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# The 'province' of the Dutch Republic in the international Republic of Letters

MANUEL LLANO and DIRK VAN MIERT\*

#### 1. THE 'TRANSNATIONALISM' OF THE DUTCH LEARNED WORLD

One of the victims of nationalist historiography has been the intrinsically transnational culture of learning that was so vibrant in the United Provinces that this country was deemed a focal point of the international world of scholarship and science already in the early modern period. The history of the Republic of Letters promises to offer a fruitful alternative to nation-based history, precisely because of its apparent transnationalism, the mobility of its citizens and the internationalism of the early modern book trade. But whereas there is consensus that the United Provinces were a major scene in the Republic of Letters, the extent to which this learned culture here was 'international' remains to be established. Speaking of 'extent' suggests that the question at stake is of a quantitative nature. Accordingly, in this article we will attempt to quantify the Dutch learned world's 'international' orientation and practices by focusing on the geography of the epistolary communication. Before turning to our quantitative methodology and its results, we will first rehearse the state of affairs in the historiography of the Dutch province of the Republic of Letters.

# 2. HISTORIOGRAPHY ON THE NETHERLANDS AS A PART OF THE REPUBLIC OF LETTERS

Historiography of the Republic of Letters, traditionally assigns the Dutch Republic a major role. It was, after all, the Dutchman Erasmus, born in Rotterdam, who made the Republic of Letters famous throughout Europe in

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the sixteenth century. It is also in the Dutch Golden Age that one of the major historians of the Republic of Letters, Hans Bots, locates the heyday of the Republic of Letters, although he also assigns a counterbalancing role for France.<sup>1</sup>

The internationalism of the learned world within the Dutch Republic has been confirmed and celebrated, time and again. Heinz Schneppen in 1960 listed the numerous students from German territories who enrolled at Dutch institutions of higher education in the seventeenth century.<sup>2</sup> Willem Frijhoff in his dissertation showed that many Dutch students received doctorates abroad,3 while Cornelia Ridderikhoff for an earlier period demonstrated the thriving of Dutch-born communities in France through her editions of the archives of the Germanic nation in Orléans.<sup>4</sup> Daniela Prögler and Esther Mijers showed that the universities of the Dutch Republic remained attractive to English and Scottish students throughout the century.<sup>5</sup> Not only the students but also the professors were recruited from abroad. In Leiden, the Dutch professors were a minority, especially in the first decade after its establishment, although the balance gradually shifted in the course of the seventeenth century, with the Germans taking over the French minority position and people from the southern Netherlands disappearing. Ronald Sluijter has shown that before 1600, 41% of the professors at Leiden University originated from northern Dutch soil, a figure that grew to 62% towards the end of the seventeenth

<sup>&</sup>lt;sup>1</sup> Hans Bots, *De Republiek der Letteren* (Tilburg: Vantilt, 2018). For another recently published European perspective, see Marc Fumaroli, *La République des lettres* (Paris: Éditions Gallimard, 2015 [= *The Republic of Letters*, trans. by Lara Vergnaud (New Haven: Yale University Press, 2018)]).

<sup>&</sup>lt;sup>2</sup> Heinz Schneppen, *Niederländische Universitäten und deutsches Geistesleben* (Münster: Aschendorffsche Verlagsbuchhandlung, 1960).

<sup>&</sup>lt;sup>3</sup> Willem Th. M. Frijhoff, *La Société néerlandaise et ses gradués, 1575–1814* (Amsterdam: APA-Holland University Press, 1981).

<sup>&</sup>lt;sup>4</sup> Cornelia M. Ridderikhoff, Hilde De Ridder-Symoens, Detlef Illmer and Chris L. Heesakkers, *Les Livres des procurateurs de la nation germanique de l'ancienne Université d'Orléans, 1444–1602*, 4 vols. (Leiden: Brill, 1971–2015).

<sup>&</sup>lt;sup>5</sup> Daniela Prögler, English Students at Leiden University, 1575–1650: 'Advancing your abilities in learning and bettering your understanding of the world and state affairs' (Farnham: Ashgate Publishing Limited, 2013); Esther Mijers, 'News from the Republick of Letters': Scottish Students, Charles Mackie and the United Provinces, 1650–1750 (Leiden and Boston: Brill, 2012). See also Hilde De Ridder-Symoens and John M. Fletcher (eds.), Academic Relations between the Low Countries and the British Isles 1450–1700: Proceedings of the First Conference of Belgian, British and Dutch Historians of Universities held in Ghent, September 30-October 2 1987 (Ghent: s.n., 1989).

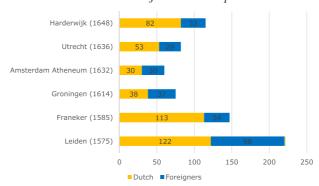


Fig. 1 Ratio of foreign and Dutch-born professors appointed between the foundation of each institution and  $1750^7$ 

century. At first, 30% came from the southern Low Countries, a share that was taken over by German professors a hundred years later (in the second half of the seventeenth century, one quarter of the professors were of German origin). A tally of the entries in the *alba academica* of Groningen, Leiden, Utrecht and Amsterdam yields the following accumulative picture (in actual numbers) (Fig. 1):

Studies of international student traffic have been facilitated by the enrolment archives of universities, which have been kept or even published.<sup>8</sup> Correspondence, published or not, has supplied additional material for close reading.<sup>9</sup> Intense polemics, carried out in pamphlets and correspondence, both published and unpublished, highlight the transnational orientation of the Dutch religious-political arena, for example in relation to England.<sup>10</sup>

<sup>&</sup>lt;sup>6</sup> Ronald Sluijter, "Tot ciraet, vermeerderinge ende heerlyckmaeckinge der universiteyt': Bestuur, instellingen, personeel en financiën van de Leidse universiteit, 1575–1812 (Hilversum: Verloren, 2004), 156.

<sup>&</sup>lt;sup>7</sup> Data obtained through combined queries in the following digital catalogi professorum: Leiden: https://hoogleraren.leidenuniv.nl/, Utrecht: https://profs.library.uu.nl/index.php/info/about, Groningen: https://hoogleraren.ub.rug.nl/, Athenaeum Illustre: http://www.albumacademicum.uva.nl/cgi/b/bib/bib-idx?c=ap;lang=nl;tpl=history-nl.tpl (all accessed 30 September 2018). The data for Franeker University were extracted from W. B. S. Boele, Frieslands Hoogeschool en het Rijks Athenaeum te Franeker, Vols. 2-3 (Leeuwarden: Kuipers, 1878-1889), and for Harderwijk from Hans Bots et al. (eds.), Het Gelders Athene: Bijdragen tot de geschiedenis van de Gelderse universiteit in Harderwijk (1648–1811) (Hilversum: Verloren, 2000), 209–29.

<sup>&</sup>lt;sup>8</sup> Martine Zoeteman, De studentenpopulatie van de Leidse universiteit, 1575–1812: Een volk op zyn Siams gekleet eenige mylen van Den Haag woonende' (Leiden: Leiden University Press, 2011), 252–89.

<sup>&</sup>lt;sup>9</sup> Maarten Ultee, 'The Place of the Dutch Republic in the Republic of Letters of the Late Seventeenth Century', *Dutch Crossing: A Journal of Low Countries Studies*, 31 (1987), 58.

Steven C. A. Pincus, Protestantism and Patriotism: Ideologies and the Making of English Foreign Policy, 1650–1668 (Cambridge: Cambridge University Press, 1996). Helmer J. Helmers, The Royalist Republic: Literature, Politics, and Religion in the Anglo-Dutch Public Sphere, 1639–1660 (Cambridge: Cambridge University Press, 2015), 30, 55, 59–61 and passim, argues there was something of an 'Anglo-Scoto-Dutch public sphere' from the 1630s onwards. Although Helmers sees this sphere as vernacular, Jan Waszink extends it to comprise Latin discourses; see Jan Waszink, 'The Praelium Nuportanum by Isaac Dorislaus: Anglo-Dutch Relations and Strategic Historiography', History of European Ideas, 42 (2016), 1005–26.

# 3. CORRESPONDENCES AND SOCIAL NETWORK ANALYSIS

Besides close reading, correspondence also offers an interesting source for studying learned transnationalism from a quantitative perspective. The metadata of letters (sender, recipient, location, address, date, language) allow us to chart the extent to which learned culture was non-Dutch in terms of language and geographical reach, and how this changed over time. Thus, networks are not understood as a metaphor for interpersonal relations and coteries, but as a formal device to quantify said relations.

Formal social network analysis (SNA), a methodology developed in the field of sociology, is not new to history. During the early 1990s, John Padgett undertook a series of classic studies on the rise to power of the Medici family in Florence, quantifying and analysing the business and marriage ties of the different Florentine families. New historical studies featuring SNA have appeared ever since, facilitated by the surge in digital humanities and the appearance of accessible GUIs (graphical user interfaces) and peer-reviewed tutorials, forming a trend that materialized with the foundation of the *Journal of Historical Network Research* in 2017. <sup>11</sup>

Letters and other forms of communication have been a common subject for quantification and network analysis. Robert Mandrou analysed scholarly correspondence as early as the 1970s, and some contemporary case studies include those by Robert Hatch, Vladimir Urbánek and Ingeborg van Vugt, to mention only a few. <sup>12</sup> Most of these studies approach the notion of a network through qualitative lenses, and their quantification is generally restricted to categorical metadata. This is why Ruth and Sebastian Ahnert's study of the Marian Protestant networks in the Tudor letters stands out for their use of measurements of formal SNA, such as 'betweenness' and 'eigenvector centrality' (a measurement that is suited to study how nodes are influenced by other nodes). They created a dataset of 795 social ties and 377 individuals, based on extracting reported contacts by close-reading 289 letters and adding these social connections to the letter exchange. However, methodology appropriation is not without risks, and many insightful SNA measurements that are often applied in complete, or nearly-complete, datasets of other disciplines

<sup>&</sup>lt;sup>11</sup> For a comprehensive and up-to-date bibliography of network-focused historical research, see the Historical Network Research site's bibliography: http://historicalnetworkresearch.org/bibliography/ (accessed 30 September 2018). An example of commonly used GUIs are Gephi and UCInet. A widely popular, peer-reviewed site for tutorials is *The Programming Historian* https://programminghistorian.org/ (accessed 30 September 2018).

<sup>12</sup> Robert Mandrou, Des humanistes aux hommes de sciences, XVIe et XVIIe siècles (Paris: Seuil, 1973); Robert E. Hatch, 'Between Erudition and Science: The Archive and Correspondence Network of Ismaël Bouillau', in Michael Hunter (ed.), The Formation and Exchange of Ideas in Seventeenth-Century Europe (Woodbridge: The Boydell Press, 1998), 49–72; Vladimír Urbánek, 'Comenius, the Unity of Brethren, and Correspondence Networks', Journal of Moravian History, 14 (2014), 30–50; and Ingeborg van Vugt, 'Using Multi-Layered Networks to Disclose Books in the Republic of Letters', Journal of Historical Network Research, 1 (2017), 25–51.

are not easily applicable for historical sources, as they warn. <sup>13</sup> This caveat applies *a fortiori* to our own dataset; while considerably larger in size, it does not take into consideration any other links than those warranted by the letters themselves, and not their remarks on reported contacts. In this sense, measurements designed to be meaningful for whole networks cannot be applied successfully to our dataset. Another aspect that is worth pondering before we dive into our own analysis, is the role of language in relation to political boundaries in the international learned community.

#### 4. THE ROLE OF LANGUAGE

The ideas of internationalism and transnationalism cannot be adopted as an analytical category before we look at what 'nationalism' would mean, or, less problematically, how to define 'Dutch Republic'. There are geographical boundaries to this Republic, and there is a legal-political system in place, that integrates villages, cities, provinces, but also parishes, classes and churches. But 'Dutch' is also the name of a language (*nederduytsch*, i.e. Low Dutch, Low German or Low Saxon, to be more precise).

Discussions about what makes nation states need not be reiterated here, but it is important to single out the role of language. Benedict Anderson attaches crucial importance to the role of language in the formation of collective identities that transcend the urban domain. For Anderson, the decline of Latin and the rise of a vernacular 'literature' (in the sense of fiction and not as 'learning', science or scholarship) went hand-in-hand in fostering a patriotic identity. We can see notions of such patriotism at work in the Republic of Letters itself, or at least in a subsection of the Republic of Letters that self-identified emphatically in religious terms. The Remonstrants of the second half of the seventeenth century, for example, employed Dutch to stimulate a group-identity. First, they set out to gather and publish testimonies and histories of major citizens of the Republic of Letters who played key-roles in the religious tensions that drove much of the polemics and scholarly engagements in the first half of the century: in 1660, the Remonstrants Christianus Hartsoeker and Philippus van Limborch published a huge collection of 'ecclesiastical and theological letters of outstanding and erudite men': 961 folios of letters, all in Latin. 15 Subsequently, the collection was translated into Dutch two years later

<sup>&</sup>lt;sup>13</sup> Ruth Ahnert and Sebastian E. Ahnert, 'Protestant Letter Networks in the Reign of Mary I: A Quantitative Approach', *ELH*, 82 (2015), 5–6. They call their method Quantitative Network Analysis (QNA) and define 'betweenness' thus: "For any two nodes in a network, there is a shortest path. Betweenness tells us how many times shortest paths go through a given node. It tells us how [...] important they are in connecting other people", see http://www.culturesofknowledge.org/?page\_id=4593 (accessed 13 November 2018).

<sup>&</sup>lt;sup>14</sup> Benedict Anderson, Imagined Communities: Reflections on the Origin and Spread of Nationalism (London: Verso, 1983), 18–19.

<sup>&</sup>lt;sup>15</sup> Christianus Hartsoeker and Philippus van Limborch (eds.), Praestantium ac eruditorum virorum epistolae ecclesiasticae et theologicae varii argumenti (Amsterdam: Henricus Dendrinus, <sup>1</sup>1660; expanded 2nd edn.: Amsterdam: Henricus Wetstenius, 1684 (645 letters); Amsterdam: Franciscus Halma, <sup>3</sup>1704).

– according to the editor because 'most inhabitants of our Netherlands' had no Latin and thus 'our language-companions and countrymen' were barred from the useful contents. <sup>16</sup> Conversely, the use of languages other than national ones would suggest a weakening of those ties. In the case of Latin, a language which was no country's 'own', the question cannot be seen in a competitive perspective between two categories operating on the same aggregation level, but requires a more hierarchical approach. Latin is more easily domesticated due to its political neutrality and its transcendence of religious divides. <sup>17</sup>

It is customarily stated that in the course of the seventeenth century, Latin gave way to French as a language for international communication. Yet, this might only apply to certain domains such as the United Provinces. <sup>18</sup> And even there, the use of a particular language should not be taken in an absolute, uncontextualized way, but could still be a marker of a certain type of exchange. Diplomacy, for example, switched sooner to French or Dutch than scholarship, but poets were bound to have used the vernacular with fewer reservations than classical scholars. Women used the vernacular more often than men (relatively at least). <sup>19</sup>

It is a fact that major scholarly authors residing in the United Provinces continued to use Latin: the extant correspondence of such figures as Gerard Vossius, Caspar Barlaeus and Daniel Heinsius are almost exclusively in Latin. But whereas Nicolaas Heinsius wrote to Pierre Dupuy in Latin, Dupuy consistently answered in French.<sup>20</sup> Isaac Casaubon's correspondence is almost exclusively in Latin, but Joseph Justus Scaliger's is for one-third in French. Gijsbert Cuper wrote his first letters to Bayle in Latin, but switched to French 'as their friendship ripened', suggesting a growing intimacy (Fig. 2).<sup>21</sup>

Latin and French were both languages of international communication, and together they were dominant in the epistolary corpus. Curiously, within this selection of Dutch correspondence, the vast majority of letters sent and received were written not in Dutch but in two other languages. This raises the question to what extent it is useful to speak of 'Dutch' in denoting this part of the Republic of Letters. The adjective should certainly be seen as a political (i.e. geographical) and not as a linguistic parameter.

Within the Republic of Letters, Franco-Dutch relations and Anglo-Dutch relations were strong during the long seventeenth century. French and people of French origin were omnipresent. Huguenot scholars held considerable

<sup>&</sup>lt;sup>16</sup> Cited after Ultee, 'The Place of the Dutch Republic in the Republic of Letters', 59–60.

<sup>&</sup>lt;sup>17</sup> The association of Latin and the medieval (hence Catholic) Church is largely due to liturgy, but ignores the fact that both Protestant and Catholic traditions employed Latin in almost all scholarly writings.

<sup>&</sup>lt;sup>18</sup> Peter Burke, Languages and Communities in Early Modern Europe (Cambridge: Cambridge University Press, 2004), 86.

<sup>&</sup>lt;sup>19</sup> Dirk van Miert, 'Language and Communication in the Republic of Letters: The Uses of Latin and French in the Correspondence of Joseph Scaliger', Bibliothèque d'Humanisme et Renaissance, 72 (2010), 7–34.

<sup>&</sup>lt;sup>20</sup> Hans Bots, Correspondance de Jacques Dupuy et de Nicolas Heinsius (1646-1656) ('s-Gravenhage: Nijhoff, 1971), ix-x, 6.

<sup>&</sup>lt;sup>21</sup> Ultee, 'The Place of the Dutch Republic in the Republic of Letters', 62.

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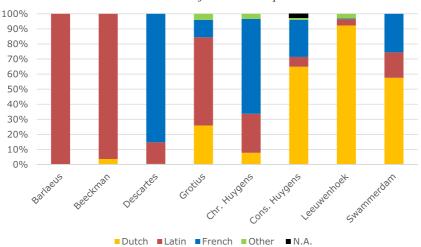


Fig. 2 Language use percentages in the ePistolarium correspondence<sup>22</sup>

sway over intellectual life in the United Provinces from the end of the sixteenth century onwards, with figures such as Joseph Justus Scaliger, André Rivet, Claude Saumaise, Jean LeClerc and Pierre Bayle. Even the Roman Catholic René Descartes could float on the Francophone intellectual culture of the Dutch Republic, in which scholars like Constantijn Huygens were as fluent in French as in Latin.

Far less integrated into learned institutions such as the illustrious schools and the universities were people with an English background. English Protestants could return to their country after their studies in the United Provinces, but French Protestants had fewer possibilities to repatriate. Still, the example of Samuel Hartlib's circle shows precisely how important the United Provinces were in the Republic of Letters: John Dury, Lady Ranelagh, Robert Boyle, Benjamin Worsley, Samuel Hartlib, the Du Moulin family and the brothers Gerard and Arnold Boate often visited the United Provinces to collect intellectual news.<sup>23</sup> Displaced Germans formed the core of Hartlib's network of intelligencers in Amsterdam, which comprised Caspar Streso, Johann Rulice, Godofried Hotton, Louis de Geer and Johann Morriaen.<sup>24</sup>

To sum up, we cannot assume that if scholars use French or Latin in their letters, they were corresponding with people abroad. The adjective 'Dutch'

<sup>&</sup>lt;sup>22</sup> Huygens ING, ePistolarium, at: http://ckcc.huygens.knaw.nl/?page\_id=43 (accessed 30 September 2018).

<sup>&</sup>lt;sup>23</sup> Carol Pal, Republic of Women: Rethinking the Republic of Letters in the Seventeenth Century (Cambridge: Cambridge University Press, 2012), 123.

<sup>&</sup>lt;sup>24</sup> Robin Buning, 'A Circle and Its Centres: A Glimpse into the Structure of the Hartlib Circle', Paper presented at the workshop "The Practise of Scholarly Communication", Institute of Philosophy, Academy of Sciences of the Czech Republic (18 September 2014).

in this study refers not to a language but to a country of residence. It is well known that scholars in this country were part of a dynamic transregional world of learning, but how transnational, really, was their communication?

#### 5. METHOD OF ESTABLISHING OUR DATA SET

We propose to measure and compare the strength of foreign relations by analysing correspondence traffic. We use epistolary exchanges as approximations of social networks, but it is important to keep in mind that a strong link between people who live close to one another and have frequent interaction on a day-to-day basis disappears in an epistolary network. Some of the void might be compensated for by integrating other sources in further research: alba amicorum (friendship books) can be described with the same basic metadata as a letter (two names linked at a particular date), but place these in the same room, instead of in separate cities. Entries in alba amicorum function, we suggest, as 'inverted letters': theoretically, they fill in some gaps in the epistolary network, and point at the perceived importance of some individuals. Serial sources such as alba promotorum or immatriculation lists, likewise place people in a the same place at the same time, and bear witness to sustained relations between pupils of the same institution and between professors and doctoral candidates. Other sources are conceivable as well: all texts that place people together, e.g. through co-citation, would ideally have to be integrated. However, we are currently not yet at the point in which such integration is possible, and we have to work with a set of data that is not entirely accidental, but not systematically collected either from archives and libraries' (manuscript) holdings.

We have compiled a scholarly correspondence dataset based on the seventeenth-century United Provinces from different sources. The main selection criterion has been whether one of the correspondents was Dutch or developed the most significant part of his or her career in the United Provinces, and that the overall sample is representative of this milieu. Within these parameters, we have selected canonical members of the Republic of Letters, who wielded considerable influence in scholarly and scientific circles, such as Hugo Grotius, Constantijn Huygens, René Descartes and Christiaan Huygens. The first two were partly influential due to their political and administrative positions, which reflect the intertwining of scholarship and diplomacy that was characteristic of the early modern world of learning. Interestingly, our analysis shows that the Huygens' epistolary network was slightly more Dutch-oriented, and the Grotius' one slightly more foreign, although the distribution of domestic/foreign contacts is still quite even in both cases. Their 'diplomatic' outlook does not skew the dataset into more foreign-oriented results. Descartes and Christiaan Huygens were widely quoted by members of the Republic of Letters as, respectively, a philosopher and a scientist. We

have balanced their position with two major figures in the world of scholarship, Gerard Vossius and Isaac Vossius (father and son, like the Huygens, Constantijn and Christaan). To balance the influence of the Latin philological world of Caspar Barlaeus and Petrus Scriverius, we have added the correspondence of Anthoni van Leeuwenhoek and Jan Swammerdam to account for vernacular scientists with a less humanistic profile. We have taken care to add Anna Maria van Schurman to include scholars involved in theological and biblical discussions. Added to these giants, we inserted two printers/publishers (Reinier Leers and Petrus Rabus), as well as antiquarians (Arnoldus Buchelius and Franciscus Junius F. F.), a philosopher (Isaac Beeckman), a historian (Johannes Isacus Pontanus), an extremely well-connected middle-ofthe road philologist (Theodorus Janssonius van Almeloveen) and a journalist (Henri Basnage de Beauval). To even out the preponderance of ego networks (i.e. single author networks, in social network analysis the focal node of a correspondence), we have also used the scholarly letters held by the Bodleian Library, which contain correspondents who by chance or merit made it into the archives of a major scholarly library. Some of these are lesser gods, to prevent this picture from having mere 'big names'. The assemblage of these correspondents give, in our view, a well-balanced and representative cross-section of the Republic of Letters throughout the long Dutch seventeenth-century. Our dataset excludes the complete correspondence of major scholars, who featured only in so far they communicated with the aforementioned persons such as Justus Lipsius, Carolus Clusius, Philippus Lansbergen, Nicolaus Mulerius, André Rivet, Daniel Heinsius, Pieter Cornelisz. Hooft, Gisbertus Voetius, Franco Burgersdijk, Johannes de Laet, Andreas Colvius, Johannes Fredericus Gronovius, Johannes Georgius Graevius, Claude Saumaise, Nicolaus Heinsius, Benedictus Spinoza, Pierre Bayle, Jean LeClerc and Herman Boerhaave. Together they consist of perhaps between twenty and thirty thousand surviving letters. Therefore, these scholars and scientists as well as lesser known ones, appear as correspondents within the networks of others only and not as correspondents in their own right. In addition, obscure correspondents cannot be identified with certainty in our dataset, and thus might appear duplicated in our dataset. A detailed inventory of the data sources is provided as an appendix.

A more detailed consideration of the dataset provides insight into the way in which we have negotiated potential bias. The gross number of letters is 36,969. However, since they have been collected from different sources, there are many duplicate entries referring to the same letter. After deduplication, the net number of letters was reduced to 32,374. Never before has an epistolary dataset of this magnitude been used for a quantitative analysis of an aspect of the Dutch Golden Age. We estimate to have captured about one third of the available metadata of learned letters in this period and location. To give an indication: the *Catalogus Epistularum Neerlandicarum*, which list *all* 

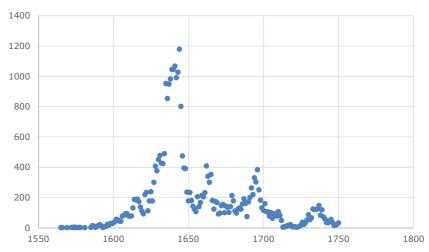


Fig. 3 Number of letters per year

letters available in the eleven most important archives in the Netherlands, counts at least 155 thousand (plus several hundred boxes of uncatalogued) individual letters for the entire early modern period, including the first half of the sixteenth and latter half of the eighteenth century that fall beyond the scope of this article. For the purposes of this article, all the letters either sent to or from unknown correspondents have been eliminated, as well as those of which the year of sending could not be established with sufficient certainty, for the purpose of periodization. After performing these operations, the resulting dataset amounts to a total of 31,392 letters. Although our analysis disregards chronological patterns, it is worth mapping the chronological distribution of our dataset to trace potential bias (Fig. 3).

The core and peaking point, as can be easily appreciated in the chart, is located between 1630–1650. To establish if this is due to an inconsistency in the dataset, we need to explain the causes of this peak.

First, it might be argued that the dataset fails to fairly represent the scholarly community of the seventeenth-century Dutch Republic. The dataset is an aggregation of modern letter editions built around central figures such as Hugo Grotius and Constantijn Huygens, whose prolific correspondence tilt the balance toward the mid-century. Notwithstanding, there are some attenuating conditions. The sheer size of the dataset and the high level of interconnectedness of scholars counterbalance the tendency toward over-representing the main figures, giving depth to the many scholars featured in different catalogues. Equally relevant is the inclusion of a collection of letters without a person-based compilation criterion, the Bodleian Card Catalogue, which lists all the epistolary holdings of this institution. Furthermore, the peak in

letter-traffic shown in the chart in our view reflects not so much an overrepresentation of two important letter-writers, but indicates an actual increase in traffic driven by politico-religious crises in the Anglo-Franco-Dutch realm. The historical conjunction of the influence of the Thirty Years' War and the English Civil War, the economic and cultural rise of the Dutch Republic, and the activity of the Bohemian court in the Hague necessitated an intense letter-traffic. This rise in communication is reflected by an independent source for the same period and country. In the publication record of pamphlets in P.C. Knuttel's famous catalogue of Dutch pamphlets there is a similar spike for the 1640s. <sup>25</sup>

As is the case with any quantitative analysis of historical sources, only surviving letters (and lost ones about which we have sufficient information) have been taken into consideration. In this sense, this dataset is representative of the surviving sources, but not necessarily of the actual correspondence traffic in the period. However, the fact that some letters were preserved and others did not survive is not an altogether random process. If arguably not necessarily representative of the real state of affairs, this dataset is at worst indicative of what the leading scholars of the time and their successors in the process of canon formation deemed worthy of being preserved and publicized. There is, for example, only one woman in our dataset, and it might be true that the level of international contact shows a distribution that follows gendered patterns. Although this would be an interesting avenue for research, in this article we focus not on differences in patterns between types of scholars. Compared to men, we know of relatively few learned women, and one out of twenty in our corpus is a female correspondence. That said, women such as Amalia van Solms, Beatrix de Cusance, Elisabeth of the Palatinate and Maria van Reigersberch, to name but a few female correspondents in our set, are represented as 'alters' (in social network analysis, alters are the nodes to whom a focal node ('ego') is directly connected) in the networks of Constantijn Huygens, Descartes and Grotius. We do not expect that the ratio of domestic/international contact in their correspondence patterns would show a significantly different pattern from that of the men in our set, but even if this could be confirmed by a separate investigation, this is not the aim of the present article.<sup>26</sup>

The dataset that we have compiled for the seventeenth-century Dutch Republic is unprecedented and therefore more objective than general

<sup>&</sup>lt;sup>25</sup> W. P. C. Knuttel, Catalogus van de pamfletten-verzameling berustende in de Koninklijke Bibliotheek, 9 vols. in 10 ('s-Gravenhage: Algemene Landsdrukkerij, 1889–1920). The Knuttel collection is available at the Dutch Pamphlets website (https://brill.com/view/db/dupo). See Matthijs van Otegem, 'Tijd, snelheid, afstand: De mechanica van het pamflet', De zeventiende eeuw, 17 (2001), 57.

<sup>&</sup>lt;sup>26</sup> Pal, *Republic of Women*, studies seven learned women (Anna Maria van Schurman, Princess Elisabeth of the Palatinate, Marie de Gournay, Marie du Moulin, Dorothy Moore, Bathsua Makin and Katherine Jones, Lady Ranelagh) who constituted a network that was both Dutch and very transnational. The most active of these, Schurman, is included in our dataset and so is Elisabeth (as an alter – i.e. correspondent – of Van Schurman and Descartes), as well as the others (as alters of Van Schurman).

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Table 1 Ranking of cities by total number of letters

City	Sent	Received	Total
The Hague	5554	6321	11875
Paris	5272	4348	9620
Amsterdam	2629	1433	4054
Leiden	1939	1395	3334
London	645	739	1384
Utrecht	829	286	1115
Stockholm	267	149	1006
Hamburg	369	285	655
Dordrecht	332	284	616
Rotterdam	398	176	574

impressions based on non-quantified erudition or on extrapolations from a limited number of well-known and much-studied correspondents such as Grotius, Constantijn Huygens and Gerard Vossius. Such general impressions suffer more dramatically from the same representation problem of the archival bias. This brings us to the actual method we employed.

# 6. METHOD OF RESEARCH AND RESULTS

When considering the standing of foreign elements in Dutch intellectual life, the first step is to establish an intellectual topology of learned exchanges. Two preliminary measurements that should be considered are the places of sending and the address of letters. Out of the total of 31,392 letters, 21,615 have both a known place of sending and reception, and 6,130 have only a place of sending. In other words, we know with certainty 78.6% of all places of sending and reception. There are in total 600 different locations, but we know that only 100 of these figure more than ten times as places of sending or as an address. In fact, the vast majority of the letters were written from or to the following ten cities (Table 1).

The four cities ranking highest, The Hague, Paris, Amsterdam and Leiden, maintain their order regardless of whether we arrange them by sent, received or total letters. This corroborates the historiographical consensus based on years of close-reading, such as that of Hans Bots, that these cities were important in Dutch intellectual life: the political and economic capitals, the main university town and one of the centres of European learning. The importance of these places in the dataset is largely due to the locations of Grotius, Constantijn and Christiaan Huygens, but these people were in these cities not

<sup>&</sup>lt;sup>27</sup> Bots, De Republiek der Letteren, 138, 161, and 164.

by chance: like other scholars and diplomats, they gravitated to the political centres. It would therefore be interesting to see what position these centres of learning took in the ego networks of geographically peripheral but extremely well connected and active scholarly letter writers/correspondents such as Gisbertus Cuper (Deventer) or Nicolas-Claude Fabri de Peiresc (Aix-en-Provence). Perhaps more surprising is the relative importance of Stockholm. The popularity of that city is due to Grotius, who acted in Paris as ambassador for Sweden and later to the exchanges of Queen Christina with intellectuals in the Netherlands, including Descartes and Isaac Vossius, who had spent time at her court in Stockholm. Indeed, when examining the national background of the correspondents, it becomes apparent that the presence of Swedes in the correspondence networks is substantially weaker than the high position of Stockholm would suggest.<sup>28</sup> Yet it does underscore the important role that Christina's court played in the seventeenth-century Dutch Republic of Letters. We expect that the networks of Nicolaus Heinsius and Claude Saumaise, if added, would replicate this pattern.

Our dataset encompasses over 3,500 correspondents. Only 300 of these sent and/or received more than a total of ten letters, which can be considered a reasonable touchstone for an established epistolary exchange. We have visualized these exchanges in Figure 2. The correspondents have been colour-coded according to their national-linguistic background and the ties between them are weighted according to the total number of letters. If both correspondents share a common background, the link between them will appear in the same colour; otherwise, it is displayed as a mixture (Fig. 4).

The pie chart (Fig. 5) shows that roughly half of the correspondents are Dutch and half foreign, with French and Germans as the most common interlocutors. The dataset was compiled with the Dutch Republic as a guiding criterion, hence the preponderance of Dutch scholars. Yet in order to grasp the nature of these exchanges, a straightforward tally has less analytical or explicative value than a relational account. Correspondence by definition relies on two parties. Thus taking elements in isolation somewhat misrepresents these exchanges. To account for these relations, we will explore their dyadic nature using some approaches of SNA.

First of all we must make clear that our dataset is not suitable for studying 'whole networks', the kind of approach which comes readily to mind when thinking about SNA. After all, numerous dyadic ties are missing and conceivably also correspondents. There is no way to estimate which ties and

<sup>&</sup>lt;sup>28</sup> On the intellectual relations between Sweden and the Low Countries in this period, Wrangel's classic account is still a point of reference: Ewert H.G. Wrangel, *De betrekkingen tusschen Zweden en de Nederlanden op het gebied van de letteren en wetenschap voornamelijk gedurende de zeventiende eeuw* (Leiden: Brill, 1901). For the integration of Sweden into the Anglo-Dutch range of the Hartlib Circle, see Carl Wennerlind, 'The Political Economy of Sweden's Age of Greatness: Johan Risingh and the Hartlib Circle', in Philipp Robinson Rössner (ed.), *Economic Growth and the Origins of Modern Political Economy: Economic Reasons of State, 1500–2000* (New York, NY; Abingdon, Oxon: Routledge, 2016), 156–85.

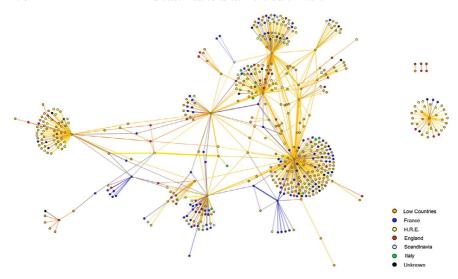


Fig. 4 Correspondence visualization, colour-coded by nationality of the correspondents (filtered to ties of  $\geq 10$  letters)

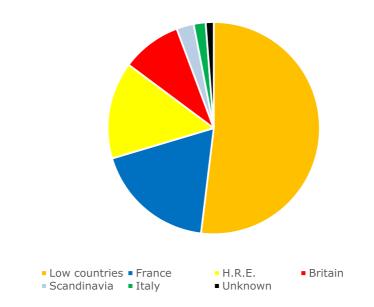


Fig. 5 Correspondents by socio-geographical background (filtered to ties of ≥10 letters)

correspondents are absent from our dataset, either structurally or numerically, making data imputation unviable. Thus, any measurement relying on the network as a whole would be close to meaningless.

Yet this circumstance does not mean we cannot apply social network analysis to the dataset in a fruitful way. It is important to distinguish at this point between whole networks and ego-centred networks. Two succinct accounts of ego-centred networks are given by Wasserman and Faust, and by Borgatti, Everett and Johnson. <sup>29</sup> Briefly put, whole networks contain all the ties between actors – and indeed all the actors. Even if some data are missing, their nature, dimensions and structural position can be established with sufficient certainty. Ego-centred networks, for their part, are composed of a series of focal actors, or egos, and their direct ties to a set of ancillary actors, or alters, who are determined by these interactions with the ego. This limits the network to the first neighbourhood of the egos. Ideally, the connections between alters would also be known, although this is not essential for every calculation. However, we need to compromise between strict SNA methodology and the kind of data commonly available. Alternatively, we have to reckon with the particular nature of the phenomenon to be studied, the research design, and a desire for parsimony when studying methodological issues.

Due to its compilation process, our dataset contains the complete extant correspondence of twenty figures who are representative of and relevant for the intellectual life of the seventeenth-century Dutch Republic. In effect, their individual correspondences are interlocking ego networks, as can be appreciated in the following visualisation, where the selected egos are tagged and depicted in yellow, and their ego networks in red. The actors that have previously been taken into consideration, but are left aside for this part of the analysis, appear in blue. To make the data more manageable and to be able to discriminate between occasional and consolidated exchanges, we established as a threshold exchanges of 10 or more letters either way, which we consider as the lowest benchmark for *commercium litterarium*, in the sense previously described (Fig. 6).

While incomplete catalogues and catalogues that are not centred around one person provide additional information on the correspondence of the alters, we will not focus here on the connections between them, but rather on the question of whether these ego networks are overall homophilic or exophilic, namely, whether they have similar characteristics or not. In answering this question, it suffices to have the direct correspondence of the egos.

By homophily, we refer to the tendency of actors to engage with others who have similar attributes. In other words, it is the measure of social connectedness of demographically similar actors in a web of interactions (exophily referring to the opposite trend). In our case, we will study whether our sample of twenty egos (eighteen Dutch scholars and two Frenchmen based in the Dutch Republic) shows a clear homophilic tendency to write to scholars of the same

<sup>&</sup>lt;sup>29</sup> Stanley Wasserman and Katherine L.M. Faust, Social Network Analysis: Methods and Applications (Cambridge: Cambridge University Press, 2009 [1994]) and Stephen P. Borgatti, Martin G. Everett and Jeffrey C. Johnson, Analyzing Social Networks, 2nd edn. (Los Angeles: Sage, 2018).

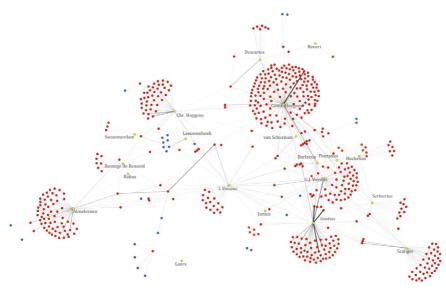


Fig. 6 Ego-centred networks (filtered to ≥10 letters ties; Yellow = egos, Red = ego networks (alters), Blue = ignored)

geo-linguistic background. In order to measure homophily, we resorted to the E-I index proposed in the classic paper by Krackhardt and Stern on the strength of organizations with exogenous ties to resist crisis situations:<sup>30</sup>

$$EI\ index = \frac{External\ links - internal\ links}{External\ links + internal\ links}$$

This creates a correlation coefficient spanning from -1.0 (all links are internal, indicating absolute homophily), to +1.0 (all links are external, absolute exophily). The E-I index allows us to compare in the same scale our twenty discrete ego networks and establish a general tendency. One obvious shortcoming of this measurement is that it cannot shed any light on the homophily itself, only its intensity. According to its source, two variants of homophily can be conceptually distinguished: contextual and intentional. A contextual structure might favour homophily by restricting the possibility of interaction between actors with different attributes: if there are fewer chances to engage with actors with dissimilar attributes, homophily does not necessarily denote a personal preference towards those who are similar, but neither can this preference be excluded. On the other hand, homophily can be an active preference of actors: they might prefer to interact with people having the same

<sup>&</sup>lt;sup>30</sup> David Krackhardt and Robert N. Stern, 'Informal Networks and Organizational Crises: An Experimental Simulation', Social Psychology Quarterly, 51 (1988) 127.

characteristics and avoid those who do not, even if they have the chance to interact with different people.

In order to distinguish whether homophily is structural or voluntary, it might be argued that a similar measurement is more suitable: the coefficient of association, commonly known as Yule's Q. This coefficient takes into consideration the total population, that is, all the possible addressees, not only the actual ones. In this way, the personal choice of actors to reach out to some, but not others can be bracketed. The E-I index fails to take this into consideration, since it focuses only on the actual ties. Yule's Q can be formulated as follows:

 $Yule's \ Q = \frac{(Internal\ links \times unrealised\ external\ links) - (external\ links \times unrealised\ internal\ links)}{(Internal\ links \times unrealised\ external\ links) + (external\ links \times unrealised\ internal\ links)}$ 

Like the E-I index, Yule's Q creates a comparable scale. However, this coefficient of association requires whole network data to settle on the number of non-realized but possible connections and therefore cannot be used for our particular case. This is not only due to the absence of data: even under the ideal circumstance that all data would be available, the problem arises of how to conceptualize the population in a study of seventeenth-century scholarly communication.

One straightforward answer would be that all the scholars with an overlapping *floruit* who engaged in epistolary exchanges with Dutch scholars, or scholars living in the Dutch Republic, form the potential but unrealized pool of correspondents - for whatever reason. But this notion hardly saves us from our predicament, since it relies on the exchanges that actually happened, making the tacit assumption that one could have only reached out to an extraneous scholar if and only if the person in question had actual contact with another correspondent based in the Dutch Republic. In a word, it equates the realm of fact and possibility. To circumvent this, we could extend the population to encompass any person active in an area reachable by contemporary post, with a working knowledge of Latin or French. But now our population is so large that it is conceivable that not everyone in this group could be a potential correspondent for an average scholar; perhaps they could never have possibly heard of this person, or have common acquaintances. Thus, the coefficient of association cannot be meaningfully applied to our subject, not because of missing data, but due to an irresolvable conceptual problem. Let us leave aside for the time being the matter of whether a homophilic tendency is induced or intentional, and move on to actual homophily by applying Krackhardt's E-I index to our sample.

<sup>&</sup>lt;sup>31</sup> Borgatti, Everett and Johnson, *Analyzing Social Networks*, 318, adopted for SNA the coefficient, first postulated in G. Udny Yule, 'On the Association of Attributes in Statistics: With Illustrations from the Material of the Childhood Society, etc.' *Philosophical Transactions of the Royal Society of London* (A), 194 (1900), 257–319.

Table 2 E-I index ranking for a sample of twenty ego networks

	E-I index	Total number of letters
Pieter Rabus, 1660–1702	-1	30
Henricus Reneri, 1593–1639	-1	63
Caspar Barlaeus, 1584–1648	-0.88	777
Arnold Buchelius, 1565–1641	-0.83	489
J.I. Pontanus, 1571–1639	-0.54	359
Franciscus Junius, 1591–1677	-0.43	213
Petrus Scriverius, 1570–1660	-0.33	523
Constantijn Huygens, 1596–1687	-0.18	7396
G.J. Vossius, 1577–1649	-0.18	3518
T.J. van Almeloveen, 1657–1712	-0.08	3077
René Descartes, 1596–1650	-0.07	672
Isaac Vossius, 1618–1689	0.05	1373
Antonie van Leeuwenhoek, 1632–1723	0.09	283
Hugo Grotius, 1583-1645	0.13	7674
Henri Basnage de Beauval, 1656–1710	0.23	327
Anna Maria van Schurman, 1607–1678	0.33	234
Christiaan Huygens, 1629–1695	0.35	2514
Jan Swammerdam, 1637–1680	0.6	155
Isaac Beeckman, 1588–1637	1	28
Reinier Leers, 1654–1714	1	190

In Table 2, the number 0 indicates a neutral ratio between Dutch and foreign connections (non-French in the case of Descartes and Basnage de Beauval): if the E-I index is 0, there is a 50/50 equilibrium between Dutch and foreign connections, i.e. there are as many Dutch as there are foreign contacts in the ego network.

The correlation between absolute homophily (Rabus and Reneri, who seem to correspond exclusively with other Dutch scholars) and absolute exophily (Beeckman and Leers, who appear to ignore Dutch contacts altogether) and a relatively low number of letters immediately leaps to the eye. Even in the case of Leers, the most complete of these catalogues, there are only two correspondents with ten or more letters either way, Thomas Smith, a fellow English bookseller, and Nicolas Clément, a French librarian. This is indicative that the extant number of letters is insufficiently representative of the actual correspondence of these actors. Thus, both the two lowest and highest results can be ignored. The E-I index average of the remaining actors is -0.08. This

indicates a very slight general homophilic tendency, but in effect a balance between foreign and domestic epistolary connections. There is no correlation between the number of letters of each catalogue and the degree of homophily. Nor is there any indication that 'nationality' itself plays a role, since the two Frenchmen scored on the different sides of the spectrum.

Network studies generally argue for a universal correlation, and indeed, causation, between physical proximity and the formation of social ties, which is often referred to as the propinguity effect. This phenomenon has been thoroughly studied and documented in the social sciences. Leon Festinger's work on friendship ties is commonly presented as the seminal study of the connection between geographical proximity and social links, and the literature on the subject is ever increasing.<sup>32</sup> Bearing in mind the importance of physical proximity as social glue, the seemingly neutral ratio of foreign and domestic ties is remarkable. A possible objection would be to point out that scholars would not resort to correspondence to interact with their peers living in the same city: their interactions remain largely undocumented, whereas they might be more intensive than their epistolary exchanges with people living in another city. While this is true, the busy inter-Republic traffic of letters is evidence of how Dutch scholars also corresponded frequently amongst themselves. So whereas contact between co-citizens may go unnoticed in our dataset, inter-city contact does not. The insight that co-citizenship causes gaps in the epistolary datasets is not new, but hitherto it has never been measured and quantitatively confirmed without the risk of encountering the heuristic problem of availability. 'Proximity' can therefore still be tested as an inductive factor, but only on the level of the province or the Dutch Republic. Since we have not attributed data yet about provincial origins, our data suggest that living in the same country is not significantly more conducive to striking up an epistolary conversation than living in separate countries.

Even if we consider the level of cities, as we pointed out above, we must realize that foreign scholars were a strong presence in Dutch universities, and that many of the undocumented personal dealings on the level of the city were between Dutch and foreigners. In any case, what is noteworthy is not that so many letters were sent to foreign correspondents, but rather that these relations were established and maintained in a situation in which there were considerably fewer chances of having personal contact. (In contrast, scholars in the Dutch Republic were remarkably mobile due to the excellent transport connections between the learned capitals of Amsterdam, Leiden and The Hague, and hence would frequently see each other in person, even when residing in different cities). Proximity between cities does create a social setting that enhances the formation of ties that are materialized in

<sup>&</sup>lt;sup>32</sup> Leon Festinger, Stanley Schachter, Kurt W. Back and Catherine Bauer, Social Pressures in Informal Groups: A Study of Human Factors in Housing (New York: Harper, <sup>3</sup>1989; <sup>1</sup>1950); Graham A. Allan, Friendship: Developing a Sociological Perspective (Boulder: Westview, 1989).

letter-exchanges. The fact that this favourable setting had no apparent influence on the domestic/foreign orientation of epistolary exchange, suggests that seeking out foreigners was more likely to have been intentional rather than structurally induced, even if is this is impossible to quantify.

### 7. CONCLUSION

In sum, while the strong presence of foreigners in Dutch higher education and the use of Latin and French blurs the idea of a demarcated Dutch high culture, the fact that foreigners residing both within the United Provinces and abroad have such weight on the scholarly correspondence networks confirms the impression of intellectual historians that the Dutch area of learned communication during the seventeenth century was continuous with the international Republic of Letters, if we regard the epistolary communication of people who are typically regarded as members of the Republic of Letters. This conclusion is important for two reasons.

First of all, it has never been established in a quantitative manner that this equilibrium between domestic and foreign contact existed. Hitherto it has always been an intuition based on extensive reading and experience with the intellectual-historical record. Historians of the Republic of Letters, in particular, have never before engaged in a quantitative analysis of learned epistolary material on the level of an entire country. They have been held back by doubts about the representatitivity of the material available. Moreover, as historians of the Republic of Letters, we are still in the early stages of familiarizing ourselves with the ways in which we can apply valid formal network analysis. Never before have such large numbers of learned letters been taken into account, for establishing a dataset involves a great deal of painstaking manual cleaning and standardizing of metadata. Moreover, this is the first thorough consideration of the ways in which the collection and availability of learned letters concerning the Dutch Republic might or might not skew the representativity of the dataset. This article shows that the idea of a continuum in the intellectual communication systems between the seventeenth-century Dutch Republic and other nations is not an ideological construct of modern scholars seeking confirmation of the cosmopolitan ideals of eighteenth-century theorists of the Republic of Letters by projecting these back onto the preceding century (not to mention projecting their own internationalist ideals on the Dutch Golden Age).

Second, we have outlined a method that can be replicated. We can now move beyond assumptions which, however much based on impressive familiarity and long standing reading experience with the data set, have never managed to reach an objective measure. We have presented not a bird's eye but a satellite photo that can zoom in and out. This means we do not have to remain trapped in fundamental discussions about the representativeness of the

datasets that are at our disposal. This opens the door to a future comparison with other geo-political entities, such as France or the Holy Roman Empire, and with other ages, such as the sixteenth or the eighteenth centuries, to quantitatively assess whether lack of insularity was the rule or, as it is commonly argued, the exception. In other words, we can start to study whether (and when and where) there were regional 'provinces' in the Republic of Letters, and compare their levels of insularity. Furthermore, the analysis presented here opens up the question when and where other types of communities are identifiable in the Republic of Letters, for example grouped around certain fields of knowledge or scholarly programs. Such research, however, must be based on the contents of the letters and we are still a long way from adding all those data in a standardized way to the metadata of the letters presented above.

**Utrecht University** 

# **APPENDIX**

# 1. DATA SOURCES

The gross number of letters before deduplication and removal of unknown correspondents and undated letters is indicated between brackets for each source. Total letters (gross 36,969; net 32,374; De Groot dataset 31,392)

ePistolarium, Huygens ING

The *ePistolarium* (http://ckcc.huygens.knaw.nl/) is a digital edition of the correspondence of the following individuals:

Hugo Grotius (8,034)

Constantijn Huygens (7,297)

Christiaan Huygens (3,090)

René Descartes (727)

Caspar van Baarle (505)

Antoni van Leeuwenhoek (282)

Jan Swammerdam (172)

Dirck Rembrantsz. van Nierop (80)

Isaac Beeckman (28)

Early Modern Letters Online, Oxford University

Buning, Robin (ed.), 'The Correspondence of Isaac Vossius', in *Early Modern Letters Online*, Cultures of Knowledge, http://emlo-portal.bodleian.ox.ac.uk/collections/?catalogue=isaac-vossius, (1,702).

Lewis, Miranda and Kim McLean-Fiander (eds.), 'Bodleian card catalogue' in *Early Modern Letters Online*, Cultures of Knowledge, http://emloportal.bodleian.ox.ac.uk/collections/?catalogue=bodleian-card-catalogue

The Bodleian card catalogue describes a total of 48,668 letters, out of which 27,274 include the place from where the letter was sent. 27,225 letters were sent from France; 17,673 from England; 4,559 from the Dutch Republic.

Sint Nicolaas, Samantha (ed.), 'The Correspondence of Anna Maria van Schur-

man', in Early Modern Letters Online, Cultures of Knowledge,

http://emlo-portal.bodleian.ox.ac.uk/collections/?catalogue=anna-maria-van-schurman, (239)

Printed sources

Botley, Paul, and Dirk van Miert, *The Correspondence of Joseph Justus Scaliger*, 8 vols. (Geneva: Droz, 2012). (1,669)

Bots, Hans, and Lenie van Lieshout, Contribution à la connaissance des réseaux d'information au début du XVIIIe siècle: Henri Basnage de Beauval et sa correspondance à propos de l'Histoire des Ouvrages des Savans (1687–1709), Vol. 3: Lettres et Index, Studies van het Instituut voor Intellectuele Betrekkingen tussen de Westeuropese Landen in de 17e Eeuw, 5 (Amsterdam: Holland Universiteit Pers, 1984). (327)

Bots, Hans, Pieter Rabus en de 'Boekzaal van Europe', 1692–1702: Verkenningen binnen de Republiek der letteren in het laatste kwart van de zeventiende eeuw, Studies van het Instituut voor Intellectuele Betrekkingen tussen de Westeuropese Landen in de 17e Eeuw, 2 (Amsterdam: Holland Universiteit Pers, 1974). (30)

Buning, Robin, Henricus Reneri (1593–1639): Descartes' Quartermaster in Aristotelian Territory, Dissertation Utrecht University (Utrecht: Department of Philosophy and Religious Studies, Utrecht University, 2013). (61)

Doorninck, Pieter N. van, and Philipp C. Molhuysen (eds.), *Brieven van en aan Jo. Is. Pontanus*, 1595–1639, (Haarlem: Van Brederode, 1909). (321)

Maber, Richard G., Publishing in the Republic of Letters: The Ménage-Graevius-Wetstein Correspondence, 1679–1692 (Amsterdam: Rodopi, 2005). (73)

Lem, G. Anton C. van der, and Cor S. M. Rademaker, *Inventory of the Correspondence of Gerardus Joannes Vossius (1577–1649)* (Assen and Maastricht: Van Gorcum, 1993). (3,430)

Lankhorst, Otto, Reinier Leers (1645-1714): Uitgever en boekverkoper te Rotterdam (Amsterdam en Maarsen: APA-Holland Universiteits Pers, 1983), 219–24 (190)

Romburgh, Sophie van, "For My Worthy Freind Mr Franciscus Junius": An Edition of the Correspondence of Francis Junius F. F. (1591-1677) (Leiden: Brill, 2003). (226)

Roscam Abbing, Michiel, and Pierre Tuynman, Petrus Scriverius Harlemensis (1576–1660): A Key to the Correspondence, Contacts and Works of an Independent Humanist (Leiden: Foleor, 2018). (559)

Stegeman, Saskia, Patronage en dienstverlening: Het netwerk van Theodorus Janssonius van Almeloveen (1657–1712) in de Republiek der Letteren (Nijmegen: APA-Holland Universiteits Pers, 1996). (3,088)

Unpublished sources

We would like to thank Robin Buning and Kees Smit for kindly providing their unpublished inventories of the correspondence of Daniel Heinsius (incomplete, at the moment 1,239) and Arnold Buchelius (520) for the purpose of this article.