustics.¹²

Musical composition, and the analysis of its effects, had by now likewise been cut loose from cosmic harmony. The dispute over the uses of dissonances in the new, monodic style of Monteverdi and his contemporaries marked the turning point – from then on, the way a composer achieves his musical effects turned more and more into an autonomous, specialized territory in its own right. Music was no longer held to express what binds the world together. It expresses just itself.

Not that music has ever ceased to serve as a vast resource of inspiration and analogy. As David Cram explains elsewhere in this collection, music served as a major resource in combinatorics or in debates about the origins of language.

Nor have efforts to redefine cosmic harmony in some viable way ceased altogether. The point is rather that Kepler's was the last such effort to stand at the center of a great, highly creative thinker's attention. Even in his case it proved necessary to pry his three laws of planetary motion loose from the harmonic structure in which he had enveloped them.¹³

In terms of the objectives of the present collection of papers, what lesson does the utterly sketchy overview just presented have in store for us?

I have sought to show that the disruption of cosmic harmony, which was a major intellectual event in early modern Europe, came about due to developments in the exact sciences and in the humanities alike. Of course all kinds of institutional, material, and other changes at the time were also responsible in part, such as changes in court culture or the increasing refinement of techniques of instrument building, to name just a few. I have focused here chiefly on ideas that underlay the making, reconstruction, and finally disruption of cosmic harmony. And then it turns out that scholarship on the 'humanities' and the 'science' side of life contributed equally to the process. In one remorseless wave of attack after another, Zarlino's grand schema came in for ever more biting critique - the senario appeared to fall short in terms of a large variety of suppositions that were now revealed tacitly to underlie it. Among these suppositions, and the critics who revealed them, we have encountered along the way quite a mixture of scholars. One reason why I have decided to go into some elementary detail about the numerical aspects of cosmic harmony in this chapter is that at the time, scholars from all walks of life were occupied with them. Where in all this is the modern distinction between scientists on the one hand, and scholars from the humanities on the other? For the period here under scrutiny, these are not even viable categories. Zarlino's redefinition, or rather saving operation, bound intricate number juggling, a choir master's practice, pieces of current philosophizing, and human-

ist inspiration together in one vast edifice of, indeed, cosmic harmony. Vincenzo Galilei was as much of a musician and a composer as a humanist and an early experimentalist. Even with Kepler the humanist inspiration is unmistakable – his entire effort at redefining cosmic harmony by means of intricate mathematical, astrological, and astronomical computation and analysis went back in good part to the Pythagorean legacy, to Plato's *Timaios*, and to Ptolemy's early effort at attaining a synthesis between mathematical and more empirical analyses of musical sound. Mersenne's masterpiece likewise bears for good reason the title *Harmonie universelle*. Even a century later, the theory of harmony still taught at our conservatories today came about through the collaborative efforts of a composer and music theorist, Jean-Philippe Rameau, and a mathematician, Jean le Rond d'Alembert.

And yet, something had changed for good. Although in thinking about matters of harmony the ways have never quite parted, they did separate to a large extent, starting in the seventeenth century. The emergence of modern science provides the watershed. Prior to c. 1600, the story of the destruction of cosmic harmony is as much a story of the humanities as of the sciences – for that period the very distinction fails to hold. Major differentiation sets in with Galileo and Kepler, and from then on the gap widens almost by the day. Around 1700 musica mundana and musica humana have quietly left the scene. Musica instrumentalis henceforth goes its own way, leaving it to the emerging science of acoustics to investigate the properties of sound that underlie all music making. Investigations in that more purely scientific vein no longer bear upon how we pass judgment on music in its extraordinary capacity to affect us so powerfully, to the point of making us join the rhythm in dance, or join the mood and burst into tears of joy or sorrow, on occasion profusely so.

Notes

- In this chapter I draw largely on my Quantifying Music. The Science of Music at the First Stage of the Scientific Revolution, 1580-1650 (Dordrecht: Reidel, 1984). The pioneers of the study of the history of quantitative musical theory were D.P. Walker and Claude V. Palisca. Some of their best work figures in an anthology edited by Paolo Gozza, Number to Sound. The Musical Way to the Scientific Revolution (Dordrecht: Kluwer, 2000). In his lengthy Introduction (p. 1-63) Gozza provides a very useful survey of the fundamental problems from antiquity up to Rameau and d'Alembert.
- 2 Jonathan Barnes, Early Greek Philosophy (Harmondsworth: Penguin, 1987), 16-24; 36-39.
- 3 Andrew Barker, The Science of Harmonics in Classical Greece (New York: Cambridge UP, 2007).
- 4 Fadlou Shehadi, Philosophies of Music in Medieval Islam (Leiden: Brill, 1995). Amnon Shiloah, 'Introduction' to his The Theory of Music in Arabic Writings (München: Henle,

- 1979). Alexis Chottin, entry 'Arabische Musik' on pp. 131-152 of a selection of encyclopaedia entries Außereuropäische Musik in Einzeldarstellungen (München: dtv/Bärenreiter, 1980).
- 5 Gustave Reese, Music in the Middle Ages (London: Dent, 1940).
- 6 H. Floris Cohen, 'Benedetti's Views on Musical Science and their Background in Contemporary Venetian Culture', in Cultura, scienze e techniche nella Venezia del Cinquecento. Atti del Convegno internazionale di studio 'Giovan Battista Benedetti e il suo tempo' (Venezia: Istituto Veneto di Scienze, Lettere ed Arti, 1987), 301-310.
- 7 Manfred F. Bukofzer, Music in the Baroque Era (New York: Norton, 1947); chapters 1 & 2.
- In Quantifying Music (see endnote 1), 34-45, I have explained at greater length the musical-theoretical problem underlying the dispute between Zarlino and Galilei. My own interpretation of the dispute is on p. 78-85, with reference to D.P. Walker, 'Vincenzo Galilei and Zarlino', in idem, Studies in Musical Science in the Late Renaissance (London/Leiden: Warburg Institute / Brill, 1978), 14-26, and to Claude V. Palisca, 'Scientific Empiricism in Musical Thought', in: H.H. Rhys (ed.), Seventeenth Century Science and the Arts (Princeton NJ: Princeton UP, 1961), 91-137. Further light has since been shed on the issue by Palisca in later work (summed up in his contribution 'Was Galileo's Father an Experimental Scientist?' to: V. Coelho (ed.), Music and Science in the Age of Galileo (Dordrecht: Kluwer, 1992), 143-151, and by Michael Fend in 'The Changing Functions of Senso and Ragione in Italian Music Theory of the Late Sixteenth Century'; in C. Burnett, M. Fend, & P. Gouk (eds.), The Second Sense. Studies in Hearing and Musical Judgement From Antiquity to the Seventeenth Century (London: Warburg Institute, 1991), 199-221.
- There is as yet no adequate overview of the history of tuning and temperament. I have explained the basics in *Quantifying Music* (see endnote 1), 34-45. An exhaustive overview, in which everything is measured against equal temperament as if it were the only possible outcome of the debate, is J. Murray Barbour, *Tuning and Temperament*. A Historical Survey (East Lansing: Michigan State College Press), 1951. A useful introduction to the main tunings and temperaments is Mark Lindley, *Lutes, Viols and Temperaments* (Cambridge UP, 1984).
- Oliver Strunk (ed.), Source Readings in Music History (New York: Norton, 1950), chapter 8: "Seconda Pratica' and 'Stile Rappresentativo". Michael Fend, chapter cited in note 8.
- II See my Quantifying Music (note 1).
- 12 Penelope Gouk, Music, Science and Natural Magic in Seventeenth-Century England (New Haven & London: Yale University Press, 1999). Joseph Sauveur (ed. Rudolf Rasch), Collected Writings on Musical Acoustics (Paris 1700-1713) (Utrecht: The Diapason Press, 1984).
- 13 Wilbur Applebaum, entry 'Keplerianism' in idem (ed.), Encyclopedia of the Scientific Revolution from Copernicus to Newton (New York/London: Garland, 2000), 346-348.

II THE VISUAL ARTS AS LIBERAL ARTS





Representing the World

INGRID ROWLAND

On the face of it, a world of difference separates the official photograph of the Solvay Conference of 1911 (Fig. 2) from Raphael's School of Athens (Fig. 3), completed exactly four hundred years earlier. At the Solvay Conference, a conclave of Nobel laureates and other distinguished scientists actually talked to one another, with an enthusiasm we can see in the photograph itself; indeed, Marie Curie, the lone woman in the foreground, is so absorbed in a conversation with Henri Poincaré that neither of them pays attention to the camera that records their presence. We may also recognize a very young Albert Einstein, second from the right, and, fourth from the right, Ernest Rutherford. Max Planck stands second from the left, and Louis De Broglie stands sixth. At the Solvay Conference of 1927, Einstein would deliver his famous remark to Werner Heisenberg that 'God does not play dice', but by then the participants were so well confirmed in their individual greatness that dialogue had given way to pronouncements. In 1911, however, Marie Curie and Poincaré can pore intently over a text that seems to puzzle them both.

This first Solvay Conference intended to assemble the greatest minds in chemistry, and it succeeded in that aim; although many of these people might have disputed their identification as chemists, without exception they would have called themselves scientists and their mode of procedure the scientific method. They are immortalized, appropriately, in the new medium of photography, their images captured by the light that, just at that moment, struck a treated piece of celluloid film. In the background we can see hints of another trick played by captured light: a portable screen suggests that the conference-goers must have illustrated their presentations by projecting lantern slides.² But technology, then as now, must also have been unreliable: candlesticks on the table suggest that the light cast by the electric bulbs overhead, and perhaps by the projector itself, might fail. Yet another play of light occurs with the help of two large mirrors: these open out, window-like, against the wood-paneled walls. Mirrors have of-



ten served the same purpose as windows at nighttime in dark, paneled rooms, most famously at Versailles.

Raphael's frescoed School of Athens, on the other hand, captures not a fleeting moment but an idea: something intangible, perhaps, but also something durable. Begun in 1509 and touched up in 1511, the painting was probably conceived as a Triumph of Philosophy.3 With marvelous immediacy, it shows the great philosophers of the world gathered, like the scientists of the Solvay Conference, in conversation. Rather than freezing an actual instant in time, however, The School of Athens collapses time onto itself, ranging philosophers who lived in the sixth century before the Christian era alongside those from Raphael's own early sixteenth century Anno Domini, as well as people from many of the centuries in between these two extremes.4 Although the gathering's nominal place is Athens, many of the philosophers assembled together beneath the painting's majestic vaults never set foot in Attica; they lived instead in places like Syracuse, Alexandria, Baghdad, and Rome. The building in which they stand is not a real building; we have reason to believe that it is the Temple of Philosophy described by the sixth-century writer Boethius in his Consolation of Philosophy, however closely it resembles the interior of Saint Peter's Basilica, designed by Raphael's relative Donato Bramante only a few years before, in 1506.5



Fig. 2 (left): Benjamin Couprie, *The Participants of the First Solvay Conference of 1911, Brussels.* Fig. 3 (top): Raphael, *The School of Athens*, 1509-1511, Stanza della Segnatura, Palazzi Pontifici, Vatican City.

Unlike the little, portable photograph of the Solvay Conference (and like St. Peter's), The School of Athens is monumentally large and immovable; it is a painted wall that belongs to a particular building in a particular place. The fresco shows a certain number of ancient Athenians, but in fact it is rooted in the city of Rome, in the heart of the Vatican Palace, where it has stood for four hundred years as an announcement not much different from the announcement made, implicitly, by the Solvay Conference. Both of these images, one time-bound, one timeless, proclaim the birth of a new world of ideas. Both show the individuals who created that new world engrossed in conversation with one another; hence the creation of this new world is a collective rather than an individual enterprise. Both groups focused their primary attention on the workings of the universe, and to the best means by which such an investigation might be carried forward; both aimed to increase humanity's general store of knowledge for our common benefit. In many ways, then, the philosophers of the nascent sixteenth century were the same kinds of people who would become the scientists of the twentieth.

Both Raphael and Julius II, the pope who commissioned *The School of Athens*, believed in a world that could be, and had been, improved over time; so did most, if not all, of the conferees at Solvay.⁶ Cynical Diogenes, sprawled across the steps of the Temple of Wisdom, may not have been so optimistic about the future, nor

sullen Heracleitus, whom Raphael shows with the facial features of Michelangelo – not to mention the dogskin boots that Michelangelo wore so constantly that he was said to lose bits of his own skin whenever he took them off.⁷ But the general spirit of Raphael's great painting, like that of the less consciously artistic photograph, is one of almost ecstatic curiosity about the structure of the world, bolstered by a conviction that such curiosity will uncover things of marvelous beauty.

By now the *School of Athens*, despite a recent restoration, looks almost as venerable as the philosophies it enshrines; it is nearly half a millennium old. With portraits of philosophers spanning two thousand years of human history, the fresco presents creativity as a matter of tradition as well as invention, whereas the photograph of the Solvay Conference, with its new technology, its contemporary cast of characters, and a complete absence of references to bygone times or people, looks almost entirely forward. Yet there are radically innovative features to Raphael's image as well, features linking it as readily to the history of science as to the history of art.

In the first place, the imposing vaults of the Temple of Philosophy are presented in strict one-point perspective, a technique of representation that had been introduced to Italy less than a century earlier by Filippo Brunelleschi. Brunelleschian perspective applied a clear geometric formula to the representation of space, a formula that seemed to Brunelleschi and his contemporaries to mirror the actual mechanics of seeing. In a similar spirit and at virtually the same time as Raphael's fresco, Albrecht Dürer produced a famous woodcut showing an artist who uses a mechanical grid to insure the geometric accuracy of his perspectival foreshortening (Fig. 4).

Raphael makes a much more sophisticated use of perspective in the School of Athens. Within its sacred halls, the Temple of Philosophy is divided in two, its divisions cued by the marble statues of two gods, Apollo and Minerva, and the figures of two ancient Greek philosophers who were themselves accorded nearly immortal status in the sixteenth century: Plato and Aristotle. Plato, clutching a copy of his Timaeus, which speaks of the harmonics of the spheres, and Apollo with his lyre dominate the left side of the fresco, while Aristotle, holding his Ethics, rules the right side together with Minerva (the books are labeled in vernacular: Timeo and Etica). The painting's vanishing point is clearly to be found in its center, but that center is hard to identify securely, located as it is in the graceful folds of Plato and Aristotle's classical robes.

The obscurity of the vanishing point contrasts with the composition of Raphael's fresco for the opposite wall of the same room, *The Triumph of Theology* (Fig. 5, usually known today as the *Disputa del Sacramento*, the 'Debate about the Sacrament', but it is really a serene conclave). Here the artist has fixed his vanishing point in the center of a monstrance displaying the Host; the structure

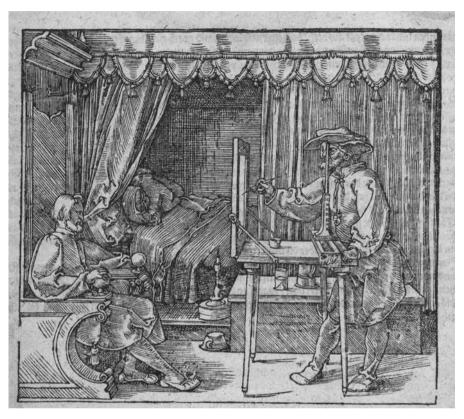


Fig. 4: Artist with mechanical grid, in Albrecht Dürer, Underweysung der Messung, mit dem Zirckel und Richtscheyt (Arnhem 1603).

of the entire picture hinges on the Sacrament. So, too, Raphael seems to suggest, Christ, and more specifically the resurrected Christ who is embodied in the rite of the Mass, is the focal point of the world – in Raphael's day, 'world' was often used to mean the entire universe. Unlike this clear structure, which ranges high heaven with its golden rays and showers of cherubs above an image of God the Father, then the resurrected Christ, then the dove of the Holy Spirit, then the four Gospels, and then the Host, with a more anarchic crowd of saints and sinners below, the School of Athens, with its ancient Greeks, Egyptians, and Persians, and its medieval Muslims, lacks a comparable center: as thinkers unaffected by Christian revelation, they lack what Raphael and his patron, Pope Julius II (who commissioned these frescoes to decorate his private apartments), regarded as the central truth of human existence. The vanishing point is implicitly present, just as the wisdom of their philosophies is a real wisdom, but they have not experienced the full revelation of Christ. The Solvay

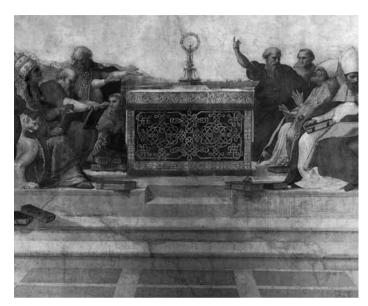


Fig. 5: Raphael, The Triumph of Theology (also known as the Disputa del Sacramento), Stanza della Segnatura, Palazzi Pontifici, Vatican City, detail.

Conference, of course, occurred in a more random world, one that would soon be thrown into the terrible chaos of the Great War. The commemorative photograph contains fewer compositional messages than Raphael's frescoes, and more fortuitous poses. Curie and Poincaré, for example, are surely rapt in discussion because that is how they spent their time, not because they have been asked to pose in this way.

Within the School of Athens, on the other hand, every posture is studied, and every posture tells a story. Plato, appropriately, clutches a copy of his cosmological dialogue, the Timaeus, labeled in Italian so that the greatest number of visitors will understand what is being portrayed here in the pontifical suite. Aristotle, gesturing out over our heads, holds his Ethics. Diogenes reclines on his side, just as Boethius describes him doing in the Consolation of Philosophy; Heraclitus, that inveterate poser of paradoxes, sulks on the side of the fresco that belongs to Plato. Pythagoras naturally takes up the Platonic side of the fresco, writing energetically in a tantalizingly illegible manuscript (there are no intelligible letters, only lines), while in front of him an angelic youth holds out a tablet with a musical diagram (Fig. 6). This diagram juxtaposes the musical interval of the diapason with the perfect number ten; in a single image it compresses two different kinds of information taken, perhaps, from two different passages in Vitruvius: the discussion of music in Book V, and that of perfect numbers in the preface to the same book. As a graphic presentation of multiple ideas, the diagram is compact and attractive; one of the first instances of a type of illustra-

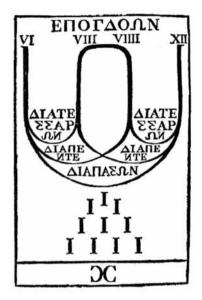


Fig. 6: The pythagorean table.

tion that will have a long, fruitful future in the service of philosophy, especially natural philosophy, and science." Raphael had a genuine knack for this kind of visual representation, along with the visual representation of so much else, from painting to architecture to graphic arts. But he was hardly alone in exploring the possibilities offered by graphs and graphics. His exact contemporary Cesare Cesariano also distilled a passage from Vitruvius into a single image. Here, the ancient architect attempted to define the ideal length of a prose composition on geometric principles:

Pythagoras and those who followed his sect decided to write down their precepts using the principle of cubes; they thought that two hundred sixteen lines constituted a cube and that there ought to be no more than three cubes in a single written composition. Now a cube is a body, squared all round, made up of six sides whose plane surfaces are as long as they are wide. When it is thrown, the part on which it lands (so long as it remains untouched) preserved an immovable stability; the dice that players throw onto the gaming board are like this. The Pythagoreans seem to have taken the image of the [literary] cube from dice, because this particular number of lines, landing like dice on any side whatsoever, will there produce immovable stability of memory.¹²

Following this lead of Vitruvius, Cesariano captured the idea of 'cubic composition' in the image of a die (Fig. 7).¹³

When Vitruvius discussed cubic composition, he may have concluded that 216 lines of papyrus text were the ideal amount of information for a reader to absorb in a single sitting, and therefore the most effective unit into which a writer can divide a composition, but the actual divisions in his own treatise seldom reflect this ideal—Vitruvius had too much to say on too many subjects. Two thousand years after Vitruvius, Robert Silvers, the editor of the New York Review of Books, defined the ideal length of an article as three thousand six hundred words. This is about twice the length that Vitruvius commends—but it is remarkably close to the actual length of the rhetorical prefaces with which Vitruvius begins each of his Ten Books [that is, papyrus scrolls; we would call them chapters] on Architecture, and both of them, in turn, hew close to the Pythagorean limit of three cubes'.

Cesare Cesariano himself is an interesting case: an architect who lived in Milan and translated Vitruvius without ever having seen the marvels of ancient Rome, like the Colosseum and Pantheon—although of course Vitruvius was born too early to have seen them either. To illustrate the section of the *Ten Books* in which the ancient architect set out the criteria for evaluating a classical building, 'soundness, utility, and attractiveness,' Cesariano therefore turned to his own idea of a classic: the cathedral of Milan (Fig. 8).¹⁵ To our eyes, and to the eyes of Cesariano's contemporary, Raphael, this building, begun in 1386, with its elongated proportions and lacy spires, is Gothic rather than classical in style. In one sense, then, Ce-

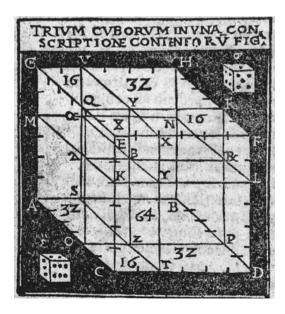


Fig. 7: Image of a die from C. Cesariano, Di Lucio Vitruvio Pollione de architectura libri decem: traducti de latino in vulgare (Como 1521).

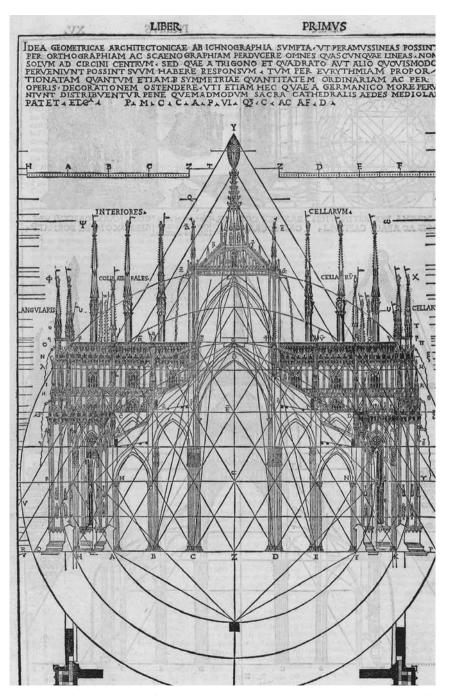


Fig. 8: Façade of Milan Cathedral from C. Cesariano, Di Lucio Vitruvio Pollione de architectura libri decem: traducti de latino in vulgare (Como 1521).

sariano's visual vocabulary was strikingly archaic for his era—he did not draw an evident distinction between classical and medieval architecture as his contemporaries in Florence and Rome were doing. In another sense, however, he understood that medieval architects still held to the same classical principles as Vitruvius, and that their works, like the cathedral of Milan, were also, in their own way, strong, useful, and attractive—and on this point, in fact, Raphael agreed with him.¹⁶

As a graphic artist, however, Cesariano belonged to the sixteenth century's most innovative avant-garde, and few of his contemporaries could match the creative ways in which this Milanese architect could lay out a printed page, or display different varieties of information in a concise image.

Cesariano had been taught by the same mentor as Raphael: the painter and architect Donato Bramante, whose talents also included composing vernacular poetry, playing the lute, and reciting Dante. This extraordinary Renaissance man appears in the lower right-hand portion of the *School of Athens* in the guise of the geometer Euclid, bent over a mathematical diagram; both Euclid and — implicitly — Bramante belong, then, to Aristotle's side of the painting, along with the astronomers and the more practical, empirical philosophers. Bramante left Milan for Rome in 1500; in the Eternal City he began a close study of ancient Roman construction that led him to create modern buildings whose elegance and refinement were regarded by many contemporary critics, Raphael and Cesariano among them, as equal to the great works of antiquity.¹⁷

Bramante's view of the classical style, and of Vitruvius, would become the prevailing view, first in Rome, and then in the world, first for Raphael, and then for Vignola, Palladio, and through Palladio for the English and American classical tradition: Inigo Jones in the seventeenth century, Thomas Jefferson in the eighteenth, and McKim, Mead and White in the twentieth.¹⁸ Although Bramante's only surviving written work may be an extremely funny mock-rustic poem about Rome's antiquities, the *Antiquarie Prospettiche Romane*, he was a towering intellect, whose casual conversation with Raphael and others may have given us our concept of the classical orders, Doric, Ionic, and Corinthian, and certainly gave us our ideas about the majesty of ancient Roman interior space.¹⁹ Raphael's Temple of Wisdom owes an immense debt to Bramante's vision, especially to his plans for the rebuilding of St. Peter's Basilica, and in their own day Bramante's works were revolutionary. The sheer novelty of his architecture is hard for us to recreate now, because it so quickly became the definitive style for monumental buildings, both sacred and secular, throughout the Christian world.

Bramante's vision of ancient architecture emphasized the clarity of its overall design and the distinctiveness of its component parts, but there were other strains in early sixteenth-century thought that aimed for intricacy, secrecy, and occult truth. A good example of that taste for convolution can be seen on the altar front of Ra-

phael's Triumph of Theology (its popular name now is Disputa del Sacramento 'Debate about the Sacrament', but in the center of the Vatican of Julius II that debate had surely been resolved once and for all) (Fig. 5). The altar at the fresco's center is covered by a cloth intricately embroidered in golden knots from a single cord, a reminder that one of the new luxury arts to come in with the fifteenth century was that intricate creation of knots known as lace. The making of lace is a matter of great complexity and long-term strategy; a lacemaker, no less than a general, must anticipate what her threads will be doing in a remote future and deploy them with that future in mind. To an extent most ancient writers would not like to admit, the grid plans of ancient architecture and city planning derived from the looms on which women wove the social fabric along with more literal cloth. Similarly, in Malta, one of the centers for lace in the early modern world, the most highly paid woman was the Grand Master's lace mistress. The world is bound with secret knots, declared the Jesuit Athanasius Kircher on the title page of his book on The Magnetic Kingdom of Nature, Magneticum Naturae Regnum, published in 1665.

Theology, indeed, presented an increasingly knotty problem for thinkers of the early modern period. Cesare Cesariano's universe was still bounded by the sphere of the fixed stars, but the universe for another son of the sixteenth century, Giordano Bruno, had burst forth into infinity.²⁴ Bruno made his leap by the sheer power of thought, shortly before the telescope began to confirm his findings. When Galileo Galilei began to point his telescope toward the heavens, his discoveries expanded not only the boundaries of the known universe, by identifying the moons of Jupiter, but also, once again, the boundaries of graphic art. In some editions of his *Starry Messenger* of 1612, the book in which he first reported his findings with the telescope, the stars of the Pleiades, now revealed as many more than the traditional six (Fig. 9),

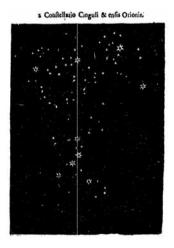


Fig. 9: The Pleiades, from Galileo Galiei, *Sidereus nuncius* (London 1653).

seem to burst the margins of the printed page; in the same way, Bruno's ideas were bursting apart the music of the spheres.²⁵ Bruno's influence on Galileo was more profound than the younger man liked to admit (and not only because Bruno had been burned at the stake in 1600); when Galileo insisted, for example, that the Bible should be used as a source for moral guidance rather than as a treatise on nature, he was actually repeating an idea that Bruno had voiced in his own cosmological dialogue, *The Ash Wednesday Supper*.²⁶

Both Bruno and Galileo had the misfortune to live in the aftermath of the Protestant Reformation, when European positions on religion began to harden on all sides. The Catholic response to Martin Luther and John Calvin was the self-reforming Council of Trent, the great gathering that originally aimed to heal the break of the Reformation and ended up instead by reinforcing it.27 Along with pronouncements on dogma, the Council also issued edicts about art and architecture, and it was in this quandary that the painter Michelangelo Merisi da Caravaggio - although we now know for certain that he was born in Milan - came down to Rome.²⁸ Caravaggio has often been identified as a realist, a painter who took pains to show his subjects' dirty feet, who used prostitutes and cutpurses as his models. And yet a painting like his Deposition (Fig. 10), now in the Vatican Museum but intended for a chapel in the church of Santa Maria in Vallicella, performs a far more complex operation. In one sense, this is a painting that aims to show Christ's burial just as it was; the heroic figure of Jesus is explicitly wrapped in the Shroud of Turin, which also appears in the stucco decoration of the chapel that was the painting's original destination.29 The figures are nearly life size; in the oblique light of their original setting, they must have seemed uncannily three-dimensional. And yet at the same time they recreate the pose from a famous ancient Roman sarcophagus, now in the Capitoline Museums, depicting the burial of the ancient Greek hero Meleager.30 Caravaggio, the great realist, shows here that he is also a classicist at heart. In trying to show how this event happened in Roman-occupied Judea, in the reign of the emperor Tiberius, under the procurator Pontius Pilate, the painter, by now familiar with original works of ancient Roman art, gives his figures the movements of ancient Romans, and carefully shows Christ wrapped in the long linen shroud, twice a man's height, that is still venerated in Torino. Yet these figures are clothed in early seventeenth-century clothing; if they are of ancient Roman times, they are also of Caravaggio's time, and the time of the painting's first viewers. Similarly, Caravaggio's Calling of St. Matthew (Fig. 11, page 88) puts Jesus and Peter, clad in their Roman togas, just inside the door of a dark little moneychangers' shop, calling 'follow me' to men who dress and act like Caravaggio's contemporaries, people who live sixteen centuries later. These scenes therefore show

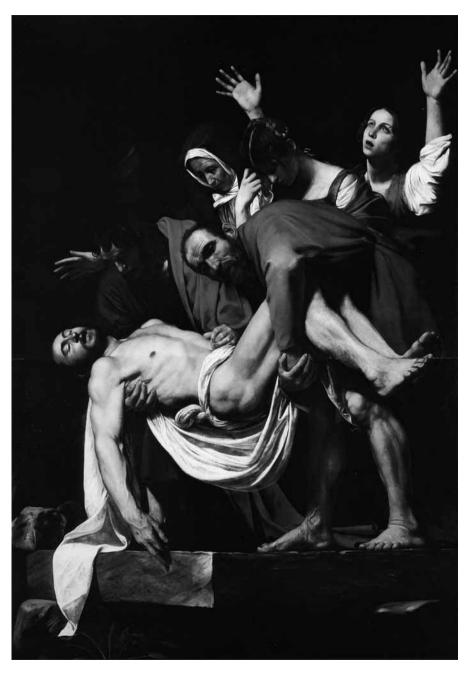


Fig. 10: Michelangelo Merisi da Caravaggio, *The Deposition*, 1602-1603, oil on canvas, 300 x 203 cm, Pinacoteca, Vatican City.



Fig. 11: Michelangelo Merisi da Caravaggio, *The Calling of Saint Matthew*, 1599-1600, oil on canvas, 322 x 340 cm, Contarelli Chapel, San Luigi dei Francesi, Rome.

more than the call and the suffering of Jesus; they also strive, urgently, to reveal the deep, truthful harmonies that underpin reality, no less than the much neater diagram of the diapason in Raphael's School of Athens. Caravaggio's thoroughly human subjects wear their imperfections in much the same spirit as the moon in Galileo's Starry Messenger, whose pockmarked face the great astronomer portrayed in unprecedented detail (Fig. 12); by carefully tracing the outlines of lunar craters, Galileo, an exceptional artist, made it increasingly difficult to argue that the spots on the moon's surface were clouds in the Earth's atmosphere – our satellite was not the perfect crystal sphere that Aristotle declared it should be. Yet neither the imperfection of humanity nor the imperfection of the Moon disturbed Caravaggio's conviction that human-

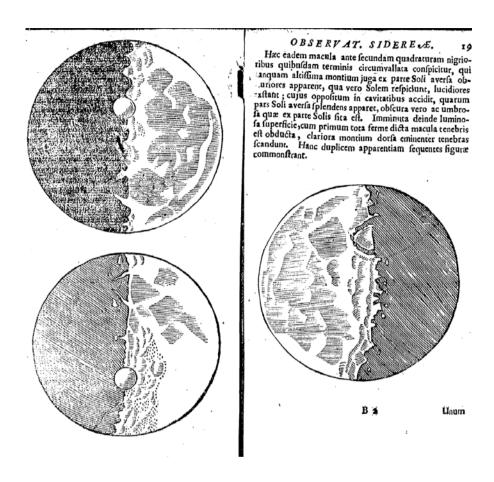


Fig. 12: The Moon, from Galileo Galiei, Sidereus nuncius (London 1653).

ity could be redeemed by faith nor Galileo's conviction that the universe was fantastically beautiful.

Indeed, Galileo, however inclined he may have been to show the moon warts and all, was also his own kind of classicist; by couching his later works in the form of dialogues, he harked back to Plato and, although once again he would never admit it, to Giordano Bruno, his forerunner in so many ways. Dialogue was a medium that allowed both Bruno and Galileo to discuss as well as to expose their arguments, especially by showing the process by which intelligent but initially skeptical characters like the Londoner Mr. Smitho in Bruno's Ash Wednesday Supper, or the sober Venetian Sagredo in Galileo's Dialogue on the Two Chief World Systems, could be won over by the brilliance of the author's

alter egos: Bruno's Teofilo and Galileo's Salviati. Stefano Della Bella's title page for Galileo's *Dialogue* (Fig. 13) is itself a kind of *School of Athens*, even if one member of its conclave, the dimwitted Simplicio embodying Aristotle, hardly deserves his place in the Temple of Wisdom.



Fig. 13: Stefano della Bella, title page from Galileo Galileo, Dialogo ... sopra i due massimi sistemi del mondo Tolemaico, e Copernicano (Florence 1632).

We have already noted Galileo's mastery of print as a medium; beyond his pungent use of language, his publications deftly exploit art together with prose and the appearance of the printed page. And here again, Galileo looked back to the heretic Giordano Bruno who had made similar use of printed publication to disseminate his ideas, although he did so on a much lower budget, with woodcuts from his own hand rather than professional engravings by a master artist like Stefano Della Bella. Over the course of the sixteenth and seventeenth centuries, the possibilities for publishing began to expand as rapidly as the amount of philosophical knowledge that print was called upon to disseminate; in Catholic countries, the Inquisition was quick to take notice. As a result, printers flocked to Protestant cities; Amsterdam, in particular, became one of world's greatest centers for the publication of books and engravings. Catholic authors took advantage of Amsterdam's free presses no less than their Protestant and Jewish counterparts, none more so than the seventeenth-century German Jesuit, father Athanasius Kircher (1601-1680), who in his own day ranked as a scientist in the same league as Galileo (Fig. 14, next page). One of Kircher's Amsterdam imprints shows him in his most distinctive haunt: the museum he assembled within the halls of Rome's Jesuit College beginning in 1651, and which survived more or less intact until the unification of Italy in 1870.31 The museum hall still exists, although its fresco decorations have been whitewashed away, as do a surprising number of the objects we see on display in the engraving. When we examine both the setting and the surviving objects, we can see that the whole engraved image of Kircher's museum is perfectly accurate in its proportions, with one exception: the human figures gathered in its foreground are about half as tall as they should be. The obelisks we see ranged behind Father Kircher and his guests still exist; made of wood, they are all only a meter high. The skeleton in the background has also survived, but it belongs to a human fetus rather than a full-sized adult. The Temple of Wisdom in Raphael's School of Athens is truly monumental, but this room is monumental only because its occupants have been reduced to the size of leprechauns. The clever trick of perspective and miniaturization works so convincingly, however, that Giambattista Piranesi would borrow it for his terrifyingly grand views of Roman ruins—and most architects' drawings today still glorify their work by exaggerating the size of their own buildings and reducing the people who will use those buildings to the stature of ants. On the timeline between Raphael's Temple of Wisdom, where questions about nature are part of philosophy, and the paneled room of the Solvay Conference, where nature is the province of science, Athanasius Kircher and his Museum stand somewhere in the middle – and perhaps they stand more on the scientific side than the writers of the 1909 Encyclopedia Britannica thought when they described Father Kircher as 'a man of wide and varied learning, but singularly devoid of judgment and critical discernment. Kircher's reputation suffered for much of the twentieth century because his efforts



Fig. 14: The Musaeum Kircherianum, from Georgius de Sepibus, Romani collegii Societatis Jesu musæum celeberrimum (Amsterdam 1678).

to represent reality included both a theological and what we would call a scientific purpose rather than a single-minded pursuit of science; however, the death of Giordano Bruno and the imprisonment of Galileo would have reminded Kircher that any departure from theological orthodoxy in his own time and place could pose a mortal risk. In fact, however, with daring, subterfuge, and an outrageous sense of humor, he departed regularly from the standard truths of Jesuit teaching.

Kircher may be best known today for his Baroque diagrams, like his vision of the microcosmic man from his treatise on music, the *Musurgia universalis* (Fig. 15), but there was a core of practical empiricism in the man as well. His interest in geology was sparked by his year in Malta between 1637 and 1638, when he was able to climb both Etna and Vesuvius, but many of his ideas must have come from

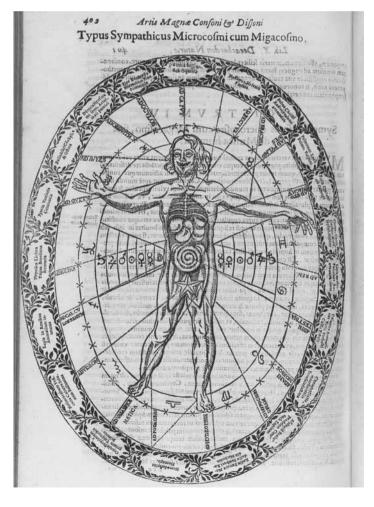


Fig. 15: The Microcosmic Man, from Athanasius Kircher, Mvsvrgia vniversalis sive ars magna consoni et dissoni in X. libros digesta (Roma 1650).

the limestone plateau of the Maltese islands themselves, from places like Dwejra Bay on the island of Gozo. Fossilized sand dollars such as those at Dwejra crystallized his interest in fossils in general; his geological masterpiece, the *Mundus subterraneus* of 1665, devotes several pages to engravings of them. The geological strata and fault lines that are particularly visible on the limestone plateau of the Maltese Islands eventually led Father Kircher to formulate the forerunner of our own theory of plate tectonics, and to explain the loss of Atlantis by the process we now identify as subduction. He regarded the Earth as an imperfect sphere riddled with veins of fire, air, and water. So too were the Moon and Sun, whose troubled faces he had seen with telescope and helioscope (a telescope that projected the Sun's image). Kircher's geology even underpins one of Baroque Rome's most beloved works of art, Gianlorenzo Bernini's *Fountain of the Four Rivers*, commissioned for the Jubilee of 1650 although it was finished in 1651, several months behind schedule (Fig. 16). Beneath an Egyptian obelisk, rivers represent-



Fig. 16: Gianlorenzo Bernini, Fountain of the Four Rivers, 1648-1651, Piazza Navona, Rome.

ing four continents gush forth from an enormous water reservoir, what Kircher called a hydrophylacium, hidden, like the sources for all the world's rivers, underneath a great hollow mountain. The similarities between Bernini's travertine mountain and the formations that Kircher imagined after seeing the fault lines and stratified layers of Malta show the work of two great observers, and two great imaginations.

The Fountain of the Four Rivers, in a real sense, is also a representation of the world, one that Kircher especially, more than perhaps Bernini, conceived as a melding of two forces: what he called the vicissitude of nature, and the eternal truths of religion.32 The obelisk is made of granite, a supremely hard stone, and topped by a dove and cross of gilded bronze, materials to symbolize the eternal glory of heaven and the durability of true faith. Below, everything is porous, from the surface of the travertine to the very nature of the creatures clinging to the water-gushing rocks. Real weeds sprout among Bernini's carved foliage, proof of Kircher's theory that the world was infinitely fertile as well as of Bernini's artistry.³³ The fountain was erected to celebrate a ceremony of Christian repentance and forgiveness, the Jubilee, that descended from a similar rite in Judaism; it was also a monument to the recent end (in 1648) of the dreadful Thirty Years' War, with its million victims.34 As a single comprehensive image of the world and its ways, this important work of urban renewal is not much different from the allegory on the title page of Kircher's later book, the Ars magna sciendi (Fig. 17, page 106), where divine wisdom rules over a land whose eroded soil is carried by a river into the sea, but built up again by a spewing volcano. In Kircher's view, the physical world moved in an endless circle of change, guided by a transcendent, steady higher truth. If he were to be transported magically into Raphael's School of Athens, this redoubtable empiricist would still stand firmly on the side of Plato.

In Obeliscus Pamphilius, the volume that Father Kircher published to celebrate the fountain of the four rivers – and at the same time to advertise his own forthcoming books on Egyptology and geology – he concentrated on translating the hieroglyphic inscriptions on the obelisk's sides, a skill in which he claimed unique proficiency, and not entirely without justification; his was the intuition that modern Coptic would provide the key to ancient Egyptian. But perhaps the strongest impact of the book resides in the power – or at least the shamelessness – of its advertising, from the title page that presents the middle-aged, black-clad author as a heroic youth to the constant hints that still greater works are poised to emerge from his remarkably fertile pen. Kircher's Jesuit censors called ceaseless and critical attention to his propensity to brag, but it never seems to have had the slightest effect on him. The public, meanwhile, begged for more, and more they got.

In 1666, when Kircher and Bernini joined forces a second time to combine statue and obelisk, they also played a Jesuitical joke on the Dominicans who had

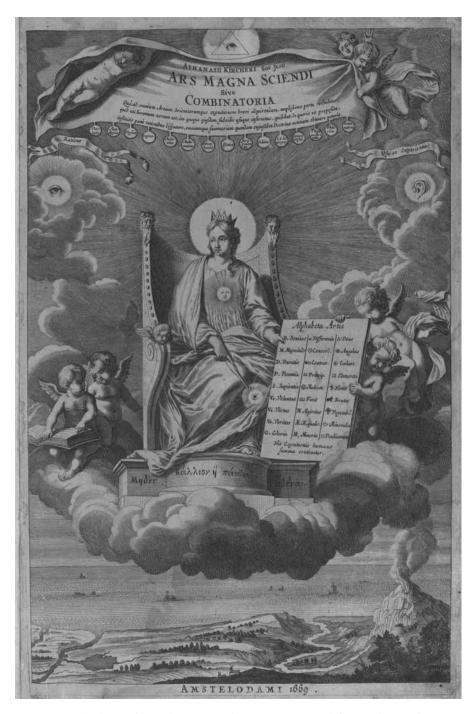


Fig. 17: Title page from Athanasius Kircher, Ars Magna Sciendi (Amsterdam 1669).

found the artifact in their garden.³⁷ Bernini's drawings for the project still exist, and he toyed with several designs for a pedestal to carry the obelisk, including a figure of Hercules staggering under its weight. He and his sponsor, Pope Alexander VII, eventually opted for a more reassuring – and more structurally sound – solution on a site that is literally built on the shifting silt of the River Tiber (Fig. 18). A well-fed elephant lofts his Egyptian needle above inscriptions declaring that only a robust soul is fit to bear the burden of wisdom, but his knowing smirk seems likely to stem from the fact that all the while he is turning his posterior toward the door of the Dominican convent of Santa Maria Sopra Minerva, the



Fig. 18: Gianlorenzo Bernini, The Obelisk of Santa Maria Sopra Minerva, 1667, Rome.

place where Giordano Bruno resided for a time in 1576 and Galileo stood trial for heresy in 1633. On the other hand, the elephant could hardly turn his tail toward the church next door, and it would be nearly as rude to turn it toward passersby on the street. Or so Bernini might have argued, indeed the placement of sculpted animals in Roman piazzas always reflects mature consideration of the direction in which they aim their various parts. The reign of Alexander VII, who was elected in 1655, had been ushered in by a series of dramatic events, from the arrival of the newly converted Queen Christina of Sweden - of whom the disappointed Pope wrote 'non è bella' in his diary - to an outbreak of plague.³⁸ He had good reason to ask artist Pietro da Cortona to paint him an image of a guardian angel (Fig. 19) and may have felt more like the old man in the background hovering on a precipice in a dark and stormy night than like the child who strides forward with innocent faith in the foreground. In the meantime, however, his friend Father Kircher was seeing the plague through empirical eyes, training several varieties of microscope on the problem. As the disease raged in Trastevere, the Pope imposed a rigid quarantine, encouraged by Kircher, who was convinced that the trouble could ultimately be traced to what he called 'little worms' and we would eventually call a microbe.39 The plasmodium Yersinia pestis was too small to be detected by the instrument that Kircher called a smicroscopium, and the Jesuit censors delayed publication of the book in which he detailed his findings, but Scrutinium pestis came out in 1668, the first step in a chain of research that would lead to the understanding, if not the eradication, of the bubonic plague. The board of censors, for their own part, had acted in a way consistent with modern scientific or scholarly peer reviewers; Jesuits were not trained as medical doctors, and they did not want Kircher's book to draw conclusions about medicine without having a real physician's approval.40 Pope Alexander's reaction to plague in 1655, then, involved both the invocation of guardian angels and the imposition of quarantine, and it is testimony to the courage — and to the faith – of his nephew Flavio Chigi and two other cardinals that they made repeated visits into the quarantined area without wearing protective plague suits. 41 There was no other way for people to know that they were cardinals.

Skill with the microscope enabled Kircher's contemporary Francesco Redi to refute another of the seventeenth century's persistent controversies: the question of spontaneous generation. 42 Kircher, for example, believed that insects and reptiles were created from straw, dung, and the fertile power of sunbeams; the weeds on the Fountain of the Four Rivers testify to that fertile force, which Kircher called *panspermia rerum*, the universal seeds of things. 43 Both of them, like their

Fig. 19: Pietro da Cortona, *The Guardian Angel*, 1656, oil on canvas, 225 x 143 cm, Galleria Nazionale d'Arte Antica, Rome.



Dutch colleague Antonie van Leeuwenhoek, were horrified to discover what a remarkable menagerie lived within normal everyday objects, from peaches and melons to the insides of their own mouths and the surface of their own skins. Redi, however, was finally able to identify fly eggs in dung and thereby put strict limits on the generative powers of *panspermia rerum*; the term would not be used again until the Swedish chemist Svante Arrhenius, who won the newly minted Nobel Prize in 1903, to discuss the origins of life in the universe.⁴⁴

In general, we can see the early modern period oscillating between allegorical and metaphorical means of representing the world, and what we might identify now as a more empirical approach. Athanasius Kircher, of course, stands gloriously in between the two, with his intricately fanciful diagrams of great correspondences that no longer mean much to us, and the orderly presentation of data, to which we attribute much of our own standard of physical and intellectual life. It may not be surprising to find a great early modern empiricist like the entomologist (and Amsterdam resident) Maria Sibylla Merian (Fig. 20) presenting her visually ravishing studies of insect metamorphosis as simultaneous comments on the transitory nature of life; she was, after all, the member of a strongly pietistic Protestant sect, the Reformation's version, then, of an Athanasius Kircher.⁴⁵

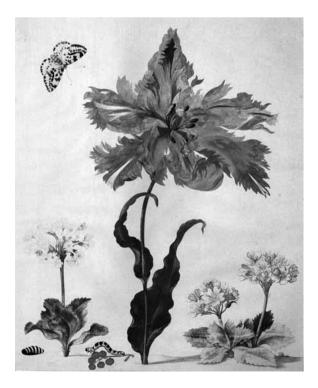


Fig. 20: Maria Sibylla Merian, Tulip.



Fig. 21: Jacopo Torriti, Coronation of the Virgin, 1295, Santa Maria Maggiore, Rome.

But even today, modern scientific representations of our world and its nature still make use of art and allegory. The great gas clouds that the Hubble space telescope has revealed giving birth to stars are visible to us only because their colors have been artificially enhanced; created no less than the wholly distinctive reds and oranges that only Maria Sibylla Merian could ever extract from pigments. And a now-common diagram in chemical kinetics presents the reaction of two molecules as an event that takes place in an energy field conceived as a landscape; here the hills and valleys are made not of earth but of pure energy. Our blue planet is the product of scattered light rather than the crunching in a mortar of lapis lazuli, but the ends of the universe have not changed their colors for all that; a thirteenth-century Coronation of the Virgin (Fig. 21) pictures a round heaven in stripes of blue and gold, perhaps only because these are the two most precious pigments, perhaps because of the color presented by sun and sky. For Raphael in his Triumph of Theology of 1508, as for Titian's Assumption of the Virgin from ten years later, deep space is light gold, the color of the metal electrum, as the prophet Ezekiel declared when he described his vision:

And I looked, and behold, a whirlwind came out of the north, a great cloud, and a fire unfolding itself, and out of the midst thereof as the color of amber, out of the midst of the fire.

Now we think of deep space as black, and smelling of sizzling beefsteak, and the music of the spheres, as Stanley Kubrick's film 2001 suggested, is the ¾ time of the Blue Danube Waltz. Our representations of the worlds beyond still refer back in the end to this shifty world around us, because it is here that we live our lives. The Solvay Conference, no less than the School of Athens, is a lofty edifice filled with quirky human beings, an overarching universe roiling with errant ideas. The history of those ideas is not only a history of science; it is always, equally, a history of the humanities, those two fields of study that were once partners in philosophy and are still inextricable partners in thought. Today, no less than in the yesterday of the School of Athens, Plato still jostles Aristotle, and the still point between them is still caught in a swirling mass of drapery.

Notes

- See the official website of the Conseils Solvay at URL: http://www.solvayinstitutes.be/ Conseils%20Solvay/WhatConseilsSolvay.html.
- The first lantern slides were projected in the seventeenth century; see, for example, Athanasius Kircher, Ars Magna Lucis et Umbrae (Romae: Herm. Scheus, 1646).
- 3 See Marcia Hall, ed., Raphael's School of Athens (Cambridge and New York: Cambridge University Press, 1997); Bram Kempers, 'Words, Images, and all the Pope's Men: Raphael's Stanza della Segnatura and the Synthesis of Divine Wisdom,' in Iain Hampsher-Monk, Karin Tilmans & Frank van Vree, eds., History of Concepts: A Comparative Perspective (Amsterdam: University of Amsterdam Press, 1998), 131-165.
- 4 Pythagoras, holding a tablet on the lower left, lived in Southern Italy in the sixth century BC; contemporaries depicted in the painting include Raphael himself, standing second from the right on the right-hand edge of the painting; his relative and mentor Donato Bramante, the bald man bending over a geometric diagram in the right foreground, and Tommaso Inghirami, the portly man in blue standing to the far left and reading a book.
- This interpretation was put forth first by Roland Fréart de Chambray, Idée de la perfection de la peinture (Le Mans, 1662); a modern edition by Frédérique Lemerle-Pauwels and Milovan Stanié, Roland Fréart de Chambray, Parallèle de l'architecture antique avec la moderne: suivi de Idée de la perfection de la peinture (Paris: École Nationale Supérieure des Beaux-Arts, 2005). Giovanni Pietro Bellori's influential Descrizione follows this interpretation; Kempers, however, puts their identification into historical perspective, Kempers, 'Words, Images, and All the Pope's Men,' 141-3.
- 6 This plenitudo temporum is evoked in Paolo Portoghesi, Roma del Rinascimento (Venice: Electa, 1971), 16-24.
- The dogskin boots were noted by Giorgio Vasari in his Life of Michelangelo: 'Alle gambe invecchiando portava di continovo stivali di pelle di cane sopra lo ignudo i mesi interi, che quando gli voleva cavare poi, nel tirargli ne veniva spesso la pelle' ('as he grew older he wore dogskin boots over bare feet for months on end, so that when he wanted to remove them, often, in pulling them off, his skin came off as well.'
- 8 In a vast bibliography, the following are still excellent sources: John White, *The Birth and Rebirth of Pictorial Space* (London: Faber and Faber, 1957); Samuel Y. Edgerton, *The Re-*

- naissance Rediscovery of Linear Perspective (New York: Basic Books, 1975); Martin Kemp, The Science of Art: Optical Themes in Western Art from Brunelleschi to Seurat (New Haven and London: Yale University Press, 2002).
- In a vast bibliography, see note 3 above.
- 10 Kempers, 'Words, Images, and All the Pope's Men' is particularly interesting in this regard.
- 11 The classic work on this subject is Edward R. Tufte, The Visual Display of Quantitative Information, 2nd Edition (Graphics Press, 2001).
- Vitruvius, De Architectura, V.praef. The translation is mine; Ingrid D. Rowland and Thomas Noble Howe, eds., Vitruvius Ten Books on Architecture (Cambridge and New York: Cambridge University Press, 1999), 63.
- Cesare Cesariano, ed., Di Lucio Vitruuio Pollione De architectura libri decem: traducti de latino in vulgare, affigurati, comentati, & con mirando ordine insigniti: per il quale facilmente potrai trouare la multitudine de li abstrusi & reconditi vocabuli a li soi loci & in epsa tabula con summo studio expositi & enucleati ad immensa utilitate de ciascuno studioso & beniuolo di epsa opera (Como: Gottardo de Ponte, 1521), fol. LXXII recto. On Cesariano, see, most recently, Maria Luisa Gatti Perer and Alessandro Roveretta, Cesare Cesariano e il classicismo del primo Cinquecento (Milan: Università Cattolica, 1996).
- 14 My word counts for papyrus scrolls are extremely rough, given the lack of preserved Latin texts from the time of Vitruvius (late first century B.C.). One line of Latin papyrus text normally seems to have contained one line of Latin hexameter verse, and transcribed Latin prose texts from Herculaneum seem to contain similar numbers of words and letters; I have therefore based my calculations on a comparison of Vergil and Vitruvius. See some general remarks on Latin papyri and their script in Knut Kleve, 'The Latin Papyri in Herculaneum,' in Adam Bülow-Jacobsen, ed., Proceedings of the 20th International Congress of Papyrologists, Copenhagen, 23-29 August, 1992 (Copenhagen: Museum Tusculanum Press, 1994), 382-383.
- 15 Cesariano shows the ground plan at folio XIIII verso; elevations at XV verso and XVI recto. The famous triad of *firmitas*, *utilitas*, *et venustas* comes from Vitruvius, *De Architectura*, I.3. Translation Rowland and Howe, p. 26.
- 16 See Francesco Paolo di Teodoro, Raffaello, Baldassar Castiglione e la Lettera a Leone X. Con l'aggiunta di due saggi raffaelleschi (Bologna: Minerva Edizioni, 2003).
- 17 Raphael credits Bramante with equaling the ancients in his letter to Pope Leo X: 'a' dì nostri l'architectura sia molto svegliata e venuta assai proxima alla maniera delli antichi, come si vede per molte belle opere di Bramante'. Text cited from Ingrid D. Rowland, 'Raphael, Angelo Colocci, and the Genesis of the Architectural Orders,' Art Bulletin 76 (1994), 103.
- 18 See the collected papers in Studi Bramanteschi, atti del Congresso Internazionale di studi bramanteschi, 1970, (Milan: Electa, 1974); Francesco Paolo Di Teodoro, ed., Donato Bramante, ricerche, proposte, riletture (Urbino: Accademia Raffaello, 2001); Arnaldo Bruschi, Bramante Architetto (Rome and Bari: Laterza, 1969).
- 19 For Bramante's authorship, see Doris Fienga, 'The Antiquarie Prospetiche Romane Composto per Prospectivo Melanese Depictore. A Document for the Study of the Relationship between Bramante and Leonardo da Vinci,' (Ph.D. diss., University of California at Los Angeles, 1970), so also Ingrid D. Rowland, The Culture of the High Renaissance. Ancients and Moderns in Sixteenth-century Rome (Cambridge: Cambridge University Press, 1998), 105-108. Giovanni Agosti and Dante Isella disagree, pointedly, in their edition of the Antiquarie Prospetiche Romane (Milan: Guanda, 2004), esp. p. lxxiii.

For some reason, many English-speaking writers also put an accent on the final letter of Disputa (a convention I mistakenly followed in an early article), but the word is stressed on its first syllable.

- A remarkable, erudite account of the history of lacemaking is that of Consiglia Azzopardi, Antique Maltese Lace of the time of the Order 1534 – 1798: Artistic and Technical Appreciation (M.Phil. Thesis, University of Malta, 2002), written by the great lace expert of the Maltese Islands.
- See Pier Nicola Pagliara, 'Vitruvio da testo a canone,' in Salvatore Settis, ed., Memoria dell'antico nell'arte italiana, Vol. III (Turin: Einaudi, 1986), 5-86; Ingrid D. Rowland, 'From Vitruvian Scholarship to Vitruvian Practice,' Memoirs of the American Academy in Rome 50 (2006), 9-27.
- 23 Athanasius Kircher, Magneticum Naturae Regnum (Amsterdam: Johann Jansson, 1667), title page.
- 24 Ingrid D. Rowland, Giordano Bruno, Philosopher/Heretic (New York: Farrar, Straus and Giroux, 2008).
- 25 See Ingrid D. Rowland, The Ecstatic Journey: Athanasius Kircher in Baroque Rome (Chicago: University of Chicago Libraries, 2000), 72-74.
- Galileo's declaration that Scripture should not be used as a basis for the discussion of nature is found in his letter to the Grand Duchess Christina of Lorraine (1615), Lettera a Cristina di Lorena, Granduchessa di Toscana, in Galileo Galilei, Opere, ed. Antonio Favaro (Florence: Giunti-Barbera, 1968), vol. V, 309-348; Giordano Bruno's assertion comes from his dialogue The Ash Wednesday Supper, La Cena de le Ceneri, of 1584.
- 27 Paolo Sarpi's introduction to his history of the Council is scathing; Pietro Soave Polano (Paolo Sarpi), Istoria del Concilio Tridentino (London, 1619).
- 28 Caravaggio's birth notice was discovered in Milan in 2007 by Vittorio Pirami, a retired executive who had always been interested in the history of art; see the press release for the exhibition 'Caravaggio a Milano', URL: www.caravaggioamilano.it/pdf/atto_nascita.pdf.
- 29 See Helen Langdon, Caravaggio: A Life (London: Chatto and Windus, 1998), 241-246.
- Ancient Roman sarcophagi showing the death of Meleager, visible in several versions in Rome, inspired Renaissance paintings of the *Entombment of Christ* since the early fifteenth century (notably Raphael's *Entombment* in the Borghese Gallery, Rome), and Leon Battista Alberti praised a version of the sarcophagus visible in Florence in his Della Pittura, here cited from the translation by John R. Spencer, *Leon Battista Alberti on Painting* (New Haven: Yale University Press, 73): 'In every one of his members, he appears completely dead—everything hangs, hands, fingers, and head; everything falls heavily.'
- Maristella Casciato, Maria Grazia Ianniello & Maria Vitale, eds., Enciclopedismo in Roma barocca: Athanasius Kircher e il Museo del Collegio romano tra Wunderkammer e museo scientifico (Venice: Marsilio, 1986); Eugenio Lo Sardo, ed., Athanasius Kircher: Il Museo del Mondo (Rome: De Luca, 2001); Idem, Giorgio Di Sepi, Il Museo del Collegio Romano di Athanasius Kircher (Naples: Scriptaweb Online Publishing, 2006); Ingrid Rowland, 'Il geroglifico del mondo: Athanasius Kircher e il suo Museo,' in Il Rinascimento Italiano e l'Europa, Vol V, Le Scienze (Angelo Colla Editore, 2008), 218-232 (trans. Francesco La Nave); in press; English version online in Humanist Art Review III (2008), URL: http://www.humanistart.net.
- Ingrid Rowland, 'Th' United Sense of th' Universe: Athanasius Kircher in Piazza Navona,' Memoirs of the American Academy in Rome 46 (2001).
- Ingrid Rowland, 'Athanasius Kircher, Giordano Bruno, and the Panspermia of the Infinite Universe', in Paula Findlen, ed., Athanasius Kircher, the Last Man who Knew Everything (New York: Routledge, 2004), 191-206.

- See Konrad Repgen, 'Negotiating the Peace of Westphalia: A Survey with an Examination of the Major Problems', in: 1648: War and Peace in Europe: 3 vols. (Catalogue of the 26th exhibition of the Council of Europe, on the Peace of Westphalia), Klaus Bußmann and Heinz Schilling (eds.) on behalf of the Veranstaltungsgesellschaft 350 Jahre Westfälischer Friede (Münster and Osnabrück, 1998), vol. 1, 355-372. Acta Pacis Westphalicae is an immense project devoted to every aspect of the Peace; the website at URL: http://www.pax-westphalica.de/ gives details of its extensive publications.
- 35 See Lo Sardo, Athanasius Kircher; idem, The She-Wolf and the Sphinx: Rome and Egypt from History to Myth, exhibition catalogue (Milan: Electa Editrice, 2008).
- 36 Harald Siebert, 'Kircher and his Critics: Censorial Practice and Pragmatic Disregard in the Society of Jesus,' in Athanasius Kircher, the Last Man who Knew Everything, ed. Paula Findlen, (New York: Routledge, 2004), 79-104.
- 37 Lo Sardo, Athanasius Kircher; Brian Curran, Anthony Grafton, Pamela Long and Benjamin Weiss, Obelisk (Cambridge, MA: MIT Press, 2009).
- The relationship between Kircher and Chigi has yet to be discussed in depth. They saw each other with some frequency whenever they were both in Rome; see Chigi's diaries, edited by Konrad Repgen, *Diarium Chigi*, 1639-1651, Acta Pacis Westphalicae, Ser. III, Abteilung C, Diarien (Münster: Rheinisch-Westphälische Akademie der Wissenschaften, 1984).
- 59 Fabio Troncarelli, 'La paura dell'idra. Kircher e la peste di Roma,' in Casciato a.o., Enciclopedismo in Roma Barocca, 139-150; Martha Baldwin, 'Reverie in the time of Plague: Athanasius Kircher and the Plague Epidemic of 1656,' in Athanasius Kircher, the Last Man who Knew Everything, ed. Paula Findlen, (New York: Routledge, 2004), 63-78.
- 40 Harald Siebert, 'Kircher and his Critics: Censorial Practice and Pragmatic Disregard in the Society of Jesus,' in *Athanasius Kircher*, the Last Man who Knew Everything, ed. Paula Findlen, (New York: Routledge, 2004, 79-104).
- 41 Troncarelli, 'La paura dell'idra'; Baldwin, 'Reverie in the time of Plague'.
- 42 Francesco Redi, Esperienze Intorno alla Generazione degl' Insetti, fatte da Francesco Redi, Gentiluomo Aretino e Accademico della Crusca, e da lui scritte in una Lettera all'Illustrissimo Signor Carlo Dati (Florence: All'insegna della Stella, 1668).
- 43 See Note supra.
- 44 Svante Arrhenius, Worlds in the Making: The Evolution of the Universe (New York: Harper & Row, 1908).
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Ficino, Diacceto and Michelangelo's

Presentation Drawings¹

Marieke van den Doel

The Florentine philosopher Marsilio Ficino (1433-1499) was one of the first scholars who suggested that painting, which was generally regarded as a craft, should be included among the Liberal Arts. His main work, *Platonic Theology* (1482), compared his own time to a Golden Age that 'has brought back to light the Liberal Arts which had almost been extinct: Grammar, Poetry, Rhetoric, Painting, Architecture, Music and the ancient art of singing to the Orphic Lyre'. Ficino not only replaced logic with poetry in the *trivium*, but formulated an almost completely new *quadrivium*, removing geometry, arithmetic and astronomy, in favor of painting and architecture.

This paper will demonstrate that Ficino's ideas, which gave such unprecedented importance to the visual arts, provided highly relevant arguments for those painters and art theorists who wanted to raise the status of painting as an activity with intellectual pretensions, perhaps as one of the Liberal Arts or even as more important than the other arts of the humanistic curriculum.4 In his philosophy it is the sense of sight in particular through which man's soul may approach heavenly beauty and be reminded of its divine origins. The sense of sight and its 'internal' counterpart, the imagination, are therefore key elements in his writings: of the sensory 'pleasures', 'the lowest is in smelling; the higher, in hearing; the more sublime, in seeing; the more eminent, in the imagination. However, Ficino does not allot a place among the artes liberales to all types of visual art or artists. This status is only granted to individuals who are of a certain mental disposition that makes them receptive to divine inspiration. The term 'genius', however, is in its modern meaning not entirely appropriate for Ficino's age. As shall be argued here, his ideas about melancholic artists precede the modern notion of artistic genius.

To assess the importance of Ficino's statements on the artistic temperament properly, one should note that in the arts and the literature from the beginning

of the sixteenth century onwards, there are frequent references to the melancholic disposition of artists in relation to their exceptional talents. They appear in artists' biographies, not infrequently written by colleagues, but also in personal statements by the artists themselves in letters, drawings and paintings of a more personal nature. Although already in the course of the fifteenth century artists applied the principles of the *artes liberales* to turn the art of painting into a Liberal Art, searching for shared principles in geometry, rhetoric or poetry, from the beginning of the sixteenth century onwards there was a marked shift in interest as artists and the authors of treatises on the art of painting began to emphasize more the inspirational and divine character of the creative process and the necessary innate talent. To put it briefly, there was a shift from *ars* to *ingenium*, from acquired skills to innate dispositions.⁷

This article will try to prove the importance of Ficino's ideas to the process of the rise in the artist's intellectual and social status by focusing on two drawings by Michelangelo, from a series of drawings known as the *Presentation Drawings*. In letters and poems, but also in other works, Michelangelo shows that he suffers from the whims of the melancholic temperament while at the same time flirting with a difficult though brilliant character. On top of that, he insinuates that his talent is innate and not acquired: as an artist he is capable of creative frenzy. This self-image was copied by his biographers and admirers, such as Ascanio Condivi (1525–1574), Georgio Vasari (1511-1574), and Francisco de Holanda (1517-1585). The last one makes Michelangelo speak for himself, in his *Roman Dialogues* (1548), about talented artists, who are unsociable not from pride, but because they deem only very few spirits worthy of their art; ... and in order not to debase the elevated imagination that keeps their mind in perpetual ecstasy.

The image of Michelangelo as a melancholic can also be found in *The School of Athens*, the famous wall painting in the Vatican by his rival Raphael. Michelangelo is possibly depicted there as the philosopher Heraclitus in a pose that has become standard for the iconography of the melancholic (Fig. 22). In all likelihood, this portrait of Michelangelo was an ode both to his personality and to his style of painting." The following will first explore Ficino's ideas about melancholy as an artistic affliction, related to man's ability to contemplate beauty and behold a glimpse of the divine. Next, we will study the way Michelangelo may have acquired knowledge of them. Finally, we shall see how he subsequently tried to give visual form to these ideas, in images that may be interpreted as allegorical self-portraits, reflecting on the status of the artist.



Fig. 22: Raphael, School of Athens (detail: Heraclitus), 1509-1511, Stanza della Segnatura, Vatican City.

Melancholy and frenzy in De vita and Theologica Platonica

Ficino was the first philosopher to elaborate, in his *De vita libri tres* (1481-1489), the notion that melancholy, in spite of being the most problematic of temperaments, also contained the possibility of genius.¹² *De vita* formulates therapeutic instructions to restrain the excesses of the melancholic temperament, such as anger, gluttony, sexual desire and moods of intense gloom.¹³ That the melancholic should be capable of genius, Ficino explains from an excess of black bile that makes the *spiritus* of the melancholic refined and inflammable. Ficino's directions are aimed at setting the melancholic's highly inflammable *spiritus* aglow, without causing it to be consumed entirely.¹⁴ The subtlety of the *spiritus* causes the imagination of the melancholic to be exceptionally strong. Its 'burning' brings about a state of *furor* or frenzy which makes one fit for new inventions and discoveries in the arts.¹⁵

Ficino's notion of the melancholic temperament, as a combination of a difficult character and an inspired personality, seems to have been a model for the artistic temperament that emerged from art literature and self-referential works of art since the end of the fifteenth century. Ficino's emphasis on the melancholic's imagination and the faculty of phantasy as an important tool in the process of inspiration has played an important part within this development.

Ficino's ideas are based on a tradition derived from Aristotle, who stated that the imagination is a faculty of knowledge, intermediary between the senses and the intellect (or rational intelligence). Together with the common sense (sensus communis) and the memory it belongs to the so-called interior senses. It forms a bridge between sense-perception and intellect, because the soul does not think

without images or so-called *phantasmata*. The imagination, situated in the forehead, transforms the sense impressions perceived by the body into *phantasmata* by means of which they can be visualized in the mind, thought about or remembered. Sensory impressions are led from the senses to the soul by means of *spiritus*, a semi-material, vaporous substance. The spirit is also the instrument by which *phantasmata* are led through the soul and by which the soul communicates with the body.¹⁸

In this Aristotelian frame Ficino attempted to incorporate Neoplatonic notions such as Plato's postulate, from the *Phaedrus*, that on the one hand the imagination – since it is connected with the sense impressions perceived by the body – can drag the soul down to the material world or prevent it from flying back to its divine origin. On the other hand, sensing or imagining earthly beauty might cause the soul to remember the heavenly beauty of the World of Ideas, so that, finding itself in a state of frenzy, it can return to its heavenly homeland. The theme of divine inspiration was elaborated in Plato's *Timaeus* where it is emphasized that *phantasmata* are created by God in the soul and that man is not always capable of understanding the images that he receives in a state of inspirational frenzy. This notion is echoed in Ficino's *Theologia Platonica* (XIII.2):

[P]oets in a frenzy sing of many things, and marvellous ones at that, which a little later, when their frenzy has abated, they themselves do not sufficiently understand: it is as if they had not pronounced the words but rather God had spoken loudly through them as through trumpets. ... [M]en of great prudence and those most learned from their youth have not turned out to be the best poets. Rather, some of the poets were mad, as was said of Homer and Lucretius; but others were uneducated as Hesiod himself bore witness.²⁰

Translating and writing a commentary on the works of Plotinus, which he studied around 1490, must have had a profound impact on Ficino's ideas on the imagination. According to Plotinus, the human soul descends at birth from the Intelligible World of Ideas into the body. All individual human souls emanate from the World Soul in order to unite with the lower material world. A small part of every individual soul always remains in the Intelligible World, and because of this, the human soul, more than nature, is capable of conceiving the ideal Forms that are captured within the material world, which is an imperfect shadow of the Intelligible World. Although nature is led by some kind of intelligent principle in producing mirror images of the Ideas, it does so blindly without intellection. Since part of the human soul always dwells in the World Soul, it is better capable of forming within itself, through the imagination, an image of the beauty of the Ideas.²¹

In De amore, a commentary on Plato's Symposium, Ficino dealt extensively with the way in which the soul can rise to the divine by imagining and contemplating beauty.²² Prior to the soul's descent to the material world, impressions of the ideas were made on the soul, like 'pictures on a wall',23 and by experiencing earthly beauty the soul remembers the immutable perfection of the World of Ideas to which it desires to return. Within this Platonic context, physical beauty is seen as a divine reflection shining through a human body, and loving this body is never considered negatively by Ficino.²⁴ In De amore, love is the all-encompassing force that harmonizes all elements of the cosmos. Through love of the higher for the lower, God rules the angels, the angels rule the souls, and the soul rules the body. Hence this all-pervading force is the master of all arts and sciences.25 In addition, love causes the soul to forget itself so that it is overtaken by the desire to dwell in the soul of the beloved. If this love is mutual, the soul finds itself again, safely kept in the soul of the beloved: one death, but a double resurrection.'26 The melancholic's imagination is most likely, through its highly inflammable spiritus, to succeed in rising to the divine as a result of the contemplation of beauty. This means that melancholics are, according to Ficino, very sensitive to the lures of love. Because through the presence of bile in the body, the spiritus is consumed so forcefully, the blood turns thick and heavy so that love is a cause of much melancholy.27

2 Michelangelo's melancholy and Neoplatonism

In order to connect Ficino's ideas on melancholy to Michelangelo's works, we should point out that Michelangelo was familiar with Platonic theories of love. This is clear from Condivi's biography that toned down gossip regarding Michelangelo's homosexuality by pointing out that Michelangelo spoke about love frequently, but always in a Platonic sense.²⁸ Both Condivi and Vasari relate how the young Michelangelo was trained in the sculpture garden of Lorenzo de' Medici at San Marco, situated near the monastery of that name in Florence, where artists could work after the example of ancient works.²⁹ In 1635, Ottavio Vannini (1585-c.1643) depicted the San Marco garden on a fresco in the Palazzo Pitti: it includes the young Michelangelo. This image was placed next to a fresco by Francesco Furini (c. 1600-1646) depicting Ficino's so-called 'Platonic Academy' that possibly was Lorenzo de' Medici's intellectual circle (Fig. 23, next page).30 In Lorenzo's household Michelangelo would have become acquainted with classical myths and philosophy, especially the Neoplatonism so characteristic of the circle around Il Magnifico to which Ficino, Giovanni Pico della Mirandola (1463-1494), Cristoforo Landino (1424-1498) and Angelo Poliziano (1454-1494) belonged;31 if



Fig. 23: Francesco Furini, *The Platonic Academy at Careggi*, ca. 1635, Salone di Giovanni da San Giovanni, Palazzo Pitti, Florence.

we may believe Condivi, the last one had a particularly personal interest in the young sculptor.³²

Through Michelangelo's introduction into this household, it is likely that the Neoplatonism of Lorenzo's circle was part of his education. Platonic theories of love were available through the Italian version of Ficino's *De amore*, which possibly had circulated in manuscript form since 1474³³ or through the work of Ficino's pupil Francesco da Diacceto (1466-1522).³⁴ Both Michelangelo and Diacceto were members of a learned academy established in 1515, the Accademia Sacra dei Medici.³⁵

As I have studied elsewhere in more detail, the contact between Diacceto and Michelangelo through the Accademia Sacra could have been of great importance for the sculptor's Neoplatonic ideas as found in his poetry and drawings.³⁶ In the following, I will argue that they can also be found in two drawings with intricate iconography that refers to love, beauty, and the imagination. Diacceto may have lent a manuscript to Michelangelo with the Italian version of Ficino's *De amore*, but more likely, Michelangelo was familiar with the Platonic theories of love which Diacceto expounded in his *Panegirico all'amore*, a slightly revised summary of Ficino's *De amore*, finished in 1508.³⁷ Also, Diacceto's *I tre libri d'amore*, on which he worked between 1508 and 1511 and which was probably in circulation before it was published in 1561, may have been a source for the sculptor.³⁸

The two drawings that will concern us were probably part of a series, now known as the Presentation Drawings, that Michelangelo presented as gifts to Tommaso dei Cavalieri (c.1509-1587), a young nobleman he loved. They are dated around 1533, shortly after their first meeting. In a letter dated January 1, 1533, Tommaso stated that on receiving the first drawings, he intended to contemplate them at least two hours a day;39 according to Vasari, the drawings were possibly intended to instruct Tommaso in draughtsmanship.40 In any case, the drawings were clearly gifts of love and were part of the letters and poems that Michelangelo dedicated to the young man. The theme of melancholy surfaces in a poem in which Michelangelo compares himself to the moon, the night and darkness; Tommaso is the sun. 41 The poems in Tommaso's honor also testify to the Platonic conception of love, as there are frequent references to the soul's ascent to God through the perception of visible beauty. In one of the earliest poems there is a reference to souls in two bodies becoming one and soaring up to heaven with equal wings'. 42 Repeatedly, Michelangelo hints at Tommaso's outward beauty as a reflection of the beauty of his soul.43

The following will focus on two drawings that probably belonged to the series, *The Dream* and *The Archers*, which, I will argue, reflect ideas about the status of the sense of sight, the imagination, and the artistic temperament, and maybe even about the artist himself.⁴⁴

3 Michelangelo's The Dream: Love as a 'Great Demon'

When Panofsky studied the drawing known as *The Dream* or *Il Sogno* (Fig. 24), he described the figure in the drawing as a young man surrounded by a wreath of unreal and vaguely depicted figures or groups which can easily be recognized as dream visions.⁴⁵ He thought that they represent the seven cardinal sins: gluttony, lust, avarice, pride, wrath, envy and sloth.⁴⁶ But some scholars have remarked that of the seven cardinal sins depicted in the drawing, pride is lacking, which casts doubts on Panofsky's interpretation.⁴⁷

According to Maria Ruvoldt, the meaning of the drawing should be looked for in views on melancholy, inspiration and *furor*, especially Ficino's. The globe on which the young man leans may refer to the iconography of the melancholic. On Dürer's famous *Melencolia I* and also on Jacob de Gheijn's engraving on the same topic, there is an unmistakable depiction of the globe which traditionally refers to the melancholic's skill in geometry (Figs. 25, page 126 and 26, page 127). Talking about the causes of melancholy, Ficino refers to the relation between the melancholic temperament and the earth:

The natural cause seems to be that for the pursuit of the sciences, especially the difficult ones, the soul must draw in upon itself from external things to internal as from circumference to the center, and while it speculates, it must stay immovable at the very center ... of man. Now to collect oneself from the circumference to the center, and to be fixed in the center, is above all the property of the Earth itself, to which black bile is analogous.⁴⁸

In relation to the engravings by Dürer and De Gheijn, one can point at the similarity in attitude between the two melancholics and the presumed portrait of Michelangelo as Heraclitus in *The School of Athens* (Fig. 22). Not only the globe in Michelangelo's drawing refers to the iconography of the melancholic temperament, but also the depicted vices, which can be characterized as gluttony, lechery, wrath, and sloth. Following the semicircle with the cloudlike figures from left to right, we can detect a man roasting meat above a fire; another one drinking voraciously (gluttony); various nude and kissing figures; genitals (lust); a hand with a purse; two people fighting (wrath); and finally, to the right, a sleeping figure (sloth). This calls to mind the deficiencies of the melancholic temperament as described by Ficino, 49 who at the time was looked upon as the most important authority on this subject. Along with the vices just mentioned, avarice can also be identified in the image of the purse; this is something that Ficino did not expound but that nevertheless belongs



Fig. 24: Michelangelo, *The Dream of Human Life (Il sogno)*, 1533, The Samuel Courtauld Trust, Courtauld Institute of Art Gallery, London.



Fig. 25: Albrecht Dürer, Melencolia I, 1514, Fondazione Magnani Rocca, Corte di Mamiano.

to the iconography of the melancholic: a money bag can be found in Dürer's *Melencolia I*, and also in Ripa's image of the melancholic (Figs. 25 and 27).

Alongside the frailties of this temperament, Ficino mentions an overactive imagination which came about through a surplus of black bile. The cloudlike dream images seem to point at this. So far the iconography of *Il sogno* seems to be more concerned with the vices of the melancholic temperament than with the seven cardinal sins, and the drawing seems to be the equivalent of the engravings by Dürer and De Gheijn, with the difference that Michelangelo's figure was not depicted in a pensive or depressed mood, but rather an inspired one. *Il sogno* shows not only the negative qualities of the melancholic, but also his disposition that may result in a state of frenzy. An angelic figure, which could best be denoted by the polysemic term *spiritus*, blows on the young man with a trumpet from above so that the concept of inspiration is depicted almost literally. Regarding the trumpet, we may repeat Ficino's remark, quoted above, that 'Poets in a frenzy sing of many things ... it is as if they themselves had not pronounced the words but God had spoken loudly through them as through trumpets.'51

The fact that the trumpet is not blown in the ear of the youth is an important detail according to Ruvoldt, since it is quite contrary to what one would expect from the use of a wind instrument and also contrary to the traditional depiction





Fig. 26 (left): Jacob de Gheijn, Melancholy, The Elisha Whittelsey Fund, The Metropolitan Museum of Art, New York.

Fig. 27 (top): Melancholy, in: Cesare Ripa, Iconologia overo descrittione di diverse imagini cavate dall' antichità, e di propria inventione (Rome 1603), p. 79. of the evangelists inspired by angels.⁵² The trumpet is sounded on the forehead, precisely there where the imagination resides. Ruvoldt points at a thirteenth-century image of a melancholic whose forehead is cauterized to prevent hallucination. Also, a later depiction from the scholar Robert Fludd's (1574-1637) work clearly shows the location of the *oculus imaginationis* (Fig. 28).

Rather than the melancholic temperament, the youth seems to represent the 'melancholic artist' whereby the visual orientation of the imagination is emphasized. Perhaps Michelangelo wanted to make a statement about his own self-image by surrounding the artist with the vices of his melancholic temperament and the divine gift of inspiration.⁵³ In connection to this idea, various scholars have pointed out the physiognomic similarities between Michelangelo's self-portraits and the central mask beneath the youth.⁵⁴ In a general sense, the masks seem to point at the deceptive side of *phantasia* and *imaginatio*, as *larva* can mean both 'mask' and 'phantasm'.⁵⁵ If the *Sogno* drawing is, in fact, a personal statement, the masks should not be interpreted in a purely negative sense, for creating illusions is one of the primary tasks of the artist.⁵⁶ The fact that the drawing is a gift of love also strengthens the assumption that we are dealing here with a personal content, maybe even an allegorical 'self-portrait'.

A Neoplatonic or Ficinian context of the dream drawing is not unthinkable.⁵⁷ Diacceto's *I tre libri d'amore* and *Panegirico all'amore* can serve as a summary of Fi-

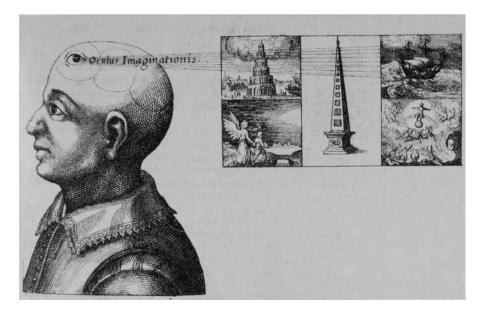


Fig. 28: 'Oculus imaginationis', in: Robert Fludd, Ars Memoriae (Oppenheim 1620), Vol. II, p. 47.

cino's philosophy, terse and simple, and written in Italian; both works originated in Michelangelo's milieu. Diacceto elaborates on Ficinian ideas on the imagination within a frame of Neoplatonic theories of love, explaining how the *spiritus*, as 'the refined vehicle of life', connects body and soul, activates the imagination and makes man share in all the gifts of life.⁵⁸ He describes the *spiritus* as a divine fire which makes man the most beautiful part of Creation and through which he can call himself a 'piccolo mondo', a small world.⁵⁹ The *spiritus* will burn more fiercely when the lover sees the beauty of his beloved, even though heavenly beauty can only be perceived through the 'eternal eye' of the intellect⁶⁰ and never through the eyes and ears of the body.⁶¹ Moreover, Diacceto explains that the soul suffers from melancholy the moment it perceives earthly beauty, which reminds it of its divine origin.⁶² God's greatest gift to man, according to Diacceto, is the ability to behold divine beauty.⁶³ The most important themes of the *Sogno*, melancholy, inspiration, *furor* and *imaginatio*, are all present in the two texts by Diacceto in the context of the perception of beauty and love – a frame eminently suited for a gift of love.

In the sixth oration of his *De amore*, Ficino gives an explanation of Socrates's exposition in Plato's *Symposium* in which he remarks that love is a 'great demon', positioned between the ugly and the beautiful, born from the union of affluence and poverty. The power of love that emanates from the World Soul thus connects the high and the low, the divine and worldly matter, and this 'demon' pervades the entire universe: 'the love of the World Soul, 'the great demon' which, hanging over all things throughout the whole universe, does not permit hearts to sleep, but everywhere wakens them to loving.' Diacceto specifies Ficino's crucial remark in his *Panegirico*:

Therefore, love is not called God or mortal, but a great demon, because demonic nature, which is placed between men and gods as an interpreter, conducts the prayers and sacrifices of men to the gods, and the will and commandments of the gods to man. And in no other way but through demonic nature, men, be they awake or asleep, are inspired by divine goodness.⁶⁴

The all-pervading power of love and the concept of the refined and omnipresent spiritus seem to overlap in the texts of Ficino and Diacceto, whereby spiritus should be interpreted as the semi-material instrument of love. What Ficino and Diacceto expressed in their treatises, Michelangelo translated into images: the angelic figure in the *Dream*-drawing, which earlier on was labeled with the term spiritus, visualizes love, demonic nature or the World Soul that inspires divine goodness in waking or sleeping man. Michelangelo's drawing thereby gives a more adequate expression of the Platonic theory of love than Ficino's or Diacceto's words, since it is especially the sense of sight which, in this philosophy,

can bring about the recollection of heavenly beauty, thereby opening the soul to divine inspiration.⁶⁵ Michelangelo's drawing *Il sogno* thus visualizes in a very inventive way the theme of divine artistry which is inspired by the sight of beauty and the experience of love.

4 The Archers: the soul's search for its heavenly homeland

The second drawing that is relevant to our discussion is now known as *The Archers* (Fig. 29). It is derived formally from a classical relief from Nero's Domus Aurea, as Michael Hirst remarks. Descriptions of the lost prototype show us, however, that Michelangelo made radical changes regarding the original, changing the group of archers in such a way that they seemed to be flying. ⁶⁶ The most conspicuous element in this image is that the depicted archers seem to aim at a target, but have nothing in their hands: neither bow nor arrows.

Some art historians concluded that the work is unfinished; already Panofsky opposed them by suggesting that the objects were left out on purpose, since the drawing has been worked up in such detail.⁶⁷ The archers aim at a shield attached to a figure that is usually identified as a so-called 'herm', a human-like creature



Fig. 29: Michelangelo Buonarroti, *The Archers*, c. 1530, The Royal Collection Queen Elisabeth II, Windsor, RL 12770.

whose lower legs disappear into an architectural element. In spite of the absence of bows, some of the arrows seem to have hit the herm. On the left in the drawing are two *putti* (or *spiritelli*) fanning a fire. At the lower right is a sleeping winged Cupid holding a bow and arrows. It has been frequently suggested that what is depicted here is the Neoplatonic idea that only actions based on love can be successful. The sleeping Cupid is the only one with the instrument to shoot arrows and to hit the herm; whilst love is asleep, everything misses its target.

Scholars have related *The Archers* to two poems which Michelangelo wrote for Tommaso and in which there is a reference to arrows and archery. References to arrows appear frequently in Michelangelo's poems and usually symbolize the cruelty or painfulness of love, but *The Archers* is not an illustration of a specific sonnet. As will be argued here, Michelangelo's readjustments to the image on the antique relief, on which *The Archers* seems to be a personal variation, are inspired by the sixth oration from Ficino's *De amore*, which is a commentary on Socrates's oration on Diotima from Plato's *Symposium*. Again, we should note that it is probable that Diacceto's more accessible *I tre libri d'amore* was the actual source for the drawing.

In the earlier mentioned oration, Ficino explains how the *spiritus* of the lover reacts to the beholding of his beloved:

A man's appearance, which is often very beautiful to see, on account of an interior goodness fortunately given him by God, can send a ray of its splendor through the eyes of those who see him and into their soul. Drawn by this spark as if by a kind of hook, the soul hastens toward the drawer.⁷²

Earlier, the Platonic idea emerged that the lover possesses his beloved only in part and that love for that reason is partly beautiful and partly ugly. Love is born from Porus and Penia, poverty and affluence, and a demon placed between the higher and the lower. In Socrates's oration love was called the son of poverty, 'thin, dry, and meager'. In *De amore*, Ficino tries to explain this remark by stating that the man tormented by love eats nothing and becomes meager because the *spiritus* is disbalanced and thus food is not digested. On top of that, he remarks that

wherever the continuous attention of the soul is carried, there also fly the spirits, which are the chariots, or instruments of the soul. The spirits are produced in the heart from the thinnest part of the blood. The lover's soul is carried toward the image of the beloved planted in his imagination, and thence toward the beloved himself. To the same place are also drawn the lover's spirits. Flying out there, they are continuously dissipated.⁷³

A permanent influx of fresh blood is necessary according to Ficino, not only because the lover does not digest his food, but also because otherwise the blood would immediately grow thick, dry and black so that melancholy will rear its head, and the soul is chased day and night by 'deformed and terrible images'.⁷⁴

Next, Ficino tries to give an allegorical explanation of the negative properties that are attributed to love in Socrates's oration and that are a consequence of the fact that love, along with being beautiful, is also half ugly. In this oration it is expounded that love is not only thin, meagre and dry, but also 'barefoot' and 'humble'.75 Ficino immediately adds that the Greek word that Plato used for 'humble', *chamaipetes*, literally means 'flying low'.76 He explains this remark by saying that lovers fly low because they live without reason and through their trivial obsession fail to achieve great ends.77

According to Socrates, love is 'without a home', which Ficino explains by remarking that the soul of the lover abandons its own body and tries to leap to the soul of the beloved. The soul thereby deprives itself of its natural seat, the *Lares*, and is doomed to remain unquiet forever. Moreover, love is 'without bed and blanket', because the lover, on seeing the beauty of his beloved, tries to fly back into the body of the other. Dove, finally, sleeps 'on the threshold', as was forwarded in Socrates's oration. Ficino explains that the door of the soul is formed by our eyes and ears. Through these doors the beauty of the beloved enters, so that the soul can no longer concentrate on itself, and continually wanders out through the eyes and ears.

As noted earlier, love was never judged negatively by Ficino. Indeed, those who aim at the divine aspects of love are rewarded with her generosity which is born of affluence. The dark sides of love emerge from poverty: those who aim at physical love only are 'dry, naked, humble (flying low), dull' and – Ficino adds – 'unarmed': 'Unarmed because they succumb to shameful desire. Dull because they are so stupid that they do not know where love is leading them, and they remain on the road, and do not arrive at the goal.'81

Diacceto's third book from his *I tre libri d'amore* is a paraphrase of Ficino's sixth oration from *De amore*, in which the expositions on the workings of the *spiritus* have been extended. He explains elaborately how this instrument of the senses and the *fantasia* is moved vehemently on seeing the beloved, ⁸² and is emitted from the eyes to behold the object of admiration. ⁸³ Like Ficino, he warns against surrendering oneself to physical pleasure solely, because this love is dry and meager, and 'without home, bed or blanket.' ⁸⁴ Diacceto explains that it is especially this love that incites to melancholy ⁸⁵ and flies low:

It is called flying over the earth, because the lover becomes a slave of physical beauty. This state of affairs is born from extreme ignorance and extreme madness because our souls belong to the divine things that should rule and not serve physical things. ⁸⁶

That Michelangelo was familiar with the concept of *spiritus* flying out through the eye and trying to reach the image of the beloved and even to capture that image and bring it back into the soul or the body is shown clearly from some of his poems, among which the following lines: 'You entered me through my eyes ... / as a cluster of unripe fruit goes into a bottle and, / once past the neck, grows where it is wider; / so does your image ... / grow once it's inside the eyes, so that I stretch / like a skin inside of which the pulp is swelling.' This theory was not exclusively Platonic, but a generally recognised opinion on the working of the eye. **

The sixth oration from Ficino's *De amore* and Diacceto's paraphrase of it in *I tre libri d'amore* prove to be a key to the meaning of Michelangelo's *Archers*. The missing arrows in the depiction can refer to the invisible love arrows of the *spiritus* beaming from the eyes of the archers. This was not only a literary or a philosophical concept, but one that had a pictorial tradition in the early modern period, which is shown from an emblem by Otto Vaenius of a woman whose glance pierces the heart of her beloved like an arrow (Fig. 30). ⁸⁹ The emblem, however, does in fact provide a depiction of the arrows from the eyes of the woman. Next to her is a sleeping Cupid who may symbolize the absence of higher, divine love. In Michelangelo's drawing, which also contains a sleeping cupid, this absence ap-



Fig. 30: Love emblem, in: Otto Vaenius, Amorum emblemata (Antwerp 1608).

pears from the fact that the archers are only aiming at the physical side of love, so that they are literally 'nude', 'flying low', 'unarmed': they 'do not know where love is leading them' and 'do not arrive at the goal'.

Michelangelo depicted the archers flying low and made the group dynamic which seems to refer to their living without reason and their failure to achieve their goals through their obsession. Their souls are drawn to their lovers as with a hook, whilst their *spiritus* tries to reach the beloved with great zest, so that their souls will dry out and succumb to melancholy. The depicted *putti* or *spiritelli* fan this fire even further.

The herm, who is without legs or arms, seems to be a defenseless prey for the archers. However, in antiquity this object was often outfitted with a phallus whereby the figure symbolized unrestrained physical lust.⁹² In the case of this drawing, it is possible that the depicted figure was not intended as a herm, but as a humanoid sitting duck as used frequently in tournaments.⁹³ Herm or sitting duck, the figure is at any rate a target for the archers. In the upper left hand corner of the drawing, we see an archer with a bow. He does not aim at the herm and does not shoot, but holds the bow inversely. Given his contrasting posture, it could be that he symbolizes the victory of lust; he will not be tempted to base desire. Possibly, this is a self-portrait of Michelangelo.

5 Conclusion

The hypothesis that Michelangelo sought to convey complex ideas about melancholy, love, and inspiration through carefully drafted images is in accordance with Ficino's philosophy. By means of an image, we are not only reminded of the beauty of the Ideas which will bring us in a state of frenzy or furor, but we may also understand divine truths in a flash, as a whole; as Ficino puts it: 'When Apelles looked at a field he tried to paint it with colors on a panel. It was the whole field which showed itself in a single moment to Apelles and aroused this desire in him.'94 In his Commentary on Priscianus Lydus, Ficino calls sight the most perfect of senses, and the visible, as the most perfect of sense-objects, have an order from the multitude to the one that the other senses do not have.'95 Within the framework of the Florentine philosopher's ideas, the visual arts that involve the sensory act of seeing as well as the inner eye, or the faculty of imagination, seem to underlie his inclusion of painting among the Liberal Arts.

Michelangelo's drawings of *The Dream* and *The Archers* are a visualization of Ficinian thought in which central statements from the *Platonic Theology, De vita,* and especially *De amore* are depicted. Themes such as the imagination, the artistic temperament, and frenzy prove to be of importance for sixteenth-century thought

about art. Although the meaning of Michelangelo's *Presentation Drawings* can be explained through Ficino's ideas on love, *furor* and inspiration, it is nevertheless more probable that Diacceto's *I tre libri d'amore* and *Panegirico all'amore* served as actual sources for the drawings. Several themes, which are scattered throughout Ficino's works and are relevant for interpreting the iconography of the drawings, are dealt with tersely, concisely, and consecutively. Michelangelo must have known Diacceto personally; both were members of the Accademia Sacra dei Medici where such themes were debated. We have seen that the elaborate allegories of *The Dream* and *The Archers* contain detailed references to the sixth oration from Ficino's *De amore* or, more plausibly, to Diacceto's summary of that text.

The Dream shows the negative and positive sides of the artistic temperament. Inspiration achieved in a state of furor, usually reached through beholding physical beauty and experiencing love, is represented as a winged genius, Ficino's 'great demon' which either awake or asleep, inspires by divine goodness'. The work is the visualization of profound philosophical ideas on the sense of sight, the imagination, and divine inspiration: as an artist's statement on the intellectual status of artistic creation, it is without precedent, a key moment in the development of the intellectual status of the artist. It may be interpreted as an allegorical self-portrait.

The negative aspects of the themes of beauty, love, and inspiration are explored further in *The Archers*. The details of the drawing may be explained through the sixth oration of *De amore*. The archers are unarmed because they are 'subject to shameful desires' and 'ignorant of whither love leads them', while their *spiritus* eagerly tries to reach the object of their love.

Michelangelo's two drawings illustrate how the interconnected themes of Platonic love, the beholding of physical beauty, and the working of the spiritus and the imagination found their way to the artist's studio. Ficino's theories on melancholy and inspiration could be used in an artistic context to plead for the divinity of inspirational art; in comparison to this claim, his idea that painting should be included among the Liberal Arts seems not only an obvious, but a rather innocent statement.

Notes

- This article is based on a larger study that was translated from the Dutch by Jan Veenstra, 'Ficino's Imagination and Michelangelo's Dream', in: Hermeticism in an Era of Cultural Change, ed. Jan Veenstra (Leuven: Peeters, forthcoming). I am greatly indebted to Jan Veenstra for his work; of course, I myself remain fully responsible for all mistakes. I also wish to thank Thijs Weststeijn.
- M. Ficino, Opera Omnia, ed. P.O. Kristeller, 2 vols. (Turin, 1962, ed. princ. Basel, 1566), 944, translation from E.H. Gombrich, 'Icones Symbolicae: the Visual Image in Neo-Platonic thought', Journal of the Warburg and Courtauld Institutes 11 (1948), 163-192: 77.

- 3 The art of the 'Orphic lyre' may refer to Ficino's own habit of accompanying his own singing on a lyre with an image of Orpheus painted on it.
- For the visual orientation of Ficino's philosophy, see M. van den Doel, Ficino en het voorstellingsvermogen; 'fantasia' en 'imaginatio' in kunst en theorie vanaf de Renaissance (Diss. University of Amsterdam, 2008), 14, 34, 74, 78, 93, 161-166.
- M. Ficino, De vita libri tres (Florence, 1489), II, 15, translation from: M. Ficino, Three Books on Life, ed., transl. C.V. Kaske and J.R. Clark (Binghamton, 1989).
 M.J.E. van den Doel, 'Nach den Regeln wolgegründete Natürlichkeit; opvattingen over hand auch den Regeln volgegründete Natürlichkeit.
- M.J.E. van den Doel, 'Nach den Regeln wolgegründete Natürlichkeit; opvattingen over kunst van Joachim von Sandrart (1606-1688)' (M.A. Thesis: University of Amsterdam, 2000), 71-81.
 On ars and ingenium, cf. J.A. Emmens, 'Natuur, onderwijzing en oefening: bij een drie-
- luik van Gerrit Dou', in: Album discipulorum aangeboden aan professor Dr. J.G. van Gelder (Utrecht, 1963), 125ff.
 The following lines from one of Michelangelo's sonnets are a telling instance: 'From melancholy I get my happiness, and these discomforts are my source of rest', J.M. Saslow, The Poetry of Michelangelo (New Haven, 1991), 451; cf. Van den Doel, Ficino en het voorstel-
- 1963), 71-75.
 9 Cf. A. Condivi, Vita di Michelangelo Buonarroti, ed. E.S. Barelli, (Milan, 1964), 63, 20, 52.

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F. de Holanda, Romeinse dialogen: gesprekken met Michelangelo en Vittoria Colonna, transl. A. Boon (Amsterdam, 1993), 19-20.

lingsvermogen, 183-189, R. and M. Wittkower, Born under Saturn: the Character and Conduct of Artists; a Documented History from Antiquity to the French Revolution (New York,

- A. Boon (Amsterdam, 1993), 19-20.

 D. Redig de Campos, 'Il pensieroso della Segnatura', in: Michelangelo Buonarroti nel IV centenario del giudizio universale (1541-1941) (Florence, 1942), 205-219; M. Ruvoldt, The
- Italian Renaissance Imagery of Inspiration: Metaphors of Sex, Sleep, and Dreams (Cambridge, 2004), 148. It should be noted that especially this part of the fresco was added later, and it may be painted by another hand than Raphael's. A.Nesselrath, 'Raphael and peop Julius II', in: H. Chapman and C. Plazotta (eds.), Raphael; From Urbino to Rome
- (London, 2004), 281-293. (Pseudo-)Aristotle, Problemata, 30.1 (935a); Ficino, De vita libri tres, I.5, cf. Ficino, Three Books on Life, 117. Cf. Ficino, De vita, I.5, 119; De vita, I.25, 159; De vita, I.5, 117; De vita, I.7, 123-127; De
- vita, I.25, 159, and I.5, 117-118; De vita, I.7, 125; see also II.15, 210f.
 See Ficino, De vita, I.5, 119: 'the black bile ... let it shine, but not burn'; compare D.P. Walker, Spiritual and Demonic Magic from Ficino and Campanella (London, 1958), 4.
 The soul of the melancholic is 'filled from above with divine influences and oracles, and it always invents new and unaccustomed things'. Ficino, De vita, I.7, 123.
- The soul of the melancholic is 'filled from above with divine influences and oracles, and it always invents new and unaccustomed things', Ficino, De vita, I.7, 123.
 R. Klibansky, E. Panofsky, and F. Saxl, Saturn and Melancholy; Studies in the History of Natural Philosophy, Religion and Art (London, 1964), and R. and M. Wittkower, Born

under Saturn, 98-108. These books caused a stream of literature on melancholy that also studied later works such as Robert Burton's (1577-1640) Anatomy of Melancholy (1621). For a survey of the literature on melancholy, see J. Radden, The Nature of Melancholy; from

- Aristotle to Kristeva (Oxford, 2000).

 Van den Doel, Ficino en het voorstellingsvermogen, Chapters III and VI.
- Van den Doel, Ficino en het voorstellingsvermogen, Chapters III and VI.
 M.J.E. van den Doel and W.J. Hanegraaff, 'Imagination', in: Dictionary of Gnosis and Western Esotericism, ed. W.J. Hanegraaff in collaboration with A. Faivre, R. van den Broek, and J.-P. Brach, 2 Vols. (Leiden, 2005), Vol. 2, 606-616.

- 19 Plato, Phaedrus, 253D ff. and 244A ff.
- 20 Ficino, Platonic Theology, vol. 4, 127.
- 21 M.W. Bundy, The Theory of Imagination in Classical and Medieval Thought (Illinois, 1970, ed. princ. 1927), 129, quoting Plotinus, Enneades, IV.4.13.
- 22 Ficino, De Amore (Commentarium in Convivium Platonis, Florence, 1469), IV.6, VI.1, VI.13 and V.6; cf. Ficino, Commentary on Plato's Symposium on Love, transl. S. Jayne (Dallas, 1985), 95.
- 23 Ficino, De Amore, VI.13 (see Commentary, transl. Jayne, 134). Cf. also De Amore, I.1 and VI.12.
- 24 Ficino, De Amore, V.4-6 and I.4.
- 25 Ficino, De Amore, III.1, also I.3, II.1, V.8, and III.2-4.
- 26 Ficino, De Amore, II.8; cf. also VI.9-10 (Commentary, transl. Jayne, 121).
- 27 Ficino, De Amore, VI.9.
- 28 A. Condivi, *The Life of Michelangelo*, transl. and ed. A. Sedgwick-Wohl and H. Wohl (University Park, PA, 1999), 166-7.
- 29 C. Elam, 'Lorenzo de'Medici's Sculpture Garden', in: Mitteilungen des Kunsthistorischen Instituts in Florenz XXXVI (1992), 41; cf. Condivi, Vita di Michelangelo, 27-28.
- Hankins negated the 'myth' of the Platonic Academy, although earlier literature already stated that it could not have been an academy in the modern sense with a clearly developed institutional framework, but probably more a group of friends or scholars of variable composition. J. Hankins, 'The Myth of the Platonic Academy of Florence,' Renaissance Quarterly 44 (1991), 429-475; 'Cosimo de' Medici and the "Platonic Academy", Journal of Warburg and Courtauld Institutes, 53 (1990), 144-162 en 'The Invention of the Platonic Academy of Florence,' Rinascimento, n.s. 42 (2002),1-39. Cf. Van den Doel, Ficino en het voorstellingsvermogen, 25
- 31 C.L. Frommel, 'Michelangelo und Tommaso dei Cavalieri', Castrum Peregrini 139-140 (1979), 32.
- 32 Condivi, The Life of Michelangelo, 14-15.
- Ficino worked on an Italian edition from 1474 onwards that was published only in 1544; cf. S. Jayne, 'The Circumstances of Composition', in: Ficino, Commentary, transl. Jayne, 3-4, 26-7; also J. Devereux, 'The Textual Tradition of Ficino's De Amore', Renaissance Quarterly 28 (1975), 173-182.
- On the correspondence between Ficino and Diacceto see P.O. Kristeller, 'Francesco da Diacceto and Florentine Platonism in the Sixteenth Century', in: *Miscellania Giovanni Mercati IV* (Città del Vaticano, 1946), Vol. 124, 260-304: 271.
- 55 Frommel, 'Michelangelo und Tomasso dei Cavalieri', 33, Kristeller, 'Francesco da Diacceto', 260-304. The most important document to testify to the existence of this Academy is a petition sent to Pope Leo X in 1519 by its members, among them 'Franciscus Cataneus Diacetius' and 'Michelagnolo schultore [sic]'; Archivo Diplomatico di Firenze, proveniente dallo Spedale di S. Maria Nuova, 20 Ottobre 1519; for this petition see Van den Doel, Ficino en het voorstellingsvermogen, 191, 388.
- 36 See Van den Doel, 'Ficino's Imagination', and Ficino en het voorstellingsvermogen, esp. Chapter V.
- 37 First published in Rome in 1526; the Latin edition was first printed in Basel in 1563; manuscripts may have circulated earlier, see Kristeller, 'Francesco da Diacceto', 278.
- 38 F. Cattani da Diacceto, I tre libri d'amore, con un panegirico all'amore, et con la vita del detto autore, fatta da m. Benedetto Varchi (Venice, 1561).
- The letter was published in Frommel, 'Michelangelo und Tommaso dei Cavalieri', 17.

- Vasari's remarks mainly concern the drawings Ganymede, Tityus and The Children's Bacchanal; G. Vasari, Le vite de' più eccelenti pittori, scultori e architettori, ed. G. Milanesi (Florence, 1878-1885), VII, 271f. See also Frommel, 'Michelangelo und Tommaso dei Cavalieri', 6.
- 41 Saslow, Poetry of Michelangelo, 234.
- 42 Frommel, 'Michelangelo und Tomasso dei Cavalieri', 23; cf. Saslow, Poetry of Michelangelo, 152, see also 16, 31, 37, 59, 62, 79, 83, 84, 89, 99, 104, 105, 166, 260.
- 43 Saslow, Poetry of Michelangelo, 195: I see in your beautiful face, my lord, / what can scarcely be related in this life: / my soul, although still clothed in its flesh, / has already risen often with it to God' and so he who loves you in faith / rises up to God and holds death sweet'; cf. Saslow, Poetry of Michelangelo, 236, 470.
- Other drawings in the series, as well as relevant issues of attribution and identification, are discussed by Van den Doel, 'Ficino's Imagination'. Although Vasari presented the drawings Ganymede, Tityus and The Children's Bacchanal drawings as one group, also The Dream and The Archers display stylistic similarities and can be dated to the same period. See further Frommel, 'Michelangelo und Tommaso dei Cavalieri', 61, 66-67, 92, and F. Gandolfo, Il 'dolce Tempo': Mistica, Ermetismo e sogno nel Cinquecento (Rome, 1978), 151; Ruvoldt, Renaissance Imagery of Inspiration, 161. Testa and Hirst, among others, believe that The Archers is related to the other Cavalieri drawings in respect of style and content; J. A. Testa, 'The iconography of the Archers: A study in Self-Concealment and Self-Revelation in Michelangelo's Presentation Drawings', in: Studies in Iconography 5 (1979), 45-72; M. Hirst, Michelangelo and his Drawings (New Haven & London, 1988), 111.
- The literature on this drawing is vast; key publications are: H. Thode, Michelangelo: Kritische Untersuchungen über seine Werke, 3 vols. (Berlin, 1908-1913), vol. 2, 375; E. Panofsky, Studies in Iconology; Humanistic Themes in the Art of the Renaissance (New York, 1962, ed. princ. 1939), 171-230, 223-225; E.A. Marabottini, 'Il Sogno di Michelangelo in una copia sconosciuta', in: Scritti di storia dell' arte in onore di Lionello Venturi, 2 Vols. (Rome, 1956), vol. 1, 349-258; E.H. Gombrich, 'Sleeper Awake! A Literary Parallel to Michelangelo's The Dream of Human Life', in: Festschrift für Konrad Oberhuber, ed. A. Grann and H. Widauer (Milan, 2000), 30-32; Ruvoldt, Renaissance Imagery of Inspiration, 141ff.
- 46 E. Panofsky, Iconologische studies: thema's uit de Oudheid in de kunst van de Renaissance (Nijmegen, 1984²), 171ff.
- 47 L. Dussler, Die Zeichnungen des Michelangelo: kritischer Katalog (Berlin, 1959), 268; Ruvoldt, Renaissance Imagery of Inspiration, 154.
- 48 Ficino, De vita, I, IV, 113.
- 49 Van den Doel, Ficino en het voorstellingsvermogen, 179-180.
- 'Melancholy vexes the mind with continual care and frequent absurdities and unsettles judgment', M. Ficino, *De vita*, I, 2, 113.
- 51 Ficino, Theologia Platonica, XIII, 2, Platonic Theology, ed. Allen, IV, 127.
- 52 Ruvoldt, Renaissance Imagery of Inspiration, 146.
- 53 Ruvoldt, Renaissance Imagery of Inspiration, 149.
- 54 Saslow, Ganymede in the Renaissance: Homosexuality in Art and Society (New Haven & London, 1986) 47; Ruvoldt, Renaissance Imagery of Inspiration, 178.
- 55 Ruvoldt quotes Poliziano on '[S] ogni dentro alle lor larve', Renaissance Imagery of Inspiration, 177.
- 56 Ruvoldt, Renaissance Imagery of Inspiration, 177-178.
- 57 For a more detailed argument, see Van den Doel, 'Ficino's Imagination'. The publications by Ficino that deal with the topic of the imagination or melancholy are notably the Theo-

- logia Platonica, book XIII and the *De vita libri tres* both of them voluminous works in Latin of which the latter was a scientific bestseller at the time; cf. Kaske and Clark, 'Introduction', in: Ficino, *Three Books on Life*, 3. Also in *De amore* the imagination theme surfaces, but only in passing, and the reader is expected to be familiar with the theory behind it; see Ficino, *De Amore*, VI, 2 en VI, 6.
- Diacceto, Tre libri d'amore, 83-84: 'attissimo instrumento della intelligentia; ... tenuissimo et lucidissimo uehicolo della vita et del senso correspondente all' elemento delle stelle: per ilquale, come per competente mezo, l'anima congiunta al corpo elementare, lo fa partecipe de doni della vita. A questo è simile quel fuoco divinissimo, ilquale è sempre per tutto diffuso, ripieno della virtù dell'anima regia ... ilquale da Platone nel Fedro è chiamato il carro alato del gran Giove.'
- Diacceto, *Tre libri d'amore*, 84: 'Meritamente adunque sendo l'huomo bellissimo di tutte le cose, che sono in terra: et essendo simile al mondo, in modo che esso è chiamato piccolo mondo, habbiamo affermare il mondo, quasi un grande huomo, esse bellissimo di tutte le cose sensibili.'
- 60 Diacceto, *Tre libri d'amore*, 106: 'La prima è esso intelletto, ilquale ragguarda nella uerità intelligibile, ilquale è ueramente un'occhio eterno.'
- Diacceto, Tre libri d'amore, 160-161: 'Ma al presente o dolcissimo amore, ilquale riscali le cose fredde, illustri le oscure, dai vita alle morte, troppo hai sollevate l'ale delle menti nostre, lequali infiammasti alla chiarissima luce della divina bellezza, e le penne gia rotte & il superchio amore delle cose mortali, ... hai esplicato, e noi volando sopra il cielo, guidati dal divino furore siamo ripieni di quelle meraviglie, lequali mai ne occhio vide, ne orecchio udì, ne discesono in cognitione di cuore alcuno. ... Questa è la via retta, per laquale debba procedere il legittimo amatore, ilquale quando comincia a contemplare la divina bellezza, si puo dire essere vicino al fine, ove ciascuna cosa creata quietandosi acquista la vera felicità, e perrò qualunque riguarda la vera bellezza con l'occhio della Mente, col quale solo puo essere Veduta, non producendo imagine e similitudine di virtù, fatto a Dio amico, dimostra chiaramente l'huomo essere per beneficio dello amore recettaculo della divinità, cf. F. Cattani da Diacceto, 'Panegyricus in Amorem', in: Opera Omnia, Francisci Catanei Diacetii Patricii Florentini (Basel, 1563), 136-137; Frommel, 'Michelangelo und Tomasso dei Cavalieri', 109-110.
- 62 Diacceto, *Tre libri d'amore*, 157: 'Ma quando separate dal divino spettaculo, mancono della loro consueta esca, affliti e dolente si rivolgono continuamente nella memoria, la imagine dello splendidissimo volto, onde sforzati dallo ardentissimo desiderio, ... non potendo ne la notte dormire, ne'l giorno in alcun luoco quietarsi, per tutto discorrono cercando di vedere quello spettaculo, senza la cui vista consumati dal dolore perirebbono', cf. Diacceto, *Opera Omnia*, 136, and Frommel, 'Michelangelo und Tomasso dei Cavalieri', 108.
- 63 Diacceto, Tre libri d'amore, 136, Opera Omnia, 135, Frommel, Michelangelo und Tomasso dei Cavalieri. 107.
- 64 Diacceto, *Tre libri d'amore*, 144: 'Onde essi chiamorono la amore non Iddio, non mortale, ma grande demone, perche la natura demonica, posta in mezo fra gli huomini e li Dij quasi interprete, conduce a li Dij li prieghi e sacrificij de gli huomini, alli huomini la volontà e comandamenti delli Dij. Ne per altro mezo li huomini, o uigilanti o dormienti sono inspirati dalla diuina bontà, che per la natura demonica', Frommel, 'Michelangelo und Tomasso dei Cavalieri', 102. Both quotations refer to Plato, *Symposium*, 202e-203b.
- Tommaso and Vittoria Colonna speak of 'hours spent gazing at [Michelangelo's] works and the use of mirrors and magnifying glasses for their closer examination', Ruvoldt, Renaissance Imagery of Inspiration, 141; also Testa, 'Iconography of the Archers', 45.

- 66 Hirst, Michelangelo, 111.
- 67 Panofsky, Studies in Iconology, 226.
- 68 Cf. L.J. Hammond, 'Panofsky on Michelangelo', Phlit; A Newsletter on Philosophy and Literature (s.l., 2003).
- 69 Ficino, De Amore, III, 1-3.
- 70 'Ah cruel bowman, you can tell exactly / When to bring quiet to our anxious, brief / Unhappiness, using your hand's strength; / For he who lives on death will never die', Michelangelo, *Rime* 74 r.5., transl. Testa, 'Iconography of the Archers', 62.
- 71 Hirst, Michelangelo, 37.
- 72 Ficino, De Amore, VI, 2.
- 73 Ibidem, VI, 9.
- 74 Ficino, De Amore, VI, 9.
- 75 Plato, Symposium, 201d vv.
- 76 Ficino translates χαμαιπετής as 'humi et per infima volans' or 'volante a basso', Ficino, De Amore, VI, 9.
- 77 Ficino quotes Propertius, cf. Commentary, ed. Jayne, 149.
- 78 Ficino, *De Amore*, VI, 9: 'the soul abandons the service of its own body and spirit and tries to leap across into the body of the beloved. ... On this account love is deprived of its own Lares, its natural seat, and its hoped-for rest.'
- 79 Ibidem, VI, 9: For since all things seek their own origin, the little blaze of love, kindled in the appetite of the lover by the sight of a beautiful body, tries to fly back into that same body.'
- 80 Ficino, De Amore, VI, 9.
- 81 Ibidem, VI, 10. Unarmed: 'inermis' or 'disarmato'.
- 82 Diacceto, *Tre libri d'amore*, 112, 120: 'Imperoche la cosa amata, fa violentia nello spirito; et per lo spirito nel cuore, onde ha origine.'
- 83 Ibidem, 114.
- 84 Ibidem, 124.
- 85 Ibidem, 125.
- 86 Ibidem, 126: 'Disse volare per terra, perche l'amante si fa servo della bellezza corporale. Laqual cosa nasce da estrema ignorantia, et da estrema insania, sendo l'anima nostra nel numero delle cose diuine, lequali hanno a dominare alle cose corporee, et non seruire.'
- 67 'Tu m'entrasti per gli occhi, ... / come grappol d'agresto in un'ampolla, / che doppo'l collo cresce ov'è più largo; / così l'immagin tua, che fuor m'immolla, / entro per gli occhi cresce, ond'io m'allargo / come pelle ove gonfia la midolla', Saslow, Poetry of Michelangelo, 144.
- 88 On this topic cf. T. Weststeijn, 'Painting's Enchanting Poison: Artistic Efficacy and the Transfer of Spirits', in: Spirits Unseen; the Representation of Subtle Bodies in Early Modern European Culture. Intersections, Yearbook for Early Modern Studies, Vol. IX, eds. C. Göttler & W. Neuber (Leiden and Boston, 2007), 141-178.
- 89 Otto Vaenius, Amorum emblemata (Antwerp, 1608), 151.
- 90 Ficino, De Amore, VI, 9.
- 91 Ibidem, VI, 9.
- 92 H. Wrede, Die Antike Herme (Mainz am Rhein, 1985); G. Carabelli, In the Image of Priapus, London 1996.
- 93 A similar sitting duck is depicted in the 1561 edition of *I tre libri d' Amore* as decoration of an initial.
- 94 Diacceto, Opera omnia, 229.
- 95 'But because things that are here below are apart, in the realms above are united, therefore we can conjecture that the primary visible and the primary instance of sight is the same,

foremost the light of the sun', Ficino, Commentary on Priscianus Lydus' Commentary on Theophrastus' De sensu, transl. R. Bouthoorn (unpublished), 811-812. Cf. also: 'Beauty, therefore, is three-fold: of souls, of bodies, and of sounds. That of souls is known through the mind; that of bodies is perceived through the eyes; that of sounds is perceived only through the ears. Since, therefore, it is the mind, seeing, and hearing by which alone we are able to enjoy beauty, and since love is the desire to enjoy beauty, love is always satisfied through the mind, the eyes, or the ears. ... Love regards the enjoyment of beauty as its end. That pertains only to the mind, to seeing and to hearing. Love, therefore, is limited to these three; an appetite which follows the other senses is not called love, but lust and madness', Ficino, De amore, I, 4.

'Signs that Signify by Themselves' Writing with Images in the Seventeenth Century

Thijs Weststeijn

In his treatise on painting of 1678, the Dutch artist Samuel van Hoogstraten (1627-1678), one of Rembrandt's pupils, pleaded for the inclusion of the art of painting among the liberal arts. One of his strategies was connecting the visual arts to ideas about language and letters developed by influential philologists such as Gerardus Vossius (1577-1649) and Franciscus Junius (1591-1677). In this context, Van Hoogstraten's book touched on the subject of pictography, the ideal of a script based on pictures rather than letters. He discussed this in connection to the art of the Chinese. Just like the Egyptians and the Mexicans, they have 'written their books with meaningful pictures, instead of letters; and their way of expressing themselves has reached us now in the art of painting.'

In Van Hoogstraten's view, the writing system of the Chinese entailed two promises for Western culture. First, through pictography, the art of painting would automatically gain a rightful place among the accepted arts of the *trivium*, grammar, logic, and rhetoric: this would bring to completion the process of social and intellectual emancipation that Dutch painters had gone through from the early sixteenth century onwards. They became interested the culture of the brush' that allegedly characterized classical Chinese civilization in which painting was closely related to scholarship and high public office. Van Hoogstraten thought that in East Asia even the Emperor, whenever he goes out, 'includes eminent painters among those who are called his courtiers'.

A second point of interest suggested that, since paintings are the 'Books of the Illiterate', pictography would make possible a language that could be understood by everyone regardless of cultural and linguistic background. This second point will concern us most as a great many seventeenth-century scholars were involved in the search for pictographic signs.³ The 'Golden Age' in Dutch painting had its counterpart in an exceptional flowering of philology. Van Hoogstraten's statements on Chinese may well have been inspired by two key figures in textual scholarship in the Netherlands: Gerardus Vossius, the first professor of the

Athenaeum Illustre (forerunner of the University of Amsterdam), and one of his sons, Isaac (1618-1689), a great enthusiast of Chinese culture and the first European to write a defense of Chinese visual art.⁴ Gerardus assumed that Chinese characters had developed out of a pictographic script, postulating that each sign was a miniature painting of the object it referred to. He concluded this from the fact that a single script was used for unrelated languages. As he wrote in *De arte grammatica* (1635):

for the Chinese, there are no fewer letters than there are words: however, they can be combined together, so that their total number does not exceed 70,000 or 80,000 ... The Chinese and Japanese, although their languages differ just as much as Hebrew and Dutch, still understand one another if they write in this manner. For even if some would have pronounced other words when reading, the concepts would nevertheless have been the same. Indeed, now as people of different languages who see the same thing, understand the same thing, likewise, those who see the sign of a thing would have the same understanding of it.⁵

Since Chinese characters express concepts without the medium of language, they are similar to paintings: 'In the same sense, from the painting of a human figure, a horse, a tree, or a house, all people obtain the same concept'. From the example of Chinese writing, Vossius concluded that it was possible to learn 'as many characters as there are things', if this was done from an early age onwards.

Even though Vossius's estimate of the total number of characters was too high, to his contemporaries these scholarly conjectures about the Chinese script seemed realistic. They were based on the early modern emphasis on thinking in images, in contrast to the stress on language as the basis for thought that is so popular in twentieth-century philosophy. When Renaissance writers about the visual arts used the formula *ut pictura poesis*, it was not to highlight the 'textual' nature of works of art but rather to elaborate on Aristotle's assumption that 'the mind never thinks without images'. The visual components of the art of memory, aimed at remembering the parts of a speech by association with physical objects in an architectural setting, as well as the popularity of illustrated emblem books, were based on the fundamental role allotted to images. 10

Without the ambition to be comprehensive or incontrovertible, this chapter will explore three aspects of the seventeenth-century discourse on writing with images. First we shall trace the purported geographical spread of pictograms: although based on hieroglyphical roots, they were allegedly put to use most fruitfully in China. Furthermore, we will analyze how ideas on the common root of Christian and Oriental civilizations inspired speculations about a pictographic

origin of the world's various scripts. Finally, we shall situate the projected signs that were independent of speech in the context of seventeenth-century attempts at philosophical language.

Joining artistic, linguistic, historical, and geographic arguments, the debate about signs that signify themselves constituted a lively, albeit short-lived chapter in the history of the humanities. It brings to the fore how religious and antiquarian credulity, extending to the Chaldaeans, Sibyls, and the people before Adam, went hand in hand with scholarship heralding modernity, such as comparative linguistics and symbolic logic.

I Emblems, hieroglyphs, and the Chinese script

To explain the possibility of pictography, Vossius referred back to the rediscovery of the Egyptian hieroglyphs in the fifteenth century." In his capacity as art theorist and philologist, Leon Battista Alberti had been the first to develop an interest in the inscriptions on Roman obelisks that he thought could be deciphered also without knowledge of the language spoken in Egypt. 12 His treatise on architecture advised avoiding letters for inscriptions on monuments made for posterity, and replacing them with 'Egyptian' pictograms that could always and under all circumstances be read by scholars. 13 Later in the century, a spurious text surfaced with two hundred fanciful 'explanations' of hieroglyphs, attributed to Horapollo, a priest of late antiquity. It was reprinted nine times up to the seventeenth century and thus catalyzed the fashion for emblems:14 images that combined various symbols, provided with an interpretive epigram. Andrea Alciati's Emblematica (first edition 1505) provides one example, which refers to the creed of making haste slowly: it combines a dolphin, symbolizing speed, to an anchor, denoting slowness (Fig. 31, next page). That this symbolism sometimes exploited its own ambiguity is suggested by a visually very similar image (combining a snake and an arrow) that was given a different meaning (it denotes the idea that things need time to mature) (Fig. 32, page 137).15

An influential modern student of this topic, Ernst Gombrich, analyzed how, according to Renaissance scholarship, vision conveyed a specific kind of knowledge that was unmediated by language. Images made in the right manner were regarded as direct reflections of Platonic ideas. They were expected to leave an adequate imprint of these ideas on the viewer's mind; seeing was therefore deemed the most truthful kind of perception. Even though in the seventeenth century there was less stress on the multiplicity of meanings that could be attached to visual symbols, the idea that images were a purer kind of communication than language remained popular. The best example may be Jan Amos Comenius's (1592-1670) treatise Orbis



Fig. 31 (top): 'Princeps', in: Andrea Alciati, Emblemata ... cum ... notis Laurentii Pignorii Patavini (Padua 1661), p. 615.

Fig. 32 (right): 'Maturandum', in: Andrea Alciati, Emblemata (Leiden 1584), p. 58.

58 AND READ A CETATE

EMBLEMA XX.



MATVRARE inbent propere, & cunctarier omnes,

Ne nimium praceps, neu mora longa nimis. Hoc tibi declaret connexum echeneïde telum: Hac tarda est, volitant spicula missa manu.

In rebus arduis, & quibus negle dis aliquid periculi elle potest, cauendum est à nimia celeritate, nimiave mora. pictus (1658), which based a system of education entirely on confronting children with illustrations from an early age onward. In this system, knowledge of the world is classified and communicated through simple images (Figs. 33 and 34).¹⁷

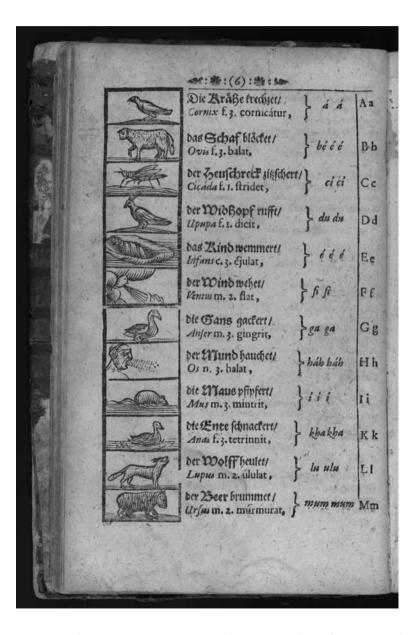


Fig. 33: Illustration from J.A. Comenius, Orbis sensualium pictus quadrilinguis (Nurnberg 1679), p. 6.



Fig. 34: Illustration from J.A. Comenius, Orbis sensualium pictus quadrilinguis (Nurnberg 1679), p. 162.

Comenius worked in the Netherlands, where he aspired to visit Vossius whose work he admired, but the Dutch discussion on pictography was inspired most markedly by another scholar, a German Jesuit living in Italy: Athanasius Kircher (1602-1680). His ideas on universal language and writing were part of his works on ancient Egypt and China that were published in Amsterdam and partly translated into Dutch. In Kircher's works, the Middle East and the Far East were closely interrelated, as his discussion of pictography demonstrates.

Father Kircher's original ambition had been to become a missionary in China, but his request was denied.²⁰ In 1635, he arrived in Rome with the special assignment of deciphering the hieroglyphs; soon he claimed to have succeeded – and to have related them to Chinese characters. Under Kircher's supervision,

an ancient obelisk was erected on Piazza Navona in Rome. He also published an extensive translation of the inscriptions.²¹ This project, in which Egyptian wisdom appeared as a forerunner of papal doctrine, sparked his ambition to write 'world history': to chart the spread of civilization from its origin in the ancient Middle East to the rest of the world, including East Asia and the Americas. Reactions to this ambiguous scholarship, which ostensibly combined observation with speculation, were mixed. When Spinoza consulted the Jesuit's writings in the library of a friend, he reported that his host sardonically 'praised [Kircher's] piety, but not his ability'.²² To put Kircher's ability to decipher exotic scripts to the test, someone sent him a note with invented characters; he soon received a translation.²³

Isaac Vossius's work reveals an ambivalent attitude. Speaking as Kircher's friend, he states that 'even his friends wish that he had not written his *Oedipus* [Aegyptiacus]', the book in which Kircher claimed to have translated the hieroglyphs.²⁴ At other moments, however, Vossius demonstrates his interest in the Jesuit's ideas.²⁵ In 1642 he even went to Rome to visit the 'Museo Kircheriano' that contained extensive collections of ancient Egyptian objects. It also displayed various things collected by the Jesuits in China and demonstrated that Kircher had more access to knowledge about East Asia than any other scholar in Europe.²⁶ Eventually, some of Kircher's writings came to hold pride of place in the Dutch republic of letters, not least his *China illustrata* (1667) that was translated immediately.²⁷

Upon returning from his 'Grand Tour', Vossius tried to rival Kircher's network in various ways, seeking contact with other Jesuits and with the governor of the Dutch East India Company to obtain manuscripts and printed texts on China.²⁸ Remarkably, all this remained a bookish affair. In the project to find the *clavis sinica*, the presumed key to the interpretation of the Chinese characters, no scholar cared about consulting the East Asians who visited the Netherlands. Already in 1654, a Chinese named Michael Shen Fu-tsung had come to Amsterdam, in the service of a Flemish Jesuit, to visit the famous playwright Joost van den Vondel (1587-1697).²⁹ He made as little impression as two students at Leiden University, sons of a Dutch official and a Japanese woman, who were born and raised in Japan. Another son of a Japanese woman, Pieter Hartsinck (1637-1680), became a distinguished mathematician at Harderwijk; he was never consulted by Vossius or any other Orientalist.³⁰

Instead, it was Kircher who remained the chief authority. He called the Chinese characters 'pictograms' and explained how they developed from images: 'The ancient Chinese have based their letters on all things that present themselves to the eye, and have revealed and expressed the thoughts of their mind solely through the varied combinations and compositions of these things.'31



Fig. 35: An illustration of the Chinese method of writing, from Kircher, *China illustrata* (Amsterdam 1667), p. 233.

Kircher found proof for this idea in the fact that the Chinese do not write with pens, but with 'paintbrushes'; their writing should rather be termed 'painting', ³² To highlight this idea, the illustration to his discussion of Chinese writing includes a monkey, the Renaissance symbol for visual art as 'ape of nature' (Fig. 35). ³³ Kircher thought that the Chinese based their pictograms on objects classified according to the categories of the elements. For the element of air, they used birds; for earth, plants and leaves; for water, fishes; and for fire, dragons. ³⁴ In the earliest stage of Chinese civilization, these images would have been painted by the mythical first Emperor, 'Fohi'. In the course of the centuries, their figurative forms had become increasingly abstract (Figs. 36-40, page 152-154).

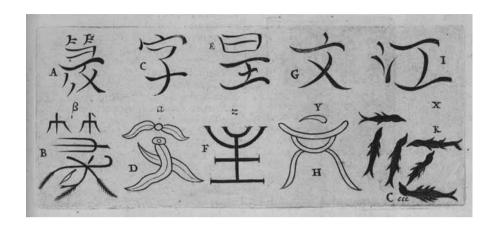
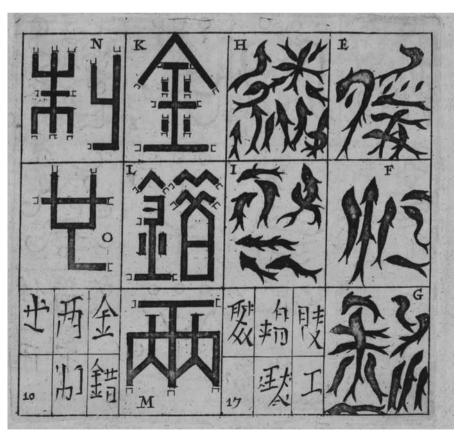




Fig. 36 (top): Example of Chinese characters, from Kircher, *China illustrata* (Amsterdam 1667), p. 227. Fig. 37 (left): Image from Kircher, *China illustrata* (Amsterdam 1667), p. 228.



Fig. 38 (left): Image from Kircher, China illustrata (Amsterdam 1667), p. 229. Fig. 39 (bottom): Image from Kircher, China illustrata (Amsterdam 1667), p. 230.



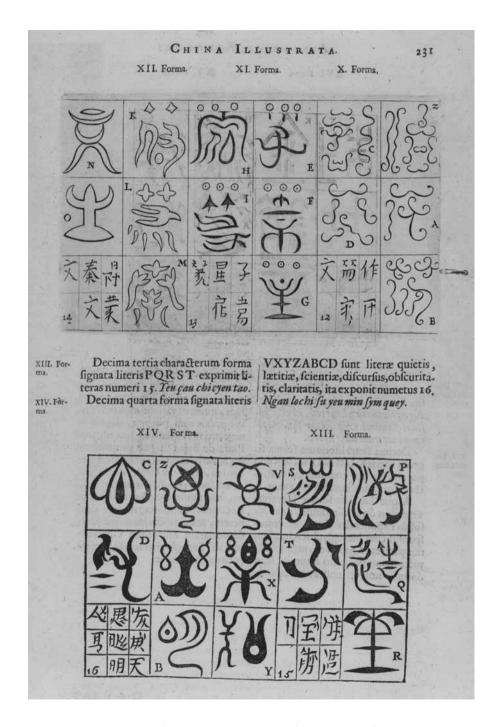


Fig. 40: Image from Kircher, China illustrata (Amsterdam 1667), p. 231.

2 Primeval knowledge and the primitive language

Fohi brings us to the heart of Kircher's project of linking Chinese civilization to that of Egypt and hence to the history of the Western world. In his view, the Emperor, when he developed pictographic writing, must have been inspired by someone from the Near East, perhaps one of Noah's sons who had come to China immediately after the Flood. Another possibility would be the ancient philosopher Hermes Trismegistus who had given the Egyptians their art, their religion, and their hieroglyphs: 'The origins of their writing ... the [Chinese] learned from Father Cham, and from Mercurius Trismegistus, the counselor to his son Nefraim and the first instigator of pictograms. And surely, those ancient characters of the Chinese, that are equal to pictograms in all aspects, are an important proof for me to believe in this [Egyptian origin].35 The assumption that the Chinese characters were emblem-like, 'hieroglyphical' signs with ambiguous meanings lay at the basis of the Jesuits' view of 'world history'. It allowed them to interpret oriental languages and art typologically as coming from a Christian origin.36 Their argument was that the Chinese themselves no longer recognized the hidden meaning of their own signs: Christian missionaries, trained in the art of emblematics, were needed to rediscover it.37

In the account of sacred history in Oedipus Aegyptiacus (1652), pictography appears as a key element. To Kircher, the hieroglyphical origin of Chinese writing proved that all civilizations were offshoots from the 'one primeval wisdom', or prisca philosophia, that had originated in Egypt and had modern Catholicism as its purest representative. Likewise, all languages could be traced back to the primeval tongue that had been spoken before the Flood and was first written down in Egypt. The title page of Obeliscus Pamphilius (1650) represents this genealogy of languages by means of a stack of books, on which a winged personification (apparently Kircher's muse) rests her elbow (Fig. 41, next page). The image suggest that Egyptian wisdom lay at the foundation of Pythagorean, Greek, and Chaldaean knowledge. To the figure's right, there are slabs of stone inscribed with fake Greek, Hebrew, and Arabic letters and a fourth script of unclear origin (Chaldaean or Egyptian?), highlighting the importance of writing systems for Kircher's hypothesis of a chain of religions linking the Near East to the rest of the world. Similarly, in China illustrata, Kircher developed the view that ancient Asian idols were of Egyptian origin: one example is his interpretation of 'Pussa', or a bodhisattva, as a local version of the Greek nature goddess Cybele or Isis of the Chinese' (Fig. 42, page 147).

In the Netherlands, not all scholars were inclined to accept the Jesuits' notion of world history'; it even sparked theological controversy. Reports about the flowering of Chinese civilization seemed to modify the point of view centered on



Fig. 41 (above): Frontispiece of Athanasius Kircher, *Obeliscus Pamphilius* (Rome 1650). Fig. 42 (right): The goddess 'Pussa', from Kircher, China illustrata (Amsterdam 1667), facing p. 140.



Europe. What is more, the historical chronology as laid down in the Bible could not accommodate a civilization that, according to the Chinese historiographers, was older than the Flood. Isaac Vossius took this observation as the basis for serious Biblical criticism.³⁸ Echoing his father's assumptions about the pictographic character of Chinese writing, Vossius concluded that Chinese historical accounts must be reliable as they were based on a script that dated back 5,000 years and could still be understood.³⁹

Vossius was a champion for China's culture for its own sake and thus called Kircher's conclusions about its Egyptian origin 'absurd'. 40 However, together with his text 'On the Arts and Sciences of the Chinese' (1685), in which he praised the visual arts and writing of the Chinese, Vossius published a discussion of the kind of 'world history' proposed by Kircher. This related to a corpus of ancient texts, the so-called Sibylline Oracles. 41 These 'oracles' were reported to have been written by the pagan soothsayers who had foretold the coming of Christ. Traditionally, the ancient prophetesses had exotic names such as the Ethiopian, the Libyan, and the Persian Sibyl: they formed an important typological link, not only between classical and Christian civilizations, but also between the Eastern and Western worlds. 42 What is of interest to our discussion is the controversy about the language spoken by the Sibyls when they communicated directly with God. One option that had to be considered seriously was Chinese. If Chinese was indeed uncorrupted since the period before the Flood, it could well have been the language in which God had spoken to Adam when he named the animals and had perfect and complete knowledge. Although Vossius pleaded for an alternative chronology to replace accepted sacred history, he did not himself draw these ultimate conclusions; he also refrained from the idea that the earth had already been populated before Adam, a thesis that could account for various problematic issues in the writing of 'world history', put forward in Isaac la Peyrère's work Prae Adamitae (1655).43 On the basis of Vossius's writings, however, the British architect John Webb claimed that all languages are essentially derivations from Chinese in his Essay Endeavouring the Probability that the Language of the Empire of China is the Primitive Language (1669).44

In the Netherlands, Vossius was mainly criticized for his ideas on the reliability of Chinese history writing. His most intrepid opponent was the historian Georg Hornius (1620-1670), a devout protestant based at Harderwijk, who criticized the highly controversial idea that the Bible should not be taken literally. The scholar thus not only adhered to Kircher's world view of the basis of Chinese religion in the Middle East but even expanded on it: returning to the discussion on pictography, he concluded that Egyptians, via China, ended up in the Americas. Supposedly, the difficulty in learning the great number of Chinese characters had led the American peoples to use simplified signs:

'I confess that the way of writing among the ancient Mexicans and the Chinese was not the same, but it was also not very different ... The Chinese write with a paintbrush, and one character comprises many letters and makes an entire word'.48

3 Pictograms as 'Real Characters'

The discussion about 'world history' illustrates how the pictographical theory, by assuming a legible script dating back to the beginnings of history, put to the test established religious and scholarly views. There was another, even more controversial chapter to this story that we need to address. Ultimately, ideas about *prisca philosophia* became intertwined with ideas on communication by means of symbols. Pictography inspired particular experiments with philosophical language: the ideal of communication based solely on reason, independent of culture and tradition. This language needed signs that directly expressed things instead of sounds: these were the 'real characters', to quote Francis Bacon who thought that 'it is the use of China ... to write in Characters Real, which express neither letters nor words in gross, but Things or Notions'. 49

In the first serious attempts at a philosophical language, Chinese writing also returned as a source of inspiration. One example was the work of George Dalgarno (1626-1687), who, in developing a complete philosophical language in his Ars signorum (1661), called out to 'You far-seeing Chinese': 'do not, we beseech you, render blind us one-eyed ones, anxious as we are to look more intently at your affairs, by displaying enchanting images in place of letters'. 50 He also thought that 'real characters were in use before vocal characters', as he concluded from the examples of Chinese and Egyptian writing.⁵¹ Dalgarno's colleague, John Wilkins (1614-1672), had similar ambitions. His Essay towards a Real Character and a Philosophical Language (1668) stated that he was inspired by the men of China, who have for many Ages used such a general Character, by which the Inhabitants of that large Kingdom ... communicate with one another, everyone ... reading it in his own Language'; as an example he included Our Lord's Prayer written in Chinese characters.⁵² In his own alphabet of 'real characters', Wilkins used symbols that are not truly pictograms but what may be called 'ideograms', signs representing the categories of reality (Fig. 43, next page). It allots specific symbols to the elements, such as stone, metal, and vegetation, in a manner not dissimilar to how Kircher thought that the Chinese characters reflected the way the Chinese differentiated classifications in nature.

The two discussions related to pictography, on 'world history' and philosophical language, remained intertwined throughout the seventeenth century. One phi-

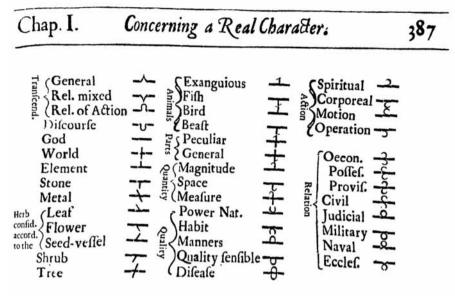


Fig. 43: Example of ideograms from John Wilkins, Essay towards a Real Character and a Philosophical Language (London 1668), p. 387.

losopher in particular tried to combine speculations on *philosophia perennis* with logical and linguistic theories: Gottfried Wilhelm Leibniz. Leibniz's work reveals the influence of Kircher, who was one of his correspondents; ideas about Chinese script were an early source of inspiration for Leibniz's work on symbolic logic.⁵³ Kircher even published an innovative book on logic based on symbols, *Ars magna sciendi* (1669), before Leibniz's better-known work on this topic. The title page reveals how pictograms lay at the basis of symbolic logic: it includes an image of Kircher's *alphabeta artis*, listing various symbols that index argumentative combinations, such as a heart for concordance' and an omega for conclusion' (Figs. 44 and 45). The list concludes with small images of a man, an animal, a tree, and a stone to denote categories related to the hierarchy of creation, and even an angel's head to refer to any angelic aspects of intelligence.

Any statement written in this alphabet would lay bare the structure of its argument in an unambiguous way. This use of pictograms as classification symbols is revealing about the seventeenth-century view towards the Chinese characters. Leibniz expected that the combinations of signs in Chinese script reflected the way the Chinese organized and represented knowledge; finding the *clavis sinica* would thus be a great contribution to epistemology.⁵⁴ The symbolic logic based on this would reveal the workings of the mind, as Leibniz concluded from his



Fig. 44 (left): Detail from title page of Athanasius Kircher, *Ars magna sciendi* (Amsterdam 1669). Fig. 45 (below): Alphabeta artis', from Kircher, *Ars magna sciendi* (Amsterdam 1669), p. 24.

Columna prima, Alphabetum primum Erotematicum.	Columna fecunda. Alphabetum principiorum abfolutorum.	Columna tertia. Alphabetum principiorum re- Spectivorum.	Columna quarta. Alphabetum principiorum uni- versalium.
1. An. 2. Quid. 3. Cur. 4. Quantum, 5. Qui. 6. Quale. 7. Ubi. 8. Quando. 9. Quibufcum.	1. B. Bonitas. 2. M. Magnitudo. 3. D. Duratio. 4. P. Potentia. 5. S. Sapientia. 6. Vo. Voluntas. 7. Vi. Virtus. 8. Ve. Veritas. 9. G. Gloria.	1. = Differentia. 2. ♥ Concordantia. 3. • Contrarietas. 4. α Principium. 5. • Medium. 6. ω Finis. 7. M Majoritas. 8. Æ Æqualitas. 9. Mi. Minoritas.	1. \(\triangle Deus. \) 2. \(\triangle Angelus. \) 3. \(\triangle Coclum. \) 4. \(\triangle Elementa. \) 5. \(\triangle Homo. \) 6. \(\triangle Animalia. \) 7. \(\triangle Plantæ. \) 8. \(\triangle Mineralia & omnia mixta. \) 9. \(\triangle Materialia; Inftrumentalia. \)

idea that 'all our thinking is nothing but the connection or substitution of signs, whether these are words, or marks, or images'. Leibniz therefore asked for figures significantes par elles mêmes which could immediately be understood: a script with 'signs as natural as possible' (notas quam maxime naturales) that could be read without a dictionary. 56

Unsurprisingly, Leibniz's ambitions, which were based on a mistaken view of the Chinese characters as ideograms, proved a dead end. When the philosopher studied the signs used in the Yi Jing (or I Ching), as they were reprinted in the Je-

suits' writings, his ideas on Chinese thought were equally misguided: he thought they were Fohi's 'hieroglyphs' representing the Infinite and the Chaos from which God had rescued mankind (Fig. 46). He also thought, however, that he had revealed a system of binary relations in the Yi Jing. This assumption inspired his search for an ideal language: 'a new characteristica which will appear to be a con-

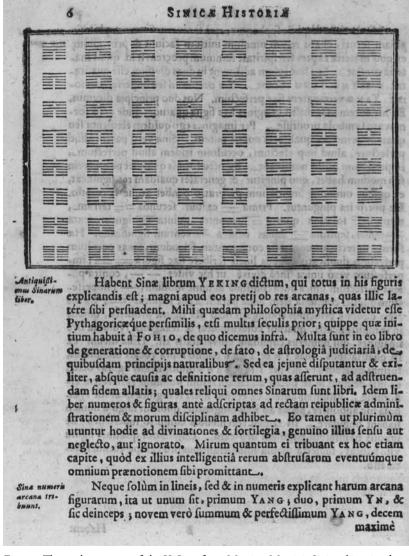


Fig. 46: The 64 hexagrams of the Yi Jing, from Martino Martini, Sinicae historiae decas prima (Munich 1658), p. 6.

tinuation of Fohi's, and which will provide the beginning of the analysis of ideas and of that marvellous calculus of reason that I am planning.⁵⁷ As historians of science commonly assume, this *characteristica univeralis* catalyzed the development of modern symbolic logic and eventually of digital electronics.⁵⁸

4 The failure of the pictographic project

Ultimately, ideas on China as a 'culture of the brush' led to a vision of a distant utopia: pictography would be a key to universal knowledge and a prerequisite for a harmonious world order. Comenius, for instance, saw the 'real character' as a basis for the reconciliation of humankind. He spoke of the 'pleasing light' granted by the 'knowledge we received about the symbolic characters used by the Chinese; that these characters help men of different languages to understand one another; ... If this is a good thing, why should we not devote ourselves to the discovery of a Real Language, which all men equally should understand ...; the discovery not only of a language but of thought, and what is more, of truth of things themselves at the same time?'59

To conclude, we should note that it is not hard to see why the idea of Chinese pictography appealed to seventeenth-century scholarship in Europe. Chinese letters, just like the Egyptian hieroglyphs, presented a great philological challenge precisely because nobody fully understood them. To many, their intractability made any connection with 'hidden' or 'lost' knowledge a self-evident conclusion. As pictography was a central argument in the new science of 'world history', the clavis sinica presented itself as one of the most promising tasks for modern scholarship. Such exalted expectations led Vossius to suppose that a cultural and philosophical utopia had been realized in China. Not only did he prefer its visual arts above those of the West, he also concluded that the Chinese had realized an improved version of Plato's ideal reign of the philosopher-king: 'These things may seem unbelievable, but [only] to those who do not know that in China the Platonic republic has always flourished, and that since so many thousands of years there have only reigned philosophers'.

Precisely these ideological assumptions eventually encountered serious criticism, equating an interest in China with philosophical radicalism and even heresy. Thus, strict Calvinist authors, who condemned the art of painting as idolatry, also criticized Chinese pictography. The Frankfurt professor of logic Elias Grebnitz (1627-1689) attacked Chinese language as a product of the devil. He thought that every time the name of God was written in Chinese, one committed a sin against the Second Commandment that prohibits the depiction of the Divinity. 61 Another Protestant, the Leiden-educated orientalist Andreas Müller

(c.1630-1694), made a set of types of Chinese characters that contained over three thousand signs. ⁶² Soon Leibniz wrote to him, asking whether 'this language can be introduced easily in Europe, and whether those who constructed this language understood the nature of things'. ⁶³ But when Müller finally found his key to Chinese that was a key to the hieroglyphs at the same time, he was accused of heresy and, in the hour of his death, threw his materials into the fire. ⁶⁴ Also, Isaac Vossius's Chinese utopia presented dangers to accepted authority; one critic compared them to the work of 'Libertines, spoiled by a false metaphysics' that would 'lead to nothing less than a total subversion of all Religion'. ⁶⁵

It soon transpired that this criticism was not really necessary. As the 'real character' was concerned, from a practical point of view, the great number of signs necessary for writing Chinese discouraged linguists and philosophers in Europe. Dalgarno, for instance, complained about the 'near infinitely burdensome' number of letters, which would make them unfit for philosophical language. 66 Nevertheless, eighteenth-century scholarhip kept attempting seriously to trace Chinese writing back to the Coptic language, based on the actually correct assumption that the language expressed in the Egyptian hieroglyphs is Coptic. 67

Despite the failure of pictography as a utopian project, we should be wary of dismissing Kircher and Vossius as 'more charlatans than savants', to quote Descartes. We should rather take account of the unprecedented nature of the European confrontation with China in the seventeenth century: to quote one modern scholar, 'never before had Europe received so powerful and varied an artistic stimulus from a distant civilization'. Pictography proved a means of showing off scholarship about this most topical area of discussion that, while appealing to common notions about thinking in images, called for the abandonment of widely held convictions about language and literacy.

Pictography was undoubtedly one of the more imaginative moments in the history of the humanities. Its main importance may have laid in highlighting the affinities between the visual arts and the study of language, as parts of the same project, the communication and organization of knowledge. There were, however, unintended spin-offs. Vossius's ideas on the reliability and accessibility of the Chinese historians, for example, eventually inspired a respected school of Bible criticism.⁷⁰ What is more, without his misguided ideas on 'perennial philosophy' and the nature of Chinese writing, Leibniz may not have pursued his 'universal characteristics'; eventually, this project catalyzed the development of modern logic and computer languages.⁷¹ Although pictography itself did not become a viable tool for scholarship, the seventeenth-century discussions about it sparked a creative impulse that contributed in unexpected ways to society as well as modern science.

Notes

- 'd'Egyptenaeren, Chinezen ... hebben hare boeken met Zinnebeelden, in plaets van letteren, geschreven; en deeze wijze van uitbeelden is met de schilderkonst ook tot ons gekomen, Samuel van Hoogstraten, *Inleyding tot de hooge schoole der schilderkonst*; anders de zichtbare werelt (Rotterdam: Van Hoogstraten, 1678), 90.
- ['][Z]00 heeft hy onder de geene, die men zijn gezelschapsheeren noemt, ook treffelijke Schilders, Van Hoogstraten, *Inleyding*, 356.
- An earlier study providing a long, but for the seventeenth century rather superficial, historical overview is S. Köhn, 'Hartnäckige Mythen der Wissenschaft; vom vermeintlich ideographischen Charakter der chinesischen Schrift', Nachrichten der Gesellschaft für Natur und Völkerkunde Ostasiens (NOAG) 173/174 (2003), 63-92; further remarks on the subject can be found in general studies addressing seventeenth-century Sinology, such as D. Mungello, 'Proto-Sinology and the Seventeenth-Century European Search for a Universal Language', in: Curious Land; Jesuit Accommodation and the Origins of Sinology (Honolulu: University of Hawaii Press, 1989), 174-246; and Donald F. Lach, 'China in Western Thought and Culture', Dictionary of the History of Ideas, ed. Philip P. Wiener (New York: 1968), I, 353-373: 358.
- On Isaac Vossius's scholarship on China, see my 'Vossius's Chinese Utopia', in: Eric Jorink & Dirk van Miert (eds.), *The World of Isaac Vossius* (Leiden: Brill, forthcoming).
- '[P]rodidit Nicolaus Trigaultius ... non pauciores Sinensibus literas esse, quam voces numerantur: eas tamen iter inter se componere, ut LXX, aut LXXX milia non excedant. Imo idem refert, Sinenses & Japanenses, etsi lingua aeque differant, ac Hebraei, & Belgae; tamen, quae sic scribuntur, intelligere ... Utcumque enim in legendo alii alia verba pronunciassent: tamen iidem fuissent conceptus. Nempe uti nunc variarum linguarum homines rem eandem conspicientes eandem rem concipiunt: ita idem [sic] rei signum intuentes, eundem haberent conceptum', Gerardus Vossius, De arte grammatica libri septem (Amsterdam, 1635), I, 143. Vossius discusses Chinese writing on pp. 140-143 and 122.
- 6 'Quomodo ex pictura hominis, equi, arboris, domus, homines omnes eundem habent conceptum', Vossius, *Grammatica*, 142.
- 7 '[T]ot prope characteribus fore, quot res sunt', Vossius, Grammatica, 142.
- 8 The most complete Chinese dictionary of the seventeenth century, Mei Yingzuo's Zihui of 1615, listed 33,179 characters.
- 9 Aristotle, De anima III, 3 (Bekker 431a).
- On early modern mnemotechnics see F.A. Yates, *The Art of Memory* (Chicago/London: 1974, ed. princ. 1966).
- Vossius refers in particular to Lorenzo Pignoria (whom he calls his 'very good friend'), Kircher's immediate predecessor in the interpretation of the hieroglyphs, Vossius, Grammatica, 140. Vossius corresponded with Pignoria, cf. G.A.C. van der Lem and C.S.M. Radermaker, Inventory of the Correspondence of Gerardus Johannes Vossius (1577-1649) (Assen & Maastricht: Van Gorcum, 1993), 468.
- 12 Erik Iversen, The Myth of Egypt and Its Hieroglyphs (Copenhagen: Gad, 1961), 65; and more recently Brian Curran, The Egyptian Renaissance; the Afterlife of Egypt in Renaissance Italy (Chicago: University of Chicago Press, 2007).
- I3 Iversen, Myth of Egypt, 65; Alberti, De re aedificatoria X, VIII, 4.
- The *editio princeps* in Greek was printed by Aldus Manutius, Venice 1505. Also Kircher (on whom more below) used the interpretations attributed to Horapollo; on the book and its reception in the Renaissance see Iversen, *Myth of Egypt*, 47-49, 65, 72-75.

- The literature on emblems is vast; see the overview in John Manning, 'Introduction', in: id., The Emblem (London: 2002), 13-36.
- 16 Ernst Gombrich, "Icones Symbolicae"; the Visual Image in Neo-Platonic Thought', Journal of the Warburg and Courtauld Institutes 11 (1948), 163-192.
- 17 Jan Amos Comenius, Orbis sensualium pictus (Nuremberg 1658); on the ideal of education through images cf. John Edward Sadler, J.A. Comenius and the Concept of Universal Education (New York & London: Routledge, 2007, ed. princ. 1966).
- 18 C.S.M. Rademaker, The Life and Work of Gerardus Johannes Vossius (Assen: Van Gorcum, 1981), 280.
- Kircher's works in Dutch were Het eerste deel van het groote licht der natuur-kunde of tweede vervolgh op de eminente oratie van ... Digby, getrocken uyt de Lat. geschriften Athan. Kircherus, transl. J. Casteleyn (Haarlem: 1662, other editions 1681, 1697, 1709); Toonneel van China, door veel, zo geestelijke als werreltlijke, geheugteekenen, verscheide vertoningen van de natuur en kunst, en blijken van veel andere gedenkwaerdige dingen, geopent en verheerlykt, transl. J.H. Glazemaker (Amsterdam: Van Waesberge and Weyerstraet, 1668); Naturelijke en geneeskonstige navorsching der peste, waar in nevens de oorzaken, teekenen, werkingen en genezingh des zelfs, ontel're geheymen der nature ontdekt worden, transl. Z. van de Graaf (Rotterdam: 1669); d'Onder-aardse weereld in haar goddelijk maaksel en wonderbare uitwerkselen aller dingen (Amsterdam: van Waasberge, 1682).
- Aldo Mastroianni, 'Kircher e l'Oriente nel Museo del Collegio Romano', in: E. Lo Sardo (ed.), Athanasius Kicher; il museo del mondo, cat. exh. Roma, Palazzo Venezia (Roma: De Luca, 2001) 65-78, 65.
- This was Obeliscus Pamphilius (Rome 1650). In the last decade, an increasing number of scholarly studies has been devoted to Kircher; some of them have been collected in Paula Findlen (ed.), Athanasius Kircher; the Last Man who Knew Everything (London & New York: Routledge, 2004).
- The passage has survived in the correspondence of Henry Oldenburg, cited in a letter of October 7, 1665, reprinted in A. Wolf, 'An Addition to the Correspondence of Spinoza', *Philosophy* 10/38 (1935), 200-204: 202.
- 23 Anton Haakman, De onderaardse wereld van Athanasius Kircher (Amsterdam: Meulenhof, 1991), 126.
- 'Oedipum ejus, quem tamen amici nollent ab illo scriptum', Isaac Vossius, Castigationes ad scriptum Georgii Hornii de Aetate Mundi (Den Haag: Vlacq, 1659), 41.
- 25 Despite his criticism of Oedipus Aegyptiacus, Vossius praises Kircher's 'ingenuity and erudition', Vossius, Castigationes, 41.
- On the museum cf. Mastroianni, 'Kircher e l'Oriente'. For Vossius's contacts with Kircher in Rome, cf. his remarks on 'Kircherus [...] mihi olim Romae amicus', Vossius, Castigationes, 41. On his visit to Rome in 1645, Coenraad Burgh gave Vossius's regards to Kircher, cf. Frans F. Blok, Isaac Vossius and His Circle; His Life until his Farewell to Queen Christina of Sweden (Groningen: Forsten, 2000), 154.
- 27 China monumentis qua sacris qua profanis, nec non variis naturae & artis spectaculis, aliarumque rerum memorabilium argumentis illustrata (Amsterdam, 1667), published by J.J. van Waesberge and in a pirated reprint by Jacob van Meurs; within a year the Dutch edition, Toonneel van China, appeared.
- Marion Peters, 'Mercator sapiens' (de wijze koopman); het wereldwijde onderzoek van Nicolaas Witsen (1641-1717), burgemeester en VOC-bewindhebber van Amsterdam (Diss. Rijksuniversiteit Groningen, 2008), 34-35.
- 29 Peters, 'Mercator sapiens', 159.

- Journal of the Seventeenth Century', Bulletin of the School of Oriental and African Studies 56/3 (1993), 502-524: 505.
- 'd'[E]erste Sinezen hun merkletteren uit alle de dingen, die zich voor't gezicht vertonen, genomen, en alleenlijk naar de verscheide schikking en ordening dezer samengezette dingen de bevattingen van hun geest geopenbaart en bekent gemaakt hebben', Kircher, Toonneel van China, 275. The Dutch edition coins the neologistic term beeld-letteren or beeltletters, literally 'image letters', for pictograms.
- 32 Kircher, Toonneel van China, 275, 281.
- 33 The classical study of ape symbolism is Horst W. Janson, Apes and Ape Lore in the Middle Ages and the Renaissance (London: The Warburg Institute, 1952).
- 'If they were to discuss things of a fiery nature, they used serpents, asps, and dragons, which, arranged in this or that pattern, stood for this or that thing. To describe airy matters, arrangements of birds were needed; for watery topics, fish; for the description of vegetable nature, flowers, leaves, and branches', Kircher, China Illustrata (Amsterdam, 1667), 227. Kircher's book correctly lists the various other elements also differentiated in classical Chinese thought, besides the four that were common in Europe.
- 35 'd'[E]erste beginselen der letteren, die zy van Vader Cham, en van Merkurius Trismegistus, raat van zijn zoon Nefraim, en d'eerste insteller van de beeltletteren ... geleert hadden. En zeker, deze oude merkletteren der Sinezen, in alles met de beeltletters gelijk, zijn een gewichtig bewijs, daar door ik bewogen word om dit te geloven', Kircher, Toonneel van China, 274.
- 36 Cf. Virgile Pinot, La Chine et la formation de l'esprit philosophique en France (1640-1740) (Paris: 1971, first ed. 1932), Chapter II, paragraph 3, passim.
- 37 Claudia von Collani, Die Figuristen der Chinamission (Frankfurt am Main: Peter Lang, 1981), 22.
- Vossius formulated his Bible criticism in relation to his Dissertatio de vera aetate mundi, qua ostenditur natale mundi tempus annis minimum 1440 vulgarem aeram anticipare (The Hague, 1659); on Vossius's sinophilia in relation to his reputation as a libertine, cf. my "Spinoza sinicus;" an Asian Paragraph in the History of the Radical Enlightenment', Journal of the History of Ideas 68/4 (2007) 537-561; Jonathan Israel, Enlightenment Contested; Philosophy, Modernity, and the Emancipation of Man 1670-1752 (Oxford: Oxford University Press, 2006), 640; and Edwin J. van Kley, 'Europe's "Discovery" of China and the Writing of World History', The American Historical Review 76/2 (1971), 358-385.
- 'Soli in hoc nostro mundo sunt Seres, qui iam a quinque fere annorum millibus perennem & nunquam interruptam conservavere literaturam', Isaac Vossius, 'De artibus et scientiis Sinarum', in: *Isaaci Vossii variarum observationum liber* (London: Scott, 1685), 69-85: 69-70.
- 40 Vossius, Castigationes, 40-41.
- 41 I. Vossius, 'De artibus et scientiis Sinarum' and 'De Sibyllinis aliisque quae Christi Natalem praecessere oraculis', in: Isaaci Vossii variarum observationum liber (London: Scott, 1685), 69-85, 215-292.
- One argument, common in seventeenth-century travelogues, was that one of the Sibyls had prophesied the European 'discovery' of the Far East, cf. Arnoldus Montanus, Gedenkwaerdige gesantschappen der Oost-Indische Maetschappy in't Vereenigde Nederland aen de kaisaren van Japan (Amsterdam, 1669), 15.

- Vossius refers to La Peyrère's thesis in Dissertatio de vera aetate mundi, 47. Cf. most recently A. Schnapp, 'The Pre-adamites: An Abortive Attempt to Invent Pre-history in the Seventeenth Century?', in: History of Scholarship; a Selection of Papers from the Seminar on the History of Scholarship, Held Annually at the Warburg Institute, ed. C.R. Ligota & J.-L. Quantin (Oxford: 2006), 399-412. La Peyrère's book was also translated into Dutch, as Preadamiten (n.p.: 1661).
- John Webb, An Historical Essay Endeavouring the Probability that the Language of the Empire of China is the Primitive Language (London, 1669), references to Vossius on pp. 154-157, 175-176, 188. Cf. Christoph Harbsmeier, John Webb and the Early History of the Study of the Classical Chinese Language in the West, in Ming Wilson & John Cayley (eds.), Europe Studies China: Papers from an International Conference on the History of European Sinology (London: Han-Shan Tang Books, 1995), 297-338. On the 'primitive' status allotted to Chinese, see C. Marrone, Le lingue utopiche (Viterbo: Stampa alternativa, 2004), 85-92.
- 45 On Hornius see J.P. de Bie and J. Loosjes, Biographisch woordenboek van Protestantsche godgeleerden in Nederland (The Hague: Sijthoff, 1931), Vol. IV, 304-310. For his discussion with Vossius on Chinese history see Weststeijn, "Spinoza sinicus".
- 46 Georg Hornius, De originibus Americanis libri quator (Leiden: Vlacq, 1652) 229, 236.
- 47 Hornius, De originibus Americanis, 271.
- 48 'Fateor non unam scribendi penitus apud Mexicanos et Sinenses rationem, nec tamen penitus diversa fuit ... Cataini scribunt penicillo pictorio et una figura multas literas complectitur ac verbum facit', Hornius, De originibus Americanis, 270-271.
- 49 The Advancement of Learning, II.xvi.2.
- George Dalgarno, Omnibus quo omnino hominibus (1660), in: David Cram and Jaap Maat (eds.), George Dalgarno on Universal Language (Oxford: Oxford University Press, 2001), 121.
- George Dalgarno, 'Ars signorum, vulgo character universalis et lingua philosophica (1661)', in: Cram and Maat, George Dalgarno, 157. Another text elaborating on the similarities between hieroglyphs and Chinese characters is Theophil Spitzelius, De re literaria Sinensium commentarius (Leiden: Hack, 1660).
- 52 John Wilkins, Essay towards a Real Character and a Philosophical Language (London: Gellibrand & Martyn, 1668), 13, 451.
- 53 Franklin Perkins, Leibniz and China; a Commerce of Light (Cambridge: Cambridge University Press, 2004), 42.
- 54 On Leibniz's ideal of an ars combinatoria reflecting the structure of reality, see J.C. Westerhoff, 'Poeta calculans; Harsdorffer, Leibniz, and the "Mathesis Universalis", Journal of the History of Ideas 60/3 (1999), 449-467.
- 'Omnis ratiocinatio nostra nihil aliud est quam characterum connexio et substitutio, sive ille characteres sint verba, sive notae, sive denique imagines', Leibniz quoted from C.I. Gerhardt (ed.), Die philosophischen Schriften von Gottfried Wilhelm Leibniz (Berlin, 1875-90), III, 605.
- Leibniz quoted from Gerhardt, Philosophischen Schriften, V, 379; Leibniz, Dissertatio de arte combinatoria (ed. princ. 1666), quoted from Gerhardt, Philosophischen Schriften, IV, 27-104: 73.
- Leibniz to Bouvet, quoted in D.P. Walker, 'Leibniz and Language', in: R.S. Woolhouse (ed.), Gottfried Wilhelm Leibniz; Critical Assessments, (New York & London: Routledge, 1994), 436-451: 447. See also Perkins, Leibniz and China, 42; Sun Xiaoli, 'Leibniz, les symboles I Ching et les idéogrammes', in: Yue Daiyun and Alain Le Pichon, La Licorne et

- le dragon; les malentendus dans la recherche de l'universel (Beijing and Paris: Presses Universitaires de Pékin & Mayer, 1995), 109-122; and David Porter, Ideographia. The Chinese Cipher in Early Modern Europe (Stanford, 2001), 55-57.
- 58 Cf. Martin Davis, The Universal Computer; The Road from Leibniz to Turing (New York: Norton, 2000).
- The way of Light of Comenius, transl. E.T. Campagnac (Liverpool: The University Press, London: Hodder and Stoughton, 1938), 186-189. On the influence of his ideas on Wilkins see Benjamin DeMott, 'Comenius and the Real Character in England', Periodical of the Modern Language Association 70/5 (1955), 1068-1081.
- 60 'Incredibilia haec possint videri, sed iis qui nesciunt apud Sinas Platonicam semper viguisse rempublicam, et jam a tot annorum millibus solos fere ibi regnasse Philosophos aut Philosophiae amantes. ... Eadem plebis in monendis philosophis libertas, si et illi suo non bene fungantur officio', Vossius, 'De artibus', 58-59.
- 61 Donald F. Lach, 'The Chinese Studies of Andreas Müller', Journal of the American Oriental Society 60/4 (1940), 564-575: 573.
- 62 On this scholar cf. L. Noack, 'Der Berliner Propst, Orientalist und Sinologe Andreas Müller (1630-1694); ein bio-bibliographischer Versuch', Nachrichten der Gesellschaft für Natur und Völkerkunde Ostasiens (NOAG), 157/1 (1995), 1-39.
- 63 G.W. Leibniz, Sämtliche Schriften und Briefe (Darmstadt: 1927), Series I, Vol. II, 491-92.
- 64 Peters, 'Mercator Sapiens', 205; Lach, 'The Chinese studies of Andreas Müller', 573.
- To quote in full: 'M. Vossius ... trouvoit des preuves dans les Auteurs anciens, pour soutenir tout ce que il lisoit ou entendoit dire sur les Chinois. Enfin sur de pareilles autorités, des Libertins gastés par une fausse métaphysique ont respandu des opinions qui leur ont paru nouvelles quoyque la plus part soient des anciens Philosophes ou des hérétiques des premiers siècles, et qui ne vont pas à moins qu'à un renversement général de toute Religion', Eusèbe Renaudot, Anciennes relations des Indes et de la Chine, de deux voyageurs mahométans, qui y allèrent dans le neuvième siècle, traduites d'arabe en francois (Paris: Coignard, 1718), 28-29.
- 66 George Dalgarno, 'Character universalis (1657)', in: Cram and Maat, George Dalgarno, 85.
- This was done by Maturin Veyzière de la Croze, court librarian in Berlin, cf. Peters, 'Mercator sapiens', 205.
- 68 Descartes to Huygens, 14 January 1643; quoted in Findlen, Athanasius Kircher, 22.
- 69 Lach, 'China in Western Thought and Culture', 363.
- David S. Katz, Isaac Vossius and the English Biblical Critics 1670-1689, in Scepticism and Irreligion in the Seventeenth and Eighteenth Centuries, eds. R.H. Popkin and A. Vanderjagt, (Leiden: Brill, 1993), 142-184: 142-143.
- 71 Walker, 'Leibniz and Language', 447; Davis, Universal Computer.

III Humanism and Heresy





Giordano Bruno and Metaphor¹

HILARY GATTI

Giordano Bruno was born in Nola, near Naples, in 1548, and died in Rome in 1600, burnt at the stake as a heretic. That means he was born only five years after the first publication of Copernicus's De revolutionibus in 1543, and only thirtyodd years after Martin Luther's excommunication from the Catholic church had divided Europe and its culture into two militantly hostile factions. During the second half of the sixteenth century, in a lifetime of wandering through the cultural capitals of an often blood-stained Europe, Bruno was able to witness first hand, as few of his contemporaries could do, the crisis that Copernicus, Luther and their numerous progeny were bringing about, in their different ways, in the previously compact culture of renaissance humanism initiated by Petrarch. For the universal values deriving from the cultures of ancient Greece and Rome had from the beginning of the humanist movement been grafted onto the universal Christian values claimed by the papacy (although with increasing difficulty). The result had been an extraordinary and unique moment of cultural progress and rich, sometimes tense, but ultimately harmonic diversity. Now that line of development had been shattered in many of its core assumptions. In the seventeenth century the universal values of European humanism would be re-forged under the sign of the dominion of reason, and the scientific mechanicism to which it gave rise. Eventually, however, the romantic movement operated what William Blake saw as a liberation from the 'mind-forged manacles' of an oppressive obsession with rules. The rest is the story of a modern culture based on the idea of diversity, in which the humanities (as renaissance Europe conceived of them) struggled to survive.2

Bruno's lifetime in the second half of the sixteenth century thus covers a vital if often turbulent moment of cultural transition, which would radically affect the history of both science and the humanities. This paper will primarily be concerned with his thinking about language, and especially with his thoughts about metaphor, thus aligning itself with an interpretative model of early modern

culture that establishes 'representation', both of thought and of the world itself, as a problem of which historians are increasingly aware.³ For it is clear that the sixteenth century witnessed what one commentator has called a 'Crise des signes' that would radically destabilize not only the way of reading texts but also the reading of the world.⁴ By following this path, I hope to show how in some ways Bruno anticipated the coming enlightenment, while in others he tended rather to indicate alternative routes, some of which would only be pursued at a much later date.⁵

I take as my starting point a passage in Bruno's first cosmological work, written and published in London in 1584, usually known in English as *The Ash Wednesday Supper*. Still a humanist text in its use of dialogue as an appropriate way of facing up to a scientific dilemma, Bruno here celebrates in realist terms the new heliocentric theories of Copernicus which were destined to replace the old geocentric cosmology propounded by Aristotle and Ptolemy, and sanctioned by numerous Biblical texts. Later on, in the seventeenth century, Galileo would take over many of Bruno's formal solutions, as well as many of his pro-Copernican arguments in his *Dialogue on the Two Major World Systems*, which would get him into serious trouble with the inquisitors in Rome.⁶ Bruno already puts forward an argument in the fourth dialogue of the *Supper*, later to be repeated by Galileo which would get him too into serious trouble, against the use of Biblical texts in cosmological discussion. Cosmological and Biblical discourse, Bruno maintains, are of two quite separate kinds; and he defines the difference between them in terms of metaphor. In English translation, the passage reads like this:

When the divines speak as if they found in natural things only the meanings commonly attributed to them, they should not be assumed as authorities; but rather when they speak indifferently, conceding nothing to the vulgar herd. Then their words should be listened to, as should the enthusiasm of poets, who have spoken of the same things in lofty terms. Thus, one should not take as a metaphor what was not intended as a metaphor and, on the other hand, take as truth what was said as a similitude.⁷

This passage is based on the traditional idea of Biblical discourse as containing four different levels of meaning: the literal level, the metaphorical level, the tropological level and the anagogical level. Protestant theologians, from Luther to Calvin, had reduced these levels of meaning to two: the literal and the metaphorical level. Indeed, at times Calvin seems to consider the whole of the Bible as essentially metaphorical in so far as the human mind is, in his opinion, to be considered incapable of contemplating God directly. Bruno seems to be using such ideas to compare metaphor with scientific truth. The Copernican discussion within which this statement occurs makes it quite clear that the Copernican principle of

heliocentricity, particularly when expanded to include the infinity of the universe, is considered by Bruno as a cosmological picture of universal truth, and not as a purely instrumental hypothesis to facilitate astronomical calculations. The passage suggests that Frances Yates, in her distinguished and much discussed book on Bruno and the Hermetic Tradition, was wrong to consider Bruno's Copernicanism as a Hermetic hieroglyph or diagram - let us say a metaphor - within which, hidden and concealed, lay 'potent divine mysteries': mysteries which, she went on to claim in the same book, make him into a 'reactionary' who had nothing to do with the advance of the new science. 10 On the contrary, the Copernican heliocentric principle is, for Bruno, not a metaphor but the truth itself, which has recently been brought to light. Copernicus is, for Bruno, the genius who dragged the heliocentric principle from under the shadows of a centuries-long distorted picture, or false metaphor, of a geocentric universe. It was Copernicus's heliocentric principle that supplied Bruno with the foundations on which to construct what he thought of as a true picture of cosmological infinity. Arguing in favour of an infinite universe in The Ash Wednesday Supper, and filling that universe with an infinite number of solar systems in which all the celestial bodies revolve around their central suns, Bruno strongly rejected the objections of his neo-Aristotelian critics that such a vision was pure hypothesis, or even fantasy, claiming that he was, on the contrary, talking about 'real things' (ista sunt res, res, res). Metaphorical expression (here identified with the geocentric universe to be found in so many Biblical texts) and scientific truth (here identified with the Copernican heliocentric principle extended to infinity) seem at this point to be antithetical.

Does this mean that for Bruno metaphor as such is to be banned? Surely not. In many contexts, metaphor seems to define what we may call for Bruno the humanities' as opposed to natural philosophy or science: that is to say, the universe of words and images through which the mind conducts its search for truth. Like Francis Bacon after him, Bruno had no qualms about praying metaphors to come to his aid' for heuristic, explanatory and evaluative purposes.12 Bruno tends to associate 'the humanities' in this sense with above all three groups: the true divines, or those philosophers who attempt to reveal the hidden face of divine truth; the true poets, who are closely associated by Bruno with true divines (this is consistent with his choice of the Biblical Song of Songs as one of the greatest texts ever written); and the true painters, whose visual images combine with words to form Bruno's universe of languages. The intimate relationship that Bruno envisages between these three groups is expressed in an early work on the art of memory where he writes: 'Philosophers are in some way painters and poets; poets are painters and philosophers; painters are philosophers and poets. Which is why true poets, true painters and true philosophers search for and admire one another.'13

Yet if we interpret Bruno's passage in *The Ash Wednesday Supper* in the light of these ideas, we are obliged, I think, to notice that it contains some degree of ambiguity. In what contexts, if any, do we find theologians and poets who renounce the use of metaphor in order to express the divine truth 'directly' in some way? Or is his distinction rather between good and bad metaphors, between metaphors that significantly illuminate the path towards truth and those, like the biblical stories, which simply explain difficult concepts in pictorial terms comprehensible to what Bruno rather scathingly calls 'the vulgar herd'? Perhaps help might be gleaned on this point by considering Bruno's sources.

Bruno was not only a renaissance thinker and writer, but his early education had been received at the Dominican monastery in Naples, which had been closely associated in the past with a famous fellow Dominican: Saint Thomas Aquinas. The course in philosophy Bruno followed would have been largely based on Thomistic doctrines inspired by Aristotle. Undoubtedly, Bruno was strongly anti-Aristotelian in many respects, particularly as far as his physics, and especially his celestial physics, was concerned. Nevertheless, he always included Aristotle in his many lists of the true philosophers; and it is only natural that Aristotle's concept of the metaphor would have been present in Bruno's mind when he wrote on that subject.14 It could, in fact, be claimed that Bruno's distinction between two different types of discourse, in which the metaphor assumes different values, derives fairly directly from Aristotle himself. For example, in Book II of the Posterior Analytics, in a passage where he is concerned with a discourse referring to an external world of objects, and thus with the necessary clarity of definitions, Aristotle writes: 'And if one should not argue in metaphors, it is clear too that one should not define either by metaphors or what is said in metaphors; for then one will necessarily argue in metaphors' (97b37). In Book VI of the Topics, Aristotle makes an even more critical comment, claiming that a metaphorical expression is always obscure, if not actually false (139b34). In his study of Rhetoric, however, where he is concerned with a discourse referring to the internal mind and its style of expression, Aristotle's attitude changes to one of praise for the metaphor. 'Metaphor gives style clearness, charm, and distinction as nothing else can,' he writes in Book III, adding that it is not a thing whose use can be taught by one man to another. Metaphors, Aristotle adds, require an acute mind, not only a poetic but also a philosophical mind, capable of perceiving resemblances even in things far apart (1405a-1412a).15

This Aristotelian root to Bruno's thoughts on the two types of language is still evident in his final Latin masterpiece, the so-called Frankfurt trilogy published in that town in 1591. In the introductory Letter to the trilogy, Bruno formulates a clear distinction between the truth value of the three works of which the trilogy is composed. What he is above all concerned to underline is the 'unquestionable

certainty' of the final work of the trilogy, the *De immenso*, which he presents as the climax of his cosmological speculation concerning the infinite universe, in which all celestial movements are based on a principle of heliocentricity. In this work Bruno considers he has reached an intuition of certain truth, whereas he has no qualms about underlining the relative uncertainty of the other two works of the trilogy, dedicated to the concept of the minimum and to number symbolism. ¹⁶ It is in the light of this certainty pertaining to the objective truth of the infinite universe that Bruno makes a series of comments on the need for a new language which, without denying the solemn tones of epic poetry such as he himself is writing here, will be made up, if necessary, of newly invented words, devoid of rhetoric and flourish, capable of describing the world of nature *as it is.* To-day we would call that a scientific language. In this passage, Bruno seems to be proceeding towards a Cartesian concept of clear and distinct ideas, already seen as necessary if the truths of nature (thought of as a world of external things) is to be grasped and held firmly in the mind:

We will be the source of a new (linguistic) usage once we have drawn forth from the deep shadows the famous teachings of the ancient men of wisdom, expressed in their ancient words, to serve as a basis for new things, if need be, however those teachings may most easily be extracted. We will be inventors of new words. The grammarians are the servants of words, but words serve us. The grammarians should observe the usage we establish...¹⁷

On the other hand, Bruno himself would never create a work in which he fully implemented what seem already to be enlightenment and rationalistic linguistic criteria. In some cases the apparent divergence between his intentions and his actual practice is strident. For example, in his Italian dialogue, Lo spaccio della bestia trionfante (a title usually translated into English as The Expulsion of the Triumphant Beast), Bruno claims that he is speaking simply and literally in this work, naming bread as bread and wine as wine, and giving everything else its proper name. However, he then goes on to develop one of his most complex constructions of myth and fable, envisaging a universal reform of a polluted cosmos in terms of a last-minute reform of the classical astrological images by an aged and rapidly decaying Jupiter, described by Bruno himself as 'the subject of our metaphors'.18 If this work is couched in terms of a radical re-make of classical Greek mythology, the last work Bruno wrote and published in London, in 1585, the Heroici furori, reaches its final ecstatic vision of a now infinite universe through the medium of Petrarchan sonnets re-written in the light of the imagery of the biblical Song of Songs, which Bruno himself describes as a work in which the images are 'clearly and openly treated as metaphors'. These are hardly examples of

what today we would think of as scientific languages, as Bruno himself seems to underline when, in the passage immediately following the remark on the *Song of Songs* quoted above, he asks his reader to believe that his own work is drawn up according to quite different criteria. So it is difficult to know how to construe the fact that Bruno's own sonnets in the *Furori* are themselves composed of complex metaphors: such as the refined conceit of a dialogue between the eyes and the heart; the powerful epistemological images of Actaeon pursuing the moon goddess Diana, only to be consumed in the moment of vision by the hounds of his own thoughts, or the phoenix rising gloriously from the ashes of its funeral pyre. Clearly, these, too, are sonnets composed in a metaphorical mode; and Bruno is obliged to go to great lengths in the prose comment to explicate and deconstruct them into their rational components of argument and reasoning.

In attempting to understand what would appear to be a serious contradiction between linguistic intention and actual practice in Bruno's work, help may be gleaned, in my opinion, by turning to some more modern thoughts on the subject of metaphorical expression. In his seminal study entitled La métaphore vive, the twentieth-century philosopher, Paul Ricoeur, also takes as his starting point Aristotle's comments on metaphor that have been quoted above. He then goes on to ask himself if the time has not come to give up the opposition between a discourse directed towards the external world, or a scientific discourse of description, and a discourse directed towards the internal world that represents a state of mind and puts everything in hypothetical terms. According to Ricoeur, we need to ask ourselves if it is not the very distinction between 'external' and 'internal' which has become more and more uncertain, together with that between representation and emotion. To support his point, Ricoeur quotes from Heidegger a statement underlining a difficulty in the concept of language that corresponds to a difficulty in the concept of being.20 These post-Kantian thoughts on language may be more helpful in understanding Bruno's dilemma than the pre-Cartesian context to which an orthodox historical discourse confines him. It is worth remembering that whereas the enlightenment placed Bruno in a marginal position, above all recognising him as an inspiration to philosophical libertinism (Descartes himself thought that there was no need to read his works21), the modern rebirth of Bruno criticism starts with such post-Kantian figures as Schelling and Hegel in Germany, or Samuel Taylor Coleridge, who was both a philosopher and a poet, in England.22

It would be easy to further my claim that it can be useful to discuss Bruno's ideas on metaphor in the light of more modern considerations on the subject. For example, the current interest in Vico's anti-Cartesian ideas on metaphor as a foundation of what, in his *New Science*, he calls 'poetic logic' is being developed in the light of Charles S. Peirce's definition of metaphor as a type of icon.²³ It is

an enquiry that should raise the question of whether the Neapolitan Vico had read the works of his renaissance countryman, Giordano Bruno. Furthermore, the ideas put forward quite recently by cognitive science, which sees metaphor as a founding element of all language, and of all knowledge scientific and otherwise, could well be related to Bruno's ideas on the art of memory, which he develops as a study of the image-making properties of the creative mind in all branches of its search for knowledge of the infinite whole.²⁴ From another, if quite closely related, point of view, the recent discoveries in neuropsychology, which have led to incomparably more knowledge than we previously had of the workings of our divided brains, are currently being used to further our understanding of such subjects as the nature of dialogue or of works of art - both subjects on which Bruno himself had much to say – and have been posited also as the bases of a new understanding of scientific knowledge itself.25 Such recent enquiries remind us that Bruno was already thinking in terms of the connecting powers of the mind, which nowadays we associate with the connecting networks set up by our neurons during the processes of learning and of thought.

Bruno's own texts often highlight the capacity of the mind to connect various levels of both discourse and being. I wish to refer here particularly to a passage in the Heroici furori, Part I, Dialogue iii, where Bruno writes: 'Beneath sensible images and material objects, he (that is, the frenzied searcher after knowledge) recognizes divine orders and counsels.26 This remark, with its neo-Platonic overtones, seems to indicate that all knowledge consists of a comparison between different levels of being and is, therefore, always to some extent metaphorical.²⁷ On the other hand, Bruno always distinguished between what he considered the essential and the accidental truths of nature. The essential truths, as Bruno saw them, are few but absolutely essential, and not subject to metaphorical expression: the infinity of the infinite universe; the heliocentric nature of motion within an infinite space populated by an infinite number of solar systems; and finally, if slightly less certainly, the atomistic composition of an infinite substance. Towards these truths, which Bruno describes as representing 'the master-plan' of the universe in which we live in the same dialogue of the Heroici furori mentioned above, the individual mind proceeds in myriad ways. If it proceeds more often indirectly than directly, it is because the individual mind is nothing more than a fleeting pinpoint within infinite space and time.

Bruno expressed this last idea with surprising clarity during a session of his trial for heresy in Rome, during which the inquisitors requested him to declare his opinion on the immortality of the soul. Bruno replied that there is no immortality of the individual soul, but only of the infinite, universal framework within which each soul or mind searches for knowledge of an infinite truth. He made his point through the use of a traditional but powerful metaphor, saying

to his judges: 'it is as if many fragments of a mirror all came together to form an antique mirror. The images animating each single fragment are annihilated, but the glass or the substance remains, as it has always been and always will be'. And if Bruno here, in front of the inquisitors, says that he is talking only of the souls of beasts, and not of those of human beings, which continue to live even after separation from the body, it should be remembered that in his works he had frequently advanced the far more audacious claim that there is no substantial difference between the soul of a human being and the soul of an animal: or, indeed, between the souls of animals and those which are to be found in all things: 'For all the spirits emerge from the Amphitrite of a single spirit, and to that they return'. 29

Initially, the metaphor of the mirror, or of Amphitrite, may seem little more than orthodox neo-Platonism, with the concept of a world soul surrounded by biblical overtones reminding the inquisitors (as Bruno clearly intended) of St. Paul's famous dictum in his First Epistle to the Corinthians 13:12 that on this earth we can only see as in a glass, darkly. However, as always with Bruno, it has to be remembered that everything he says applies for him within the context of a universal infinity, foreign to his sources, that radically transforms the meaning of his images. The mirror becomes a synonym of substance itself, meaning an infinite substance, with the shadow of Spinoza already looming on the horizon.³⁰ And it is precisely the infinite substance, in my opinion, that tends to identify with the divinity itself, and as such to defy metaphorical expression. God is not 'like' something else: God simply 'is'.

It is a point underlined forcibly by Bruno himself when, in part II, dialogue I, of the Heroici furori, he describes the 'excellent and magnificent goals' that the heroic mind will forever go on striving for, until it has risen to the point of desiring divine beauty in itself, without likeness, figure, image or species, if that be possible, and, moreover, if it is able to reach such heights.'31 It is clear from this passage that non-metaphorical expression is identified by Bruno with the divine truth, or truth (as he calls it) 'without likeness'. Such purity of truth is seen by Bruno as the ultimate goal of the enquiring mind; but although he often refers to such truth as 'divine', both in its beauty and its goodness, Bruno is consistently adamant that his is not a theological but rather a 'natural' discourse. The truth he is enquiring into requires the use of mental tools (such as logic, geometry, numbers, the art of memory) to take the measure and probe the evolution of an infinite universe; and the understanding of such truth, as he represents it in the final pages of the Furori, is to be seen as the ultimate good on earth' (il sommo bene in terra), and not as a mystical intuition of a transcendental 'beyond', 32 Bruno's discourse may frequently make use of a religious terminology, but it moves within the horizon of the new science. At the same time, arriving at the vision of such truths about the natural world has become problematic to the extent

of being feasible only in those exceptional circumstances in which the mind is stretched almost to a breaking point, and its language purged, 'if that be possible', of all false 'likenesses'.

It is not my aim, in approaching my conclusion to these few remarks, to make large claims for the importance of Bruno's thought. He was well able to make such claims himself, and recently many of them have been picked up and eloquently illustrated in Ingrid Rowland's new Bruno biography.33 What I am concerned to point out is rather that Bruno's thought on the nature of the humanities and the sciences, and particularly his thought on the languages within which they are necessarily formulated, may often seem familiar to us today. For we live in a world which has - it would seem definitively - assumed the immense dimensions of both space and time already foreseen by Bruno, just as he foresaw the atomistic fragmentation of all bodies within the infinite whole. The crisis of the thinking subject which this new vision implies was solved by Bruno by placing a special emphasis on the creativity of the individual mind: a neural activity of imaging, connecting - formulating patterns and ever varying strings of letters, words, numbers, images - which was, in his time, belied by the increasing emphasis on rules which was beginning to dominate both the arts and the sciences. Descartes may have conceived of his Rules to Guide the Intelligence as pertaining to the structure of the mind; but he could only find certainty in pure concepts such as figure or extension that do not suppose anything that experience has rendered uncertain.34 The resulting dualism between mind and matter is about as far as it is possible to imagine from Bruno's view of things.

Bruno knew that the close link he was attempting to forge between the thinking mind and the infinite amount of matter from which all minds emerge (to-day we talk about the 'embodied mind') inevitably gave rise to an idea of all knowledge as fragmented and incomplete. Even mathematics, for Bruno, was knowledge of approximations, in a denial of the special status of pure mathematical entities of which Kepler (an avid reader of Bruno) would strongly disapprove.³⁵ On the other hand, post-evolutionary philosophers and scientists in the nineteenth century would rediscover Bruno with enthusiasm. In some manuscript notes on Bruno, the Italian philosopher Bertrando Spaventa wrote in the middle of the century: 'the same principle which in nature forms and figures things thinks in the human mind'.36 Later on in the century, a disciple of Darwin's evolutionary theories, John Tyndall, published a book - widely read in its time, and frequently republished - called Fragments of Science.37 Tyndall dedicates many pages to Bruno's infinite cosmology and to his theory of the infinite evolution together of matter and mind. Tyndall's title may not have been a gratuitous coincidence. He often cites from Bruno's cosmological dialogues, of which the first was The Ash Wednesday Supper (the starting point for this paper) where Bruno had admitted that his text

hardly added up to a traditional scientific treatise. Sometimes, Bruno points out, it is poetry; sometimes oratory; sometimes celebration; and at others vituperation. Only occasionally, he continues, will you find 'demonstrations and teaching, in physics and mathematics, in morals and logic: in short, it can be said that there is no branch of knowledge of which you will not find some fragment'.³⁸

The individual minds, then, are seen as passing fragments, destined to dissolve into the eternal and infinite substance, which they can only glimpse momentarily in its perfect and incomparable purity. Their attempt to arrive at this vision is seen by Bruno as heroic: the true hero of the modern world becomes the intellectual searcher after natural truth. Such a search involves making an elaborate series of connections between different levels of being, and will be essentially metaphorical: at least until the infinite object is, even if momentarily, grasped and held in the mind. In this way knowledge, for Bruno, becomes the object of the search not only of the new scientist, but equally of the true theologian, the true poet, the true painter and the true philosopher. So, we can conclude by saying that, at the very beginning of the Enlightenment, Bruno vigorously denied that strict division between disciplines and genres that an ever more neo-Aristotelian culture was already busy sanctioning. Not only did he want to see dialogue and collaboration between the different disciplines of the humanities, he also wanted the humanities and the sciences to come closer together in an effort to share their fragmentary forms of knowledge of an elusively infinite whole.

The interdisciplinary nature of the humanities, as the plural name implies, was implicit in their development from their beginnings, following the example of Petrarch and his immediate followers. Basing their activities on the classical notion of the seven liberal arts as they had survived into the medieval period as the Trivium (logic, grammar and rhetoric) and the Quadrivium (arithmetic, geometry, music and astronomy), the early humanists were, however, acutely aware of the temporal or historical dimension of their enquiries with respect to the dominating influence of theology and the search for transcendent and eternal truths which had animated the long centuries of medieval culture. The idea that religion was despised by the humanist culture of the Renaissance has long been rejected. There can, however, be little doubt about the increasing value given to the terrestrial or secular sphere of human experience, so hauntingly evoked by Petrarch himself in his Secretum, or his secret text written in his old age, full of premonitions of an approaching death, in which he reveals, in an imaginary conversation with St. Augustine, his anguished doubts about the validity and endurance of his religious faith. That faith had, in Petrarch's younger years, been subjected to almost unbearable tensions by his earthly love for Laura, not by chance expressed in the Italian vulgate, already modeled into a superb poetic language by Dante,

rather than in the more formal Latin of which Petrarch, who found so much of his inspiration in the ancient Greek and Roman classics, was also a master.

The dramatic schisms brought about by Luther and his followers at the beginning of the sixteenth century, from within the fabric of a Catholic church which prided itself on its universal values, were undoubtedly intended by their perpetrators to augment rather than to destroy an authentic religious experience. On the other hand, the fragmentation of religious life in a previously united Europe acted as a stimulus to the birth of new territorial and geographical forms of political as well as religious autonomy. They were further stimulated by the writings of Machiavelli, whose bold accusation that the church had for too long directed people's attention to a world beyond, undervaluing the necessary study for the community at large of political history and strategy, resounded dramatically throughout the sixteenth century and beyond. History – not just political but also cultural history – has been integral to the development of the humanities from their origins and, on numerous occasions, has been directed towards a history of the various disciplines known as 'the humanities' themselves.

One might cite as examples taken from the early modern world texts such as Vasari's Lives of the Most Excellent Painters, Sculptors and Architects; or Bruno's own Heroici furori, which can be read as a history of the Petrarchan sonnet tradition from its origins until his own day. It is interesting to remember in this context that Bruno himself declared in Venice, shortly before his arrest at the hands of the Inquisition, that he was writing a book entitled Le sette arti liberali (The Seven Liberal Arts) and that he hoped to go to Rome and present it to the Pope himself, Clement VIII, who was known to be a patron of philosophy and letters. No text of this work has survived, although it seems clear from the references to it in the documents of the time that it was intended as some kind of sixteenth-century history of the humanities. Exercises such as these need to be renewed from the differing perspectives of each generation as the contours of this essential complex of disciplines vary and acquire new meanings.

Notes

- This essay is scheduled to appear in Hilary Gatti's monograph Essays on Giordano Bruno (Princeton University Press, 2011). We gratefully acknowledge Princeton University Press for their generous permission to reprint it here.
- Two conference volumes of collected essays that attempt an overview of the history of early modern humanism and its interpretation in the new millenium are: *The Italian Renaissance in the Twentieth Century*, eds. Allen J. Grieco et al. (Florence: Olschki, 2002), and *L'Étude de la renaissance: nunc et cras*, eds. Max Engammare et al., (Geneva: Droz, 2003).

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The possibility of reading the renaissance from the point of view of its 'language merchants' is proposed by Michael Wyatt in *The Italian Encounter with Tudor England: A Cultural Politics of Translation* (Cambridge University Press, 2005). For the same idea, proposed in a somewhat different context, see 'Introduction: History, Culture and Text' in *The New Cultural History*, ed. Lynn Hunt (Berkeley, University of California Press, 1989), 1-22: 16.

- 4 See Michel Jeanneret in L'Étude de la renaissance, 12.
- 5 For a book-length study of Bruno's language and imagery, above all in its Lullian derivation, see Maurizio Cambi, *La macchina del discorso* (Naples: Liguori, 2002).
- On Bruno and Galileo, see Giovanni Aquilecchia, 'I massimi sistemi di Galileo e la Cena di Bruno: per una comparazione tematico-strutturale,' in Nuncius 2 (1995), 485-496.
- 7 All quotations from Bruno's Italian texts are from Opere italiane di Giordano Bruno, 2 vols., eds. Giovanni Aquilecchia and Nuccio Ordine, (Turin: UTET, 2002). The English translations are mine. For the above passage in the Cena de le ceneri (in English The Ash Wednesday Supper), see Bruno, Opere italiane, vol. I, 525.
- 8 See Henri de Lubac, Exégèse médiévale: les quattres sens de l'Ecriture (Paris: Aubier, 1959).
- 9 See Hilary Gatti, 'La Bibbia nei Dialoghi italiani di Bruno', in *La filosofia di Giordano* Bruno: problemi ermeneutici e storiografici (Florence: Olschki, 2003), 199-216.
- Yates's contribution to Bruno studies was a rich and complex one which was far from being limited to the Copernican question. Her reading of his Copernicanism, however, has been at the centre of a particularly lively debate, including a major critique by Robert Westman. See Frances Yates, Giordano Bruno and the Hermetic Tradition (London: Routledge, 1964), 241 and 324, and Robert Westman, 'Magical Reform and Astronomical Reform: the Yates thesis reconsidered,' in Hermeticism and the Scientific Revolution (Los Angeles: University of California Press, 1977).
- II Bruno, Dialoghi filosofici italiani, 533.
- On Bacon's use of metaphor in scientific discourse, see Brian Vickers, 'Francis Bacon, Feminist Historiography, and the Dominion of Nature', Journal of the History of Ideas 69, no. 1 (January 2008), 117-141. In particular, the section: 'Misunderstanding Bacon's Metaphors', 122-136.
- 13 This much quoted passage, whose importance has already been underlined by Frances Yates, appears in Bruno's explication of his twelfth seal, referring to the images of painters, in the *Explicatio triginta sigillorum*. See Giordano Bruno, *Opere mnemotecniche, tomo secondo*, eds. Michele Ciliberto et al. (Milan: Adelphi, 2009), 120-121, and the comment by Marco Matteoli on pp. 388-389.
- 14 Much recent work has been done on Bruno's education in Naples. See, in particular, the section 'Nolanus ... Neapolitanus' in *Giordano Bruno: gli anni napolitani e la 'peregrinatio' europeo*, ed. Eugenio Canone (Cassino: Università degli Studi, 1992), 15-75.
- 15 For the English translation, see *The Complete Works of Aristotle: the Revised Oxford Translation*, 2 vols., ed. Jonathan Barnes, (Princeton, N.J.: Princeton University Press, 1984).
- 'In primo volumine studiose cupimus, in Secundo incerti quaerimus, in Tertio clarissime invenimus'. See the Dedicatory Letter in Giordano Bruno, *Poemi filosofici latini*, ed. Eugenio Canone (La Spezia: Agora Edizioni, 2000), 235.
- 17 Ibid., p. 14. There is no English translation to date of Bruno's Frankfurt trilogy. I am grateful to Ingrid Rowland for useful suggestions concerning the translation of this passage.
- 18 Bruno, Dialoghi italiani, vol. II, 256.
- 19 Ibid., 494-497.
- 20 See Paul Ricoeur, La Métaphore vive (Paris: Seuil, 1975).

- 21 See Descartes' polemical letter to Isaac Beeckman (who was reading Bruno) dated 13 July 1638, in which he includes Bruno among a group of philosophical *novatores* whose many and often contradictory maxims are compared unfavourably with 'the certain demonstrations' of geometry: in René Descartes, *Tutte le lettere* 1619-1650, ed. Giulia Belgioioso (Milan: Bompiani, 2005), 158.
- 22 For Bruno's nineteenth-century reputation, see Eugenio Canone's 'Introduction' to the volume Brunus redevivus: Momenti della fortuna di Giordano Bruno nel XIX secolo, ed. E. Canone, Pisa-Rome (1st. Ed. e Poligrafici, 1998). For the romantic revaluation of Bruno in England, see Hilary Gatti, 'Coleridge's Reading of Giordano Bruno', The Wordsworth Circle 3 (1996), 136-145.
- Augusto Ponzio, 'Metaphor and Poetic Logic in Vico', Semiotica 161-1/4 (2006), 231-248.
- On the logical constituents of Bruno's art of memory, see the relevant section in Paolo Rossi, Clavis universalis: Logic and the Art of Memory (London: Athlone Press, 2000). On the image-making properties of Bruno's art of memory, see Michele Ciliberto's 'Introduction' to Opere mnemoniche, tomo secondo.
- 25 See Jurij M. Lotman, La semisfera: l'assimetria e il dialogo nelle strutture pensanti, ed. Simonetta Salvestroni, (Venice: Marsilio, 1985), and John Onians, Neuroarthistory: from Aristotle and Pliny to Baxandall and Zeki (New Haven: Yale University Press, 2007). The importance of neuropsychology for an understanding of scientific discovery was posited by Roger Penrose in The Emperor's New Mind: Concerning Computers, Minds, and the Laws of Physics (Oxford: Oxford University Press, 1989).
- 26 Bruno, Dialoghi italiani, vol. II, 558.
- 27 For this same idea in a modern context, see George Lakoff and Mark Johnson, *Metaphors we live by* (Chicago: University of Chicago Press, 2003).
- 28 See *Il processo di Giordano Bruno*, eds. Luigi Firpo and Diego Quaglione (Rome: Salerno ed., 2000), 302.
- 29 See the Cabala del cavallo pegaseo, dialogue 2, in Bruno, Dialoghi italiani, vol. II, 451.
- 30 See Arturo Deregibus, Bruno e Spinoza: la realtà dell'infinito e il problema della sua unità (Turin: Giappichelli, 1981).
- 31 Dialoghi italiani, vol. II, 648-649.
- 32 Ibid., 747.
- 33 Ingrid D. Rowland, Giordano Bruno: Philosopher and Heretic (New York: Farrar, Straus and Giroux, 2008).
- Descartes' Regulae ad directionem ingenii (Rules to Guide the Intelligence) appeared posthumously in a Dutch translation in Amsterdam in 1684, and then in Latin in the same town in 1701.
- 35 See Johannes Kepler, Harmonices mundi: The Harmony of the World, eds. E.J. Aiton et al., (Philadelphia: American Philosophical Society, 1997), 88-93.
- 36 See the Spaventa manuscripts published by Maria Rascaglia in Canone, Brunus redivivus,
- John Tyndall, Fragments of Science (London: Longmans Green, 8th edition, 1892).
- 38 Bruno, Dialoghi italiani, vol. I., 438.

'In Erudition There Is No Heresy' The Humanities in Baroque Rome

BERNWARD SCHMIDT

In many historical accounts, seventeenth- and eighteenth-century Rome is marked by its splendid buildings, fine art and political insignificance. Baroque Rome – and moreover all of Italy – appears barren on an intellectual level as well, with every impulse of modern thought oppressed by a dominant papacy and the Inquisition; the case of Galileo Galilei had induced a long-term trauma. Even contemporaries complained about Italy's backwardness compared with the well-known home of scholarly exchange, France.

For a long time, historical research has stuck to these stereotyped paradigms,¹ and only a few scholars have paid attention to intellectual life in Rome,² most notably Françoise Waquet in her important study on Italian and French intellectuals in the seventeenth and eighteenth centuries (1989). It was only recently that an extensive anthology of the École Française de Rome, mainly compiled by Italian and French scholars, highlighted that intellectual life in the city of the popes was manifold and worth investigating.³

In this contribution, it will obviously not be possible to describe in full detail the situation of the humanities, meaning in this case chiefly historical and textual scholarship, in Rome between around 1670 and 1760. Rather, some aspects of the institutions of intellectual life in Rome in the years around 1700, as well as some selected Roman scholars and their work, will be presented in order to characterize the situation of scholarship in Baroque Rome, and the specific consequences it engendered for the history of the humanities. This will involve a comparative analysis of textual criticism and ecclesiastical history; as will become clear, these disciplines only came to fruition through the careful negotiation of educational institutions, censorship, and scientific notions that were classified as heretical.⁴

Institutions of scholarly exchange: academies

Because vastly more than one article would be needed to present just the most important institutions of Roman erudition individually, I would like to present an overview in order to convey an impression of what some scholars call 'Roman polycentrism'. However, I will exclude the universities of the city, such as the pontifical Sapienza, the Jesuit Collegio Romano or the Collegio Urbano of the Congregatio de Propaganda Fide. These institutions were mainly dedicated to the education of the clergy and were thus not actually centres for discussion or the development of scholarly learning. In the Sapienza, for instance, historical criticism of the Biblical text was introduced only in the middle of the eighteenth century, mainly by Agostino Antonio Giorgi.

Whereas the universities may have been belated in their acceptance of the most recent intellectual approaches, the academies, as places where the latest topics and newest publications were discussed and lectures were given, correspond to the Republic of Letters — the ideal community of individual scholars.⁸ In the period in question, Rome experienced different phases of flourishing academies: the first lasting from 1671 until about 1715, the second phase from 1740 until 1758, and the third only began in the 1770s.⁹

The history of Roman academies of the late seventeenth century cannot be extricated from the figure of Giovanni Giustino Ciampini, who – together with Giovanni Pastrizio and Benedetto di S. Giacomo – founded the Accademia dei Concili in the spring of 1671. The mission of this academy was to study ecclesiastical history in its entirety. The history of councils – in dispute with the Protestants, Jansenists and Gallicans – was highly relevant at that time, and the topic allowed academicians to describe, as well as stress, the pope's authority over the Church. In order to emphasize papal power, scholars focused on the history of the early councils of the fourth through sixth centuries, attaching particular importance to the interaction of profane, theological and ecclesiastical history. In doing so, scholars tried to make use of the modern methods of historical criticism to establish an irrefutable basis for their argumentation.

Such an academy was an inevitable result of not only the effort to defend the theological and legal claims of the Holy See but also the need to improve the level of education among the Roman clergy in general. Devoted to the neo-Tridentine ideal of the respectable and learned prelate, the Accademia dei Concili staked a claim to education of the clergy. This was especially evident in the choice of its meeting place: the palace of the Congregatio de Propaganda Fide, which was then regarded as the centre of ecclesiastical erudition, *inter alia* due to the already mentioned Collegio Urbano, which was specialized in the education of missionaries.

The Accademia dei Concili was successful, perhaps too successful; just one

year after its founding, its meetings were overcrowded. After Pope Innocent XI praised the work of the academy at the very beginning of his pontificate, it became fashionable to be seen there. Because numerous cardinals attended its meetings, a considerable ceremonial effort had to be expended, and several participants complained of feeling restricted in their freedom of speech. Nevertheless, Ciampini's academy simultaneously became a form of elite university for the Curia. Several Roman scholars who would become important figures later – such as Francesco Bianchini¹⁷ or Giusto Fontanini¹⁸ – attended the academy; even the future popes Clement XI and Benedict XIV studied at this academy. The fact that the Accademia dei Concili became so popular and successful also reflects the poor quality of the Roman universities. But as a consequence of the developments described, its scientific quality deteriorated.

Despite the supervision of Clement XI, who was well aware of the slow decline of the Accademia dei Concili, it was not possible to maintain the institution in the long run. After Domenico Bencini, 20 the head of the academy, left Rome in 1715, it was forced to close. 21 However, erudition remained such a significant priority for the pontificate of the Albani-pope Clement XI that he included the concept of academies in his cultural and educational policy, and he provided these educational institutions with his support. 22 Besides the Accademia dei Concili, there were various other institutions which were concerned with theological debate and the education of young clergymen, such as the Accademia dei Nobili Ecclesiastici 23 or the Accademia Dogmatica in the Sapienza.

In contrast to these academies which were dedicated to theological matters, institutions which specialized in the natural sciences were not primarily educational centres; instead, they were dedicated to intellectual exchange among established scholars. Once more, a foundation by Ciampini is most representative in this context: the Accademia Fisico-Matematica.²⁴ The academy was open to any contribution from the field of natural sciences, preferably experimental science. When Francesco Bianchini returned to Rome from England in 1714 and reported on his contacts with Edmond Halley, John Flamsteed and Isaac Newton, the interest of the academy was increasingly drawn to astronomy.25 A great diversity of opinion predominated in the Accademia Fisico-Matematica; among its members were Aristotelians, Atomists and the followers of Galileo Galilei and René Descartes. It should be noted that many of the academy's members were clergymen of the Curia, including the Jesuit Antonio Baldigiani²⁶ and Francesco Bianchini, who were both censors of the Congregation of the Index, as well as Stefano Gradi²⁷ and Emmanuel Schelstrate,²⁸ who worked as librarians in the Vatican Library.²⁹ Although this academy was not directly connected to the humanities, it is important to mention it in this context because it clearly proves that Rome in the late seventeenth century was by no means reduced to a norm predetermined by the Curia, and that the consequences of the

'case Galileo Galilei' were not as severe as often claimed.³⁰ Due to limitations of the current format, we have to pass by the Accademia matematica (founded in 1689)³¹ of Domenico Quarteroni³² and the Congresso medico romano (founded in 1681)³³ of Giovanni Maria Lancisi,³⁴ as well the academies of poetry and rhetoric, which Ludovico Antonio Muratori judged useless institutions for windbags.³⁵

Two popes, Clement XI and Benedict XIV, left a particular ecclesiastical mark on the academies. But whereas in 1700 Clement XI was able to fall back on already existing institutions,³⁶ such as Ciampini's Accademia dei Concili, in 1740, when Benedict XIV accepted office, there were hardly any surviving academies.³⁷ The names of the four academies then established by the pope shortly after his election are significant for defining a programme of restoration, aimed at the preservation and revival of ecclesiastical heritage as well as the defence of Catholic positions: Accademia di Storia Romana, Accademia di Liturgia, Accademia di Storia Ecclesiastica and Accademia dei Concili.³⁸ They were almost exclusively staffed with clergymen from the Curia who had already acquired a reputation as impeccable scholars, such as Giovanni Gaetano Bottari, Fortunato Tamburini, Ridolfino Venuti or Giuseppe Agostino Orsi. It is furthermore significant that all four academies declined around 1758, the year of Benedict XIV's demise, which marks an actual turning point of epochs in the cultural history of the papacy.

2 Institutions of scholarly reading: libraries

Rome had numerous large libraries, most of which were owned by cardinals, monasteries (e.g. Augustinian friars of S. Agostino; Dominicans of S. Maria sopra Minerva) or universities (e.g. La Sapienza, Il Collegio Romano). The largest and oldest library was and still is the Bibliotheca Apostolica Vaticana, which was significantly enlarged three times during the seventeenth century. In 1622/1623 the Bibliotheca Palatina of Heidelberg was donated to the Vatican library by the Bavarian elector Maximilian, and in 1631 the library of the Dukes of Urbino was integrated into its collection, followed in 1690 by the library of Christina, Queen of Sweden. Even today, the books from these libraries form separate collections (known by their abbreviations Pal., Urb., Reg.) within the Vaticana.39 Because of its huge collection of manuscripts, scholars travelling to Rome found the Vatican library worth visiting: Jean Mabillon, Bernard de Montfaucon as well as Gottfried Wilhelm Leibniz visited the Vaticana, and their historical research benefited from the expertise of the librarian Emmanuel Schelstrate.40 Theology, liturgy, the history of music and more purely scholarly pursuits such as ecclesiastical history, philology and other liberal arts (logic, grammar, rhetoric, linguistics) were topics that could be investigated with the help of Vatican collections. Frequently, books were also lent to foreign scholars and institutions. 41

The existing inventories of Roman libraries list mainly books dealing with various disciplines that are relevant to the history of the humanities. Two examples are the exceptionally well-stocked libraries of the cardinals Giuseppe Renato Imperiali⁴² and Domenico Passionei.⁴³ Although there were small sections devoted to the natural sciences in both libraries, theological, juridical and historical issues were predominant. We may understand library catalogues as a reflection of Roman scholarly reading and research, enabling us to reconstruct which books were available in Rome and which Roman publications were included in ambitious collections. It is important to note that in all large Roman libraries, there was a great number of works listed in the Index of prohibited books, which were nevertheless catalogued and apparently used without doubt or distinction.

3 Girolamo Casanate and Giusto Fontanini: two concepts of libraries

The history of libraries also enables us to gain an insight into the general situation of textual and historical scholarship in Rome at about 1700. One important library, which is still extant, illustrates the contemporary state of affairs: the library of the cardinal Girolamo Casanate, prefect of the Vatican library and the Congregation of the Index as well as a member of the Roman Inquisition.⁴⁴ Casanate owned one of the largest Roman libraries, which he willingly made available to other scholars. In his last will and testament, he stated that the library was to become the property of the Dominicans of S. Maria sopra Minerva and explicitly stipulated how it was to be run in future. Three Dominicans who censored books (in the Congregation of the Index and/or the Inquisition) were to sit on the board at the same time: the Master of the Sacred Palace, the secretary of the Congregation of the Index and the commissioner of the Holy Office.⁴⁵ The entire library was to be made available for the work of the censors in the Congregation of the Index and Holy Office and was to be further expanded for this purpose. Because the library was actually put to use as Casanate envisioned, the history of the Roman Inquisition in the eighteenth century is closely connected to the Biblioteca Casanatense. 46 In addition to the library, Casanate intended to create a centre of learning where the theology of St. Thomas Aquinas would be studied and taught.⁴⁷ Based on these plans, we can conclude that Casanate's objective was to create an 'inquisitorial' library, where an undeniably orthodox theology was to be practised and which was to distinguish the 'true Catholic doctrine' from the various heresies.

A completely different idea of libraries was represented by the collection overseen by Giusto Fontanini, one of the most important Roman scholars of the era. In 1697, he became the librarian of Cardinal Giuseppe Renato Imperiali. Imperiali likewise owned a well-stocked collection of books, which was merged with the libraries of the cardinals Lorenzo Imperiali and Jan Walthersz. Sluis and which Fontanini cultivated and expanded (he, for instance, bought the library of the scholar Marcello Severoli). Since Imperali welcomed guests with open arms, his library was popular and appreciated by scholars all over Europe. It was Fontanini who put this enormous collection of books into a characteristic order; his catalogue represents one of the earliest uses of a well thought-out system. The order developed by Fontanini exceeds the library of his cardinal by far; in the end, it is the attempt to completely systemize all knowledge available in print. In the eighteenth century, the term bibliotheca meant both physically tangible collections of books as well as more generally all the literature listing knowledge. This may be the reason why Fontanini's catalogue was presented in the Acta Eruditorum, a Lutheran journal from Leipzig, which was popular all over Europe.

Giusto Fontanini was, just like Girolamo Casanate, a member of the Republic of Letters, the international, virtual association of scholars in which members were able to engage in discussion on equal footing. Fontanini was not only able to stay in contact by writing letters but more importantly, by meeting face-to-face with scholars visiting Rome.⁵² Furthermore, his task as a librarian allowed Fontanini to come into contact with numerous Protestant publications, which he obviously even read without inhibition. It would have been very difficult for him to remain in a purely Catholic world of scholars as prescribed by the 'official' Roman theology.

4 Francesco Bianchini: ecclesiastical history between historical criticism and theological standards

What are the characteristics of Roman theology in the years around 1700? Primarily, theological discourse was dominated – as it was everywhere – by the distinction between speculative and positive theology. Counted among the latter approaches are Biblical exegesis and ecclesiastical history, disciplines based (in simple terms) on material sources and not only theological thought.⁵³ For the present discussion, we can leave aside speculative theology and concentrate on ecclesiastical history as part of positive theology.

In 1697, Francesco Bianchini published a first volume of his *Istoria universale* (Universal History); further volumes did not follow.⁵⁴ The book was dedicated to Cardinal Pietro Ottoboni, nephew of Pope Alexander VIII, who had died in 1691 – a topic we will address later. An extensive, yet very concise depiction of his programme concerning ecclesiastical history can be seen in the frontispiece of the work, in a much more suggestive form than in Bianchini's introduction to the book (Fig. 47).⁵⁵

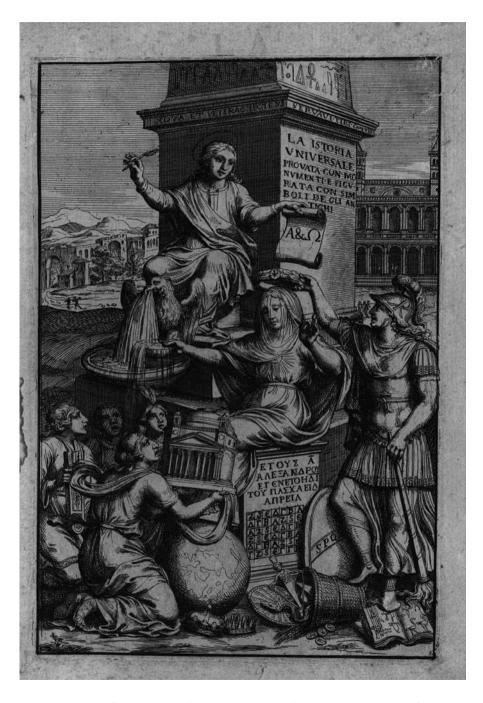


Fig. 47: Title page of Francesco Bianchini, La istoria universale provata con monumenti e figurata con simboli degli Antichi (Rome 1697). © Staats- und Universitätsbibliothek Göttingen.

In the centre of the picture, there is a female figure that can be called *veritas* or *religio*. In each case, the term needs an additional adjective: *veritas christiana* or *religio catholica*. This results from the context: John the Evangelist sits enthroned above her, at his feet an eagle, his attribute, is spewing water into a basin. The female figure fills a bowl with this water in order to pour it – as if in a baptismal ceremony – over the heads of the personifications of the Four Continents kneeling at her feet. Next to the central figure is a man in ancient Roman armour who – owing to Christ's monogram on his helmet – can be identified as the Emperor Constantine. He holds a crown, also showing Christ's monogram, over her head.

At first glance, it is easy to overlook the fact that the woman is sitting on a rectangular stone; this stone, however, according to Cesare Ripa, symbolizes the cornerstone of Christ (1 Peter 2,7-8).⁵⁶ Its inscription in Greek letters refers to Christ's representative on Earth, Pope Alexander VIII.

Still, the *romanitas* in this picture goes further: the Basilica of the Lateran in the right-hand background of the picture is easily identifiable; on the opposite side, the ruins of the Palatine can be seen. As is generally known, there are several obelisks in Rome; the popes of the early modern period used them systematically to mark important places. However, this one has a very atypical inscription. 'New and old, which I have laid up for thee, O my beloved.' This quotation from the Old Testament (Songs of Solomon 7,13) is a reference to the long continuity of Roman history, from the ancient world to the present, and to the activities of the historian Bianchini as well as to the old and new discoveries that he presents to his readers.

The coins and other objects lying at Constantine's feet are just as ambiguous: they serve as indications of Roman power over its subjugated peoples, even the whole world, but they are also references to Bianchini's method which he describes in the preface. For his writing of ancient history, Bianchini made special use of archaeological finds to present facts, so that he could avoid relying exclusively on the ancient myths of chroniclers. Scholars had only begun to place archaeology among the sciences and to recognize its importance for critical historiography around 1700, so Bianchini's method was very up-to-date. He was active as an archaeologist in Rome himself; in 1703 he was probably named Presidente delle antichità di Roma by Clement XI.⁵⁷

Altogether, the frontispiece of Bianchini's *Istoria universale* shows an understanding of ecclesiastical history that is oriented toward the Roman Church and the Catholic denomination and that is not afraid of the latest methodological achievements; however, these are subordinate to the aim of the depiction. Thus, history can only be represented as the creation, spread and growth of Roman Catholic Christianity, to which all people should be converted. Only the *religio catholica*, not a secular sovereign such as Constantine, should be given the honour

of gifts and genuflection. The emperor, standing on the treasures of his subjects, has finally recanted the pagan religion, as indicated by the reversed torch. He now dedicates his rule to the *religio catholica*, which he crowns with the victor's crown and at whose feet there is a globe, symbol of the world. The Holy Scripture, the Word of God (represented by St. John) proves the truth of the Church and that the beginning and the end of the world (alpha and omega) are included in it. The pontifical authority, symbolically present in the stone, its inscription and the Basilica of the Lateran, represents and guarantees the *religio catholica* in the moment of reading as well. In my opinion, this picture sums up what Roman historical scholars recognized as their task.

Yet, Helmut Zedelmaier's observations also have to be taken into consideration, namely that history as an independent discipline was just being developed during the first half of the eighteenth century. The 'historicization' of thinking and historical critique, however, have their established place among Roman erudition. This can be seen, for example, in the well-publicized argument about the rights of the pope or the emperor to the city of Comacchio and the Duchy of Parma and Piacenza. Giusto Fontanini was particularly committed to this subject and defended the position of the Holy See on the basis of historical sources. In order to sharply outline what I feel to be the most important aspect of this subject, we have to make a detour to the Holy Office and have a look at its censors.

In the years 1705 and 1706, the Holy Office considered a critical edition written by the Benedictine Benedetto Bacchini, 61 who now asked the Inquisition for permission to print. The edited text was the Liber pontificalis by Agnello of Ravenna, a history of the archbishops of Ravenna dating from the ninth century. 62 History can be dangerous or helpful to actual positions, so expert's reports by two outstanding scholars, Lorenzo Alessandro Zaccagna,63 first custodian of the Vatican library, and Francesco Bianchini, librarian of the Ottoboni, were requested by the Roman Inquisition⁶⁴ and read in a congregatio extraordinaria on 3rd March 1705.65 Both scholars agreed: critical editions in general were not to be condemned, not even because of the published text; rather, it was important what the editor made of it. With Agnello's text, Bacchini had enclosed a comment that was probably explanatory rather than critical. And this was exactly what the two censors condemned in their very detailed analyses. For in the ninth century, Agnello had strongly stressed the independence from Rome of the Church of Ravenna and attributed this independence to its close connection with the Byzantine emperor. 66 Thus – to give one example – the archbishops of Ravenna are said to have received the pallium, the very vestment that symbolizes their dignity, ⁶⁷ not from the pope but from the emperor. It was mainly on this subject that Zaccagna and Bianchini insisted Bacchini should distance himself from Agnello more strongly and should reveal in his commentary how misguided the view of the mediaeval

bishop was. Why? On this point, Agnello's text was highly topical, beyond the question of historical truth. By means of this text, French and German movements strongly oriented towards national churches would have been able to build an argument for more independence from the pope. ⁶⁸ This would not have been in the interest of the Roman Curia, leading to the creation of national churches at the expense of the one Universal Church. The processes of the Inquisition were designed to prevent such unintended effects. However, it was not necessary to ban a complete edition; the advantage of such an editorial attempt was evident to Zaccagna and Bianchini.

Bacchini agreed to revise his manuscript and presented a new draft to the Inquisition several months later. 69 Once more, Zaccagna and Bianchini were required to hand in reports; once more, their judgment was that Bacchini should distance himself from Agnello's view more clearly. Still, this seems to have encountered resistance even within the Inquisition, especially since Bacchini was recommended by Domenico Passionei and Giusto Fontanini, who were both very influential and put in a word for Bacchini with Pope Clement XI.70 The pope charged a third well-known scholar, Giuseppe Maria Tomasi,71 to write a fifth report.72 Although Tomasi did not directly contradict his predecessors, he nevertheless left leeway for a possible publication of Bacchini's manuscript. He declared many aspects that would have been marked as indication of heresy by other Roman censors to be irrelevant, especially since Bacchini could not be rebuked for purely describing facts. Tomasi's recommendation was that in ecclesiastical historiography, it would be best to generally stick to Caesar Baronius,73 so nothing could go wrong. The final permission for Bacchini to publish his edition was given after an oral presentation by Cardinal Tommaso Maria Ferrari74 of all five reports in the congregatio on 5th May 1706.75

All five reports written on Bacchini's edition demonstrate a lot of respect for both the scholar and his work as well as a high regard of the historical-critical method. Tomasi's open-minded attitude towards Bacchini's results was eventually decisive for a publication of the work. But as Françoise Waquet writes, 'censoring the Agnello, this perfect expression of the new science, would have meant condemning the entire programme of cultural renewal...'⁷⁶

5 The double loyalty of the 'pio letterato'

This rough outline of Roman erudition in the late seventeenth and early eighteenth centuries allows us to describe the situation of Roman textual and historical scholars in a few short theses:

- 1 Roman erudition was polycentric in terms of an institutional framework which consisted of various academies and particularly libraries; both forms of institutions were generally accessible for Roman as well as foreign scholars with appropriate contacts.
- 2 From a socio-historical point of view, around 1700 Roman erudition was principally erudition in the context of the Curia; it was mostly supported by members of the Curia or those connected to it, a circumstance that is not surprising considering contemporary social structures in Rome. However, this also means that impartial research and education were not feasible, rather they were only possible in the context of the Curia or the religio catholica.
- 3 Insight into the situation of the various disciplines can primarily be derived from the history of libraries and their catalogues. Casanate's 'inquisitorial' concept and Fontanini's 'polyhistorical' one are only two examples from the rich culture of ecclesiastical erudition of the time.
- 4 Most of the disciplines of humanist scholarship in Rome were closely connected with theology, especially ecclesiastical history as its leading discipline, and the method of historical criticism with its investigation of written and non-written sources. This becomes particularly clear in Francesco Bianchini's publications.
- 5 Roman erudition in the first half of the eighteenth century was always 'intentional' erudition as could be seen in the case of Bacchini's edition: It was dedicated to the Holy See, both in terms of its theological positions and its political interests.⁷⁷
- 6 For that reason, Roman scholars were loyal to both the Curia and to the Republic of Letters. This observation can be illustrated by asking what they were reading. How could someone who censored for instance Protestant books in service of the Inquisition or the Congregation of the Index also enjoy reading these very books at home and benefit from the experience? After all, numerous forbidden books could be found in Roman libraries; for example, people read Bayle's *Dictionnaire historique et critique* (1697), and the Biblioteca Corsiniana decorated its halls with portraits of the most important scholars above all Protestants. Certainly, the reading of banned scholarship was not always a matter of knowing what the heretics wrote in order to better censor it afterwards. More often, a purely scientific interest or thirst of knowledge was the driving force.
- 7 Françoise Waquet uses a beautiful term, and although she only applies it to Ludovico Antonio Muratori, it is adequate for characterizing Roman scholars in general: pio letterato pious scholar.⁷⁸ The two essential elements are included in this term, and only by considering both will it be possible to understand what Roman scholars wrote around 1700 and to do justice to them. The

adjective 'pio' means more than just spirituality or the piety of the Church; it likewise indicates loyalty to the Pope and the theology of the Roman Church. 'Letterato' implies a connection to the Republic of Letters and thus, the scholar's reading habits. The standard of scholarship certainly required a comprehensive knowledge of what had happened and what was published in the entire Republic of Letters. For the mere 'letterato', confessional boundaries were not necessarily important; the 'pio letterato' on the contrary was not able to ignore opinions that questioned the papacy and Roman theology. No scholar would be declared a heretic simply because of his academic research and reading. The notion dominant at that time is confirmed by Scipione Maffei in the remark, which also heads this contribution: 'Nell'erudizione non si dà eresia' — in erudition there is no heresy.'9

Given the very dissatisfactory state of research on the Roman scholarly world of around 1700, so only a rough overview could be presented. In particular, the Roman censoring institutions of the Inquisition and the Index could not be discussed in detail without going beyond the scope of this article. Furthermore, the development of single humanities disciplines or the reception of ideas in Rome during the late seventeenth and early eighteenth centuries is still to be examined. Late has become clearer, however, that Rome, rather than being a scientifically backward stronghold of the Inquisition, was an exemplary theatre for welcoming the Europe-wide network of the Republic of Letters. With its well-developed scholarly infrastructure and its large educational institutions and libraries, which had few parallels elsewhere in Europe, the city made possible the double loyalty of the 'pious scholar' to the Curia and the Republic of Letters.

A history of the humanities in Rome from about 1650 to 1750 still has to be written; all research on the subject should consider what was said about the 'pio letterato'. For a general history of the humanities, the Roman scholars of the period demonstrate the great importance of historical research and thinking as well as the considerable role of religion and theology. But the infrastructure of the city with its academies and libraries was favourable not only to these leading disciplines, but also to more subordinate ones like grammar, logic or rhetoric, as Fontanini's catalogue of the Imperiali library proves. In defining the place of this part of the humanities, its relation to historical and theological premises should be taken into consideration without neglecting the situation of the Curia as a melting pot of European cultures (scholarly). As the state of research on Roman and Italian scholars and their work in the second half of the seventeenth and the first half of the eighteenth centuries is indeed very poor at the moment, this contribution also invites scholars to concentrate on this topic more intensely.

Notes

- For a historiographical overview, see Françoise Waquet, Le modèle français et l'Italie savante. Conscience de soi et perception de l'autre dans la République des lettres (1660-1750) (Rome: Ecole Française, 1989), 213-219; Brendan Dooley, Science, Politics and Society in Eighteenth-Century Italy. The Giornale de'letterati d'Italia and its World (New York-London: Garland Publishing, 1991). Peter Hersche established a 'culture against progress': Peter Hersche, Italien im Barockzeitalter, 1600-1750. Eine Kultur- und Sozialgeschichte (Vienna: Böhlau, 1999), 267-280.
- Cf. Jean Boutier et al., 'Les Milieux intellectuels italiens comme problème historique. Une enquête collective,' in Naples, Rome, Florence. Une Histoire comparée des milieux intellectuels italiens (XVIIe-XVIIIe siècles), ed. Jean Boutier et al., (Rome: Ecole Française, 2005), 8-10.
- Jean Boutier et al. (eds.), Naples, Rome, Florence. Une Histoire comparée des milieux intel-3 lectuels italiens (XVIIe-XVIIIe siècles) (Rome: Ecole Française, 2005). This volume was preceded by important but nearly unconnected studies by Mario Rosa, Maria Pia Donato and others, e.g. Mario Rosa, 'Un 'mediateur' dans la République des Lettres: le bibliothécaire', in Commercium Litterarium. La communication dans la république des lettres / Forms of Communication in the Republic of Letters 1600-1750, ed. Hans Bots and Françoise Waquet (Amsterdam-Maarssen: APA, 1994), 81-99; id., 'Curia romana e'repubblica delle lettere", in Papes, princes et savants dans l'Europe moderne. Mélanges à la mémoire de Bruno Neveu, eds. Jean-Louis Quantin and Jean-Claude Waquet (Geneva: Librairie Droz, 2007), 333-349; Maria Pia Donato, 'Le strane mutazioni di un'identità: il 'letterato' a Roma, 1670-1750', in Gruppi ed identità sociali nell'Italia di età moderna, ed. Biagio Salvemini (Bari: Edipuglia, 1998), 275-314; id., Accademie romane. Una storia sociale (1671-1824) (Naples-Rome: Edizioni Scientifiche Italiane, 2000); Brigitte Sölch, Francesco Bianchini (1662-1729) und die Anfänge öffentlicher Museen in Rom (Munich-Berlin: Deutscher Kunstverlag, 2007).
- This essay summarizes some important results of the author's dissertation Virtuelle Büchersäle. Lektüre und Zensur gelehrter Zeitschriften an der römischen Kurie 1665-1765 (Paderborn: Schöningh, 2009).
- For a general overview see Mario Rosa, 'I depositi del sapere: biblioteche, accademie, archivi', in *La memoria del sapere. Forme di conservazione e strutture organizzative dall'antichità a oggi*, ed. Pietro Rossi (Rome-Bari: Laterza, 1988), 165-209.
- 6 Cf. Marina Caffiero *et al.*, 'De la catholicité post-tridentine à la République Romaine. Splendeurs et misères des intellectuels courtisans', in *Naples, Rome, Florence*, 173.
- Agostino Antonio Giorgi OSA (1711-1797), Roman Theologian, Professor at the Sapienza; 1772 Consultor of the Holy Office. See Filippo Maria Renazzi, Storia dell'Università degli Studi di Roma detta comunemente la Sapienza. Vol. 4 (Rome: Pagliarini, 1806), 74, 250. Giorgi's method can be seen clearly (e.g.) in his Fragmentum Evangelii S. Ioannis Graeco-Copto-Thebaicum Saeculi IV. Additamentum ex vetustissimis membranis lectionum evangelicarum divinae missae cod. diaconici reliquiae et liturgica alia fragmenta veteris thebaidensium ecclesiae ante Dioscurum ex Veliterno Museo Borgiano (Rome: Fulgoni, 1789).
- 8 Introductions to the Republic of Letters: Hans Bots, Republiek der Letteren. Ideaal en werkelijkheid (Amsterdam: APA, 1977); Hans Bots, Françoise Waquet, La République des Lettres ([Paris]: Belin, 1997); Lorraine Daston, 'The Ideal and Reality of the Republic of Letters in the Enlightenment', Science in context 4 (1991): 367-386; Anne Goldgar, Impolite Learning. Conduct and Community in the Republic of Letters 1680-1750 (New Haven-Lon-

- don: Yale University Press, 1995). For the ideal of scientific academies: Anthony Grafton, 'Where was Salomon's House? Ecclesiastical History and Intellectual Origins of Bacon's New Atlantis', in *Die europäische Gelehrtenrepublik im Zeitalter des Konfessionalismus*, ed. Herbert Jaumann (Wiesbaden: Harrassowitz, 2001), 21-38.
- Maria Pia Donato, Accademie romane. Una storia sociale (1671-1824), Naples-Rome 2000. A list of all Roman academies in the seventeenth and eighteenth centuries is given in *Naples, Rome, Florence,* 683-684. For the latest phase which cannot be discussed in this place: Marina Caffiero, 'Accademie e autorappresentazione dei gruppi intellettuali a Roma alla fine del Settecento', in *Naples, Rome, Florence,* 277-292.
- Giovanni Giustino Ciampini (1633-1698), Roman scholar; collaborator in the Giornale de'Letterati by Nazari (1668-1675), editor of an own Giornale de'Letterati (1675-1681); founder of the Accademia dei Concili and the Accademia Fisico-matematica; owner of an important library. See also Silvia Grassi Fiorentino, 'Ciampini, Giovanni Giustino', Dizionario Biografico degli Italiani 25 (1981), 136-143.
- II Giovanni Pastrizio / Ivan Pastrič (1636-1708), Theologian and Polyhistor, born in Croatia. lived in Rome.
- 12 Cf. Donato, Accademie romane, 13-26; id., 'Le due Accademie dei Concili a Roma', in Naples, Rome, Florence, 243-255.
- 13 Cf. William J. Bouwsma, 'Gallicanism and the Nature of Christendom', in Renaissance. Studies in honor of Hans Baron, ed. Anthony Molho, John Tedeschi (Florence: Sansoni, 1971), 811-829; Wolfgang Mager, 'Die Kirche als Gehäuse der Freiheit. Die Ausbildung liberaler Anschauungen über den Aufbau der Kirche und des Staates in Frankreich als Entgegnung auf die päpstliche Bulle 'Unigenitus' (1713)', in Französisch-deutsche Beziehungen in der neueren Geschichte, ed. Klaus Malettke et al. (Hamburg: LIT, 2007), 175. In the middle of the eighteenth century, the secretary of the Congregation of the Index, Giuseppe Agostino Orsi, published two volumes on this subject which summarize the debate: Giuseppe Agostino Orsi, De Irreformabili Romani Pontificis in Definiendis Fidei Controversiis Judicio (Rome: Congregatio de Propaganda Fide, 1739); id., De Romani Pontificis in Synodos Oecumenicas et earum Canones Potestate (Rome: Congregatio de Propaganda Fide, 1740).
- 14 Cf. Donato, Accademie romane, 21. See also Luigi Fiorani, 'Identità e crisi del prete romano tra sei e settecento', Ricerche per la storia religiosa di Roma 7 (1988), 135-212.
- 15 Cf. Donato, Le due Accademie dei Concili, 247-248.
- 16 Cf. Donato, Accademie romane, 18-19.
- 17 Francesco Bianchini (1662-1729), Roman theologian, archaeologist and astronomer, librarian of Cardinal Pietro Ottoboni. See also Salvatore Rotta, 'Bianchini, Francesco', Dizionario Biografico degli Italiani 10 (1968), 187-194.
- 18 Giusto Fontanini (1666-1736), Roman scholar and theologian; uditore and librarian of Cardinal Giuseppe Renato Imperiali; 1725 participant at the Concilio Romano (synod of the Roman province). See also Dario Busolini, 'Fontanini, Giusto', Dizionario Biografico degli Italiani 48 (1997), 747-752.
- 19 Cf. Donato, Accademie romane, 21.
- 20 Francesco Domenico Bencini (1664-1744), 1687-1715 professor at the Collegio Urbano de Propaganda Fide, 1715-1735 professor in Torino.
- 21 Cf. Donato, Le due Accademie dei Concili, 250.
- 22 Cf. Donato, Accademie romane, 24-26; Christopher M. S. Johns, 'Papa Albani and Francesco Bianchini. Intellectual and Visual Culture in Early Eighteenth-Century Rome', in Francesco Bianchini (1662-1729) und die europäische gelehrte Welt um 1700, ed. Valentin

- Kockel, Brigitte Sölch (Berlin: Akademie-Verlag, 2005), 41-55.
- 23 Several letters and plans concerning the Accademia dei Nobili Ecclesiastici can be found in Archivio Segreto Vaticano (ASV), Fondo Albani, 10.
- 24 Cf. Donato, Accademie romane, 26-34.
- 25 Cf. Sölch, Francesco Bianchini, 37-38.
- 26 Antonio Baldigiani SJ (1647-1711), Roman scholar, lecturer of philosophy and theology at the Collegio Romano, relator (1687) and consultor (1690) of the Congregation of the Index as well as qualificator of the Holy Office (1690).
- 27 Stefano Gradi (1613-1683), scholar and diplomat from Ragusa, in 1682 custodian at the Bibliotheca Apostolica Vaticana.
- Emmanuel Schelstrate (1645-1692), First Custodian at the Biblioteca Apostolica Vaticana, consultor of the Congregation of the Index. For Schelstrate see Herman H. Schwedt, 'Emmanuel Schelstrate († 1692) nella Roma dei santi e dei libertini', Bulletin de l'Institut Historique Belge de Rome / Bulletin van het Belgisch Historisch Instituut Rome 66 (1996), 53-80 (reprint in: Censor censorum. Gesammelte Aufsätze von Herman H. Schwedt, ed. Tobias Lagatz, Sabine Schratz [Paderborn: Schöningh, 2006], 63-84); id., 'Schelstrate, Emmanuel', Biographisch-Bibliographisches Kirchenlexikon 9 (1995), 140-142.
- 29 On the variety of the participants, see Donato, Accademie romane, 28-33.
- 30 Cf. Francesco Beretta, 'Le Siège Apostolique et l'Affaire Galilée: Relectures romaines d'une condamnation célèbre', Roma moderna e contemporanea 7 (1999), 421-498; id., 'L'heliocentrisme à Rome, à la fin du XVIIe siècle: une affaire d'étrangers? Aspects structurels d'un espace intellectuel', http://halshs.archives-ouvertes.fr/docs/00/05/87/86/PDF/TexteBeretta.pdf; Antonella Romano, 'A l'ombre de Galilée? Activité scientifique et pratique académique à Rome au XVIIe siècle', in Naples, Rome, Florence, 209-242.
- 31 Cf. André Robinet, 'L'Accademia matematica de D. Quarteroni et le 'Phoranomus' de G.W. Leibniz (Rome, 1688)', Nouvelles de la République des Lettres 11 (1991), 7-18.
- 32 Domenico Quarteroni (1650-1734), Roman mathematician, founder of the Accademia matematica.
- 33 Cf. Donato, Accademie romane, 34-39.
- 34 Giovanni Maria Lancisi (1654-1720), Roman doctor of medicine, leading member of the Congresso medico romano.
- 35 Ludovico Antonio Muratori, Primi disegni della Repubblica letteraria d'Italia (1703), in Dal Muratori al Cesarotti. Vol. 1,1: Opere di Ludovico Antonio Muratori, ed. Giorgio Falco, Fiorenzo Forti (Milan-Naples: Ricciardi, 1964), 179: 'La pompa della sola poesia non ha altra virtù che quella de'fiori.'
- 36 Cf. Johns, Papa Albani and Francesco Bianchini, 41-55.
- For Benedict's pontificate see Mario Rosa, Benedetto XIV', Enciclopedia dei Papi 3 (2000): 446-461; Elisabeth Garms-Cornides, Benedikt XIV. Ein Papst zwischen Reaktion und Aufklärung, in Ambivalenzen der Aufklärung, ed. Gerhard Ammerer, Hanns Haas (Munich: Oldenbourg, 1997), 169-186; id., Storia, politica e apologia in Benedetto XIV: Alle radici della reazione cattolica', in Papes et papauté au XVIIIe siècle, ed. Philippe Koeppel (Paris: Honoré Champion, 1999), 145-161.
- 38 For the Academies founded by Benedict XIV, see Donato, Accademie romane, 86-115. Consequently, the production of books florished in Rome during the pontificate of Benedict XIV: cf. Valentino Romani, 'Tipografia e commercio librario nel Settecento Romano: Note intorno al pontificato di Benedetto XIV', in Benedetto XIV (Prospero Lambertini). Convegno Internazionale di studi storici, Vol. 2 (Ferrara: Centro Studi Girolamo Baruffaldi', 1982), 1181-1196.

- 39 Cf. Jeanne Bignami Odier, La Bibliothèque Vaticane du Sixte IV à Pie XI. Recherches sur l'histoire des collections de manuscrits (Vatican City: Biblioteca Apostolica Vaticana, 1973), 99-156.
- 40 Cf. Christine Maria Grafinger, 'Studiosi nella Biblioteca Vaticana del Settecento', Archivium Historiae Pontificiae 35 (1997): 289-296.
- 41 Cf. Christine Maria Grafinger, *Die Ausleihe vatikanischer Handschriften und Druckwerke* (1563-1700) (Vatican City: Biblioteca Apostolica Vaticana, 1993).
- 42 Giuseppe Renato Imperiali (1651-1737), nephew of Cardinal Lorenzo Imperiali, as cardinal (1690) member of the Holy Office (1720) and the Congregation of the Index (1698), owner of a huge library which was catalogued by Giusto Fontanini. Cf. Stefano Tabacchi, 'Imperiali, Giuseppe Renato', Dizionario Biografico degli Italiani 62 (2004), 305-308.
- 43 Domenico Passionei (1682-1761), scholar, papal diplomat and nuntius; as cardinal (1738) member of the Holy Office and the Congregation of the Index (1743); Prefect of the Biblioteca Apostolica Vaticana (1755); associated member of the Académie des Inscriptions et des Lettres in Paris; owner of a huge library on the Quirinal in Rome. Cf. Alfredo Serrai, Domenico Passionei e la sua biblioteca (Milan: Sylvestre Bonnard, 2004).
- 44 Girolamo Casanate (1620-1700), 1658 Inquisitor in Malta, 1668 Assessor of the Holy Office; as cardinal (1673) member of the Holy Office, Prefect of the Congregation of the Index (1698) and of the Bibliotheca Apostolica Vaticana (1693); Cf. Lucien Ceyssens, 'Casanate, Girolamo', Dizionario Biografico degli Italiani 21 (1978), 144-147.
- For the offices of the Congregation of the Index and the Inquisition, see Herman H. Schwedt, 'Die römischen Kongregationen der Inquisition und des Index: Die Personen (16.-20. Jh.)', in *Inquisition, Index, Zensur. Wissenskulturen der Neuzeit im Widerstreit*, ed. Hubert Wolf (Paderborn: Schöningh 2001), 89-101.
- 46 Cf. Vincenzo de Gregorio, La Biblioteca Casanatense di Roma. Naples: Edizioni Scientifiche Italiane, 1993; Margherita Palumbo, 'La 'bibliotheca haeretica' del cardinale Girolamo Casanate', in Dal torchio alle fiamme. Inquisizione e censura: Nuovi contributi dalla più antica Biblioteca Provinciale d'Italia, ed. Vittoria Bonani (Salerno: Biblioteca Provinciale, 2005), 21-32. The connection between library and congregation can be shown in the case of Daniel Georg Morhof's 'Polyhistor': Cf. Bernward Schmidt, "Sollicita ac provida vigilantia'. Die 'Indexreform' Benedikts XIV', in Verbotene Bücher. Zur Geschichte des Index im 18. und 19. Jahrhundert, ed. Hubert Wolf (Paderborn: Schöningh, 2008), 345-360.
- For prosopographical indications, see Alberto Guglielmotti, Catalogo dei Bibliotecari, cattedratici, e teologi del Collegio Casanatense nel convento della Minerva dell'Ordine de'predicatori in Roma dal principio di loro istituzione sino al presente (Rome: Tipografia delle Belle Arti, 1860).
- 48 Cf. Flavia Cancedda, Figure e fatti intorno alla biblioteca del Cardinale Imperiali, mecenate del '700 (Rome: Bulzoni, 1995).
- 49 [Giusto Fontanini], Bibliothecae Josephi Renati Imperialis Sanctae Romanae Ecclesiae Cardinalis Sancti Georgii Catalogus (Rome: Gonzaga, 1711).
- 50 Cf. Roger Chartier, 'Bibliothèques sans murs', in L'Ordre des livres. Lecteurs, auteurs, bibliothèques en europe entre XIV[®] et XVIII[®] siècle, ed. Roger Chartier (Aix-en-Provence: Alinea, 1992), 69-94; Colette Nativel, 'Bibliotheca selon Morhof', in Les premiers siècles de la République européenne des Lettres, ed. Marc Fumaroli (Paris: Baudry, 2005), 427-448.
- 51 Cf. Acta Eruditorum, May 1714, 218-219: 'Inter celebriores Urbis bibliothecas, quae codicum impressorum & selectu & copia sese commendant, non minima est, quae Purpuratum modo dictum Eminentissimum possessorem ac dominum habet. Tribus enim spatiis seu cameris sat amplis, in aedibus ejus ad Forum Antonii sitis, distincta patet, atque haud

- raro hospitum literatorum accessu, quibus & nos aliquando immixtos fuisse non sine voluptate recordamur, quotidie ferme frequentatur.'
- 52 Cf. Domenico Fontanini, Memorie della vita di Monsignor Giusto Fontanini arcivescovo di Ancira, canonico della Basilica di S. Maria Maggiore e abbate di Sesto (Venice: Valvasense, 1755), 4-6.
- 53 Cf. Bruno Neveu, 'Quelques orientations de la théologie catholique au XVII^e siècle', Seventeenth-Century French Studies 16 (1994), 44-46.
- 54 Francesco Bianchini, La Istoria universale provata con monumenti e figurata con simboli degli Antichi, Rome: de Rossi, 1697. A reprint was published in 1747 with the same editor.
- Cf. Susan M. Dixon, 'Francesco Bianchini's Images and his Legacy in the Mid-Eighteenth Century: From Capricci to Playing Cards to Proscenium and back', in *Francesco Bianchini* (1662-1729) und die europäische gelehrte Welt um 1700, ed. Valentin Kockel, Brigitte Sölch (Berlin: Akademie-Verlag, 2005), 83-103; Sölch, *Francesco Bianchini*, 42-47, 149-154.
- 56 I Peter 2,7-8: 'Unto you therefore which believe he is precious: but unto them which be disobedient, the stone which the builders disallowed, the same is made the head of the corner, and a stone of stumbling, and a rock of offence, even to them which stumble at the word, being disobedient: whereunto also they were appointed.'
- 57 According to François de Polignac, this nomination cannot be proven though reported by Bianchini's biographer Alessandro Mazzoleni (1735). Cf. Sölch, Francesco Bianchini, 33.
- 58 Helmut Zedelmaier, "Im Griff der Geschichte'. Zur Historiographiegeschichte der frühen Neuzeit', in Historisches Jahrbuch 112 (1992): 436-456.
- 59 E.g. [Giusto Fontanini], Historia Summi Imperii Apostolici Sedis in Ducatum Parmae Ac Placentinae Libri Tres. Rome: anonymus, 1721. Cf. Gesine Göschel, Das 'bellum diplomaticum' um Comacchio zu Beginn des 18. Jahrhunderts (Frankfurt/M.: Johann-Wolfgang-Goethe-Universität, 1973).
- For an introduction to the procedures of the Inquisition see Adriano Garuti, 'La santa Romana e Universale Inquisizione. Strutture e procedure', in L'Inquisizione (Vatican City: Biblioteca Apostolica Vaticana, 2003), 295-302. Hubert Wolf, Einleitung 1814-1917 (Paderborn: Schöningh, 2005), 244-249 (in English).
- 61 Benedetto Bacchini OSB (1651-1721), Savant from Parma, librarian of the Dukes of Modena, teacher of Ludovico Antonio Muratori. See A. Momigliano, 'Bacchini, Benedetto', Dizionario Biografico degli Italiani 5 (1963): 22-29; Paolo Golinelli, Benedetto Bacchini (1651-1721). L'uomo, lo storico, il maestro (Florence: Olschki, 2003).
- 62 Agnelli, qui et Andreas, ... Liber pontificalis, sive Vitae Pontificum Ravennatum. D. Benedictus Bacchinius Abbas S. Mariae de Lacroma O.S.B. Congregationis Casinensis ex Bibliotheca Estensi eruit, dissertationibus, & observationibus, nec non Appendice Monumentorum illustravit, & auxit ... (Modena: Capponi, 1708). The text was revised and re-edited in 1723 by Ludovico Antonio Muratori and in 1864 by Jacques-Paul Migne. Modern editions: The Liber Pontificalis Ecclesiae Ravennatis, ed. Deborah Mauskopf Deliyannis (Turnhout: Brepols, 2006); Agnellus von Ravenna, Liber Pontificalis Bischofsbuch, ed. Claudia Nauerth, 2 vols. (Freiburg: Herder, 1996).
- 63 Lorenzo Alessandro Zaccagna (1652-1712), in 1708 Relator of the Congregation of the Index, First Custodian of the Bibliotheca Apostolica Vaticana.
- The entire material can be found in the Archives of the Congregation for the Doctrine of Faith (ACDF), SO CL 1706-1707, no. 3. Some notes also in ACDF Decreta SO 1705, fol. 75r and 1706, fol. 163r and 189rv. Cf. Franz Heinrich Reusch, Der Index der verbotenen Bücher. Ein Beitrag zur Kirchen- und Literaturgeschichte. Vol. 2,1 (Bonn: Cohen, 1885), 155-156.

- Besides, Antoine Arnauld's *Difficultez proposées à M. Steyaert* were censored in the same congregation. Cf. ACDF Decreta SO 1705, fol. 75r; ACDF SO CL 1704-1705, no. 19.
- 66 Cf. Girolamo Arnaldi, 'Agnellus', Lexikon des Mittelalters I (1980): 211-212.
- 67 Cf. Theodor Klauser, 'Pallium', Lexikon für Theologie und Kirche, 2nd edition, 8 (1963): 7-9; Louis Duchesne, Les origines du culte chrétien, 5th edition (Paris: Boccard, 1925), 404-410.
- 68 Cf. Günther Wassilowsky, 'Katholizismus', Enzyklopädie der Neuzeit 6 (2007): 467-473; id., 'Gallikanismus', Enzyklopädie der Neuzeit 4 (2006): 135-137.
- Discussed on 21st April 1706, cf. ACDF Decreta SO 1706, fol. 163r. The provisional decree of this day read 'Eminentissimi dixerunt non impediandam esse editionem libri, de quo agitur facturo in primis per Auctorem Commentarii eiusdem libro iis omnibus additionibus, explicationibus, ac correctionibus, quae opportuna, et necessaria visa sunt, et videbuntur illis qui ad revisionem libri praefati fuerunt iam deputati, et deputabuntur. Et eadem die in solita audientia facta per me relatione Sanctissimo Patri Nostro Sanctitas Sua S. Congregationis sententiam approbavit, ac iussit revisionem supradicti libri committi Patri Thomasio Ordinis Theatinorum.' (ACDF SO CL 1706-1707, without page number).
- 70 Cf. Francesco Andreu, Pellegrino alle sorgenti. San Giuseppe Maria Tomasi. La Vita il Pensiero le Opere (Rome: Curia Generalizia dei Chierici Regolari, 1987), 250-251.
- 71 Giuseppe Maria Tomasi (1649-1713), Roman theologian and historian, examinator episcoporum, qualificator of the Holy Office, consultor of the Congregation of the Index; as cardinal (1712) member of the latter one.
- 72 Tomasi's report was published in his Opera, vol. 7 (Rome: Pagliarini, 1754), 132-144.
- 73 Cesare Baronio (1538-1607), Roman scholar, author of a huge ecclesiastical history; 1593 director of the Roman Oratory, as cardinal (1596) member of the Congregation of the Index and prefect of the Bibliotheca Apostolica Vaticana (1597).
- Tommaso Maria Ferrari (1647-1716), 1688-1695 Master of the Sacred Palace, as cardinal (1695) member of the Holy Office (1696) and prefect of the Congregation of the Index (1700).
- 75 ACDF Decreta SO 1706, fol. 189rv: 'Facta relatione in voce per E.mum S. Clementis de correctionibus factis super libro manuscripto P. D. Bened. Bacchini monaci Ordinis Cassinen. cuius tit. = Agnelli qui et Andreas (de quo alias 3 Martii 1705) E.mi dixerunt, scribendum esse P. Inquisitori Mutinae, quod imprimi permittat praefatum Librum cum dictis correctionibus, quae una cum dicto Libro ad ipsum transmittant.'
- Waquet, Le modèle français et l'Italie savante, 380 : 'Censurer l'Agnello, cette parfaite expression de la nouvelle science, ce serait, en effet, condamner tout le programme de renouveau culturel ...'
- 77 Cf. Schmidt, Virtuelle Büchersäle, 177-186.
- 78 Cf. Françoise Waquet, 'Ludovico Antonio Muratori. Le 'pio letterato' à l'épreuve des faits', in *Die europäische Gelehrtenrepublik im Zeitalter des Konfessionalismus*, ed. Herbert Jaumann (Wiesbaden: Harrassowitz, 2001), 87-103; id., 'De la 'Repubblica letteraria' au 'pio letterato'. Organisation du savoir et modèles intellectuels dans l'Italie de Muratori', in *Naples, Rome, Florence*, 637-650; Schmidt, *Virtuelle Büchersäle*, 201-207.
- 79 Scipione Maffei, [Expert opinion on the reform of the university of Padua], in 'Un parere di Scipione Maffei intorno allo Studio di Padova sui principi del Settecento', ed. Biagio Brugi, Atti del Reale Istituto Veneto di Scienze, Lettere ed Arti 69 (1909-1910), 583.
- 80 Cf. Schmidt, Virtuelle Büchersäle, 20-26.
- 81 Cf. Patrizia Delpiano, Il governo della lettura. Chiesa e libri nell'Italia del Settecento (Bologna: Il Mulino, 2007); Schmidt, Virtuelle Büchersäle, 209-357.

82 The ideas of Athanasius Kircher, for example, were apparently barely discussed at that time – but this should be examined. I am thankful to Rens Bod for this suggestion. Furthermore, I am deeply grateful to Jessica Buskirk who ameliorated and smoothened my lecture for the publication.

IV Language and Poetics





Humanism in the Classroom, a Reassessment

JULIETTE A. GROENLAND

History's well-filled dustbin contains many events and persons that once attracted great attention but have since been eclipsed by greater events and greater individuals, and that languish in an historical limbo, disturbed only by an occasional doctorate candidate trying to exhume events and personages that (so far as our general comprehension of the past is concerned) might almost never have existed at all. Yet sometimes these historical non-events can cast light on the greater events which have eclipsed them.

CHARLES G. NAUERTI

I Introduction: the merits of a practical pedagogue²

Starting from a single case-study into a virtual historical nonperson, Joannes Murmellius (ca.1480-1517), this paper purports to draw attention to a basic tenet of Renaissance humanism and of the humanities, both pedagogical movements in origin: the classroom practice. A most characteristic profile sketch of the pioneer northern humanist school teacher is to be found in his own account of his pedagogic standpoint:

Iam vero in tanta opinionum et sententiarum diversitate quam discipulos instituendi rationem sequar, paucis accipe. Quid super ea re Quintiliano rhetori diligentissimo visum fuerit haud ignoras, quid item Baptista Guarinus, et Erasmus noster (ut ceteros preteream) de discendi docendique modo ac ordine sentiant et precipiant legisse te compluries non dubito. Verum eorum praecepta penitus exequi in hisce ludis trivialibus ob plurimas causas non est opportunum. ... Sed meruerunt illi quidem laudem non parvam suadentes optima praeclaris ingeniis ad summam exactae eruditionis et eloquentiae arcem foeliciter tendentibus. Nos vero quamplurimis simul

consultum cupimus, nec iis modo qui melioris sunt ingenii, sed tardioribus etiam et tamen id literaturae quaerentibus, quod sufficiat ad deo optimo maximo sancta morum integritate militandum. Non enim omnium est (ut veteri fertur adagione³) Corinthum navigatio, nec cuivis datum absolutum illum doctrinarum orbem, et oratoriam consequi facultatem. Bene ait Horatius⁴ Est aliquo prodire tenus, si non datur ultra.⁵

'Learn in a few words which method amidst so great a diversity of opinions and sentiments I follow in teaching my pupils. You are familiar with the thoughts of that most diligent teacher of oratory, Quintilian, on the matter, and I am sure you have often read what method and programme of learning and teaching Battista Guarino and our own Erasmus (not to mention others) envisage and recommend. But it is not expedient to keep to the letter of their precepts right here in the Latin school ... They certainly deserve lavish praise for giving choice advice to excellent talents successfully aiming for the zenith of knowledge and eloquence. We, however, long to have regard for as many pupils as possible at the same time, not only the quicker ones, but also the slow-witted ones seeking to get acquainted with just enough literature to serve the Lord with sound and sacred morality. For it is not every man's lot to set sail for Corinth (as the old saying goes), and not every man can complete the full circle of knowledge and aspire to the gift of eloquence. Horace rightly says: "There is some point to which we may reach, if we can go no further."

Murmellius, conrector (deputy headmaster) and rector (headmaster) of Latin schools in Westphalia and Holland in the early decades of the sixteenth century, belonged to the early generation of northern teacher humanists. Labouring for the introduction of the studia humanitatis in the overcrowded and noisy classrooms, they performed the humble fieldwork in the shadow of their contemporary Erasmus. Murmellius was not only a gifted schoolmaster, who attracted hundreds of pupils to his schools, from the farthest corners of Europe. He also composed the necessary books to enable and support curricular changes in other classrooms than just his own. During his short lifetime he published the remarkable number of more than fifty writings: school editions of ancient and humanist texts, handbooks, pedagogical treatises and poems. Some of his schoolbooks were reprinted dozens of times until as late as the eighteenth century, and spread as far as Poland and Hungary.⁶

In spite of the considerable short- and long-term effects of his work, Murmellius's name is not primarily remembered for any of his lifetime achievements. Within the history of northern humanist pedagogy, the practical contributions of

the schoolteachers, even those from a successful and prolific writer like Murmellius, have from the start been outshone by the great achievements of more academic pedagogues like Agricola and Erasmus.⁷ Significantly, when Murmellius's name comes up twice in Erasmus's correspondence,⁸ it is not by virtue of any of his pedagogic activities. The immediate cause was the schoolmaster's untimely death, at the age of 37. Rumour had it, Murmellius had been poisoned by order of a rival schoolmaster. The fascinating humanist murder story, unravelled on another occasion,⁹ must be left in peace here, for this paper aims to highlight the life work of Murmellius.

Why should a Latin school teacher be worthy of a place within the history of humanism, even when his oeuvre apparently constitutes a rare direct product from and for the early northern humanist classroom? What is more, why should he be included in the even grander scheme this book is intended to initiate? In other words: what did Murmellius ever do for us? The call for papers of the First International Conference on the History of the Humanities, the starting point of this book, stated the urgent and lofty goal of a comparative history of the humanities:

We are especially keen on understanding the mutual interplay between the humanities and how they developed from the *artes liberales*, via the *studia humanitatis*, to early modern disciplines. Although there exist separate histories of single humanities disciplines, a comparative history would satisfy a long-felt need, and fill a conspicuous gap in intellectual history. ... While the focus is on the early modern period when the humanities started to emerge (roughly 1400-1800), we also welcome proposals for papers exploring interesting links with earlier or later periods. ... We strongly favor abstracts that are as comparative as possible, i.e. that explore the connections between different disciplines and/or persons in the history of the humanities.¹⁰

As for 'connections between different disciplines', like all other humanists Murmellius was interdisciplinary by nature from a modern point of view. Similarly, as for 'connections between different persons', Murmellius's reputation as a school-master and author, like that of all his fellow humanists, depended heavily on his network within the *respublica literaria*. But besides that, would Murmellius or rather a case study based on his works truly be worthy of a place within the proposed comparative history, or should it be left to others — Valla, Scaliger, Spinoza — to set sail for Corinth? In short, this paper promotes Murmellius as just the right person to teach a very relevant lesson: it is a delicate balance between theory and practice, between lofty ideals and humble reality. More elaborately, the ar-

gument involves a twofold explanation: what can the writings and textbooks of this teacher-pedagogue teach us about the way the humanist ideals were put into practice? And how, if at all, does this case study fit in with a comparative history of the humanities?

For just like Murmellius in the opening quote decided his practical experience had something to add to the ambitious theories expounded by great minds like Quintilian, Guarino junior and Erasmus, I believe a case study on this level-headed teacher-pedagogue might just be the necessary practical touchstone that has something to add to such awe-inspiring, thought-provoking projects as the intended comparative history of the humanities and the work which has demanded attention for the early modern classroom, drawing parallels with the modern humanities education, Anthony Grafton and Lisa Jardine's From Humanism to the Humanities." Turning to the school practice of Murmellius, we will see how this teacher-pedagogue can serve as a phenomenal touchstone for hasty and generalizing assumptions that have been made about the practitioners of the studia humanitatis, and the way this Renaissance programme of studies¹² relates to our present-day humanities.

2 The humanist educational reform in context

In their inspiring study From humanism to the humanities Grafton and Jardine rightly argued that, with all the progress made in educational history since the rise of social history in the 1960s and 1970s, cultural historians have not paid enough attention to what actually went on inside the Renaissance classroom. However, instead of referring to the lack or inscrutability of relevant source material for a ready explanation, they pointed a finger at 'traditional intellectual historians':

... themselves believing in the preeminent value of a literary education, committed to preserving a canon of classics and a tradition of humanism, [they] have treated the rise of the classical curriculum and the downfall of scholasticism as the natural triumph of virtue over vice. Like the humanists they study, whose words they often echo faithfully, they assume the barbarity and obsolence of medieval education and the freshness and liberality of humanism.¹³

According to Grafton and Jardine, the humanist educators failed to put their high moral aspirations into practice. In contrast, the scholastic method is made out to have been a stimulus of creative and independent reasoning, which was stifled by the elite, conservative curriculum of the humanists, attuned to 'the ideals and attitudes of government and those in power':

Scholasticism bred too independent an attitude to survive. In the Renaissance as in other periods, in sum, the price of the renewal of art and literature was collaboration in the constriction of society and polity.¹⁴

The method employed by Grafton and Jardine, case studies based on primary sources, has pointed the way for researchers to try and open up the classroom doors. However, the newly acquired vision was instantaneously blurred by the central argument dominating From Humanism to the Humanities, which was explicitly prompted by a topical message:

What we are stressing is that the independence of liberal arts education from establishment values is an illusion.¹⁶

Throughout the book the case studies are employed to substantiate this thesis by demonstrating the gap between the humanist ideals and harsh reality. The limited access of women humanists to the *studia humanitatis* is meant to prove 'the limitations of the humanist liberal arts education as a general education, suitable for any cultivated person'. Similarly, primary sources from the school of the pioneer pedagogue Guarino – textbooks, commentaries, and student and teacher notes – are mobilized to expose the bookish, ineffective classroom practice of the humanist educators, which does not concur with their high moral aspirations.

Thus, at crucial instants, when the fruits of otherwise commendable explorations of primary source material are evaluated, the topical viewpoint takes the upper hand and induces anachronisms. As for the difficulties facing women humanists, in practice the *studia humanitatis* were never meant for all human beings alike, they were tailored to the active man of affairs. The scattered and limited achievements of the female aspirants cannot be used as a test case for the liberality of the *studia humanitatis*, the studies deemed fit to prepare the future male citizen to fulfil his civic duties.¹⁸ If anything, they are illustrative of the sociohistorical context from which the Quattrocento humanist ideals arose. From this point of view, the fact that some female humanists nonetheless managed to make a lasting name for themselves could just as well be interpreted as a sign of the relative liberality of the humanist movement.

As for Guarino's school practice, one could also dispose of Murmellius's commentaries as testimonies of a dull daily word-for-word analysis. From a modern perspective, one may even, like Grafton and Jardine, be prompted to resort to

terms like a 'ruthless drilling' or 'an overwhelming preoccupation with a profusion of tiny details'. But on second glance, what impression do these textbooks make when approached from a more historical point of view?

2.1 Latin from theory to practice

Within the brief period of circa 1500-1520, Murmellius and his fellow humanist schoolteachers carried through a profound reform in the Latin schools of the Netherlands and Westphalia. During the Middle Ages, following a decree of the Fourth Council of the Lateran (1215), parish and chapter schools had been founded in order to prepare boys for offices at the service of the church, under the wing of the ecclesiastical authorities. With the late medieval rise of towns, most municipalities had gained control of the schools. The humanist schoolteachers met the increasing demand of the town establishment for a more liberal education, which was to prepare their citizens-to-be for ecclesiastical as well as secular offices. In concordance, the aim of the *studia humanitatis*, teaching literature and moral values hand in hand, was not only the transfer of knowledge, but expressly also citizenship education.²¹ Or, in the humanist maxim adapted from Seneca: Latin education was meant to be useful *non scholae*, *sed vitae* ('not for school, but for life'). Consequently, literature of sound moral content became the main subject, at the expense of linguistics.

In the late Middle Ages, the dialectical method had defined grammar education. At school pupils were drilled in a complex system of grammatical rules. The most widespread late medieval textbook *Doctrinale*, originally composed by Alexander de Villa Dei around 1200, theorized on linguistic subtleties. The handbook confronted the student with an intricate web of morphological and syntactical rules, formulated in verse in order to facilitate memorisation. However, the rigorous metrical form generated contrived, distorted expositions that could only be grasped by more advanced students, with the help of explanatory remarks. The happy few that succeeded in taking the theoretical hurdle still faced the hazardous task of applying the artificial formulas in practice and turning them into fluent speech. Following the lead of Italian humanist teachers, Murmellius considered the bulky medieval grammar *Doctrinale* to be inexpedient for young children.²² In contrast to the deductive approach of the *Doctrinale*, he advocated an inductive method. Through an intimate acquaintance with ancient literature, pupils would pick up and learn to apply the language of the classical authors in practice:

Bonus praeceptor et dignus, qui pueris docendis praeficiatur, sit singulari virtute et doctrina praeditus, cum a sermonis, tum maxime a morum barbarie alienus ... Caveat imprimis, ne, ut plerique faciunt, supervacaneis rudimentorum grammatices praeceptis et diffusis variisque plurimorum vocabulorum circa Alexandri Galli versus interpretationibus discipulos detineat, qui multo commodius longeque maiori studiorum gratia regulis grammaticis breviter transmissis in Bucolico Vergilii carmine vel comoedia aliqua Plauti seu Terentii vel in epistolis dialogisve M. Tulli et verborum significatus ediscere et verae sinceraeque Latinitati assuescere possent.²³

'A good teacher, worthy of an appointment to teach the youth, should be endowed with singular virtue and knowledge, and refrain from barbarisms of speech and especially of moral conduct. ... He should in particular take heed not to delay his pupils, as most teachers do, with unnecessary rules for the elementary grammar and the diffuse and divergent interpretations of many words around the verses of the Frenchman Alexander, whereas they could much more easily and with much more delight in their studies learn the meaning of words and get acquainted with real and pure Latin by reading an eclogue of Vergil or a comedy of Plautus or Terence or the epistles or dialogues of Cicero.'

Murmellius not only advocated less grammar and more literature furthering the Latin eloquence and morals of his pupils in treatises and handbooks. He also enabled the necessary curricular reform, by publishing short grammar summaries and editing a range of classical, early Christian and humanist texts.

When in 1512 a young Joannes Bugenhagen wrote a letter from Treptow filled with words of admiration to his fellow schoolteacher in Westphalia, he showed the highest regard for the actual school practice of Murmellius, based upon the progress both his under-teacher and his brother had made while attending classes in Münster. He also explicitly expressed his esteem for the conciseness and quality of Murmellius's manuals and annotated text editions:

Detestatus posthac longas quas dicunt continuationes, quas facimus et male quidem in explanandis autoribus, in eam tandem veni sentientiam, nihil esse abs te scriptum, vel interpretatum, quod non summopere amplectar, nihil praeceptum persuasumve, quod non sequar aut vel sequendum alios hortando praedicem.²⁴

'Ever since [I became acquainted with your textbooks and school editions] I detest those long sequences of words that we use, and wrongly too, when explaining authors, and have finally come to see that you have written or explained nothing that I cannot wholeheartedly embrace, and prescribed and advised nothing that I don't follow or urge others to follow.'

Three years later Bugenhagen took it upon himself to prepare an edition of Murmellius's revolutionary concise grammar summary *De latina constructione viginti quinque praecepta* ('The Construction of Latin in 25 Rules'), treating in a nutshell such basic rules as congruence, the cases, and specific Latin constructions like *accusativus cum infinitivo*, *supinum* and *ablativus absolutus*.²⁵ In the dedicatory letters to a prior, town secretary and headmaster, Bugenhagen sells the content as 'common property, compiled in an uncommon fashion'.²⁶ In the form of a dialogue between the original author and the editor, the title page not only advocates the merit of the booklet, but Murmellius's groundwork as a schoolteacher in general:

Murmellius: Cur mea das aliis? Bugenhagen: Non ut mea sed tua doctis Dedico: quo inter nos nomen habere queas.

Murmellius: Infima cur doctis? Bugenhagen: Ut tutent, infima nec sunt Quis sine maiora frustra adit ipse puer.²⁷

'Murmellius: "Why do you give my rules to others?" Bugenhagen: "Not as mine but as yours I dedicate them to learned men, so that you can make your name among us."

Murmellius: "Why do you give base rules to learned men?" Bugenhagen: "So they can protect them, and they are not base, because without them a boy proceeds to greater things to no avail.""

2.2 Hard-won change from the bottom up

A discussion of the lengths a northern school reformer like Murmellius had to go to attain his goal is not in keeping with a mere 'natural triumph of virtue over vice.' As difficult as a teacher's life in general must have been in those days, setting oneself up as a revolutionary humanist pioneer does not appear to have been the line of least resistance. On top of that, a happy outcome was far from predictable, especially for the infantry in the line of fire.

Like many of his colleagues, Murmellius embarked on a living as a Latin school teacher right after graduating from the academic Artes faculty, since he could not rely on the necessary means or family ties to purchase alternative options. From a commoner background, Murmellius had entered the University of Cologne in 1496 as *pauper* living at the typical poor man's college Laurentiana. As soon as he had become a master of arts in 1500, the force of circumstances made him switch over to the cathedral school in Münster, to become a deputy-headmaster at the age of nineteen:

Sed fortuna novercante compulsus sum non multo post alios docere, dum ab aliis mallem discere, et coactus profiteri artem grammaticam, dum magis cuperem audire dilucidam et synceram sacrorum voluminum explicationem.³¹

Fortune turned against me, and not long afterwards I was forced to give lessons to others, while I had rather taken lessons from others, and I was compelled to teach grammar, while I longed to attend lectures on the clear and accurate interpretation of the Holy Scriptures.

The pedagogue Murmellius would time and again urge his pupils to proceed, if possible, to the higher Faculty of Theology, the ideal final destination of any study career, which had remained out of his own reach. For a social climber like Murmellius, the Latin school turned out to be the starting point as well as the finish line of his social mobility.

Correspondingly, teaching was not held in very high regard. The northern humanist pioneer Rudolph Agricola, who did have the means for an extended college life not only at the Universities of Erfurt, Cologne, and Leuven, but all the way to the academies of Pavia and Ferrara, acknowledged in letters that he was not the sort of man to take on the arduous tasks of a schoolmaster. He had declined a lucrative offer from the city of Antwerp: 'I would have been head of a grammar school, rather a lowly position in itself, but also one which would have greatly hampered my studies.'32 'So to school with me? Where would I get the time for studying, where the leisure, where the peace and quiet to invent or create anything? Where one or two hours (...) to spend on explaining some author, when most of the time is needed for dealing with the boys, which so utterly upsets the master's patience that he needs the rest of his time to recover and regain his sanity rather than studying.'33 Considering the average school timetable and the class size, Agricola's rejection has good grounds. Seven days a week, from 6 a.m. until 5 p.m., the average teacher found himself at the head of a class that could amount to a hundred pupils.34 Shortly after the invention of the printing press, books and paper were precious, so the learning process for the most part was conducted out loud, causing a true bustle in the classroom. Apart from the rod and cane a teacher had to rely on advanced pupils to instruct their classmates and on occasion snitch on them. Agricola's reservations about the combination of school and study seem to find support in Murmellius's prefatory statements - relevant applications of a commonplace excuse - that he has composed his writings only very hastily in his scarce spare time as a schoolteacher.

While Agricola kept to a more academic career, he nonetheless instigated the dearly won reform in the Latin schools. In terms of the genealogy construed by

Erasmus in his Adagia, Murmellius could be considered another grandson of Agricola, with Alexander Hegius being his father.35 Agricola imported the studia humanitatis in his 'barbaric' native country, where he found a willing pupil in his friend Alexander Hegius, headmaster of the Latin school in Deventer.³⁶ As a result, Hegius's school became an early stronghold of humanism where Murmellius, Erasmus and a whole generation of humanist reformers-to-be were educated. Hegius introduced several precursory humanist changes in the classroom, presenting his pupils with ancient literature while at the same time clinging to the Doctrinale, albeit in a modified version, leaving it up to the next generation to proceed on the course laid out. Murmellius, even though necessity had called him to the classroom in the first place, took on the challenge far from half-heartedly. Once a teacher himself, he cultivated some specific educational notions his own former teacher had employed: the introduction of elementary lessons in ancient Greek, the auxiliary use of the vernacular in Latin textbooks for beginners and, most strikingly, the habit to have pupils compile their own 'diaries' of quotations and exercises, a rudimentary version of the humanist common place books.³⁷ Above all, Murmellius recognized in Hegius – legendary for his devotion to both his pupils and (at night) his scholarly work, and for his modesty and charitable deeds - the textbook example of the ideal humanist teacher, showing in person the correspondence between acquired learning and sound morality.

Murmellius's first teaching job confronted him with harsh reality, serving as deputy-headmaster under a principal who in his view failed to meet the double standard of erudition and decency. On the bright side, the young university graduate was taken in as a protégé by the Münster provost Rudolf van Langen, who had been in close contact with both Hegius and Agricola through correspondence and study meetings in the so-called Academy of Adwert, an abbey near Groningen. Van Langen had put forward the ambitious idea for a humanist reform of the cathedral school, following the example Hegius had set in Deventer. Timann Kemener, another Deventer alumnus of an allegedly more authoritative age and nature than Murmellius, acquired the position of headmaster. Kemener's textbooks show that he indeed had the ambition to become a leading school reformer, but was held back in practice by a tendency to conform to the traditional demands of a solid manual. His substantial compendia summarizing all available material on a subject served the purpose of reference books, rather than teaching methods for children. Soon he was outshone by his deputy, who turned out to be a more radical and charismatic reformer. Besides his textbooks, Murmellius's poetic Elegiae morales (1507), treating the humanist theme of human dignity, established a firm name for Murmellius in humanist circles.38

In the writings of Murmellius, a growing resentment can be traced towards unspecified writers of compendia obstructing the progress of schoolchildren; they

could make better use of their time editing ancient literature. Towards 1508 the alienation between the two humanist reformers culminated to the point that Murmellius, for the time being, had to retreat from the cathedral school and settle for the headmastership of the less prominent parish school of St. Ludgeri in Münster.

Thereafter, Murmellius made his grudges against Kemener manifest in print without reservations: 'He believes he has published 'time-savers' (compendia), while in fact they are 'time-spenders' (dispendia).'39 Murmellius's open sneers at the avaricious would-be scholar – in his eyes – show that the conflict did not only revolve around the content of the curriculum, but also concerned status and money. The episode reveals the vulnerable status of an under-teacher at the time. His position and earnings were under the control of the school head, who received a guaranteed basic income from the municipality, which was to be supplemented with tuition fees from the students. Given this underdog position and the less than reverential remarks about Kemener, Murmellius's comeback at the chapter school in 1512 as deputy under the very same headmaster can only be explained as revealing evidence of both the continued support of Van Langen and the reputation Murmellius had by now earned as a pedagogue and publicist.

The come-back results in an innovation representing a milestone within the history of education, while at the same time strikingly underlining the dependent relationship of an under-teacher. Restored to his former position, Murmellius played a significant part in bringing about the crown achievement of the humanist reform: lessons in ancient Greek. Evidently, Joannes Caesarius, private instructor of Greek in Cologne, had been made an offer by Timann Kemener to come and teach at the Münster chapter school. However, as can be gathered from two letters that Caesarius wrote to Murmellius, Kemener did not follow up on the agreement.40 Since Caesarius had already gone to great expense by ordering 300 Greek grammars from Paris, he asked Murmellius to intervene. From a second letter of Caesarius, filled with words of gratitude to Murmellius, it appears he did indeed lecture in Münster, during the fall of 1512, not only to educate the schoolboys but most of all the schoolmasters. Caesarius's stay can be labelled a landmark, for thanks to his tuition under-teacher Joannes Hagemann acquired sufficient knowledge to continue the lessons in Greek. Reputedly, the chapter school became the first humanist school in Germany to teach the second ancient language.41 However, the epoch-making Greek teacher himself received small thanks for his pains, as appears from the account he gave Murmellius. Kemener did not pay him the agreed fee, and neither did most other teachers. When Caesarius left town that very same year, he had earned hardly enough money to cover his travel expenses.

In 1513, according to Murmellius's own statement after generous offers from several other towns, the city of Alkmaar employed him as head of the town

school. All the way in the northwest of Holland, Murmellius freely enjoyed the privileges of a headmaster. In his programmatic pedagogic letter, containing the self-conscious statement quoted in the introductory paragraph, we find him ambitiously outlining a humanist school programme, recommending literature and textbooks.⁴² On the other hand, the school regulations in the same letter show us a glimpse of the daily trials and tribulations that came with the position. A headmaster was at all times and places accountable for the conduct of his pupils. Not only are students admonished to fear God, obey their parents and teachers, show priests, civil servants and teachers due respect, and be kind to their landlords, housemates and fellow students. They are also told not to use violence, touch other people's property, sleep outside their lodgings or wander the streets at night. In no uncertain terms the adolescent boys are told to keep clear of brothels, bars, women, weapons, gambling and alcohol abuse. Nonetheless, the headmaster stayed productive in print, and after many years of preparation finally issued his philological masterpiece: an edition and commentary of Boethius's De consolatione philosophiae (1514), incorporating a transcript of enarrationes autographas (handwritten annotations) of Agricola.43

During the four years of Murmellius's headmastership, not merely the school but the whole town of Alkmaar thrived: sources add up to a number of ca. 900 students in a town which at the time may have counted some 4200 inhabitants. In 1515, the town council and rector were so delighted with their settlement that Murmellius's contract was renewed for nine more years. However, before too long both cultural life in general and a schoolmaster's position proved feeble. In 1517, a band of soldiers from the south conquered and plundered the town. Robbed of his belongings, Murmellius fled the town and its region. Heading eastward, the established pedagogue was forced to take on a job as a subordinate teacher once again, under headmaster Gerardus Listrius in Zwolle. Although Listrius had already published his commentary on Erasmus's Moriae encomium, a testimony of his humanist learning, the Doctrinale was still in use at his school - to the great indignation of Murmellius. For the second time Murmellius became entangled in a fierce controversy with his headmaster. After just a few months, Murmellius left Zwolle to become a teacher in Deventer, at the school where he spent his adolescent years. Only two weeks after his arrival in Deventer, and following his publication of the sharp Epigrammata paraenetica questioning Listrius's humanist learning and moral standard, Murmellius suddenly fell ill. The Epicedion by fellow humanist Hermannus Buschius informs us that not only the learned world was left destitute, but also a wife and infant child.44

The funeral poem by Buschius ends on a positive note: Murmellius's life may have been taken away, his humanist ideals will live on ever so vigorously. In fact, Murmellius's schoolbooks were to be used by children long after his lifetime. Many of his pupils grew up to be schoolteachers themselves or otherwise advocates of humanism. Today, the classical and humanistic texts he edited and the handbooks, pedagogical treatises and poems he composed provide an exceptional inside-look into the rather dark beginnings of humanist education in the Low Countries. Not only the lack of source material or the singular excellence of Erasmus has left the northern Latin schools lingering in the dark. Vision was clouded for a long time, since the initiation of the humanist reform at the Deventer school was mistakenly attributed to the Brethren of the Common Life. 45 Later, the attention paid to academic training may have blocked the view towards pre-university education.46 However, Murmellius's achievements are a continuing reminder of the essential contribution of the people in the field. Before humanist education gained a foothold at the universities, the reform at the Latin schools was already well under way. If dedicated schoolmasters like Murmellius had not laboured to win over the next generation, the studia humanitatis would never have gained such extensive and lasting territory. In sum, to quote the evocative words of Willmann: 'The humanists had to delve the source from the rock, and then laborious schoolmen had to dig rivulets for it'.47

2.3 Humanism versus scholasticism?

Striving for their ideals, humanist reformers met with opposition on their way. Polemics rose that, as in the case of Murmellius and Kemener, could escalate into full-scale affairs through a combination of factors - including more material matters such as status and money. As a consequence, the humanist reform activities brought about a polarisation and splits that may have been unwanted at the outset, or downright inconceivable. Reviewing the case of a pioneer like Murmellius, it becomes clear that the differentiation between scholastics and humanists at the time was not as black-and-white as hindsight may suggest. Apparently, during Murmellius's college years in Cologne, the tensions between humanists and scholastics had not yet surfaced. Only gradually, after the turn of the sixteenth century, did the University of Cologne become the focal point of a fierce struggle that would go down in history as the battle of the humanists versus the scholastic viri obscuri ('obscure men'). Similarly, the split between pre-university education and the academic curriculum seems to have surfaced only in due time. Whereas the humanist reform in the northern schools would expand rapidly after 1500, humanism would only step by step gain a foothold at the universities. Instead of radically turning around the traditional academic study programme, the studia humanitatis had to find their way within a tightly structured scholastic curriculum. 48

In this respect we need to bear in mind that, unlike the term *studia humanitatis*, the designation humanist is an anachronism,⁴⁹ stressing discontinuity in

hindsight where continuity played its part as well. Whereas we might be inclined to speak of the humanist reform in terms of a transition from the traditional artes liberales to the Renaissance studia humanitatis, 50 Murmellius and his humanist colleagues used related terms almost synonymously: referring to their field of activity, they spoke of philosophia (philosophy), liberales artes (liberal arts), bonae artes (good arts 51) or humanae artes (humane arts). 52 Still, a difference in overtone surfaces in a work like Murmellius's Aurea bonarum artium praeludia ('Prelude to the good arts', 1504). In a nutshell the booklet treats the different artes disciplines belonging to the collective called philosophia, but it does so humaniori stylo ('in a more humane style'): the booklet is meant to prevent students from withdrawing from the study of philosophy altogether because of the perceived barbaric language in the traditional handbooks.

The terminology further indicates that to a Latin schoolteacher like Murmellius – a deputy headmaster teaching only the most advanced pupils heading for university⁵³ – the distance between his own field of activity and the academic arts study might have appeared relatively small. After all, in his schola triviali the three liberal arts of the so-called trivium (grammar, rhetoric, dialectic)⁵⁴ were taught in preparation for the liberal arts study at the propaedeutic Artes faculty, designated philosophicum gymnasium.⁵⁵ In hindsight the Artes faculty can be typified as 'a grammar school within university'.⁵⁶ As can be gathered from a textbook like Murmellius's In Aristotelis decem praedicamenta isagoge (1513), the Latin schoolteacher fully accepted his responsibility to cram his choice pupils for the academic curriculum, dominated by Aristotle. The concise introduction in the ten Κατηγορίαι (Categoriae), an indispensible component of Aristotelian logic, was incorporated in Joannes Caesarius's Dialectica (first edition 1532), a much reprinted textbook that would in time substitute the 'barbaric' Summulae logicales by Petrus Hispanus at most Catholic universities.⁵⁷

Murmellius's treatise Didascalici libri duo (1510), striking academic ground, defines the artes disciplines in more detail, confirming that the teacher-pedagogue did not set out to rigorously replace the traditional system, but to give it a crucial humanist twist. ⁵⁸ Outlining a recommendable course of study, Murmellius sticks to the traditional seven artes liberales. ⁵⁹ However, following the Italian humanist Giorgio Valla ⁶⁰ and referring to his former teacher Hegius, he significantly adds ars poetica as an eighth discipline. ⁶¹ The treatment of rhetoric might reveal the author's humanist tendencies; also dialectic – the key to the scholastic method of logical argument and formal disputation dominating university education – receives due attention. Murmellius shows little consideration for the skirmishes between the prevailing, opposing philosophical schools: via antiqua versus via moderna and Albertism (the current school of thought at his former college Laurentiana) versus Thomism. On the other hand, he does proclaim, both in the

Didascalici libri duo and elsewhere, his high regard for the scholastic thinkers Albertus Magnus (honoured as teacher in the artes humanae⁶²), Thomas Aquino and Duns Scotus.⁶³ Whereas the relatively clear expositions of these doctores theologiae fitted Murmellius's fundamental belief that Studia omnia ad Dei cultum convertenda ('All study is to be turned to the worship of God'), the subtle quibblings of their self-proclaimed followers apparently were considered irrelevant or even an impediment to this ultimate goal.⁶⁴ The paratext of the Didascalici libri duo strikingly reflects how a humanist innovation was not perceived – for the time being – as a threat to the traditional academic system: the book is dedicated to Murmellius's beloved former tutor of the Bursa Laurentiana, the theologian Arnold van Tongeren; a liminal poem by Ortwinus Gratius, another alumnus from Deventer who tried to make a living in Cologne as a teacher of rhetoric and poetic, hails Murmellius for heralding foelices anni nobis, nova tempora mundo ('blessed years for us, new times for the world').⁶⁵

Even when Gratius wrote these hopeful words, the first fissures had already appeared that would in time divide the learned world and dissolve dear relations - as both Gratius and Murmellius would experience all too well. At the time of Murmellius's clash with his less innovative headmaster Kemener in Münster, humanist acquaintances had come into conflict with the academic establishment in Cologne. In 1507, the popular Italian law professor Peter of Ravenna was disciplined by the board of theologians for criticizing a princely ban on burying criminals who had accepted God's grace just before their execution. In the fall of 1509, Hermannus Buschius was blocked in his attempts to reform the academic curriculum by replacing the Doctrinale with the Ars minor of the fourth-century Roman teacher Donatus. His plans were hindered by Ortwinus Gratius, who deemed Donatus an appropriate textbook for schoolchildren, but the Doctrinale essential teaching material for students proceeding to a higher level.66 The conflict documents a growing awareness of the far-reaching consequences a humanist educational reform would have at the academic level: 'In terms of the established pattern, humanism forced a crisis by proposing a program, which in effect challenged the primacy of dialectic and, in so doing, impugned the whole curricular organization and the teaching professions as such, and thereby threatened the intelligibility of the whole universe.'67

Both Ravenna and Buschius decided not to take their blows submissively, but to fight back in print, just like Murmellius did in his controversy with headmaster Kemener in Münster. In the case of Peter of Ravenna, a chain of polemics developed, not only between the principal antagonists, Ravenna and the theologian and inquisitor Jacob van Hoogstraten, but also involving sympathizers taking up their pen in support. ⁶⁸ In March 1508, Ortwinus Gratius established himself as Ravenna's most vocal defender by issuing an apology. A few weeks later, when the

Italian professor felt forced to leave Cologne, Murmellius wrote a farewell eulogy, praising the professor's pious, honest and true doctrines. Polemics continued up to the point that Hoogstraten published his closing statement *Protectorium* in 1511, although his opponent had already died in 1509. Apparently, the stakes were deemed high enough. The *Protectorium* contained many declarations in support of Van Hoogstraten's standpoint, including a liminal poem by Gratius who had by then evidently conformed to the academic establishment. In the conflict over Donatus between Buschius and again Gratius, Murmellius found two of his more familiar colleagues opposing each other. However, he appears to have maintained a neutral position, as for the time being relationships continued seemingly unharmed. In 1513, Buschius and Gratius would even find their names side by side in a textbook of Murmellius, to which they both contributed a liminal poem.

Later on, from his outpost in Alkmaar, Murmellius kept close track of friends and affairs more eastward as well. At the University of Cologne the notorious conflict between Joannes Reuchlin and the leading theologians broke out, mobilizing humanists far beyond the city walls.72 The jurist Reuchlin, an expert in the third classical language Hebrew, had declared himself openly against the confiscation and destruction of Hebrew writings, arguing that they had to be studied and discussed in order to convert Jews to the Christian faith. The essentially legal conflict escalated stepwise into an unprecedented polarizing polemic between humanists and academic scholastic theologians. Reporting to Murmellius from the frontline, Buschius at first showed himself hesitant to take sides.73 Subsequently, Buschius became one of Reuchlin's foremost defendants, collaborating with fellow humanists in writing the infamous Epistulae obscurorum virorum, fictitious satirical letters ridiculing the theologians as illiterate obscurants.74 Two of Murmellius's respected acquaintances fell prey to the humanist propaganda for siding with Reuchlin: his former philosophy professor Arnold van Tongeren and the 'traitor' humanist scholar Ortwinus Gratius. At the expense of these longstanding relationships, Murmellius threw in his lot openly with the humanist camp and published an eulogy of Reuchlin in 1516.75

The conflicts affecting Murmellius's closer and wider circle expose the fine line between humanists and their allegedly more 'obscure' opponents. Murmellius found himself countered in his attempts to bring about a humanist reform at the chapter school in Münster by headmaster Kemener, at the outset a Deventer alumnus just like him, committed to the same task of introducing the *studia humanitatis* in the curriculum. Likewise Gratius, another former student and even underteacher of Hegius, was essentially a fellow humanist. However, he took a more moderate, conformist stand, promoting a programme of academic reform that 'could be fitted into the scholastic curriculum without seriously challenging the values and intellectual method of scholastic learning.'76 Gratius' academic ca-

reer is symptomatic for the marginal existence granted to humanists at the faculty of arts in Cologne and other universities.⁷⁷ Humanists could teach their courses in rhetoric and poetry, but only extracurricularly. They did not qualify for the same financial compensations as the regular members of staff, but were forced to scrape together an income by private tutoring and jobs on the side, for instance at one of the printing houses.⁷⁸ There is an indication that Murmellius for a while also tried to come to some sort of rapprochement with the academy in Cologne, but had to give up disillusioned.⁷⁹

Over the course of time, the mutual policy of tolerance between the more radical humanists and the academic establishment fell apart. The realization dawned that a fundamental curricular reform constituted a fundamental threat to the traditional scholastic study programme. More than that, however, the escalating polemics around Ravenna and Reuchlin proved provoking and polarizing. Confronted with the nonconformist views of Ravenna and Reuchlin, the academic establishment of theologians felt compelled to assert its authority. Humanists, craving for scholarly and financial recognition, were not triggered at first by the essential legal and religious issues at stake. Slowly but surely, however, they adopted the conscientious stand of admired scholars as their common struggle against the scholastic academic stronghold. Using the printing press as their weapon, they launched a striking propaganda campaign against their 'obscure' opponents that would mark them for centuries to come.

Gratius, in a favourable position at the Quentell printing house, tried in vain to counter the bad press. Retorting the satire of his opponents, Gratius issued in turn fictitious Lamentationes obscurorum virorum ('Complaints of the obscure men', 1518), quoting one of Murmellius's former tributes to Van Tongeren to demonstrate the untruthfulness of the Reuchlinist allegations. 80 Before that, still during Murmellius's lifetime, Gratius had edited a second print of Murmellius's commentary on Boethius's De consolatione philosophiae (1516), removing the headmaster's positive evaluation of Reuchlin's Defensio. Murmellius struck back in his Scoparius ('Broom', 1517) with a tart judgment on the edition in question. Gratius had the last word in a posthumous reprint of the pamphlet (1518), not limiting himself to removing the unwelcome comments, but even putting a denunciation of the Epistolae obscurorum virorum in the mouth of the late author. Nonetheless, Murmellius's Scoparius clearly voices a radical humanist stand, with the intention of sweeping away all enemies of humanism, from scholastic theologians to illiterate priests. Consisting of more than a hundred quotations from ancient and humanist authors, the work is a manifestation of humanist learning as much in form as in content. In two especially noteworthy chapters, where grammatical and lexical textbooks and sound commentaries on an impressive selection of authors are listed, the practical pedagogue Murmellius speaks up one last time.81

2.4 The morality and liberality of humanist schooling

The combination of ideology and practical guidelines which comes to the fore in the *Scoparius* and many other writings of Murmellius⁸² allows us to reassess our perspective on the moral bias of humanist education. As indicated above, Grafton and Jardine accused intellectual historians of taking over ideological claims in prefatory boasts as part of a historical account of humanist achievement. Instead, zooming in on the textbooks and student notes from the school of Guarino, they argued that:

One glance at the mass of surviving classroom material from the humanist schools of the fifteenth century must make it obvious that, whatever the principles on which it was based, the literary training it provided was a far cry from this sort of generalised grooming for life. Even a charismatic teacher presenting the information which survives in student notes and teachers' lecture notes would have been hard put to convert the dense accumulation of technical material into quintessential 'humanity'. Yet if we are to evaluate the impact of the humanist teaching curriculum on fifteenth-century 'life and thought', it is to this body of taught humanism that we must turn.⁸³

Furthermore, Robert Black in his impressive study of the manuscript glosses of 324 Florentine schoolbooks concluded that 'Morals and philosophy make an occasional appearance, but invariably such comments are lost in an immense ocean of philological minutiae'. However instructive and fruitful explorations of such commentaries and annotations may be, it remains to be seen whether the margin is the place to look for morality. To assess to what extent humanist educators put their ideals into practice and evaluate their socio-cultural impact, should we not try to take the bigger picture into account as well? Grafton and Jardine, evaluating a rhetoric course of Guarino on the basis of surviving notes on the opening lecture, resort to an evocative image to voice their doubt on the teacher's effectiveness:

There is little attention to Cicero's train of thought or line of argument – this is entirely lost in the scramble for detail. ... It is as if the teacher had on his desk a beautiful, completed jigsaw puzzle – the text. Instead of calling up his students to look at the puzzle, he takes it apart, piece by piece. He holds each piece up, and explains its significance carefully and at length. The students for their part busy themselves writing down each explanation before the piece in question vanishes into the box. And the vital question

we have to ask ourselves is whether the accumulation of fragments which the student made his own could ever take shape as the whole from which they originated.⁸⁵

Rather than the limitations of the humanist teacher, this metaphor poignantly exposes the limitations of the source material in question. What results can we expect when we base our evaluation of an educational system merely on sources providing us with annotation and notes? Should we jump from such a specific point of departure to the conclusion that there was a discrepancy between the moral claims of the humanists and their classroom instruction? When we only focus on the little pieces of the puzzle, will we ever get hold of the whole from which they might have originated – a whole that in surprising coherence might open up to us an unforeseen vista?

An exploration of the bigger picture should take into account the objectives and principles behind textbooks and school editions and therefore include ideological treatises and prefaces – not in order to take the humanists at their word, 86 but simply because these writings (or paratextual parts of them) were deemed the appropriate channels to express and justify underlying ideas and aims. Grafton and Jardine are right to warn about the commercial aspect of introductory statements. 87 Prefaces as well as treatises do not constitute unproblematic sources because of their persuasive nature and the rhetorical conventions at play. However, should we therefore disqualify their substance as meaningless claims altogether? Or can we try and evaluate the ideological statements, making due allowance for their rhetorical make-up, by examining them in their literary and socio-cultural context and taking into account other relevant primary and secondary literature at hand?

A corpus as wide-ranging as the oeuvre of Murmellius, combining ideology and practicality, allows us the desired multifaceted perspective. Taking in the panorama opened up by the life and works of the teacher-pedagogue and on the look-out for manifestations of the moral claims of the humanist educators, two phenomena stand out: the choice of the literature and the authors to be read in class, and the *flores* ('flowers') or *loci communes* ('common places').

As for the relevancy of the first phenomenon, Murmellius shows in ideological writings a clear preference for morally edifying literature above grammar, resulting in practical curricular outlines and book lists. He also produced the school editions and commentaries deemed essential for materializing these ideals. Focusing on the content of the editions, we may flinch for 'the scramble for detail'. However, taking these school texts in as constituents adding up to a greater whole – a curricular shift to literature selected for its perceived moral value – their significance for the implementation of a moral agenda becomes manifest.

Furthermore, the method of 'flowers' (choice quotations) and 'common places', recurring in various shapes and in various places in Murmellius's oeuvre, was a way to materialize claims of an education for life. Like his Italian predecessor Guarino and in the direct footsteps of Hegius, Murmellius promoted to teachers and pupils alike the method of noting down memorable quotations while reading ancient literature and listing them by topic, 88 so as to have them ready at hand when composing a poetry or prose composition. 89 As Ann Moss has convincingly argued, these so-called loci communes were not only a method for reading, memorizing and composing, they were a way of structuring Renaissance thought.90 The common place-books would become a big hit in the years to come, not in the least thanks to Erasmus, successfully exploiting the heritage of Rudolf Agricola, as Grafton and Jardine have pointed out. 91 Murmellius's works indicate, however, that before Erasmus's De copia and De ratione studii or the success of his Adagia, the notebooks had already become common practice in the schools. Murmellius's most successful school edition, an anthology of Tibullus, Propertius, and Ovid, illustrates how the method of common places could be used to bring home a moral message. After Wimpheling had condemned the writings of the controversial pagan poets as too lascivious to be presented to children uncensored, Murmellius published a choice collection of the ancient love poets consisting of *flores* (choice verses) preceded by loci communes (common places) articulating a moral sense or twist.92 The booklet was reprinted as many as 130 times until the eighteenth century: by expurgating the ancient love poets, Murmellius ensured a lasting place for them in the school curriculum.

The Flores also signal that, while we scan the vista opened up by Murmellius for the ethical streak of humanist education, we should not overlook the liberality toning down the morality of the humanist schoolmaster. After all, Murmellius did not ban the controversial pagan poets altogether but made room for their verses - albeit selective and torn from their original context - in the Latin school curriculum. Another bestseller by Murmellius, his elementary Latin teaching method Pappa puerorum ('Porridge for children', 1513) fills in the picture.93 The bilingual textbook originally consisted of five parts: a concise lexicon arranged by topic, about 100 sentences schoolboys could use for daily conversation, 90 moral precepts, 43 proverbs and an overview of the conjugations. The Pappa proved an immediate success, with some 50,000 copies during the first 50 years after the first edition. The vernacular language and local references were adapted to new High German regions, and the content was expanded. The separately reprinted dictionary was greatly enlarged, translated into Polish94 and even Hungarian,95 and republished until far into the seventeenth century. A startling impression of daily school life in Murmellius's own days is provided by the colloquial sentences. Schoolboys could find out how to meet and greet, look for a place to stay,

and borrow books and money in perfect Latin. Murmellius also taught them the words to snitch on a fellow student and – against school regulations – to play about, calling each other names, and spitting and peeing upon books and shoes. So here we arrive again at the key lesson from Murmellius that we should take to heart: it is a delicate balance between theory and practice, between lofty ideals and humble reality.

A history from the artes liberales to the humanities?

Above, the authors of the innovative study From humanism to the humanities have been appraised for opening up the early modern classroom doors. At the same time, they were criticized for looking in with too short-sighted a view, limiting themselves to a preconceived topical perspective. Correspondingly, while the editors of this volume deserve due recognition for launching the initiative of a history of the humanities, similar reservations apply to the design that is suggested by the central question of the conference:

how did the humanities develop from the artes liberales, via the studia humanitatis, to the (early) modern disciplines?

In the entailed proposition, the descent of the present-day humanities is traced all the way back to the medieval and early modern disciplines in a seemingly linear evolutionary chain. If we follow this line of thought, we run the risk of ending up with too simplified a picture that does not hold up on close scrutiny, overlooking shades and focusing on contrasts where a more differentiated view would be appropriate.

As for the presumed transition from the artes liberales to the studia humanitatis, as mentioned above the studia humanitatis were promoted by Renaissance educators but not at the expense of the artes liberales. At the level of the Latin school, the so-called humanists were giving the linguistic trivium, which had been dominated by a dialectic approach to grammar in the preceding centuries, no more (but certainly also no less) than a literary turn, shifting the focus to the rhetoric form and moral content of ancient literature. Moreover, at the academic Artes faculty, where humanists struggled to obtain a firm footing, the scholastic curriculum was not taken over by the studia humanitatis, but modified at best.

As for the second transition in the proposed evolutionary chain, it is a big step for mankind from the medieval and early modern Artes curriculum to the humanities practised at today's universities. Different from the propaedeutic Artes faculty obligatory for all other academic fields of study, the humanities make up a fully grown faculty on their own, on the same level as the other faculties of the natural, formal and social sciences. A list of the branches of study nowadays belonging to the humanities faculties shows at first sight a mix of disciplines of longer and shorter pedigree: history, philosophy, religion, languages and linguistics, literature, visual arts and performing arts. However, there has been such a great shift in the content and the mutual relations of the disciplines that a closer look forces us to take a smaller step back in time. As it seems, the roots of most present-day academic humanities disciplines can be traced back to the nineteenth century - the century which witnessed at the very start the birth of both the pedagogic Neuhumanismus of Wilhelm von Humboldt cum suis and simultaneously the concept of humanism, creating in retrospect a time-honoured pedigree. In fact, the same treatise of Friedrich Emmanuel Niethammer that represents the first documented appearance of the word humanism - Humanismus as an educational system elevating man's spirit as opposed to the more practical school of Philanthropismus - also explicitly makes the genealogical link between the studia humanitatis and the Humaniora.96

On close analysis, the proposed evolutionary chain falls apart in three incongruous schemes – three histories of the humanities with a distinct point of departure and a distinct goal. In imagery reminiscent of the introductory quote: when we aim for Corinth, the overload should not be squeezed onto one unwieldy ship. Instead, three ships with separate cargoes should sail and try and make it to port safely on their own account.

First of all, when outlining a history of the humanities with the proposed title *The Making of the Humanities*, the point of departure, as follows from the observation above, should be the nineteenth century, when the traditional arts curriculum was supplemented with non-classical languages and literature, and the university was enlarged with social sciences like politics and economics and technology disciplines like chemistry and engineering.

Second, aiming at a history which goes all the way back to the *artes liberales* actually means not taking the present-day humanities as the point of departure, but instead starting from the first element in the evolutionary chain: the seven *artes liberales*, a curriculum inherited from antiquity⁹⁷ that constituted within the medieval university the programme of the propaedeutic Artes faculty, providing the entrance ticket to the higher faculties of Law, Medicine or Theology; seven arts traditionally divided in the *trivium*, with its three linguistic disciplines of grammar, rhetoric, logic, and the *quadrivium*, consisting of the four quantitative disciplines of geometry, arithmetic, music and astronomy. The result would be a history of the curriculum in Western education, developing into more than only the humanities. Since the humanities and sciences were not separated of old, the latter should be included as well.

The third possible scheme is not the history of a set of disciplines or the whole western curriculum, but of the ancient idea(l) of *humanitas*, linking linguistic competence with moral standing, 98 metamorphosing in such different shapes as the *studia humanitatis*, the *Humanismus* coined by Niethammer or even the present-day humanities.

4 Epilogue: between idealism and realism

However appealing the ideal of *humanitas* may have turned out to be throughout Western history, reality has caught up with us today to such an extent that we, humanities scholars, can no longer sustain the belief that the great literature of the past necessarily, as a matter of fact, ennobles its readers. After all, following the level-headed assessment of Stanley Fish in his New York Times blog: 'If it were true, the most generous, patient, good-hearted and honest people on earth would be the members of literature and philosophy departments, who spend every waking hour with great books and great thoughts, and as someone who's been there (for 45 years), I can tell you it just isn't so.'99 Nonetheless, the privilege of perceiving in the humanities a way to pursue personal fulfilment and happiness has drawn many of us to this field of study. On the other hand, these disciplines are certainly no better a way to get to Corinth than the sciences, and there are many other ways besides. Likewise, it is important to note that the humanities most certainly are no more dependent on establishment values than the sciences.

With the zest for *humanitas* put in perspective, are the humanities in danger of losing their right to exist — especially given demands for valorisation, reflecting ever prevailing issues of status and money? To my mind, a most clinching argument in support is to be found exactly in the profound impact such historic counterparts as the *artes liberales* and the *studia humanitatis* have left on our Western history, shaping our culture during the time that their sociocultural position seemed much more self-evident. Even when those disciplines differ from ours in their basic principles, content, and socio-cultural position, they still constitute a most valid and crucial object of study within our humanities departments. On that account, research into the history of education, not only chasing the great names but also receptive to the relevancy of seemingly historical non-persons, constitutes a lofty and urgent goal truly worth striving for.

Notes

- 1 Charles G. Nauert Jr., 'The Clash of Humanists and Scholastics: an Approach to Pre-Reformation Controversies', in Sixteenth Century Journal IV.1 (1973), 1-18.
- This article is a reworking of a lecture held as part of the First International Conference on the History of the Humanities, 23-25 October 2008 in Amsterdam, which expanded upon the results of a PhD study into the pedagogic humanism of the northern humanist school reformer Murmellius: Juliette A. Groenland, Een humanist maakt school. De onderwijsvernieuwer Joannes Murmellius (ca. 1480-1517) (dissertation, University of Amsterdam, 2006). The second volume of the dissertation, the Appendix Flores, contains edited excerpts from the Neo-Latin works of Murmellius and contemporaries, of which this paper provides a small selection.
- 3 Horace, Epistulae 1.17.36; cf. Erasmus, Adagia 301 (ASD II,1, p. 407-410): Non est cuiuslibet Corinthum appellere.
- 4 Horace, Epistulae 1.1.32.
- Joannes Murmellius, 'De ratione instituendi pueros in schola triviali epistola,' in: Giovanni Francesco Boccardo, *Pylade Brixiani grammatici versus hexametri* (Deventer: A Pafraet, 1515), D i v°; the programmatic letter outlining a humanist Latin school curriculum is included in: Groenland, *Een humanist maakt school II: Appendix Flores*, no. 6.3b. Cf. ad n. 41.
- 6 See for an outline of Murmellius's life and works and a bibliography: Juliette A. Groenland, 'Murmellius (Joannes) (1480-1517)', in Centuriae latinae II. Cent une figures humanistes de la Renaissance aux Lumières. A la mémoire de Marie-Madeleine de La Garanderie, éd. C. Nativel (Genève: Droz, 2006), 595-602.
- Even Dietrich Reichling, who blazed the trail in dedicating his dissertation and a monography to Murmellius, drawing the attention of Westphalian scholars to the humanist and his contemporaries in the late 19th century, showed appreciation for the devout poet in the first place, with his feelings for the pedagogue in his view somewhat all too liberal towards young students being ambivalent. D. Reichling, Johannes Murmellius: sein Leben und seine Werke: nebst einem ausführlichen bibliographischen Verzeichniss sämmtlicher Schriften und einer Auswahl von Gedichten (Nieuwkoop: De Graaf, 1963; reprint ed. Freiburg im Breisgau, 1880); his anthology of Murmellius's poetry: Ausgewählte Gedichte von Johannes Murmellius. Urtext und metrische Übersetzung. (Freiburg im Breisgau: Herder, 1881).
- 8 Erasmus, Epistolae 697, 838.
- Juliette A. Groenland, 'Murder among Humanists. The Death of Murmellius (1480-1517) according to Buschius,' in: Acta Conventus Neo-Latini Bonnensis. Proceedings of the Twelfth International Congress of Neo-Latin Studies (Bonn, 6-9 August 2003) (Tempe, Arizona: Arizona Center for Medieval & Renaissance Studies, 2006), 349-359.
- 10 Rens Bod, Jaap Maat and Thijs Weststeijn, 'Call for Abstracts' for *The Making of the Humanities, First International Conference on the History of the Humanities.*URL: http://www.illc.uva.nl/MakingHumanities/abstracts.html.
- Anthony Grafton and Lisa Jardine, From Humanism to the Humanities: Education and the Liberal Arts in Fifteenth- and Sixteenth-century Europe (London: Duckworth, 1986).
- The ancient term studia humanitatis (Gellius, Noctes Atticae 13,17) was used in the Renaissance to denote a study programme of five disciplines: grammar, rhetoric, moral philosophy, poetry and history. See A. Buck, 'Die 'studia humanitatis' im italienischen Humanismus,' in Humanismus im Bildungswesen des 15. und 16. Jahrhunderts, ed. W. Reinhard (Weinheim: Acta humaniora, 1984), 11-24. Cf. n. 21.

- 13 Grafton and Jardine, From Humanism to the Humanities, xii.
- 14 Ibid., xiv.
- 15 Cf. Paul Grendler, 'Schooling in Western Europe', Renaissance Quarterly 43.4 (1990), 775-787, spec. 786-787: Recent scholarship has opened the doors of Renaissance elementary and secondary schooling. But we have barely walked into the classroom. If we linger a while, if we read the textbooks and memorize the catechisms of Renaissance children, we shall learn a great deal about Renaissance men and women.
- 16 Grafton and Jardine, From Humanism to the Humanities, 44.
- 17 Ibid., 29.
- 18 See Jane Stevenson, Women Latin Poets: Language, Gender, and Authority, from Antiquity to the Eighteenth Century (Oxford-New York: Oxford University Press, 2005), 144-145.
- 19 Grafton and Jardine, From Humanism to the Humanities, 27.
- 20 Ibid., 20.
- 21 See for the link between language (Latin) and moral values, Cicero, *De officiis* 4.11-14, where two characteristics are discerned that make a human being stand out among other animals: the abilities to speak and to distinguish right from wrong. Accordingly, the *studia humanitatis* were meant to develop just these two capacities in order for a human being to reach his full potential. The communicative skills of mankind were to be developed by grammar and rhetoric, and the moral faculties by moral philosophy as well as two brands of classical literature that were deemed to teach morals by example: poetry and history.
- 22 See Dietrich Reichling, Das Doctrinale des Alexander de Villa-Dei: kritisch-exegetische Ausgabe mit Einleitung, Verzeichniss der Handschriften und Drucke nebst Registern (New York: Burt Franklin, 1974 [repr. ed. 1893]).
- 23 Murmellius, Enchiridion scholasticorum (1505) c. 16, r. 1-16, in: Alois Bömer (ed.), Ausgewählte Werke des Münsterischen Humanisten Johannes Murmellius (Münster: Regensberg, 1892-1895) II, 45-46.
- 24 Murmellius, Epistolarum moralium liber (Deventer: A. Pafraet, 1513), B ij v°.
- Originally conceived as an additional part of Murmellius's successful schoolbook Pappa puerorum, Bugenhagen's edition of 1515 (s.l.: s.n.) was simply entitled Grammatice regule. A second edition appeared in 1518 (Leipzig: Schumann). See: Joseph Frey, Die Thätigkeit Münsterischer Humanisten auf dem Gebiete der lateinischen Syntax. Beilage zu dem Jahresberichte über das Königliche Paulinische Gymnasium zu Münster i. W. für das Schuljahr 1895-96 (Münster: Aschendorff, 1896), 15-17.
- 26 ... vulgatissimas non tamen vulgari modo collegit latinitatis regulas. Ibid., 15.
- 27 Murmellius, Grammatice regule quibusdam a Joanne Bugehagenio additis cum nominum et verborum declinatione. (s.l.: s.n., 1515), in: Ibid., 16.
- 28 See n. 13.
- Regnerus R. Post, Scholen en onderwijs in Nederland gedurende de Middeleeuwen (Utrecht-Antwerpen: Spectrum, 1954), 119-121.
- 30 Rainer C. Schwinges, Deutsche Universitätsbesucher im 14. und 15. Jahrhundert. Studien zur Sozialgeschichte des Alten Reiches (Stuttgart: Steiner, 1986), 452.
- 31 Murmellius, Didascalici libri duo (Keulen: Quentell, 1510), a ii v°.
- Praefuturus enim scholis litterariis eram, quae res quum ipsa per se sordidior sit, tum studiis meis plurimum impedimenti fuisset allatura. Rudolph Agricola, Epistolae 30.4, in: Adrie H. van der Laan and Fokke Akkerman ed., Rudolph Agricola Letters, Assen 2002, 182-183.
- 33 Scholam ergo ego? Ubi tempus impartiendum studiis, ubi ocium, ubi quies ad aliquid inveniendum vel excudendum necessaria? Unde una aut due hore ... explicando autori alicui impendenda, cum precipuam temporis partem cura puerorum ad se vocet et usque adeo omnem

tollerantiam magistri conturbet, ut, quicquid temporis reliquum est, non tam studiis tribuere possis quam ut respires atque mentem resumas? Agricola, Epistolae 29.28-29, in: Ibid., 174-177.

- 34 Post, Scholen en onderwijs in Nederland, 119-138.
- 35 Erasmus, Adagia 339, in: ASD II.1, 440, l. 819-822.
- The historiographer Gerard Geldenhouwer, who went to the Deventer school, has recorded a statement by Hegius himself that he had learned at the age of forty, when he was already an established headmaster, all that he knew about the Greek and Latin language and literature from Agricola, his junior by a few years. Gerard Geldenhouwer, 'Vita Rodolphi Agricolae Frisi', in: Johannes Fichardus, Virorum qui...illustres atque memorabiles fuerunt Vitae (Frankfurt: Egenolph, 1536), 87; the statement is included in: Jan Bedaux, Hegius poeta. Het leven en de Latijnse gedichten van Alexander Hegius (dissertation, University of Leiden, 1998), 18 and 337.
- 37 See ad n. 88.
- See for an edition of the Elegiarum moralium libri quatuor (Keulen, Quentell: 1508): Bömer (ed.), Ausgewählte Werke des Murmellius (see n. 23) III. A.o. a young Ulrich von Hutten showed his appreciation for the Elegiae morales and other poetic works by Murmellius, in a laudatory poem printed in: Murmellius, Epistolae morales (Deventer: A. Pafraet, [1513]), C iiij v°- [C v] r°; the poem is included in: Groenland, Een humanist maakt school II: Appendix Flores (see n. 2), no. 4.51.
- 39 Hic compendia se dedisse credit, / Cum dispendia sint scolasticorum. Murmellius, Liber Aeglogarum ([Zwolle: P. Os de Breda or T. Peterszoon Os de Breda, ca. 1507], D iij v°.
- The two letters of Caesarius were published in: Murmellius, *Epistolarum moralium liber* (Deventer: A. Pafraet, 1513), C ij r° C iij r°; they are included in: Groenland, *Een humanist maakt school II: Appendix Flores* (see n. 2), no. 5.18 and 5.19.
- 41 Cf. Conrad Bursian, Geschichte der classischen Philologie in Deutschland von den Anfängen bis zur Gegenwart (München-Leipzig: R. Oldenbourg, 1893); Günther Lassalle ed., 1200 Jahre Paulinum in Münster 797-1997. (Münster: Aschendorff, 1997), 345.
- 42 See n. 5
- 43 Murmellius's commentary is included in: Migne, Patrologia Latina 63.869A-1074A. See Lodi W. Nauta, 'A humanist reading of Boethius' Consolatio Philosophiae: the commentary by Murmellius and Agricola (1514)', in: L.W. Nauta and A.J. Vanderjagt ed., Between Demonstration and Imagination. Essays in the History of Science and Philosophy Presented to John D. North (Leiden-Boston-Köln: Brill, 1999), 313-338.
- 44 Hermannus Buschius Pasiphilus, In acerbum magistri Joannis Murmellii Ruremundensis obitum funebre lessum sive Epicedion. (Köln: E. Cervicornus, 1517; Alkmaar: J. Daventriensis, 1518; Köln: H. Quentell, 1518; Utrecht: H. Borculous, 1540 [revised edition, without introductory letter]); the Epicedion is at length discussed in: Groenland, 'Murder among humanists' (see n. 9).
- See for the discussion R.R. Post, The Modern Devotion: confrontation with Reformation and Humanism (Leiden: Brill, 1968). Cf. for the persistent misapprehension: 'Like so many of the early northern humanists (including Erasmus), Murmellius was a product of the intellectual and spiritual environment created by the schools of the Brethren of the Common Life.' Ann Moss, Printed Commonplace-Books and the Structuring of Renaissance Thought (Oxford: Clarendon Press, 1996), 87 n. 6.
- 46 'What this deflation of claims for the "Devotio Moderna" means is that we are left with the universities as the main centers through which humanism was diffused among the educated classes of pre-Reformation Germany. Despite their reluctance to change their

- official courses of instruction, their traditional textbooks, and their requirements for degrees, the universities were the most important places where young Germans acquired humanistic interests and learning. C.G. Nauert Jr., 'The Humanist Challenge to Medieval Culture,' *Daphnis. Zeitschrift für Mittlere Deutsche Literatur* 15.1 (1986), 277-306, spec. 285.
- 'Die Humanisten mußten die Quelle aus dem Felsen schlagen, die Schulmänner ihr mühsam die Rinnsale graben, in Otto Willmann, Kleine pädagogische Schriften (Paderborn: Ferdinand Schöningh, 1959), 229.
- 48 C.G. Nauert Jr., 'The Humanist Challenge to Medieval Culture', Daphnis. Zeitschrift für Mittlere Deutsche Literatur 15.1 (1986), 277-306, spec. 304-306; James H. Overfield, Humanism and Scholasticism in Late Medieval Germany (Princeton, New Jersey: Princeton University Press, 1984), 322-324; Arno Seifert, 'Der Humanismus an den Artistenfakultäten des katholischen Deutschland,' in: W. Reinhard (ed.), Humanismus im Bildungswesen des 15. und 16. Jahrhunderts (Weinheim: Acta humaniora, 1984), 135-154, spec. 144.
- Augusto Campana, 'The Origin of the Word "Humanist", Journal of the Warburg and Courtauld Institutes 9 (1946), 60-73.
- 50 See paragraph 3.
- Artes bonae were the arts beyond suspicion as opposed to artes suspectae such as alchemy, banned by the church. S. Clasen O.F.M., 'Der Studiengang an der Kölner Artistenfakultät,' in: J. Koch ed., Artes liberales. Von der antiken Bildung zur Wissenschaft des Mittelalters. (Leiden-Köln: Brill, 1959), 124-136, spec. 124.
- 52 For the relation between *philosophia* and the *artes* cf. Murmellius's schematic survey *De philosophiae diffinitionibus et divisionibus tabulae* ('Diagrams on the Definitions and Divisions of Philosophy', Deventer: A. Pafraet, 1515), based on ancient as well as humanist sources, where the liberal arts are all presented as branches of philosophy.
- An average Latin school ranged from the preliminary classes *nulla* or *octava* (grade zero or eight) to the *tertia* (third grade), whence students could move on to university. On top of that, more successful Latin schools were enlarged with a *secunda* and sometimes even a *prima* (second and first grade), where a select group of students were trained at university level. Both in Münster and in Alkmaar, Murmellius appears to have been teaching second-graders.
- 54 See n. 59.
- 55 Significantly, the preserved book list of a freshman at the bursa *Laurentiana* in Cologne from 1509 shows, except for the *Doctrinale*, books that were read in Murmellius's classes as well: *Disticha Catonis, Donatus*, letters by Filelfo, Vergilius's *Bucolica* and Boethius's *De consolatione philosophiae*. E. Meuthen, *Die alte Universität* (Köln-Wien: Böhlau, 1988), 230.
- 56 R.C. Schwinges and B. Studer ed., Artisten und Philosophen: Wissenschafts- und Wirkungsgeschichte einer Fakultät vom 13. bis zum 19. Jahrhundert (Basel: Schwabe, 1999), 149; in the course of the 16th century the bursae in Cologne would actually develop into independent gymnasia: Meuthen, Die alte Universität, 258-262.
- 57 At reformatory universities, Melanchthon's *Compendiaria dialectices ratio* (1520) would become the standard textbook. Seifert, 'Der Humanismus an den Artistenfakultäten des katholischen Deutschland' (see n. 49), 143.
- James V. Mehl, 'Johannes Murmellius's Approach to the artes liberales and Advice to Students in his Didascalici libri duo (1510),' in: R. Schnur (ed.), Acta Conventus Neo-Latini Hafniensis. Proceedings of the eighth International congress of Neo-Latin studies, Copenhagen 12 August to 17 August 1991 (Binghamton, New York: Medieval & Renaissance Texts &

- Studies), 641-650, cf. spec. 642 where the Didascalici libri duo are said to reflect the tensions which existed in a humanist reformer who still had some appreciation for the scholastic curriculum.
- The late-antique encyclopaedia *De nuptiis philologiae et Mercurii* by Martianus Capella (active ca. 410-429) had defined the seven liberal arts: see ad n. 97. Murmellius discusses other arts that could be called 'liberal' as well, e.g. metaphysics, physics and ethics. Murmellius, *Didascalici libri duo* (Cologne: Quentell, 1510), l.1 c.5, a iij v°. Cf. for the concept artes liberales: Aristotle, *Politica* 1337b, with 'liberal' meaning 'proper to a free man' as opposed to a slave.
- Georgius Valla, De expetendis en fugiendis rebus opus (Venice: Aldus Manutius, 1501), l. XXXVIII.
- Murmellius, Didascalici libri duo (Cologne: Quentell, 1510), l. I, c. 17, b iv v°. See on Murmellius and poetry: Groenland, 'Epigrams in the humanist classroom. The pointed poems and poetics of the Latin school teacher Joannes Murmellius (c. 1480-1517)', in: S. de Beer, K. Enenkel, D. Rijser eds., The Neo-Latin Epigram: Towards the Definition of a Genre (Leiden: Brill 2009), 247-265.
- 62 Murmellius, Elegiae morales (1508) 2.14, v. 27-116, in: Bömer (ed.), Ausgewählte Werke des Murmellius (see n. 23) III, 64-66.
- Murmellius, Didascalici libri duo (Cologne: Quentell, 1510), l.1 c.10, [a vi] v°. Cf. Murmellius, Enchiridion scholasticorum (1505) c. 22, r. 65-80, in: Bömer (ed.), Ausgewählte Werke des Murmellius II, 59.
- 64 Cf. John F. d'Amico, 'Humanism and Pre-Reformation Theology,' in: A. Rabil Jr., Renaissance humanism: Foundations, Forms, and Legacy Vol.3. Humanism and the Disciplines (Philadelphia: University of Pennsylvania Press, 1991), 349-379, spec. 365: 'Aquinas was for the humanist theologians a guide who could be depended on for his theological orthodoxy but also one who would not lead them into complicated and ultimately, in their eyes, useless theological and metaphysical sidetracks.'
- 65 Murmellius, Didascalici libri duo. (Cologne: Quentell, 1510), [a i] r°.
- 66 Hermann J. Liessem, Hermann van dem Busche. Sein Leben und seine Schriften (Nieuwkoop, B. de Graaf 1965 [repr. 1884-1908]), 43-57; J.V. Mehl, 'The 1509 Dispute over Donatus. Humanist Editor as Controversialist,' Publishing History 16 (1984), 7-19.
- 67 Walter Ong, Ramus: Method and Decay of Dialogue (Cambridge, Massachusetts: Harvard University Press, 1958), 166.
- 68 C.G. Nauert Jr., 'Peter of Ravenna and the 'obscure men' of Cologne, a case of pre-reformation controversy,' in: A. Molho and J.A. Tedeschi (ed.), Renaissance Studies in Honor of Hans Baron (Dekalb, Illinois: Northern Illinois University Press, 1971).
- 69 Murmellius, 'In preconium Petri Ravennatis utriusque iuris professione et mirabili memoria clarissimi sylva', in: id.., Epigrammatum Liber (Cologne: Quentell, 1508), a iv v°- a vi r°; the poem is reprinted, including 25 verses that had been omitted in the first edition, in Murmellius' Panegyricon in praeconium Erici, episcopi Monasteriensis (Cologne: Quentell, 1509), b iij v°- b vi r°.
- 70 The friendship with Buschius remained as strong as ever. Gratius wrote liminal poems for three textbooks of Murmellius that were published by the Quentell press in 1510: Ciceronis epistolae quaedam selectae, Juvenalis tres satirae and Didascalici libri duo.
- 71 Murmellius, Pappa puerorum (Keulen: Quentell, 1513), in: Bömer (ed.), Ausgewählte Werke des Murmellius (see n. 23) IV, 3.
- 72 See for a discussion of the Reuchlin affair: Overfield, Humanism and Scholasticism in Late Medieval Germany (see n. 48), 247-297; H. Peterse, Jacobus Hoogstraeten gegen Johannes

- Reuchlin. Ein Beitrag zur Geschichte des Antijudaismus im 16. Jahrhundert (Mainz: Philipp von Zabern, 1995).
- 73 Murmellius, Epistolae morales (Deventer, A. Pafraet, [1513]), [B iv] ro. Cf. also a letter from Joannes Caesarius included in the same collection, C iij ro. In answer to a request from Murmellius for information concerning Reuchlin, Caesarius writes that he is waiting for particulars from Neurenberg probably referring to Willibald Pirckheimer, another humanist who only in second instance chose Reuchlin's side. Both the letters of Buschius and Caesarius were written around the turn of the year 1512-1513.
- 74 See for an edition: A. Bömer ed., Epistolae obscurorum virorum (Heidelberg: Richard Weissbach, 1924); an English translation: Ulrich von Hutten et al., On the eve of the Reformation: 'Letters of obscure men', Francis G.T. Stokes transl. (New York-Evanston-London: Harper & Row 1964); for Buschius's collaboration, see: 'Hermann von dem Busches Anteil an den Epistolae obscurorum virorum,' in: A. Bömer, F. Cramer, W. Dersch et.al., Aus Vergangenheit und Gegenwart: Festgabe Friedrich Philippi zum 14. Juli 1923 gewidmet von seinen Schülern, Amtsgenossen und Freunden (Münster: Regensberg, 1923), 1-14.
- The liminal poem by Murmellius was published in: Joannes Reuchlin, Sergius (Münster: D. Tzwyvel, 1516, [B v] ro-vo. Before, Murmellius had already written a liminal poem entitled 'De comoediarum utilitate' for a reprint of Reuchlin's comedy Scenica progymnasmata (Bornemann, Münster, 1509), and rated the scholar among his favourite philosophers and theologians in a letter to Bugenhagen from 1512. Murmellius, Epistolae morales (Deventer: A. Pafraet, [1513]), [B iv] ro. When the affair had come to a head, Murmellius would more than once express his approval of Reuchlin's exposure of theologistae ('pseudo-theologians'): Murmellius, De consolatione philosophiae (Deventer: A. Pafraet, [1514]), fol. XCI vo; id., Scoparius in barbariei propugnatores et osores humanitatis (Deventer: A. Pafraet, 1517), c. 107, 111, 112, in: Bömer (ed.), Ausgewählte Werke des Murmellius (see n. 23) V, 93-94; 96.
- 76 J.V. Mehl, 'Ortwin Gratius' Orationes Quodlibeticae: humanist apology in scholastic form,' in: The Journal of Medieval and Renaissance Studies 11.1, 57-69, spec. 68.
- Taetitia Boehm, 'Humanistische Bildungsbewegung und mittelalterliche Universitätsverfassung,' in: J. IJsewijn and J. Paquet (ed.), *The Universities in the Late Middle Ages* (Leuven, Leuven University Press, 1978), 315-346, spec. 330-332 refers to the universities in Vienna, Leuven, Paris, Ingolstadt and Wittenberg.
- 78 J.V. Mehl, 'Humanism in the Home Town of the 'Obscure Men,' in: id. (ed.), *Humanismus in Köln / Humanism in Cologne* (Köln-Wien: Böhlau 1991), 1-38, spec. 12-13.
- In a letter to Murmellius of 16 August [1512], Buschius speaks about a short visit his friend has paid to Cologne, nova spe aut fiducia corrigendi barbariem loci ('filled with new hope and faith to amend the barbarism of the place'). Apparently, the result fell short of expectations. In guarded terms Buschius hints at a frustrated attempt of Murmellius to show his benevolence: Neque si me audias in animum unquam induxeris te apud cygnos et ululas eodem loco futurum, licet post dicessum tuum cum iam securus erat iniuriae simularit (ut dicitur) poenitentiam tetrarcha ulularum. Satis tenes quid innuam. ('If you would have listened to me, you would never have thought of staying in one place with swans and owls, although after you left, when he did not have to fear damage anymore, the prince of owls is said to have simulated regret. You know well enough what I'm hinting at.') Murmellius, Epistolarum moralium liber (Deventer: A. Pafraet, 1513), C i r° v°. In this light, the Didascalici libri duo (see above) could be interpreted as an attempt to strengthen the ties with his alma mater. Furthermore Murmellius's edition of Alcimi Aviti libri VI recogniti et emendati (Cologne: M. de Werdena, 1509) suggests some kind of relationship between the

- schoolteacher and the university. At the end ($[Q\ 5]\ v^{\circ}$ $[Q\ 6]\ r^{\circ}$) a letter is printed written by Christiane theologie professores, impressing on the reader that Christian and not pagan poets should dominate the curriculum: Hi pueris absque veneno tradi probantur, hi iuventutem non inficiunt ('They are fit to be delivered to boys without poison, they don't corrupt the youth'). However, if and to what extent the editor of Avitus's biblical epic was involved in the proclamation remains in the dark. Cf. ad n. 92.
- 80 Murmellius, Elegiae Morales (1508) 2.14, v. 117-130, in: Bömer (ed.), Ausgewählte Werke des Murmellius (see n. 23) III, 66-67.
- 81 See for both the 1517 and 1518 edition of Murmellius's Scoparius in barbariei propugnatores et osores humanitatis: Bömer (ed.), Ausgewählte Werke des Murmellius V, spec. c. 57 and 62 for the book lists; see on the Scoparius: J.V. Mehl, 'Johannes Murmellius' Scoparius (1517-18): Another German Defense of Humanistic Study,' in: A. Dalzell, C. Fantazzi en R.J. Schoeck (ed.), Acta Conventus Neolatini Torontonensis. Proceedings of the Seventh International Congress of Neo-Latin Studies, Toronto, 8 Aug. 13 Aug. 1988 (Binghamton, New York: Center for Medieval and Early Renaissance Studies, 1991), 471-480.
- e.g. in Murmellius's programmatic letter *De ratione instituendi pueros in schola triviali epis*tola ('How to teach boys in the Latin school', 1515). See n. 5 and ad n. 42.
- 83 Grafton and Jardine, From Humanism to the Humanities, 3.
- 84 Robert Black, Humanism and Education in Medieval and Renaissance Italy (Cambridge: Cambridge University Press, 2001), 275-330, spec. 275.
- 85 Grafton and Jardine, From Humanism to the Humanities, 20.
- 86 Ibid., 3.
- 87 Ibid., 3; cf. Gérard Genette, Paratexts: Thresholds of Interpretation (Cambridge: Cambridge University Press, 1997), 197.
- Murmellius, Enchiridion scholasticorum XX, l. 56-70, in: Bömer (ed.), Ausgewählte Werke des Murmellius II (see n. 23), 55.; cf. id., 'De ratione instituendi pueros in schola triviali epistola' (see n. 5), D iii r°- D iii v°.
- 89 Murmellius, In epistolam divi Hieronymi ad Niciam commentarioli duo (Cologne: Quentell, 1515), [A v] r°; id., Protrepticus poetantium (Deventer: A. Pafraet, 1517), A ij v°.
- Moss, Printed Commonplace-Books (see n. 45); cf. Rebecca W. Bushnell, A culture of teaching. Early modern humanism in theory and practice. (Ithaca-London: Cornell University Press, 1996), 117-143.
- 91 Grafton and Jardine, From Humanism to the Humanities, 136.
- Murmellius, Ex elegiacis Tibulli, Propertii ac Ovidii carminibus selecti versus magis memorabiles atque puerorum institutioni aptiores (Deventer: R. Pafraet, 1503); reprinted as Varia Tibulii, Propertii et Nasonis Ouidii poetarum carmina, and Tibulli, Propertii et Ovidii flores, and Loci communes sententiosorum versuum ex elegiis Tibulli, Propertii, et Ovidii. The words by Jakob Wimpheling, printed at the beginning of Murmelius's edition ([A i] v°), are derived from the Isidoneus germanicus (1497).
- 93 Murmellius, Pappa puerorum (Cologne: Quentell, 1513), in: Bömer (ed.), Ausgewählte Werke des Murmellius IV (see n. 23).
- 94 See for a reprint of the Polish edition Krakau, 1528: Dictionarius Ioannis Murmellii variarum rerum; [Francisci Mymeri] dictionarium trium linguarum. (Krakau: Biblioteka Tradycji Literackich, 1997), with an introduction by W. Gruszczynski.
- See for an edition of the Hungarian wordlist Krakau, 1533: I. Szamota, 'Lexicon Joannis Murmelii, seu latina rerum vocabula, in suas digesta classes, cum Germanica et Hungarica interpretatione. A Murmelius-féle latin-magyar szójegyzék 1533-ból,' in: E´rtekezések a nyelv- és széptudományi osztály köréböl, 16 (1897), 311-360.

- 96 Friedrich I. Niethammer, Der Streit des Philanthropinismus und Humanismus in der Theorie des Erziehungsunterrichts unserer Zeit (Jena: Frommann, 1808), 8.
- 97 See n. 59.
- 98 Cf. n. 21.
- 99 Stanley Fish, 'Will the Humanities Save Us?', in: *Think Again Blog*, posted January 6, 2008, URL: http://fish.blogs.nytimes.com/2008/01/06/will-the-humanities-save-us.

Origins and Principles The History of Poetry in Early Modern Literary Criticism

Cesc Esteve

In his 'Essay upon the Epic Poetry of the European Nations', which first appeared in London in 1727, Voltaire reproaches 'the greatest part of the critics [who] mistake commonly the beginning of an art, for the principles of the art itself' and complains about their tendency to believe that everything must be, by its own nature, what it was when contrived at first, Voltaire understands that, since all the inventions of art change because fancy and custom differ in time and from one nation to another, critics should find the nature and eternal rules of epic poetry in those features that have been common to the genre in different periods, peoples and literary traditions. Voltaire is probably referring to most of the authors of poetic treatises from the sixteenth century, because they share the conviction that the essential nature of poetry, as well as its purest and greatest forms, lie at its origins. Apparently, Voltaire's theoretical criteria are much more sensitive to historical and cultural change than those of the critics of whom he disapproves. However, the somewhat paradoxical fact is that this confusion between beginnings and principles ensured that early modern critics adopted historical approaches and methods for the study of literature.

Needless to say, there are significant differences between the ways that scholars of each period conceive of literary history and consider its value as a branch of knowledge. For most Renaissance critics, studying the history of poetry deserves less attention and effort than classifying its genres and types of verse, defining its universal features and effects, and instituting artistic rules and moral precepts in order that future writers achieve literary excellence and lead readers towards virtue. The interest in relating the origins of lyric poetry, discovering who invented the hexametre or recalling the names of the first authors of tragedies very often complements and completes philosophical research. Ancient and illustrious authors supply the theories and systems displayed in the treatises with practical examples and models for imitation, and exploring the ancient past of poetry offers critics the opportunity to show off their erudition.² Like the

accounts of the origins and founders of poetry, which appear in the margins of the *artes poeticae*, historical research occupies a minor position in the genres of early modern literary criticism, where its function is subordinate to theoretical purposes.³

However, it is worth noting that the scientific status and the forms of literary history change over the course of the sixteenth century. Research into the past becomes more complex and more autonomous from the methods and goals of poetics: in this process, early modern literary historiography develops interests and practices more similar to those of Voltaire and his contemporaries. Thus, critics who, at the beginning of the Cinquecento, under the influence of the humanist tradition of defence and praise of literature, focus their attention on the sacred origins of poetry gradually give way to historians who have to take into account recently discovered ancient and medieval sources and authorities in addition to contemporary accounts not only, as was customary, about the first poets and the causes of the invention of the literary art, but also about the foundation of modern vernacular literatures. As I will show, these narratives involve different and sometimes contradictory versions of the chronological beginnings of poetry and its original forms and functions. New evidence and arguments force critics to intervene in the controversies arising from the various claims for the honour of having discovered such an illustrious art, and, more importantly, these new accounts imply a reconsideration of the same concept of origins and a shift towards a more secular assessment of its historical relevance.

Nonetheless, we need to avoid certain misconceptions that are quite common among historians of literary history and students of Renaissance poetics. Some scholars have dismissed these narratives because they lack scientific autonomy and do not form a separate genre. Others have assumed that, since the critics use these accounts to legitimize their theories, to praise their authors and literatures and to denigrate rival traditions, these narratives cannot be treated as proper instances of historical research, motivated and ruled by genuine historical interests and methods. According to this view, the accounts should be studied as examples of a pseudo-history or, at best, as preliminary sketches of a modern literary historiography that is still only embryonic. As I pointed out, the quest for the origins of poetry in the Renaissance is founded on premises and practices that will gain relevance in the literary historiography of subsequent periods. But aside from these features and trends, it is necessary to bear in mind others which, although they may be alien to modern conceptions of the discipline, also provide these accounts with historiographical qualities and make them part of contemporary historical discourse.4 As a first step, therefore, I would like to show how the underpinnings of this narrative of origins are indeed genuinely historiographical in the Renaissance sense, in order to examine its role in the

conceptual framework of literary history as it developed towards more modern forms. An efficient way to do this is to consider why and how the quest for origins is also central to contemporary theories and genres of political and cultural history.

The historiography of origins in the Renaissance

It is worth recalling that both early modern historians and authors of artes historicae consider that one of the main tasks of the historian is to find out and explain the origins of nations, the founders of cities and the causes of wars and revolutions. Many of them share the strong belief that it is not possible to get a full, true and useful understanding of the nature and history of these and other entities, such as languages, customs and laws, without first knowing their origins. Historians and theorists formulate this principle in different terms because the idea has been transmitted to early modern culture by various traditions of thought. The Italian humanist Marco Antonio Sabellico, for example, in the preface to his Latin chronicle of Venice, written around 1470 but edited in translation on several occasions over the course of the Cinquecento, expresses his admiration for the extraordinarily high standards of civic and material progress achieved by the city. In his opinion, this exemplary wealth of good conditions is due to the virtues and wisdom of the founders of Venice, who would have been able to provide the political, legal and material means to guarantee, over the centuries, not only the support of the Venetians for the original institutions and forms of government, but also their commitment to developing all their inherent capacities.5

The conviction that the founders of a city and its first political regime imprint indelible characteristics on its inhabitants had already been stated by Leonardo Bruni and other humanist historians and would be repeated in the historical treatises of the sixteenth century. The formula makes it relevant and useful to search for the origins of a city, and to trace its history from its origins, because it endows them with the power to determine and control its fortunes. The reflection on the historical importance of origins that the French linguist and orientalist Guillaume Postel makes in the prologue of his work De originibus et de varia inconsiderata historia links with that of the humanist chronicles told ab urbe condita, but also adds new reasons to defend the value of this principle. His work, edited in Basel in 1553, is a compilation of various unknown histories of nations, but is also a catalogue of the origins of peoples, languages and customs. That is why he not only argues that everything he explains about the history of these entities is true because it is built on the solid ground of the absolute knowledge of their beginnings and causes, but also justifies the interest in the origins in their own

right and appeals to the intellectual and moral benefits of capturing the primeval substance of things. In this case, the value of origins is derived from their location at the beginning of time (or even outside of it), and stems from their capacity to protect the integrity of historical entities from corruption or any other kind of change caused by usage and the passing of time.⁷

Similar thoughts can be found in the very popular genre of military history. In the prefatory epistle of a chronicle of the recent wars of religion, published in 1572, Henri de la Popelinière insists on the premise that to achieve the deepest understanding of anything, it is compulsory to grasp its origin and cause.8 In a book published a few years earlier, in 1564, the Italian writer and editor Thomaso Porcacchi explains that this same principle has inspired his compilation of the causes of ancient wars, but what is more significant is that Porcacchi draws on the authority of Aristotelian philosophy to conclude that the cause which motivates historical research is that which takes place at the beginning of the events and reveals the reason for which something has occurred or has been created.9 The French historian François Hotman exploits the belief that the origins of things preserve their true aims in order to prove that the abolition of the états générales, ordered by the king at the end of the fifteenth century, is a historical aberration. According to Hotman, the états générales would have been the latest in a long series of forms adopted by the first counsel created to guarantee the legitimacy and proper use of the French constitution, so to dismantle them would have meant abolishing its traditional function and, with it, corrupting the original political regime of the nation.10

As I will discuss later, some accounts of the origins of poetry are designed rhetorically to advance particular views in the debate over the real purpose of literary art. But political and military history deploys another conception of origins worth considering for its influence on literary history. Again, it is formulated in terms of a cause, but in this case it is related to the attitudes and motives of kings and generals, regarded as the main protagonists of history. Giovanni Pontano, Sebastian Fox Morcillo and Antonio Viperano are some of the historical philosophers who tackle this issue throughout the sixteenth century. They take part in a long discussion, which has its roots in classical historiography, that focuses on the theoretical difference between the beginnings and the causes of wars, conspiracies and revolutions. Their opinions on the nature of each category vary and are quite complex, but what matters is that their definitions of causes often include the intuitions, prejudices, fears and hopes of rulers and commanders and that all of them agree that the characters and passions which determine events have an exemplary value: since they constitute circumstances that happen once and again, the reader of history who learns them is able to anticipate, prevent or improve the results expected from each cause." What is significant for the historical discourse

on poetry is the idea that ethics and passions may lie at the origins of things and determine their history. This is a key factor for the historians who attribute the invention of poetry to insane or divinely inspired authors and for those who link the proliferation of literary genres to the different characters and passions of ancient poets.

The genre of the catalogues of inventors of arts and various other things also emphasises the exemplary and personal dimensions of origins. The most popular work of this kind during the Renaissance was Polidore Vergil's De inventoribus rerum, published in Venice in 1499, and re-edited in many languages and on many occasions throughout the sixteenth century. What needs to be stressed from Vergil's research is a deep theoretical contradiction that also affects many contemporary literary histories. One of Vergil's primary concerns is to unmask false inventors of arts and to restore the legitimate honours to those who really contributed with their discoveries to the progress of civilization. The problem arises when Vergil takes advantage of the superiority assigned to the primeval forms and regards these true inventors as the perfect masters: because in doing so, he contradicts his own progressive view of human history by implicitly questioning the possibility that imitators may improve the original achievements. 12 Early modern historians of vernacular literatures adopt the overt political use of cultural history that Vergil exemplifies. European critics' need to impose their own versions of the origins of vulgar poetry is crucial for succeeding in the struggle over the supremacy of modern national literatures. However, the spread among Renaissance poetics of a progressive conception of literary history strips the origins of poetry of some of their key qualities.

2 From divine to natural origins. The Aristotelian turn of Renaissance literary history

The principles and methods of research into origins that Renaissance literary criticism shares with most contemporary historical genres start to take form in the first Italian artes poeticae of the sixteenth century, particularly in their first chapters, where the critics regularly repeat a short account about the sacred origins of poetry. This narrative (found, for example, in the treatises of Bartolommeo della Fonte, Girolamo Vida and Lelio Giraldi) derives from the work of several prominent humanists of the fourteenth and fifteenth centuries, like Petrarch, Boccaccio and Cristoforo Landino, and is adopted without significant changes to its form and function.¹³ With the aim of proving that the study of literature, and especially classical pagan poetry, is not an immoral and useless activity, this narrative gathers ancient and medieval testimonies – Plato, Cicero and Saint Isidore,

among them – which are used to state that, at the beginning of human history, God inspired the first human beings to write verse or, alternatively, the need to create a poetic language, as the best way to communicate with the divine. According to this history, the first poets would have been virtuous and wise priests, prophets, theologians and philosophers in charge of the religious, moral and civic education of the community. Thus, originally, poetry would have played an essential civilizing role and constituted a discourse common to all the sciences, which would have been taught through metaphor, allegory and music.

In addition to these general statements, the narrative involves a discussion of specific issues, such as which authors invented poetry and when and how the literary art spread among other nations. Critics usually put the verses of the Old Testament devoted to God by Moses and David before the predictions of the Oracle of Delphi and the hymns of the *vates* Orpheus, Museus and Linus. Most of them draw on Hebrew and Christian medieval apologists, like Joseph, Eusebius and Jerome, to argue that the Jewish nation is much older than the Greek and that only the poets and prophets of the true faith could have really been inspired by the Holy Spirit. The theological difference and the chronological primacy of biblical poetry prove its artistic superiority: thus, the narrative declares that pagan authors would not have learnt the literary art from Jewish masters until centuries later and affirms that, at the time of the first Greek poets, divine inspiration degenerated into a much more common innate genius.¹⁴

It is clear that the efficiency of this apologetical function depends on the acceptance of the premise that at least some of its ancient virtues and purposes remain in all poetry. However, it is worth dwelling on the fact that the value of these exemplary origins is eroded when the controversy over the inventors enters the narrative, because this debate has its own concerns and focuses attention on the temporary dimension of literature, on its changes over time and its national differences. In any case, this is a minor conflict in the history of this narrative when compared with the deep contradictions that arise when critics have to take into account Aristotle's version of the origins of poetry, following the increasing influence that his *Poetics* exerts in literary theory from the 1540s onwards. The discursive strategies that critics have to develop to incorporate the philosopher's view into a coherent but still apologetical narrative mark a decisive turn in the formation of Renaissance literary historiography.¹⁵

As is well known, Aristotle considered that poetry was brought into being from two natural causes: the faculty of imitating, innate in every human being, and the pleasure of learning through imitation. Having established these natural causes, Aristotle traces a slow and gradual process in which those with a natural capacity for mimetic activity and the use of metres began to improvise compositions and divide poetry into types according to their own characters: the more

dignified imitated noble agents and actions with hymns and encomia, while the more vulgar preferred invectives devoted to the actions of base men. According to the philosopher, the known history of these old poets started with Homer, and both types of literature evolved towards more dramatic forms thanks to his exemplary works.

Up to this point, Aristotle's narrative calls into question the truth and the utility of the whole history of sacred origins. This completely new version obliges theorists to assume that since the faculty of poetry came naturally to ancient peoples and began to take shape through spontaneous improvisations, anyone could have invented it, regardless of his moral and intellectual conditions, with no apparent purpose but to imitate and enjoy. In this view, there is no reason to consider that original poetry was pure, perfect and exemplary: its divine inspiration and religious and educational functions vanish, its founders are forgotten, and what is more, some of the ancient poets are regarded as having had abject characters, while all those who wrote before Homer's time and the discovery of dramatic literature become anonymous due to their lack of talent.

The contradictions between the two most authoritative versions are so sharp that some critics do not even attempt to combine them: those who strictly follow Aristotelian doctrine, like Giovan Giorgio Trissino, adhere to the naturalist and progressive historical account of the philosopher. Those committed to the promotion of Christian, theological and platonic principles and literary models, like the Jesuit Lorenzo Gambara, Francesco Patrizi or Pierre Ronsard, neglect Aristotle's view and insist on relating the history of the sacred authors, forms and functions of original poetry, lamenting the decline and degeneration of literary art due to its secularization and yearning for the restoration of its virtues and effects.¹⁷ These poetics continue to conceive of origins as the site which preserves the integrity of the essential qualities and purposes of poetry and as a literary Parnassus, the natural and sacred dwelling of the finest poets. Consequently, in these treatises the critics consistently justify the benefits of historical research in universal and exemplary terms.

However, the accounts which best demonstrate the tensions occurring within Renaissance literary historiography following the Aristotelian shift, as well as the need to develop new interests and methods, are those of the critics who deploy narrative strategies which aim at merging both versions and reducing their contradictions. This is the case with the history that Giulio Cesare Scaligero rewrites in his influential *Poetices libri septem*, published in Lyon in 1561. Like Aristotle, Scaliger classifies the first poets according to their character, not to separate the noble from the vulgar, but the wild and rude from the ministers of God. He then proceeds to divide the latter into those who were divinely inspired and those who were exemplary for their virtues. Once the critic has accounted for all types of

originary poets, he categorizes them according to chronological period: the rustic ones are confined to a remote and unknown age, Orpheus and the rest of prophets are assigned to the second age, while Homer marks the beginning of the third. Not satisfied with this classification, Scaliger then ranks them again according to the subjects of their poems so that he can describe them as theologians and moral and natural philosophers.¹⁸

Thus, Scaliger's history assumes that poetry evolved from the very basic forms of the first unknown poets to more complex genres and authors who belong to another age and deserve to be remembered for the virtues and knowledge they instilled in their poems. Like Aristotle, Scaliger concedes to Homer a key position in literary history, but also fills the gap that the philosopher leaves before the poet by describing which authors preceded and trained him. This way, the critic manages to omit from the prehistory of poetry all those qualities, purposes and authors that have traditionally bestowed the origins with exemplary values. Later critics, like Giason Denores in 1586, will follow Scaliger's strategy with less sophisticated but equally efficient narratives which assert that poetry was born twice: the first time, in a spontaneous and crude manner, the second one, when it became an art.¹⁹

Scaliger's narrative and its influence allow us to perceive slight but significant biases in Renaissance literary history: the spread of a progressive view of art pressures historians to secularize their narratives and to shift their attention from origins to change. Thus, the theoretical, apologetic and exemplary profit of historical research tends to be transferred from the discovery of origins and the commemoration of inventors to the value of more accurate, organized and detailed accounts (what cannot be known falls into literary prehistory) and, above all, to the learning that stems from tracing the specific vicissitudes of poetry.

3 Towards the invention of modern literary traditions

Contemporary historiography of vernacular literatures reveals similar biases towards interests and methods closer to those of modern cultural history. In Italy, for example, critics and linguists start using historical research to prove that Florentine literature descends from Latin and to advocate the exemplarity of its new founders, Dante, Petrarch and Boccaccio, after one thousand years of cultural decline. But the study of these same poets promotes research into their vernacular sources and influences, a trend that propitiates that European historians tend to pay more attention to the relationships, exchanges and filiations among different vernacular literatures and to start exploring their histories from comparative (also competing and conflictive) points of view.

In the *Prose della volgar lingua*, published in 1525, Pietro Bembo offers a history of the origins of Italian language and poetry that illustrates both the potential and the tensions that these research trends generate in early modern literary historiography. As many humanists had done before, Bembo dates the invention of Italian rhymes soon after the formation of the vernacular tongue, which would have resulted from the corruption of Latin caused by the contact with the barbarous languages spoken by the northern European tribes that had invaded and destroyed the Roman empire in the fifth century and settled down in Italy since then.²⁰ Thus, the origins of Italian vernacular poetry appear in this narrative at the beginning of an age of ignorance and are linked to the nations and languages responsible for the obliteration of the cultural legacy of ancient civilization. This is seen by many Italian humanists as the 'guilty' birth of an alien literature inherently incapable of progressing in intellectual and artistic terms. Since Bembo aims at persuading the reader of the literary qualities and potential of the vernacular, its history needs to be reconsidered from its origins.

The critic tackles the issue with several strategies. The simplest one consists in recalling that vernacular literature would have had a second and much better birth in the fourteenth century: due to the talent and learning of Dante, Petrarch and Boccaccio, Tuscan letters would have achieved excellence after a very short period. The crucial role that humanist historians, biographers and commentators attribute to the Florentine writers lies in their mastery of Latin and of the rules of classical eloquence, a knowledge that they would have applied in their vernacular works. Bembo tries to emphasize the benefits of the influence of Latin on the vernacular by arguing that it occurred at the very beginning of its formation. Thus, according to the linguist, in the vernacular Italian the Latin substratum would have prevailed over the elements which had stemmed from the barbarous idioms. Two historical factors shaped this process: the power of the aboriginal land, which had impregnated the vernacular with the natural language of the Roman country, that is, Latin, and the fact that the transalpine peoples who settled in Italy changed over time, a process that reduced their linguistic influence over the vernacular. With these arguments, Bembo underlines the belief that Italian would have had a natural filiation with Latin, since both idioms would share geographical and national origins.21

This primary attribute of the vernacular would also explain its later development, or rebirth, as a literary language. But Bembo adds another historical reason for this progress, related now to the Provençal heritage of Tuscan poetry. The historian dismisses the hypothesis that the earliest Italian authors learnt the art of composing in rhyme from Sicilian poets in favour of the version that considers the Occitan troubadours the first masters of Italian literature. To justify his decision, Bembo argues that the lack of textual and historical evidence of

primitive Sicilian poetry makes it impossible to appreciate its influence on the compositions of ancient Italian poets. Otherwise, especially in Tuscan poems, the critic finds many characteristics that reveal lexical and prosodic borrowings from Provençal poetry, which Bembo presents, significantly, as the oldest vernacular literary tradition in Europe. By establishing this historical relationship, the critic transfers from Occitan to Florentine poetry the prestige and exemplarity conventionally assigned to ancient and original forms.²²

It is worth noting that not many contemporary Italian critics are as willing as Bembo to admit that Dante, Petrarch and most of their disciples owed so much to a foreign literary tradition which, after all, emerged and developed among barbarous nations. Some of them prefer to keep strengthening the classical heritage of vernacular poetry by searching, for example, for the etymologic connections between the words rhytmus and rime, and for a historical explanation of how the resource of rhyming derived from techniques and usages already observed by ancient Greek and Roman poets.²³ The history of lyric poetry that Antonio Minturno relates in his Arte poetica thoscana, printed in 1564, establishes a line of continuity between the primeval hymns and sacred songs of the prisci vates and the chaste love sonnets composed by Petrarch. Since Minturno wishes to advocate the view that his fellow Italian poets are the modern privileged inheritors of classical literature, he is reluctant to contaminate his history of Italian lyric poetry with foreign and barbarous elements, so he does not mention any source or influence from the European literary traditions which, according to humanist history of learning, belong to the Dark Ages.24

However, Minturno's historical awareness of the influence of French medieval poetry in contemporary Italian literature changes dramatically when he reports the history of the *romanzo*. The critic admits that Lodovico Ariosto and the rest of *romanzisti* learnt how to cultivate this narrative genre from Provençal and Spanish authors, though he immediately suggests that this is not a positive influence at all, since the name of this chivalric poetry comes from the term that originally designated the vernacular languages which emerged in Roman settlements in France and Spain after Latin was corrupted by indigenous idioms. Thus, the *romanzo* seems to carry the guilt of being an anticlassical kind of poetry, a feature that allows Minturno to consider it a foreign and barbarous genre and, as such, a very minor variety of heroic poetry, unable by nature to achieve epic perfection.²⁵

The interests and interpretive patterns that shape Italian literary history spread across contemporary western Europe: they are assumed and adopted by French, British and Spanish critics, among others, but also reformulated and contested through different research priorities and new accounts. Nevertheless, in this larger intellectual and political framework, the question of origins remains a central concern for the historical discourse on poetry.

It is easy to notice that the attitudes and arguments with which European writers discuss Italian humanist cultural history change in a significant manner in the last decades of the sixteenth century, notably in France. In his Art poetique françoise of 1548, Thomas Sebillet reproduces the standard literary history disseminated by Italian critics and expresses the conviction that Dante and Petrarch were the refounders of eloquence and poetry due to the fact that, since they were Italians, they could preserve some vestiges of ancient Roman literary knowledge. Sebillet dares to add to this narrative that soon after the Florentine writers restored the art of poetry, French authors like Jean de Meun and Jean le Maire contributed to its progress with their chivalric romances.²⁶ A few years later, Jacques Peletier prefers to adopt a different strategy: instead of aligning French literature with a prestigious vernacular tradition with classical roots, he attempts to erode the power to determine the potential and development of languages and literatures assigned to their origins. Thus, he argues that, since most accounts assert that poetry is a gift from God, there is no sense in searching for its inventors. Moreover, considering that this same celestial origin is universal, everyone should accept that literary skills must have been equally distributed among all languages and nations, and therefore no poetry can claim to be superior because of its antiquity or its inventors.27

Later reactions from historians such as Henri Estienne, Étienne Pasquier and Claude Fauchet in France, Fernando de Herrera in Spain and Samuel Daniel in Britain are more aggressive and overtly question the premises, hierarchies and periods of the cultural history of Europe written by Italian humanists. These authors elaborate new reports to contest the origins, status and roles that this hegemonic narrative has given to their literatures, and they produce new historical arguments to challenge the authority and exemplarity of Italian poets and scholars. I will focus my review on the works of Fauchet and Daniel because they represent a divergence from traditional approaches to the history of vernacular poetry and also because their methods provide some examples of the emergence of more sophisticated patterns for understanding literary history.²⁸

To rival the prestige and influence that Italian literature has gained in the Renaissance, many French historians attempt to find evidence of the ancient classical origin and heritage of their national predecessors, the Franks and the Gauls, in order to purify their culture and language from barbarous and corrupted traces and to displace them from a decadent age.²⁹ In the Recueil de l'origine de la langue et poesie françoise, printed in 1581, Fauchet discards this strategy and devotes his research to demonstrating that, after the formation of the vernacular languages out of the corruption of Latin, French became the most important language and poetry in Europe. To support this statement, the historian adduces that French appeared before the rest of vernaculars, that it was spoken in many European are-

as, and that its poetry was especially influential in Italy, Spain and Germany. Fauchet draws on common beliefs about historical relationships between vernacular literatures, disseminated by critics such as Bembo and Minturno, and arranges them to prove that French poetry was the source of most of the genres, resources and vocabulary of medieval European literature. According to the author, French masters taught the other nations how to write chivalric romances and lyric compositions. He finds evidence of this superiority in the great number of Italian words derived from French, in the fact that most modern epic heroes were inspired by French characters, in the subjects, images and meters that Petrarch and other lyric poets adopted from the troubadours, and, above all, in several testimonies that confirm that the art of rhyming was invented in France and transmitted to the rest of Europe through French dominions, such as Sicily.³⁰

Nor does Samuel Daniel need to discover the ancient Greek or Roman roots of English poetry to defend its value against those who, like Thomas Campion, wish to improve it by adapting it to a classical versifying system.³¹ In A Defence of Rhyme, published in 1603, Daniel designs his literary history with the aim of proving that modern poetic styles and fashions, deeply influenced by Continental and especially Italian tastes, may pervert the nature of English poetry, rather than increase its achievements. To make this statement acceptable, Daniel assumes that some powerful historical prejudices and conventions established by humanist historiography need to be reconsidered. Therefore, he accuses all those to be profoundly ignorant who believe that an age of cultural decay followed the fall of Roman empire and that not until recent times there has been a revival of learning. The historian argues that a close examination of the history of arts and sciences reveals that long before sixteenth-century scholars such as Erasmus and More emerged, many men from many nations contributed to the advancement of knowledge: not only those students from the long list of Italian humanists, from Petrarch to Pico della Mirandola, whom Daniel cites, but also fellow compatriots such as the venerable Bede, who 'flourished' many centuries before, in a presumed period of darkness.

Daniel adds some crucial reflections to his defence of cultural progress in the Middle Ages concerning certain prejudices and risks that condition historical scholarship and are too often undetected by writers and readers. The most relevant is the inclination of historians to judge peoples from the past not only as if they had to be very different from those of present times, but necessarily inferior regarding their intellectual capacity. Daniel holds that researchers should take into account the fact that history provides a quite superficial knowledge of regions, customs and their circumstances and, in addition, should bear in mind that human powers are more universal, that is, more equally distributed among nations and periods than most historians suppose. Thus, according to these premis-

es, Daniel suggests that one should reassess the accuracy and validity of the histories that describe ancient civilizations as a golden age, the Middle Ages as a long and uniform period of cultural crisis, and current times as the greatest revival of learning ever seen, and for the same reasons, one had better distrust clear-cut concepts such as classical knowledge and barbarous languages and literatures. As every nation receives a portion of universal wisdom, and the history of English medieval letters reveals a long succession of achievements, Daniel concludes that his nation has an eloquence of its own and that English poetry has developed a pleasant rhythm of diction sanctioned by custom. Therefore, it goes against the nature and the history of English eloquence to try and subject its forms to classical rhetorical and metric rules, because they are alien to its literary tradition.³²

Fauchet and Daniel are both audacious enough to find new ways of exploiting historical discourse for the purpose of defending and promoting their vernacular literatures and allowing them to rival Italian poetry. In both cases, the interest lies in tracing the development of each tradition and relating it to the present rather than associating it with a particular past, detracting the historical value attributed to origins, causes and inventors (Daniel does not even mention who the first English poets might have been). Since identifying classical roots is no longer perceived as the only possible tool (or the most efficient argument) for ennobling vernacular poetry, this narrative conveys a higher sense of change and singularity, which is reinforced by the appeal to learn to estimate the worth of a poetry because it is *naturally* one's own.

The changing perception of the relevance of origins and the increasing influence of progressive views of the cultural past go along with the secularization of literary history. In the narrative of the evolution of vernacular languages, God and divine causes tend to lose their role as the inspiration for poetry and poets, not only giving way to human agency, but also to impersonal forces and social and political factors, such as institutions, customs and technology: Fauchet attributes the diversity of his country's vernacular dialects to the proliferation of feudal courts in medieval France, and the widespread influence of French letters to its dominions across Europe; Daniel argues that the invention of printing involved an advancement of learning, but also sees the development of military ordnance and printing technologies as a decisive historical factor for the emergence of the religious and political conflicts which put an end to the allegedly peaceful Middle Ages.

This interpretive framework results from conceptual changes that affect historical thought and scholarship in the second half of the sixteenth century, but also takes shape due to the need to contest the particular views and claims of Italian humanism, as well as to question its grounds. It is in this context that the following hypotheses lose their validity: that the individual talent of certain authors, such as Dante and Petrarch, and the inherent and primeval potential

of languages, such as classical Italian and barbarous French, may determine the development of literary traditions. In addition, Renaissance poetics acquired autonomy from ancient literary criticism as a result of a historical scholarship that stimulates cultural relativism and finds *other* historical reasons to legitimate and encourage literary preferences, for instance, when Daniel adduces history sanctioned by custom to advocate the use of a plain style.

Some of the principles that sustain Voltaire's criticism of the premises and methods used by previous scholars, as well as his proposal for a more consistent approach to the understanding of poetry, begin to take shape and come into effect in the late sixteenth-century historiography on vernacular literatures, and undergo a process of maturation over the following century. Voltaire overtly assumes literary change and equates the exemplarity of Greek and Roman poetry with that of Italy, France, England and Spain, though he also firmly believes in universal and eternal laws, enacted by nature, and in national tastes and styles, produced by particular customs and characters, which also explain a given nation's instinctive dislike of foreign literatures. These are the parameters that define the new 'commonwealth of letters' and that create the conditions for the rise of historical and comparative approaches in modern literary studies. But these are also the terms that stimulate a new hierarchical conception of universal poetry and literary value, in which certain Western literatures now occupy the high status of ancient poetry, and encourage competition among national scholars. In short, the formation of early modern literary criticism and history reveals some of the foundational contradictions and conflicts that shape modern comparative literature.

Studying how the humanities evolved as a discipline must also take into account similar conflicts, which arose from tensions between their ideological principles and purposes and their actual development. As an educational and political programme, humanities have at their core a human, anthropological and universal conception of culture. The disciplines devoted to the study of this human culture should enable an understanding of all the qualities common to the human condition, and help us appreciate the value of the humanities as a way of reconciling conflicting interests in the political and cultural domain.

However, the construction of the humanities as an interlocking set of disciplines also facilitates the emergence of national cultures, since the humanities are also used to promote the study of their particular histories, languages, arts and sciences as the necessary ideological terrain for the growth of qualities and values that we define as 'human'. As this second dominant strain emphasizes what is unique and different in national cultures, it calls into question the very idea of a human (or Western or European) culture that evolves towards a more civilized

community. In addition, and precisely in order to avoid this contradiction, it becomes necessary to assume that only or principally national cultures provide the common elements of human culture and that some nations possess these common elements and advance them more than others. This resulting human culture, then, derives from a selection and hierarchy of components which are biased by the political interests, criteria and conflicts that the humanities claim to leave behind.

Early modern literary history allows us to perceive this same tension at work within the different conceptions of poetry. The narrative of the origins of poetry involves descriptive and normative approaches to literary art because its beginnings and developments are conceived of in terms that are simultaneously chronological and contingent (i.e. historically determined) as well as essential and exemplary (i.e. universal). This philosophical dimension of historical discourse accounts for a good deal of its transcendence and utility as a branch of knowledge in the Renaissance. However, its evolution towards modern historiographical forms implies a process by which the common premises and functions of history and philosophy are reconsidered and reassigned; the same evolution affects shared features of history, rhetoric and literary narrative. This process clearly suggests that studying the making of the humanities must attend to these relations, shifts and redefinitions between their disciplines from a comparative point of view.

Notes

- Voltaire's Essay on Epic Poetry, Florence Donell White ed. (New York: Phaeton Press, 1970), 81-82. I would like to thank Julian Weiss and Sizen Yiacoup for their invaluable help in the writing of this essay.
- For a general description of the main characteristics of Renaissance literary criticism, see Bernard Weinberg, A History of Literary Criticism in the Italian Renaissance (Chicago: The University of Chicago Press, 1961), The Cambridge History of Literary Criticism, III. The Renaissance, Glyn P. Norton ed. (Cambridge: Cambridge University Press, 1999), Poétiques de la Renaissance, Perrine Galand-Hallyn and Fernand Hallyn, dir. (Genève: Droz, 2001).
- Most of the accounts are included in the eulogies of the excellency and antiquity of poetry that critics usually place in the first chapters of their treatises as, for example, in Thomas Sebillet, Art poetique françois, 1548, Jacques Peletier, L'Art poetique, 1555, Antonio Minturno, De poeta libri sex, 1559, Pierre Ronsard, L'Abbregé de l'art poëtique François, 1565, Giovanni Antonio Viperano, De poetica libri tres, 1579, George Puttenham, The Art of English Poesie, 1589. The cases of J.C. Scaliger and Francesco Patrizi are exceptional: they devote to the history of poetry the entire first books of their long treatises, the Historicus liber in Scaliger's Poetices libri septem, 1561, and the Deca Istoriale in Patrizi's Della poetica, 1586.

Giovanni Getto's reluctance to consider this narrative proper literary history in Storia delle storie letterarie (Firenze: Sansoni, 1942, rev. ed. 1969) contrasts with the approaches of W. K. Ferguson, The Renaissance in Historical Thought (Boston: Houghton Mifflin, 1948, reprinted by the University of Toronto Press and the RSA, 2006), Franco Simone, Storia della storiografia letteraria francese: due capitoli introduttivi (Turin: Bottega d'Erasmo, 1969), Arthur B. Ferguson, 'The Historical Thought of Samuel Daniel: A Study in Renaissance Ambivalence', Journal of the History of Ideas 32 (1971): 185-202. However, it is worth noting that there is no place for the historical discourse on poetry in the most important histories of Renaissance poetics, neither in Weinberg's (Chicago, 1961) nor in those of Norton (Cambridge, 1999) and Galland-Hallyn and Hallyn (Genève, 2001). The studies focused on the modern trends and characteristics of early modern historiography published by scholars such as J.M. Franklin, Jean Bodin and the Sixteenth-Century Revolution in the Methodology of Law and History (New York: Columbia University Press, 1963), G. Huppert, The Idea of Perfect History: Historical Erudition and Historical Philosophy in Renaissance France (Urbana: University of Illinois Press, 1970), D. R. Kelley, Foundations of Modern Historical Scholarship: Language, Law and History in the French Renaissance (New York: Columbia University Press, 1970) fostered new interest in Renaissance literary historiography but were too biased towards its revolutionary or modernizing aspects. The narrative of the origins of poetry reveals both some of the modern trends of early modern historiography and the validity and power of traditional principles and methods of historical research. For a reconsideration of the notion of Renaissance historicism conveyed by these authors, see J.H. Preston, 'Was there an Historical Revolution?', Journal of the History of Ideas 38 (1977): 353-364, and Z.S. Schiffman, 'Renaissance Historicism Reconsidered', History and Theory 24 (1985): 170-182.

- M. Antonii Sabellici in tris et triginta suos rerum venetiarum libros (Venice: Andreae de Toresanis, 1487), praefatio, 9.
- 6 Leonardo Bruni. History of the Florentine People, J. Hankins ed. (Cambridge, MA-London: Harvard University Press, 2001). On the tradition of this principle, Eric Cochrane, Historians and Historiography in the Italian Renaissance (Chicago: Chicago University Press, 1981), 4-5, 20-25.
- Guillaume Postel, De Originibus, seu, de Varia et Potissimum orbi Latino ad hanc diem, aut inconsyderata historia (Basel: Ioannem Oporinum, 1553), Epistola ad amplissimum Bisuntinae civitatis Senatum, 5.
- 8 Lancelot Voisin de La Popelinière, La vraye et entiere histoire des troubles et choses memorables avenues tant en France, qu'en Flandres et Pays circonvoisins depuis l'an 1562 (Basel, 1572), Epistre à la noblesse; on this and other historical principles of La Popelinière, see Z. S. Schiffman, 'An Anatomy of Historical Revolution', Renaissance Quarterly 42 (1989): 507-533, esp. 514-518.
- Il Primo volume delle Cagioni delle Guerre Antiche di Thomaso Porcacchi (Venice: Gabriel Giolito de' Ferrari, 1564) Proemio.
- François Hotman, Francogallia, 1573, R. E. Giesey ed. (Cambridge-New York: Cambridge University Press, 1972); Schiffman, 'Renaissance Historicism Reconsidered', 178-179.
- II Giovanni Pontano, Actius dialogus, originally published in Naples in 1507, reprinted in J. Wolff ed., Artes historicae Penus (Basel: 1579), 571-572; Sebastián Fox Morcillo, De historia institutione dialogus, printed in Anvers in 1557, A. Cortijo ed. (Alcalá de Henares: Universidad de Alcalá de Henares, 2000) 25; Antonio Viperano, De scribenda historia liber, 1569, Wolff, Artes historicae penus, 860-862.

- 12 Polydore Vergil, On Discovery, B.P. Copenhaver ed. (Cambridge, Ma.-London: Harvard University Press, 2002), preface, 2-5.
- 13 Bartolommeo della Fonte, De poetice ad Laurentium Medicem libri III, c. 1492, selected passages in Charles Trinkaus, 'The Unknown Quattrocento Poetics of Bartolommeo della Fonte', Studies in the Renaissance 13 (1966): 40-122; Marci Hieronimi Vidae Cremonensis de Arte poetica libri III (Rome: Ludovicum Vicentinum, 1527); Lelio Gregorio Giraldi, Historiae poetarum tam graecorum quam latinorum dialogi decem (Basel: Michael Isingrinus, 1545). Petrarch, Epistolae Familiares, X, IV; Boccaccio, Genealogia Deorum Gentilium, book XIV, especially in chapter VIII, Trattatello in laude di Dante, XXI-XXII; Landino, prologue of his 1481 edition of Dante's Comedia.
- To this chronology and the hierarchy that stems from it adhere, among others, fifteenth-century authors including Cristoforo Landino and Polydore Vergil and sixteenth-century authors such as Lelio Giraldi, Historiae poetarum, Lorenzo Gambara, in the 1576 Tractatio de Perfectae Poeseos Ratione, Antonio Viperano, De poetica libri tres, and Antonio Possevino, whose treatise De poesi et pictura ethnica, humana et fabulosa, collata cum vera, honesta et sacra, was first published in 1593.
- 15 On the increasing influence of Aristotle's Poetics on Renaissance literary criticism, see Weinberg, A History of Literary Criticism in the Italian Renaissance, 349-477, and Daniel Javitch, 'The Assimilation of Aristotle's Poetics in sixteenth-century Italy', in The Cambridge History of Literary Criticism. III. The Renaissance, Glyn P. Norton ed., 53-65.
- 16 Aristotle, Poetics, ch. 9, 1448b-1449b.
- 17 Giovan Giorgio Trissino, La poetica (V-VI) (1562), B. Weinberg ed., Trattati di poetica e retorica del Cinquecento (Bari: Laterza, 1970), v. II, 7-9; Gambara, Tractatio, B. Weinberg ed., Trattati, v. III, 227; Ronsard, Abbregé (Paris: Gabriel Buon, 1565), 2; Patrizi, Della poetica, D. Aguzzi Barbagli ed. (Firenze: Istituto Nazionale di Studi sul Rinascimento, 1969-1971), especially the Deca Istoriale and the Deca Sacra.
- 18 Scaliger, Poetices libri septem, Historicus liber (Lyon: Antonium Vincentium, 1561), 5.
- 19 Giason Denores, Discorso intorno a Que' Principi, Cause et Accrescimenti Che la Commedia, la Tragedia et il Poema Eroico Ricevono dalla Philosophia Morale et Civile, et da Governatori delle Republiche, B. Weinberg ed., Trattati, v. III, 375.
- 20 Pietro Bembo, *Prose della volgar lingua*, in Carlo Dionisotti ed. *Pietro Bembo*, *Prose e Rime* (Torino: Utet, 1960, repr. 1992), 76.
- 21 Bembo, Prose, 86-89.
- 22 Bembo, *Prose*, 90-91, 97-98, 104.
- 23 For instance, Girolamo Ruscelli, Del modo di comporre in versi nella lingua italiana (Venice: Heredi di Marchiò Sessa, 1559), and Lodovico Dolce, I quattro libri delle osservationi della lingua (Venice: Marco Antonio Bonibelli, 1597), 189-191.
- Antonio Minturno, L'Arte poetica thoscana (Venice: Andrea Valvassori, 1564), III, 167-
- 25 Minturno, L'Arte poetica thoscana, I, 26.
- 26 Thomas Sebillet, Art poetique françoise (Paris: Gilles Corrozet, 1548), 1-3.
- 27 Jacques Peletier du Mans, L'Art poëtique (Lyon : Ian de Tournes et Guillaume Gareau, 1555), 6-10, 34-36.
- 28 Henri Estienne wrote several works on the history and usage of French in order to demonstrate that French was older than and superior to Italian and to persuade courtiers and poets not to speak and compose under the influence of Italian styles and manners. Étienne Pasquier wrote a history of French poetry in the sixth book of his *Recherches de la France*, where he argues that the Gauls were the inventors of rhymed vernacular poetry, a fact that

would explain why the French poets have always shown, up to present times, a higher ability in composing poems than the rest of vernacular authors. In his *Anotaciones a la poesía de Garcilaso*, printed in 1580, Fernando de Herrera holds that Spanish culture, language and letters are very similar to Italian, hence, he does not understand which criteria Bembo and other authors adopt to dismiss Spanish literature and consider it barbarous.

- 29 Examples of this kind of historiography are Robert Gaguin, Compendium de origine et gestis francorum, first published in Paris in 1495, and Guillaume Postel, Apologie de la Gaule contre les malevoles escripvains (Paris: Sebastian Nivelle, 1552).
- Claude Fauchet, Recueil de l'Origine de la Langue et Poesie Françoise, Ryme et Romans (Paris : Mamert Pattison, 1581), book I, chapters VI and VII, 49-72. On Fauchet as literary historian, see J. G. Espiner-Scott, 'Claude Fauchet and Romance Study', Modern Language Review 35 (1940), 173-184.
- Thomas Campion, Observations in the Art of English Poesie, 1602, Selected passages, ed. Gavin Alexander (London: Penguin Books, 2004), 281-288.
- 32 Samuel Daniel, A Defence of Rhyme, 1603, ed. Gavin Alexander (London: Penguin Books, 2004), 205-233. On Daniel as literary historian, see Arthur B. Ferguson, 'The Historical Thought of Samuel Daniel', S. Clark Hulse, 'Samuel Daniel: The Poet as Literary Historian', Studies in English Literature 19 (1979): 55-69.

Transitional Texts and Emerging Linguistic Self-Awareness

Literary Study in the Late Eighteenth Century

P.M. Mehtonen

Humanism is the exertion of one's faculties in language in order to understand, reinterpret, and grapple with the products of language in history, other languages and other histories.

EDWARD SAID, Humanism and Democratic Criticism,
New York 2004, p. 28

There is probably no post factum disagreement about the claim that the so-called linguistic turn was a significant scientific event in the twentieth century. However, the pre-history of such a turn – the turn itself consisting of a host of simultaneous intellectual processes rather than an abrupt moment of revolution – is a vaguer and largely unwritten story. This vagueness in itself may be challenging and a key to such slow processes that cannot easily be detected in scientific manifestos, axioms or groundbreaking innovations. One unmistakable element of the twentieth-century linguistic turn was a claim for the linguistic framework of human perception, cognition and pursuit of knowledge. But how did such a linguistic self-awareness develop historically, in different sciences? This paper will ask, in a somewhat broader historical perspective and narrower disciplinary focus: what was the linguistic self-awareness of the systematic study of literature before the twentieth-century linguistic turn – and before even linguistics and literary studies were established as academic disciplines, in the nineteenth century?

It is not an unambiguous pursuit to determine what belongs to the history of a discipline before its name, 'founding' works, academic place and other noticeable circumstances have been established. A challenge for a comparative history of the humanities is thus to negotiate a consensus regarding each comparans and comparandum, to explore the forking paths of concepts and disciplines and not to ignore developments that have, in the history of the subjects, diverged in radically different directions or even remained as dead ends on the roadmap of sciences.

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My present focus in this quest for a growing linguistic self-awareness of a discipline is literary study in the period preceding the well-documented eighteenth-century emergence of 'comparative literature' (littérature comparée, vergleichende Litteratur, vergelijkende letterkunde, etc.) as a systematic approach and, gradually, university subject in its own right.²

The investigation begins with names. Since the term 'comparative literature' refers to the approach and discipline that matured in the nineteenth century, in what follows the term 'literary study' is used as an English equivalent to the broader European term (Allgemeine) Literaturwissenschaft in German, (yleinen) kirjallisuustiede in Finnish, (algemene) literatuurwetenschap in Dutch, and so forth. (There is no exact English equivalent to these terms, which literally translate as 'general science of literature'.) Thus, comparative literature belongs to literary study, but not all literary study is comparative literature; Literaturwissenschaft is thus the broader – and historically more undeterminable – field that comprises literary theory, history and analysis/interpretation.³

The two cases examined here, from the 1750s and the 1770s, are transitional texts; they are synthetic in a way that it is difficult to say *exactly* what is the discipline they represent, and therefore they can be found in the histories of many arts and sciences. The earlier of them, Alexander Baumgarten's Latin *Aesthetica* (1750–1758; henceforth A), became the founding text of the new discipline of aesthetics. Yet the text is far more oriented towards linguistics, rhetoric and poetics than aesthetics as a discipline was to be in its later phases. My second candidate for a transitional text, George Campbell's English *Philosophy of Rhetoric* (1776; henceforth PR), was not able to found a new discipline, largely because it leaned on a keyword and tradition that was losing its status and appreciation in the European academies: namely rhetoric. Nevertheless, Campbell's systematic and synthetic approach to language again became appreciated along with the twentieth-century renaissance of rhetoric – an important factor in the linguistic turn – in literary study and communication studies.

Baumgarten (1714–1762) is regarded as the German father of aesthetics and the scholar who 'distinguished the realm of art from the realms of philosophy, morality, and pleasure'. George Campbell (1719–1796) was a Scottish philosopher, theologian and rhetorician. Despite their obvious differences – Baumgarten's Aesthetica stemming from German Rationalism (Leibniz–Wolff) whilst Campbell's Philosophy of Rhetoric was inspired by British Empiricism (Locke–Hume) – there are also remarkable likenesses between the texts. Baumgarten and Campbell focus on the systems of perception, cognition and language in a way that is not as nation-specific or language-specific as much of the criticism of the time was. Their preoccupation with contemporary philosophy as well as sound knowledge of the trivium arts makes their approaches systematic in a way that is applicable

to many subjects. The rest of this paper is devoted to a closer look at two further similarities that clarify the concept of what is called here a 'transitional text' in the history of the humanities.

Firstly, both books aim for a synthesis of different conceptual systems. The old framework (in this case, the *trivium* arts) is not wholly scrapped but is *visibly* incorporated in the new horizon (Rationalism in Baumgarten, Empiricism in Campbell).

Secondly, neither book is easy to read; on the contrary, recent scholarly literature often remarks on the notorious difficulty of their language and structure. Could this be seen as the fate of transitional texts also more generally speaking? To be able to fully accept or grasp an approach that combines different conceptual frameworks, the reader – whether contemporary or later – ought to be well versed in both the old and new systems of scientific concepts. We shall return to this second feature of transitional texts towards the end of this article.

Transitional texts between old and new scientific frameworks

An influential pan-European trend in the eighteenth century was the connection of languages and nations – or, in Claudio Guillén's terms, 'the obsession with nationalism and preoccupation with history.' The use of Latin as a scholarly language was waning (Germany) or had already faded (England). The consequences for literary study, deeply rooted in language, were challenging. '[T]he weight placed upon the vernacular for social cohesion,' as recently observed by Kramnick in the English context, 'meant that literary expertise was particularly troubled.' Literary specialists were seen to work 'in an arcane idiom that was of little use to a society more and more defined by its shared reading of the national literature'. At the same time there was another well-documented process going on. It was marked, in different parts of Europe, by theoretical activity that contributed towards a more systematic study of literature and 'reaffirmed the possibility of – indeed the need for – a rational, discursive theory of poetry'.

Both Baumgarten and Campbell represent specialist scholarship that seems to work against the ideal of accessible criticism and public writing on national literature. They conceived the subject of the systematic study of language and literature – its method and expression – partly in terms of the classical trivium concepts. Yet these transitional texts amalgamated the traditional subjects of grammar, rhetoric, logic and poetics with the modern philosophical theories of human cognition. One of Baumgarten's keywords in this process is philosophia poetica, whereas Campbell explores the general structure of linguistic communication (in sciences, literature, journalism) under the umbrella term of a 'philosophy

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of rhetoric. In terms of literary study, these linguistic terms lean on an important observation that Baumgarten and Campbell had inherited from the Rational and Empiricist philosophies of cognition: that the logic of literature and its language is different from the logic of reasoning. Literature cannot be subsumed under the (Cartesian) epistemology of clear and distinct ideas or the (Lockean) demand for clear and distinct words. Literary language and its perception are often inherently vague, even obscure; this is a topic to which both Baumgarten and Campbell often return. However, neither of them opposed literature and its study to reason. On the contrary, the inability of reason to conceptualise literary phenomena in a clear and distinct manner was a realization that necessitated a more critical – i.e. not a dogmatic, or purely evaluative – study of literary language and meaning.

If we focus on literary study as it appears in Baumgarten's and Campbell's texts mentioned below, their methodological toolkits may be represented as follows.

	BAUMGARTEN	CAMPBELL	
Influences	Leibniz; Wolff	Hume; Gerard (An Esssay on Taste)	
Founding works of new approaches	Meditationes philosophicae de nonnullis ad poema pertinentibus (1735; Philosophical Meditations Concerning Some Conditions of Poetry)	Philosophy of Rhetoric (1776)	
	Aesthetica (1750–1758; Aesthetics)		
Approaches to the study of literary language	PHILOSOPHIA POETICA • General poetics: the study of epic,	RHETORIC as the general theory of communication (includes both logic and grammar)	
	dramatic and lyrical forms	• Study of meaning	
	 General rhetoric: the study of spiritual, secular, juridical, demonstrative and deliberative modes 	Study of the modes of expression	
Structure of literary language	Poetic presentation Poem (poema) as the smallest unit of	Poetry is 'a particular mode or form of certain branches of oratory'	
00	poetic presentation	The constituents of poetry: the medium of language the general rules of composition: narration, description, argumentation the use of tropes and figures	

Even this sketchy table shows the literary keywords of the two theories and serves the purpose of some comparative remarks.

2 Baumgarten

Baumgarten, a teacher of Latin poetry and rhetoric, presents his 'philosophy of poetics' as a branch of his general theory of the liberal arts (theoria liberalium artium) that, in the opening passages of Aesthetica, is also called 'aesthetics'. The range of disciplines associated with this theory is thus extensive, including rhetoric, poetics, hermeneutics, philology, and so on (A 1–2)." It is noteworthy here that Baumgarten's theory deduces general principles from the linguistic fields – the trivium – which had traditionally been linked to the practice of speaking and writing well. By combining classical rhetoric and eighteenth-century epistemology in the vein of Leibniz-Wolff, Baumgarten thus filters elements of early modern rhetoric and poetics into a philosophical terminology. This 'theory' has very little to do with criticism as an art of critical judgment which focuses on individual works, genre or authors. In contrast, the new science explores more general structures of poetic presentation and thus requires a scientific redefinition of even rudimentary terms such as 'poetics' as well as a 'poem'.

This enterprise of developing new technical vocabulary is, no doubt, also a source of linguistic difficulty. It is only proper here that one thematic pair of concepts explored in *Aesthetica* is light (or clarity) *versus* obscurity, as in the chapters *Lux aesthetica* and *Obscuritas aesthetica*. Baumgarten constructs his basic divisions via the various degrees of shadow and half-light, as already well represented in earlier German philosophy but now also in the new context of art: literature and its study must resemble the principles of nature. Nature makes no leaps from obscurity to brightness; between night and noon there is dawn. Likewise, poetic presentation is to the perceiver at its most perfect and most beautiful *clarus et confusus*, clear and confused. Its understanding and perception will always involve factors which lie beyond the reach of categorical analysis.

In Baumgarten's redefinition – as presented in *Meditationes philosophicae* (henceforth MP)¹³ and *Aesthetica* – it is the task of 'Poetics' to study poetic presentation. The ultimate objective of poetic presentation is clarity but not that clarity and precision which logicians, mathematicians and many philosophers had prescribed as the criterion of truth. According to Baumgarten the philosopher presents his thoughts as he *thinks* them, without need to consider the rules of presentation or the sonic aspects of articulation; this is why it is possible to foster lucidity and distinctness of thought in the realms of philosophy and logic. In contrast, literature appeals to the senses, and the study of its understanding

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and reception calls for different methods, to which Baumgarten seeks access via *general* rhetoric and *general* poetics. These involve an understanding of the workings of literary language and the ways we are able to understand it. Thus, Baumgarten's task of redefinition continues towards the smallest units of poetic presentation (such as a poem, *poema* as a structure that is formed by – obscure or clear – sensitive representations; MP 40).

Baumgarten's approach is not a radical defense of obscure literature and its obscure study; he claims that his theory will doubtless put paid to writers who erroneously believe their outpourings to be all the more poetic the more obscure and involved they make them (MP 41). At the same time he opposes the subjection of poetry to the demand for lucid and precise information as was being pondered in many quarters of the mid-eighteenth century. Baumgarten's theory constitutes a description of poetry and poetics as peculiar elements in human thought, and likewise, his *Aesthetica* can be read as a 'formal statement' that speaks for new ways of presenting this elusive subject.

3 Campbell

Some decades later George Campbell, too, was preoccupied with the relationship and mutual division of labour among the elements of the *trivium*. While Baumgarten feels at home with classical – Latin – citations, Campbell applies his observations to examples culled from contemporary literature and journalism, and their analysis. However, his approach is far removed from criticism which focuses on individual authors. In his *Philosophy of Rhetoric* he seeks to establish a position for rhetoric in the framework of empirical epistemology. As a general theory of communication, Campbell claims, rhetoric is concerned with both meaning and modes of expression. Rhetoric is the architectonic language art that subsumes within it both logic and grammar.¹⁴ Rhetoric is 'the grand art of communication, not of ideas only, but of sentiments, passions, dispositions, and purposes' (PR lxxiii).

This architectonic concept of rhetoric thus also covers poetry which is 'properly no other than a particular mode or form of certain branches of oratory' (PR lxxiii). Although Campbell thus seems to classify poetry tightly, he nevertheless includes it in a methodological network which makes the conventional toolkit of rhetoric its general frame in a rather twentieth-century fashion. As shown in the table above, Campbell lists as the 'constituents' of poetry the medium of language; the general rules of composition, namely narration, description and argumentation; and the use of tropes and figures (PR lxxiii). These are indeed permanent constituents of poetry, whereas features such as versification belong to the mere appendages of poetry which constitute only variety, and not a different species.' ¹⁵

Campbell's work is significant here since it explores the problems and anomalies of language within the framework of thought, words and reality - the framework upon which linguistic communication is founded. Philosophy of Rhetoric contains a lengthy section dealing in close detail with features such as obscurity, unintelligibility, nonsense; no language is capable of absolute perfection (PR 2.6., 217). It is here that we find reflection on the discourse of the treatise Philosophy of Rhetoric itself, too. Whether a speaker or writer seeks to convey information, convince, please, move or persuade, he must make himself understood. It does not follow automatically, though, that the dichotomy clear-obscure overlaps with the dichotomy understandable-incomprehensible. Campbell interestingly asks, with reference to the Roman rhetorician Quintilian: 'May not then obscurity, on some occasions, be as conducive to the effect intended, as perspicuity is on other occasions?' (PR 2.8.1., 273-274). For an unremarkable writer, deliberate obscurity is not appropriate: though 'the genius of the performance renders obscurity to a certain degree excusable, nothing can ever constitute it an excellence' (PR 2.9., 284).

Regarding our present quest for moments of linguistic self-awareness among disciplines, Campbell makes an even more noteworthy concession that comments on the meta-language of criticism. He namely warns against too much clarity since too much of it has 'a tendency to cloy the reader' as it gives 'no play to the rational and active powers of the mind' (PR 2.9., 283–284). Thus, in some cases obscurity is defensible.

Perhaps I have said too much on the subject: for a review of what I have written, I am even apprehensive lest some readers imagine, that after quoting examples of the unintelligible from others, I have thought fit to produce a very ample specimen of my own. Every subject, it is certain, is not equally susceptible of perspicuity: but there is material difference between an obscurity which ariseth purely from the nature of the subject, and that which is chargeable upon the style. (PR 2.I., 265; emphasis added.)

While Campbell, like Baumgarten, was certainly very moderate in his defense of obscurity, he took several steps away from the Empiricist cult of clarity that he knew so well. In literature as a subject of study, he indeed found elements that serve as a criterion – or a *material difference*, in his terms – between decent study (even when difficult) and a mere academic Mischmasch.

We have seen that both Baumgarten and Campbell were involved in explorations into obscurity and clarity as elements of language in general and literary language in particular. However, their own critical language was not above such concerns either. The attempts of Baumgarten and Campbell to redefine old

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concepts to novel purposes participated in producing new technical vocabularies regarding even the very basic elements of literature. Now the question that suggests itself is: were these transitional writers also searching for a space for a more specialist discourse of literary study? If the epistemological structure of literary language was confused and even obscure *an sich*, how should or could this analytic insight be expressed?

4 The style of the meta-language

If one listens to some modern critics of Baumgarten and Campbell, their struggle for a specialist language of literary study was not successful. Their works are appreciated for their content, but language-wise they are seen as disasters. Baumgarten has been blamed for the Paragraphen-Verpuppung der ungelesenen Aesthetica ('the paragraph-pupation of the unread Aesthetics'16). Another critic sees that this Latin work remains untranslated in part (due) to the scholastic method of presentation and the sharply defined theoretical framework in which Baumgarten was clumsily moving, as in heavy armor; A more recent commentator observes Baumgarten's 'largely inconspicuous wit [that] occasionally interrupts his often-tedious analyses'. Somewhat surprisingly, the stylistic fame of George Campbell's Philosophy of Rhetoric is hardly any better. After all, it was not addressed to the 'scholastic' Latin-reading community but to the vernacular readership. According to a recent commentator, Campbell's language in this work is 'a frustrating read' with its turgid and elliptical style. 'Key points are ... lost in prose that lectures us on what seems obvious, and the text is even reluctant 'to dramatize what is original and important about the theory advanced' (Waltzer 2003, 1).

These are heavy accusations, especially when we recall that Baumgarten aimed for a systematic theory of the liberal arts, and Campbell himself criticized ironically the sort of difficult language he called 'The learned unintelligibility': 'if nonsense ever deserves to be exposed, it is when she has the arrogance to assume the garb of wisdom' (PR 2.6.2, 253). Does, then, something lurk behind the modern critics' comments that reveals more of our present paradigms and aspirations of literary study than those of the late eighteenth century?

Here we are at the heart of a characteristic that both describes and haunts modern humanities in general and literary study in particular. To put it as tautologically as possible: the disciplines that study language and literature produce language on language. Is this meta-language – if we believe in the difference between a meta-language and an object-language (Roland Barthes did not¹⁹) – supposed to be a language of expertise that tolerates difficulty and specialist vo-

cabulary (as is the case, say, in medical sciences)? Also within the humanities and cultural studies, the production of specialist new vocabularies has been seen an aspect of many disciplinary 'turns' or shifts of paradigms.²⁰ Or, on the contrary, should the meta-language of the researcher communicate to the broad reading audience that shows interest in the topic? As pointed out earlier, in the eighteenth century the preoccupation with this topic was actually due to the emerging national language and criticisms.²¹ However, the recent comments on Baumgarten and Campbell show that these issues and demands have not become obsolete. It has been recently argued, for instance, that much of contemporary literary study lacks a rational and methodologically precise approach. Instead of a systematic study of literature, scholars persist in writing 'metaphorical narrative and essayistic description'.

While it is true that the results of literary study should be made accessible to the general public, this approach is only half of the work that needs to be done and then as a second and/or parallel step. First, scholarship should be performed in the form and content of 'high' science and only after that should popularization occur. ... [S]cholarly books and work should not be written for the general public neither in the natural (basic) and medical sciences nor in the humanities and literary study.²²

This healthy recent reminder is nothing new as such but merely rehearses the early twentieth-century manifestos written by the architects of the linguistic turn.²³ If Tötösy de Zepetnek is right, however, then we may conclude that the prevailing paradigm of literary study may not recognise or at least appreciate the self-confident formal statements' of its predecessors. For a Baumgarten or a Campbell, the expert language may have served as an antidote to mere literary dilettantism. As Campbell sees it in the *Philosophy of Rhetoric*, the best method for theory creation combines a study of practice and the abstract knowledge of theory.²⁴ This realisation went hand in hand with the historical process where grammar, rhetoric and poetics were transformed and eventually amalgamated into the newly emerging disciplines of comparative philology, linguistics and literature in the nineteenth century.

5 The future of linguistic self-awareness?

Baumgarten and Campbell represent a period when the divorce of philosophical and literary language had not taken place and the age of the professional, university-based literary study did not yet exist. However, their search for the

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'constituents' of literature contributed to creating intellectual space for the emergence of literary study as a discipline. Moreover, obscurity and clarity were not just subjects of study and features of literary language but, likewise, also elements of the ways in which the observer's mind allegedly organises and structures the sensory world.

This takes us back to the critical struggle between difficult technical expert language *versus* reader-friendly humanism. Writers such as Baumgarten and Campbell neither claimed that literary criticism should not have an essential use within polite society nor wrote for the everyman of the late eighteenth century. Thanks to their synthetic efforts, the language of literary study was – decades before the dawn of Romanticism – conceptually ready to defend both its existence as a discipline and its interest in obscure discourses. However, there is a limit to any science – a limit George Campbell captures well as he warns ironically:

The more incomprehensible the subject is, the greater scope the [speaker] has to talk plausibly without any meaning (PR 2.7., 249–250).

Such an excessive 'learned incomprehensibility' is not alien to the present communities of scholarship and politics either. Language is the place where such incomprehensibility is produced – but also the place wherein the humanists may rewrite the canons and let 'vernacular energies play against revered terminologies'. ²⁵

Finally, the debates on expert languages and past linguistic turns reflect more general currents. Today the connections of languages and nations in Europe look completely different than in the eighteenth century. What would a history of humanities written in the year 2100 find when looking back to the early 2000s? A globalized, multilingual Europe, with a growing number of world languages spoken in everyday life. Yet the future historian would realise that at the same time – somewhat paradoxically – the number of languages offered by universities dropped. She would also discover that the European universities, from the north to the south, increasingly offered courses and degrees in any subject in English. More and more people learning fewer and fewer languages?

One does not have to be a prophet to conclude that there is thus no end to the fruitful debates between clarists and obscurantists or between defenders of reader-friendly science versus self-consciously technical languages of literary study.

Notes

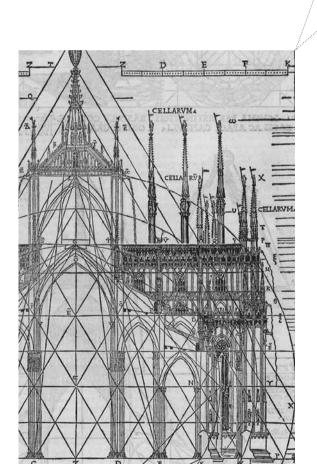
- For interesting approaches to linguistic and other turns in the wider tradition of occidental thought, see John O'Callaghan, Thomist Realism and the Linguistic Turn (Notre Dame: University of Notre Dame Press, 2003) and Doris Bachmann-Medick, Cultural turns. Neuorientierungen in den Kulturwissenschaften, 2. Auflage, (Reinbeck: Rowohlts Enzyklopädie, 2007).
- 2 Horst Fassel, Hugo Meltzl und die Anfänge der Komparatistik (Stuttgart: Franz Steiner Verlag, 2005); see also Claudio Guillén, The Challenge of Comparative Literature, transl. Cola Franzen (Cambridge, Mass. & London: Harvard University Press, 1993), 24n on these developments in France in the early 1800s.
- For definitions and elaboration, see Ulrich Weisstein, Comparative Literature and Literary Theory: Survey and Introduction (Bloomington: Indiana University Press, 1973); Guillén, The Challenge; Steven Tötösy de Zepetnek, Comparative Literature: Theory, Method, Application (Amsterdam, Atlanta: Rodopi, 1998); Fassel, Hugo Meltzl; Rainer Baasner and Maria Zens, Methoden und Modelle der Literaturwissenschaft (Berlin: Erich Schmidt Verlag, 2005); Jan M. Ziolkowski, Incomparable: The Destiny of Comparative Literature, Globalization or not, The Global South, Special Issue: Globalization and the Future of Comparative Literature 1, no. 2 (2007), 16–44.
- 4 Alexander Baumgarten, *Aesthetica*, third edition (Hildesheim: Olms, 1986, ed. princ. 1750). I shall refer to this work hereafter as A.
- 5 George Campbell, *The Philosophy of Rhetoric*, revised ed. L.F. Bitzer (Carbondale: Southern Illinois University Press, 1988, ed. princ. 1776). I shall refer to this work hereafter as PR.
- 6 René Wellek, A History of Modern Criticism 1750 –1950, 4 vols. (Cambridge: Cambridge University Press, 1981, ed. princ. 1955), vol. I, 145.
- See Douglas Lane Patey, 'The Institution of Criticism in the Eighteenth Century, in: The Cambridge History of Literary Criticism, Vol. 4: The Eighteenth Century, H.B. Nisbet and Claude Rawson, eds. (Cambridge: Cambridge University Press, 1997), 3–31: 3, for the meanings of the term 'criticism'. Cf. Susan Manning, 'Literature and Philosophy', in: The Cambridge History of Literary Criticism, Vol. 4: The Eighteenth Century, H.B. Nisbet and Claude Rawson, eds. (Cambridge: Cambridge University Press, 1997), 587–613, for literature and philosophy in the eighteenth century.
- 8 Guillén, The Challenge, 24.
- Jonathan Brody Kramnick, 'Literary Criticism among the Disciplines', Eighteenth Century Studies 35 no. 3 (2002), 343–360: 348, 359.
- Lubomír Doležel, Occidental Poetics: Tradition and Progress (Lincoln, London: University of Nebraska Press, 1990), 38, with reference to the Swiss-German theorists Bodmer, Breitinger and Baumgarten.
- In the various editions of his works, Baumgarten's emphasis moved from one liberal art to another. While at times, prime status is accorded to the terms 'rhetoric' and 'poetics' as synonyms for aesthetics, at times these are replaced by logic; cf. Päivi Mehtonen, Obscure Language, Unclear Literature. Theory and Practice from Quintilian to the Enlightenment (Helsinki: The Finnish Academy of Sciences and Letters, 2003), 151. This section of my paper and parts of the following ones develop themes examined in the context of Rationalism and Empiricism in Mehtonen, Obscure Language.
- For the sources of similar claims in the context of philosophy, see for instance G. W. Leibniz, New Essays on Human Understanding, transl. P. Remnant and J. Bennett (Cambridge: Cambridge University Press, 1996, ed. princ. 1765).

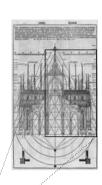
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Alexander Baumgarten, Reflections on Poetry (Meditationes philosophicae de nonnullis ad poema pertinentibus, transl. with the original text by K. Aschenbrenner and W. B. Holther, (Berkeley, Los Angeles: University of California Press, 1954, ed.princ. 1735). I shall refer to this work hereafter as MP.

- 14 Cf. Arthur E. Walzer, George Campbell: Rhetoric in the Age of Enlightenment (Albany: State University of New York Press, 2003), 89.
- The dichotomy of the constituents *versus* appendages of poetry resembles the dichotomy of the essential *versus* accidental elements in the medieval Arab-Aristotelian poetics; it also attempted to define the place of poetry/poetics as a part of the Aristotelian *organon* of sciences.
- 16 Hans Rudolf Schweizer, Ästhetik als Philosophie der sinnlichen Erkenntnis. Eine Interpretation der 'Aesthetica' A. G. Baumgartens mit teilweiser Wiedergabe des lateinischen Textes und deutscher Übersetzung (Basel, Stuttgart: Schwabe & Co, 1973), 13–16.
- 17 Wellek, History, vol. I, 144-145.
- 18 Peter Fenves, 'An Introduction to "Aesthetics and the Disciplines", Eighteenth Century Studies 35 no. 3 (2002), 339–341: 339.
- 19 See e.g. Roland Barthes, 'From Science to Literature', in: The Rustle of Language, transl. Richard Howard, (Worcester: Basil Blackwell, 1986), 3–10, 7: 'Structuralism's logical extension can only be to join literature no longer as "object" of analysis but as activity of writing, to abolish the distinction, born of logic, which makes the work into a language-object and science into a meta-language...'
- 20 Doris Bachmann-Medick, Cultural turns. Neuorientierungen in den Kulturwissenschaften,
 2. Auflage, (Reinbeck: Rowohlts Enzyklopädie, 2007), 19.
- 21 Kramnick, 'Literary Criticism'.
- 22 Tötösy de Zepetnek, Comparative Literature, 22.
- Thus R. Jakobson and JU. Tynjanov, 'Problems in the Study of Language and Literature', in: Roman Jakobson, Selected writings, Vol. III: Poetry of Grammar and Grammar of Poetry, Stephen Rudy ed., (The Hague, Paris, New York: Mouton Publishers, 1981, ed. princ. 1928), 3–6, 3: '... academic eclecticism and pedantic 'formalism' which replaces analysis by terminology and the classification of phenomena and the repeated attempts to shift literary and linguistic studies from a systematic science to episodic and anecdotal genres should be rejected'.
- 24 Walzer, George Campbell, 36.
- 25 Poirier, cit. by Edward W. Said, *Humanism and Democratic Criticism* (New York: Columbia University Press, 2004), 29.

LINGUISTS AND LOGICIANS





The Changing Relations between Grammar, Rhetoric and Music in the Early Modern Period

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I The tradition of the trivium and quadrivium

This paper aims to trace the changing architecture of the liberal arts in the seventeenth century, with primary focus on grammar and music. Both of these disciplines underwent radical internal developments over this period, and there are strong reasons for studying each strictly within its own boundaries. But there are also changes in the relations between the liberal arts which only emerge if one takes a broader perspective. This is most clearly manifest in the case of music, which undergoes a dramatic realignment from the quadrivium to the trivium over this period – from the artes reales (arithmetic, geometry, astronomy and music) to the artes sermocinales (grammar, logic and rhetoric).¹

The main thrust of the paper is that the shift of music from the quadrivium to the trivium is symptomatic of a larger set of developments which have complicated knock-on effects for all the disciplines involved. What appear to be simple structural realignments within the traditional framework of the liberal arts, involving grammar as well as music, are in fact part of a process whereby an older architecture of knowledge is fundamentally dismantled, and a newer division between the humanities and natural sciences emerges. This development was outlined by George Sarton in his *History of Science*.² Sarton argues that, within the set of liberal arts which formed the basic syllabus for education in the Middle Ages and the Renaissance, the division between the quadrivium and trivium is not the same as the one that was later to be drawn between the sciences and the humanities. 'For one thing,' he asks (rhetorically), 'is not music part of the humanities?'

I have long maintained that the main cleavage in education is not vertical, between humanities on the right and science plus technology on the left, but rather horizontal, between grammar at the bottom and the humanities

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above it. There were humanities as well as grammar in the trivium, there were humanities as well as science in the quadrivium.

(SARTON, A History of Science, 1959, p. 311)

In other words, the emerging distinction between the humanities and the sciences is *orthogonal* to the existing division between the trivium and the quadrivium, and the newer dichotomy does not simply replace the older but overlays it, in the manner of a palimpsest. Thus, although 'before-and-after' snapshots can reveal robust differences between the start and finish of the seventeenth century, the set of intervening changes presents an enormously complex and multi-dimensional picture. At the risk of oversimplifying, I would like to argue that focusing on changes in the links *between* the various individual disciplines can go some way to explaining how the larger reconfiguration is 'driven' and also help illuminate some crucial developments *within* the individual disciplines themselves. This can be illustrated, before we descend to more detail, by the changes in the links which music and grammar have to rhetoric.

As we have noted, music in the Western tradition is grouped under the mathematical arts of the quadrivium. This linkage goes back to Greek antiquity and is exemplified by the discussion of harmonic structures in terms of the geometrical and arithmetical patterns within the musical scales, and the parallels between musical ratios and proportions and those of the movements of the heavenly bodies.3 These mathematical aspects of music (arithmetical, geometrical and astronomical) continued to be the focus of scholarly attention throughout the seventeenth century, at least as an academic discipline studied as part of the university curriculum.4 However, a radically different sort of musical analysis emerges at the turn of the sixteenth and seventeenth centuries, which explicitly places music within the framework of rhetorical theory, thus linking music to the other language arts of the trivium. This new approach is typified by Joachim Burmeister's treatise on musical poetics, Musica Poetica, which appeared in Rostock in 1606 and which exerted a strong influence throughout Europe. 5 By the second half of the century, this realignment was sufficiently well established for music to be listed along with the artes sermocinales in Comenius's encyclopedia for schoolboys, the Orbis Sensualium Pictus.⁶ The double identity of music (as both a rhetorical and a mathematical art) is itself only one aspect of the turbulent changes which music underwent during the seventeenth century, caught up as it was in the sectarian and political controversies of the civil war and the restoration periods. But it is a double identity of sufficient theoretical importance to warrant highlighting it thus, since the larger controversies, which are for most historical purposes of greater importance, can easily overshadow and obscure it.7

Language in seventeenth-century Britain was almost as embattled as was music. The decline of Latin as an institutional lingua franca and the consequent 'triumph' of the English language - to borrow the title from the classic study by Richard Foster Jones⁸ - meant that the proper object for grammatical theory correspondingly shifted from the classical languages to the vernacular. This was directly reflected in the controversy between Protestant and Catholic theologians concerning the availability for lay persons of scriptural texts in translation, which opened the way to their interpretation without clerical guidance.9 A third factor was the perceived need for new vocabulary and grammar for classification and argumentation called for by the empirical sciences which were emerging with the Baconian 'instauration of knowledge'.10 The cumulative effect of these various impulses was a major readjustment in the status of the language arts, foregrounding the study of grammar in such a way that it became a central focus of attention for thinkers of all disciplines (as we shall see in the following section) and, paradoxically, back-grounding and denigrating the art of rhetoric as an independent discipline. In England (though not to the same extent elsewhere in the Englishspeaking world) the concept of rhetoric during this period developed pejorative overtones as the art of linguistic decoration, concealment and deceit, in contrast to an ideal of the unadorned 'plain style', which became a mainstream Protestant aspiration for both liturgical and scientific purposes.

The starting point of the paper will be an examination of seventeenth-century schemes for the construction of a philosophical language, and the position of such schemes in the context of the trivium and quadrivium. As an interlude, I shall then look at the satirical treatment of philosophical language schemes by Swift in *Gulliver's Travels*, focussing on the art of combinatorics, which, for contemporaries, brought together the arts of grammar and music under a single rubric. In the concluding section, I shall look at the changing relations between language and music in the context of what I shall call 'linguistic eschatology' (linguistic first and last things).

2 From real character to philosophical language

Any history of grammatical theory in Britain needs to take account of the impact of philosophical language schemes, which originated in the early seventeenth century as part of Francis Bacon's call for a general reform of learning, and which petered out towards the end of the 1680s. The intellectual tide on which these ideas floated was a pan-European one, the debate including such figures as Descartes, Comenius and Leibniz." But where continental thinkers tended to adopt a largely speculative approach, British scholars commonly produced practical implementa-

tions of their ideas. Notable exponents included Francis Lodwick, George Dalgarno and John Wilkins.¹²

The theory of philosophical language needs to be situated against the background of both the classical and the vernacular tradition in Western grammatical thought, as has been documented in the magisterial studies by Arthur Padley.¹³ But the development is one that transcends the traditional boundaries of grammar as a self-contained study. The ideal philosophical language was designed to be a representational system that was simultaneously to fulfil a wide spectrum of functions, serving as a mathematical algebra, a system for exact scientific nomenclature, a means of international communication between scholars, a pedagogical primer to train children in logical thinking and, into the bargain, offering a system of shorthand and of cryptography. In point of fact, there were tensions within the central circle of thinkers from the very start as to what primary aims and objectives the schemes should set themselves, and as the projects unravelled, the component threads ran in a variety of different directions.

One useful way of documenting the scope and impact of such schemes is to position them within the framework of the liberal arts. As a contribution to grammatical theory, philosophical language schemes belong straightforwardly with the other language arts of the trivium. However, from their inception they subverted the very division between trivium and quadrivium, not just because of their scope (relating as they do to the various disciplines in which they are to be used), but more importantly as a result of the theory of signs on which they rest. This is implicit in the very concept of a 'real character', which can be defined as a representational system where the signs do not stand for words (as in our received writing systems) but stand directly for things. This conception is based on a radical scepticism and suspicion of language, which is elaborated by various seventeenth-century thinkers from Francis Bacon himself to John Locke. The point of interest here is that a 'real' character, thus defined, straddles the primary division between the trivium and the quadrivium. As a representational system (a 'character' in the seventeenth-century sense), it belongs with the artes sermocinales of the trivium; but since the signs of the real character stand not for words but things (res), it belongs equally with the artes reales of the quadrivium. Its primary function, at least for thinkers such as Wilkins, was precisely to serve as a classificatory tool for the mathematical and physical sciences.

It is from this pivotal point that one can document a radical divergence of opinion as to how a real *character* (i.e. an ancillary written system) was to be elaborated into a philosophical *language* (a system, both spoken and written, capable of fulfilling the same range of communicative purposes as the received human languages). George Dalgarno, who had originally joined forces with John Wilkins, began to feel that if a philosophical language were to embody the tax-

onomies of the various sciences, about which there was philosophical disagreement, it would be a case of *quot capita*, *tot sententiae* – as many different opinions as there were different heads – and that such shifting sands could not be an adequate foundation on which to build. An alternative approach, therefore, was to see the primary purpose of a philosophical language as being a tool for analysis and argumentation, rather than as a repository of encyclopedic knowledge. Dalgarno was not alone in conceiving of a philosophical language in this way. Hooke's notion of a 'philosophical algebra'¹⁴ was along the same lines, and the ideas of Seth Ward and John Wallis, despite their scepticism about the need for a universal language as a separate invention, were closer to Dalgarno than to Wilkins in this regard (Cram 1994).¹⁵

A central point that Dalgarno stresses is that his philosophical language does not rest only on a grammatical foundation which he has invented (i.e. the morphological elements and the syntactic rules for combining them) but equally on the logical analysis of the concepts whose internal structure is to be thus represented. Furthermore, Dalgarno's art of signs is intended not just to be a grammar and a logic, but to serve the full range of functions involved in the trivium, including rhetoric. In the preface to Ars Signorum, he advises his reader: 'Take care that in forming your judgment you do not separate things which are not to be separated, namely the logical and the grammatical parts; but so as to come to a fairer verdict keep foremost in mind the ultimate aim, namely ease of communication.'16 As the system works out, no separate art of rhetoric is required, since the logical resolution of notions itself renders them clear and distinct, and the process of translating a text into the philosophical language from English (or Latin for that matter) will serve precisely to separate out and discard any rhetorical tropes whose function is purely ornamental. Dalgarno's art of signs is in practice a rhetoric as well as a grammar and a logic: it will serve all the communicative functions of traditional rhetoric – other than those whose purpose is to decorate, conceal, or deceive. But while Dalgarno's Ars Signorum can thus be characterised as coextensive with the traditional trivium of grammar, logic and rhetoric, it differs from his own earlier schemes, and from Wilkins's Essay, in de-coupling itself from the disciplines of the quadrivium. Where Wilkins's scheme is based on an exhaustive encyclopedic taxonomy of concepts, and hence commits its users to the associated epistemological and ontological assumptions, Dalgarno's scheme is based on the simplest possible set of primitives (and possibly no more than an 'alphabet' of simple notions), from which taxonomies of whatever sort can be constructed.

It is doubtless oversimplifying the difference between Dalgarno's and Wilkins's scheme to state it thus baldly. However, the 'breach of judgement' between the two men, which was perceived at the time to be one of fundamental principle,¹⁷ can be usefully restated in terms of the respective orientation of their schemes

within the architecture of the liberal arts: Wilkins's scheme is intended to sit above both the trivium and the quadrivium as whole; Dalgarno's is intended to sit above the trivium as a whole, but to be fundamentally independent of the quadrivium (although, of course, as a 'real character' it will serve to articulate propositions relating to the artes reales). It was Dalgarno's contention that the dwindling of public interest in philosophical language schemes, which had already set in by the 1680s, was a direct result of the failure among those involved to reach any consensus about the foundations of such a scheme, even though their professed aim was precisely to engineer methodological consensus of this sort. Dalgarno was at least partly correct in this view, although it must be added that a factor of equal importance was the advent of radically new ways of thinking about language and epistemology. This was typified by the work of John Locke, which undermined the very theory of signs on which Dalgarno and Wilkins relied, both thinkers assuming that the set of radical notions to be represented are the same for any rational human being, and that language is no more than a nomenclature for such universal notions.

One further step in the development of Dalgarno's thought is relevant to the larger trends which we are exploring here. At the start of his work, Dalgarno assumed that his art of signs could serve both as a system of shorthand as well as a real character – indeed his work on *Ars Signorum* grew directly out of an attempt to improve an existing shorthand system. It was only considerably later that he came to believe that this was a profound mistake, as can be illustrated by the simplest of examples. In a real character, which aims to resolve all complex notions into their simplex constituents, the English words *here* and *there* will be resolved into THIS-PLACE and THAT-PLACE, respectively, and likewise *now* and *then* will translate as THIS-TIME and THAT-TIME. The component elements THIS, THAT, PLACE and TIME will already be part of the set of basic primitives (needed to translate the corresponding English words), so the logical analysis can be effected 'for free'. In other words, the philosophical language needs no separate and independent radical signs corresponding to the English *here, there, now* and *then*.

But notice that this process of logical resolution, the central feature of Dalgarno's real character that sets it apart from Wilkins's, means that it cannot function as a shorthand system when serving to translate an English text. In fact, it works precisely the other way round. It is English that functions here as a shorthand system for conveying the complex notions analysed out by the real character, and not vice versa. The same will hold for received languages in general. What emerges from Dalgarno's later work is thus not just the conception of a philosophical language that is arguably more elegant and consistent than that of Wilkins, but also a more sophisticated view of existing human languages, rec-

ognising that they need, in effect, to be shorthand systems (in contrast to a full logical analysis of human thought) for the purposes of practical communication and argumentation.

3 Interlude: Gulliver at the Academy of Lagado

Whatever the reasons for the sharp decline in scientific concern with philosophical languages by the 1680s, one measure of the change in the intellectual climate of opinion was the emergence of caricature and satire aimed at these projects following the turn of the century. Such attacks, the best known of which were by Jonathan Swift and his circle, were part of a much larger onslaught on the old style liberal arts curriculum and in particular on syllogistic logic, which continued to be an obligatory and central component of university education for all subjects and the medium for both college and university education. A broadly based satire along these lines, of delicious literary merit in its own right, can be found in the account of the intellectual development of the fictitious Martinus Scriblerus, a collaborative construction by a group of writers including Jonathan Swift.¹⁸ More relevant for our present purposes is the account in Swift's Gulliver's Travels of the visit to the Academy of Lagado, a thinly veiled caricature of the Royal Society.¹⁹ Although the various scientific projects depicted here are made to appear hare-brained, they are in fact closely modelled on actual experiments reported in the Transactions of the Society. This holds also for the account of Gulliver's visit to the School of Languages, which highlights two central aspects of philosophical language schemes.

Gulliver's first port of call at the Academy of Lagado is the School of Languages, where he finds three professors in consultation about ways of improving the language of their own country. Two projects are being pursued. The aim of the first of them is 'to shorten Discourse by cutting Polysyllables into one, and leaving out Verbs and Participles, because in reality all things imaginable are but Nouns.' Swift has here yoked together two principles indeed propounded by the actual language projectors: one is the logical reduction of the parts of speech to the absolute minimum, and the other is the maxim that a simplex idea should be represented by a sign which is likewise simplex.²⁰

The second scheme is more radical, since its aim is to abolish words altogether, on the grounds that 'since Words are only Names for *Things*, it would be more convenient for all Men to carry about them, such *Things* as were necessary to express the particular Business they are to discourse on'. Here Swift presses the idea of a 'real character' to its logical conclusion. Communication is effected by flour-ishing exemplars of the things which are the objects of the exchange, words thus

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simply being rendered redundant. There is however a snag in the implementation of this scheme, as with other projects at the Academy:

[If] a Man's Business be very great, and of various kinds, he must be obliged in Proportion to carry a greater bundle of *Things* upon his Back, unless he can afford one or two strong Servants to attend him. I have often beheld two of those Sages almost sinking under the Weight of their Packs, like Pedlars among us; who, when they met in the Streets, would lay down their Loads, open their Sacks, and hold Conversation for an Hour together.

(Swift, Gulliver's Travels, p. 15721)

The ludicrousness of this scene is, appropriately, graphic enough to have inspired more than one of the book-illustrators for subsequent editions of *Gulliver's Travels* to flourish an image of it for their readers.²²

In another part of the Academy, Gulliver visits the Projectors in Speculative Learning. Here he is invited to inspect a combinatorial device which takes up the greater part of both the length and breadth of the room. This consists of a frame holding multiple rows of blocks with written characters inscribed on them, each row of which can be turned independently by means of iron handles projecting out from the sides of the machine. The professor in charge of this project sets his engine to work by commanding his forty pupils each to take hold of one of the forty iron handles and to give it a sudden turn, so that each time this happens the overall configuration of the blocks is changed. Where they find three or four words which combined to form a sentence, this is dictated to other boys who act as scribes. Gulliver reports that:

The Professor shewed me several Volumes in large Folio already collected, of broken Sentences, which he intended to piece together, and out of those rich Materials to give the World a compleat Body of all Arts and Sciences.

(Swift, Gulliver's Travels, p. 156)

As with the previous project, what we are presented with here is a caricature. But the scope of the two projects combined is not unrepresentative of the more heady manifestos of what a philosophical language might achieve. Such a tool would be a means not only of representing things (rather than words) in an analytic and self-revealing way, but also for generating new knowledge across the full gamut of the liberal arts.²³

Two aspects of the Lagado schemes are worth highlighting, since they point towards a developing link between grammar and music. Firstly, although it is quite accurate to identify these schemes with those of the British philosophical language projectors, they may with equal accuracy be characterized in a more abstract way as an *ars combinatoria*, an 'art of combinatorics'. This is the label used by Leibniz for the mathematical scheme on which he worked throughout his lifetime, and which was intended to have a range of philosophical and scientific uses beyond those of a universal language in the narrower sense.²⁴ One of the features of this scheme of relevance for our present purposes is the range of its application not just to language but also to music.

In a perfect language, Leibniz argued, people would not stand and argue, but would sit down together and say 'Let us calculate'. Along similar lines, Leibniz comments on the combinatorial nature of music as follows:

Music charms us, although its beauty consists only in the agreement of numbers and in the counting, which we do not perceive but which the soul nevertheless continues to carry out, of the beats or vibrations of sounding bodies which coincide at certain intervals. The pleasures which the eye finds in proportions are of the same nature, and those caused by other senses amount to something similar, although we may not be able to explain them so distinctly.

(Leibniz, Principles of Nature and of Grace)25

The art of combinatorics in this construal thus starts to embrace both a theory of language and a general theory of aesthetics. Although this is a more typically eighteenth-century development, and perhaps more characteristic of continental than British thinkers, similar sorts of issues concerning the perception and emotive force of music were being tackled in an experimental way towards the end of the seventeenth century in the circles of the Royal Society.²⁶

The second noteworthy feature of the combinatorial project which Gulliver witnesses at Lagado is its implementation on what is called an 'engine' in contemporary parlance, i.e. a physical machine. In modern parlance, this is the hardware on which the software of the combinatorial scheme will run. Such machines were indeed being developed at this time: well-known examples include the rotary calculating machines constructed by Leibniz and Pascal and various devices using sliding rods (the origin of the modern slide-rule) based on the model of 'Napier's bones', invented by the Scotsman John Napier.²⁷ An omni-purpose machine of the latter sort was invented by Athanasius Kircher, designed for a range of functions including arithmetic, geometry, cryptography and, last but not least, the composition of music.²⁸ A musical 'composition box', based on Kircher's device and thought to have been the property of Samuel Pepys, is preserved in the library of Trinity College, Cambridge University.²⁹

4 From the language of Adam to the language of the angels

So far, we have considered a number of developments in the theory of grammar and music in relation to the position of these two disciplines within the traditional structure of the liberal arts. In this final section, I will examine the role of grammar and music in connection with a range of theological issues which can be grouped together under the rubric of 'linguistic eschatology', involving questions about the origin of language and the language of the afterlife. These issues were a continuing preoccupation throughout the seventeenth century and formed an integral dimension of speculation about the nature of both language and music. There is, however, a fundamental change in the relation between language and music in this context, and the overall direction of this change matches the trajectory of the other developments we have been following.

Let us begin with the question of the origin of language.30 For most seventeenth-century thinkers, the theoretical challenge of constructing a philosophical language was in effect coextensive with that of reconstructing the language of Adam – the perfect language of paradise before the Fall and before the confusion of tongues at Babel. One point of theological difference of opinion was whether this language was divinely inspired or of human invention. John Wilkins subscribed to what was the more common view that language was divinely inspired, since it is evident from scriptural authority that 'the first Language was con-created with our first Parents, they immediately understanding the voice of God speaking to them in the Garden'. George Dalgarno, by contrast, found scriptural support for the opposing view that, far from being a supernatural gift, language was of human invention (albeit by the pre-lapsarian Adam in his state of innocency), citing the verse in Genesis 2.19 which asserts quite explicitly that God brought the animals to Adam to SEE what he could call them (Dalgarno's emphasis).32 There were similar differences of opinion as to whether the confusion of tongues at Babel was to be viewed as a supernatural event, the result of divine intervention, or a metaphorical account of a natural event (the divergence of languages at the colonisation of the world by the sons of Noah being similar to that observable in modern times by the divergence of Latin into the Romance languages). These theological points have direct implications for philosophical language schemes. If language is of human invention by origin, then it is in principle reconstructible by human effort. But if language is of divine origin, then the very idea of attempting to reverse Babel must be seen as an act of hubris or worse, as Dalgarno reports being told.

Parallel to these considerations regarding the origin of language, there are similar traditions concerning the origin of music. Thus, while Genesis 4: 21 tells us that Jubal was the father of all who play the harp and organ, and was by implication the inventor of music, Job 38: 7 informs us that previously, at the very

dawn of creation, 'the morning stars sang together'. What is of importance for our present discussion is that, although music and language were strongly linked together under the rubric of the art of combinatorics, there is no dynamic connection between the two as regards the accounts of their first origins. The two traditions simply sit side-by-side, each with its own set of complications. Music does not have any significant role in seventeenth-century accounts of language origin, nor in teasing apart differences of stance in the subsidiary controversies. However, the situation is very different if we attempt a broad-brush comparison between seventeenth-century debates about the origins of language with those which were being conducted in the second half of the eighteenth.33 Two of the most influential treatises on the origin of language from this latter period are those of Rousseau³⁴ and Herder.³⁵ and in both of these music is viewed as an integral part of the social and communicative context which gave rise to human speech.³⁶ In subsequent discussion of first origins throughout this and the following century, opinions varied widely as to the priority given to language and music, and to the mediating role assigned to song (the fitting of words to music) and to poetic meter (the fitting of musical structures to words). But if one stands back far enough from the individual trees to catch a glimpse of the wood as a whole, one can discern a step-change from an earlier view of language and music as independent combinatorial objects with a common Platonic existence to a later view in which both are seen as social, communicative and aesthetic productions. What is emerging here is a category of study - that of the humanities - which overlays and bridges the earlier divide between the trivium and the quadrivium.

A parallel development can be discerned when we turn from eschatological first things to last things. It is curious that so little attention has been paid to this aspect, given the vast scholarly literature devoted to philosophical language schemes as a process of 'debabelization' - the reversal of Babel as distinct from the reconstruction of the Adamic language. But even a brief foray can be illuminating.37 Following commonplace biblical hermeneutics, the typological counterpart of the confusion of tongues at Babel is the gift of tongues at Pentecost. But seventeenth-century interpretations of Pentecost turn out to be very different from those which serve as the foundation for most modern Pentecostal churches. As in the case of the interpretations of Babel, there is a fundamental distinction to be drawn here between supernatural and natural interpretations of what is meant by speaking in tongues in the account of Pentecost in Acts 2: 1-15. On the one hand, there is glossolalia, by which is meant speaking in a supernatural language that is different from any know human language (commonly termed 'holy gibberish'), and on the other hand, there is xenolalia, by which is meant speaking in a known human language to which the speaker has not been previously exposed and has not learnt in the usual way. Reports of glossolalia, or 'holy gibberish', are not un274 David Cram

common in seventeenth-century Britain, particularly among the more extreme puritan sects.³⁸ But it may come as a surprise to modern readers that the standard Anglican interpretation of the biblical account of speaking in tongues does not take it to be glossolalia, but xenolalia.³⁹ The gift of tongues is construed not as the gift of a supernatural object (a divine language) but of supernatural knowledge of a natural object (a human language).

These eschatological considerations have strong but potentially contradictory implications for the project of debabelization and the construction of a philosophical language. On the one hand, if the gift of tongues at Pentecost involved a natural language rather than a supernatural one, then it should in principle be within the reach of human ingenuity to achieve by study what was granted to the apostles by miraculous intervention. The project of debabelization is thus feasible, even if one subscribes to the further assumption that the age of miracles is past. On the other hand, if debabelization in this manner is feasible, then there is in principle no need for an additional new language over and above the existing ones. This results in a quite distinct position, which one can label 'sympathetic but sceptical', adopted by several of those in the circle of Wilkins and Dalgarno: the arguments designed to demonstrate that a philosophical language is feasible likewise show that it is unnecessary.⁴⁰

What then of the language of the afterlife? For those subscribing to a notion of glossolalia, the answer is straightforward: holy gibberish gives us a small glimpse of this - even though it may not be wholly accessible to human reason. The same holds for those in England who followed in the tradition of Jacob Böhme and subscribed to the notion of a mystical 'Natursprache' which is accessible only by intuition and through inspiration.41 But for scholars such as Wilkins and Dalgarno, the difficulty in giving an account of the language of the afterlife was similar to that of giving an account of the language of Adam. From this perspective, as Thomas Burnet affirms in his encyclopedic treatise on The State of the Dead and of Departed Souls at the Resurrection, the answer is simple: we cannot know what the language of the afterlife will be, even though many people have invented dialogues of the dead: 'Mortuorum dialogos finxere multi, sed quâ linguâ colloquuntur, nescio'.42 One might think, he goes on to speculate, that each would use the same mother tongue as they had used on earth, the Greeks Greek, the Latins Latin, and so on. But what of the island of Britain, which has several languages of different origins? 'Shall we speak Welsh in our aërial Bodies, or Saxon, or Norman, or as we do at this Day, a Mixture or Compound of them all? If the Life to come were to be regulated at this rate, I am afraid there would be a Confusion of Tongues, worse than that of Babel'.43

There is however another way that the question about the language of the afterlife can be formulated, namely: what is the language of the angels? One sev-

enteenth-century answer to this question (which in this form has a rich medieval pedigree) was provided by John Dee's conversations with the angels, an account of which was published by Meric Casaubon at precisely the time that Dalgarno and Wilkins started collaborating on a combined project. ⁴⁴ But most mainstream thinkers would have followed Thomas Burnet in dismissing such hubristic speculation out of hand, along with the other constructed 'dialogues of the dead'. An alternative answer, which commended wider acceptance, is a more radical one: the language of the angels is not a language, but music. And this brings us back to our main topic.

The idea that music is the language of the angels is the view taken by Richard Baxter, the author of *The Saints Everlasting Rest*, a discussion, as the title page announces, of the blessed state of the saints in their enjoyment of God in glory. This view can be supported by a multiplicity of biblical statements, from both the Old and New Testaments, that the function of the angels is to sing everlasting praise. Human prayer, by contrast, has a number of functions other than that of praise, including petitions and confessions, which of course do not apply in the realm of the angels and the saints. It is the element of praise that is the one that makes the soul resonate, and thus bridges between the human and the angelic spheres: In he body is the soul's instrument; and when it lies unstringed, or untuned, the musick is likely to be accordingly but dull.

The key concept here is that of *harmony*, and a juxtaposition of sermons devoted to this topic, one from the 1640s and one from 1724, points up both the continuity and the change in religious attitudes to music over the seventeenth and early eighteenth century. The earlier sermon was published anonymously and announces itself as 'a plea for the abolishing of organs and other musick out of the Protestant churches of Great Britain', but the title of the sermon is 'The Holy Harmony'.⁴⁸ This might at first sound paradoxical, but the argument against *instrumental* music is precisely that, by attracting attention to itself, it disturbs worship as it prevents the soul from resonating in the appropriate harmonic way. This puritan attack on instrumental music, under the banner of harmony, can be contrasted with a sermon preached in 1724 at the Three Choirs Festival, an annual event established very early in the eighteenth century. In promoting church music, Henry Abbot urges that:

If Singing be the Employment of Angels, and Eternity must be spent in Praises and Thanksgivings; if Cherubs and Seraphs are to be our future Companions [...] methinks it should be the utmost endeavour of every Soul, that desires to be a Member of that blessed Choir, to take all opportunities of joining in Chorus with those here below.

(Abbot, The Use and Benefit of Church-Music, pp. 20-21)49

In the first sermon, harmony was invoked as grounds for banning instrumental music from worship; in the second, as grounds for promoting it.

In a sermon at the same annual event two years later, Thomas Bisse preached on the same theme, but with a wider approach. Rather than invoking scriptural authority alone, Bisse begins by giving a survey of recent scientific investigation of music and the effects of music, and on this basis he concludes:

For as I believe, and have reasons so to do from the representations of Scripture, that harmony will be an ingredient, surely no small one, in the enjoyments of the life to come: so I am emboldened in this belief, from the former meditations on its nature, end and causes.

(Bisse, Music the delight of the sons of men, p. 33)50

The range of specific topics which Bisse touches on amounts to a remarkably comprehensive account of the current state of the art. They include: the nature, end and causes of harmony; music and the auditory nerves; the comparison of hearing and vision; the effect of music on the passions; the effects of music on animals; the phenomenon of deafness and tone deafness; and the effects of theatrical as distinct from church music.⁵¹ And it is noteworthy that, in documenting these investigations, Bisse makes specific reference to publications by John Wallis,⁵² who, as we have seen, straddles the divide between the study of language and the study of music.

5 Coda: What is a 'natural language'?

This study has examined aspects of seventeenth-century thought concerning language and music and the relations between them. Many of the individual issues involve matters which are pulled in different directions by larger theoretical and theological concerns. Close-up, it is not always easy to discern any larger picture into which these smaller pieces fit. What I have tried to show is that, for a modern student of the period, one can go a long way towards illuminating the contemporary significance of these issues by situating them robustly on the received map of the trivium and quadrivium. By doing so, one can identify a range of smaller developments which are part of much larger fundamental changes, which they either drive or are driven by, and which in the longer run modify the very map itself. The effect is not so much the simple replacement of one paradigm by another, but a process of 'palimpsesting' a new map on top of an existing one.

The example I started out from was that of music and its realignment from the quadrivium to the trivium. I would like to finish with a parallel exam-

ple from the study of language, and a similar pair of before-and-after snapshots involving the term 'natural language'. In modern usage, the term 'natural language' is used in contradistinction to an 'artificial language' or a 'man-made language': English and French are natural languages, Algol and Esperanto are artificial or man-made languages. Seventeenth-century usage can be confusing for the modern reader, since although a similar sort of distinction is made, the term 'natural language' is quite differently anchored. Thus, for Dalgarno (whose usage is representative), English and French are termed 'instituted languages', in contradistinction to a 'natural language' (or 'language of nature'), which would include examples ranging from the Adamic language at one extreme to the language of gesture at the other. This contrast can be put in a diagram as follows:

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seventeenth-century: instituted versus natural
instituted language = English, French, etc.
natural language = Adamic language, gesture, etc.
eighteenth-century: natural versus artificial
natural language = English, French, etc.
artificial language = Algol, Esperanto, etc.<sup>53</sup>
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This is not just a question of relabelling. What is more important than the terminological change is an associated switch in polarity. It so happens, confusingly but helpfully, that the term natural language migrates from one pole to the other, following a change in theoretical focus of interest. In the seventeenth century there is a common assumption that if one wants to know how language works, then knowledge of natural language will afford this; the construction of a philosophical language is thus part of the attempt to understand natural language in this sense. By the eighteenth century this older polarity has been largely overlaid by a new one: if one wants to understand human language, then it is to the study of received languages such as English and French that one must look – natural languages' in the new sense. This is the framework that informs the eighteenth-century investigations by Rousseau and Herder of the origin of language (in the sense of individual human languages) in contrast to seventeenth-century investigations (in the sense of the language of Adam).

These developments are messy and multi-faceted ones. But I would argue that this shift in the meaning of the term 'natural language', like the previously discussed shift in the alignment of music, is symptomatic of the advent of a new distinction that overlays and overwrites the older distinction between the trivium and the quadrivium – the distinction between the sciences and the emerging category of 'the humanities'.

Notes

In the iconography of the Middle Ages, the seven liberal arts are depicted as subservient to Mary, the fount of all wisdom, and subdivided into a trivium of language disciplines and a quadrivium of mathematic ones; see Philippe Verdier, 'L'Iconographie des arts libéraux dans l'art du moyen âge jusqu'à la fin du quinzième siècle,' in: Arts libéraux et philosophie au moyen âge (Montréal: Institut d'études médiévales, 1969), 305-355. On the medieval and Renaissance background, see David L. Wagner (ed.), The Seven Liberal Arts in the Middle Ages (Bloomington: Indiana University Press, 1983), and Ann E. Moyer, 'The Demise of the Quadrivium and the Beginning of the Scientific Revolution: Boethius in the Sixteenth Century', Intellectual News 10 (2002): 69-77.

- ² George Sarton, A History of Science. Hellenistic Science and Culture in the Last Three Centuries B.C. (New York: Norton, 1959).
- On Greek musical theory, see Martin L. West, Ancient Greek Music (Oxford: Clarendon Press, 1992), and Thomas J. Mathiesen, Apollo's Lyre: Greek Music and Music Theory in Antiquity and the Middle Ages (Lincoln, Nebraska: University of Nebraska Press, 1999). Scholarly editions of the major Greek texts on music were published in this period by Marcus Meibom, Antiquæ musicæ auctores septem: Graece et Latine. Marcus Meibomius restituit ac notis explicavit (Amsterdam: Elzevir, 1652) and John Wallis, Claudii Ptolemaei Harmonicorum libri tres, nunc primum Graece editus Johannes Wallis (Oxford: From the Sheldonian Theatre, 1682).
- Joachim Burmeister, Musica Poetica (Rostock: S. Myliander, 1606). On music theory at this period, see Floris H. Cohen, Quantifying Music: The Science of Music at the First Stage of the Scientific Revolution, 1580-1650 (Dordrecht: Kluwer Academic Publishers, 1985), Penelope Gouk, Music, Science and Natural Magic in Seventeenth-century England, (New Haven/London: Yale University Press, 1999), Rebecca Herissone, Music Theory in Seventeenth-Century England (Oxford: Oxford University Press, 2000), and Benjamin Wardhaugh, Music, Experiment and Mathematics in England, 1653-1705 (Farnham: Ashgate, 2008). Major seventeenth-century treatments of music theory include Johannes Kepler, Harmonices mundi libri v (Lincii Austriae: Sumptibus Godofredi Tampachii, 1619), Marin Mersenne, Harmonie universelle, contenant la theorie et la pratique de la musique (Paris: Sebastien Cramoisy, 1636), and Athanasius Kircher, Musurgia universalis siue ars magna consoni et dissoni (Rome: Ex typographia hæredum Francisci Corbelletti, 1650).
- For a discussion of the realignment of music from quadrivium to trivium, see Elisabeth Kotzakidou Pace, 'The Conceptual Affinity between the Arts of Music and Rhetoric in the German Renaissance,' Language and History 52 (2009): 70-95; cf. Hans Heinrich Unger, Die Beziehung zwischen Musik und Rhetorik im 16.-18. Jahrhundert (Würzburg, 1941) and Brian Vickers, 'Figures of Rhetoric/Figures of Music?' Rhetorica 2 (1984): 1-44.
- 6 See the English translation of Comenius's tract (Jan Amos Comenius, Orbis Sensualium Pictus. The Visible World, London, 1659), where the Artes Sermonis, glossed as 'Arts Belonging to the Speech', include Grammar, Rhetoric, Poetry and Music.
- See David Cram, 'Language and Music: Theme and Variations in the History of Linguistics', in: Jan Noordegraaf et al. (eds.), Amicitia in Academia. Composities voor Els Elffers (Amsterdam: Stichting Neerlandistiek VU; Münster: Nodus, 1-15, 2006) and David Cram, 'Language and Music: The Pragmatic Turn,' Language and History 52 (2009): 41-58.
- 8 Richard Foster Jones, The Triumph of the English Language: A Survey of Opinions Concerning the Vernacular from the Introduction of Printing to the Restoration (London: Oxford University Press, 1953).

- This was a point of difference which theologians such as John Wilkins saw as more fundamental to the Protestant/Catholic divide than the metaphorical versus literal understanding of transsubstantiation (John Wilkins, Ecclesiastes, or, a Discourse concerning the Gift of Preaching, London: Samuel Gellibrand, 1646).
- 10 Charles Webster, The Great Instauration: Science, Medicine and Reform 1626-1660 (London: Duckworth, 1975).
- 11 For a brief general survey, see Jaap Maat & David Cram, 'Universal Language Schemes in the Seventeenth Century', in: Sylvain Auroux et al. (eds.), History of the Language Sciences (Berlin/New York: de Gruyter, 2000), Vol. 18.1: 1030-44.
- On Lodwick, see Vivian Salmon, The Works of Francis Lodwick: A Study of his Writings in the Intellectual Context of the Seventeenth Century (London: Longman, 1972) and William Poole, 'The Divine and the Grammarian in the Seventeenth-Century Universal Language Movement', Historiographia Linguistica 30 (2003): 275-303. For a detailed account of the schemes of Dalgarno and Wilkins, with reference also to Leibniz, see Jaap Maat, Philosophical Languages in the Seventeenth Century: Dalgarno, Wilkins, Leibniz (Dordrecht; Boston, MA: Kluwer, 2004). On the larger philosophical and intellectual context, see Rhodri Lewis, Language, Mind and Nature: Artificial Languages in England from Bacon to Locke (Cambridge: Cambridge University Press, 2007).
- 13 Arthur G. Padley, Grammatical Theory in Western Europe, 1500-1700: The Latin Tradition (Cambridge: Cambridge University Press, 1976), ch. 4, and Arthur G. Padley, Grammatical Theory in Western Europe, 1500-1700. Trends in Vernacular Grammar. Vol I. (Cambridge: Cambridge University Press, 1985), ch. 5.
- 14 Mary B. Hesse, 'Hooke's Philosophical Algebra', Isis 57 (1966): 67-83
- David Cram, 'Universal Language, Specious Arithmetic and the Alphabet of Simple Notions', Beiträge zur Geschichte der Sprachwissenschaft 4 (1994): 213-33.
- 'Cave autem ne inter judicandum, non separanda separes, id est, partem Logicam & Grammaticam; sed ut sententiam æqius feras, finem ultimum (Communicationis facilitatem) primo respice' (George Dalgarno, Ars Signorum, vulgo character universalis et lingua philosophica, London, 1661: sig. A6r; David Cram & Jaap Maat, George Dalgarno on Universal Language: 'The Art of Signs' (1661) 'The Deaf and Dumb Man's Tutor' and the Unpublished Papers, Oxford: Oxford University Press, 2001, 147).
- 17 David Cram, 'George Dalgarno on Ars Signorum and Wilkins' Essay', in: E.F.K. Koerner (ed.), Progress in Linguistic Historiography (Amsterdam: John Benjamins, 1980): 113-121.
- 18 Edited with very useful introduction and commentary by Kerby-Miller (Charles Kerby-Miller, ed., Memoirs of the Extraordinary Life, Works, and Discoveries of Martinus Scriblerus; Written in collaboration by the members of the Scriblerus Club, John Arbuthnot, Alexander Pope, Jonathan Swift, John Gay, and Robert Harley, Oxford: Oxford University Press, 1988); see especially chapter VI on gymnastics and music and chapter VII on rhetoric, logic and metaphysics.
- 19 A key for contemporary readers who may have missed the allusions was provided in Corolini di Marco, The flying island, &c. Being a Key to Gulliver's voyage to Laputa, Balnibarbi, Glubbdubdribb, Luggnagg, and Japan (London, 1726). For modern readers, most editions provide the necessary notes and commentary.
- In the historical survey by Ian Michael of treatments of the parts of speech, Dalgarno is identified as the only thinker who reduces them to a single category (Ian Michael, English Grammatical Categories and the Tradition to 1800, Cambridge: Cambridge University Press, 1970, 241-7). The principle that a simplex notion should be represented by a corresponding simplex was a commonplace among the projectors from the early tract by Ward onwards

(Seth Ward, Vindiciae Academiarum, containing, some briefe animadversions upon Mr Websters Book, stiled, The Examination of the Academies, Oxford: Leonard Lichfield, 1654).

- 21 Jonathan Swift, Gulliver's Travels, edited by Albert J. Rivero (New York / London: Norton, 2002 [1726]).
- These can readily be found by using *Google Images*, or one of the other digital search engines. These modern resources, incidentally, communicate precisely by flourishing not words but images of things.
- 23 And this is not to mention the additional functions of providing a tool for shorthand and cryptography, for reforming primary education, for teaching language to the deaf, for serving as an art of memory, for propagating the gospel, and for civilizing barbarous nations; see the broadside advertisement published by Dalgarno in 1658, reprinted in Cram and Maat, George Dalgarno on Universal Language, 109-111. A similar programmatic list can be found in [Sir] Thomas Urquhart, Logopandecteison, or, an Introduction to the Universal Language (London: G. Calvert & R. Tomlins, 1653).
- 24 On Leibniz's work in this area see Olga Pombo, Leibniz and the Problem of a Universal Language (Munster: Nodus Publikationen, 1987) and Maat, Philosophical Languages in the Seventeenth Century. The primary Leibniz texts tend to be fragmentary and dispersed; see the classic study by Louis Couturat, La Logique de Leibniz, d'après des documents inédits (Paris: Alcan, 1901) and the more informal collection in Gottfried Wilhelm Leibniz: L'Harmonie des langues. Présenté, traduit et commenté par Marc Crépon (Paris: Éditions du Seuil, 2000).
- 25 [1714], cited in Leroy E. Loemker (ed.), Leibniz, Gottfried Wilhelm: Philosophical Papers and Letters (Chicago: University of Chicago Press, 1969, 641). On Leibniz's theory of music, see Rudolf Haase, Der Briefwechsel zwischen Leibniz und Conrad Henfling: ein Beitrag zur Musiktheorie des 17. Jahrhunderts (Frankfurt am Main: V. Klostermann, 1982).
- 26 For examples of such work, see John Wallis, 'A Letter of Dr. John Wallis, to Mr. Andrew Fletcher; Concerning the Strange Effects Reported of Musick in Former Times, beyond what is to be Found in Later Ages', Philosophical Transactions of the Royal Society of London 243 (August 1698): 297-303 and Thomas Salmon, 'The Theory of Musick Reduced to Arithmetical and Geometrical Proportions', Philosophical Transactions of the Royal Society of London 24 (1705), No. 302, 2072-2077. For contextual discussion, see Cohen, Quantifying Music and Wardhaugh, Music, Experiment and Mathematics in England.
- 27 John Napier, Rabdologiae seu numerationis per virgulas libri duo (Edinburgh: Andreas Hart, 1617). On seventeenth-century calculating machines, see Abraham Wolf, A History of Science, Technology, and Philosophy in the 16th and 17th Centuries (London: Allen and Unwin, 1950).
- 28 For a contemporary illustration of Kircher's machine, see Gaspar Schott, Organum mathematicum libris IX explicatum (Wurzberg: J. A. Endter, 1668), and for a photographic illustration of a surviving example, see Gerhard F. Strasser, Lingua Universalis: Kryptologie und Theorie der Universalsprachen im 16. und 17. Jahrhundert (Wiesbaden: Harrassowitz, 1988). For discussion of combinatorics and 'aleatory' music composition, see Eberhard Knobloch, 'Musurgia universalis: Unknown Combinatorial Studies in the Age of Baroque Absolutism', History of Science 17 (1979): 258-275.
- An illustration of Pepys's 'musarithmica mirifica' can be found in Robert Theodore Gunther, Early Science in Cambridge (Cambridge: Printed for the author at the University Press, 1937), 96.
- 30 The best general discussion of this topic is the six-volume and extensively indexed work by Arno Borst, Der Turmbau von Babel: Geschichte der Meinungen über Ursprung und

- Vielfalt der Sprachen und Völker, 6 vols. (Stuttgart: A. Hiersemann, 1960); see especially volume 3, part 1. See D.C. Allen, 'Some Theories of the Growth and Origin of Language in Milton's Age,' Philological Quarterly 28 (1949), 5-16 for a smaller-scale survey.
- John Wilkins, An Essay towards a Real Character and a Philosophical Language (London, 1668), 2.
- 'From divine Authority the case seems so clear that one may think it needs no further proof but barely producing Genesis 2.19 which is express and full beyond contradiction that Adam was Author of a language and a perfect one too, but it is far from giving the least intimation that this was a supernatural gift, that if the whole series and circumstances of the History be considered, the contrary seems rather to follow; for what should be the meaning of these words, Genesis 2.19: And brought them to Adam to SIE [sic] what he would call them' (Dalgarno's emphasis) (Cram & Maat, Dalgarno on Universal Language, 399).
- For a more detailed discussion than is possible here, see Paul Salmon, 'The origin of language debate', in R.E. Asher (ed.) Encyclopedia of Language and Linguistics, Oxford, [V]: 2883-2886, 1994; Downing A. Thomas, Music and the Origins of Language: Theories from the French Enlightenment (Cambridge: Cambridge University Press, 1995) and the collection of essays in Joachim Gessinger & Wolfgang von Rahden, Theorien vom Ursprung der Sprache (Berlin: de Gruyter, 1989).
- 34 Jean-Jacques Rousseau, 'Essai sur l'origine des langues: où il est parlé de la mélodie, et de l'imitation musicale', in *Traitées sur la musique* (Geneva: Société typographique, 1781).
- Johann Gottfried Herder, Abhandlung über den Ursprung der Sprache (Berlin: Christian Friedrich Voss, 1772).
- Translations of the tracts by both Rousseau and Herder, with notes and commentary, can be found in John H. Moran & Alexander Gode (eds.), On the Origin of Language: Jean-Jacques Rousseau, Essay on the Origin of Languages; Johann Gottfried Herder, Essay on the Origin of Language; Translated, with Afterwords, by John H. Moran and Alexander Gode (Chicago: University of Chicago Press, 1986).
- This will be explored further in a forthcoming expanded version of David Cram, 'Linguistic Eschatology: Babel, Pentecost and Babylon in Seventeenth-century Linguistic Thought,' paper presented at the Henry Sweet Society colloquium, Oxford, April 2002.
- 38 For a survey and discussion of the political and ecclesiastical context, see Nigel Smith, Perfection Proclaimed: Language and Literature in English Radical Religion, 1640-1660 (Oxford: Clarendon Press, 1989).
- 39 For a representative discussion, with cross-reference to other contemporary works, see Matthew Henry, An Exposition of the Old and New Testament (London: Partridge and Oakey, 1706) and his notes on Acts, ch. 2.
- This is the position of Robert Boyle and John Wallis, among others; see David Cram, 'Universal Language, Specious Arithmetic and the Alphabet of Simple Notions', Beiträge zur Geschichte der Sprachwissenschaft 4 (1994), 213-33 for further discussion.
- 41 Richard Nate, 'Jacob Böhme's Linguistic Ideas and their Reception in Seventeenth-Century England', Beiträge zur Geschichte der Sprachwissenschaft 5 (1995), 185-202.
- Thomas Burnet, De statu mortuorum et resurgentium liber (London, 1723), 95.
- Thomas Burnet, A Treatise concerning the State of the Dead, and of Departed Souls at the Resurrection (London: For the booksellers of London and Westminster, 1737 [A translation of De statu mortuorum et resurgentium liber]), 123-4.
- 44 John Dee, A True & Faithful Relation of what Passed for Many Yeers between Dr. John Dee [...] and Some Spirits: Tending (had it Succeeded) to a General Alteration of Most States and

- Kingdomes in the World (London: T. Garthwait, 1659). For a discussion of Dee's angelic language in the context of philosophical language, see Umberto Eco, *The Search for the Perfect Language* (Oxford: Blackwell, 1995), ch. 8.
- 45 Richard Baxter, The Saints Everlasting Rest: or, A Treatise of the Blessed State of the Saints in their enjoyment of God in Glory (London: Thomas Underhil & Francis Tyton, 1650).
- 46 For a contemporary analysis of the functions of prayer, see John Wilkins, A Discourse Concerning the Gift of Prayer (London: Samuel Gellibrand, 1651), chapters IV and V.
- 47 Baxter, The Saints Everlasting Rest, 682.
- 48 Anon., The Holy Harmony: Or, A Plea for the Abolishing of Organs and Other Musick out of the Protestant Churches of Great Britain [...] (London: R. Austin and A. Coe, 1643).
- 49 Henry Abbot, The Use and Benefit of Church-Musick, Towards Quickning our Devotion. A Sermon Preach'd [...] September 9, 1724 (London: Jonah Bowyer, 1724).
- Thomas Bisse, Music the Delight of the Sons of Men. A Sermon Preached at the Cathedral Church of Hereford, [...] September 7, 1726 (London: W. & J. Innys, 1726).
- 51 Compare the range of topics listed by Bisse and those examined in the studies by Penelope Gouk, 'Music', in: N. Tyacke (ed.), History of the University of Oxford; vol. IV, Seventeenth-Century Oxford (Oxford: Oxford University Press, 1997) 621-40, and Wardhaugh, Music, Experiment and Mathematics in England.
- 52 Wallis, Claudii Ptolemaei Harmonicorum libri tres,1682, and 'A Letter of Dr. John Wallis, to Mr. Andrew Fletcher, August 1698.
- The use of 'natural language' in the sense of 'a language that has evolved naturally, as distinguished from an artificial language' (OED sense 2a) emerges during the eighteenth century. The earliest attestation given by the OED are in Lord Monboddo in 1774 and Friedrich Max Müller in 1864.

The Artes Sermocinales in Times of Adversity How Grammar, Logic and Rhetoric Survived the Seventeenth Century

JAAP MAAT

1 Introduction

This paper explores some of the developments in grammar, logic and rhetoric that took place in Europe in the seventeenth century. These disciplines were traditionally seen as belonging together, as they each dealt with language in a particular way. For this reason, they were called the artes sermocinales, or arts of discourse. The seventeenth century was a period of radical changes in intellectual history at large, and this paper investigates how the arts of discourse were affected by these changes. In particular, it was a period in which the prestige of the arts of discourse declined, and in which some influential figures argued that much of what they had to offer was of little use. Yet these arts contained a number of doctrines which proved to be so deeply entrenched that they survived almost unscathed in the next centuries. Thus, as usual, we find both change and continuity, and the challenge is to get a clear view of what this consisted of.

It will be useful, then, to ask a few rather obvious questions that may help clarify some of the issues involved, and which I think are ones that may be profitably asked in investigating other aspects of the history of the humanities as well. To begin with, which were the basic concepts, tenets, and methods used by experts in a certain discipline? How did they define their subject, and how did they view the relations with other disciplines? Was there consensus about this, or were there different factions or schools? If so, what were the differences between them? Which problems, if any, did the practitioners of the discipline try to solve? These and similar questions are concerned with what may be called 'internal' aspects. Questions about 'external' aspects include topics like the institutional context of a discipline: how and where were people taught, and how many teachers and students were there? What position did the study of a discipline occupy in society? If these questions can be clearly answered, it is possible to ask about the

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dynamics of both internal and external aspects. In other words, it is then possible to examine if there were any significant changes in the content of a discipline or in the context in which it existed.

In order to outline both change and continuity in the arts of discourse in seventeenth-century Europe, then, I shall first briefly address the questions mentioned. Next, I discuss some criticisms that were levelled against these arts by leading writers. Finally, I examine a few developments that took place, not necessarily as a direct consequence of these criticisms, but clearly connected with the trends that motivated them.

2 The status of grammar, logic and rhetoric

From classical times onward, grammar, logic (or dialectic), and rhetoric formed the trivium, a cluster of three distinct but closely related disciplines, each dealing with language in a particular way: it was commonplace to characterize grammar as the art of speaking correctly, logic as the art of speaking truly, and rhetoric as the art of speaking elegantly, or persuasively.

From a modern point of view, it may seem puzzling that all three were seen as dealing with language. That grammar is about language is still straightforward, and the same goes for rhetoric, perhaps somewhat less so. But logic as we know it today might seem to be far less clearly related to language. It may rather be viewed as a branch of mathematics or philosophy. For the period we are considering, logic was undoubtedly a discipline that dealt with language, and this is a difference that is important for our understanding of its history. What logicians were doing in the seventeenth century, and also what grammarians and rhetoricians were doing, overlaps only partly with what practitioners of these disciplines do today.

This raises the issue of what a discipline is, and how we identify it. How much change do we allow a subject to undergo without questioning its identity? These are questions that inevitably arise when we are writing a history of the humanities. A natural answer would be that we identify a discipline by its subject matter. But this does not really help: as the example of logic shows, this may change over time, and worse, we cannot always determine what a particular subject matter is independently of the discipline that studies it. A possible solution may be sought in the fact that similarities and differences between various stages are in general not sufficient to decide the identity question. If there is a causal chain between the stages, change may be colossal without forcing us to state that identity has been lost: babies turn into old people, an orchestra changes personnel. Thus, a discipline may become unrecognizable and yet remain the same in a relevant sense.

However this may be, in the seventeenth century this problem was not acute. Although there were different views of the scope and use of logic, nobody doubted that it was a single, fairly clearly defined discipline, and that much of what it was about was of a linguistic nature. And the same applies to grammar and rhetoric.

A further common characteristic of grammar, logic and rhetoric was that these disciplines were almost universally called 'arts'. They were commonly regarded as instrumental disciplines, consisting of a series of precepts and rules, rather than sciences related to a certain field of inquiry. When textbook writers described the use of these arts, what they habitually did, they emphasized skills rather than theory. The arts were presented and perceived as gateways to the world of learning rather than the substance of learning as such. Nevertheless, there was a strong theoretical component as well, in that the rules of art were based upon and interlinked with the analysis and description of language structure and use.

A feature also shared by the arts of discourse is that all three of them had a long tradition behind them, and that most of their basic concepts and distinctions had been in place since Antiquity. As was also observed by their critics in the seventeenth century, practically all terms and rules they contained came from the classical tradition, and virtually every element of the theories they employed could be traced back to a classical source. These were Priscian and Donatus for grammar, Aristotle for logic, and Cicero and again Aristotle for rhetoric.

In order to answer further questions about the internal aspects of the arts of discourse, we must consider them separately. It goes beyond the scope of this paper to provide a satisfactory account of even the most basic concepts, distinctions and insights they encompassed. Nevertheless, an overview of what an educated person would have become familiar with in the course of learning grammar, logic and rhetoric does not require a thick book. In fact, short synopses of these arts were frequently produced in the seventeenth century. That this was possible is partly due to the fact that a common doctrinal core existed in each of the three arts, in spite of the existence of different schools in logic and rhetoric, and different approaches in grammar - differences which will be ignored here. If we compare writers on these subjects, we find differences in wording, differences in emphasis, and differences in organization, but at least as far as textbooks are concerned (which is of course not all that one should take into account), we also find an overall similarity, the same patterns and the same themes rehearsed over and over again. As an indication of what a useful synopsis would spell out in more detail, an extremely short summary of grammar, logic and rhetoric follows, in that order.

Grammar, defined by many as 'the art of reading and writing', was a rather clearly delineated body of doctrines with its own set of technical terms and sub-

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jects that were presented in a fixed order, following a compositional progression from the smallest elements of speech to the largest units. A customary grammar was about a single language, and the pattern it followed was originally devised for Latin. Grammars usually consisted of four parts: the first was usually termed 'orthographia', and its subject was called 'littera'. Under this heading spelling was discussed, but also phonetics. The second part was called 'prosodia', which was concerned with the syllable, and in which matters such as pronunciation and emphasis were discussed. The third part, usually called 'etymologia', was in many cases the most lengthy one. It dealt with the definitions of the various word classes and their subdivisions, as well as the categories such as number, case, person, tense, etc. The fourth and final part, often called 'syntax', was concerned with topics such as agreement and government. An example of agreement is that adjectives are in the plural if the corresponding substantive is; an example of government is that if verbs combine with nouns, the latter must adopt a certain case, e.g. the accusative.

Definitions of logic varied. Some frequent ones were 'the art of reasoning' and 'the art of directing the mind in discerning truth from falsity'. Sixteenth-century definitions of humanist logic, which was a mixture of rhetoric and logic following a pattern devised by Cicero, became increasingly rare. In seventeenth-century logic we find a similar pattern, and a similar compositional structure as in grammar. First, the elements of discourse, namely words, were treated; next, words combined into propositions, and finally propositions combined into discourse and reasoning. The chapters on terms or words usually contained an exposition of the Aristotelian categories (substance, quantity, quality, relation and others), the predicables (such as genus, difference and species) and related subjects. The chapters on propositions dealt with the square of opposition and topics such as the conversion of propositions. The third part, dealing with discourse and reasoning, contained the theory of syllogisms, their figures and moods. Other standard topics of discussion were either contained in one of the first three parts, or were assigned a part of their own; these were, among other things, different sorts of proofs, the topics of invention and the fallacies.

Rhetoric, finally, was often defined as 'the art of teaching or speaking well, in order to persuade'. It also had its standard inventory of technical terms, distinctions and themes. A pattern that was often followed was the one deriving from Cicero's division of the art of rhetoric into five different arts: the art of invention, containing discussion and examples of the 'topics' or commonplaces and their use in finding arguments to defend a case; the art of arrangement, distinguishing and describing the various parts of an oration; the art of style, which discussed the figures of speech, such as metaphor with its variants, e.g. synecdoche and metonymia; the art of memory, containing mnemonic precepts; and the art of

delivery, treating the use of voice and gesture. In the course of the seventeenth century, a number of textbooks appeared which discussed the figures of speech thoroughly but exclusively; others were mainly filled with examples of good writing.

As regards the external aspects of the arts of discourse, it is first of all to be noted that they formed the foundation of all academic education. Pre-university education was dominated by Latin grammar. Schoolboys spent years grappling with the declinations, conjugations and other intricacies of the Latin tongue, in order to get access to the world of learning, from which girls were largely shut off. A major part of undergraduate studies at the university was devoted to rhetoric and logic. A thorough grounding in the arts of discourse was a preliminary to the study of more advanced subjects such as law, medicine and theology. Instruction in the arts included the study of textbooks but also practice in verse writing, declamation and disputation, all conducted in Latin. As a result, almost every educated person to be found in seventeenth-century Europe had a good command of Latin, and was familiar with the 'terms of art' of grammar, logic and rhetoric. They all knew (or at least had once been required to know) what a solecism is, and what synecdoche is and catechresis, which types of amplification could be employed, and what the difference is between a syllogism in Barbara and one in Celarent. And all of them, albeit with unequal success, could apply this knowledge in speaking and writing. The arts of discourse thus formed a common body of knowledge and skill shared by the learned, whether natural scientist, philosopher or lawyer. They shaped manners of thinking and forms of expression in ways that may go unnoticed, because universally shared intellectual idioms tend to remain unarticulated among insiders. Thus, the importance of the arts of discourse for the intellectual atmosphere in seventeenth-century Europe should not be underestimated, although it often is.

Universities throughout Europe were similar enough to allow teachers to move between countries, which they often did. At most universities, the curriculum remained humanistic in organization and spirit. The ideal of education was all-round erudition rather than specialization. Those teaching the arts typically mastered several of them, and combined their teaching with a post devoted to other subjects such as astronomy or geometry. Universities were still the main centre of intellectual activity, although other institutions became increasingly important. Scientific academies and societies were founded, and more and more influential thinkers worked outside the universities, some of them in a setting related to the church, others as independent scholars or in the service of royal and other courts.

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3 Critics and reformers

The arts of discourse had taken a central position in education for centuries, but in the seventeenth century this position was challenged by a series of critics. This was a period in which prominent thinkers called for a radical revision of the entire framework of knowledge. A leading representative of this movement was Descartes, who influentially argued for the importance of starting afresh in natural philosophy as well as epistemology. The method he devised for arriving at true knowledge entailed that no element of traditional knowledge could be taken for granted without scrutinizing it anew. Indeed, much of it should be discarded in order to arrive at new insights. Another extremely influential writer was Francis Bacon, who undertook to examine existing disciplines in order to sort out what was useful in them and what not, and to detect gaps in knowledge and flaws in method.

Both Bacon and Descartes were highly critical of the arts of discourse, with logic serving as the main culprit. A major point of criticism was that it was incapable of offering, or guiding the way, to new knowledge. And new knowledge was precisely what had become the most important item on the agenda. This is what Bacon said on logic: 'The logic now in use serves rather to fix and give stability to the errors which have their foundation in commonly received notions than to help the search after truth. So it does more harm than good.' And Descartes commented on logic: 'Dialecticians [that is, logicians] are unable to formulate a syllogism with a true conclusion unless they are already in possession of the matter of the conclusion, i.e. unless they have previous knowledge of the very truth deduced in the syllogism. It is obvious therefore that they themselves can learn nothing new from such forms of reasoning, and hence that ordinary dialectic is of no use whatever to those who wish to investigate the truth of things.'

A further criticism, especially found in Bacon, is that the arts of discourse were all concerned with language. His main objection against traditional learning as a whole was that it centered on 'words' rather than 'things', '[Aristotle] being always more solicitous to provide an answer to the question and affirm something positive in words, than about the inner truth of things'. Bacon's criticisms of the arts of discourse were motivated by a strong dissatisfaction with their subject matter, namely words or language. His famous theory of the idols identified the idols of the market-place, those associated with language, as the most pernicious ones. In Bacon's view, language itself exerted a sometimes harmful power over sound thinking and judgment. True progress could not be expected until the linguistically focused arts of discourse were replaced by methodical investigation of the natural world. In this respect, Bacon can be seen as an early proponent of the belief that there is an antagonism between 'hard', useful science on the one hand,

and the arbitrary and inconsequential opinions of the humanities on the other. Yet Bacon was certainly not in favour of abolishing the traditional arts altogether, and his writings also contained suggestions for linguistic studies which were enthusiastically taken up by a number of scholars later in the century.

In more general terms, what many found objectionable about the arts of discourse was that they were so obviously linked with an attitude towards learning which was oriented towards the past. Training in the arts consisted of studying classical sources and emulating classical models. The study of logic required a painstaking effort to master the moods and figures invented by Aristotle. The study of grammar and rhetoric was intimately connected with the ideal of literary excellence and erudition treasured by the humanists. This ideal was thoroughly authority-bound, seeking examples and wisdom in the writings of Horace and Cicero. This clashed with a forward-looking attitude, a sense of beginning, an expectation of new discoveries which became ever more widespread.

4 Three trends

In the remainder of this paper, I point up three trends which took place against the background just sketched. The first concerns only logic; the second both grammar and logic; and the third a new development in the study of language, connected with grammar as well as logic. That rhetoric thus drops out of the picture is a consequence of the many limitations of this short paper.

4.1 Eclecticism and distance to the tradition in logic textbooks

Most of what was written on logic in the seventeenth century is to be found in textbooks. In the medieval period, the popular standard format was a commentary on the work of earlier logicians, mainly Aristotle. It was not unusual that in these commentaries new additions to logical theory were propounded. In the post-medieval period, the commentary format became ever less frequently used, and new additions were increasingly rare. The humanists reorganized logic according to a rhetorical pattern derived from Cicero, at the expense of formal logic. Much of what had been omitted by the humanists was restored in most of the textbooks produced in the seventeenth century, although the medieval additions received scant attention. Most textbooks thus presented a more or less detailed account of Aristotelian logic. The number of different textbooks appearing in this period was larger than ever before, but there was very little that their authors added or changed to the conventional wisdom.

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An example, although not fitting in all respects, of such a textbook is John Wallis's Institutio Logicae of 1687.4 Wallis was a founder member of the Royal Society, but did not agree with the negative Baconian assessment of logic shared by the majority of the fellows. His book is traditional in more sense than one. It presents a detailed and lucid account of the standard subjects of Aristotelian logic, but it also aims to purify logic from what Wallis regarded as distortions, especially some novel distinctions that had been introduced by Ramus (Pierre de la Ramée) in the sixteenth century. These concerned singular propositions, which Ramus assigned a separate status, distinct from universal and particular propositions, and hypothetical syllogisms, which Aristotle, according to Ramus, had failed to recognize as a distinct type of inference. Wallis argued at length that Ramus was mistaken on both counts.5 What is important in the present context is Wallis's manner of presentation in the non-polemical sections. In explaining and defining basic notions of logic, he consistently takes a third person's stance. The terms introduced are those that 'logicians' use. The explanation is one that shows what 'they' mean by these terms. The doctrines and the system are thus described from a distance. The reader is presented with a very well-informed account of the terms, doctrines and insights that form an impressively coherent whole. In fact, Wallis's book could serve as a useful introduction to Aristotelian logic to a modern reader. But the theory is presented as something that was invented and completed by Aristotle, with no need of revision. Wallis insisted that logic was a useful and even indispensible discipline, but judging from how he presented it, logic was not a subject with a research agenda.

A similar attitude towards traditional logic, although far more critical than Wallis's, can be found in the Port Royal logic.⁶ As the authors state in a preface, they had undertaken to provide an account of what they considered to be useful in logic, at first assuming that this could be written up in a single day. This reflects a rather disparaging approach to the subject, in line with the Cartesian evaluation of it. The assumption is that there is a finished body of doctrines, inherited from the past, which can be assessed as to their tenability and usefulness. The intention is to sift through them with a view to retaining the useful bits. Some parts of the system turn out be valuable, some appear to be superfluous on inspection, and others, such as the Aristotelean categories, are even dangerous as they lead to misconceptions. This approach led to a much admired work on logic, in which many of the standard ingredients of logic are rephrased in Cartesian fashion, while it jettisons a number of less central topics in the process.

4.2 A new research programme: philosophical grammar

In the course of the seventeenth century, a type of grammar often called 'philosophical grammar' emerged, or rather re-surfaced, as it was in a sense a revival of medieval speculative grammar. It was Bacon who had noted that a more scientific type of grammar was desirable, as opposed to so-called popular grammar, which is 'for the speedy attaining of languages'. This philosophical grammar, by contrast, was to examine 'the power and nature of words, as they are the footsteps and prints of reason'. Bacon's proposal was in line with a trend in seventeenth-century grammar which became more and more concerned with establishing connections between language and rational thought, while the boundaries between logic and grammar became increasingly indistinct. The emergence of philosophical grammar marked the beginnings of a new research programme; the challenge was to find out how language and thought are connected. The study of language in this context was not an art consisting of precepts and rules, but a scientific effort.

A work on grammar that was explicitly presented as philosophical was Caramuel's *Grammatica Audax* (1654),⁸ the first part of which was said to discuss philosophically, abstracting from all languages, the method and technical vocabulary ['second intentions'] of the art of grammar'. Caramuel discusses a peculiar mixture of logical, grammatical, metaphysical and theological topics, and constitutes an admittedly bold (audax) attempt to connect them all together.

Another example of a work in which the increase of logical considerations in grammar writing is clearly visible is Vossius's *De Arte Grammatica* (1635),9 the most comprehensive work on grammar to appear in the seventeenth century. This monumental work follows the traditional plan, treating letters, syllables, words, and syntax in the usual order, and is humanistic in spirit, presenting a grand synthesis of existing scholarship on more than 1,400 pages. But Vossius's grammar has many traits which it shares with philosophically oriented grammars. It prefers semantic criteria over criteria of linguistic form wherever possible and gives prominence to logical considerations. To cite a single example, Vossius defends the view that noun and verb should be seen as the primary word classes to which the other ones are subordinate or even reducible. This view, as Vossius indicates, derives from Aristotle and was common in the logical tradition from Antiquity onwards.

A final example is the *Grammaire générale et raisonnée* (1660) by Arnauld and Lancelot, also known as the Port Royal grammar, which was a very influential grammar of the philosophical type. This relatively short treatise is a *general* grammar in that it discusses the technical vocabulary of grammar with respect to universal properties of languages. It is also a *rational* grammar in that the authors are concerned throughout to show that languages are rationally constructed

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inventions. They claim that in order to understand the foundations of grammar, it is necessary to know 'what goes on in our mind'. When they go on to specify these mental processes, it turns out that they are the three operations traditionally distinguished in logic as the mental counterparts of linguistic units: conceiving, judging and reasoning, which correspond to words or terms, sentences or propositions, and discourse or syllogisms, respectively. And there are several other aspects of this grammar which show a mixture of logical and grammatical approaches.

There are some general characteristics that these philosophical grammars have in common. First, linguistic form and usage are given less prominence than semantics; these grammars are concerned with general linguistics rather than the structure of particular languages. Second, logical terminology and distinctions are frequently used, and attempts are often made to reduce usage to underlying, 'logical' structures. Third, some of these works criticize existing languages for being irregular or otherwise defective. Fourth, these grammars are traditional in the sense that most of the traditional concepts and distinctions of grammatical theory are retained, although alternative systems of parts of speech are sometimes proposed.

4.3 New horizons in linguistics

The opposition between words versus things mentioned earlier opened the way to a new approach to language, according to which natural languages were just one of a range of possible symbolic systems capable of representing and communicating knowledge. From this perspective, natural languages were primarily seen as a tool, the efficacy and usefulness of which can be judged on independent grounds. And if they failed to meet certain standards, which they in fact did, it seemed obvious that they should be replaced by better ones. Thus, both the goals and the methods of the study of language changed: from describing existing usage, with a view to copying the classical models (essentially a reproductive activity) to exploring and devising new methods of communication and representation (a constructive enterprise). This approach was fed by a fresh appreciation of what symbolic systems in general could accomplish. The example of Chinese writing, among other things, showed that written symbols could be used to represent things, rather than words. This type of writing was known as a 'real character', as opposed to a vocal character representing words, such as alphabetical writing. The concept of a real character appealed to many writers, and various proposals to put this in practice were put forward.

In the 1660s two artificial languages were published, which were meant to fulfill the same functions as natural languages. Their authors duly emphasized the primacy of things over words. In *Ars Signorum*," George Dalgarno stated that this art of signs should follow the art of things. And John Wilkins, in his *Essay*, claimed that 'things are better than words," which was completely in line with what he said in an earlier treatise, claiming that a newly invented real character would contribute to 'the spreading and promoting of all Arts and Sciences: Because that great part of our Time which is now required to the Learning of Words, might then be employed in the Study of Things."

In theory, then, everything seemed clear enough. A newly invented artificial language was to be built from scratch, and to take real things as a starting point. The task facing the language planners entailed first of all devising a new vocabulary, which had to provide a transparent representation of 'things'. But this presented an enormous practical problem. Existing languages were no longer eligible as a model in determining which things needed to be named for the defects of existing languages in this regard were precisely the problem that the artificial language was supposed to solve. The language planners needed a language-independent inventory of 'things' that were to be provided with a name. This issue was debated by Dalgarno and Wilkins, who disagreed about the solution. I will focus on the course of action eventually taken by Wilkins. In his project there was a strong connection between linguistic and scientific concerns.

Wilkins, perhaps somewhat unexpectedly, resorted to logic. That is to say, he used a method which was closely similar to what each and every undergraduate was familiar with from the first part of a logic course, which treated of the categories. Exactly why Wilkins did so is not entirely clear, but it is certain that the logic textbooks provided at least the rudiments of the inventory of things that Wilkins was looking for. The logic textbooks, as noted, started with a treatment of terms, and arranged them according to the ten Aristotelian categories. Aristotle himself had never gone into any such detail, and neither had his commentator Porphyry, whose famous tree was expressed in a single, not so very long sentence. In the course of history, the tree of Porphyry was fleshed out in ever more detail, and by the time Wilkins was taught logic, the manuals he must have used provided an all-encompassing inventory of existent things, in hierarchical arrangement. Thus, the category of substance was illustrated by a Porphyrian tree in which not only humans, but also animals, plants, and non-living things had their proper place. Not only the category of substance, but other categories, especially those of quantity, quality and relation, were divided into subordinate categories in a similar way. Authors of these textbooks usually explained that it was up to the various disciplines to study and describe the things designated by the terms in these classificatory tables, but still it was logic that provided an all-embracing categorization, and in this way brought the various disciplines together.

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Wilkins used similar tables as a basis for his artificial words, using many of the traditional categories and their subdivisions, although not without modifications. In doing so, he let an important component of the traditional art of logic, heavily criticised by Bacon and closely associated with the words of the master officially denounced by the Royal Society¹⁴, in through the back door.

However, as indicated, the classificatory tables of the logic textbooks only provided the top of the hierarchy. To make these tables suit his purposes, Wilkins had to expand them to contain much greater detail. In order to achieve this, he asked and got assistance from various experts, notably John Ray, who helped him draw up the tables of plants, and Francis Willoughby, who assisted with the tables of animals. Thus, Wilkins managed to integrate knowledge belonging to botany and zoology into a linguistic project, entirely in the spirit of the logic textbooks, leaving it to the experts to fill out the details of the overall classification.

As it happened, Wilkins's project was considered a failure shortly after the *Essay* was published. And those involved in the project realized that the attempt to merge science and linguistics in this way would be unsuccessful even when they were still working on it. The scientists, such as Ray, were convinced that it was useless to try and classify plants and animals using a pre-conceived, linguistically motivated pattern. And Wilkins himself, when writing the *Essay*, realized that the purpose of constructing a practicable artificial language was ultimately incompatible with scientific accuracy. Instead, it was commonsense notions as articulated by natural languages which, he perceived, would have to be taken into account rather than scientific theory. Although many modern commentators have held the view that Wilkins's philosophical language was primarily meant to provide a means for expressing new scientific knowledge, we have his own word that it was not. 16

5 Conclusion

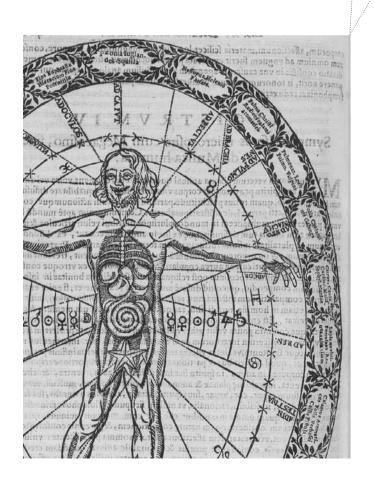
To conclude, the traditional artes sermocinales survived the seventeenth century almost undamaged. Grammars modelled on the classical pattern continued to be written in the centuries afterwards, textbooks on logic and manuals of rhetoric repeating the teachings of the ancients who invented them were produced or reprinted in great numbers throughout the eighteenth and nineteenth centuries. Formal disputations, in the form of thesis defences which heavily relied on syllogistic reasoning, remained part of academic life until well into the nineteenth century, and rhetorical terminology is still taught and used in language teaching. At the same time, however, a series of new developments had been set in motion, which gradually caused the traditional arts to become more and more marginalized and ultimately superseded by new approaches to the study of language.

Notes

- Francis Bacon, Novum Organum (1620). 'Aphorisms concerning the Interpretation of Nature and the Kingdom of Man. Aphorism XII.' In: James Spedding, Robert Leslie Ellis, and Douglas Denon Heath (eds.), The Works of Francis Bacon, Philosophical Works (London: 1857-1874), Vol. IV, 48.
- 2 René Descartes, The Philosophical Writings of Descartes, Vol. 3, ed. and trans. John Cottingham, Robert Stoothoff, Dugald Murdoch, and Anthony Kenny (Cambridge: Cambridge University Press), 36-37.
- Francis Bacon, Novum Organum, 'Aphorism LXIII' (Spedding, Ellis and Heath), Vol. IV, 64.
- John Wallis, *Institutio Logicae, ad communes usus accomodata* (Oxford, 1687). Wallis wrote an English version of this book in 1685, but this was never published. An edition is now being prepared by the Wallis project in Oxford.
- 5 See Jaap Maat, 'Defending Aristotle: Singular Propositions are Really Universal, and Hypothetical Syllogisms are Really Categorical', forthcoming.
- 6 Antoine Arnauld and Pierre Nicole, La Logique ou l'Art de Penser (Paris: 1662).
- 7 Francis Bacon, *The Advancement of Learning* (1605). Book 2 (Spedding, Ellis and Heath), Vol. VI, 285.
- 8 Juan Caramuel y Lobkowitz, Praecursor logicus complectens grammaticam audacem (Frankfurt, 1654).
- 9 Gerardus Joannes Vossius, De arte grammatica libri septem (Amsterdam: Blaeu, 1635).
- 10 Claude Lancelot and Antoine Arnauld, Grammaire générale et raisonnée (Paris, 1660).
- Dalgarno, George (1661). Ars Signorum, vulgo character universalis et lingua philosophica (London: J. Hayes). Text and English translation in David Cram and Jaap Maat, George Dalgarno on Universal Language: The Art of Signs (1661), The Deaf and Dumb Man's Tutor (1680), and the Unpublished Papers (Oxford: Oxford University Press, 2001).
- 12 John Wilkins. An Essay towards a Real Character and a Philosophical Language (London: Samuel Gellibrand & John Martyn, 1668), epistle dedicatory.
- 13 John Wilkins, Mercury, or the Secret and Swift Messenger (London: John Maynard & Timothy Wilkins, 1641), 56.
- 14 From 1663 onward, the Royal Society's motto was 'nullius in verba', using Horace's phrase 'Nullius addictus iurare in verba magistri' (Horace, Epistles I.i, 1.13-14).
- 15 Nevertheless, it has been suggested, in a recent study on the history of botany, that Ray's experiences with Wilkins's tables influenced him positively in developing his famous natural method. Sarah Scharf, *Identification Keys and the Natural Method: The Development of Text-Based Information management Tools in the Long Eighteenth Century* (PhD Diss. Toronto: University of Toronto, 2007).
- Wilkins, Essay, 194, 196. See Jaap Maat, Philosophical Languages in the Seventeenth Century: Dalgarno, Wilkins, Leibniz (Dordrecht: Kluwer, 2004), 214-215, 259-260 for discussion.

VI PHILOLOGY AND PHILOSOPHY





Manuscript Hunting and the Challenge of Textual Variance in Late Seventeenth-Century Icelandic Studies

Már Jónsson

Denmark has formerly produced very learned men... But at present learning is there at a very low ebb... There is but one university, which is at Copenhagen, and that mean enough in all respects.

Robert Molesworth in 16921

The fervent collecting of ancient and medieval manuscripts – in Italy and Greece from the late fourteenth century, in France, Germany and England from the early fifteenth century, and in Spain and Iceland from the late sixteenth century onwards – resulted not only in the accumulation of new texts and information. It was also a reason for perplexity as scholars struggled to design methods for sifting evidence, for defining options, and for making choices concerning the texts they wished to use or publish, their struggle at times ending in despair and exhaustion. As more and more manuscripts were brought to light and made accessible in continuously growing libraries and private collections, scholars needed new tools to understand and manage textual variance. Which manuscripts should be used, and how could their quality be gauged? Why did their texts differ? How should they be transcribed and published? Should vernacular texts be translated into Latin? What kind of comments were needed – factual, historical, or textual?

Such technicalities, in other words the painstaking travails of textual scholar-ship, deserve to be a focus of attention in an overarching history of the humanities. This history should not restrict itself to the brilliant ideas of philosophers and theologians. Developments in the humanities were based on the 'rough' material of ancient textual sources, and in this article I hope to show how scholarship in the Early Modern age needed to plough through vexed issues of textual variance, manuscript hunting and compilation that, although often coming to dead ends and not always resulting in successful publications, were nevertheless seminal to developments in history writing, philology, and language scholarship.

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I will focus on an area to which the history of scholarship has paid scant attention: the kingdom of Denmark-Norway in the late seventeenth century. Somewhat earlier, the English antiquarian Henry Spelman characterized this 'unlearned' kingdom as being on 'the confines of the Arctic Circle'. Although an abundance of Icelandic and Norwegian medieval texts and manuscripts was rediscovered and the first editions appeared in 1664-1673, none of them was based on a critical assessment of manuscripts. In the 1680s and 1690s a renewed effort was made that, had it succeeded, would have delivered interesting results. Lamentably, however, this endeavour did not produce editions, partly due to a lack of funds but chiefly because of methodological difficulties. The scholars involved were aware of the value of vellum manuscripts but unable to solve the problem of textual variance, that is the fact that manuscripts of any specific work differed in many ways, and a scholar who wanted to produce an edition would have to make choices based on critical discernment and clear principles.

Instead of using standards of philological correctness of our present age to judge these late seventeenth-century efforts, I shall base my estimate on the exceptional insights of the late fifteenth-century Florentine scholar Angelo Politian, the enfant terrible of late medieval and early modern scholarship. In a way, Politian's philological ideals were so close to modern procedures that they seem almost too good to be true; his practice in that sense resembles what Ezio Ornato has called 'una semplice curiosità archeologica'. Politian's example was only followed by scholars in more recent times, but nonetheless his philological ideal can be used as a benchmark for developments in the Early Modern period. Arrogant and impatient at times, he was an incredibly observant scholar who wished to outperform his contemporaries as he strove to establish better versions of ancient Greek and Roman texts through linguistic refinement and the meticulous observation of manuscripts. He wanted to base his work on a thorough investigation of as many manuscripts as possible, preferring older ones but not discarding more recent texts that might be copies of ancient books. Politian's work demonstrates his critical assessment of the quality of manuscripts and the ways in which they were related. He made very careful collations of manuscripts and printed editions, rigorous transcripts of texts that he borrowed, and emendations, judiciously based on other texts written by the same author or his direct environment.4 Politian loathed inexactitude and harshly criticized his predecessors and contemporaries for making too many mistakes. In his Miscellanea prima of 1489, for one, he attacked the late Domizio Calderini for his sloppy method. Jacopo Antiquari, Calderini's friend in Milan, complained about this in a letter and claimed that since Calderini was long dead, it was like attacking a ghost. Politian retorted on 30 November 1489 that he could not know whether Calderini would have corrected his mistakes if he had still been alive:

How should I know this? Are you really saying that it is always and everywhere a good idea to expect intellectual progress? [An usquequaque de ingeniorum profectu bene sperare est?] Were not all of this particular person's final contributions even more inaccurate?

In Politian's view, progress came with hard work. His influence, however, was limited - like Calderini, in this respect, he died too soon. Most scholars continued to make many mistakes, and even the best were careless in their choice of manuscripts and variants. When Erasmus, for instance, published his Greek edition of the New Testament in Basel in 1516, he used five manuscripts. One of them is preserved, a twelfth-century vellum now known to be devoid of textual value. Although aware of the value of old manuscripts, Erasmus relied mostly on recent ones with scant merit. Where the Greek text was lacking, he even added bits of his own translation from the Vulgate, thus revealing, to quote L.D. Reynolds and N.G. Wilson, 'a lack of a set of logical principles for the evaluation of manuscripts'. In his edition of the works of Seneca in 1515 and 1529, Erasmus recognized the worth of a ninth-century manuscript he had acquired, but he did not use it much: 'Instead of basing his text of these works upon this prime witness, he drew on it spasmodically to emend what he had before him.'6 It soon became standard practice for most editors to use first editions as a basic text - textus receptus or textus vulgatus - adding selected readings from manuscripts that were mentioned only vaguely ('emendatio ope codicum') and various conjectures ('emendatio ope ingenii'), at times original, but just as often borrowed or stolen.7 There were some exceptions, however. In around 1530-1570, scholars of Roman law, such as Antonio Agustín, Piero Vettori, Jacques Cujas and Joseph Scaliger, criticized older editions severely, tracing the genealogy of manuscripts and publishing transcripts of those they considered important. They normalized orthography and corrected errors, and even made typographical distinctions between variants and conjectures.8

Such efforts were consolidated every time that scholars made a determined effort to gather manuscripts in growing libraries. Although most libraries were private, the biggest ones, kept by kings, dukes and universities, were public. From the 1640s onwards, this enabled Dutch scholars such as Nicolaas Heinsius and Isaac Vossius to produce better editions, partly through their ingenuity in making emendations and conjectures based on a wider knowledge of texts, but also through a closer scrutiny of manuscripts. Scholars came to prefer their specific texts above earlier editions, although at times some were overwhelmed and only produced heaps of variants without distinction.⁹

This process of strenuous and uneven progress was mirrored further to the north, but developed more slowly and with less spectacular results in terms of editions. Influenced by Italian humanists, scholars in Northern Europe had be-

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gun searching for documents and manuscripts already in the early sixteenth century. Interesting texts were discovered such as the plays and poetry composed by Hrotsvitha von Gandersheim in the tenth century; they were edited and published by Konrad Celtis in Nürnberg 1501. In 1515, his friend Konrad Peutinger used recently found manuscripts to publish The History of the Goths, written by Jordanes in the sixth century, and The History of the Longobards by the ninthcentury historian Paulus Diaconus.10 In 1514, Christiern Pedersen, a Danish student of theology in Paris, published the extensive early thirteenth-century Latin History of the Danes (Gesta Danorum) by Saxo Grammaticus - and was actually among the first editors to use the blurb text for claiming that this was the first time a text appeared in print: 'nunc primum literaria seriæ illustratæ tersissime que impressæ.' Later, he wished to make a Danish translation of Saxo with detailed explanations on Nordic history. Aware of the existence of manuscripts of medieval sagas of Norwegian kings, he hired a Norwegian man of learning who knew the old language to make excerpts. A Danish translation of Saxo first appeared in 1575, when the historian Anders Sørensen Vedel concluded one. The first Danish translation of the Norwegian kings' sagas appeared in Copenhagen in 1594 and a more thorough one in 1633, when Ole Worm, in his introduction, compared the writings of the thirteenth-century Icelandic historian Snorri Sturluson to Greek and Roman historical works, stating that they were just as useful and truthful.12

As late as the 1630s, the Dutch historians Johannes Meursius and Johannes Pontanus wrote eloquently on the medieval history of Denmark without using a single manuscript.13 It was by then well known that medieval manuscripts of great interest for the medieval history and culture of Scandinavia were to be found in Iceland. The first batches were sent as gifts to the Danish king in 1656 and 1662 by the learned bishop Brynjólfur Sveinsson who hoped that Icelandic texts would be published with a Latin translation and a scholarly commentary.¹⁴ Swedish scholars, arguing with Danish ones about the age of their two nations, also showed an interest in Icelandic texts containing references to Swedish kings. In 1664-1673, a series of text editions appeared in Uppsala and Copenhagen with translations into Danish, Swedish and Latin, but all of them were worse than anything produced in Europe at the time. Any available manuscripts were used regardless of their scholarly value, mostly recent and inexact copies from Iceland, and the editors' commentaries reveal a credulous attitude towards the text and a blatant lack of critical zeal.¹⁵ This was the scholarly norm when Árni Magnússon, or Arnas Magnæus as he will be called here, arrived in Copenhagen in 1683, at the age of twenty, to study theology at the university just like many promising young men of good families in Iceland. A year later he became assistant to Thomas Bartholin the Younger, the recently appointed royal antiquarian, and provided

numerous Icelandic texts for his fairly voluminous book on the fearlessness of medieval Danes, published in Copenhagen in 1689.

Magnæus developed rapidly as a textual scholar. In 1684-1685 he made hundreds of short excerpts from Icelandic manuscripts of sagas and historical works, using recent copies available in the city, most of them of disputable quality, copied without care for reading purposes and not for scholarly use. The Icelandic vellums that belonged to the king and the university were all at Stangeland, on the west coast of Norway, with the Icelander Pormóður Torfason or Thormod Torfæus, royal historiographer of Norway.¹⁶ Magnæus's method of transcription was simple. He used his own orthography and expanded the abbreviations in the manuscript he copied (exemplar), so that he gave everything his personal touch. Bartholin and Magnæus did not care about the age of the manuscripts or texts they used. To them, all texts were equally interesting, and they used what was at hand, such as an early seventeenth-century copy of Knytlinga saga, a saga on Danish medieval kings that Ole Worm had received from Iceland some decades earlier. In collaboration with an unknown Icelander, Magnæus copied the legendary Hrólfs saga kraka from a paper copy and translated it into Latin. 17 He also made a copy of the Norwegian thirteenth-century Speculum regale (Konungs skuggsjá), again in collaboration with an unknown scribe, but now from a vellum manuscript that belonged to Peder Resen, professor of law at the university. In one place, Magnæus commented on the fact that a leaf was missing. He corrected what the other scribe had done, and they both modernized the spelling.¹⁸ Although one of his exemplars was on vellum and the other a recent copy, the method was consistent. The goal was to make texts readable and accessible, so that information would be available on a variety of relevant issues. The transcripts were meticulous, and few changes were made, except for the spelling. This is how Icelandic scribes had worked earlier in the century. Magnæus followed their tradition and not without success.

In 1685-1686, Magnæus changed his mind completely, as if he suddenly discovered that things could be done so much better. In the spring of 1685, he went to Iceland in order to collect manuscripts for Bartholin; he stayed until the autumn of 1686. He found nothing that Bartholin needed, but obtained for himself a few legal codices and made copies of medieval legal texts in a manner totally different from what he had done so far, in more detail and with greater exactitude. As he returned to Copenhagen, he responded to this 'revelation' by transcribing several texts from a late fourteenth-century collection of Icelandic sagas, recently acquired by Resen from a student who had been with Torfæus as a scribe for three years. The transcript is exceptionally detailed and can be situated on what philologists now call the diplomatic level. Magnæus strove to imitate the orthography and abbreviations of the original, and succeeded except for minor

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inconsistencies in some details. He emended the text in a few places and put his additions within square brackets.¹⁹ This 'new' method seems to have been based on a mixture of foreign models and personal fascination due to direct contact with vellum manuscripts.

The exceptional attention to detail was probably inspired by his reading of scholarly books and editions in Bartholin's library of at least 2400 volumes. Here, Magnæus had access to hundreds of editions of classical and medieval texts and to the most recent scholarly feats of Jean Mabillon and others – not to mention Angeli Politiani opera, published in Paris in 1519. Dy now, Magnæus had decided to acquire as many Icelandic texts as possible in good copies, probably hoping to establish a research library of sorts. However, he soon found the newly developed diplomatic method too time-consuming and opted instead for a somewhat easier way of copying texts in a normalized orthography with expanded abbreviations. He did not go so far, however, as to use his own orthography like he had done earlier. In the winter of 1687-1688 he copied another fourteenth-century vellum of Icelandic sagas, Möðruvallabók, with two friends who studied at the university, Ásgeir Jónsson and Eyjólfur Björnsson. They expanded all abbreviations and wrote all names with a majuscule. Corrections were not indicated, and not all medieval letter-forms were maintained.

In the autumn of 1688, Torfæus came to Copenhagen to claim his salary that was long overdue. He was working on books on the medieval history of Denmark and Norway, published in 1702 and 1711, respectively. He befriended his much younger countryman Magnæus who confided that he planned an edition of a crucial historical work, the early twelfth-century Book of Icelanders (Íslendingabók).²² Written by chieftain, priest and historian Ari Thorgilsson the Wise, it succinctly narrates the discovery and colonization of Iceland in the late ninth century and its subsequent Christianization. The edition was intended for scholarly readers and was to contain a Latin translation and an extensive historical commentary. It would have added invaluably to the knowledge of Icelandic medieval history and was accepted for publication in Copenhagen in spring 1691, but never appeared. My contention is that Magnæus abandoned the edition because textual and factual inconsistencies in medieval manuscripts stretched the limits of his method. Rather than accepting these inconsistencies as some sort of challenge by integrating them in his work, he discontinued the project.

Magnæus's first problem was that he had no decent copy of the text and had to use whatever manuscript he could lay his hands on. To our present knowledge, an early thirteenth-century vellum manuscript was extant in Iceland in around 1650. A highly qualified scribe, Jón Erlendsson, made two copies for the aforementioned Bishop Brynjólfur before the manuscript disappeared, one of them (AM 113 b fol.) better than the other (AM 113 a fol.) – now both in the Arnamagnæan

collection. Several copies were soon made of the version that was most faulty; subsequent copies of these copies grew more deficient with each generation. At some point in 1688, Magnæus received one of those bad copies, unfortunately not preserved, and made a copy for himself that he intended to use in his edition.

In the summer of 1688, the Book of Icelanders was published together with the much longer Book of Settlement by Bishop Thordur Thorlaksson at the only printing press in Iceland. The text was based directly on the manuscript AM 113 a fol. with a few judicious corrections. The editorial principles are explained in a short introduction, but there is no commentary and no translation. When Magnæus received the printed book in the autumn of that year, he must have realized that this edition was far better than the copy he had made for himself. Paradoxically, he showed no sign of using the edition in his work but instead insisted that Torfæus should send him a manuscript of the text even if it contained exactly the same text as the printed edition.23 In early 1690, Magnæus added to his copy a few marginal notes based on this manuscript, but should have made many more had he wanted to be thorough and consistent. In 1691 and 1692, Magnæus received both of Jón Erlendsson's mid-century copies from Iceland and corrected his text in various places on the basis of the better copy, but again not consistently. Simultaneously, he collated that copy with the other good one. He now had the best manuscripts and knew it, but as he saw that there were more and different copies, he seems to have lost his way and instead of redoing the text, he abandoned the project.

Magnæus's other problem was the commentary. The Book of Icelanders is only five thousand words in length, but poses intricate issues of chronology that appeared insoluble - and some of them really are. Magnæus went to stay with Torfæus at Stangeland for a few months in 1689. On his way back to Copenhagen, he wrote a letter asking Torfæus where he had read that the Norwegian king Harald Fairhair was born at the moment that King Gorm of Denmark had been in power for seven years. Torfæus replied that this conclusion was 'ex hypothesi', since medieval chronicles claimed that Gorm became king in the year 840 and Harald was born in 848. The problem Magnæus and Torfæus encountered was that medieval chronicles and kings' sagas hardly ever mention dates and do not agree with each other on how many years various kings stayed in power. About Harald Fairhair, allegedly the first king of a unified Norway, Magnæus concluded at one point that there was so much confusion that he saw no possibility of figuring out anything at all. Torfæus claimed that only the oldest historians should be used and not the ones that followed them. No author, however, could be entirely trusted since all of them made their own guesses and even mixed things up. For this reason, Torfæus repeated, a scholar had to work 'ex hypothesibus'. Having done what could be done, the scholar should decide, or better still the community of scholars, or as Torfæus wrote on 2 October 1690: 'It is best that both of us agree, and Bar306 Már Jónsson

tholinus, and exclaim a single adieu!' When Magnæus insisted, Torfæus offered to include his arguments in the book. Magnæus should also publish both versions, and it would be left to the readers to decide. Any further discussion would be a waste of time and paper.²⁴ Torfæus went on to write several learned volumes, discussing various options for a variety of problems in the texts, but Magnæus only produced handwritten notes.

It needs to be said that a contributing factor to Magnæus's failure to produce an edition of the Book of Icelanders may have been the perceived or real lack of interest in Nordic medieval history on the continent. This lack of interest is apparent, for instance, in the fact that the only writers of Danish history mentioned in Adam Rechenberg's general presentation of necessary learning, published in Leipzig in 1691, were Saxo Grammaticus and Pontanus, whose Rerum Danicarum historia was published sixty years earlier.25 Perhaps in response to this lack of interest, Magnæus published a short Danish medieval chronicle in Latin in Leipzig in 1695, transcribed from an old vellum manuscript ('pervetusto codice membraneo') that belonged to the university library in Copenhagen. In his introduction Magnæus shows his debt to his predecessors by connecting his modest effort to famous names in the scholarly world, praising Marcus Meibomius, Roger Twysden and Jean Mabillon for their exemplary editions. His hope of publishing a manuscript fragment on Danish kings did not come true, however. In his own words, this was because of the reluctance of German printers to print a text in the Icelandic language, although it is clear that his Latin translation was far from ready and the commentary in shambles, as Magnæus constantly changed his mind, and he was, as with The Book of Icelanders before, overcome with doubts.26

The lesson Magnæus learned from his erudite struggles was that instead of writing and publishing, he should do two things, both of them within what can be called Politian's program of a necessary assessment of the quality of manuscripts and the making of rigorous transcripts of borrowed ones:

1. Transcripts should be made with great care and exactitude. One example of this notion will have to suffice, relative to two Icelandic vellum manuscripts in the Ducal Library in Wolfenbüttel, registered as Icelandic mythology and poems.²⁷ In the early months of 1697 the dukes sent their librarian Hertel to Stockholm in order to pay their respects to Sweden's new king. Gottfried Wilhelm Leibniz, philosopher, historian and head-librarian in Wolfenbüttel, had recently become interested in septentrional matters and sent one of the manuscripts to his correspondent, the Swedish scholar Johan Gabriel Sparwenfeld. Leibniz did not know the contents but thought that the manuscript was written in verse without rhyme en Islandois ou en vieux Scandinave'. Sparwenfeld persuaded Hertel to take the manuscript to Magnæus in Copenhagen, something Leibniz agreed to afterwards:

Mr. Hertel left our Icelandic manuscript with Mister Arnas Magnæus in Copenhagen, if it is useful to him, so much the better. Libraries and manuscripts need only be available for the use of skilled people.²⁸

Magnæus had the aforementioned Ásgeir Jónsson, again in Copenhagen, make a copy of the two Icelandic thirteenth-century family sagas: Eyrbyggja saga (AM 450 a 4t0) and Egils saga (AM 461 4t0). As the first and last pages were illegible, Magnæus copied them himself. He already had several copies of both sagas and filled two gaps in the Wolfenbüttel manuscript with a text from other versions. Another scribe helped him to compare the transcript with the original, and Magnæus concluded that, although not copied letter by letter and except for the poems and some important sentences, the transcript was reliable. In June 1701 he sent the manuscript back with a report on its contents.²⁹ In his collection as it survives to this day, there are at least 500 copies that he made or had his assistants make, all of them based on these principles, besides thousands of transcripts of Icelandic, Norwegian and Danish charters and other documents.

2. All extant manuscripts should be tracked down. Many interesting and quite dramatic stories could be told about Magnæus's search for manuscripts. A good example is his chase after a fourteenth-century manuscript of the historical work Sturlunga saga, only preserved there and in another contemporary manuscript, acquired by Magnæus in 1699 (AM 122 a fol.). The so-called Reykjarfjarðarbók (AM 122 b fol.) was torn to pieces in 1676-1679 as it was damaged by moisture. The owner, a well-to-do farmer, gave leaves to his friends for use as book covers. Magnæus was informed about the manuscript's tormented existence in 1693 and went on to trace its remains for three decades. In all, he retrieved 30 pages out of an estimated 180 that made up the original manuscript. At least seven colleagues sent him one or more leaves, the last two leaves arriving in 1724.30 His painstaking efforts can be seen in his request to Árni Gudmundsson in 1707, as he asked where and when the first known owner at Reykjarfjörður had obtained the book. Was it complete when Árni saw it? If not, what was missing: how much or how little, in the beginning, middle or end? Was the whole book readable or was it damaged because of moisture or black stains? Who exactly possessed leaves, and would it be possible to retrieve them?

When Magnæus died on 7 January 1730, his collection comprised close to three thousand manuscripts and fragments, almost one-third of them on vellum. Half of those are fragments of less than six leaves. In a limited sense it can be claimed that he thus came close to the idea of recensio – fully developed in the late eighteenth century, according to Timpanaro – as he desired to gather together all manuscripts of a determined text, not only vellums but also seventeenth-century copies. In this wish for completeness, Magnæus went further than any contem-

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porary scholar or collector of manuscripts. Unlike Politian, however, he never developed a clear sense of how to manage the difference between manuscripts. He was not alone in this, as shown from the careless and arbitrary method of Lenglet de Fresnoy in his edition of *Le Roman de la Rose* in 1735; but it must be said that some or even many editors of that time were more scrupulous.³²

In the course of his studies, Magnæus's understanding of textual variance hardly improved, as can be seen in his handling of some seventeenth-century copies of an otherwise lost medieval text on church history called *Hungurvaka*. It was hopelessly confused, and I shall spare the reader the details. Before 1700, one of his assistants made a copy (a) of one (b) of these manuscripts and Magnæus collated it with another one (c). He then asked another assistant to make a copy (d) of his collated copy (b), but without the added variants ('varias lectiones'). In 1724, Magnæus compared this second copy (d) 'accuratissime' with the original (b) used to produce the first copy (a), making numerous corrections. Finally, he collated his copy (d) with a third seventeenth-century manuscript (e) and wrote down all the differences in the margins. His copy now contained an 'accuratissima collatio' of the two oldest manuscripts (b, e) of this important text, as he happily concluded. The only reason for doing all this appears to have been to throw away the first copy (a), useless since he now had its text on the margins of other copies.³³

Returning to the Book of Icelanders in his later years, Magnæus concluded, erroneously as we have seen, that as a young man he had copied the text as exactly as he then could. In around 1720 he made an exact copy of his best copy and most likely recognized that his own version of 1688-1690 was useless, although he did not discard it. He copied some of his old commentary and revised a number of items.34 When, ultimately, he did not publish an edition, he now justified his inactivity by claiming that the world of books was replete with products of vanity. He had never intended to write books himself and was convinced, as he explained to an assistant, that a man could spend almost his whole life in putting together a little booklet'.35 As a philologist, Magnæus gradually gained a finer understanding of the quality of texts and manuscripts, but this understanding was never brought to fruition in printed editions. His scholarship, seminal as it may have been for the origin of Icelandic studies, did not reach the public arena of European philology. The Republic of Letters allowed the participation of Scandinavian scholars of course, but there was limited interest in northern languages, culture and history. The thriving Anglo-Saxon studies in England were the closest field of research, much of it just as admirable in the details and the driving force the same, that is to replace or at least displace the old view that the origin of European languages and culture should be sought in Greek or Roman Antiquity.36 There was little contact, however, and scholars of medieval Iceland remained isolated.

We can thus safely conclude that Magnæus's diligent but inconspicuous scholarship, inspired as it may have been by the wish to transplant the ideas of humanistic philology to Scandinavia, was only partly successful in the sense that his activities did not become an integrated part of the wider European developments in philology and historiography. His image in the historiography of the humanities therefore remains that of a hunter for manuscripts and maker of copies, and he left the task of coping with textual variance to posterity by donating his collection to the University of Copenhagen after his death. To be fair, some of the problems he encountered remain unresolved to this day.

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Spinoza in the History of Biblical Scholarship

PIRT STRENBAKKERS

I Libertines at large

Let us start with prayer – to wit with Spinoza's Prayer, as found in an anonymous manuscript of 1678-79: 'Think with the learned, speak with the vulgar; the world wants to be deceived, amen." The text is, of course, spurious, but it does give us a glimpse of Spinoza as seen by his contemporaries. The manuscript is a notebook for private use, with unconnected and slapdash, barely readable jottings on a range of topics, mainly politics (passionately anti-Orange), religion and most importantly - sex; our author has a marked fascination for perversities and monstrosities in this area. The choice of subjects suggests average pub talk,2 yet there is method in it. The author, whom I have been unable to identify so far,3 was a friend and follower of Hadrian Beverland (1650-1716).4 In 1678, this young Utrecht libertine had just published his controversial 'philological treatise' Peccatum originale (On Original Sin), which revealed the sexual drive to be the unique and supremely powerful motive force behind the workings of Nature. The original sin that besets the human race and informs all our actions is the craving for sexual intercourse (coeundi pruritus). Beverland's vitalism may be considered an unsophisticated foretaste of Schopenhauer and Nietzsche. Given the mechanistic consensus of the period, he certainly qualifies as an original thinker. Though Beverland pays lip service – albeit with ill-concealed sarcasm – to orthodoxy by branding Spinoza as a sly deceiver (vafer impostor)5 and an atheist, his critique of religion and his metaphysics owe a great deal to the philosopher. What makes Beverland unique and interesting is the way he connects biblical criticism with his own theory of Nature as a blind procreative force. Many of these insights have found their way into the commonplace book of 1678–79; hence the amount of space devoted to sex. In this perspective there is a strong connection with religion: like classical paganism and religions generally, Judaism originally was a fertility cult, and the Bible should be read from that perspective. The author's

language is at times rather smutty – undoubtedly on account of the privacy a notebook affords. He obviously admires Spinoza, and refers to his views on religion several times, as in this quote:

From Beverland⁶ – The Bible as we read it is not the true Bible, as can be shown from the Hebrew language, and as Spinoza also states. True is only that it secures the covenant made by the Israelites with God. The rest, which was added by Joshua and others, was written and invented by the Jews.⁷

The Bible is here presented as a historical, human document, with all the problems of transmission that this entails, rather than as the word of God, pure and simple. Though uncommon and dangerous, such a view was not entirely unheard of in 1678. In fact, puzzles and doubts about the historicity and authenticity of the books that constitute the Bible had been around for a long time; for example, in the rabbinic midrash of the end of the first century CE and later, and in De doctrina christiana of Augustine. Yet for a long time, none of this was to have any serious consequences for the status of the Bible as the word of God: any discrepancies that arose could be accomodated by 'harmonizing' the potentially antithetical readings. In the early seventeenth century, the situation was still basically the same. Though Protestantism had launched an entirely new programme of reading and interpreting the Bible, summed up in the formula sola scriptura, this did not immediately spark off any serious debates about the authority of the Bible as such. By the end of the seventeenth century, however, the situation had changed dramatically. To what extent the Bible was to be regarded as a genuine document, or as the word of God, had become a serious problem not only for the learned, but for the ordinary flock as well. The Utrecht manuscript is an instructive illustration of the gradual dissemination of these doubts.

It would be preposterous to try and explain the complex, often contradictory process of the change in attitude towards the Bible in the course of the seventeenth century as the effect of Spinoza's work. Yet it is striking that after he had published his *Tractatus theologico-politicus* in 1670, there is a general tendency, on all sides of the controversy, to associate any attempt at a historical critique of the Bible with Spinoza. Much of this, undoubtedly, will boil down to polemics and rhetoric. Even so, the question remains why Spinoza was considered to have such an impact.

2 A research project, and Spinoza's place in it

The topic of Spinoza's contribution to biblical criticism is a fascinating one, on account of at least two factors: the unparalleled status of the Bible in Western civilization, and the part allegedly played by Spinoza in the dramatic decline of that status. The Dutch philosopher is often referred to as a pioneer in textual criticism of the Bible, but much research remains to be done: what exactly was his contribution, how original was it, how does it relate to the 'sacred philology' that preceded it? These and many other questions will be studied in a new research project, Biblical Criticism and Secularization in the Seventeenth Century, which Henk Nellen (of the Huygens Institute of the Royal Netherlands Academy of Arts and Sciences), Dirk van Miert, Jetze Touber and I have started in November 2009. What I offer here are some preliminary observations on Spinoza's contribution to the development of biblical scholarship. We want to situate this within the broader tradition of philology of a humanistic lineage, a scientific discipline whose role, we feel, has been underrated in historical research so far. Rather than assuming, unhistorically, that Spinoza's interpretation was unprecedented or, conversely, brushing aside his achievements as unoriginal, we want to find out why and how it was that biblical criticism in the course of some 150 years developed from an originally academic debate into a maelstrom of public controversy, and what Spinoza's part in this was.

Charting the development of biblical criticism in the Netherlands from 1575 to 1725, we will first deal with a number of scholars who worked in Leiden University (Josephus Justus Scaliger, 1540-1609; Daniel Heinsius, 1580-1655; Constantijn L'Empereur, 1591-1648) and with Dutch Arminians (Hugo Grotius, 1583–1645; Simon Episcopius, 1583–1643; Étienne de Courcelles, 1586–1659). We will then move on to the highly controversial work of Isaac de La Peyrère (1596-1676) and Isaac Vossius (1618-89), after which the research will focus primarily on a single thinker, and one outside the walls of academe at that: Benedictus de Spinoza (1632-77), and on the circle around him (especially Adriaan Koerbagh, 1632-69, and Lodewijk Meyer, 1629-81). From there, the overview will be expanded to include the reception of Spinoza's critique of the Bible, its impact, and the ensuing debates among philosophers, scholars, theologians, clergymen and the general public until the early eighteenth century. This part of our survey will include the Arminian theologian Philippus van Limborch (1633-1712), the Cartesians Lambert van Velthuysen (1622-85) and Christoph Wittich (1625-87), the controversial theologians Balthasar Bekker (1634-98) and Frederik van Leenhof (1647–1712), as well as Pierre Bayle (1647–1706) and Jean Le Clerc (1657–1736).

Though Spinoza owes his position in the history of philosophy first and foremost to his *Ethica* (1677), his contemporaries knew him virtually only as the au-

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thor of the infamous Tractatus theologico-politicus. Though an intervention in the political debates of the period, it is not a typical pamphlet. In fact, the contemporary political situation is only touched upon in the preface and the epilogue. The main part of the book is dedicated to politico-theological issues such as the nature and status of prophecy and of miracles, the election of the Hebrews, the question of who holds authority in religious matters (jus circa sacra), the relationships between faith and philosophy, between the law of nature and divine law, and the power of the state. Since the advocates of theocracy in all these issues appeal to the word of God as revealed in Scripture, Spinoza dealt at length with all relevant Bible verses. But his interest in Scripture was not merely instrumental: he was convinced that he had found a solid method of interpreting the text. His systematic point of departure is that the Bible should be understood from itself alone (ex sola scriptura). On the face of it, this looks akin to the Protestant formula of sola scriptura (God's word as the only source and measure of faith), but Spinoza's principle aims at something completely different: explaining the Bible through itself is to lay bare the meaning it had for its authors and their audiences. From that perspective, the biblical message is a purely moral one; it does not teach any philosophical or scientific truths.

It is nowadays fairly common to consider Spinoza's critical analysis of the Bible in the Tractatus theologico-politicus a landmark in the history of biblical textual criticism.8 Though much in chapters 7 (on the exegetical method) to 13 (conclusion: the Bible does not teach philosophy but obedience) is far too technical and too detailed for many if not most present-day readers,9 there can be no doubt that Spinoza himself saw his reading of the Bible as essential to the project of the Tractatus theologico-politicus. 10 As the correspondence shows, Spinoza remained an avid reader of Scripture throughout his life. " That his interest was not strictly 'philosophical' but had strong philological and linguistic penchants, too, is clear not only from the sustained and meticulous analysis Spinoza offers in chapters 7–13, but also from his endeavour to write a Hebrew grammar, the Compendium grammatices linguae Hebraeae, published in 1677 as part of Spinoza's Opera posthuma. It remained unfinished, and we have no indications as to the date or purpose of its composition, but there is a manifest connection with Spinoza's treatment of the Hebrew language in the Tractatus theologico-politicus.12 Unlike Descartes and Leibniz, Spinoza, for all his mathematical rigour, did not contribute anything at all to the development of mathematics; nor to the development of physics, despite his skill in optics.¹³ But he did indeed leave his mark on the subsequent history of biblical scholarship. Before the nineteenth century, scholars had no qualms about combining mathematics, natural philosophy and philology, a mix that no longer seems obvious to us. The concept of 'science', particularly in the English-speaking countries, now virtually

coincides with that of the natural sciences. This is not the case with German Wissenschaft (nor with Dutch wetenschap, for that matter) and, more importantly: such a concept of science is a fairly recent phenomenon – it was unknown in the seventeenth and eighteenth centuries. 14 In the early modern period, 'science' included philology. We must of course also be aware that the term 'philology' as we understand it today is itself a historical product - like 'science' - again shaped to a considerable degree by nineteenth-century practice. Though the word has ancient origins, it acquired its modern content, implying such diverse aspects as the historical study of languages, textual criticism and hermeneutics, only gradually in the Italian Renaissance, and more specifically in the sixteenth and seventeenth centuries, owing to scholars like Josephus Justus Scaliger, Isaac Casaubon, Daniel Heinsius and Gerard Vossius. Precisely because of its encyclopedic, comprehensive and polymathic character, philology did not demarcate itself clearly from theology, law, medicine, philosophy, history or the study of nature.15 Though Spinoza never uses the term, he obviously works within the horizon of what his contemporaries would have labelled critica sacra or philologia sacra, 16 and those who reacted critically to his analysis of the history of the Bible could not resist playing down his originality, by spelling out his debts both to the humanistic philological tradition and to other philosophers. 7 As far as Spinoza was concerned, in investigating the historia of the Bible he was not involved in an undertaking essentially different from what he was doing in the Ethics or in the Hebrew grammar – a text he had also intended to expound more geometrico. Nor is it any different from the study of nature. The following quotation is Spinoza's account of his method of studying Scripture, in the beginning of chapter 7 of the Tractatus theologico-politicus:

To sum it up briefly, I say that the method of interpreting Scripture does not differ at all from the method of interpreting nature, but agrees with it completely. For just as the method of interpreting nature consists above all in putting together a history of nature, from which, as from certain data, we infer the definitions of natural things, so also to interpret Scripture it is necessary to prepare a straightforward history of Scripture and to infer the mind of the authors of Scripture from it, by legitimate reasonings, as from certain data and principles. For if someone has admitted as principles or data for interpreting Scripture and discussing the things contained in it only those drawn from Scripture itself and its history, he will always proceed without any danger of error, and will be able to discuss the things which surpass our grasp as safely as those we know by the natural light.¹⁸

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3 Secularization and confessionalization¹⁹

A few words about two key notions, secularization and confessionalization, may be helpful. The term 'secularization' means different things to different people in different periods.20 As we employ it, secularization involves assigning a secular, non-sacred status to the Bible, which in turn results in questioning the claims to truth upheld by the established churches. The term itself, to be sure, does not occur in the seventeenth century, but we think it is useful and even indispensable to describe the complex process of the gradual erosion of the dominant position of religion and church, eventually resulting in a separation of philosophy and science. It is now quite common to explain this proces of secularization as caused by the Scientific Revolution and by radical changes in philosophy.²¹ We do not take issue with the importance of the innovations in the natural sciences and in philosophy in that period, but we think that there is another factor as well, one that has so far received little or no attention, viz. the advances in philological research of the Bible. The results made many educated people less inclined to consider biblical revelation normative for the explanation of the Book of Nature. The process never was straightforward or linear. An interesting development that - on the face of it - would appear to go against secularization is that of confessionalization: the increasing importance of the organizational and dogmatic boundaries between the many different denominations that had come into existence after the Reformation. They vindicated their raison d'être in unabated controversy and tried to obtain political dominance in order to impose their religious views on others. In doing so, all appealed to Scripture. In the Tractatus theologico-politicus, Spinoza dryly quotes the Dutch proverb geen ketter sonder letter, 'no heretic without a text', that is, without recourse to a passage from Scripture with which to underpin his heresy.²² But paradoxically, this strategy - endorsing one's denominational views with Bible quotes - would ultimately be conducive to secularization. One of the tactics was to show that a competitor's claim was based on an erroneous interpretation of Scripture, or on a corrupt reading; an accusation for which textual criticism could provide the ammunition. For polemical purposes, this might produce some short-term profit, but in the end it only helped to undermine the status of the Bible. An example of how this worked is the fate of the great Roman Catholic Bible scholar Richard Simon (1638–1712). In order to subvert the Protestant principle of sola scriptura - the doctrine that the Bible is the sole spiritual authority - and to argue that the tradition of the Roman Catholic Church was needed to establish the meaning of Scripture, Simon presented a sustained historical critique of the Bible, showing that its textual problems were legion. Simon had the bad luck of publishing his Histoire critique du Vieux Testament in 1678, and he immediately came under the suspicion of crypto-Spinozism,

as many of his findings seemed to corroborate those of Spinoza in the *Tractatus theologico-politicus*.²³ Thus, a strategy that had originally pretended to back up the views of the church – in this case the Roman Catholic Church – eventually resulted in a general weakening of the belief that the Bible was God's word and thereby incontrovertible and incorruptible.

4 Spinoza's position

So what about Spinoza's place in the history of Bible scholarship? However innovative, nay revolutionary, his analysis of the Bible in the *Tractatus theologico-politicus* may have been, it is obvious that he did not start from scratch. For one thing, Spinoza's approach to matters of textual criticism is to be understood within the framework of humanist scholarship,²⁴ and it is firmly grounded in the tradition of Lorenzo Valla and Desiderius Erasmus: the Bible is a text, and it should be handled with the same tools as classical texts. In a highly suggestive chapter captioned 'The Overthrow of Humanist Criticism', Jonathan Israel argues that it was precisely 'Spinoza's principal innovation and strength as a text critic' that he did not stick to traditional humanist philology, but uncompromisingly anchored his text criticism in his metaphysics.²⁵ That was what put textual criticism on a par with the scientific revolution of the period. In that context, Israel quotes Spinoza's equation of the methods of interpreting Scripture and of interpreting nature (*Tractatus theologico-politicus*, chapter 7), and then continues:

This was merely one of many different manifestations in the late seventeenth- and early eighteenth-century West in the field of scholarship of the prior 'revolution' in philosophy rooted in Descartes and Hobbes and then carried further by Spinoza, Bayle, and many others, changes that *transformed text criticism*, and hence the foundations of all scholarly erudition, and, for the first time, made hermeneutics a fundamental aspect of philosophy itself.²⁶

The rest of the chapter is dedicated mainly to presenting the often scathing comments of scholars, in particular Jean Le Clerc, on the achievements of their humanist predecessors. In this way, Israel sets up an insuperable opposition between the old Renaissance textual critics, and the 'new *critique*', as he labels it, of people like Spinoza, Bayle and Le Clerc, the 'three leading figures of the Dutch Early Enlightenment'. As I understand it, the implication of this picture is that humanist philology as such is a powerless tool, and that only by infusing it with his radical metaphysics did Spinoza manage to turn it into a truly revolutionary

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discipline. This looks like yet another heroic version of the querelle des anciens et des modernes. In our project, Henk Nellen and I have chosen quite a different perspective, viz. that of a continuous development. We will show that philological research carried with it an explosive load that was bound to detonate sooner or later. Scholars like Le Clerc may have dissociated themselves from their predecessors, but that did not prevent them from following in their footsteps when it came to philological skills. That biblical scholarship became such a controversial issue in the latter half of the seventeenth century cannot be explained in terms of the grafting of a new metaphysical system onto the old philological stock. For one thing, it is not at all clear that Le Clerc was a partisan of the new metaphysics, if that refers to Spinoza's metaphysics. In philosophy, he was an eclectic thinker, much closer to Descartes and to his friend John Locke than to Spinoza. For another, philology carried with it a potentially explosive load, as the development of the relationship between textual criticism and systematic theology in the seventeenth century shows.

Spinoza did not only build on the humanistic philological tradition. His Jewish education had given him a solid training in the Tanach, the Hebrew Bible, and in the Medieval Jewish tradition of biblical commentary, especially Abraham ibn Ezra (1093-1163), whose interpretations he quotes on several occasions.²⁹ Thus, ibn Ezra had already presented evidence that excluded Moses's authorship of every single word of the Torah.30 Another important Jewish source is Maimonides (1135-1204), though as far as the exegetical method is concerned, the influence is a negative one only. For those who, like Lambertus van Velthuysen, had missed the point that Maimonides's rationalist position is rejected as a matter of principle in the Tractatus theologico-politicus, Spinoza spells it out once again in his letter to Jacob Ostens: 'Furthermore, I do not see why he says that I think that all those will agree with me who deny that reason and philosophy are the interpreters of Scripture. For I have refuted the views both of these and of Maimonides.'31 Spinoza's account of the Bible was also influenced by such contemporary authors as Thomas Hobbes, Louis Cappel and Isaac de La Peyrère.³² Even so, the powerful analysis Spinoza offers in the Tractatus theologico-politicus cannot be reduced to an eclectic blend of various influences. One of the challenges of our project is to explain why precisely Spinoza's interpretation of the Bible had such an enormous impact. A preliminary and no doubt partial explanation of the extraordinary effect of the Tractatus theologico-politicus may be found in Spinoza's uniquely detached position, one that allowed him to question the received opinions about 'the word of God' in a profound and radical way, unequalled by any of his predecessors or contemporaries. Let me be clear: in characterizing his position as detached, I do not wish to suggest that he was an impartial observer, somewhat along the lines of Mannheim's 'freischwebende Intelligenz'. The important thing about Spinoza's position is rather that he had left Judaism and never converted to Christianity. As a thinker without a commitment to any of the religious denominations around him, without any financial, professional or personal obligations, Spinoza could address the questions that many others had raised before him without wondering whether the answers would fit in with his religious convictions.³³ His critique carried more weight than that of any of his predecessors, closely entwined as it was with his metaphysics and his critique of religion.

Philology in the seventeenth century was not only a 'science' in approximately the modern sense of the word but also the most sophisticated of the 'humanities'. As Spinoza's combined application of textual criticism, historical investigation, critique of religion, moral and political philosophy in the *Tractatus theologico-politicus* shows, an early modern scholar saw no boundaries nor incompatibilities between the various disciplines that we now distinguish as separate sciences and humanities.

Notes

- 't gebet van spinosa/ sentire cum doctis loqui cum vulgo mundus vult/ decipi, amen' (Ms 1284, University Library Utrecht, fol. 13'). The manuscript is a fragment (it starts in the middle of a sentence, even in the middle of a word) of 28 densely scribbled pages, mostly in Latin, with interspersions in Dutch. Jetze Touber, Jeroen van de Ven and I are preparing an edition of it, which will appear in Lias: Journal of Early Modern Intellectual Culture and its Sources.
- There is some affinity with collections of jokes and anecotes like the one compiled by Aernout van Overbeke, 1632–1674, but the Utrecht manuscript evidently was not intended for circulation, as Overbeke's was; Aernout van Overbeke, Anecdota sive historiae jocosae: een zeventiende-eeuwse verzameling moppen en anekdotes, ed. Rudolf Dekker & Herman Roodenburg (Amsterdam: Meertens-Instituut, 1991). Moreover, its libertine and clandestine character indicates that its purpose was not entertainment or social talk either.
- The university library's catalogue of manuscripts tentatively attributes it to Johan Nellesteyn, but Nellesteyn died in 1677; Pieter Anton Tiele, Catalogus codicum manu scriptorum bibliothecae universitatis Rheno-Trajectinae. Vol. 1 (Utrecht: Kemink, 1887) 306, No 1284.
- For Beverland, see Rudolf de Smet, 'Beverland, Hadrian (1650–1716)', in: Wiep van Bunge et al. (eds), The dictionary of seventeenth and eighteenth-century Dutch philosophers (Bristol: Thoemmes, 2003), 92–94.
- 5 Hadrian Beverland, Peccatum originale kat'exochèn sic nuncupatum, philologice problèmatikôs elucubratum à Themidis alumno (Eleutheropoli [Leiden?]: s.n., s.a. ['absque Ubi & Quando'] 1678), 4.
- 6 Most entries are preceded by a reference to their source (often an oral one, apparently); an indication that the manuscript is a commonplace book.

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- 'ex Beverland, biblia ea quae nos legimus, ut ex/ hebraicâ lingua demonstrari potest et etiam affir-/mat spinosa non sunt vera biblia. solum hoc verum/ quod allegat faedus ab israelitis cum Deo factum/ reliqua quae Josua etc. addidere a Judeis/scriptum fictumque est' (Ms 1284, UL Utrecht, fol. 2^r).
- 8 P.T. Van Rooden, 'Spinoza's bijbeluitleg', Studia Rosenthaliana 18 (1984), 120-33: 120, n. 2, provides an extensive list of references in order to illustrate his point that Spinoza is generally considered a precursor or even founder of modern Bible scholarship - a view that Van Rooden himself does not endorse. The scholarly results presented in the Tractatus theologico-politicus do not, so he argues, depend on Spinoza's method, but on a perceptive reading of the Bible. Van Rooden's list of references is not intended to be exhaustive, and many more publications could be added, e.g. M. Vexler, 'Spinoza et l'autorité de la Bible', Revue des études juives 64 (1912), 30-58; J.D. Woodbridge, 'Richard Simon's Reaction to Spinoza's Tractatus theologico-politicus', in K. Gründner & W. Schmidt-Biggeman (eds), Spinoza in der Frühzeit seiner religiösen Wirkung (Heidelberg: Schneider, 1984), 201–26; J. Lagrée & P.-F. Moreau, 'La lecture de la Bible dans le cercle de Spinoza', in J.R. Armogathe (ed.), Le Grand Siècle et la Bible (Paris: Beauchesne, 1989), 97-115; Manfred Walther, 'Biblische Hermeneutik und historische Erklärung: Lodewijk Meyer und Benedikt de Spinoza über Norm, Methode und Ergebnis wissenschaftlicher Bibelauslegung', Studia Spinozana II (1995), 227-300, Rüdiger Otto, 'Johann Christian Edelmann's Criticism of the Bible and its Relation to Spinoza', in W. van Bunge & W. Klever (eds), Disguised and Overt Spinozism around 1700: Papers Presented at the International Colloquium, held at Rotterdam, 5-8 October 1994 (Leiden: Brill, 1996), 171-88; , Richard H. Popkin, 'Spinoza and Bible Scholarship', in Don Garrett (ed.), The Cambridge Companion to Spinoza (Cambridge: Cambridge University Press, 1996), 383-407; J. Samuel Preus, Spinoza and the Irrelevance of Biblical Authority (Cambridge: Cambridge University Press, 2001), Roy A. Harrisville & Walter Sundberg, The Bible in Modern Culture: Baruch Spinoza to Brevard Childs (2nd ed. Grand Rapids, MI: Eerdmans, 2002; first ed. 1996, as The Bible in Modern Culture: Theology and Historical-Critical Method from Spinoza to Käsemann); Travis L. Frampton, Spinoza and the Rise of Historical Criticism of the Bible (New York, NY: Clark, 2006), Brayton Polka, Between Philosophy and Religion: Spinoza, the Bible, and Modernity (Lanham, MD: Lexington, 2007), Steven Nadler, 'The Bible Hermeneutics of Baruch de Spinoza,' in Magne Sæbø (ed.), Hebrew Bible, Old Testament: The History of its Interpretation, vol. 2: From the Renaissance to the Enlightenment (Göttingen: Vandenhoeck & Ruprecht, 2007), 826-36.
- Thus, Wernham in Benedictus de Spinoza, The Political Works: The Tractatus Theologico-Politicus in Part and the Tractatus Politicus in Full. Ed./trans. A.G. Wernham (Oxford: Oxford University Press, 1958) includes less than one page from chapter 7 and not a single line from the chapters 8–13; that is to say, only about one per cent of the entire text of these chapters. Wernham's selection is, of course, guided by his intention to present Spinoza's political thought. Still, given the importance Spinoza himself attached to the interpretation of the Bible in the context of his politics, the asymmetry is striking. The lack of interest in these exegetical chapters is, I think, itself due to the erosion of the status of the Bible. In the seventeenth and eighteenth centuries, they were considered significant. This is illustrated, for instance, by the separate publication of the highly technical chapters 8 and 9 in London in 1763, anonymously and without the publisher's name, Tractatus de primis duodecim Veteris Testamenti libris, in quo ostenditur eos omnes ab uno solo historico scriptos fuisse: deinde inquiritur quisnam is fuerit, et an huic operi ultimam manum imposuerit, idque, ut desiderabat, perfecerit. (Alternative title on p. 3: Tractatus de

- scriptore Pentateuchi &c. &c.) (London: s.n., 1763). As far as I have been able to ascertain, this separate edition is not mentioned in any of the Spinoza bibliographies.
- See Spinoza's account of his method of studying Scripture, in the beginning of chapter 7 of the *Tractatus theologico-politicus* (to be quoted in full below), and also the final paragraph of Letter 76 (to Albert Burgh, December 1675): there Spinoza proudly affirms that the fundamental principle of the *Tractatus theologico-politicus* viz. to explain Scripture through Scripture alone ('quòd scilicet Scriptura per solam Scripturam debeat exponi') has been apodictically proved to be true and well-established by him in chapter 7, see Benedictus de Spinoza, *Complete Works*, translated by Samuel Shirley, (Indianapolis, IN: Hackett, 2002), 950.
- Especially the exchanges with Van Blijenbergh and with Oldenburg. See in particular Letter 21 (to Van Blijenbergh, 28 January 1665), with the candid avowal: 'For my part, I plainly and unambiguously avow that I do not understand Holy Scripture, although I have devoted quite a number of years to its study' (Spinoza, Complete Works, trans. Shirley, 822); Letter 30 (to Oldenburg, autumn 1665), in which he explicitly connects the study of the Bible with the need to defend the freedom to philosophize (844); Letter 75 (to Oldenburg, December 1675), end; Letter 78 (to Oldenburg, 7 February 1676).
- See J.M. Hillesum, 'De spinozistische spraakkunst', Chronicon Spinozanum 1 (1921), 158–177; Joël Askénazi & Jocelyne Askénazi-Gerson, Spinoza: Abrégé de grammaire hébraïque (Paris: Vrin, 1987); and also Lodewijk Meyer's note on the projected contents in the preface to the Opera posthuma (sig. 5*2'); cf. Fokke Akkerman, 'The Preface to Spinoza's Posthumous Works', in: Studies in the Posthumous works of Spinoza: on style, earliest translation and reception, earliest and modern edition of some texts (PhD thesis, Groningen University, 1980), 205–75: 253; according to Meyer, Spinoza had intended to supply a preface in which he would have covered some topics already touched upon in the Tractatus theologico-politicus.
- Cf. Alan Gabbey, 'Spinoza's Natural Science and Methodology', in Don Garrett (ed.), The Cambridge companion to Spinoza (Cambridge: Cambridge University Press, 1996), 142–91. The two anonymous tracts, on chances and the rainbow, attributed to Spinoza, were not written by him, but by Salomon Dierquens (1641–1703): see J.J.V.M de Vet, 'Salomon Dierquens, auteur du Stelkonstige reeckening van den regenboog et du Reeckening van kanssen', in F. Akkerman & P. Steenbakkers (eds), Spinoza to the Letter: Studies in Words, Texts and Books (Leiden: Brill, 2005), 169–88.
- 'In modern use, often treated as synonymous with "Natural and Physical Science", and thus restricted to those branches of study that relate to the phenomena of the material universe and their laws, sometimes with implied exclusion of pure mathematics. This is now the dominant sense in ordinary use.' (Oxford English Dictionary, entry 'Science', sense 5b. I consulted the online version; this entry is from the Second Edition of 1989.) The narrowing down of science to the natural and physical sciences (excluding pure mathematics) dates from the nineteenth century; the OED's earliest attestation is from 1867. Helmut Pulte, 'Wissenschaft III: Ausbildung moderner Wissenschafts-Begriffe im 19. und 20. Jahrhundert', in Joachim Ritter et al. (eds.), Historisches Wörterbuch der Philosophie, vol. 12 (Darmstadt: Wissenschaftliche Buchgesellschaft, 2004), 921–48, offers a compact survey of the historical vicissitudes of the notion of 'Wissenschaft' (and its cognates) in the nineteenth and twentieth centuries.
- 15 Axel Horstmann, 'Philologie', in Joachim Ritter et al. (eds.), Historisches Wörterbuch der Philosophie, vol. 7 (Darmstadt: Wissenschaftliche Buchgesellschaft, 1989), 552–72: 556–57.
- 16 Salomon Glassius's epoch-making Philologia sacra came out in five volumes from 1623 to 1636. Another important study was Christophorus Cellarius's Sciagraphia philologiae

- sacrae: difficiliores quaestiones plerasque, & linguarum orientalium usum genuinum delineans (second, expanded edition 1678).
- This is a topic, for example, in Regnerus à Mansvelt's Adversus anonymum theologo-politicum, published posthumously in 1674.
- 18 I quote from an as yet unpublished translation by Edwin Curley, who kindly put his text at my disposal. The passage is to be found, with variants, in Shirley's translation of Spinoza's Complete Works, 457.
- This section owes a great deal to the proposal for the research project that Henk Nellen and I drew up collaboratively, and many of the ideas propounded here – certainly the best ones – come from Nellen.
- OED, s.v. secularization: 'The conversion of an ecclesiastical or religious institution or its property to secular possession and use; the conversion of an ecclesiastical state or sovereignty to a lay one', in various senses. The oldest occurrence of the word attested there (1706) is in the legal sense of transfer of property from ecclesiastical to secular possession; the more general senses seem to date from the latter half of the 19th century.
- 21 E.g. Henk Jan de Jonge, Van Erasmus tot Reimarus: ontwikkelingen in de bijbelwetenschap van 1500 tot 1800 (Leiden: Rijksuniversiteit, 1991); Jonathan I. Israel, Radical Enlightenment: Philosophy and the Making of Modernity, 1650–1750 (Oxford: Oxford University Press, 2001) and Enlightenment Contested: Philosophy, Modernity, and the Emancipation of Man, 1670–1752 (Oxford: Oxford University Press, 2006); Floris Cohen, De herschepping van de wereld: het ontstaan van de moderne natuurwetenschap verklaard (Amsterdam: Bakker, 2007). Against Steven Shapin, The Scientific Revolution (Chicago: University of Chicago Press, 1996), Cohen makes a case for the notion of a Scientific Revolution that started around 1600.
- 22 Spinoza, Tractatus theologico-politicus, chapter 14, beginning (Complete Works, trans. Shirley 2002, 514).
- 23 For the knotty question of Spinoza's real influence on Simon, see the excellent analysis by J.D. Woodbridge, 'Richard Simon's Reaction to Spinoza's Tractatus theologico-politicus', in: K. Gründner & W. Schmidt-Biggeman (eds), Spinoza in der Frühzeit seiner religiösen Wirkung (Heidelberg: Schneider, 1984), 201–26; on the basis of newly discovered manuscripts. Woodbridge also has his doubts about the portrait of 'Simon as a heartfelt defender of Roman Catholic tradition against the Protestant principle of Sola Scriptura' (220).
- 24 Israel, Enlightenment Contested, 409-435; quote 412.
- 25 Ibid., 413; my emphasis.
- 26 Ibid., 427.
- 27 Cf. Steenbakkers, 'Clerc, Jean le'. In Wiep van Bunge et al. (eds.), The Dictionary of Seventeenth and Eighteenth-Century Dutch Philosophers (Bristol: Thoemmes, 2003), 213–216.
- Other Jewish commentators that Spinoza knew and benefited from are Rashi and Gersonides. See Carl Gebhardt, Spinoza Opera, im Auftrag der Heidelberger Akademie der Wissenschaften herausgegeben von Carl Gebhardt (4 volumes, reprinted 1972; vol. 5 published in 1987), vol. 5, 230.
- Nadler, 'Bible Hermeneutics', 829–830. Spinoza himself refers to Ibn Ezra ('liberioris ingenii vir et non mediocris eruditionis') in this context: Tractatus theologico-politicus, chapter 8. Cf. Akkerman's edition: Benedictus de Spinoza, Tractatus theologico-politicus/Traité théologico-politique, texte établi par Fokke Akkerman, traduction et notes par Jacqueline Lagrée et Pierre-François Moreau (Paris: Presses Universitaires de France, 1999), 326; and Gebhardt's edition: Spinoza, Opera ed. 1925, III, 118.

- Letter 43, February 1671 (Spinoza, Complete Works, trans. Shirley 2002, 881). Spinoza quotes Van Velthuysen's letter (Letter 42; Complete Works, trans. Shirley 2002, 871).
- For La Peyrère, see in particular Richard H. Popkin, Isaac La Peyrère (1596-1676): His Life, Work and Influence (Leiden: Brill, 1987), and Popkin, 'Spinoza'.
- An older contemporary for which this may also hold, at least in part, is Isaac Vossius; see Thijs Weststeijn, 'Spinoza sinicus: an Asian Paragraph in the History of the Radical Enlightenment,' Journal of the History of Ideas 68 (2007), 537–61: 540.

The 'Rules of Critique'

Richard Simon and Antoine Arnauld

Martine Pécharman

1 Introduction

The decree concerning the edition and the use of sacred texts adopted by the Council of Trent in its fourth session on 8 April 1546 was sometimes understood as prohibiting any emendation of the Vulgate version of the Scripture. The Synod demanded that the Vulgate be considered *authentic* in all liturgic matters, on account of its long-standing usage and approbation in the Catholic Church. By such an ordaining, did the Council only attempt to secure the authority of the Vulgate in the doctrinal controversies, or did it rather aim at condemning corrections of the standard Latin version introduced in conformity with the Hebrew and Greek originals? Was the Tridentine decree propounding a merely *juridical* meaning of the authenticity of the Vulgate, or did it state that the Vulgate was absolutely in accordance with the divine inspiration of the Holy books? If the second option was the right one, then not only a *critical* study of the Bible was made impossible, but moreover any vernacular version elaborated from the original languages of the Bible had to be suspected of heresy.

It is known that the humanist concern for the original textual sources of Christian theology was expressed in a new Latin translation of the New Testament, Erasmus's Novum Instrumentum (1516), whose peculiarity was the publishing of the Greek text compiled from a few manuscripts alongside the Latin. The second edition (Novum Testamentum, 1519), containing a more thoroughgoing correction of the Vulgate, was used by Luther for his German translation from the Greek (1522). William Tyndale, who published an English version in 1526, The Newe Testament as it was written and caused to be written by them which herde yt, followed Erasmus's third edition (1522). Indeed, Erasmus's undertaking of a Latin translation emending the Vulgate through the examination of Greek manuscripts was enough to incite the disapproval of Roman Catholics. The return to the graeca veritas of the New Testament signalled for them the loss of religious uniformity:

the theological orthodoxy supported by the divinely inspired Vulgate was threatened if the humanist philological and critical legacy happened to be imported in biblical scholarship. In their opinion, the lengthy common use of the Vulgate meant its truth and integrity, thus changes made in the Vulgate from the Greek New Testament inevitably led to a departure from the authority of Scripture. In this respect, the minute revision of the Greek New Testament published in 1550 by Robert Estienne³ was censured by the Faculty of Theology in Paris. Roman Catholics deemed further that the widening of the audience for the Holy Writ through the translation of restored original texts into the major vernacular languages could only induce the propagation of heresy in Western Europe. Pandora's box was open as soon as the universality of the standard Latin version was undermined both by its emendation from the original languages of Scripture and by its translation into modern languages.

The history of French translations of the Bible in the sixteenth and seventeenth centuries pre-eminently displays such a Catholic hunting of the theological reformism supposedly lodged in the textual corrections of the Vulgate. Jacques Lefèvre d'Étaples's translation of the New Testament (1523) failed to be approved by the Sorbonne. Lefèvre was guilty of reviewing the Vulgate according to the Greek text. In 1525, the Parliament of Paris and the Faculty of Theology did prohibit any translation of the Holy texts. The successive editions in 1534 and 1541 of the Saincte Bible en françoys which Lefèvre had first published in 1530 in Anvers were condemned as propitious to Protestantism. Not surprisingly, the first French translation of the Bible directly from Hebrew and Greek originals, published in 1535 near Neuchâtel, was the work of a Protestant, Pierre Robert Olivétan. Known as the Bible de l'Épée after its 1640 edition by Calvin, it was the source, through several revisions,4 of the Bible de Genève (1588),5 which was still dominant among French-speaking Protestants at the end of the seventeenth century.6 The Catholic counterpart to Olivétan's translation came from the theologians of Louvain⁷ who initiated a rewriting of Lefèvre d'Étaples's Saincte Bible. They suppressed the corrections of the Vulgate inserted by Lefèvre according to the ancient Hebrew and Greek. Lefèvre's French translation was thus made strictly concordant with the standard Latin version. So was born in 1550 the first Bible de Louvain. In 1566, another French version of the Bible was published - for the first time in Paris - by the theologian René Benoist. This translation was principally from the Vulgate, not from the differing Hebrew and Greek texts, but Benoist claimed the right to use the heretical versions as often as they were true. The Parisian Faculty of Theology condemned Benoist's Bible as early as 1567. However, a revision achieved by the theologians of Louvain⁸ allowed its reedition in 1578 in Anvers, giving birth to the second Bible de Louvain, which was uninterruptedly reprinted in the Netherlands and in France for many decades. The

Sorbonne persisted in the meanwhile in its opposition to translations of the Bible in vernaculars. In 1647, in the foreword to his translation of the *New Testament*, François Véron tried to champion the reading of the Bible in French. The same claim was made in 1649 by Michel de Marolles, who contended in the Preface to his own version of the *New Testament* that the Tridentine Council had not prohibited the reading of Scripture in vernaculars. However, these claims were merely urged by the anti-Protestantism of their authors.

Was thus a Catholic French version of the Bible in the seventeenth century bound to be elaborated merely in resistance to the Calvinist Bible de Genève? Not at all. The project of a new translation of the New Testament examined from 1657 to 1660 by some of the Solitaires of Port-Royal (Antoine Arnauld, Pierre Nicole, Claude Lancelot, Antoine Le Maître, Isaac-Louis Le Maître de Sacy)10 constituted a notable break within the modern history of the French Bible. Supervised by Antoine Arnauld", the discussions of the Solitaires dealt with the very principles of translation. For the first time, the thesis of the necessity of a translation of Scripture into vernaculars was defended for positive reasons, which were genuinely linguistic reasons. The point was clearly stressed afterwards by Antoine Arnauld, in his Défense des versions en langue vulgaire de l'Écriture Sainte (1688). The argument alleged by Port-Royal concerning the translation of the Bible into vernaculars was that the Latin version of Hieronymus was itself nothing other than such a translation. Had Latin continued to be used in Western Europe as a vernacular language, instead of maintaining itself as a dead language of erudites, Scripture would have still been intelligible to everybody. The original languages of Scripture were vernacular languages for those who used them and for their audience. The oldest versions, and Hieronymus's translation as well, facilitated the passage of the ancient Hebrew and Greek to other vernaculars. So, it would be absurd for texts that were originally expected to be understood by a whole linguistic community to now be transmitted without caring about the linguistic changes of the audience. The other reason why Port-Royal launched the project of a new French translation of the Bible was the important transformation the French language had undergone since the end of the sixteenth century. The transformation was so great that the Louvain version could be considered in the midseventeenth century as offering only a dead version of the Bible, unintelligible to speakers of living French. The necessity of a new version was called for by the grammatical and lexical standardization of French. 'Purity of language' could be now adopted as the translator's slogan, and indeed it was the banner of Sacy, who completed the translation of the New Testament initiated by his brother Le Maître12 and then undertook the translation of the Ancient Testament. At the beginning of 1666, the draft of Sacy's translation of the New Testament was the object of a collective examination and correction under Arnauld and Nicole's direction.¹³

The revised version was printed by Elzevier at Amsterdam and published in 1667, under the address of an editor in Mons. This new translation, the so-called Mons New Testament, achieved great triumphs,¹⁴ but it also aroused great hostility.¹⁵ Port-Royal was suspected by the Jesuits of founding faith on sola Scriptura and of making the ecclesiastical tradition unnecessary. Port-Royal was taxed with crypto-Protestantism. In his defence of the Mons translation against these attacks, Arnauld vindicated the right for any Christian, not only for scholars, to read the New Testament. This universal right was for him the correlate of the attribution to Scripture itself, not to an external interpretation, of the ultimate criterion for determining the meaning of difficult passages.

The manner in which the ex-Oratorian Richard Simon¹⁶ opposed Port-Royal's version of the New Testament was quite different. Simon's theological formation in 1658-1662 had been rather unusual. Instead of devoting himself to the study of works of spirituality, he had learnt Hebrew and Syriac, read all books of scriptural critique, and acquired an amazing historical knowledge of the Bible's versions. After that, he had gained expertise in both Judaism and the oriental Christian doctrines. In 1669, his mastery in the latter area led him to denounce the amateurism displayed in Arnauld and Nicole's Perpétuité de la foi de l'Église catholique touchant l'Eucharistie, concerning the use of Greek and oriental sources. 17 At the moment of the publication of the New Testament, Simon had issued no judgement on the Port-Royal version. His own method of translation of the Bible was elaborated later on, and realised in 1676.18 So, Simon was from the outset of another calibre than the challengers mocked in Arnauld's Défense des versions for mistaking knowledge of Hebrew and Greek, as well as translation of the Bible in a vernacular, with heresy. The interest of Simon's remarks on Port-Royal's version, published in 1690 as a part of a general examination of the various versions of the New Testament, comes from the fact that they cannot be detached from his own methodological concern. They form part of his altogether innovative doctrine of an historical critique of the Bible, first displayed in 1678 with the Histoire critique du Vieux Testament¹⁹ and pursued afterwards with the three volumes of the Histoire critique du Nouveau Testament (1689 for the text, 1690 for the versions, 1693 for the commentaries). This doctrine affords an interesting contrast to Port-Royal's principles of translation. Simon deems that faith is drawn from the oral tradition in the Church and would be well-grounded even without the reading of Scripture. As a consequence of this theological superiority of tradition over Scripture, the biblical texts must be considered strictly as texts, that is to say, they must be studied for their literal status. The problem of translation which is primordial for Port-Royal is thus only secondary for Simon: what matters in his eyes is not the equal intelligibility of the text in whatever language, but the history of the text since its original state. A biblical text consists for Simon in an

irreducible plurality that translation cannot overcome, a plurality which must persist in the margins and the notes of the version. While Port-Royal focuses on what Scripture mentally conveys to its audience, the real stake for Simon consists in the plural existence of any biblical text, its historicity and materiality. Now, once specified at the end of the seventeenth century, this theoretical divorce on the topic of the methodology of translation, supported by two distinct notions of critique (its textual meaning versus its logical meaning), may appear as opening a radical division in linguistic studies, insofar as the choice will be between Simon's historical way (the development of textual criticism with the help of philology and paleography) and Arnauld's philosophical way (the analysis of human judgements with logical tools).

2 Richard Simon's art of critique

According to Richard Simon, the divine inspiration source of the Bible texts does not imply their literal infallibility, and there is no 'singular providence'20 safeguarding them from the common destiny of all books whose primitive form is lost. Their transmission is liable to defects and falsifications, it requires a series of copies which multiply the chances for alterations. The mere supposition of these changes is enough to imply the necessity of critique. Simon defines critique as 'a term of art' relating to the works in which the various readings are examined in order to re-establish those that are true.'21 Critique is the condition sine qua non to the end of reconstructing in some manner'22 the original of texts that have been corrupted. The historical approach to texts, viz. the knowledge of their different 'states' and 'revolutions',23 affords an indispensable resource against their temporal destruction or decay. Biblical critique conforms to this general definition. It considers the diverse alterations and the various readings of the holy texts as facts whose causes or reasons must be explained. On account of the loss of their first and true original,²⁴ the literality of these texts must be indirectly rediscovered through a method of comparison, by judging the readings that can be said to be authentic in relation to altered copies. Simon dismisses a mere catalogue of the diverse readings, 25 as well as their multiplication without necessity: 26 as a judicative art, critique must consist in the discernment of true and reliable readings from falsified ones, or else it could restore nothing. By conjecturing the probable causes of the variants and determining the origin of most of the copists' mistakes', critique provides the means to ascertain 'the true reading of the Bible text'. 27 In place of the primitive text that was not preserved, it re-institutes a substitutive or resembling text which embodies all that 'must be preserved' - as uncorrupted - from the different successive readings.28 However, this restoration of literality does not mean a necessary

preference for the oldest readings:²⁹ their antiquity cannot equate them with the lost holy texts, they are not closer to the perfection of the original than later copies. The art of critique is not the business of antiquarians.

Nor is biblical critique the business of theologians.³⁰ In Simon's view, it is an art of grammarians, whose concern is not the religious, but the textual truth. Had all the Bible exemplars disappeared, religion would not be annihilated.³¹ Critical judgment, which opposes textual destruction, is independent of the ecclesiastical tradition; it is grounded in the very plurality and diversity of copies of the holy texts. Local additions or suppression needed for restoring the literal meaning escape theological considerations, and reciprocally, a theologian lacks the capacity of discriminating true readings from false ones. Critique does not go beyond the opacity of Scripture: grammar and theology are two complementary jurisdictions that must not infringe their respective limits. The method for translating the Bible must be assessed accordingly. Translation requires only the historical critique of the text, without any interference from theological issues. Only critique can give the rules for a 'true translation' of the Bible, representing the first original 'as far as possible'. 32 Both an extensive and accurate knowledge of all exemplars and a reasoning from the various readings as from different facts are necessary in order to establish the succedaneum of the lost original: the best reading is then preserved in the body of the translation, while variants are included in the margins.'33 Thus, when Simon's Histoire critique des Versions du Nouveau Testament devotes a lengthy discussion to a 'peculiar examination' of the Port-Royal version of the New Testament,34 the criterion of the evaluation lies in the necessary deduction of the method of translation from the method of critique. Simon's purpose is not to detect hints of heresy in the Mons version. Taking things strictly from the viewpoint of the definition of biblical critique, his objections denounce the Mons version as a counter-model of a genuine translation, chargeable with two main infractions to the 'rules of critique', those rules whose invocation constitutes Simon's Leitmotiv.

2.1 The rule of grammatical literality

In Simon's eyes, through fear of an excessive literality which might turn the version of the *New Testament* into an unintelligible text, Port-Royal has fallen into the opposite defect: an excessive distance from the literal text. The former defect would have been less prejudicial than the second. It is easy to provide clarifications when the holy text is made obscure by an excessively literal translation. But at the other extreme, translation is threatened by substituting a merely human sense for God's Word in many passages. Simon considers that the Port-Royal manifesto in the Preface of the Mons *New Testament*³⁵ is misleading. It claims that

the purpose is not to explain the core of things, le fond des choses, but to make the sense of the holy text intelligible for everybody. The Mons version is vindicated as 'an absolutely simple translation', une traduction toute simple, nothing more. But Simon deems that under the pretence of not leaving the sense of some passages in suspense and without determination (suspendu et indéterminé)', the Messieurs 'take their ease and establish their opinions' in all these passages.³⁶ The Mons version is almost always very distant from the literal text; it is more an explained translation than a simple translation;³⁷ On the pretext of caring about the intelligibility of the text, the Messieurs incorporate a commentary into their translation. They transgress the rule that bans explanations (a fortiori theological elucidations) to the notes. The primary rule is the translation's accordance with 'the grammatical or the literal sense'.38 Simon rejects as excessive and inappropriate the requisite of clarifications: a translation must differ from an explanation. He considers that there are a lot of 'useless phrases and words' in the Mons version³⁹ by comparison with the Vulgate adopted as the source text. The Messieurs often use several words for translating just one. Any such elucidation of one Latin word by means of additional French words ought to be located in the margin. 40 The frequent use of circumlocutions and the accumulation of synonymous words in the Mons version leads Simon to the conclusion that Port-Royal aims at something other than the literality of the holy text: its theological interpretation. Preference has been given to ancient patristic commentaries over the text itself. This cannot be really a translation of the evangelic and apostolic writings: Port-Royal substitutes for them a pseudo-text mainly reconstructed from the Augustinian commentaries. While the chief rule of critique requires dissociating the grammatical or literal sense from the theological sense, the Mons New Testament abounds with theological prejudices. 41 It does not constitute a translation but rather 'a paraphrase'. 42

2.2 The rule of linguistic uniformity

The authors of the Mons version claim that they follow a middle way or tempérament⁴³ between a translation from the Vulgate and a translation from the Greek text of the New Testament. The Greek text as well as the Vulgate version are found together in the Mons translation. When the Greek text contains more than the Vulgate, these additions are included in the body of the translation. Moreover, when differences between the two texts suggest that the Greek is to be preferred to the Latin, these Greek differences are also inserted in the body of the translation instead of being translated in annotations. In these passages, the Vulgate itself is dismissed to the margin. This is an awful method in Simon's eyes, an altogether non-critical method. Biblical critique prohibits ever abandoning the Latin text once it has been chosen as the source text. The Greek variants have to be

marked only in notes, they cannot constitute a real part of the text. The alternative is either a complete translation following the Greek or a complete translation following the Latin.⁴⁴ No middle way is allowed. The rule of textual uniformity forbids mixing Greek and Latin together. If the Vulgate is acknowledged as the source text, the translation must always represent the Vulgate, even though this conformity with the Latin proper terms sometimes does not provide a clear and distinct meaning.45 The problem is not to decide whether the Vulgate exhibits the accurate evangelic or apostolic sense or not, but merely to have the literal text transferred into French. As a direct consequence of the choice of the Vulgate as the source text, it is impossible to leave the Latin aside in the body of the translation. The 'natural place' of the Greek, 46 even in cases where it can be considered as a better reading than the Latin one, is separate from the body of the version, in footnotes or in the margin. Moreover, Port-Royal's transgression of the 'rules of critique' when disregarding the necessary alternative of Latin or Greek is aggravated for Simon by the Messieurs' restriction of Greek text to Greek ordinary editions' 47 or to the surviving Greek manuscripts, as if the lost Greek manuscripts used for the old Latin version did not matter at all.48 Port-Royal commits a fallacy here: a Greek variant that occurs only secundum quid is considered as occurring simpliciter. 49 On the contrary, the method of biblical critique provides an indefinite extension for the Greek of the New Testament, as well as for the Hebrew of the Old Testament: Greek and Hebrew must also cover the Greek or the Hebrew which can be inferred by means of a conjecture from ancient versions. This extensive view of the different states of the original text is the only ground for asserting that some passage belongs to it or not. The Messieurs consider that the Greek is sometimes to be preferred to the Latin, but their limitation of the Greek text of the New Testament to the Greek directly known from common editions (or at best from preserved manuscripts) makes the critical restoration of the original text impossible. Port-Royal has no idea of the compass of knowledge necessary in order to reconstitute the letter of the original.

3 Antoine Arnauld on the method of translation

Simon contends that the Mons New Testament succeeds only in showing that Port-Royal has no acquaintance with the art of critique. The fact that more words are encountered in their version than in the Vulgate indicates that the Messieurs did not translate the source text, but precipitated themselves into theology⁵⁰. By means of a continually roundabout way of speaking,⁵¹ they put the theological sense of the text, discovered by exegesis, in place of its grammatical and literal sense, discovered by critique. But indeed, according to Arnauld, this opposition

alleged by Simon collapses. The true choice is not between theology and grammar (this is for Port-Royal quite a fictitious choice), but between two manners of interpreting the grammatical nature of a text. Indeed, on the question of the diversity of languages, we might contend that Simon is to be ranked on the side of Descartes assuring that 'there are only two things to be learnt concerning all languages, namely the signification of words, and the grammar' (Letter to Mersenne of 20 November 1629).52 When asking for a translation based on the distinction between the grammatical sense and the theological sense of the holy text, he understands the grammatical sense as apprehended by means of the knowledge of some language's idiomatic terms together with the knowledge of its specific grammatical rules. But the translators' manifesto in the Preface of the Mons New Testament⁵³ appeals to another knowledge than this one, which satisfies Simon. The comparison between the Greek text and the Latin text does not mean for Port-Royal that grammatical difficulties encountered in the course of the translation can be solved by acquaintance with these particular languages. Claude Lancelot's new methods of Latin (1644) and of Greek (1655) do not supply sufficient foundations for a translation from these languages: translation ultimately finds its principles in the Grammaire Générale et raisonnée (1660), where Arnauld expounds, at Lancelot's request, the reasons for what is common to the different grammars or 'arts of speaking' and what is peculiar to each one.54 General grammar provides the knowledge of the natural manner in which we express our thoughts'.55 This knowledge attests to a deeper manner of being Cartesian than the one we may attribute to Simon. The best way of being Cartesian on the matter of the plurality of languages consists in founding the 'diverse forms of the signification of words'56 on the various operations of the human mind. Words were designed by men only for the expression of their thoughts from one to another. So, instead of referring immediately to the usual meaning of words in particular languages, it is necessary for translation to refer first to the distinction between the modes of signifying thoughts. As a requisite and direct consequence of the intentionality of human language, there exists a general distribution of all words into signs of conceptions and signs of relations between conceptions⁵⁷ - a classification more fundamental than the lexical polymorphism of dictionaries. Before being located in a vocabulary and a grammatical method constitutive of one language among many others, words are located within a division of the expression itself, that is to say, within the division of the different parts of discourse.58 The ordinary use of words in some particular language cannot be made independent of men's general use of speech in order to signify their thoughts to each other. Words explain our mind's 'whole secret'59 before being arbitrary sounds attached to certain ideas: words are parts of the discursive signification of mental contents before being elements of an idiom. Thus, according to Arnauld's

reply to Simon's objections - in parts VI and VII of the Difficultés présentées à M. Steyaert (1691) -60 the requirement of grammaticality against the theological purpose imputed to Port-Royal misses the point because Simon's grammaticality is not the right one. Grammatical knowledge must involve first the knowledge of human discourse, the knowledge of speech in its mental foundation. The demand for a literal translation of the Vulgate is quite inappropriate: to strive for a wordfor-word symmetry⁶¹ would be to ignore the natural modes of the signification performed by words. Arnauld mocks his censor: Simon 'counts the words' 62 in the Mons New Testament in order to prove that the excess of the French version over the Vulgate is the mark of a disguised commentary. This is a wasteful occupation, the occupation of a bad grammarian, because the number of words is quite indifferent in regard to the natural expression of men's thoughts. The true criterion for judging whether a translation is verbose must be derived from the exigencies of the partition of speech into modes of signification, not from its material partition into different sounds. As long as the Mons New Testament merely expresses all the parts of discourse indispensable to the signification of some thought, none of the words used in the translation is in excess relative to the source text. The natural way of expressing thoughts allows degrees according to the different languages: the French language prefers a complete expression of a thought, 63 whereas the Latin language prefers using fewer words. Simon contends that there are too many words in the Mons New Testament. According to Arnauld and Lancelot's General Grammar, he should have said that the Vulgate is elliptical. The fact to be emphasized is that neither the Mons New Testament nor the Vulgate is defective: each one performs the expression of thoughts in a natural way. The ellipsis of Latin and the periphrasis of French find a common foundation in the mental principles of human speech. Simon's conception of the literality of a text is not grammatically justified. The 'grammatical and literal sense' he claims must not be identified with words taken in their materiality, but with words as far as they have an expressive end. A literal translation of the New Testament must therefore be rejected on account of the expressive nature of well conceived literality.

We may go on to argue that, from Arnauld's viewpoint, Simon's ignorance of the true grammaticality is aggravated by his lack of logical concern. Had he meditated on Arnauld's Défense de la traduction du Nouveau Testament imprimée à Mons (1667, against Maimbourg) and Nouvelle Défense de la traduction du Nouveau Testament imprimée à Mons (1680, against Mallet),⁶⁴ he would have understood that Arnauld and Nicole's Logic or Art of Thinking (1662) ought to be the second handbook or vade mecum of every translator. The abundance of words in the Mons New Testament is not only the result of the fact that French and Latin observe a different proportion in their construction of the common parts of speech. This abundance, which is never a superfluity, also depends on the im-

portance in human language of what the Logic calls 'complex terms in meaning' 65 Terms used in a discourse may often appear simpler than they really are: in fact, 'part of what they contain in the speaker's mind is implicit and not expressed'.66 In this case, there are more thoughts in the mind than words in the verbal expression. Translation must restore for the reader the conditions of the achieved use of language in a direct intercourse. It therefore requires the discernment of passages where explicitly expressed thoughts do not equate the thoughts which are actually signified. The sense of the source text cannot merely be its distinctly expressed sense because the author sometimes tacitly makes additions of terms which are not marked in the verbal expression. These purely mental additions are the ones which the Mons New Testament tries to represent in the expression itself by proceeding to additions of words as often as the understanding of the original depends on such a development in the version. Translation, in this way, makes its expressed terms adequate to the original's conceived terms; it ensures that the literal text represents the author's whole thought instead of just being representative of his words. The literal holy text is not changed in the Mons New Testament because the words which must be added are simply the correlatives of tacit terms involved in the original's expressed words. ⁶⁷ On the contrary, without these additions in the expression, the literal text would be altered, since the transposition from one language to another would compromise the immediate intellection by the reader of what remains understated in the source text. There is no 'abridgement' (abrègement) in the author's mind⁶⁸, but only in the expression of the author's sense, and thanks to translation the reader's mind is able to supplement all the ideas which were signified in the source text without all of them being expressed. What Simon mistakes for a theological sense is nothing other than the entire impression that is to be produced in the reader's mind by all the ideas signified in the source text. The New Testament is to be viewed as a speech complying with the rules of men's ordinary language. The sense represented in the Mons version is not a sense established by exegesis and borrowed from ancient patristic commentaries, but the sense which must naturally get into the reader's mind. So, Simon's rule of literality is of no use in translation. His rule of textual uniformity is also doomed to collapse, as far as the true criterion of translation belongs inseparably to grammar and logic. If any uniformity is to be required, it is only a semantic and logical one: the unity must be placed at the level of the sense intended by the author. Whenever some passages are encountered where the Vulgate reading cannot be the sense of the holy author, it would be an absurdity and a crime against logic to maintain conformity with the Latin. This would amount to giving a copyist's mistake a value equal to the true text. The rule of absolute uniformity prohibiting any substitution of the Greek sense to the Latin one in the French version cannot be a true rule of critique: Simon subjects translation to

a 'fictitious rule' (prétendue règle). ⁶⁹ By relying upon pseudo-rules and chimerical principles, Simon's art of critique merely proves itself to be a negation of critique instead of proving its capacity to attain the methodological status of an ars judicandi. For Arnauld, Simon is dramatically forgetful of the claimed judicative end of his art of critique when he alleges that, once somebody has chosen to translate the New Testament from the Vulgate, the sense of the Greek text must never appear in the body of the version, 'however one would be convinced that it is the sense of the canonical author'. ⁷⁰ Hence, Simon's statement that 'every translation must represent the original as far as possible' cannot be adopted as a rule of critique without being transformed in order to underline that the most considerable perfection of a version of N.T. consists in representing, as far as possible, concerning the sense, the first original'. ⁷² This is the only uniformity to be looked at: by contrast with this semantic requirement, Simon's precept of linguistic uniformity amounts to 'nothing'. ⁷³

4 Antoine Arnauld's redefinition of critique

According to Arnauld, if critique has to attain the judicative end defined by Simon, it cannot escape being questioned about its logical criterion. The 'rules of critique' are not self-validating, their normativity must be derived from the normativity of logic. A true method is expected to be reflexive, and not to be merged with material considerations. The art of critique is thus to be integrated within the reflections on the manner in which men think and form their judgment defining the 'art of thinking'74. The critique's true object is not the comparison of surviving manuscripts, nor the hypotheses about lost manuscripts, but the problem of the proofs entitled to give evidence for preferring one reading over others. Critique should not be understood as the quantitative art of philologists who number manuscripts and state the frequency of any variant through all exemplars of a text. Arnauld's definition of critique says that it is a conjectural science, which teaches us to bear a good judgment on authors and their writings'.75 Critique has both a matter-subject (the facts given by readings) and a form (the consequences drawn from the facts)76: true critique is defined by its formal dimension, not by its material one; it is committed to a kind of reasoning which is not the one acknowledged by Simon. As characterized by Simon, biblical critique serves only a subordinate end in Arnauld's eyes. Its ultimate end ought to be linked to another question than that of the authenticity of a reading. The real question deals with the kind of certainty that the human mind is able to attain when direct acquaintance with things is impossible. The first original text is absent, and its representation is imperfect as far as all its copies are, in various degrees, defective: thus, it

is necessary, whenever textual differences are met with, to give reasons for preferring one reading over another. There must be proof for sustaining the separation between exemplars we can believe in and exemplars whose authority we have to negate. Biblical critique cannot exist as biblical without primarily bearing the features that are the components of the very concept of critique. So, biblical critique's main end is not the correction of the original text through its different exemplars' inventory - extended by Simon to the supposition of inaccessible states of the original, inferred from the most ancient versions. This is only subaltern; the principal is to support one's judgment on the original text by the weighing of proofs drawn from this comparison. The mixing of Greek and Latin in the Mons New Testament is then definitively justified by the new definition of critique. Arnauld asserts that 'according to the rules of critique', one can be certain that some passage in the holy text bears 'more conformity' to the lost original either in the known Greek text or in the Vulgate. 77 Thus, critique cannot command that translation from the Vulgate be placed under the constraint of a general rule which would oblige one always to prefer Latin to Greek. Simon's intangible rule that the literal sense of the Vulgate must constantly be the sense of the Mons version would make the Messieurs unforgivable sinners if they had inserted just one passage from the Greek into the body of their translation78: one is already too much for Simon, there is no possibility of weakening the fault. But this rule of literal uniformity, this requirement of a general choice, tends to indicate that Simon's method is a defective one. Simon does not acknowledge the necessity of weighing conflicting reasons, when the Latin and the Greek texts cannot agree, in order to attain conformity with the author's intention of signification. He mislocates the object of critique and thus makes this art self-contradictory, since his demand of textual uniformity prevents the mind from being confronted with problems of decision. Instead of prescribing the mode of judgment by which the mind, when facing opposite possibilities, can be inclined to one side of the scales rather than the other, Simon's pseudo-rule of critique makes uncertainty permanent. The only way to ensure critique's preservation as an ars judicandi must consist in replacing Simon's consideration of the 'grammatical and literal sense' of the text by Arnauld's consideration of the sense of the discourse - a sense whose continuity admits of local choices between Latin and Greek.

As far as the problem of variants of the holy text amounts to a problem of final judgment on the best one regarding the author's meaning, it must be formally considered as the same as the general problem of judgment on factual matters. For instance, argues Arnauld, if a passage such as *The First Epistle of John*, c. 5, v. 7 (concerning the 'three that bear witness in heaven'), is found in a great number of manuscripts (both Greek and Latin) of the *New Testament* while it is not found in others, the question is to determine 'which ones are to be believed as pre-

sumably more conformable to the apostolic original'.79 This cannot be achieved without comparing the alternative degrees of verisimilitude of two antithetic suppositions: the hypothesis of a suppression and the hypothesis of an addition. Confronted with such a textual difference, critique has to balance the reasons pro and contra both the prior presence/posterior omission and the prior absence/ posterior addition of the passage. These reasons pro and contra may be equally strong. Consequently, the work of critique is to decide how the textual change could have happened in an easier way. The most probable hypothesis is the one that succeeds in making us conceive of the more easily producible mode of transformation of the text. Presumably, what was easier to do is what has been done. The two branches of the alternative (either a suppression or an addition of the passage) are seemingly two equivalent ways of explaining the textual difference. But the suppression hypothesis is one hundred times more probable'80 than the addition hypothesis, because it corresponds to a normal careless habit of copyists. In this example, the extension and enumeration of the occurrences of the respective absence or presence of the verse are useless in regard to the essential question: which one of these two changes is most credible in mente, according to its degree of ease in re? The true object of biblical critique, as an art of discerning truth from falsity, is not the history of the text, but the proofs conveying a sufficient reason for choosing locally one sense rather than another one. The essential quality consists in the discernment of accurate and inaccurate proofs. The ability to separate conclusive arguments from non-conclusive ones, the knowledge of the difference between weak conjectures and strong conjectures, enter into the nature of true biblical critique. In order to know how to discriminate a true reading from a false one, one has to be aware of the difference between persuasive reasons and unconvincing reasons. Arnauld develops this argument in an appendix to the Difficultés, the Dissertation critique touchant les exemplaires grecs sur lesquels M. Simon prétend que l'ancienne Vulgate a été faite.81 This Dissertation highlights the flaw in Simon's method of extension of the different states of the text to ones which are merely supposed. Instead of limiting itself to the directly knowable exemplars, Simon's critique combines these 'certain facts' with 'uncertain facts', merely conjectural.82 According to Arnauld, from one observed fact, it is impossible to infer something that cannot be observed, as if it were another fact. This would amount to putting a factual certainty and just a supposition on the same level, that is, it would introduce doubt into the principles underlying our judgment on the truth or falsity of some reading. Critique must follow an analytical method conceived in Arnauld and Nicole's Logic in the manner of Descartes' Rules for the Direction of the Mind.83 In every question, it is necessary to separate what is still unknown from what is already known, in order to determine what precisely is to be sought. In this way, the conditions of the resolution of the problem are clearly stated. This

Cartesian first precept of analytical method, which requires the prior determination of the particular object of the research, constitutes an inescapable rule for biblical critique. Qua critique, biblical critique cannot escape the discrimination between the mere numbering of certain facts on one side, and the conceiving of antagonist hypotheses, sustained by several proofs, on the other. The weighing of the proofs must be antecedent to the choice of one hypothesis as the most probable one, whereas in Simon's manner of dealing with biblical critique, what is a mere conjecture happens to be dissimulated among assured facts. The true critical method consists in deducing reasons showing the improbability of some hypothesis and the probability of its opposite.84 The decision pro or contra the truth of some doubtful text must depend on the examination of all circumstances particular to the question. The art of critique forbids any decision founded upon one proof only; it requires a comparison between several proofs, in order to appreciate their relative value and weight. Arnauld writes: 'a proof, when considered separately, may seem a strong one, which will be recognized as a very weak one and not deserving any attention, when counterbalanced by other ones, stronger and with a better foundation'.85 Biblical critique is not consistent with its judicative end until it determines the degrees of conviction of proofs alleged pro and contra conflicting hypotheses about the sense of problematical passages.

Thus, for Arnauld, biblical critique cannot be restricted to textual problems; its true nature has to be determined by an epistemology of the critique. Indeed, as early as 1662, in the Art of Thinking, the logical principles were established according to which it became possible to obtain the true definition of critique. The 'rules of critique' which Arnauld summarizes in order to invalidate Simon's pseudo-critique belong to the rules characterized in the 4th Part of the Art of Thinking as 'the rules for directing reason well in beliefs about events that depend on human faith'86, or 'the rules ... helpful for judging about past events'.87 Simon's objections to the Mons New Testament have a remarkable effect: they give Arnauld the opportunity of making plain the inclusion of critique into logic, as an art of judging. The true critique, and therefore the true biblical critique, is a part of logic when logic no more constrains the 'rules of reason' to geometrical proofs, but extends them to the judgments we make concerning truth or falsity of human events'88. If these 'human and contingent events'89 are past, what are the precepts to be followed in order to afford convincing arguments for the belief in their truth? Reasons for believing in the truth of some fact are not simply on the side of the possibility of this fact. Arnauld holds as 'a certain and indubitable maxim' that 'the mere possibility of an event is not a sufficient reason to believe in it,'90 because it cannot exclude the possibility of the contrary. The event and its opposite are equally possible. How then can it be right to believe in one and not in the other'?91 The possibility of a fact never constitutes the reason why this fact

becomes credible while its opposite does not. If we believe in a fact in spite of the possibility of its falsity, it is because we have a reason to believe that it is not false. Now, according to Arnauld, what is drastically wanting in Simon's conception of critique is this notion of reasons determining the belief in an event. Because probabilities are unequal, where possibilities are equal, truth or falsity must be assigned to a fact in virtue of what seems more likely when all its circumstances are taken into consideration⁹². The ultimate principle of the 'rules of critique' lies in this way of conviction - the necessary one in our judgments on contingent facts. In his refutation of Simon's position on critique, Arnauld affirms that certainty in the field of biblical critique, as well as in any reasoning on human facts, depends on the accumulation of motives for believing. He writes that it is necessary to constitute a 'heap of proofs' (amas de preuves)93 because without their consideration all together, we are liable to omit particular circumstances which might reinforce our belief, and in return pay attention only to general circumstances which, however general, are merely weak reasons. The first commandment of critique is the same as the logical imperative stating in the Art of Thinking that 'it is necessary to join circumstances, not to separate them'94. Critique could not be an ars judicandi if the reasons for believing or not believing a fact remained scattered. Instead of separating the reasons for believing from the reasons for disbelieving, the function of critique is to gather them together. Simon in contrast confuses what must be the order of the probable and the mere order of the possible: far from trying to accumulate the required 'heap' of circumstantial proofs, he freely piles hypotheses up. Now, it is in everyone's power to feign possibilities and to imagine hypotheses detached from the consideration of given circumstances. But as for a factual judgment, critique must be ruled by the quest for the greatest likelihood, based on the assembling of all the circumstances associated with the fact under examination. Indeed, Arnauld's development of the problem of the 'rules of critique' into the problem of the weighing of reasons from given circumstances in order to determine the most probable exceeds mere opposition to Simon: the debate on critique may be deemed to participate in the emergence of a new logical sphere - named the 'art of estimation of likelihoods' in Leibniz's New Essays on Human Understanding.95

Thus, under the pressure of Simon's attacks on Port-Royal's method in translating the *New Testament*, Arnauld has been prompted to give to his logic, not indeed a new extension, but its whole extension, so as to make it obvious that critique cannot be severed from the 'new observations appropriate for forming judgment',96 by which the *Art of Thinking* completes traditional logic. What remained concealed, or implicit, in 1662 becomes explicit in the *Difficultés proposées à M. Steyaert*, when challenging Simon's conception of textual critique. Simon's objections to the Mons *New Testament* eventually produce a wholly undesirable

effect in his eyes: biblical critique is absorbed by logic. The true location of the art of critique is within the art of thinking, to the extent that this art contains rules for other truths (which are not less evident) than the geometric ones. The art of judging, through widening to factual judgments endowed with a moral certainty, provides critique with a real epistemic status.

5 Conclusion

The way suggested by Arnauld might be called the universalist way, as it preserves an organic link between logic, grammar and critique, preventing them from being disassociated. At different levels of abstraction, they depend on the unity of the human mind. This mentalist unity does not allow the subordination of humanities to the reign of historicity. Contrasting with Arnauld's requirement of an explanation of the historical from the universal, Simon's textualist way deals with tradition and the remains of temporal destruction. According to him, the science of texts must be purely historical and autonomous: the criteria of conjectural logic appended by Arnauld to his logic of judgement are not the criteria of textual criticism. The humanities are accordingly sciences claiming for historical tradition against mental structures. Leaving aside what might be viewed in his conception of textual critique as a myth of the original state, Simon must be acknowledged as the forerunner of a movement leading from the mid-eighteenth century in Germany to substitute comparative philology and textual genealogy for critique.⁹⁷ A major shift in theology results from this substitution: theology evolves into the historical reconstruction and analysis of biblical texts. The target is henceforth not the mere emendation of the Bible's books, but the identifying and dating of their different strata, as well as the distribution of manuscripts between some fundamental families.98 Yet after confronting Simon and Arnauld's conceptions of critique, a permanent difficulty in the history of humanities has to be highlighted: these sciences can put the emphasis either on the products of the mind (the erga) or on the mental activity underlying them (the energeia). They can scrutinize either the modes of survival of mental products or the immediate effects of the actual presence of the mind. Simon asks for documentary evidence and opposes the vanishing of material testimonies: as a champion of tradition, he affords the humanities the status of sciences of irreversible historical singularities surviving temporal decay. Arnauld's concern, on the contrary, is about the unceasing productivity of forms derived from the nature of the human mind. The two ways have been followed in the subsequent history of humanities, yet the reign of comparative philology has been less ephemeral than the influence of the explanations in terms of mental structures. Now, the different fortune of the historical

way and of the mental way cannot keep us from being eventually confronted with a doubt: if it is strictly detached from the science of the natural productivity of the human mind and unconcerned by logical rules, can the science of historical singularities really be adequate?

Notes

- The manuscript of Lorenzo Valla's Adnotationes in Novum Testamentum had been formerly published by Erasmus (1505). The Latin translation of the Pauline Epistles published in 1512 by the French humanist Jacques Lefèvre d'Étaples also influenced him. This legacy lays the first foundations of the Greek Textus Receptus so named after the second Elzevier edition of the Greek New Testament (1633).
- Erasmus's edition was denounced as erroneous, not on account of the lacunas and faults in the Greek text (inferior to the Greek original in the Complutensian Polyglot, already compiled at the University of Alcalà de Henares but only published after 1521), but because of the replacing of the Vulgate with a new Latin version.
- This edition afforded for the first time a critical apparatus of the Greek text. Robert Estienne was one of the sixteenth-century pioneers in lexicography (*Thesaurus linguæ latinæ*, 1528-1543; *Dictionarium latinogallicum*, 1538; *Dictionaire françoislatin*, 1539).
- 4 This last revision was made by Théodore de Bèze. Calvin performed the first revisions by himself.
- 5 Among English-speaking Protestants, the English *Geneva Bible* (1560) remained popular during the first half of the seventeenth century, although competed against by the *King James Version* or *Authorized Version* (1611).
- 6 Reprints during this period took place in France, the Netherlands, and Switzerland.
- 7 Principally Nicolas de Leuze.
- 8 Mainly Jacques de Bay.
- Only new French versions which were actually merely slight revisions of the Louvain Bible (by Pierre Besse in 1608, by Claude Deville in 1613, by Pierre Frizon in 1621) succeeded in being approved. Jacques Gorbin's genuine new version from the Vulgate (1643), commissioned by King Louis XIII, failed to be approved.
- The list is not exhaustive. Moreover, Blaise Pascal also played a part in the discussions. As the meetings took place in the castle of the Duc de Luynes (the translator of Descartes' *Meditationes*), they were named the *Conférences de Vaumurier*.
- II See the entry 'Arnauld, Antoine (1612-94)' in the Dictionary of Seventeenth-Century French Philosophers (New York, London: Thoemmes-Continuum, 2008).
- Le Maître's translation of the Gospels and of the Apocalypse from the Vulgate was ready as earlier as 1653. But the Conférences de Vaumurier showed the necessity to have recourse to the Greek text in order to emend the Vulgate. At the death of Le Maître in 1658, Sacy took up the torch.
- 13 In 1666, the Oratorian Denis Amelotte published the first part (Gospels and Acts) of his translation of the New Testament the whole publication was completed in 1670. Amelotte did presumably plagiarize the Port-Royal manuscript of the version of the Gospels.
- 14 The full title was: Le Nouveau Testament de Notre Seigneur Jésus-Christ, traduit en français selon l'édition Vulgate, avec les differences du grec. Five thousand copies were sold in Paris

- within a few months. The Mons New Testament had five editions in 1667, four in 1668. In 1683, forty thousand copies had been sold. As to the Ancient Testament, its publication in Paris staggered from 1672 to 1693. The whole Port-Royal's Sainte Bible, contenant l'Ancien et le Nouveau Testament (thirty-two volumes) was published in 1696. For two hundred years, this masterpiece of classic language was the reference Bible in France.
- 15 The Mons New Testament was the target of a royal censure, of an episcopal ordinance placing it on the Index in 1668, and of two papal condemnations, by Clement IX in 1668 and by Innocent XI in 1679.
- See the entries 'SIMON, Richard (1638-1712)' in the Dictionary of Seventeenth-Century French Philosophers; 'Simon (Richard)' in Supplément au Dictionnaire de la Bible, 1996, vol. 12, fasc. 71. Richard Simon was excluded from the Oratory in May 1678 (see below, note 19)
- 17 Simon developed his negative comments on Port-Royal's *Perpétuité de la foi* in the Preface to his unpublished *Additions aux Recherches curieuses sur la diversité des langues et religions*.
- 18 In 1676, Simon handed the manuscript of a Projet d'une nouvelle version de l'Écriture Sainte to the Protestant ministers of Charenton, who had asked him for a new version of the Bible.
- 19 The Histoire critique du Vieux Testament was presumably already written in 1671, but Simon reworked it. The chapter denying Moses's authorship of the whole Pentateuch incited Bossuet to demand the interdiction of the book: the copies were burnt in July 1678, two months after Simon's exclusion from the Oratory. An expanded edition was printed in Rotterdam in 1685.
- Lettre à Monsieur l'Abbé P[irot] touchant l'inspiration des livres sacrés (Rotterdam, 1687), 6. See also Histoire critique du Vieux Testament (=HCVT, Rotterdam, 1685), III, c. XXII, 480.
- 21 Histoire critique du Texte du Nouveau Testament (=HCTNT, Rotterdam, 1689), Preface. See also HCVT, Author's Preface.
- 22 HCVT, III, c. I, 353.
- 23 HCVT, Author's Preface.
- 24 HCVT, II, c. XIV, 265.
- 25 HCTNT, c. XXIX, 341.
- 26 See ibid., c. XXXIII, 430; HCVT, III, c. XV, 444.
- 27 HCVT, I, c. I, 9.
- 28 HCTNT, Preface.
- 29 HCTNT, c. XXIX, 344 (see also HCVT, I, c. XIX, 111; III, c. XXII, 491).
- 30 Histoire critique des Versions du Nouveau Testament (=HCVNT, Rotterdam, 1690), c. VIII. 87.
- 31 HCVT, III, c. XXII, 489.
- 32 HCVT, III, c. I, 352.
- 33 Ibid., 354.
- 34 Simon's objections to the Mons New Testament are contained in c. XXXV-XXXIX of HCVNT, 396-483.
- 35 The Preface was written by Isaac Le Maistre de Sacy.
- 36 HCVNT, c. XXXV, 398.
- 37 Ibid., 401.
- 38 Ibid., 402.
- 39 Ibid., c. XXXVIII, 447.
- 40 Ibid., c. XXXV, 402 ; c. XXXIX, 472.

- 41 See c. XXXIX, 482 (ils fourrent dans leur traduction ce qu'ils ont lu dans les commentaires).
- 42 Ibid., c. XXXIX, 474.
- 43 Sacy's Preface, IInd Part, X.
- 44 HCVNT, c. XXXV, 413.
- 45 Ibid.
- 46 Ibid., 414.
- 47 Ibid., 411.
- 48 Ibid., 412.
- 49 See ibid., c. XXXVII, 444 (on ne peut pas dire avec les traducteurs de Mons, qu'une chose soit absolument dans le texte grec, parce qu'elle se trouve dans le grec ordinaire, & même dans la plupart des MSS).
- 50 Simon says that this theologization also characterizes Arnauld's defence of Port-Royal's translation (HCVNT, c. XXXVII, 446).
- 51 HCVNT., c. XXXIX, 474 (un long circuit de paroles).
- 52 See Descartes, Œuvres, ed. Adam-Tannery, I, 76.
- 53 The Mons New Testament and its Preface are reprinted in Antoine Arnauld, Œuvres (Paris-Lausanne, 1775-1783), vol. VI. See XXI sq.
- For instance, the nature or essence of the relative pronoun is explained as consisting in a double function: replacing a word and linking two propositions in a sentence. But in the use of one language, the connective function may sometimes be dropped in favour of a restriction to the pronominal function, whereas in the use of another language it may be the contrary. See Arnauld and Lancelot, *Grammaire générale et raisonnée* (= GGR, Paris, 1969, Introd. by M. Foucault), II, c. IX, 56, contrasting the Greek and Latin uses.
- 55 Ibid., II, c. I, 24.
- 56 Ibid., II, title, 22.
- According to 'the most general distinction of words', 'the ones signify the objects of our thoughts and the others their form and manner' (*ibid*. II, c. I, 24). General grammar's division of 'what occurs in our mind' into 'the object of our thought' and 'the form or manner of our thought' (*ibid*.) originates in Descartes' *Meditatio Tertia* (A-T, VII, 37).
- I develop this topic in pages 65-80 of my paper 'La signification dans la philosophie du langage d'Antoine Arnauld', in J.-C. Pariente (ed.), Antoine Arnauld. Philosophie du langage et de la connaissance (Paris, 1995).
- 59 GGR, II, c. I, 22.
- 60 See Arnauld, Œuvres, vol. IX, 1-236.
- 61 See Difficulté LXXXVI, 219.
- 62 Ibid., 222.
- 63 See GGR, II, c. XXIV, 108.
- 64 See Arnauld, Œuvres, vol. VI, 559-784 (Défense...) and VII, 67-904 (Nouvelle Défense...).
- 65 La Logique ou l'Art de penser (=LAP, ed. Clair-Girbal, Paris, 1965), I, c. VIII, 66.
- 66 LAP, II, c. VI, 123.
- 67 See Sacy's Preface, XXIII. I explain this question on pp. 680-687 of my paper 'Interprétation et traduction: Pascal et Port-Royal', in G. Canziani and Y.C. Zarka (eds), L'interpretazioni nei secoli XVI e XVII (Milan, 1993).
- This topic of 'abridgement' is analyzed at length by Arnauld and Nicole in the great Perpétuité de la foi (3 vols, 1669, 1672, 1674). But this did not excite the attention of Simon, whose concern in the Perpétuité was rather Port-Royal's inaccuracy regarding the sources concerning the Greek and Oriental Christians' beliefs on the Eucharist see John D. Woodbridge, 'La 'grande chasse aux manuscrits', la controverse eucharistique et Richard

Simon', in Jacques Le Brun, Ouzi Elyada (dir.), Conflits politiques, controverses religieuses: essais d'histoire européenne aux 16e-18e siècles (Paris: Éditions de l'EHESS, 2002), 143-175.

- 69 Difficulté LXVII, 49.
- 70 Difficulté LXXX, 185.
- 71 HCVT, III, c. I, 352.
- 72 Difficulté LXXXI, 190 (my emphasis).
- 73 Difficulté LXXIX, 176.
- 74 See LAP, 37-8.
- 75 Difficulté LXXIV, 105.
- 76 Ibid.
- 77 Difficulté LXXIX, 175.
- 78 Difficulté LXXVIII, 174.
- 79 Difficulté LXXIV, 113.
- 80 Ibid., 115.
- 81 See Œuvres, t. IX, 431-75.
- 82 Dissertation, § 2, 433.
- 83 See LAP, IV, c. II (cf Descartes' Rule XIII).
- See Dissertation, § 4-5, 442-459. According to Arnauld, the preference given to one hypothesis after weighing all the circumstances' from which we can deduce convincing arguments' to its advantage (p. 444) is justified by a moral necessity.
- 85 Difficulté LXXIV, 117.
- 86 LAP, IV, c. XIII (title), 338.
- 87 Ibid., IV, c. XVI, 351. On this topic, the Logic integrates passages from Arnauld's contribution to the Écrits sur le formulaire (1661-2): a valuable edition of these Écrits can be found in Pascal, Œuvres complètes IV, ed. J. Mesnard (Paris, 1992), see pp. 1275-1318 and pp. 1323-1344.
- 88 LAP, IV, c. XIII, 338.
- 89 Ibid., 339.
- 90 Ibid., 340.
- oi Ibid.
- 92 I develop this point in pp. 480-487 of my paper 'La Question des règles de la critique à Port-Royal', Revue de métaphysique et de morale 4 (1999).
- 93 Difficulté LXXIV, 131 (the method of the 'heap of circumstances» was of primary importance in the *Perpétuité de la foi*).
- 94 LAP, IV, c. XIV, 347.
- 95 See IV, c. II.
- 96 This formula occurs in LAP's full title.
- 97 Simon's Histoire critique du Nouveau Testament was translated in German, prefaced and annotated by Johann Salomo Semler (Halle, 1776, 3 vols). See John D. Woodbridge, 'German Responses to the Biblical Critic Richard Simon: from Leibnitz to J. S. Semler', in H.G. Reventlow, W. Sparn and J. Woodbridge (eds), Historische Kritik und biblischer Kanon in der deutschen Aufklärung (Wolfenbütteler Forschungen, Bd. 41, 1988), 65-87.
- 98 An extensive list of the philological rules deduced from the collation of manuscripts in biblical criticism can be taken for instance from Johann Jakob Griesbach's introduction to his second and expanded edition of the Greek New Testament (Halle, 1796). The first of Griesbach's 'rules of critique' says brevior lectio præferenda est verbosiori.

VII THE HISTORY OF HISTORY





Framing a New Mode of Historical Experience The Renaissance Historiography of Machiavelli and Guicciardini

JACQUES BOS

Most disciplines in the humanities are not very concerned with their own history. Although the dialogue between contemporary scholars and their predecessors might extend into a somewhat further past than in the natural and social sciences, the various fields of the humanities tend to reflect just as little on their own history as, for instance, chemistry or psychology. Historians seem to be the main exception to this tendency: unlike most other disciplines, history has a long tradition of examining its own past. In many university programmes the history of historical writing is a compulsory course, and there is a wide range of textbooks on this subject. Traditionally, overviews of the development of historiography tended to focus on the succession of different speculative ideas on the course of the historical process and on the emergence of empirical methods of studying the past. A characteristic variety of Whig history in this field is the idea that with the advancement of modernity, theological and philosophical perspectives on the past lost their position to an increasingly critical and empirical approach to history. The main turning point in this narrative is the early nineteenth century, when historiography became a professional academic discipline that defined itself as a 'science' in contrast to the Enlightenment's explicitly normative perspective on the past and the grand speculative designs of Hegelian philosophy of history.

An important topic in recent discussions of the development of historiography, but largely ignored in the traditional Whig perspective, is the rise of modern historical consciousness. History as a discipline can only emerge in a cultural context in which the past is recognised as essentially different from the present but nevertheless connected with it. In his 2005 book Sublime Historical Experience, the Dutch historical theorist Frank Ankersmit suggests that the rise of modern historical consciousness can be related to the disastrous events that took place in Italy in the late fifteenth and early sixteenth centuries, especially the invasion of Italy by the French king Charles VIII in 1494 and the sack of Rome in 1527 by the German emperor Charles V. For Renaissance historians such as

Jacques Bos

Machiavelli and Guicciardini, these events were deeply traumatic, in the sense that they painfully experienced that the old world of the Italian city-states in which they had played a significant role was irretrievably lost. A similar sense of rupture was brought about among conservative historians by the French Revolution in the early nineteenth century. According to Ankersmit, these painful experiences played a crucial role in the development of historical consciousness. They amounted to a 'sublime dissociation of the past', and with this dissociation the past became a potential object of study.

An interesting question is how these crucial moments in the development of historical consciousness affected historical writing exactly. In the early nineteenth century, historicism redefined historiography by emphasising its empirical or even 'scientific' character. As a result, history became a clearly recognisable discipline. In the context of the sixteenth century, we cannot speak of the formation of academic disciplines in the modern sense of the word. Nevertheless, sixteenth-century Renaissance historians did create a more or less coherent analytical framework around the new mode of historical experience of their time. In this essay I shall focus on Machiavelli and Guicciardini, and investigate how they turned the past into an object of study. Two dimensions of their historical writings will be examined more closely. In the first place I shall look at the ontological assumptions present in their work, focusing on their views on human agency and individuality. Furthermore, I shall discuss the way in which they defined history in relation to other branches of learning, especially rhetoric and political theory. Rhetoric dominated the humanist historiography of the fifteenth century, but played a less important role in the writings of Machiavelli and Guicciardini. Instead, their historical work was closely intertwined with political theory - a field in which they were just as active as in history. Machiavelli is nowadays primarily known as a political philosopher, and Guicciardini also wrote some notable tracts on politics. Apart from that, their historical writings almost exclusively deal with political themes, which are not only presented as historically important but also as practically relevant.

1 Humanist historiography

Before turning to the work of Machiavelli and Guicciardini, it is necessary to pay some attention to their immediate predecessors, the humanist historians of the fifteenth century. Humanist historiography has two main sources, both literally, as a supply of information about the past, and metaphorically, as a model for historical writing. In the thirteenth and fourteenth centuries the genre of the chronicle flourished in the Italian city-states. These chronicles were primarily

instruments for the expression of civic pride: they sought to glorify the present and immediate past of the city by constructing a connection with events that took place in a distant past. Florentine chronicles usually started with the establishment of the city in the Roman era, which was supposed to enhance its position among the other powers of northern Italy. Influenced by the chronicle writers of the later Middle Ages, the humanist historians of the fifteenth century adopted a perspective centred on political history and civic identification. Despite this similarity in perspective and material, the form of humanist historical writing was totally different from that of the chronicle, which was merely a chronologically ordered list of events. With regard to its literary aspects, fifteenth-century historiography was indebted to the standards set by early humanists such as Petrarch, and to their efforts in recovering classical texts – including historical works – that could serve as models for emulation.²

An important example of humanist historiography is the work of Leonardo Bruni (c. 1370-1444). As chancellor of Florence, Bruni played an important role in the political life of his era. He was highly praised by his contemporaries and by later fifteenth-century humanists, and is sometimes considered the first modern historian. In 1415 he began to write his famous *Historiae florentini populi*, which was still unfinished at the time of his death. In the twelve books of this work, he discusses the history of Florence, from the foundation of the city as a Roman colony to his own age. The emphasis is on the period between 1250 and 1402, the year of the death of Giangaleazzo Visconti of Milan, whose expansionist politics in northern Italy were a major threat to the position of Florence. Bruni almost exclusively focuses on political history, taking his commitment to his city as a starting point.³ As he expresses it himself in his preface, he intends to write about the deeds of the Florentine people, their struggles at home and abroad, their celebrated exploits in war and in peace.⁴

Bruni's Historiae clearly reflect humanist theories on the nature of historical study. These theories are mainly expressed in letters, dedications and speeches. Furthermore, there are some treatises on historical theory, such as the dialogue Actius, written by the Neapolitan humanist Giovanni Pontano (1426-1503). Texts of this type are relatively scarce, however. Since this genre did not exist in Antiquity, fifteenth-century humanists had no models for the exposition of their views on the nature of historiography and had to base their theoretical explorations on a few brief remarks on history by Aristotle and Cicero. Following Aristotle, the humanists of the fifteenth century placed poetry above history, they repeated Cicero's claim that truth was the basic requirement for historiography, and elaborated on his views concerning the most appropriate style and topics for historical writing.⁵

An essential aspect of humanist historiography is its emphasis on imitation. Humanist historians first of all aspired to emulate the style of their Roman preJacques Bos

decessors. Sallust's work provided an important example, and Livy was even more admired for his manner of writing. Most of the formal aspects of Bruni's *Historiae*, such as their annalistic structure, are modelled after Livy's *Ab urbe condita*.⁶ Humanist historians are also oriented on classical examples in their choice of subject matter. They write histories of city states, like Livy, or wars, like Sallust. Lengthy descriptions of battles and the insertion of speeches and character sketches are other aspects of humanist historiography that can be attributed to the use of classical models. Another important element of humanist historical writing is its moral dimension, expressed in the phrase that 'history teaches by example'. In the light of this emphasis on the ethical relevance and practical applicability of historiography, the requirement of being true to the facts plays a secondary role. Humanist historians are mainly concerned with constructing a rhetorically convincing and stylistically admirable narrative, while they are less apprehensive about the way they deal with their sources. It is not uncommon, for instance, for a humanist historical work to be largely based on only one source.⁷

Perhaps the most important characteristic of humanist historiography is its rhetorical orientation. It can be argued that rhetoric was the heart of the humanist project.8 According to Nancy Struever, rhetoric and history are closely related fields, in Antiquity as well as in the Renaissance, because they both deal with the flux of human event and character' to which they convey form and meaning without trying to escape or transcend it by means of rigorous abstractions, as is often done in the sphere of religion and philosophy. Ideally, rhetoric is more than a complex set of rules to compose and embellish spoken and written discourse. This view of rhetoric, to Struever, distorts its true nature and fails to acknowledge its political and ethical dimension. Rhetoric, she argues, should simultaneously function as aesthetics, pragmatics, and psychology. The Sophists achieved this goal, but Hellenistic rhetoric had lost its practical relevance and tended towards mannerism. Struever claims that Renaissance humanists renewed 'the self-conscious purpose and public role of the rhetorician. This opened the way for an essentially rhetorical form of historical writing, visible in the work of Bruni and others, that made sense of the past by dealing with aesthetic, political and ethical ambivalences.9 By interpreting the rhetorical nature of humanist historical writing in this way, Struever takes up a position in a long debate about the evaluation of this episode in the history of historiography. In the nineteenth century Jacob Burckhardt is highly negative about the rhetorical orientation of humanist historians, reproaching them that their work was mainly aimed at exciting and charming the reader by stylistic means, as if it were poetry. 10 A different strand in this debate is represented by Hans Baron, who regards the rhetorical aspects of the writings of Bruni and other humanist historians as a somewhat distracting layer beneath which the real character of their work, a politically motivated 'civic humanism', becomes visible."

2 The tragic histories of Machiavelli and Guicciardini

Humanist historiography was an important aspect of the intellectual context in which Machiavelli and Guicciardini turned to the past. The political context of their work was largely shaped by the 'Calamità d'Italia' from 1494 onwards. In this period a set of dramatic events overturned the old order in which the various Italian states had competed over power. In 1494 Charles VIII of France invaded Italy, invited by Ludovico Sforza of Milan, who sought an ally against the Republic of Venice. In Florence the ensuing war resulted in a change of regime. The Medici were deposed, and Florence had a republican government until the Medici returned in 1512. The French invasion of 1494 was the beginning of several decades of war between changing alliances of Italian states and foreign powers. In 1526 Pope Clement VII, born Giulio de' Medici, formed the League of Cognac with France, Venice, Florence and Milan to drive the Habsburg powers – the Holy Roman Empire and Spain – from Italy. The war between the League of Cognac and Emperor Charles V brought about one of the most disastrous events in Italian history: the sack of Rome by German troops in 1527.¹²

Machiavelli and Guicciardini were both actively involved in Florentine politics. As a result, the catastrophes that disrupted the Italian status quo also affected their personal lives. In 1498, when Florence had a republican regime, Niccolò Machiavelli (1469-1527) became secretary to the Second Chancery, a function that involved the tasks of a senior clerk and an ambassador. When Medici rule was restored in 1512, he was removed from office. In his country house near Florence, he turned to literature, political theory and history. In 1520 he was commissioned to write a history of Florence by the Medici Pope Clement VII. He finished his *Istorie fiorentine* in 1525, and the text was published for the first time in 1532. It consists of eight books, starting with the foundation of the city and ending with the death of Lorenzo il Magnifico in 1492. Machiavelli's central thesis is that the main problem in Florentine history is the internal strife between various factions. He ends his work on a very pessimistic note. The death of Lorenzo de' Medici inaugurates a disastrous period in Italian history that Machiavelli does not expect to end soon:

Whether they had just cause for mourning was soon after shown by the result, for when Italy was deprived of his advice, those who were left found no way either to satisfy or to check the ambition of Lodovico Sforza, the guardian of the Duke of Milan. No sooner was Lorenzo dead than Lodovico's ambition stimulated the growth of those evil seeds that not long after, since no living man could destroy them, devastated – and are still devastating – Italy.¹⁴

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A central point in Machiavelli's analysis is that the Italians themselves are to blame for Italy's desperate situation. It was not brought about by an impersonal historical force or by the expansionist strategy of the French. Ludovico Sforza's ambition is a central factor in Machiavelli's explanation of the 'Calamità d'Italia', and perhaps even more important is the inability of others to stop the sequence of disastrous events. It is not unthinkable that Machiavelli also includes himself in this group because of his role in Florentine politics in the decades before and after 1500.

Machiavelli's younger contemporary, Francesco Guicciardini (1483-1540), was born into one of the grand aristocratic families of Florence and educated as a lawyer. In 1512 he became ambassador at the Spanish court, and under the Medici Pope Leo X, he was governor of various papal territories. In 1537 Guicciardini involuntarily retired from political life after the death of Alessandro de' Medici, the first Duke of Florence. In the three years between his fall from grace and his death, Guicciardini turned to history. He wrote his most famous work in this period, the Storia d'Italia, dealing with the events in Italy between 1490 and 1534. Guicciardini's perspective is just as pessimistic as Machiavelli's: in his eyes, Italy's fate had taken an irreversible turn for the worse in the decades that he describes. This was not caused by impersonal forces, but by erroneous decisions of the people involved in Italian politics. Guicciardini also included himself among those who had brought about the 'Calamità d'Italia'. In the late 1520s he wrote a short text, with the title Oratoria accusatoria in which he speaks accusingly to himself for advising Pope Clement VII to form the League of Cognac against France:

Because of you Rome was so cruelly sacked, with so much damage to so many of our citizens; because of you heretics control the holy places, because of you they have thrown the relics to the dogs ... You are the plague, the ruin, the fire of the whole world ... enemy of God and of man, enemy of the patria.¹⁶

Of course, this self-accusation has a very rhetorical character, and might possibly exaggerate Guicciardini's negative view on his own involvement in Italian politics. Yet, it nevertheless emphasises the idea, also present in Machiavelli's analysis, that human agency is the key factor in explaining the disastrous turn taken by Italian history. Especially the Italians themselves are to blame: at the end of the day, they brought about their own downfall.

The view of Machiavelli and Guicciardini on the Italian past is essentially tragic. They have a strong sense that the old Italian order is irretrievably lost after the succession of crises that started in 1494. This is the experience that Ankersmit describes as a 'sublime dissociation of the past'. Ankersmit does not

connect this kind of historical experience with a notion of human agency, but in my opinion the traumatic experience that the world of the past is forever gone presupposes the idea that this rupture is caused by our own actions. In a world ruled by impersonal forces or by divine providence, such a traumatic dissociation of the past would hardly be conceivable. An interesting parallel can be found in Aristotle's analysis of Greek tragedy. In a tragedy the hero undergoes a reversal of fortune that is not the result of external causes or a fundamental character flaw, but is caused by a mistake of some kind made by the protagonist himself. In the end, the hero realises what has happened, which amounts to a traumatic recognition of the true nature of the sequence of events he has started.¹⁷

3 The description of characters

As we have just seen, the tragic view of history in the writings of Machiavelli and Guicciardini presupposes a sense of human agency. Nowadays, agency is usually connected with individuality: we ascribe agency to individual persons who make choices against the background of their unique life histories. This modern conception of individuality also involves the idea that we have an inner life that is not directly accessible to others. It is questionable whether such a notion of individuality is already present in the work of Machiavelli and Guicciardini. One indication that they might have had a different view on the self is the frequent use of character sketches in their historical writings.

These character sketches should be seen in the light of the central position of the concept of character in early modern psychological and anthropological knowledge. With the term 'character' early modern authors referred to types that could be recognised on the basis of external actions and features, and not to unique individuals with a hidden inner core. Classical thought was the main source of inspiration for this discourse on character. In Greek and Roman rhetoric, character was an important topic, both in a 'subjective' sense, dealing with the ways in which the speaker could display the qualities of his own character, and in an 'objective' sense, which involved the techniques of describing the characters of other people, such as the accused in a lawsuit. In both cases the central concern was to show that someone belonged to a certain category of people and was therefore likely to be trustworthy or to behave in a particular way. In ethical thought we find a similar conception of character, for instance in Aristotle's descriptions of virtuous types in the Nichomachean Ethics, and in medicine the notion of character was linked with humoral physiology, resulting in a typological view of man in which the constitutive elements of the body and the characteristic traits of the soul were closely connected.18

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In this discourse on character, which was remarkably continuous from Antiquity until the seventeenth century, mental dispositions were depicted by listing a set of typical actions or characteristic physical features. A good example is Aristotle's analysis of greatness of soul (megalopsuchia) in the fourth book of the Nicomachean Ethics:

It is also characteristic of the great-souled man never to ask help from others, or only with reluctance, but to render aid willingly; and to be haughty towards men of position and fortune, but courteous towards those of moderate station. ... He likes to own beautiful and useless things, rather than useful things that bring in a return, since the former show his independence more. Other traits generally attributed to the great-souled man are a slow gait, a deep voice and a deliberate utterance.¹⁹

Machiavelli and Guicciardini frequently use the same technique of depicting characters. In the seventh book of the *Istorie fiorentine*, Machiavelli describes the characteristics of Cosimo de' Medici, the first Medici ruler of Florence, who governed the city between 1434 and his death in 1464:

He was of ordinary stature, of olive complexion and of dignified bearing. He was without learning but very eloquent and abounding in natural prudence; by means of the last he was obliging to his friends, merciful to the poor, helpful in consultation, cautious in advice, swift in execution; in his sayings and replies he was keen and weighty.²⁰

Guicciardini also regularly employs character sketches in his historical writings. In the first book of the *Storia d'Italia* he depicts the character of the French king Charles VIII. Here as well, a mental disposition is represented by a list of physical features and typical actions:

Charles, from boyhood on, was of very feeble constitution and unhealthy body, short in stature, very ugly ... Not only was he without any learning and skill but he hardly knew the letters of the alphabet ... He was neglectful of almost all effort and enterprise, and those affairs which he did take care of, he managed with very little judgment or wisdom.²¹

It could be argued that the use of this kind of character sketches by Machiavelli and Guicciardini is merely a literary device that does not in any way reflect an underlying view of the self. In his analysis of the character sketches in Machiavelli's work, Peter Bondanella claims that these sketches should be seen in the light of

similar portraits of persons in the writings of Livy or Plutarch. While these portraits were meant to function as moral examples, Machiavelli's character sketches were intended as illustrations of certain principles of human nature. In this view, it is assumed that the sixteenth-century conception of the self is essentially the same as ours; Machiavelli only uses different literary techniques to portray persons than we would do. The contextualisation in Bondanella's argument is exclusively diachronic, connecting Machiavelli with Livy and Plutarch, but not with authors working in other fields than history. As argued above, Machiavelli's character sketches should also be contextualised synchronically, by relating them to the early modern knowledge of man centred around the concept of character. In this discourse the modern notion of a highly individual self with a unique life history and a hidden interior was absent. This suggests that the psychological simplicity of Machiavelli's character sketches is not just the result of a particular technique of portraying persons, but an indication of a conception of the self that differed from the modern view.

Two aspects of this early modern notion of the self should be highlighted here because they are especially relevant for historical writing. In the first place, there is a rather direct connection between character and action, since actions are assumed to be signs of an underlying mental disposition. The relation between character and behaviour is essentially transparent, in contrast to the modern perspective in which the hidden interior of individuals cannot be related to their actions in a similarly straightforward way. Furthermore, the early modern discourse on character has a prominent moral dimension.²³ This is clearly visible in the character sketches of Machiavelli and Guicciardini, which are descriptive and evaluative at the same time. This morally orientated view of the self is mirrored in a mode of historical writing that does not keep away from judgments on the past, unlike modern academic historiography with its emphasis on disinterested objectivity.

4 Rhetoric, political theory and historical method

Machiavelli and Guicciardini were educated in the humanist tradition, which essentially means that they were immersed in rhetoric. Furthermore, the humanist historiography of their fifteenth-century predecessors had a fundamentally rhetorical character, although, as we have seen above, there has been an intensive scholarly debate about what that involves. Therefore, an important question is how the historical writings of Machiavelli and Guicciardini are related to the rhetorical tradition. According to Maurizio Viroli, Machiavelli fully endorses the rhetorical approach to historiography. This is visible in his use of rhetorical tech-

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niques, in the amount of attention he pays to the effect of political speeches on the course of history, and in his view that historiography has to address the moral and political issues of the present.²⁴ There are also indications, however, that suggest that Machiavelli and Guicciardini had a different attitude towards the rhetorical tradition. The fact that they wrote in Italian and not in Latin should be mentioned here, because this can be seen as a sign that they had started to move away from the classical rhetorical models of humanist orthodoxy. Furthermore, rhetoric and humanist historiography were not the only factors in the intellectual context in which Machiavelli and Guicciardini were active. It should be noted, for instance, that the vernacular tradition of the chronicle was another important source of inspiration for their historical writings.²⁵

Felix Gilbert observes a fundamental conflict between the pragmatic view of history held by Machiavelli and Guicciardini and the rhetorical outlook of their humanist predecessors. In his opinion, the pragmatic view of Machiavelli and Guicciardini involved a focus on the practical political use of historical knowledge; paying attention to the details of political life in the past was indispensable in this perspective. Humanist historians were also concerned with political history, but, according to Gilbert, they subordinated the political content of their historical narratives to the traditional rhetorical objective of moral instruction. The stylistic framework they had constructed for historical writing was so restricted that the analysis of practical politics could hardly be fitted in. 26 This antithesis is probably not as pointed as Gilbert claims. Machiavelli and Guicciardini did not totally discard the rhetorical apparatus that their humanist predecessors used in describing the past, and it would be exaggerated to describe humanist historical writing as a literary activity without a practical or political dimension, only concerned with fulfilling certain stylistic requirements. Nevertheless, it cannot be denied that Machiavelli and Guicciardini started to move away from the framework in which the humanists had cast their historical work. This shift towards a 'post-humanist' perspective can be related to the dissociation of the past brought about by the 'Calamità d'Italia'. Unlike their fifteenth-century precursors, Machiavelli and Guicciardini saw the past as a world that was irretrievably lost. As a consequence, the past became an object that could be studied, and rhetoric was not the most suitable tool to approach such an objectified past. Rhetoric, when it is not seen as merely a set of stylistic prescripts, can be helpful to make sense of the ambivalences inherent in social life. It can also be used to make the past relevant, for instance as a source of moral examples, but that presupposes that the past is contiguous with the present. A past that is experienced as a strange object cannot be incorporated straightforwardly in rhetorical discourse. It has to be examined with other means, and its significance for the present has to be demonstrated from a different perspective.

In the work of Machiavelli and Guicciardini, political theory replaced rhetoric as the field of learning most narrowly intertwined with history.²⁷ Machiavelli draws attention to this relation in the preface to the *Istorie fiorentine*:

If any reading is useful to citizens who govern republics, it is that which shows the causes of the hatreds and factional struggles within the city, in order that such citizens, having grown wise through the sufferings of others, can keep themselves united.²⁸

The use of history lies in its contribution to our knowledge of politics. This is also visible in Machiavelli's more theoretically oriented writings. The *Discorsi* are probably the most telling example: here Machiavelli develops a theory of citizenship and liberty in a commentary on a historical work, the first ten books of Livy's *Ab urbe condita*. Guicciardini also mixes political theory with history. His *Dialogo del reggimento di Firenze* is a discussion of the ideal form of a republican government in Florence. The first of the two books of this dialogue between three Florentine politicians deals with the recent history of the city, comparing the regime of Lorenzo de' Medici with the way Florence was governed after the revolution of 1494. On the basis of this historical analysis, Guicciardini develops his ideas on the best possible form of government for Florence.²⁹

Just before the passage from the preface of the Istorie fiorentine quoted above, Machiavelli remarks that 'if anything in history delights or teaches, it is what is presented in full detail'. In these words, the rhetorical tradition clearly resonates: delectare and docere are conventional goals of rhetoric. Yet, with this phrase he criticises Leonardo Bruni for not discussing internal strife in his history of Florence, suggesting that he considered these affairs so paltry as to be unworthy of preservation in writing.30 This shows the ambivalence of Machiavelli's relation with the rhetorically oriented historiography of the humanists, but it also points to something else. For Machiavelli, the past is an object of research that should be examined in detail and without omitting unwelcome elements. With this attitude towards the past, one might expect a special interest in historical method and a practice of carefully examining sources in order to establish indisputable facts. Yet, there are no traces that Machiavelli made an effort to reshape the study of history in this respect. Guicciardini, however, was highly concerned with giving a factually accurate account of the past. In a lengthy commentary on the Discorsi, he criticises Machiavelli for oversimplification and fitting his material into his thesis.31 Because of his focus on factual correctness, Guicciardini meticulously analysed his sources. His archive has been preserved, and his papers show that he had a preference for using documentary evidence and carefully compared all available reports about the events he intended to describe. 32 This is a major differ362 Jacques Bos

ence between Guicciardini and the humanist historians of the fifteenth century. Yet, he did not develop a systematic methodology of historical research. Texts on that subject only began to appear in the second half of the sixteenth century, resulting in a flourishing tradition of *artes historicae* in the seventeenth century.³³

5 Conclusion and outlook: Machiavelli, Guicciardini and the history of the humanities

In the writings of Machiavelli and Guicciardini, we can observe a crucial early stage in the development of modern historical consciousness. As a result of the trauma of the 'Calamità d'Italia', the past is dissociated from the present and becomes an object of study. This does not necessarily mean that Machiavelli and Guicciardini saw the past as a 'foreign country', as it is described by a modern author,³⁴ since such a perspective presupposes a post-Romantic sense of radical historicity in which historical interpretation has become fundamentally problematic. Yet, they definitely considered the past as a different region than their own dwelling place in the present. In this respect they differed from the historians that preceded them. Fifteenth-century humanist historiography regarded the past as a source of moral examples for the present. This implies that past and present belong to a continuous space, which can be imbued with meaning with the instruments provided by the rhetorical tradition.

Machiavelli and Guicciardini are important transitional figures in the development of historical writing. The historical consciousness that becomes visible in their work is a significant rupture in our thinking about the past, but around 1800 this historical consciousness would deepen into the conviction that the past was radically different from the present and could only be understood in its own terms. Human agency was a central element in the historical thought of Machiavelli and Guicciardini, but they did not have a modern notion of individuality, similar to that of nineteenth-century historicism. They started to disentangle historiography from its rhetorical framework, and in Guicciardini's work we can observe the first traces of a critical historical method. Yet, he did not elaborate this method. This elaboration took place in the *artes historicae* of the early modern period, but it was not before the early nineteenth century that history became a discipline in the full sense of the word.

The turning points in the development of historiography indicated here, the sixteenth and the nineteenth centuries, are also frequently identified as important moments in the history of other branches of learning in the field of the humanities. This suggests an important line of investigation for a comparative historiography of the humanities, which would have to entail an examination of

the roles of humanism and historicism in the development of the various fields of the humanities. As argued in this essay, paying attention to the underlying ontological assumptions about the self, society and history in these intellectual currents would significantly enrich such an analysis. Another element that should be included in a comparative historical investigation of the development of the humanities is the relative status of the various branches of the humanities in the course of their development. History had a rather modest position in Antiquity and the Middle Ages. According to Aristotle, history was inferior to poetry, because it dealt with particular events, and not with with the kinds of things that occur, with the universal aspects of human life.35 Perhaps as a result of this influential theoretical depreciation of history, in Antiquity the art of writing history was not codified in a similarly extensive way as the arts of, for instance, rhetoric and poetry. In line with this, history was not included in the artes liberales of the Middle Ages, but it gained an important position in the Renaissance as a source of moral examples and practical political inspiration. As we have seen, the development of Renaissance historiography involved a weakening of its ties to rhetoric, the dominant branch of learning of the period. It was not before the later sixteenth century that methods and theories of historical writing became the object of systematic codification in the genre of the artes historicae. In the nineteenth century, however, the position of history among the other fields of the humanities was radically different. History was leading the way for the other branches of the humanities in claiming the status of an academic discipline based on empirical methods. The philosophical foundation of this claim was established in historicism, which defined the historical method in relation to an ontology centred around individuality and historicity. In the course of the nineteenth century, the other fields of the humanities also adopted a historicist perspective. Just as history had done, they turned themselves into institutionalised academic disciplines, but in order to reach this goal they had to redefine their subject matter as a set of fundamentally historical phenomena.

Notes

- F.R. Ankersmit, Sublime Historical Experience (Stanford: Stanford University Press, 2005), 326-328, 356-363.
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- Donald J. Wilcox, The Development of Florentine Humanist Historiography in the Fifteenth Century (Cambridge, Mass.: Harvard University Press, 1969), 1-98.
- 4 Leonardo Bruni, *History of the Florentine People*, vol. 1, ed. and trans. James Hankins (Cambridge, Mass.: Harvard University Press, 2001), 3.

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5 Felix Gilbert, Machiavelli and Guicciardini: Politics and History in Sixteenth-Century Florence (1965; repr., New York: W.W. Norton & Company, 1984), 203-206. See also Rüdiger Landfester, Historia magistra vitae: Untersuchungen zur humanistischen Geschichtstheorie des 14. bis. 16. Jahrhunderts (Geneva: Librairie Droz, 1972).

- 6 Wilcox, Development of Florentine Humanist Historiography, 99-129.
- 7 Gilbert, Machiavelli and Guicciardini, 206-226.
- 8 Paul Oskar Kristeller, 'Humanism and Scholasticism in the Italian Renaissance,' in Studies in Renaissance Thought and Letters, vol. 1 (Rome: Edizione di Storia e Letteratura, 1956), 556-583.
- 9 Nancy S. Struever, The Language of History in the Renaissance: Rhetoric and Historical Consciousness in Florentine Humanism (Princeton: Princeton University Press, 1970), 37-39, 198-199.
- 10 Jacob Burckhardt, Die Kultur der Renaissance in Italien (1860/1869; repr., Stuttgart: Alfred Kröner Verlag, 1988), 174.
- 11 Hans Baron, The Crisis of the Early Renaissance in Italy (1955; rev. ed., Princeton: Princeton University Press, 1966).
- 12 A good outline of Italian history in this period can be found in Denys Hay and John Law, Italy in the Age of the Renaissance, 1380-1530 (London: Longman, 1989). For an overview of the history of Florence, see John M. Najemy, A History of Florence, 1200-1575 (Oxford: Blackwell Publishing, 2006).
- 13 For Machiavelli's life, see Maurizio Viroli, Niccolò's Smile: A Biography of Machiavelli, trans. Anthony Sugaar (New York: Farrar, Strauss & Giroux, 2000); Sebastian de Grazia, Machiavelli in Hell (Princeton: Princeton University Press, 1989); Roberto Ridolfi, The Life of Niccolò Machiavelli, trans. Cecil Grayson (Chicago: University of Chicago Press, 1963).
- Niccolò Machiavelli, The History of Florence, in The Chief Works and Others, trans. Allan Gilbert (1958; repr., Durham, N.C.: Duke University Press, 1989), 3: 1434-1435.
- The authoritative biography of Guicciardini is still Roberto Ridolfi, *The Life of Francesco Guicciardini*, trans. Cecil Grayson (London: Routledge & Kegan Paul, 1967).
- 16 Quoted in Mark Phillips, Francesco Guicciardini: The Historian's Craft (Toronto: University of Toronto Press, 1977), 15-16.
- 17 Aristotle Poetics 11.1452a22-b8, 13.1453a6-30.
- Jacques Bos, 'Individuality and Inwardness in the Literary Character Sketches of the Seventeenth Century, Journal of the Warburg and Courtauld Institutes 61 (1998): 142-157; idem, 'Reading the Soul. The Transformation of the Classical Discourse on Character, 1550-1750' (PhD diss., Leiden University, 2003); idem, 'The Rise and Decline of Character. Humoral Psychology in Ancient and Early Modern Medical Theory,' History of the Human Sciences 22, no. 3 (2009): 29-50.
- 19 Aristotle Nicomachean Ethics 4.3.1124b18-20, 1125a11-14.
- 20 Machiavelli, History of Florence, 1344.
- 21 Francesco Guicciardini, *The History of Italy*, ed. and trans. Sidney Alexander (1969; repr., Princeton: Princeton University Press, 1984), 49.
- 22 Peter E. Bondanella, Machiavelli and the Art of Renaissance History (Detroit: Wayne State University Press, 1973), 15-25, 138-141.
- 23 For the moral dimension of premodern thinking about the self, see Charles Taylor, Sources of the Self: The Making of the Modern Identity (Cambridge: Cambridge University Press, 1080).
- 24 Maurizio Viroli, Machiavelli (Oxford: Oxford University Press, 1998), 97-107.

- 25 Mark Phillips, 'Machiavelli, Guicciardini, and the Tradition of Vernacular Historiography in Florence,' American Historical Review 84 (1979): 86-105.
- 26 Gilbert, Machiavelli and Guicciardini, 233-236.
- The use of the term 'political theory' deserves some explanation. In the context of the fifteenth century, political theory was a much less clearly demarcated field of learning than, for instance, rhetoric, and it was not known under its present label. Yet, there existed various traditions of theorising about politics, such as Aristotelian and scholastic political philosophy, Roman republicanism and the mirror-for-princes genre. For an analysis of the traditions of political thought that influenced the writings of Machiavelli and Guicciardini, see J.G.A. Pocock, The Machiavellian Moment: Florentine Political Thought and the Atlantic Republican Tradition (Princeton: Princeton University Press, 1975), 114-271, and Quentin Skinner, The Foundations of Modern Political Thought, vol. 1, The Renaissance (Cambridge: Cambridge University Press, 1978), 67-190. In the past Machiavelli was often seen as one of the founders of a radically new and 'modern' type of political theory, but in the last few decades, in the wake of the work of Pocock and Skinner, attention has shifted towards his indebtedness to older idioms of political thought.
- 28 Machiavelli, History of Florence, 1031.
- 29 Niccolò Machiavelli, Discourses on the First Decade of Titus Livius, in The Chief Works and Others, trans. Allan Gilbert (1958; repr., Durham, N.C.: Duke University Press, 1989), 1: 175-529; Francesco Guicciardini, Dialogue on the Government of Florence, ed. and trans. Alison Brown (1994; repr., Cambridge: Cambridge University Press, 2002).
- 30 Machiavelli, History of Florence, 1031.
- 31 Phillips, Francesco Guicciardini, 81-93.
- 32 Gilbert, Machiavelli and Guicciardini, 296-297; Volker Reinhardt, Francesco Guicciardini (1483-1540): Die Entdeckung des Widerspruchs (Göttingen: Wallstein Verlag, 2004), 158-164.
- Giorgio Spini, 'Historiography: The Art of History and the Italian Counter Reformation,' in *The Late Italian Renaissance*, 1525-1630, ed. Eric Cochrane (London: Macmillan, 1970), 91-133; Astrid Witschi-Bernz, 'Main Trends in Historical-Methods Literature: Sixteenth to Eighteenth Centuries,' History and Theory, Supplement 12 (1972): 51-90; Anthony Grafton, What Was History? The Art of History in Early Modern Europe (Cambridge: Cambridge University Press, 2007).
- David Lowenthal, *The Past is a Foreign Country* (Cambridge: Cambridge University Press, 1985). The title of this book refers to the opening sentence of L.P. Hartley's 1953 novel *The Go-Between*, 'The past is a foreign country: they do things differently there.'
- 35 Aristotle Poetics 9.1451a35-b10.

Philosophy's Shadow Jacob Brucker and the History of Thought¹

Wouter J. Hanegraaff

No tradition, intellectual or otherwise, can exist or stay alive without demarcating its own identity from something that is seen as representing its negative counterpart, its 'other'; and as a result, this 'other' necessarily accompanies any tradition, as the shadowy background or dark canvas which allows it to draw the contours of its own identity in the first place. The presence of this shadow can therefore never be forgotten; but in order to fulfill its role as a negative background, neither can it be brought into the full daylight of memory and recollection. In short, it must be selectively remembered and selectively forgotten.

My intention in this article is to demonstrate this basic fact at the example of eighteenth-century Enlightenment historiography of philosophy. Critical historical research shaped and defined its own identity as an academic discipline decisively during the later seventeenth and the eighteenth century; and this happened by means of a complicated and often painful process of deciding what, exactly, had to be rejected, and on what basis such a rejection could be rationally legitimated and explained. The final outcome was that Enlightenment historiography created the popular image of a 'counter-tradition' which was seen as encompassing and representing everything the Enlightenment and its heirs rejected as wrong. In order to define its very identity, the Enlightenment needed to construe the memory² of pagan, occult, superstitious and irrational religion and thought as an essentially unified tradition of unreason from which the light of rational philosophy and science had now finally managed to extricate and liberate itself. But at the same time, this tradition had to be sharply excluded from the true history of thought: the history of philosophy henceforth had to focus on the progress of reason, not on the tenacious persistence and endless resurgence of unfounded beliefs. As a result of this process of exclusion (which can really be described metaphorically as one of expurgation, purification, even exorcism), enormous bodies of traditional thought that were still discussed seriously and at great length by the early pioneers of the history of philosophy in the seventeenth

century were increasingly marginalized in the historiography of the eighteenth, the nineteenth and eventually the twentieth century. The final result was a dramatic loss of historical memory, which we are now only beginning to correct – a correction that should be an indispensable part of any attempt to write the history of the humanities.³

A central player in this process was the historian of philosophy Jacob Brucker, who was born in Augsburg on January 22, 1696, and studied philosophy and theology in Jena.4 Reading the accounts of his life, one can only be amazed at his extreme productivity: during his career he published about 20,000 pages on the history of philosophy,5 and while his works made him famous, they were all written in his spare time, next to his very busy work as a pastor in the Evangelical church, where at times he had to give sermons twice or three times a week and teach Latin for eight hours each day, while also visiting the sick, leading funerals, doing administrative work, and looking after his seriously ill wife.⁶ According to a contemporary biographer, his Herculean labours on the history of philosophy were at least partly therapeutic: in addition to a weak physical constitution, Brucker suffered from heavy attacks of 'melancholy', and only by studying extremely hard could he distract himself from his fears and depressions. The manner of Brucker's death in 1770 could not have been more symbolic for this Stubengelehrter and exemplary representative of the Protestant work-ethic: he fell in his study while trying to lift a heavy volume from an upper shelf.

Of those 20,000 pages published by Brucker during his lifetime, many belonged to his multi-volume history of philosophy published in German in 1731-1736, and its strongly revised Latin version first published in 1742-1744 and republished in a further expanded edition in 1766-1767.8 The German version is titled Kurze Fragen aus der philosophischen Historie: it seeks to cover the entire history of thought from before the Flood until the present day, and does so in a question-and-answer format. The title is deceptive, for while the questions may be short enough, the answers are anything but; and increasingly from one volume to the next, everything Brucker cannot put in his main chapters he puts in his notes, which are printed in small letters and often turn into minor monographs of their own, with incredibly detailed references and bibliographies. In response to the increasing demand for a Latin version accessible to a non-German readership, Brucker decided to re-write the entire history anew, and in even greater detail - but with fewer footnotes - and the result is his Historia critica philosophiae, which is now generally considered the monument of the history of philosophy in the eighteenth century.

The importance of this work can hardly be overestimated. It became *the* indispensable source of information on the history of philosophy throughout Europe, and far into the nineteenth century. Of particular importance is its relation to

two other famous and extremely influential reference works: the so-called große Zedler, and Diderot's Encyclopédie. Johann Heinrich Zedler's Großem vollständigen Universal-Lexicon appeared in 64 volumes and four supplement volumes from 1732-1754 and stands as the German lexicographical monument of the Baroque era. Its many articles in the domain of philosophy, while published anonymously, are in fact mostly paraphrases or literal copies of Brucker's work;9 in other words, Brucker was the invisible but omnipresent authority on philosophy in this largest and most influential of all German lexicons. Even more interesting is the case of Diderot's famous Encyclopédie, which was first announced around the time the Zedler was completed¹⁰ and appeared between 1751 and 1765. For its many contributions on the history of philosophy, Brucker was again the decisive source: Diderot in fact plundered the Historia critica philosophiae without any scruples, while taking care to turn the heavy and serious prose of the German Protestant minister into elegant French. His editorial work has been described as a 'masterwork of adaptation and subtle deception: by a few interventions, Diderot artfully change[d] ... the serious chapters of the Historia Critica into a graceful reading full of allusions and double entendres, which were excellently suited to the esprit philosophique'." If we take account of the well-known centrality of the Encylopédie to the French Enlightenment, the centrality of 'philosophy' to Diderot's project, and the paradigmatic role of the French philosophes in defining internationally what the Enlightenment was supposed to be all about, one understands Lucien Braun's conclusion in his standard work on the history of the history of philosophy:

In the second half of the eighteenth century, there appear a whole series of works that are based exclusively on the *Historia critica*; and in that regard, there is nothing in the domain of the history of philosophy that can be compared to this work. It is the monument to which all the Enlightened spirits in Europe referred at the time ... The eighteenth century is dominated by Brucker: here he is the only point of reference.¹²

To understand the concept of philosophy that informed Brucker's work, we have to first look at a crucial development in the intellectual history of the second half of the seventeenth century, which has been referred to as 'anti-apologeticism'. This quintessentially Protestant perspective was directed against the 'apologetic' position dominant in Roman Catholic theology. 'Apologeticism', in this context, refers to the idea of a *prisca theologia* or *philosophia perennis*, according to which the divine revelation had not been restricted to the Judaeo-Christian tradition but also had its conscious or unconscious are presentatives among the pagans. The concept of a *translatio sapientiae* made it possible to envision a certain amount of concordance between pagan traditions and Christianity, so that the

teachings of ancient sages like Zoroaster, Hermes Trismegistus, or Plato could be seen as containing elements of religious truth.

Now this concept of a *translatio sapientiae* came under sharp attack by the Lutheran historian of philosophy Jacob Thomasius (1622-1684), one of the teachers of Leibniz and sometimes seen as the earliest pioneer of the modern history of philosophy. His central thesis, developed most explicitly in his *Schediasma historicum* (1665), was that Christianity had been infected not just since the Renaissance, but already since the first centuries by pagan philosophies that were in fact alien to and incompatible with the biblical faith. In other words, Thomasius exposed the so-called 'hellenization of Christianity' 77 as a perversion, and argued for a strict separation between Christian theology and the philosophies of the pagan nations. The two could have nothing in common; and as a result, any idea in Christian theology that turned out to be adopted from pagan philosophy, notably Platonism or Aristotelianism, had to be expurgated from it. Of course, the result was that the whole of Roman Catholic theology now had to be seen as deeply corrupt and unacceptable; and Thomasius contrasted it in the sharpest possible terms with his Protestant ideal of an exclusively biblical piety.

Thomasius traced all pagan philosophies to their origin in the teachings of Zoroaster: it was from Zoroastrian sources that Platonism, Aristotelianism, Epicurianism and so on had emerged.¹⁸ The essence of this pagan/Zoroastrian philosophy was its belief in the eternity of the world, which implied the equally despicable doctrines of dualism, pantheism and materialism, all of which were wholly incompatible with the biblical creatio ex nihilo.¹⁹ The Platonic philosophy, in particular, by means of which paganism had most seriously infiltrated Christianity, implied a doctrine of emanation, according to which the soul had its origin in an eternal, divine substance and would return to it again: this emanationism, in turn, implied a doctrine of enthusiasm' (Schwärmerei), because human beings could supposedly gain knowledge (gnosis) of their own divine origin by means of mystical illumination. Having come from Zoroastrianism, all these pernicious doctrines had infiltrated Christianity particularly in the form of Platonism, and this Platonic/Christian syncretism was the essence of all the sectarian movements up to the present day.

The impact of Jacob Thomasius's anti-apologeticism has been traced in the work of a series of later German Protestants, notably Friedrich Christian Bücher, Balthasar Köpke, Johann Wilhelm Zierold, Ehregott Daniel Colberg, Gottfried Arnold, and notably Jacob Thomasius's son Christian, and Christoph August Heumann.²⁰ Essentially, as the implications of anti-apologeticism were taken to their logical conclusions by these authors, the result was a strict separation between the history of philosophy on the one hand and the biblical revelation on the other, which were now seen as resting on entirely different foundations.

Thomasius senior had sought to define the nature of true Christianity as incompatible with anything pagan, but his son Christian used his father's arguments instead to present the history of philosophy as a wholly autonomous discipline. It was not so much that pagan philosophies must be wholly rejected, but that they had to be recognized for what they were: the attempt to understand the world by purely human means, without the aid of revelation. This approach culminated in the work of the founders of the modern history of philosophy, Christoph August Heumann²² and, finally, Jacob Brucker.²³ In all the authors I have mentioned, the internal logic of Protestant anti-apologeticism finally led to a sharp distinction between three main domains in the history of thought.

1 History of Philosophy

The first of these was the history of philosophy, the central concern of Heumann and Brucker. It had to be written according to a methodology of *eclecticism*; that is to say, the historian's task was to survey the entire history of thought and select from it only the traditions that were in accord with sound human reason. It is on this basis that these historians laid the foundations for the modern history of philosophy as an autonomous academic discipline.

2 Biblical Revelation

However, all the authors in this tradition were deeply pious Lutherans, convinced of the superiority of the Christian revelation. They were not Voltairean critics of religion. On the contrary, they strictly distinguished between biblical faith as the absolute and exclusive foundation of religion, and human reason as the no less exclusive foundation of philosophy. Reason and revelation could not be contradictory, but they were autonomous and incommensurable: each of them should keep strictly within its own domain, to avoid the 'apologetic' confusion and crypto-pagan syncretism that had been the very essence of Roman Catholic theology.²⁴

3 (Crypto)Pagan Religion

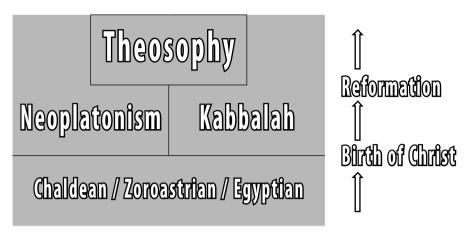
Third, and most important in the present context: as a result of this radical anti-apologetic separation between revelation and reason, late seventeenth-century historiography was left with a very large domain of currents and ideas that belonged to neither of the two camps, because they were characterized precisely by syncretic mixtures between the two. Essentially, this third domain represented the continuation of pagan religion concealed as Christianity. It shared its pagan foundations with philosophy, but it differed from philosophy in not being based on reason. With Christianity it shared its religious nature, but it differed from Christianity in that it was not based on revelation.

Interestingly, the logic of the theory implied that this third category, of heresy and superstition, could not be strictly distinguished from Roman Catholicism: the image that these Protestant authors had in mind was that of 'hellenized Christianity' as a single great tree of heresy, of which all superstitions were the branches and the fruits.

Coming now to Brucker's grand historiographical project: in order to clearly distinguish philosophy from everything that merely looked like it, he needed to discuss all forms of pagan syncretism in meticulous detail and demonstrate that they were not actually based on reason but on superstition. As a result, his Kurze Fragen and Historia Critica in fact consist of two interwoven strands, referred to as 'philosophia eclectica' and 'philosophia sectaria': the one traces the history of philosophy from its earliest beginnings, and the other traces the history of its polemical other': philosophy's shadow.

To understand Brucker's approach to it, we must note the peculiar combination in all his work of Protestant biblicism and rational criticism. For Brucker the truth of the biblical revelation is a matter of faith beyond rational demonstration, but in evaluating historical materials he thinks and argues entirely as an Enlightenment thinker. The history of thought is approached as a history of human opinions. Like his predecessors, Brucker thinks of them as 'systems' of thought, which can be described in terms of a limited number of basic doctrinal propositions. With respect to all kinds of pious traditions and ideas concerning ancient wisdom, Brucker typically gives an overview of the arguments that are being adduced, examines the available evidence, and finally decides whether or not it is reasonable to maintain those beliefs.

Heumann had still used theological criteria to divide the history of philosophy into three main periods: the great caesuras for him were the birth of Christ and the advent of the Reformation. Brucker's subdivision was roughly similar, but used a non-theological nomenclature: the great turning points were now the beginning of the Roman Empire and the 'restoration of letters' in the late Middle Ages/early Renaissance. Through all these periods, we can trace the history of the 'philosophica sectaria'. In the first period, the central place in that regard is taken by the Chaldaean/Zoroastrian and the Egyptian system, alongside the birth and development of true philosophy among the Greeks. The second period is dominated, at least for our concerns, by two great systems: Neoplatonism and Kabbalah. In the third period, finally, both of these systems are revived and combined during the Renaissance, and against their background there emerges yet a third, relatively autonomous system of sectarianism, that of Theosophy²⁵. Although Brucker clearly distinguishes these various 'systems' and treats them separately, his discussion shows that they are essentially branches of one and the same great tree of pagan superstition.



The pedigree of 'philosophia sectaria' according to Brucker

The Chaldaean/Zoroastrian and the Egyptian systems belong to the category of 'philosophia barbarica'. The Chaldaeans are the oldest and described as wholly drenched in the darkest idolatry and superstition: their system of thought is based not on the light of sound reason but merely on blind tradition and priestly deception, and expressed in obscure images and language.26 Their system combines the basic errors of all false philosophy: atheism, metaphysical dualism, absence of divine providence, and the doctrine of emanation. This emphasis clearly reflects the lingering influence of Jacob Thomasius: while biblical faith is based on theistic belief in a creatio ex nihilo, paganism is based on belief in the eternity of the world, from which derive the false doctrines of dualism, pantheism or emanationism. As for Zoroaster, Brucker concludes that there is so much confusion about his identity that it is no longer possible to find out the truth; but the many writings attributed to Zoroaster are in fact not by him.27 Notably this holds true for the famous Chaldaean Oracles, which Brucker attributes quite correctly to later Platonists²⁸ and describes as a compendium of pagan superstitions. Likewise, the 'secret doctrines' of the Egyptians consist of nothing but idolatry and superstition; Brucker discusses Thoth or Hermes as their originator, and emphasizes the spurious nature of the writings attributed to him.29

Nothing found in this 'philosophia barbarica' actually deserves the name philosophy, and the beginnings of Greek thought are hardly more impressive. The first stirrings of real philosophy come with Thales and Pythagoras, later followed by Socrates; but much of the later development of both Pythagoreanism and Platonism is in fact a perversion that distorts Plato's teachings by mixing them up with a variety of oriental pagan superstitions derived from Chaldaea and Egypt.

This brings us to the first of the three main systems or clusters of 'sectarian-ism' in Brucker's scheme: that of Neoplatonism. Brucker of course does not use that modern term: somewhat confusingly, he speaks of the 'secta eclectica'³¹ while pointing out on many occasions that it is in fact an example of 'syncretism that puts a knife to the throat of healthy philosophy'.³² Neoplatonism is crucial to Brucker's story because it succeeded in becoming the most successful and influential of all the sects. He discusses it in great detail and sees it as part of a deliberate pagan strategy to counter the rise of Christianity:

Since the pagan theology, through its many fables and other absurd teachings about the gods, had come to be a horror not only for the Christians, who were now spreading all over the world, but even for the philosophers themselves ... they sought to give themselves a better image by explaining the fables in a mystical manner ... And because, moreover, they saw that the Christian religion, being a highly reasonable philosophy, was accepted widely, also by great and respected men, and was defended by good people with clear proof, they put much effort into plundering the philosophical doctrines of the ancients and bringing them into a system in such as way that they looked more similar to the Christian teaching, and more reasonable as well. And this is how the *ratio philosophandi eclectica* came into existence.³³

Since most of the Neoplatonists had a melancholic temperament, they were continuously led astray by the products of their overheated imagination; in short, their entire system rested on an 'unfounded enthusiasm.' They deliberately sought to infiltrate Christianity and corrupt it from within, for example by promoting their own theurgical theories as the true explanation for the miracles of Jesus and his apostles, and by introducing fraudulent texts – such as the Hermetica – that superficially looked Christian but were in fact grounded in paganism. As for the ancient philosophers whose authority they claimed, their true doctrines were completely distorted by the Neoplatonists:

they also hatched all kinds of books, as scandalous and harmful miscarriages of their weird brains, and put them as strange eggs into the nest of the ancient philosophers, presenting them as Chaldaean, Egyptian, Zorostrian, Hermetic, or Orphic monuments, and thereby made the entire history of philosophy extremely uncertain.³⁵

In fact, the Neoplatonists produced so many dangerous 'eggs' of their own that finally their teachings spread as an infectious plague all over Europe and Asia, while absorbing most of the other sects in the process.³⁶

What, then, is the essential doctrine of Neoplatonism? It teaches that there is one God with whom the human soul has a natural connection and to whom he therefore seeks to return. There are hierarchies of higher, spiritual beings, such as gods, spirits, and angels, which are invisibly present everywhere. The purpose of prayer is to get in contact with these beings, and this happens by means of ecstatic trances. Fortune-telling is an important part of such rituals, and in sum, one can clearly see that the real purpose of this system is to promote all the horrors of pagan superstition and idolatry. The great problem, of course, is that it succeeded. This was partly due to the naivety of Christians, who used Platonic terminology to convert the heathens, and thereby unwittingly welcomed the virus, which ended up infiltrating the very body of Christian theology.

I can be much shorter about the second great system, the Kabbalah, not because Brucker pays it any less attention³⁸ but because it is based upon essentially the same process: biblical faith being infected by pagan thought. Kabbalah relates to the Old Testament as Neoplatonism relates to the Gospel: in both cases, the purity of the biblical revelation is heavily compromised by the pernicious influence (the 'syncretic pest'³⁹, as Brucker calls it) of paganism, derived from the Chaldaeans and Egyptians, and from degenerated Pythagoreanism and Platonism as well. And in both cases the result was, in Brucker's opinion, an impenetrable mass of irrational speculation, expressed by means of obscure language and imagery.

The revival of Neoplatonism and Kabbalah after the restoration of letters in the Renaissance is meticulously analyzed by Brucker,⁴⁰ with separate chapters for central figures such as Plethon,⁴¹ Ficino,⁴² Pico della Mirandola,⁴³ Reuchlin,⁴⁴ Giorgio,⁴⁵ Agrippa,⁴⁶ Patrizi⁴⁷ and so on. These authors dug up the old Neoplatonic writings, along with the spurious texts attributed to Hermes, Zoroaster or Orpheus and the Jewish Kabbalah, as far as they understood it, and patched together a new philosophical system. It should be noted that, surprising perhaps, Brucker's analysis here is far more neutral and businesslike than before. Most of these authors are discussed respectfully, as honest Christians who had good intentions but were simply deluded. Brucker refutes their ideas essentially on scholarly grounds, by pointing out philological errors, misdatings, incorrect historical interpretations and so on. In the end, all these errors can be traced back to the polluted source of Neoplatonism in late antiquity, and to the idea of a *philosophia perennis* or *translatio sapientiae*:

For because they were of the opinion that the ancient Hebrew, Chaldaean, Egyptian, Orphic, Pythagorean and Platonic philosophy was essentially one and the same thing, and that it all emanated from the ur-ancient divine philosophy, they concluded that everything in it had to be in harmony with

the Christian religion, and as a result they attempted to reconcile these teachings – perverted and wrong anyway, and packed together from all kinds of fraudulent texts – with the Christian religion.⁴⁸

Brucker's third great system, that of Theosophy, stands somewhat on its own in his work.49 He writes that it was created in a more recent period by authors who (quite rightly) abhorred all pagan and sectarian philosophy, but nevertheless ended up inventing a new variation of it. Their systems are based not on the light of reason but on claims of internal, divine illumination; by means of it, they believe to have privileged insight into the deepest mysteries of nature and know the secrets of magic, alchemy, astrology and other such sciences. They call their system Theosophy, and also see it as a kind of Kabbalah.⁵⁰ Strictly speaking, in Brucker's opinion, they belong to the history of theology rather than of philosophy, but he discusses them nevertheless, with his usual attention to detail and an impressive apparatus of notes and references. The most important representatives are Paracelsus and his pupils,51 Valentin Weigel,52 Robert Fludd,53 Jacob Böhme and his followers,54 father and son Van Helmont,55 Pierre Poiret,56 and the Rosicrucians.⁵⁷ In evaluating Theosophy as a whole, Brucker highlights its rejection of healthy rationality in favour of inner illumination, and its underlying system of emanation which teaches that all comes from God and returns to him.⁵⁸ Taken together, it all clearly comes down to a dangerous doctrine of Schwärmerei and self-deification, grounded in the 'secret hybris' 59 of the human heart, which undermines sound reason along with Holy Scripture.

This must suffice as a sketch of how Brucker construed the nature and history of philosophy's shadow up to his own time. What is the moral of this story? Scholars in my own field of research, the history of hermetic philosophy and related currents or 'Western esotericism', study precisely the entire complex of currents and ideas that were excluded from real philosophy under Brucker's influence. In doing so, we are trying to correct a dramatic loss of historical memory about very large and important areas of thought and cultural activity that range across the disciplines: from philosophy and religion to science and even art. As we have seen, Brucker himself thoroughly and critically studied all the systems he saw as 'pagan or quasi-pagan error', but historians of philosophy after him concluded (quite logically, from their point of view) that since all this was now proven to be mere irrational superstition, henceforth it no longer deserved to be studied or discussed in the context of real philosophy. As a result, the traditions in question vanished from their histories and from the textbooks, but no other academic discipline picked them up. As a result, they became the almost exclusive reserve of occultist amateur historians during the nineteenth century who were seen, quite correctly in most cases, as academically suspect, to say the least. This

is how the entire domain to which Brucker and his predecessors had still devoted countless hours of study became a 'no go area' for scholars. In short, as a casualty of the process of academic specialization and disciplinization – or in other words, of the 'making of the humanities' from the early eighteenth century onwards – it was exorcized from acceptable academic discourse and henceforth had to survive as best it could in a kind of academic twilight or no-man's land outside the recognized disciplines of the humanities.

It is my conviction that as historians, we ignore this domain at our peril. Brucker was quite right that most of it does not constitute anything like rational philosophy, but that is hardly a reason for academics to ignore its very existence or its importance as a factor in religious and cultural history. In scholarly research there should be no excuse for ignorance, but unfortunately, historical ignorance concerning these domains has been the rule in academia since the eighteenth century. Since the 1960s, and decidedly since the early 1990s, the study of these currents and ideas has begun to return to scholarly agendas; critical historiography is again becoming the norm here, although slowly; and we are beginning to discover how much of our history we have forgotten that we should have remembered. Ironically, Jacob Brucker should now be recognized not only as one of the most important early specialists in the very field that he helped to marginalize, but also as a model of historical criticism whose indefatigable labours and sharp insights are still a cause for respect and admiration.

Coda: Anti-Eclectic Historiography

As indicated in this chapter, Jacob Brucker's historiography of philosophy was grounded in the type of *Enlightenment eclecticism* pioneered by authors like Christian Thomasius and Christoph August Heumann. In the generations after Brucker, this methodological approach came to be superseded by that of systematic philosophy, and its centrality in the decades before and after 1700 has only recently begun to be rediscovered. However, in defining their object of research, eighteenth- and early nineteenth-century historians such as Dieterich Tiedemann and Wilhelm Gottlieb Tennemann did inherit Brucker's general way of distinguishing between 'true' and 'false' philosophy on the basis of Enlightenment eclecticism. The basic perspective was expressed by Heumann already in 1715, in a biting passage that deserves to be quoted here in full:

From what has been said thus far, it clearly follows that the philosophy by which the papists were driven into paganism, and which is known as *philosophiam barbaricam*, is necessarily a false and fake philosophy. So adieu,

dear Philosophia Chaldaeorum, Persarum, Aegyptiorum, &c, that one usually makes such a fuss about, out of blind veneration of Antiquity. [Heumann now refers to Michael Maier's and Morhof's references to secret philosophical orders in antiquity, and continues:] ... I am certain that all these Collegia sacerdotum Aegyptiorum, Orphaicorum, Eumolpidarum, Samothracum, Magorum, Brachmanum, Gymnosophistarum and Druidum, which Morhof sometimes calls occulta, then again arcana, or secreta and secretiora ... that all of these were schools, not of Wisdom, but of foolishness [Thorheit], which attempted to bring superstitio in formam artis and sought to draw profit from deceiving the people. ... So nobody should hold it against me if I have not the slightest respect for all those Collegia philosophica secreta, but judge that the passing of time has quite rightly made a secret of these mysteries, by dumping them into the sea of oblivion; and that even if the writings of these philosophorum barbarorum were preserved by posterity, they would deserve to be sent ad loca secretiora right away, for superstitious idiocies belong in no better library.63

Although Brucker did discuss all the traditions to which Heumann was referring, he was doing so only to wave them a definitive and final goodbye: 'adieu, dear *Philosophia Chaldaeorum, Persarum, Aegyptiorum, &c ...'*. Accordingly, the new histories of philosophy by Tiedemann and Tennemann no longer began in Persia or Egypt but in ancient Greece, with Thales; and the 'oriental' tendencies of middle and neoplatonism (in our terms), as well as their revivals in the Renaissance, were discussed essentially as phenomena of degeneration which endangered the healthy development of 'true' philosophy. This approach became the normative one in textbooks of history of philosophy up to the present day.

From the perspective of the history of philosophy, which was concerned with defining and demarcating its identity as an academic discipline, such an exclusion of 'pseudo-philosophy' is understandable enough. Nevertheless, from the perspective of a comparative study of the humanities, the legacy of Enlightenment eclecticism is particularly problematic. Taking the example of the pivotal work of Brucker, we have been looking at a process of exclusion that has straight parallels in most other historical disciplines: not only has the history of philosophy restricted itself since the eighteenth century to that of 'real' philosophy, but likewise it has broadly been assumed that the history of Christianity should be about whatever is considered to be 'real' Christianity, ⁶⁴ the history of science should be about 'real' science, ⁶⁵ and even the history of art should be about 'real' art. ⁶⁶ In short, eclecticism seems to be deeply ingrained in all the modern disciplines of the humanities.

Against approaches of this kind, I would argue that a comparative study of the humanities should be grounded in *anti-eclectic historiography*. The core of such an

approach is that it questions the selective procedures by which historians since the period of the Enlightenment have been defining and demarcating their disciplinary fields. It argues that such procedures are ideological and normative, and seeks to correct the historical distortions they have created by calling attention to the role and significance of those currents and ideas that, as casualties of the process of academic professionalization, have ended up in the reservoir of rejected knowledge. As a result, anti-eclectic historiography questions the established canon of modern intellectual and academic culture and emphasizes that our common heritage is of much greater complexity than one would infer from standard academic textbooks. Obviously, this program does not reflect an apologetic agenda but a historiographical one: its concern is not with the truth (or, for that matter, the falsity) of such things as alchemy, astrology, mysticism, or magic, but with the importance of recognizing the currents and ideas to which these labels refer as significant historical factors in the development of Western culture, and hence as legitimate objects of research.

The implications of such a program should not be underestimated. It is not just a matter of re-claiming some areas that had been neglected by earlier generations, or criticizing hegemonic discourses. Inevitably, an anti-eclectic historiography will also have to question the very way in which the various disciplines have defined themselves, and how they have divided the field of humanities among one another. To give just one example here, the study of alchemy has been tossed around by scholars like a hot potato: too religious, occult or 'spiritual' for historians of science, too scientific for historians of Christianity, too mystical for historians of philosophy, too technological and practice-based for intellectual historians. However, even though no discipline seems to really want it for its own, others should not have it either: hence historians of science will protest if Jungian psychologists try their hand at interpreting alchemical symbolism, some Jungians think that scientists should stay away from alchemy, and all parties agree that it has been wholly misunderstood by the 'occultists' (except, of course, the occultists themselves, who are bound to accuse their competitors of 'reductionism' and academic blindness).67

Clearly, inter- and multidisciplinarity is the minimal requirement in fields like these; but more radically, re-integrating alchemy and other areas of 'rejected knowledge' as normal fields of study in the humanities will require a critical revision of the disciplines as such and a correction of their ingrained selectiveness. Ideally, the practice of anti-eclectic historiography implies that the criteria for what is and what isn't included or taken seriously in a given field of research should not be determined by any traditional discipline and its theoretical or methodological conventions, but should be derived directly from the requirements of whatever it is that is being studied. The modern study of Western esotericism could be seen

as a testcase field in this regard. As a relative newcomer in the academy it is not yet overly burdened with specific disciplinary commitments; and since it concentrates precisely on what the humanities have traditionally excluded as 'rejected knowledge', one might say that its very *raison d'être* consists in compensating for, and correcting, the historical effects of academic eclecticism.

Notes

- A longer and slightly different version of this article, without the coda, is forthcoming in Andreas Kilcher (ed.), Constructing Tradition: Means and Myths of Transmission in Western Esotericism (Leiden & Boston: Brill, 2010).
- I am referring to Jan Assmann's distinction between mnemohistorical constructs and the findings of historiography. See Assmann, Religion und kulturelles Gedächtnis (München: 2000); and cf. W.J. Hanegraaff, 'The Trouble with Images: Anti-Image Polemics and Western Esotericism', in: Olav Hammer & Kocku von Stuckrad (eds.), Polemical Encounters: Esoteric Discourse and Its Others (Leiden & Boston: Brill, 2007), 107-136.
- Here I am referring to what has become known, in recent years, as the study of 'Western esotericism', an umbrella term that is used for covering the various currents under discussion here (for an overview of the recent development, particularly since the early 1990s, of Western esotericism as a field of academic reseach, see W.J. Hanegraaff, 'The Study of Western Esotericism: New Approaches to Christian and Secular Culture', in: Peter Antes, Armin W. Geertz & Randi R. Warne (eds.), New Approaches to the Study of Religion I: Regional, Critical, and Historical Approaches, Religion and Reason 42 (Berlin & New York: Walter de Gruyter, 2004), 489-519; the standard reference work for this field is now W.J. Hanegraaff (ed.) in collaboration with Antoine Faivre, Roelof van den Broek & Jean-Pierre Brach, Dictionary of Gnosis and Western Esotericism (Leiden & Boston: Brill, 2005).
- For general discussions of Brucker, see esp. the relevant chapters in Giovanni Santinello (ed.), Storia delle storie generali della filosofia, vol. 2: Dall'età cartesiana a Brucker (Rome: La Scuola, 1979), 527-635; Wilhelm Schmidt-Biggemann & Theo Stammen (eds.), Jacob Brucker (1696-1770): Philosoph und Historiker der europäischen Aufklärung. Colloquia Augustana 7 (Berlin: Akademie Verlag, 1998); Leo Catana, The Historiographical Concept 'System of Philosophy': Its Origin, Nature, Influence and Legitimacy (Leiden & Boston: Brill, 2008).
- 5 Lucien Braun, Histoire de l'histoire de la philosophie (Paris: Ophrys, 1973), 120.
- 6 Ursula Behler, 'Eine unbeachtete Biographie Jacob Bruckers', in: Schmidt-Biggemann & Stammen, Jacob Brucker, 19-73: 42.
- 7 Ibid., 42-43.
- To make clear how massive these two works really are, Jacob Brucker, Kurze Fragen aus der Philosophischen Historie, von Anfang der Welt biss auf die Geburt Christi, mit Ausführlichen Anmerckungen erläutert, 7 Vols. (Ulm: Daniel Bartholomaei & Sohn, 1731-1736) is printed in a small format in seven volumes: I (1120 pp), II (1086 pp.), III (1344 pp.), IV (1450 pp.), V (1517 pp.), VI (1326 pp.), VII (1210 pp.); and the first edition of the Historia is printed in five large quarto volumes plus a volume of additions and supplements: I (1357 pp.), II (1092 pp.), III (916 pp.), IV (789 pp.), V (939 pp.), VI (1032 pp.). In what follows

I will refer to Historia critica philosophiae a mundi incunabulis ad nostram usque aetatem deducta (orig. 1742-1744), 6 Vols. (Lipsiae: Literis et Impensis Bern. Christoph Breitkopf, 1767).

- As demonstrated by Behler, 'Eine unbeachtete Biographie', 19-30.
- 10 Ibid., 26.
- 11 Gregorio Piaia, 'Jacob Bruckers Wirkungsgeschichte in Frankreich und Italien', in: Schmidt-Biggemann & Stammen, Jacob Brucker, 218-237: 230.
- 12 Braun, here quoted from the German edition by Rainer Jehl, 'Jacob Brucker und die 'Encyclopédie', in: Schmidt-Biggemann & Stammen, Jacob Brucker, 238-256: 241.
- 13 The term was introduced by Sicco Lehmann-Brauns in his indispensable study, Weisheit in der Weltgeschichte: Philosophiegeschichte zwischen Barock und Aufklärung, Frühe Neuzeit 99 (Tübingen: Max Niemeyer, 2004).
- 14 Ibid., 8, with reference to Paul's Areopagus speech (Acts 17: 16-31): the 'unknown God' of the Gentiles is really the God of Christianity. Among many other examples, including notably patristic apologists from Justin Martyr to Eusebius and Clement of Alexandria, a particularly clear statement comes from Augustine: 'The very thing which is now called the Christian religion was with the ancients, and it was with the human race from its beginning to the time when Christ appeared in the flesh: from when on the true religion, which already existed, began to be called the Christian' (Retractationes I.12.3).
- 15 See the chapter of that title in Wilhelm Schmidt-Biggemann, Philosophia Perennis: Historische Umrisse abendländischer Spiritualität in Antike, Mittelalter und Früher Neuzeit (Frankfurt a.M.: Suhrkamp, 1998), 646-701. In this context, it is useful to also look at Jan Assmann's reflections on translation: whereas the pantheons of ancient polytheisms were crossculturally translatable, monotheism was based upon the principle of untranslatability: the God of Israel could not be equated or compared with any other supreme deities and therefore has no parallel in other religious cultures (Jan Assmann, Moses the Egyptian: The Memory of Egypt in Western Monotheism [Cambridge Mass. & London: Harvard University Press, 1997], 2-3 and passim). From that perspective, any concept of translatio sapientiae in an officially monotheistic context must inevitably create tensions.
- See the detailed analysis in Lehmann-Brauns, Weisheit, 21-111; and Giovanni Santinello's chapter on Thomasius in Francesco Bottin, Luciano Malusa, Giuseppe Micheli, Giovanni Santinello & Ilario Tolomio, Models of the History of Philosophy: From Its Origins in the Renaissance to the 'Historia Philosophica', International Archives of the History of Ideas 135: Models of the History of Philosophy I (Dordrecht, Boston & London: 1993), 409-442.
- The standard treatment remains Wilhelm Glawe, Die Hellenisierung des Christentums in der Geschichte der Theologie von Luther bis auf die Gegenwart (Berlin: 1912); and cf. the excellent short discussion of the 'hellenization theorem' in Lehmann-Brauns, Weisheit, 7-20. The term 'hellenization of Christianity' (famous, of course, from its earlier usage by Adolf von Harnack) is extremely problematic, as it reflects the normative theological idea of an originally 'pure' apostolic Christianity infected or contaminated 'from outside' by hellenistic paganism, as emphasized by Glawe himself: 'The typical characteristic of the concept of the hellenization of Christianity [is its] pernicious influence [ihre verderbliche Einwirkung] on the simplicity of the apostolic teaching upon which the church's credo is based' (ibid., 4-5; and cf. his closing remarks on p. 322, according to which the hellenistic 'form' of Christian dogma can be kept separate from its 'content,' so that 'in their innermost essence, the objective truths of the religion of salvation and those of hellenism were so disharmonious, heterogeneous and without any mutual affinity that a syncretism of their

- highest values as a permanent product had to be excluded from the outset'). In a famous essay, Jonathan Z. Smith has demonstrated how precisely this non-historical bias, based upon the Protestant anti-Catholic polemics of the early modern period, has survived as a hidden assumption basic to the mainstream of new testament scholarship and study of ancient religions (Smith, Drudgery Divine: On the Comparison of Early Christianities and the Religions of Late Antiquity (Chicago, 1990) esp. 33-34, 42-46).
- Interestingly, Thomasius seems to have been overlooked by Michael Stausberg in his otherwise extremely thorough and comprehensive Faszination Zarathushtra: Zoroaster und die Europäische Religionsgeschichte der Frühen Neuzeit, 2 Vols. (Berlin & New York: Walter de Gruyter, 1998).
- It is a profound irony that this doctrine, in spite of its undisputable centrality to the anti-apologetic program, is not actually biblical: it was first introduced by Theophilus of Antioch (Apol. ad Autolycum, 2.4).
- 20 Lehmann-Brauns, Weisheit, 187-396.
- 21 See discussion in Lehmann-Brauns, Weisheit, 308-354.
- 22 Christoph August Heumann, Acta philosophorum, das ist, Gründliche Nachrichten aus der Historia Philosophica, nebst beygefügten Urtheilen von denen dahin gehörigen alten und neuen Büchern (1715-1727), facs. Reprint, vol. I parts 1-3 (Thoemmes: Bristol, 1997).
- Concerning the relation between these two, there is reason to suspect that Brucker's dependence on Heumann may have bordered on plagiarism. An eighteenth-century biographer of Brucker, Paul von Stetten, found it hard to understand how Brucker could have created his works in the towns where he was living: 'He lacked the advantages of a rich public library ... and particularly in the beginning, his material circumstances were really not of such a nature that he could have spent much on buying the important works without which he could not do' (Paul von Stetten, Jacob Brucker', Hausleutners Schwäbisches Archiv (Stuttgart, 1788), 281-305: 295, as quoted in Theo Stammen, Jacob Brucker: 'Spuren' einer Biographie', in: Schmidt-Biggemann & Stammen, Jacob Brucker, 74-82: 82). In 1730, at Brucker's request, Heumann had shown extraordinary generosity by sending him extensive manuscripts by himself about the history of philosophy. Brucker had promised Heumann to return these manuscripts within a year's time, and later claimed that he had indeed tried to do so; however, he had entrusted the task to a certain Mr. Stübner in Leipzig, who turned out to be unreliable and had lost the materials! (this painful episode is described by Georg Andreas Cassius, Ausführliche Lebensbeschreibung des um die gelehrte Welt hochverdiente D. Christoph August Heumanns (Kassel: 1768), 386f, quoted in Mario Longo, 'Geistige Anregungen und Quellen der Bruckerschen Historiographie', in: Schmidt-Biggemann & Stammen, Jacob Brucker, 159-186: 176 note 34).
- As shown in meticulous detail by Lehmann-Brauns, the cruel irony was that this very separation ultimately ended up undermining the legitimacy of theology as such, even Protestant theology: without realizing it, the anti-apologists were cutting the tree on whose branches they were sitting themselves, and opened the door for a process towards secularization that went far beyond anything they had ever wished or expected.
- On the sources of the term 'theosophy' in late antiquity, see Jean-Louis Siémons, Théosophia: Aux sources néoplatoniciennes et chrétiennes (Paris: Cariscript, 1988); on 'theosophy' as understood in the early modern period, see Antoine Faivre, 'Christian Theosophy', in: Hanegraaff et al, Dictionary, 258-267. Obviously, this traditional usage has nothing to do with the nineteenth-century Theosophical Society of H.P. Blavatsky.
- 26 Kurze Fragen I, 94-117; Historia I, 102-142.
- 27 Kurze Fragen I, 101-105; Historia I, 116-127.

- 28 Kurze Fragen I, 111; Historia I, 189. As is well known, the Chaldaean Oracles had been attributed to Zoroaster since George Gemistos Plethon in the fifteenth century (see e.g. Stausberg, Faszination Zarathushtra I, 35-93).
- 29 Kurze Fragen I, 160-181; Historia I, 244-305. About the debate on the dating of the Hermetic writings, see Martin Mulsow (ed.), Das Ende des Hermetismus: Historische Kritik und neue Naturphilosophie in der Spätrenaissance. Dokumentation und Analyse der Debatte um die Datierung der hermetischen Schriften von Genebrard bis Casaubon (1567-1614) (Tübingen: Mohr Siebeck, 2002).
- 30 Kurze Fragen I, 345-346, 420; Historia I, 457-458.
- 31 Kurze Fragen III, 427-873; Historia II, 189-462.
- 32 Kurze Fragen III, 506.
- 33 Kurze Fragen III, 431-432; cf. corresponding discussion in Historia II, 192.
- 34 Kurze Fragen III, 506-508; cf. Historia II, 363-367. On melancholy in relation to scholarship and Neoplatonism, see also the chapter by Marieke van den Doel in this book.
- 35 Kurze Fragen III, 520.
- 36 Kurze Fragen III, 521.
- 37 Kurze Fragen III, 574.
- 38 Kurze Fragen IV, 428-466, 622-955; Historia II, 916-1069 ('De philosophia Iudaeorum esoterica, sive cabbalistica').
- 39 Kurze Fragen IV, 428-429.
- 40 Historia IV, 41-61 ('De restauratoribus philosophiae Platonicae'), 353-448 ('De restauratoribus philosophiae Pythagoreo-Platonico-Cabbalisticae').
- 41 Kurze Fragen V, 1410-1419.
- 42 Kurze Fragen V, 1428-1443; Historia IV, 48-55.
- 43 Kurze Fragen V, 1443-1456; Historia IV, 55-60.
- 44 Kurze Fragen VI, 536-537; Historia IV, 357-374.
- 45 Kurze Fragen VI, 573-586; Historia IV, 374-386.
- 46 Kurze Fragen VI, 587-637; Historia IV, 386-421.
- 47 Kurze Fragen VI, 637-655; Historia IV, 422-430.
- 48 Kurze Fragen VI, 678, as part of Brucker's general critical conclusions about the 'pythagorean-platonic-kabbalistic philosophy'; and cf. the corresponding section in Historia IV, 443-448.
- 49 Kurze Fragen VI, 1063-1254; Historia IV, 644-750.
- 50 Kurze Fragen VI, 1064.
- 51 Kurze Fragen VI, 1067-1137; Historia IV, 646-689.
- 52 Kurze Fragen VI, 1138-1144; Historia IV, 689-691.
- 53 Kurze Fragen VI, 1144-1152; Historia IV, 691-695.
- 54 Kurze Fragen VI, 1152-1183; Historia IV, 695-709.
- 55 Kurze Fragen VI, 1183-1210; Historia IV, 709-725.
- 56 Kurze Fragen VI, 1210-1229; Historia IV, 725-735.
- 57 Kurze Fragen VI, 1229-1242; Historia IV, 735-741.
- 58 Kurze Fragen VI, 1242-1254; Historia IV, 741-750.
- 59 Kurze Fragen VI, 1246.
- 60 Ulrich Johannes Schneider, 'Eclecticism and the History of Philosophy', in: Donald R. Kelley (ed.), History and the Disciplines: The Reclassification of Knowledge in Early Modern Europe (Rochester, New York: The University of Rochester Press, 1997), 83-101. The standard work on eclecticism in its various manifestations is Michael Albrecht, Eklektik: Eine Begriffsgeschichte mit Hinweisen auf die Philosophie- und Wissenschaftsgeschichte

- (Stuttgart/Bad Cannstatt: frommann-holzboog, 1994). It is important to recognize that the Enlightenment interpretation of eclecticism (where the historian's own rational judgment becomes the criterion of selection) was a relatively new departure at the time: see Michael Albrecht, 'Thomasius kein Eklektiker?', in: Werner Schneiders (ed.), Christian Thomasius (1655-1728): Interpretationen zu Werk und Wirkung, mit einer Bibliographie der neueren Thomasius-Literatur (Hamburg: Felix Meiners, 1989), 73-94; and Lehmann-Brauns, Weisheit, 313-317.
- 61 Dieterich Tiedemann, Geist der spekulativen Philosophie, 6 vols. (Marburg: Neue Akademische Buchhandlung, 1791-1797).
- 62 Wilhelm Gottlieb Tennemann, Geschichte der Philosophie, 11 vols. (Leipzig: Johann Ambrosius Barth, 1798-1819).
- 63 Christoph August Heumann, 'Von denen Kennzeichen der falschen und unächten Philosophie', Acta Philosophorum 2 (1715), 209-211.
- 64 See Wouter J. Hanegraaff, 'The Dreams of Theology and the Realities of Christianity', in: J. Haers & P. de Mey (eds.), Theology and Conversation: Towards a Relational Theology (Leuven: Peeters, 2003), 709-733.
- 65 See e.g. the notoriously problematic status of alchemy in the history of science. For a short introduction with references to the most important critical studies, see e.g. Lawrence M. Principe, 'Alchemy I: Introduction', in: Wouter J. Hanegraaff (ed.) et al, Dictionary of Gnosis and Western Esotericism (Leiden: Brill, 2005), 12-16. A classic defense of the 'internal' history of science against the one that sees science as 'an irreducibly social and cultural phenomenon' is Mary Hesse, 'Hermeticism and Historiography: An Apology for the Internal History of Science, in: Roger H. Stuewer (ed.), Minnesota Studies in the Philosophy of Science, vol. 5: Historical and Philosophical Perspectives on Science (Minneapolis: University of Minnesota Press, 1970), 134-160.
- 66 See in particular the traditionally controversial status of 'the spiritual in art' among art historians in the wake of critics like Clement Greenberg.
- To get a sense of these various approaches to alchemy and their polemical and apologetic positions, see the currents debate about Lawrence M. Principe's and William R. Newman's 'new historiography of alchemy': William R. Newman & Lawrence M. Principe, 'Alchemy vs. Chemistry: The Etymological Origins of a Historiographical Mistake', Early Science and Medicine 3 (1998), 32-65; idem, 'Some Problems with the Historiography of Alchemy', in: William R. Newman & Anthony Grafton (eds.), Secrets of Nature: Astrology and Alchemy in Early Modern Europe (Cambridge, Mass. & London: The MIT Press, 2001), 385-431; Hereward Tilton, The Quest for the Phoenix: Spiritual Alchemy and Rosicrucianism in the Work of Count Michael Maier (1569-1622) (Berlin & New York: Walter de Gruyter, 2003), 1-34 and 233-256; Brian Vickers, 'The 'New Historiography' and the Limits of Science' (essay review on Newman, Principe and Lauren Kassell), Annals of Science 65:1 (2008), 127-156; William R. Newman, 'Brian Vickers on Alchemy and the Occult: A Response', Perspectives on Science 17:4 (2009), 482-506.

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