THE USE OF LATIN AND THE EUROPEAN REPUBLIC OF LETTERS: CHANGE AND CONTINUITY IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES

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Praefatio

When I was to give my trial lecture for the degree of *Philosophiae Doctor* before a surprisingly crowded auditorium at the University of Tromsø on 31 May 2012, I decided to open my speech on the above topic in a somewhat jokative tone. "Considering the international composition of the committee", I began –

I think there was no one in the audience that raised an eyebrow when it was announced that this trial lecture was to be presented in English. After all, since World War II the English language has established itself as the one and only vehicle for international communication in academia, at least here in Norway. Но если бы коммунисты выиграли холодную войну, я бы, наверное, стоял здесь и говорил по-русски. Wenn ich aber vor dem letzten Weltkrieg diesen Vortrag gehalten hätte, hätte ich, aller Wahrscheinlichkeit nach, Deutsch gesprochen. Par contre, au dix-neuvième siècle la langue française m'aurait servi sans doute comme une alternative similaire, surtout quant à un sujet si continental que l'histoire de l'usage du latin. At, mutatis mutandis, ante quam annum millesimum octingesimum in caerimonia academica huiusmodi sine dubio Latinitate utendum esset.

The joke worked, in the sense that it evoked some laughter from the audience. However, as is often the case, with this joke I also had a serious statement to make. Over the following pages, the lecture will be reprinted nearly exactly as it was presented on that day, the only substantial changes being the addition of references to sources and literature as well as the omission of a few asides occasioned by the powerpoint screen.¹

Exordium

What language scholars find natural and convenient for conveying their message across linguistic boundaries, varies over time. Tradition plays a great role, and so does politics. But not only tradition and politics are relevant factors. The practical need of taking the language skills of one's peers into account is of course crucial as well. If English had not been my first foreign language, but I was fluent in German or French – or Latin or Russian, for that matter – that would not have helped me much today. I would have been forced to stand here and speak

¹ I am indebted to the committee, namely Prof. of History Richard Holt, University of Tromsø; Prof. of History, Rector universitatis László Kontler, Central European University, Budapest; and Associate Prof. of Latin Vibeke Roggen, University of Oslo, for presenting me with this intriguing topic, to which I had merely made fleeting references in my thesis (Aspaas 2012, 34–37, 153–155, 180–181). Special thanks are due to Erlend Hagan, Magnhild Svenheim, Helene Nordgård Andreassen, Marie-Theres Federhofer, Nils Helge Brobakk, and Kari Aga Myklebost. Last, but not least, I acknowledge the subsequent encouragement from several professors – Synnøve des Bouvrie among them – to "get this paper published somewhere". Thanks also to Sigrid Albert and Dirk van Miert for useful comments on this manuscript.

English in any case. Because it is the only feasible solution for a trial lecture before an international audience in Norway in the year 2012.

The history of the use of Latin for purposes like the present one invites reflection on all the three elements mentioned – on tradition, or what French historians would perhaps prefer to call la longue durée; on politics in its widest sense, including both "soft power" and "hard power"; and on the active and passive language skills among the members of the scientific community. The committee has asked me to analyse "The use of Latin and the European Republic of Letters: change and continuity in the seventeenth and eighteenth centuries". I shall do so presently. First I will provide a brief sketch of what the European Republic of Letters was about. Latin's role as a language for scientific communication in the period will then be discussed by way of comparison with other languages. Although it was used quite extensively. Latin was not the *only* language that was used by men of learning during the seventeenth and eighteenth centuries. We therefore need to reflect on its status in relation to other languages such as Italian, French, English, and German. The already mentioned keywords – tradition, politics, and language skills – will be employed in various ways during the course of my lecture. I should stress at the outset, however, that when searching for change and continuity between the year 1600 and the year 1800, I could not bring myself to produce a singular narrative that would render justice to the historical situation in entire Europe. The story looks different depending on what part of Europe we analyse. I have therefore taken the liberty of looking not for "change" and "continuity" in the singular, but rather changes and continuities in the plural. Apart from that, I shall try to respond as best as I can to the challenge from the committee. I begin by describing the European Republic of Letters.

Narratio

The concept of a *Respublica litteraria* (or Republic of Letters, République des Lettres, Gelehrtenrepublik) was born during the Renaissance. "Letters" (*litterae*) here had to do with learning and humanities; with the cultivation of classical authors, both their literary style and their outlook on life. A sense of solidarity developed among proponents of the Renaissance. For instance in the works of the sixteenth-century scholar Erasmus of Rotterdam, one finds vocal expressions of how he feels to be the bearer of a sort of pan-European identity as a "man of letters". Ideally, all men of letters belonged to this Republic of Letters. They worked for the common good; they stepped aside from wars and religious schisms and collaborated on a huge project devoted to the expansion and cultivation of "universal knowledge". Members of the Republic of Letters wrote letters to each other and exchanged their books – in Latin.

Around the year 1600, the so-called Scientific Revolution began. Ancient ideas were questioned and new, empirically based theories put forward. Whereas the humanities were the most important fields of learning during the Renaissance, the natural sciences came to the forefront during the Scientific Revolution. The early seventeenth century was the age of Johannes Kepler, Galileo Galilei, René Descartes, and several others. Later in the same century came the *floruit* of Isaac Newton; at the turn of the century that of the universal genius Gottfried Wilhelm Leibniz. All were cosmopolitan, steeped in Latin as well as other languages, and they all felt that they belonged to a Republic of Letters. The meaning of "letters" had by then shifted towards comprising the natural sciences as much as the humanities, or *belles lettres*. The eighteenth century saw the advent of the Enlightenment (or

² For an excellent introduction to this concept and its implications, see Bots and Waquet 1997.

³ Bots and Waquet 1997, 31–34.

Lumières, Aufklärung, Illuminismo)⁴ – with spearheads such as Voltaire, Montesquieu, and Diderot. The number of "members" of the Republic of Letters had by then grown so large that it was impossible to get an overview of all those who belonged to it. Almost like a nation state in the modern sense, the Republic of Letters was an "imagined community" of men – usually men, at least⁵ – who had a strong sense of solidarity because they shared certain common values. They believed in empirical science, meaning that it should be possible to study "the book of nature" without taking recourse to trancendental forces or biblical allegories. Furthermore, they believed in the universality of knowledge, in the sense that discussion of scientific results and theories should take place across religious, political, cultural, and disciplinary boundaries. They also believed, at least in principle, in some fundamental codes of civility. As a member of the Republic of Letters, you could expect to be received with respect by other men of learning where ever you went in Europe. To put it in perspective: a French soldier that paid a visit to England during the Seven Years War was not necessarily embraced by his fellow British soldiers. By contrast, we know of at least one representative of the Académie des Sciences of Paris, who paid a visit to the Royal Society of London during the same war. This academic was received quite cordially and even made friends for life. 6 "The Sciences Were Never at War", as a famous book title claims. ⁷ In the European Republic of Letters, this was very nearly true.

The nineteenth century witnessed the advent of nationalism; the sciences were increasingly split into disciplines with little or no communication between them. Even the scientific data themselves were often kept secret and put to national service, instead of being shared and discussed with cosmopolitan peers in other countries.⁸

The seventeenth and eighteenth centuries, taken as a whole, are often called the Early Modern Period. "Early Modern" suggests that in this period, several developments took place that hint at what came later. And this brings me finally to the point – the use of Latin. As mentioned, Latin was not the only language of the sciences during this period, but it was used quite extensively and helped binding the members of the Republic of Letters together. With the fragmentation of the Republic of Letters into disciplinary and national communities with scarce solidarity between each other, the days of the Republic of Letters was over. On Table 1, you see some of the clichés which the various centuries of European intellectual history are associated with.

⁴ As Bo Lindberg has pointed out, however, the Latin equivalent, *Illuminismus* is a late coinage. He interprets this as arising from the circumstance that the Enlightenment was predominantly associated with franco- and anglophone philosophers, with Latin playing only a minor role in the discourse (Lindberg 2011).

⁵ Latin, the language of learning *par excellance*, is often depicted as "masculine territory", e.g. Farrell 2000, 52–83; Waquet 2001, 223–226, 250–251; Stroh 2007, 192–194. But see Alenius 1991*a* and 1991*b*; Stevenson 2005, Part IV; des Bouvrie 2006; Göransson 2006 for examples of women that actually managed to acquire a firm command of Latin during the early modern period. See also http://www.uni-mannheim.de/mateo/start6.html for a useful (albeit modest) selection of digitised Latin texts by early-modern women.

⁶ I am thinking of Jérôme de Lalande, a prominent French astronomer who visited England in March–June 1763 (see Fauque 2010).

⁷ De Beer 1960.

⁸ For discussions of how the breakdown of the Republic of Letters came to pass, see Eskildsen 2005 (on Germany); Lipkowitz 2009 (on France and Britain); Widmalm 2010 (on Sweden).

⁹ I describe them as clichés in full awareness that the very notion of a "scientific revolution" has been seriously contested in recent decades. For example, Steven Shapin opens one of his widely read monographs by stating that "There was no such thing as the Scientific Revolution, and this is a book about it" (1996, 1).

1400–1600	1600–1700	1700-1800	1800–1900
Renaissance	Scientific Revolution	Enlightenment	Nationalism
Humanities	Sciences	Sciences	disciplinary split
pan-European	pan-European	pan-European	rivalry, secrecy
Latin	Latin (Italian, French)	French, Latin	German, French, English

TABLE 1 Epochs of the European Republic of Letters

Argumentatio

In Table 1 I argue that the age of scientific Latin was not over and done with until after the year 1800. In order to explain why and how the use of Latin persisted for so long while society and intellectual life in particular saw such fundamental changes, we need to employ a sociolinguistic perspective.

Sociolinguistics is a research field which highlights the relationship between language and society. In this particular case, it is not the Latin language as such that will be described. You will not hear much today about Latin's grammatical or syntactic properties, its lexicon and so forth – instead, I will focus on the *use* of Latin. My first keyword will be *tradition*.

It is often believed that Latin was a specialty of the Catholic Church. While it is true that Protestants argued that the vernacular should be used during masses and that they began translating the Bible in order to help the common people understand the word of God, it is *not* true that there was anything particularly Catholic about the use of Latin within the Republic of Letters. This can be illustrated by the arguably most important Latin text ever written, the "The Ninety-Five Theses on the Power and Efficacy of Indulgencies" that Martin Luther hung on the wall of the Castle Church in Wittenberg in the year 1517. Martinus Lutherus, Johannes Calvinus, and other reformists of the sixteenth century were all bilingual and wrote Latin with ease – Calvin even wrote more works in Latin than in French. The Latin language as such was not under attack. Quite the contrary, the reformists argued that the Latin tradition was important. Accordingly, the status of Latin in Protestant schools of Germany was strengthened, not weakened, in the decades following the Reformation. Although more recent generations have come to associate Latin with the pope and his priests, it was not like that during the early modern period. Latin represented the tradition of universal learning and international communication, regardless of confessional creeds.

But Latin was not only a specialty of the church. It was also a primary language of the University. The curriculum consisted in Latin books everywhere in Europe throughout the early modern period, the oral lectures were predominantly or exclusively in Latin, and university dissertations were a kind of tests of the candidate's fluency in Latin as much as his actual skills in the subject matter that his thesis was about. Considering that most members of the Republic of Letters had attended some institution of higher education, it is not surprising that Latin retained a position as an important language for scientific communication across linguistic boundaries throughout the period covered by my lecture. However, the ancient language also came under increasing attack in the same period. This development can conveniently be analysed according to what sociolinguists call "linguistic domains".

Those who had attended university were not the only ones who were able to read. The tendency was that those with a practical profession, such as merchants, artisans, architects – and women, I should say – related to a literature that was available nearly exclusively in the vernacular. Thus, the astronomer Kepler produced his groundbreaking works in theoretical

¹⁰ Less known today in its Latin original: Disputatio pro declaratione virtutis indulgentiarum.

¹¹ Waquet 2001, 20–21.

astronomy in Latin. Newton did the same with his *Principia*. In contrast, the navigators and captains of ships read their manuals in practical astronomy in the vernacular, without bothering about, or at least not having access to, theoretical discussions concerning the forces of the universe.

It is telling Newton wrote another of his greatest works, his *Opticks*, in English – aimed as it was on a more diverse readership, including instrument makers and amateurs. The tendency was that *scientia* (or theoretical, profound thinking) was in the domain of Latin, whereas the *artes* (practical skills) belonged to the vernaculars. However, already at the outset of the scientific revolution, the boundaries between the two linguistic domains were starting to get blurred.

Following the cultural historian Peter Burke, it should be admitted that "the use of Latin made the gap between elite culture and popular culture wider than it might otherwise have been". Latin was considered high-status and "learned", whereas the vernaculars were low-status and "practical". Representatives of the scientific revolution were well aware of this gap between elite culture and popular culture. We know that Galileo and Descartes self-consciously composed only part of their works in Latin, while writing several of their most important works in Italian or French in order to reach readers who had not attended university. They both perceived that there were mechanics, merchants, leisured dilettants, and others that were likely to profit from learning about the recent discoveries of empirically based, theoretical science. But there was a problem with the vernaculars: in the age of Galileo and Descartes, books in Italian or French would primarily reach local or national audiences; only Latin was truly cosmopolitan and universal. While trying to remedy the gap between elite culture and popular culture, the likes of Galileo and Descartes created a new gap – between natural philosophers in various countries.

Johannes Kepler, who was unable to read Italian, reacted to Galileo's switch from Latin to Italian by arguing that Galileo had commited "a crime against humanity" (*crimen laesae humanitatis*). Humanity here kept a double sense, both the benefits of universal human knowledge and the humanistic code of civility within the Republic of Letters. Kepler was not unique in his fervour against the use of other languages than Latin for scientific texts. But other voices are not hard to find, either. Kepler's contemporary Francis Bacon argued strongly against the exclusive domain of Latin for theoretical works, and he also put this principle into practice by writing primarily in English. One should not forget, however, that the ideas of Galileo, Descartes, and Bacon soon spread throughout Europe all the same – aided by Latin translations. ¹⁴

In the second half of the seventeenth century the first scientific societies and academies were established, as a supplement to the universities. And here the vernaculars were in many cases preferred. You see this principle followed by the *Accademia del Cimento* in Florence, the *Académie des Sciences* in Paris, and the *Royal Society* in London. The idealistic aim of disseminating knowledge to the popular reading public was thus put into practice by the most important scientific societies, whereas the universities continued as before, by lecturing and publishing in Latin.

There is a paradox here. As any specialist on early modern science knows, international recognition and co-operation were vital throughout the seventeenth and eighteenth centuries, and precisely the scientific societies mentioned were highly expedient in this respect. How come they were able to communicate, when the proceedings of the various learned bodies were in different vernaculars? There are various ways in which to answer this question. One trivial point, that all the same should not be forgotten, is that the language that appears on

¹² Burke 1993, 64.

¹³ Quoted after Stroh 2007, 244.

¹⁴ On this little-researched subject, see Waquet 2001, 85–87; Burke 2007 (with references).

print does not always correspond to the language used during the research process. In the early modern period, the international correspondence of academics was to a large extent kept in Latin, despite their use of vernaculars for printed publications. When academics decided to publish in a modern language instead of the ancient tongue, it was not because they found it difficult to read or write Latin. In fact, many men of letters complained that they struggled describing scientific subject matters in anything but Latin. When they nonetheless ended up doing so, it was the result of a deliberate choice. In order to shed light on these choices, we need to employ the next keyword of my lecture, *politics*.

I am anything but a political scientist, nor a historian of politics. So when I use the word politics, it is only in a loose sense where I think primarily of "soft power". If I may use an anachronistic example: the rise of the English language and American popular culture since World War II cannot be explained merely by the Western Powers winning the war, nor by global capitalism or technological supremacy. What is "cool" or attractive has changed, from Paris and Berlin to London and New York. Since both the latter cities are Anglophone and not French- or German-speaking, we have at least part of the explanation why English has gained such a prominent position in science. We do know that Mandarin and Spanish are bigger languages in terms of the number of native speakers, but still we all go with the flow. Such "flows" are detectible in the early modern period as well. A first flow went in favour of Italy.

Sociolinguists have pointed out that both Galilei himself and those of his pupils that founded the *Accademia del Cimento*, had patriotic concerns over and beyond an idealistic wish to disseminate knowledge to their compatriots. They also wished to contribute to the spread of Italian – or rather Florentine – culture beyond the Alps. Thus, when Galilei received a letter – in Italian – from one of his readers in Germany, he answered with joy that the time had come when the use of Latin within the Republic of Letters was to decline and be replaced by the clearer and more apt language of Tuscany. He could only say that thanks to the "soft power" possessed by Italian culture. Italy lay at the heart of the Roman Empire, of course, and everyone could immediately see the similarities between the old and the new language of the Italian soil. However, although Italian gradually became one of the languages that members of the Republic of Letters were supposed to know, it never rose to become *the* all-important language of diplomacy and high culture in general. There were never many books of science that were published in Italian outside Italy. Italian patriots had to cede that position to another inheritor of the Ancient Roman Empire, the French.

France was centralised and turned into an efficient "hard power" far earlier than Italy, of course. But the same could be said about England or Russia in the early modern period. And as to the number of native speakers, Germany had no lesser advantages and even produced vast numbers of excellent scientists throughout the seventeenth and eighteenth centuries. Nonetheless, it was French that eventually gained the upper hand in one linguistic domain after the other. German was an important *regional* language, mastered by a considerable elite in for example the Scandinavian countries and around the Baltic. But widespread competence in German hardly sifted through to Italy, France, and Britain until after the early modern period. Conversely, competence in English remained a passive affair to most persons of learning overseas. Throughout the century of Enlightenment, the only language that was considered *universal* alongside Latin, was French.

I will illustrate the linguistic situation of the Republic of Letters during the Enlightenment by pointing to two scientific societies that gained world-wide recognition during the eighteenth century. I am thinking of the Academy of Sciences in Berlin, established in the year 1700, and the Academy of Sciences in Saint Petersburg, established 25 years later. In

¹⁵ Redondi 1996, 66–67.

terms of influence within the Republic of Letters, they managed to rise to the scale of Paris and London.

The founding father of the Academy of Berlin, the above-mentioned Leibniz, was a main contributor to the first issues of the academy's periodical. They appeared in Latin until the year 1745, when the language switched to French. German was not introduced as a language until the year 1793, and then only alongside the periodical with French proceedings. In a brief preface to the German-language periodical the editors explained that the number of articles that were submitted to the Academy in German had grown to such a high level that the task of translating them proved too laborious. That was why they had decided to allow them to be printed in the original. However, when consulting the publication one immediately notices that this was no ordinary German. It was printed in Latin letters, not the Gothic typeface that was used for most works of popular science. It's as if the academics were embarrassed of their own language, and tried as best as they could to mask it behind a veil of Latinity or Frenchness. French was high-class and courtly, German popular and low-class. Only in the nineteenth century did the German language become associated with enough "soft power" to be used extensively by the best scientists on German soil.

The Academy of Sciences in Saint Petersburg was established in keeping with Peter the Great's scheme for a large-scale modernisation and westernisation of the Russian Empire. Western scientists, predominantly from German-speaking regions, were imported as its professors. In the Russian Academy of Sciences, only a tiny minority spoke Russian – whereas all, including the pioneering patriot Lomonosov, were able to understand German. The working language of the academics was predominantly German. The official proceedings of the Russian Academy of Sciences were in Latin, however. This changed in 1778, when it was announced that contributions would henceforth be printed in either Latin or French, according to the preferences of the contributors.¹⁸

I should stress that the academies of both Berlin and Saint Petersburg also issued various other works, primarily popularisations aimed at a local or national readership. Such popularisations were predominately in German or Russian, while the official proceedings, where the original, cutting-edge contributions were presented, appeared in Latin or French.

The reluctance to use German and Russian for the official proceedings in both Berlin and Saint Petersburg can perhaps partly be explained by concerns for the language skills within the international research community. However, the issue of national sentiments also stood in the way. Latin was, after all, a neutral language. As already pointed out, it was neither a specialty of the Roman Catholic Church nor of the various branches of Protestants – or of the Orthodox Church, of course – Latin was universal. Both the German- and the Russian-

¹⁶ See the Sammlung der deutschen Abhandlungen, welche in der Königlichen Akademie der Wissenschaften zu Berlin vorgelesen worden in den Jahren 1788 und 1789 (published 1793), http://bibliothek.bbaw.de/bibliothek-digital/digitalequellen/schriften/ (e-book available from the webpages of the Berlin-Brandenburgische Akademie der Wissenschaften). On the obverso of the title page it is stated that, "Es sind die Abhandlungen und Vorlesungen der Akademie der Wissenschaften zu Berlin, seit der Wiederherstellung derselben im Jahr 1744. alle in der französischen Sprache gedruckt worden. Da aber die Anzahl der Vorlesungen in deutscher Sprache sich anjetzo häuft, und es schwer fällt, alles in die französische Sprache zu übersetzen; so hat man gut gefunden, nunmehro die Aenderung zu treffen, dass zwey Bände gedruckt werden, einer in der französischen, und der andere in der deutschen Sprache [...]."

¹⁷ See further Norbert Elias' opening chapter of *The Civilizing Process*, "On the Sociogenesis of the Concepts of 'Civilization' and 'Culture'" (2000, 3–43 [1st German edn. 1939]).

¹⁸ Acta Academiae Scientiarum Imperialis Petropolitanae Anni 1777, Tomus Prior (published 1778), iv–v: "Ces mémoires seront écrits aussi bien en françois qu'en latin, selon que les Auteurs les jugeront plus ou moins appropriés aux personnes qui n'entendent pas la langue savante. Enfin on fera précéder chaque volume d'une partie historique, qui sera écrite en langue françoise; cette langue étant aujourd'hui la plus généralement connue." The predecessors were known as the *Commentarii* (since 1750 the *Novi Commentarii*) Academiae Scientiarum Imperialis Petropolitanae.

speaking parts of Europe were ethnically diverse with several co-existing vernaculars. Official use of German might hurt national sentiments. With Latin – and eventually French – no ethnic group was particularly favoured.

To sum up, by the middle of the eighteenth century, French was about to gain the upper hand in almost any kind of cosmopolitan communication. In certain parts of Europe, it was considered as high-class and neutral as Latin. But it also met with resistance.

The English Royal Society, which had done the patriotic choice of issuing its *Philosophical Transactions* in English from its very start in the 1660s, received contributions from all parts of the world. Like any other scientific society, its correspondence with foreign men of learning was at least partly kept in French. In order to follow the latest developments in continental science, its members must have been able to read French. However, whenever an article was submitted in French, it would appear in the *Philosophical Transactions* in English translation. Latin articles were, by contrast, as a rule printed in the original, only with an English title added. ¹⁹

The same "language policy" was followed, by the way, by the *Académie des Sciences* in Paris. Its proceedings recorded the scientific activities of its full members and presented their lectures in print. A supplementary journal, devoted to contributions from its corresponding members, was also issued with a French title. No contributions in English were included, but you do find a considerable percentage of Latin articles in this journal throughout the eighteenth century. The examples of London and Paris illustrate that Latin came with a neutral flavour, it had no strings of confessional creeds or political power attached to it. As all these changes in the use of languages for international, scientific publications took place – Latin remained a language that mosts high-ranking scientists knew, thanks to the continuing use of Latin in schools and universities.

Recent research has put into question the predominant view that the strong tradition of Latin in elite schools and universities stood against scientific progress. Even the supposed gap between "Latin culture" and "popular culture" has been questioned.

The Swedish historian of ideas Bo Lindberg has discussed this in his book *Europa och latinet*. He argues that

Through Latin instruction, gifted schoolboys from poor homes received the possibility to display their talents. [...] Thanks to its "logical character", that is, because the Latin language mustered certain purely intellectual qualities, it rendered pupils more or less equal. To pupils that were bright, but lacked a rich cultural capital in their homes in the form of homework assistance, cultivated dinner conversations, pianos, books on the shelves, etc., Latin offered a sort of racetrack in which they could more easily excel than in other subject areas where one's background was more likely to be of impact. In this sense, Latin can be considered *democratic*. (Lindberg 1993, 116 [my emphasis])²¹

¹⁹ See the *Philosophical Transactions of the Royal Society of London* (issued from 1665 onwards).

²⁰ See the Mémoires de mathématique et de physique, présentés à l'Académie royale des sciences, par divers sçavans, & lûs dans ses assemblées (issued 1750–1786).

²¹ My translation from the Swedish: "Begåvade skolpojkar från fattiga hem fick genom latinundervisningen tillfälle att visa sin förmåga. [...] Genom sin 'logiska karaktär', alltså att det engagerar renodlat intellektuella kvaliteter, gör det utgångsförutsättningarna för eleverna ganska lika. För elever med goda förståndsgåvor men med ringa kulturellt kapital i sin hemmiljö i form av läxhjälp, kultiverad middagskonversation, piano, böcker i hyllorna m.m. har latinet erbjudit en vädjobana, där de kunnat göra sig bättre gällande än i andra ämnen där bakgrundsmiljön lättare ger utslag. Så till vida kan latinet vara demokratiskt [...]."

According to Lindberg, Latin should not be seen as a means for the elite to exclude the common people, quite the contrary in fact. If you were good at Latin and some other subject such as mathematics, you could be allowed to climb the social ladder and become integrated in the European Republic of Letters. A late example of this could be Carl Friedrich Gauss, one of the most influential and innovative mathematicians of the early nineteenth century. Born in 1777 as the son of very poor parents, Gauss was discovered and promoted by his teachers to rise to the rank of professor. Thanks to his proficiency in Latin, his works were read all over Europe. Further examples like that are not hard to find. Any botanist is made immediately aware of the heritage of Carl von Linné, or Carolus Linnaeus. The continuing use of Latin in the nomenclature for plants and other wildlife takes its rise from the fact that Linnaeus published all his major works in Latin. His main rival, the French natural historian Comte de Buffon, disagreed with Linné's Systema Naturae. But the francophone Buffon lost, whereas the Latin-speaking Swede won. The naming of plants are nowadays regulated by an "International Code for the Naming of Algae, Fungi and Plants". Whereas nearly all features of this Code have been disputed and many revisions been made since it was established in 1905, to my knowledge no-one has ever suggested to replace the Latin nomenclature with a French or English one. 22 While scientific theories and methods change, in the symbolically important baptising of species that are new to science, the tradition of Latin persists, thanks to the neutral and perhaps even slightly exalted flavour of the old language of the European Republic of Letters.

Historians tend to read history backwards. The very tag "early modern" has more than a hint of teleology in it. It is all too easy to forget what we should forget when reading the sources of the past. Only now is it obvious that the rhetoric against Latin as a supposedly old and anti-progressive language would win in the end. That English would one day come out victorious, was something no one had the faintest idea about. I should like to illustrate this situation by briefly sketching the history of an essay competition that was announced by the Academy of Berlin in the year 1782.²³ The Academy asked – in French – "What is it that has turned the French language into the universal language of Europe? Where does French merit this privilege, and may one assume that it will retain it?"²⁴ The essay that won the price argued that the French had gained their cultural supremacy thanks to "le goût" (or "good taste") instead of military force, and that the French language was likely to retain and even strengthen its position in the future. For "he who reigns by opinion, is hardly in need of another sort of empire", the winner of the competition argued (in French, of course). 25 Little did the essayist know about how the French Revolution and the ensuing Revolutionary and Napoleonic Wars would cause a backlash in the common opinion of French as a "tasty" or neutral language.

Finally, I return to the issue of language skills. During the renaissance, Latin was the only language every person of learning across Europe could be expected to know. The use of vernaculars for scientific texts was only in its infancy when Scientific Revolution broke loose. During the Eighteenth Century, French and Latin were used widely for international communication in science. However, for all the supremacy of French culture, it was hardly

²² The magisterial introduction to this technical form of Latin is still Stearn 1992 (1st edn. 1966); see also the brief summary of Stearn's argument by Jonsell 2000. It should be noted, however, that the long tradition of requiring all publications of new botanical taxa to be accompanied by a Latin description or *diagnosis* in order to be considered valid, was broken with the latest amendment of the Code in 2011 (see http://www.iapttaxon.org/nomen/main.php ["Melbourne Code"], article 39.2).

²³ In describing the history of this essay competition, I rely entirely upon the study of Jochen Schlobach (1989).

²⁴ Translated from Schlobach 1989, 341: "Qu'est-ce qui a fait de la Langue française la langue universelle de l'Europe? Par où mérite-t-elle cette prérogative? Peut-on présumer qu'elle le conserve?"

²⁵ Antoine Rivarol's price essay *De l'universalité de la langue française*, as quoted by Schlobach 1989, 349–350: "Quand on règne par l'opinion, a-t-on besoin d'un autre empire?"

the case that all the results of cutting-edge research were published in that language during the Enlightenment. A passive knowledge – that is, a reading capability – in other languages was necessary as well.

An unexpected expression of this realisation is found in the introduction to the epoch-making *Encyclopédie* edited by Diderot and d'Alembert. In collaboration with the best experts of their generation they produced a multi-volume work that assembled articles on the latest advances in any branch of the sciences and the arts. Needless to say, all the articles were in French. But in the preface to the first volume of the *Encyclopédie* (published in 1751), d'Alembert admits that the current linguistic situation in the Republic of Letters had gone completely out of hand:

When our language [viz. French] spread throughout Europe, we believed the time had come for it to occupy the place of Latin, which had been the language for scholars since the rebirth of the sciences. [...] I must confess that a certain problem arouse out of this which could have been foreseen. The scholars of other nations followed our example, for they rightly thought that they would be better able to write in their own language than in ours. The English imitated us and the German empire also began to use its mother tongue; they were soon followed by the Swedes, the Danes and the Russians. In this manner, a *philosophe* who wishes to improve his mind as his predecessors did must learn seven or eight languages; and having devoted the best part of his life to doing this, he dies without having had the chance to set about the real business of self-improvement. The use of Latin that we so derided is highly expedient in the works of *philosophes*; its clarity and precision are of great benefit to those who stand in need of a universal language. (Quoted after Balázs 1997, 210)²⁶

Without a common language in which to communicate the latest developments of scientific knowledge production, the decline and fall of the Republic of Letters seemed imminent. But perhaps there existed some sort of "middle road" between a complete fragmentation and a complete restoration of the Republic of Letters? One of those who responded to the essay competition of the Berlin Academy actually argued that monoglottism in science was about to cause stagnation. Germans were likely to be more innovative, he argued, whereas the French would be left in a backwater since they were so rarely forced to speak or read any other language but their own. Their lazyness would make them introspective and less capable of viewing scientific problems from different angles. The monoglott French would loose, the polyglott Germans would benefit from this situation, he predicted.²⁷

The French original (d'Alembert 1751, xxx) reads: "Notre Langue étant répandue par toute l'Europe, nous avons crû qu'il étoit tems de la substituer à la Langue latine, qui depuis la renaissance des Lettres étoit celle de nos Savans. [...] il résulte de-là un inconvénient que nous aurions bien dû prévoir. Les Savans des autres nations à qui nous avons donné l'exemple, ont crû avec raison qu'ils écriroient encore mieux dans leur Langue que dans la nôtre. L'Angleterre nous a donc imité; l'Allemagne, où le Latin sembloit s'être refugié, commence insensiblement à en perdre l'usage: je ne doute pas qu'elle ne soit bien-tôt suivie par les Suédois, les Danois, & les Russiens. Ainsi, avant la fin du dix-huitieme siecle, un Philosophe qui voudra s'instruire à fond des découvertes de ses prédécesseurs, sera contraint de charger sa mémoire de sept à huit Langues differentes; & après avoir consumé à les apprendre le tems le plus précieux de sa vie, il mourra avant de commencer à s'instruire. L'usage de la Langue Latine, dont nous avons fait voir le ridicule dans les matieres de goût, ne pourroit être que très-utile dans les Ouvrages de Philosophie, dont la clarté & la précision doivent faire tout le mérite, & qui n'ont besoin que d'une Langue universelle & de convention." The translation found in Balázs' book is obviously not entirely accurate. Moreover, it refers to page xi, instead of the correct xxx.

²⁷ Johann Georg Büsch, Über die Frage: Gewinnt ein Volk in Absicht auf seine Aufklärung dabei, wenn seine Sprache zur Universal-Sprache wird? (Berlin, 1787) as summarised by Schlobach 1989, 353–354.

Peroratio

The use of Latin within the European Republic of Letters saw some fundamental changes during the early modern period. In the field of science, Latin came under pressure by the rise of an increasing number of vernaculars in the two hundred years that are commonly known as the early modern period. Use of vernaculars was often expressly patriotic and utilitarian. But despite the apparent decline, there are also some important continuities. The persisting use of Latin at universities all over Europe represents one such continuity. The neutral and nonconfessional "image" of the Latin language also persisted throughout the early modern period. If I may make an allusion to Edward Gibbon's classic work on The History of the Decline and Fall of the Roman Empire, those who have described "The History of the Decline and Fall of the Latin Language" tend to disagree, depending on their geographical point of view, their selection of sources, and disciplinary affiliation. Scholars who approach the history from a predominantly French, Italian, or British point of view, will tend to pin-point the "Fall of Latin" to an earlier date than those who write from a German, Nordic, or Central-European perspective.²⁸ Their national histories are so fundamentally different. Classical scholars that have made it their specialty to study Latin texts from this period will also disagree to such historiography.²⁹

I have taken the liberty of looking for changes and continuities, instead of trying to conjure up a uniform history of the use of Latin within the European Republic of Letters. After all, Europe was never one thing, but split into various political and cultural entities where the forces of history have unfolded themselves in different ways.

The patriotic use of Italian in the seventeenth century led to a certain spread of passive knowledge in that language, although it never rose to become a universal language of the sciences. Still in the latter half of the eighteenth century, scholars based in Italy, such as Roger Joseph Boscovich or Luigi Galvani, used Latin in order to reach international audiences.

The patriotic use of French was more successful, aided by the rise of French hard power as well as soft power. By the middle of the eighteenth century, world-famous intellectuals such as Voltaire, Diderot, and others were never forced to use any other language than French except for solemn occasions such as doctoral dissertations. All the same, the spearheads of the French Enlightenment read Latin with ease and found it easier to accept on print than for example English.

The rise of French as an international language never obliterated the use of Latin. Famous cosmopolitan societies of science, such as the Academies of Berlin and Saint Petersburg, still used Latin and started issuing French proceedings rather late in the eighteenth century. Even more conspicuous than their embracement of French, however, is the reluctance of both Saint Petersburg and Berlin to use German. The rise of German as an international language of science had to await the nineteenth century.

²⁸ Well-informed but strikingly dissimilar narratives can be found in for example Lindberg 1993, 102–113; Blair 1996; Waquet 2001, esp. 121–123; Ostler 2007, 292–301; Stroh 2007, 228–248.

²⁹ One prominent Neo-Latinist, Hans Helander has described the era of chief interest to his discipline as stretching from c. 1400–c. 1800 (Helander 2001; 2004). See, however, IJsewijn 1990 and Eichenseer 1999 for examples of Latinists that would like to stretch the Neo-Latin period right up to the present day. There are indeed several enterprises that seem to disprove the death of Latin in the contemporary world. One might point to the existence of a Finland-based broadcast service known as the *Nuntii Latini* with its web forum for discussion of contemporary issues in Latin (see the article by Reijo Pitkäranta elsewhere in this volume); to Latin periodicals such as the *Vox Latina* (as of 2014 running in its fiftieth year); or to the *Academia Latinitati Fovendae*, which organises scholarly conferences and produces publications in nothing but Latin. Latin may no longer be mastered by the majority of scientists and scholars, but still it is thriving as a means of communication in certain circles. How should this contemporary usage be characterised, if not as Neo-Latin, then perhaps *Post-Latin?*

It has been said that "a language is a dialect with an army and navy". ³⁰ But despite its lack of support from any kind of hard power, Latin was slow to die. In the words of the Latinist Hans Helander of Uppsala University, Latin texts

were produced by the same forces that created Early Modern Europe: the rise of the nation state, the geographical discoveries, the Protestant movement, the Counter-Reformation, the scientific revolution. Latin was the vehicle of all the new ideas, beliefs and insights generated by these processes [...]. Nevertheless, it is remarkable that many learned scholars today are not aware of the existence of this huge treasury. (Helander 2001, 8–9, repeated in Helander 2004, 14–15)

In the latter half of the eighteenth century, French seemed poised to take over the entire World of Learning and become the "new Latin". English has by and large accomplished that feat today. However, if we learn only this one language, we might run the risk of intellectual stagnation. I should like to dedicate this trial lecture to those academic role models that, over the years, have convinced me that in our studies of early modern science monoglottism is a dangerous and undesirable thing. A polyglott history requires polyglott perspectives. I end my lecture in the way I started it, by saying, спосибо большой, vielen Dank, merci beaucoup, et gratias plurimas pro patientia vestra.

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³⁰ Allegedly first expressed in Yiddish by a listener to one of Max Weinreich's lectures in the 1940s: "A shprakh iz a dialekt mit an armey un flot" (cf. e.g. Edwards 2009, 43).

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Summarium Latinum

De usu linguae Latinae deque Re publica litteraria Europaea: De permutatione et constantiā saeculis 17° et 18°. Symbola haec, praelectio auctoris ad gradum doctoralem obtinendum, brevem historiam usūs linguae Latinae inter homines doctos praebet. Saecula 17^{um} et 18^{um} aetates eversionis scientificae et illuminismi fuisse constat. Res publica litteraria tum floruit. Subauditur autem 'communitas' quaedam 'imaginativa' (ut verbo Benedicti Anderson utar), qua novae scientiae asseclae coniungerentur. In limitibus confessionalibus, civilibus, politicis transgrediendis lingua Latina modo peculiari homines doctos adiuvabat. Textus enim Latinus non solum eruditionem, sed etiam neutralitatem quampiam significabat. Ut usus, ut comprehensio internationalis diversarum vernacularum linguarum crevit, ita sine invidia exterorum nec lingua Italica nec Francogallica nec Anglica nec Theodisca accipiebantur. Definitionem illam saepe laudatam 'linguam dialectum cum classe armisque comitatam esse' transgrediens Latinitas solā 'vi' ut ita dicam 'molli' comitata persistere potuit. Processus, quo finis huius status factus est, non unus et idem erat.

Italica lingua, qua Galilei et academici Florentini usi sunt, successum nationalem sive regionalem magis quam internationalem obtinuit. Anglica lingua, a Societate Regia Londiniensi culta, licet pluribus doctis comprehensibilis, tamen raro apud exteros adhibebatur. Francogallica lingua, cui inter alios Academia Regia Scientiarum Parisina et encyclopaedistae favebant, praesertim sub fine saeculi duodevicesimi integram rem publicam litterariam mox superatura esse videbatur. Theodisca lingua, quam intellegendam multi docti regionum Septentrionalium et Orientalium Europae capaces erant, vulgaritatem sive barbariem redolebat. Latinam linguam, victimam nationalismi, democratisationis, saecularisationis, breviter modernitatis Europaeae, vehiculum et obstetricem etiam fuisse eiusdem modernitatis in mente tenere oportet.

Summarium Anglicum

This article, which is the author's trial lecture for the degree of Philosophiae Doctor, offers a brief history of the use of Latin among men of learning. The seventeenth and eighteenth centuries are known as the periods of Scientific Revolution and Enlightenment, respectively.

In the same timespan the Republic of Letters flourished, a word which connoted a kind of 'imagined community' (in Benedict Anderson's words) which bound together the supporters of the new science. In transgressing confessional, civil, and ideological boundaries Latin offered a peculiar kind of assistance. A text in Latin would signify not merely erudition, but also some sort of neutrality. However much the active use and the passive ability to understand various vernacular languages rose internationally, neither Italian, French, English, or German was received without mixed feelings. Escaping the famous definition of a language as 'a dialect with an army and a navy', Latinity proved capable of persisting by means of 'soft power' alone. The processes which led to the end of this state of affairs were not one and the same.

Italian, which Galilei and the academicians of Florence used, achieved national or regional, rather than international, success. English, cultivated by the Royal Society of London, was undoubtedly comprehensible to many learned, but it was used rarely abroad nevertheless. French, having the Académie Royale des Sciences and the encyclopédistes among its supporters, especially towards the end of the eighteenth century seemed poised to take over the Republic of Letters. German, read by many men of learning in Nordic and Eastern parts of Europe, reeked of vulgarity or even barbarism. That Latin, the victim of nationalism, democratisation, and secularisation, in brief, of European modernity, also served as a vehicle and a midwife for that very same modernity is a lesson well worth bearing in mind.

Verba clavicularia

Early Modern Period, Europe, Neo-Latin, Sociolinguistics, Scientific Latin, History of Science, International Communication.