

The Origin of the Scientific Review in the Seventeenth Century

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Title: The Origin of the Scientific Review in the Seventeenth Century.

Abstract: This paper explores the origin of the scientific review in France, England, Italy and Germany during the seventeenth century. It shows how this birth was related to the rise of a new conception of knowledge spread by the scientific societies of the time and was meant to be a counterpart to the increasing success of experiments as an epistemological tool.

Keywords: Reviews, Learned societies, Journals, Philosophy, Republic of Letters.

1. Introduction

In Europe, the seventeenth century was a time of profound cultural renewal; a period in which many forms of human knowledge changed, were reorganized and stabilized compared to the previous century. It was the era in which what we now call “scientific thought” emerged, in which mathematics definitively established itself as a tool for describing reality, in which the experiment was codified for the investigation of nature, and in which mankind discovered that there is not only one truth, but that truth itself is corrective, gradual and that its discovery is the undertaking of many people. The dissemination of knowledge therefore became increasingly important so that more and more individuals could have access to the sciences.

In this period of radical redefinition of both the arts and sciences, new products of knowledge emerged, among which, first and foremost, were the scientific societies, heirs of the Renaissance academies, and the scientific periodicals which were offshoots of the gazettes. These two enterprises were intimately associated, so much so that scholars have often considered the early periodicals as an expression of the learned and scientific societies. For several decades historians have developed accurate investigations into these two aspects, from highly mul-

ti- and inter-disciplinary perspectives capable of emphasizing the contribution of periodicals within the history of knowledge.¹

Little or nothing has been done, however, on another aspect connected and correlated to these two, and which is the subject of this paper, namely the birth of scientific and philosophical reviews,² which asserted themselves as a new textual genre and which changed the accepted style of reasoning and thinking, and therefore also the way of collecting, producing, examining and disseminating knowledge.³ This was a disruptive event in European intellectual history which saw tens of thousands of reviews published and saw the involvement of hundreds of reviewers between 1665 and 1789, especially in the prevalent linguistic areas, i.e. Latin, English, French, German and Italian. Despite a phenomenon of this magnitude, reviews have not attracted much of attention from scholars, who have focused more on journals and learned societies in the shaping of the Republic of Letters.

This paper does not consider the review either as a specific textual genre rich in peculiarities,⁴ nor as the source of a new style of reasoning that changed the established method of producing a philosophical or scientific work, but its origin is connected to the two previously mentioned aspects. The relationship with scientific periodicals is evident: reviews were published by journals. The periodicals, in turn, although typically run and directed by a single person who imprinted his editorial line, were mostly collective enterprises, expressions of informal or formal work groups which sometimes represented the precursors of learned societies and the more institutionalized and hierarchically organized academies.

This article is therefore an attempt to introduce a new piece into this complex story, to try to understand it from a different perspective.

2. *Early Reviews in France*

On January 5, 1665, Denis De Sallo, under the pseudonym *Sieur d'Hédouville*, published what can be considered the earliest learned journal in Euro-

¹ See among the many studies D.A. Kronick, *A History of Scientific and Technical Periodicals: The Origins and Development of the Scientific and Technological Press 1665-1790*, Scarecrow Press, New York 1962; B. Houghton, *Scientific Periodicals: Their Historical Development, Characteristics and Control*, Clive Bingley, London 1975; O. Dann, *Vom Journal des Scavants zur wissenschaftlichen Zeitung*, in *Gelehrte Bücher vom Humanismus bis zur Gegenwart*, Harrassowitz, Wiesbaden 1983, pp. 63-80; T. Habel, *Gelehrte Journale und Zeitungen der Aufklärung. Zur Entstehung, Entwicklung und Erschließung deutschsprachiger Rezensionsschriften des 18. Jahrhunderts*, edition lumière, Bremen 2007.

² In this period, it is almost impossible to distinguish philosophical investigations from scientific ones. The distinction between philosophy and science is decidedly later and consequent to the reorganization of knowledge between the end of the eighteenth century and the beginning of the nineteenth century.

³ M. Sgarbi, *Reviewing as a New Style of Reasoning in the Early Modern Period*, forthcoming.

⁴ B. Uhling, *Die Rezension – eine Textsorte des 18. Jahrhunderts in Deutschland*, in *Sprachgeschichte als Textsortengeschichte*, Peter Lang, Frankfurt am Main 2000, pp. 337-365.

pe, *Le Journal des Sçavans*.⁵ However, there had been a previous (undated) attempt, never accomplished, to establish a scientific and literary journal, by the historian François-Eudes de Mézeray. De Mézeray was a member of the committee of *La Gazette* founded in 1631 by Théophrase Renaudot and was aware of the potential of new modes of communication as a source for creating and holding knowledge, hence power. From the privilege for the publication of this *Journal Littéraire General*, the genesis and the purpose of De Mézeray emerge quite evidently:

[...] De Mézeray, our historiographer, has very humbly explained to us that one of the main purposes of the *Histoire* on which he has worked for twenty-five years is to determine the new discoveries and enlightenments [*lumières*] which are found in the sciences and arts, the knowledge of which is no less useful to human beings than that of the actions of war and politics. This part, however, could not be inserted into in his work without making a boring confusion and an embarrassing and disagreeable mixture, and that, being his chief intention, as it always has been, to serve and benefit the public and furnish them with a work as fruitful and honest as it is entertaining and enjoyable, he would have thought to collect these things and to give an account of it every week, under the title of J.L.Gl. (*Journal littéraire général*) [...] For these reasons, considering that sciences and arts shed no less light on great state than that the arms do, and that the French nation excels as much in spirit as in courage and valor; then desiring to favor the supplicant and giving him the means to support the great expenses which he incessantly incurs in the execution of such a laudable project, both for the payment of several people whom he is obliged to employ and for the maintenance of correspondence with all knowledgeable and worthy scholars in various and distant countries; we have allowed him to collect and amass from all parts and places that he deems appropriate the new enlightenments [*lumières*], knowledge and inventions which will appear in physics, mathematics, astronomy, medicine, anatomy and surgery, pharmacy and chemistry; in painting, architecture, navigation, agriculture, weaving, dyeing, the manufacture of all things necessary for the life and use of human beings, and generally in all sciences and arts, both liberal and mechanical; as also to search for, explain and provide all the new parts, monuments, titles, acts, seals, medals which it will be able to discover for the illustration of the history, the advancement of sciences and the knowledge of the truth; [...] as we have also allowed him to collect in the same way the titles of all the books and writings which will be printed in all the parts of Europe, without, however, he having the freedom to make any judgment or reflection on what will be morals, religion, or politics, and which will concern in some way that it may be the interests of our State or of other Christian princes.⁶

This long statement makes clear above all how the power of a state does not only rely on its army, but also on knowledge produced by the arts and sciences.

⁵ In France, as in other parts of Europe, there were periodicals and newspapers, for example the *Gazette* promoted by Richelieu, but they did not have a scientific, or rather “savant”, erudite character. See B.T. Morgan, *Histoire du Journal des Sçavans depuis 1665 jusqu'en 1701*, PUF, Paris 1929.

⁶ C.-A. Sainte-Beuve, *Causeries du lundi*, Garnier, Paris 1853, pp. 227-228.

The collection and dissemination of this knowledge is considered as useful and profitable for the empowerment of every citizen, for the glory of the state that promotes them, and represents an advancement towards truth. Furthermore, the privilege reveals the intention of the author to publish weekly this kind of learned information and that the gathering and spreading of knowledge were based on a collective effort and on a network of national and international scholars, who would have collaborated with the main editor. Finally, the enterprise of reviewing is conceived as a branch or an offshoot of the historical activity of collecting new knowledge and discoveries.

Whether and how this initiative involved members of the Académie Française (1635), of which De Mézeray was a member since 1648, or the Académie des Inscriptions et Belles-Lettres (1663), it is not possible to ascertain.⁷ However, the privilege seems to reflect the two souls of the academies and envisage the future Académie des sciences.⁸

What is interesting for the purpose of the present investigation is that new discoveries in the fields of arts and sciences are compared with the newly published books. Like any other kind of invention and discovery, a newly published book must be collected and disseminated as soon as possible for the progress of knowledge. A book and a scientific discovery convey a very similar kind of knowledge, profitable for every citizen of the state, hence this knowledge must be gathered, examined, processed, and disseminated. This equalization is important because it compares the scope of reviewing books with that of transmitting new scientific discoveries, exactly as the new-born scientific and learned academies had done around Europe by sharing their experience and experiments. Perhaps De Mézeray as historian had not the acute scientific sensibility to pursue this kind of enterprise;⁹ however, it is exactly by this compilation of histories (*historiae*) that Francis Bacon suggested the creation of a register of new knowledge, inventions and discoveries.¹⁰

⁷ Académie des Inscriptions et Belles-Lettres was established by Colbert and a number of academicians of the Académie Française see *Historie de l'Académie Royale des Inscriptions et Belles Lettres*, Imprimerie Royal, Paris 1736, p. 2.

⁸ In its *Status*, the Académie Française established that religious matters should be avoided and that everything concerning politics or ethics agreed with the authority of the state. See *Historie de l'Académie Française*, Didier, Paris 1858, p. 492. In its *Règlement* the Académie des Inscriptions et Belles-Lettres stated that the focus of its activity was «the statues, mausoleums, epitaphs, medals, coins, mottos and inscriptions of public buildings and all the other things of the same nature,» and for doing this the academicians had to be in contact with «many learned men of Paris and of the nation as well as of the foreign countries.» See *Historie de l'Académie Royale des Inscriptions et Belles Lettres*, cit., pp. 13, 15. The official statutes of the Académie des sciences were not written until 1699, however since the very early stages in 1666 the focus was on experimental physics, chemistry, anatomy, astronomy, geometry and arithmetic. See Pierre Clément, *Lettres, instructions et mémoires de Colbert*, Imprimerie Impériale, Paris 1868, v. 5, pp. 513-514.

⁹ This is Birn's opinion in Raymond Birn, *Le Journal des Savants sous l'Ancien Régime*, in: «Journal des Savants», vol. 1, 1965, pp. 15-35.

¹⁰ C. Wellmon, *Organizing Enlightenment. Information Overload and the Invention of the Modern Research University*, Baltimore, Johns Hopkins University Press 2015, pp. 45-76.

The extension of the collection was also significant, because the books had to be gathered from all over Europe and for this reason an international network of collaboration was necessary. The scope was not local or country-bound, but it crossed the boundaries of the various nations, religions and languages and this would represent one of the major potentialities, but also one of the major causes of problems for editors, when assessing books and authors based in different idioms and religious beliefs.

While a superficial reading of the privilege points in favor of a mere list of titles of new publications, which is strictly speaking called an “announcement”, not so different from that published in the catalog of the Frankfurt Fair, between the lines it is perceivable that the journal planned to publish reviews. These reviews should include a brief summary of the content of the book, without, however, making critical assessments, in particular in relation to moral or political issues and to religious questions. There was, therefore, a considerable understanding of the delicacy of the activity of reviewing: it should report what the author in the publication wrote, without taking part in discussion or controversies which could harm national interests. This awareness of the ethical, political and religious affairs involved in reviewing was very vivid from the dawn of this new enterprise and the choice was to neutralize, as many journals will do, every kind of polemical stance. For context, at this time Europe was emerging from the Thirty Years’ War.

De Mézeray’s idea never came to fruition, perhaps because of a lack of political support after the death of Cardinal Mazarin and the non-alignment with the new political governance, but the idea was taken up by De Sallo and *Le Journal des Sçavans*. In this instance De Sallo had the Académie Française and the First Minister Jean-Baptiste Colbert on his side.¹¹ This initiative was successful, at least at the beginning. The purpose of the publication was clear: «to inform about the novelties in the Republic of Letters.»¹² The means to do this was first of all to establish a catalog «of the main books published in Europe.»¹³ The scope of the journal and the geographical dimension was similar to that proposed by De Mézeray. The aim was not only «to provide the titles, as most of the bibliographies do,» that is announcements, «but to expose what they treat and why they can be useful,» by making critical assessment of what was published.¹⁴ The primary purpose therefore was to write book reviews. The book review has two main uses or advantages: to help those who want to buy a book, announcing its publication, and to inform about the general contents of the book, for those who cannot buy books or have access to them. The reviews were therefore also driven by a criterion of cost-effectiveness and would serve to guide the reader in the possible purchase of the book.

¹¹ On the political dimension of *Le Journal des Sçavans* see Birn, *Le Journal des Savants sous l’Ancien Régime*, cit., pp. 15-35.

¹² *Le Journal des Sçavans*, 5 January, 1665, L’imprimeur au lecteur.

¹³ *Ibidem*.

¹⁴ *Ibidem*.

De Sallo puts on the same level as reviews «the experiment of physics and chemistry, which could give an account of the effects of nature; the new discoveries in arts and sciences; machines and the inventions useful or curious that mathematics would provide; the observations of the sky, as those of meteors, and that the anatomy could find of new in the animals.»¹⁵ In their purpose, scope, and geographical coverage, the production, collection and dissemination of knowledge via reviews is comparable with that of experiments, discoveries and inventions in the arts and sciences. This meant that just as new experiences and experiments had to circulate as quickly as possible so that they were tested and proven and constituted the building blocks for the progress of science, so reviews were that tool for testing, validating and verifying the knowledge contained in books to the advancement of knowledge. The breadth and speed of circulation increasingly imposed itself as an efficiency parameter for the realization of the enterprise.

In the first three months of its publication in 1665 *Le Journal des Sçavans* included reviews of books printed in Paris, Saumur, Toulouse, Oxford, London, Rome, Köln, The Hague and Amsterdam. From its very conception, *Le Journal* provided not only sterile summaries, but also critical evaluation of the new books, criticizing the obscurity of Descartes' *L'homme*, praising the valuable discoveries of Giuseppe Campani and Thomas Willis, and extolling the great quality and merit and the penetrating spirit of François de La Rochefoucauld.

The choice was conscious, at least according to what Noël Argonne, otherwise known as Vigneul-Marville, tells us. In his *Mélanges d'Histoire et de Litterature*, he confessed that De Sallo described the journal's project to him. About this ambitious project he warned De Sallo of the dual method that he could adopt. On the one hand, there is the attitude of the "critics," who judge everything; on the other there is that of the "historians," who simply narrate the content without taking a position. This last approach appears to Vigneul-Marville as the most suitable for the purpose, the most natural, even if it risks becoming sterile and boring. The first, however, intrigues the reader, attracting his attention, but will do nothing but incite controversy and criticism on the part of the authors.¹⁶ This was a difficult choice given the difficulty of explaining long texts in just a few words. Furthermore, Vigneul-Marville warns De Sallo that the selection of books to review represents a judgment of merit, with respect to what is worthy of being taken into consideration and what is not within the Republic of Letters, and this too will be subject to blame and praise. On the other hand, reviewing all the books seemed like an almost impossible undertaking, unless one chose to review them only by examining the indexes and prefaces, but even in this case it would give a completely partial and biased view.¹⁷

De Sallo betrayed De Mézeray's original historical method and chose to adopt the critics' approach. This very approach, only three months after the beginning

¹⁵ *Ibidem*.

¹⁶ Noël Argonne, *Mélanges d'Histoire et de Litterature*, Prudhomme, Paris 1713, vol. 1, pp. 347-348.

¹⁷ *Ivi*, p. 349.

of the adventure, set him on a collision course with the Inquisition and the Holy Office, so much so that the papacy pressured the periodical to be subject to censorship before publication. De Sallo, in order not to submit to censorship,¹⁸ therefore gave up on the undertaking, but Colbert was not equally compliant and entrusted the direction to Jean Gallois, who also had the support of the Académie des sciences starting from 1669. Beginning in 1666, Gallois chose a more sober and less partisan style for his reviews. Thus, in the first issue of 1666 after the interruption of publications in March 1665, he wrote:

There are, however, some people who have complained about the too great freedom given to them to judge all kinds of books. And certainly, it must be admitted that it was to undertake on public freedom, and to exercise a kind of tyranny in the empire of letters, to attribute to oneself the right to judge the works of everyone. It is therefore resolved to abstain from it in the future, and instead of exercising its criticism, to endeavor to read well the books in order to be able to give a more accurate account of them than we have done until now.¹⁹

In a very early phase of the affirmation of reviews, Gallois, and the entire group that revolves around the *Journal*, were therefore aware that excessive freedom of criticism could lead to domination, to a monopoly in the Republic of Letters which could not have a response and which could damage both the reputation of authors and that of publishers. He therefore decided to adopt a more historical and less critical approach in his reviews.²⁰ Reading the reviews written under the direction of Gallois, one does not see a significant change of direction, rather that what was taken into consideration less and less was one of the founding parts of the De Sallo periodical, namely providing news on censorship and on the decisions of secular and religious courts. However, the review of volumes from abroad and the collection and examination of experiences made in other countries, primarily England and Italy, intensified.

3. Reviews in England

The last issue edited by De Sallo, released on March 30, 1665, gave news of a new periodical published in England in the wake of *Le Journal des Sçavans*, the *Philosophical Transactions of the Royal Society*, in which numerous interesting studies and discoveries in the field of natural philosophy appeared, which however the publisher struggled to summarize as he did not know the English

¹⁸ Harcourt Brown, *History and the Learned Journal*, in: «Journal of the History of Ideas», vol. 33, 1972, p. 370.

¹⁹ *Le Journal des Sçavans*, 4 January, 1666, L'imprimeur au lecteur.

²⁰ Brin maintains that this approach made *Le Journal* less interesting see Brin, *Le Journal des Savants sous l'Ancien Régime*, cit., p. 23

language well.²¹ De Sallo concludes by saying that he had found a translator who will allow him to review English books in future and spread all the knowledge that was produced in England.²² There is evidence that may lead one to believe that this mediator between *Le Journal des Sçavans* and the English world was Henry Oldenburg, none other than the first editor of the *Philosophical Transactions of the Royal Society*.

In a letter dated November 24, 1664, to Robert Boyle, Oldenburg wrote that he had received news that there was a project in France «to publish from time to time a Journall of all what passeth in Europe in matter of knowledge both Philosophicall and Politicall.»²³ He added:

In order to ye execution of whc dessein I am sollicitated to contribute what I can concerning England, and what is found there, as to excellent persons, things, books ... I am very unwilling to decline this task ...²⁴

A direct collaboration with *Le Journal des Sçavans* had been proposed to Oldenburg, probably by Adrien Auzout.²⁵ Oldenburg was evidently interested in a similar undertaking, so much so that in the summer of 1664 he had thought about planning a «weekly intelligence, both of state and literary news,»²⁶ and at the earliest available meeting of the Royal Society, on January 11, 1665, that is only six days after publication of *Le Journal*, he presented the first issue, which aroused particular interest «containing such matters as pass in the commonwealth of learning,» in particular the new discoveries of Giuseppe Campani.²⁷ Probably on that occasion Oldenburg took up the idea of his “weekly intelligence” transforming it into what would later be the *Philosophical Transactions* and presented it to the members of the Royal Society asking for their approval.²⁸

The *Le Journal des Sçavans* project therefore aroused the interest of English intellectuals right from the start, but the focus was different, «much more philosophical,»²⁹ less concerned with book reviews, and the emphasis was more on the dissemination of «profitable discoveries» for the «advancement of learn-

²¹ D. Atkinson, *Scientific Discourse in Sociobistorical Context: The Philosophical Transactions of the Royal Society of London, 1675-1975*, Mahwah, NJ. Erlbaum 1999.

²² *Le Journal des Sçavans*, 30 March (1665), p. 156. Gallois kept this promise and already in 1666 he had provided accounts of the experience of Robert Boyle, Robert Hook, Thomas Henshaw, David Thomas.

²³ *The Correspondence of Robert Boyle 1636-1691*, Routledge, London 2001, vol. 2, p. 319.

²⁴ *Ivi*, p. 320.

²⁵ M. Boas Hall, *Henry Oldenburg. Shaping the Royal Society*, Oxford University Press, Oxford 2002, p. 82.

²⁶ *The Correspondence of Robert Boyle 1636-1691*, cit., vol. 2, p. 210.

²⁷ T. Birch, *History of the Royal Society of London for Improving Natural Knowledge*, Millar, London 1756, vol. 2, p. 6.

²⁸ P. Dear, *Totius in verba: Rhetoric and Authority in the early Royal Society*, in: «Isis», vol. 76, 1985, pp. 145-161.

²⁹ This information is in Robert Moray's letter to Christiaan Huygens written on February 13, 1665.

ing.» Indeed, no reviews were included in the first issue and reviews were intended more as a longer “account of the books,” rather than a short “critical assessment.” The approach was therefore decidedly more historical, an approach in line with the ideal of the historical method professed by Bacon and to which Oldenburg remained an adherent throughout his life.³⁰ This does not mean the absence of precise critical positions. Indeed, in the second issue, only one book is reviewed in encomiastic tones and it is Robert Hooke’s *Micrographia*, published under the auspices of the Royal Society. Issue 10 reviewed Robert Boyle’s *Hydrostatical Paradoxes*, explaining how these experiments surpassed that of Pascal and referring to the unpublished part of the *Usefulness of Natural and Experimental Philosophy*, which would not be printed until 1671. Issue 11 reviewed *The Origine of Forms and Qualities* by Boyle, already announced in issue 8. In issue 17 there was a review of Géraud de Cordemoy’s *Le discernement du corps et de l’âme, en six discours, pour servir à l’éclaircissement de la physique*, which attempted to summarize the content of the text in a neutral way, but which revealed extreme skepticism about the physics that underpins the author’s statements. There were sections in which the reviewer kept his distance, using expressions such as “he saith” or “it sounds hard to say” and these concerned above all the problem of the indivisibility of the extended substance. The first book review not strictly linked to natural philosophy was published in issue 18 and was about Samuel Parker’s *Tentamina physico-theologica de Deo sive theologia scholastica*, written to show that philosophy did not necessarily lead to atheism. In the same issue there was a review to Honorée Fabri’s *Tractatus duo quorum prior est de Plantis et de Generatione Animalium; posterior, de Homine*, in which the book was praised for its geometrical method.

How far really, the *Philosophical Transactions*, in their initial phase, represented or reflected the activities of the members of the Royal Society or was the result of an Oldenburg filter, is difficult to ascertain.³¹ It is therefore unclear to what extent Oldenburg had obtained the requested endorsement. It is true that Oldenburg, «particularly when excerpting or summarizing material from overseas, made no attempt to establish the claims of his correspondents,»³² but, as we have seen, he had the opportunity to express his opinion when writing reviews. No doubt the Royal Society did not need the *Philosophical Transactions* to establish the claim or validity of knowledge, because within itself the society could test in

³⁰ Boas Hall, *Henry Oldenburg. Shaping the Royal Society*, cit., p. 150.

³¹ See the various opinions in Boas Hall, *Henry Oldenburg. Shaping the Royal Society*, cit., p. 86; A. Johns, *Miscellaneous Methods: Authors, Societies and Journals in Early Modern England*, in: «British Journal for the History of Science», vol. 33, 2000, pp. 159-186; E. Valle, *Reporting the doings of the curious: Authors and editors in the Philosophical Transactions of the Royal Society of London*, in *News Discourse in Early Modern Britain*, Peter Lang, Frankfurt am Main, 2006, pp. 71-90; L. Moessner, *News filtering processes in the Philosophical Transactions*, in *Early Modern English News Discourse*, John Benjamins Publishing Company, Amsterdam-Philadelphia 2009, pp. 208-210.

³² N. Moxham and A. Fyfe, *The first Philosophical Transactions, 1665–1677*, in *A History of Scientific Journals. Publishing at the Royal Society 1665-2015*, UCL Press, London 2022, p. 44.

their regular meetings what was reported, and they could conduct experiments. However, this does not mean that the *Philosophical Transactions* did not play a fundamental role.³³ Indeed, through the very numerous reports of experiments and through reviews the *Philosophical Transactions* quickly became an instrument «to create trust and understanding between readers and authors unknown to one another» on scientific protocols, and «to enable reliable communication over large physical distances as the scientific community grew.»³⁴ The high level of qualifications of the members of the Royal Society, the originality of the experiments, the discoveries they made and the diffusion of the results through the journal led the *Philosophical Transactions* to have a hegemony that was directly reflected in the reviews — that is, what was reviewed and how what was reviewed constituted a distinction in the Republic of Letters. However, the opposite was also true, that the reviews helped to impose the style of thinking and the philosophical taste of the Royal Society, and this would become increasingly evident over the years as members became critical towards French natural philosophy.³⁵

The lack of familiarity of the scholars of the time with the English language prevented the *Philosophical Transactions* from being established as the model of a scientific journal; therefore other countries settled on the model of the *Journal des Sçavans*, which gave a stronger emphasis to reviews to the detriment of original scientific contributions. This was certainly the case with the first attempts to found magazines in Italy and Germany.

4. Early Reviews in Italy and Germany

The first scientific journal was published in Italy a few years later, in 1668. Its founder was the abbot Francesco Nazzari and its title was *Giornale de' Letterati*.³⁶ The true inspirer of the work was Michelangelo Ricci, a first-rate mathematician, who had already been working, at least since the autumn of 1667 to replicate what was happening in other countries, carrying out a translation of the *Journal des Sçavans*.³⁷ A large number of intellectuals such as Salvatore and Francesco Serra, Tommaso de' Giuli, Giovanni Patrizi, and Giovanni Luca

³³ S. Shapin, *Pump and Circumstance: Robert Boyle's Literary Technology*, in: «Social Studies of Science», 14, 1984, pp. 481, 484; J. Cummins and D. Burchell, *Ways of Knowing: conversations between Science, literature, and Rhetoric*, in *Science, Literature and Rhetoric in Early Modern England*, Ashgate, Aldershot 2007, pp. 1-5.

³⁴ N. Moxham and A. Fyfe, *The first Philosophical Transactions, 1665–1677*, cit., p. 45.

³⁵ B. Allen, J. Qin, and F.W. Lancaster, *Persuasive communities: A longitudinal Analysis of References in the Philosophical Transactions of the Royal Society, 1665-1990*, in: «Social Studies of Science», 24, 1994, pp. 279-280.

³⁶ See J.-M. Gardair, *Le Giornale de' Letterati de Rome (1668-1681)*, Firenze, Olschki 1984; B. Dooley, *Science, Politics, and Society in Eighteenth-Century Italy: The Giornale de' letterati d'Italia and its World*, Garland Publishing, New York 1991.

³⁷ Firenze, Biblioteca Nazionale Centrale, Mss. Galileiani, f. 278. See Ricci's letter to Leopoldo written on November 12, 1667.

gravitated around the first publisher Nazzari, but among these Giovanni Giustino Ciampini and Ricci himself stood out for their scientific acumen. Like *Le Journal des Sçavans* and the *Philosophical Transactions*, the journal was formally dissociated from any academy and was supported by a group strongly oriented towards historical and scientific disciplines. From the first issue it was clear that *Le Journal des Sçavans* was the most immediate source of inspiration. Nazzari explicitly proclaimed that its objective was to imitate *Le Journal des Sçavans*, which was particularly commendable because it not only provided titles, but also brief summaries and evaluation of books. In the *Prefazione* Nazzari makes clear that:

What benefit the news of good books brings to the Republic of Letters appears very clearly, while others are not deceived by the great promises of the frontispieces, to which the books very often do not correspond, and know where to look for the doctrines, and the erudition in his needs.³⁸

Thus, the *Giornale* shares with *Le Journal des Sçavans* the pivotal importance of providing reliable and quick “news of good books,” to avoid possible deceptions through the reading of the “great promises of the frontispieces,” which are not correspondent with the book contents — an old strategy used from the early inception of the printing press.

The idea of establishing a new journal came from the awareness that many people could not read or understand the French language well. The task was twofold: (1) to provide book reviews and information about new experiments and observations, and (2) to translate what was more interesting in the *Le Journal des Sçavans*.

The first philosophical book review of the *Giornale de' Letterati*, which was also the first book review in general, was of *Saggi di naturali esperienze fatte nell'Accademia del Cimento* and highlighted the most recent advances in natural research. The review approach was undoubtedly historical: collecting information on as many recent publications and their contents as possible. The objective was to have a «report of the natural experiences and curiosities that will be observed in Italy, and of the books that will be printed there.»³⁹ The promoter was the Roman prelate and Michelangelo Ricci, who wanted to vindicate the importance of Italian science, in particular the approaches of Galileo and Torricelli and support the efforts of the Accademia del Cimento so much as to push some scholars to define the *Giornale de' Letterati* as «a work ready to defend and continue the defunct Florentine academy.»⁴⁰ However, it would be reductive to think of the journal as the organ of something defunct. The *Giornale* was in contact with the main Italian academies such as the Accademia degli Investiganti in

³⁸ *Giornale de' Letterati*, vol. 1, 1668, *Prefazione*.

³⁹ Ricci announces this to Leopoldo on November 12, 1667. See Firenze, Biblioteca Nazionale Centrale, Mss. Galileiani, Mss. Galileiani 278, letter 81.

⁴⁰ Gardair, *Le Giornale de' Letterati de Rome (1668-1681)*, cit., p. 181. This despite the echo of many Jesuit works.

Naples and the Accademia dei Gelati in Bologna. Therefore, the *Giornale* was an expression of the Italian scientific culture of the time and promoted the review of scientific works, above all by spreading atomist ideas that seemed to reflect modern experimental philosophy. There was therefore a close correlation between academic enterprise and journalistic initiative. This was an attempt to make Italian science acquire an international dimension, firstly by giving everyone news of what was happening abroad and secondly by circulating as much as possible the latest discoveries and publications that had occurred in Italy.

The circulation of knowledge was therefore the main objective of philosophical reviews. Ricci himself wrote to Leopoldo de' Medici that «one should not search so subtly in books to ban them, if perhaps some Author has entered into a proposition which is not harmful, nor will it be followed by others.»⁴¹ The review must not be an instrument of censorship, in bad faith towards the books; it must not be conducted in order to guarantee control and power over knowledge in order to determine the success or failure of an author or a doctrine; but its primary aim had to be an instrument for the circulation of the main ideas of the authors. This attitude described by Ricci is totally opposite to that held by Leibniz, who, through the institution of the *Nucleus librarius* aimed, in the very same year as the foundation of the *Journal*, to review the books which were then considered worthy of being presented at the Frankfurt fair.

The first issues of the *Giornale de' Letterati* depended heavily on *Le Journal des Sçavans* and when the latter entered into crisis it led the editors of the Italian magazine to look for other points of reference to discover what the most recent international publications were:

So that the periodicals do not lack news of foreign books and scientific things that happen outside Italy, since we are now deprived of French journals, it has been decided to make up for this defect with extracts from those of England, also full of beautiful news and infinite literary curiosities.⁴²

Attention then turned to the *Philosophical Transactions*. What was important about this process of cultural importation from abroad was not that in doing so they imported international ideas and methodologies, but that by translating and extracting from foreign magazines *Giornale de' Letterati* produced reviews not only of foreign books, but even of scientific articles, deciding what was important and what was not. This was a completely new review method, aimed at giving news of what was new in the Republic of Letters. However, it was a real form of review in the critical examination of what was happening around the world.⁴³

Nazari's *Giornale de' Letterati* descended into crisis and one of the first collaborators, Giovanni Giustino Ciampini, inaugurated a second version of

⁴¹ Firenze, Biblioteca Nazionale Centrale, Autografi Platini, I, 121-143, June 9, 1668.

⁴² *Giornale de' Letterati*, vol. 1, 1668, *Prefazione*.

⁴³ Gardair, *Le Giornale de' Letterati de Rome (1668-1681)*, cit., pp. 249-252.

the *Giornale* in 1675, linked to the Accademia fisicomatematica. The Ciampini edition took an even more rigorous attitude towards reviews. First of all, Ciampini decided to review only those works coming from abroad and which were on sale in Rome so that the reader could have material access to the book. Furthermore, with respect to foreign books, he adopted the policy of reviewing them even if they had not previously been reviewed in France or Germany. Therefore, the attempt was to provide information on the texts in the most exhaustive and quickest way possible, while also providing extremely precise bibliographical information. The network of reviewers and publishers formed by Ciampini was so large that the reviews sometimes took the form of announcements of ongoing or future projects, as well as private editions. Everything that led to the accumulation and dissemination of knowledge was taken into consideration to the point of introducing a practice common even today, namely that of requiring the authors themselves and the publishers to send copies of the book to the *Giornale* for review:

But because having immediately the works that are printed can produce notable profit for the learned men, and can make the glory of the authors more evident; I thought it would be good to give this notification to all those who have published, or hope to publish, their works, so that they may be pleased, as I ask them to send me here in Rome a printed copy of the same works.⁴⁴

The *Giornale* pricked the egos of the authors, but the announcement was also made to increase the possibility of reading all the works directly and not having to depend on other periodicals to report their content.

The intellectuals who lived in German territories did not have this problem of the limited availability of books.⁴⁵ In fact these territories were a hotbed for printing presses and book fairs. Despite this, their first real scientific journal was only founded in 1682. Indeed, as has already been said, at the end of 1667, Leibniz had attempted to found his journal, but he was denied printing privileges because the Viennese court, perhaps pushed even from the commercial lobbies of the printers, had seen in the Leibnizian project an attempt to establish a monopoly on the culture of knowledge without any type of control or prior censorship.⁴⁶ In 1670, in Leipzig, the *Miscellanea curiosa*, linked to the Academia naturae curiosorum directed by Johann Lorenz Bausch, was born. The magazine, with varying success, was published until 1791. The reference models were *Le Journal des Sçavans* and the *Philosophical Transactions*, even if the main topics were almost exclusively those of natural philosophy and medi-

⁴⁴ *Ivi*, p. 265.

⁴⁵ T.K. Hoffmann, *Die Anfänge der deutschen Buchkritik (1688-1720): Die Zeitschrift und ihre Rezension als aufklärishes Element*. Diss McGill University, Montreal 1978.

⁴⁶ G. Menz, *Leibniz und die Anfänge des Wissenschaftlichen Zeitschriftenwesens*, in: «Zeitungswissenschaft», vol. 11, 1936, pp. 587-590; H. Widmann, *Leibniz und sein Plan zu einem Nucleus Librarius*, in: «Archiv für Geschichte des Buchwesens», vol. 9, 1968, pp. 621-636.

cine.⁴⁷ This periodical, however, did not include reviews. The first journal that dealt with reviews was the *Acta Eruditorum Leipzig Collecta* directed by Otto Mencke. Unlike other journals, it did not depend on a scientific academy, but it referred to the informal circle of the Societas ad colligenda Acta Eruditorum Lipsiensia which included Leibniz, Friedrich Benedikt Carpzov, Basilius Titel, Christoph Pfautz and Johann Cyprian. In a letter dated 26 October 1681 Mencke wrote to Leibniz outlining the plan of the work:

Our goal is this: to announce all new experiments and observations in mathematics, physics and medicine, as well as to review new books (*recensum novorum librorum*) from 1681 onwards, in the same way as French and Roman [i.e. Italian] journals.⁴⁸

The focus therefore seemed purely linked to the exact and natural sciences, even if as the project progressed theological, historical, and geographical topics would occupy more and more space.⁴⁹ As regards reviews, however, only those books of a scholarly or scientific nature were taken into consideration. In general, we notice a certain xenophilia on Mencke's part, dictated by the fact that foreign books were more difficult to recover and not everyone was aware of the language in which they were written. So Mencke explains:

... nor do all the books reach our hands, and increasing in number in their days, by which we are not so much overwhelmed, it is impossible that even good books, and those worthy of being remembered and praised, sometimes seem to disappear under our hands. Although we do not doubt that, while we take a more exacting care about the exotics, the information of which seemed to be first disclosed to us, we omit many things that are sold in our Germany, without prejudice to any cheapness, but which are available for sale in all the workshops here and there, and the list of Frankfurt and Leipzig books reported, it is easy for no one to ignore them.⁵⁰

Mencke's concern about finding himself faced with a large and ever-increasing number of books to review is very clear, so much so that two years later, just four years after the founding of the magazine, he had to combine the reviews with a section of "libri novi" announcements:

Since there is such a great abundance of books, which flow in from all sides, it cannot be done that a review of all should be established sufficiently early, but that even as many of the most excellent ones are to be rejected from time to time from month to month, nay, from year to year; it seemed to us, henceforth, at the end of each month [...], to add the titles of new books, if any had reached us; so that the Benevolent Re-

⁴⁷ A.H. Laeven, *The Acta Eruditorum under the Editorship of Otto Mencke (1644-1707): The History of an International Learned Journal between 1682 and 1707*, APA-Holland University Press, Amsterdam 1990, p. 19.

⁴⁸ *Ivi*, p. 48.

⁴⁹ *Ivi*, p. 53.

⁵⁰ *Acta Eruditorum*, vol. 1, 1684, letter to the prince.

ader may enjoy whatever information they may have, as long as a just account of them can be presented.⁵¹

The large number of books received by the magazine did not allow for appropriate and high-quality reviews and sometimes publishers were forced to give up writing some reviews. Despite this, during Mencke's editorship, between approximately 1682 and 1706, more than 3900 reviews were published, which represented 89% of the contributions in the journal. Mencke was forced several times to justify the impossibility of reviewing all the volumes received and to explain that this did not lead to a negative opinion: «Finally, if those who think that their books are passed over by us with a certain contempt, we sincerely and earnestly ask them to put all that suspicion aside.»⁵² Yet in 1688 Mencke wrote, «we do not at all condemn or vilify books of which there is no mention in our *Acta*,» because the reasons could be very different, such as «our carelessness, or that they have not reached us, or for any other reason whatsoever.» This means that already at that point in time the reviews, whether written or omitted, were seen as forms of affirmation of power and cultural hegemony, as the criticisms of Jean Le Clerc and Pieter Rabus of the *Acta* amply testify.⁵³ Furthermore, Mencke also clarified that “eruditorum,” as a term meaning learned men, should not be understood as their being the sole holders of knowledge and that there was no arrogance or sense of superiority in this word.

Mencke absolutely did not want to become the arbiter of knowledge. For example, even in the case of reviews of texts with different religious opinions, the approach that Mencke defends is the historical one, that is, to give notice of their ideas and not to censor their works, unlike what others proposed, such as Veit Ludwig von Seckendorf, who wanted to condemn the writings of different religious faiths.⁵⁴ This historical approach applies in all directions. In 1690 Mencke conceived the undertaking of the *Acta* as a *historia litteraria* whose aim should be completeness, so much so that he hoped to be able to compile an index of everything that appeared in France, Italy and Holland. The most interesting aspect was that this historical approach to reviews, precisely in the attempt to ensure maximum objectivity and neutrality, was conceived as a scientific experiment in which one can make mistakes and for which feedback from readers was requested, exactly as feedback was requested from those who read the original contributions in the fields of physics, mathematics and medicine. Thus, Mencke wrote:

Of course, we have no doubt that we have not expressed the author's mind in a clear way somewhere, and from time to time, either through a kind of haste, or carelessness (as is usually the case), we have made a mistake. Anyone who wants to

⁵¹ *Acta Eruditorum*, vol. 1, 1686, p. 56.

⁵² *Acta Eruditorum*, vol. 1, 1684, letter to the prince.

⁵³ Laeven, *The Acta Eruditorum under the Editorship of Otto Mencke (1644-1707)*, cit., pp. 82, 84, 195.

⁵⁴ *Ivi*, p. 77.

experience a similar trial of labor may experience it, and they will discover without a doubt how easy it is to fall into mistake [...] everyone knows how much difficulty there is [...] to be summarized in a few words, so that the review remains plain and clear. Therefore, since we consider nothing alien to us as human beings, we wish to admonish our dutifully devoted Readers, so that if they observe any errors in these *Acta Eruditorum*, [...] or in their own reviewed books, they should be afraid and not be burdened to warn us candidly about them by letters [...]⁵⁵

Mencke was obsessed with objectivity in reviews and demanded extremely high standards, like any other scientific procedure in experimentation. According to Mencke, the authority of the *Acta* in the field of reviews was based on this objectivity.⁵⁶ There are repeated calls to write short, concise reviews free from harsh criticism, so much so that excessively long or polemical contributions had to be rejected.

5. Conclusion

With the *Acta eruditorum*, a first phase of experimentation with philosophical reviews linked to the academic world and societies, and to a historical approach that followed the process of scientific discovery and the diffusion of knowledge, came to an end. Already by 1684 when Pierre Bayle founded the *Nouvelles de la République des Lettres* the situation had changed considerably. Bayle is one man in charge. Not that De Sallo, Oldenburg, Nazzari, Ciampini or Mencke were not — they all made great personal efforts, and their undertakings would never have been achieved without their commitment — but they still had a strong group of people at their side and behind them certain ideals. Furthermore, Bayle wanted to enter a field almost unexplored by his predecessors, specializing mostly in the analysis of theological, religious, literary, and historical subjects, and only minimally concerned with scientific works, which mainly occupied the pages of other periodicals. This interest in less scientific topics is also reflected in his aversion to creating a journal published exclusively for scholars, or at least those thought of as such. The reviews had to be of interest to the general public and this would give rise to new periodicals that were more attentive to popular sensibilities, and to those periodicals of a certain circulation that developed a rhetoric linked to literary criticism with respect to the reviews.⁵⁷

The method had also changed. The motto «we will act as rapporteur and not as judge» seemed in the first instance to resume the historical approach in the

⁵⁵ *Acta Eruditorum*, vol. 1, 1690, letter to the reader.

⁵⁶ Laeven emphasizes these aspects. See Laeven, *The Acta Eruditorum under the Editorship of Otto Mencke (1644-1707)*, cit., pp. 77-87.

⁵⁷ F. Donoghue, *Book Reviewing and Eighteenth-Century Literary Careers*, Stanford University Press, Redwood City CA 1996; A. Urban, *Kunst der Kritik: Die Gattungsgeschichte der Rezension von der Spätaufklärung bis zur Romantik*, Winter, Heidelberg 2004.

name of a tolerance that would have allowed us to make «faithful extracts both from the books that were against us and from those that are on our side.»⁵⁸ This tolerance, however, was due to the fact that Bayle reviewed religious works and could not offend his reading public: he had to respect different tastes. In reality the reviews become more critical, so much so that what he writes about his reviewing method in the *Preface* of the first issue seems like *an excusatio non petita*:

we will be content with a reasonable middle ground between the servitude of flattery and the boldness of censures. If we sometimes judge a work, it will be without prejudice, and without any malice, and in such a way that we hope that those who are interested in this judgment will not be irritated by it. For we declare firstly that we do not claim to establish any prejudice either for or against the authors: one would have to have ridiculous vanity to claim such sublime authority. If we approve, or if we refute something, it will be without consequence; our aim will only be to provide new opportunities for scholars, to improve public education.⁵⁹

With the onset of the eighteenth century, the role of reviews within the periodicals and within the scientific and literary culture of the time differed so much that it is difficult to find overall convergences among defined groups. The main creators were the publishers with their ideas and the readers of the journals themselves with their differing tastes.

At the beginning of their adventure, however, the community of periodicals and scientific societies and academies used reviews in a rather homogeneous manner, as a tool for the production of culture, sharing general principles.

First of all, the goal was to provide the widest possible knowledge, even in different languages. This contributed to the birth of a European and transnational cultural market. The timeliness with which books were reviewed in different countries marked the cultural hegemony within this market. The faster the news could be spread, the faster knowledge could progress. At the same time the number of books continued to grow, an overload of information, a river of books which overwhelmed intellectuals who struggled to orient themselves in the face of so much new knowledge. Therefore there was a need for a tool capable of providing reliable and precise information, a tool capable of managing and saving the researcher's time and filtering what was truly important as a fundamental contribution to his discipline.⁶⁰ Finally, just like the experiments conducted within academies and scientific societies, the review tested and criticized the knowledge produced by the books, trying to understand what was most valid.

The review, especially in the first phase, created a new way of knowledge management. Whether they were critical evaluations, summaries and abstracts, extracts, announcements or advertisement, self-review or letters, reviews acce-

⁵⁸ *Nouvelles de la République des Lettres*, Mars, 1684, p. A4v.

⁵⁹ *Nouvelles de la République des Lettres*, Mars, 1684, p. A4r.

⁶⁰ *Nouvelles de la République des Lettres*, February, 1687, p. 120: scholars were looking for tool «to stop the torrent of books which grows day by day or block at least one of the sources.»

lerated the diffusion of knowledge, while also testing its accountability. In their role of judge, their authors created monopolies of knowledge. Indeed, reviewing one book instead of another, disseminating the ideas of a group and ignoring or criticizing others, shaped the culture of the time by establishing what was worth reading and what was not. This could potentially be extremely dangerous for the development of philosophy and science because a review could lead to misleading results. In 1722, Adrien Baillet wrote:

The learned and the ignorant take up their pen indifferently, as if for a kind of conspiracy to overwhelm, or at least to tire and repel humankind, to distract and mislead minds, to burden and confuse memory, to spoil and falsify the judgment.⁶¹

Good and bad reviews, written with fair or malicious intent, thus generated and influenced trends in specific communities, establishing which were the winning and failing ideas, determining the subsequent development of philosophical and scientific thought.

Another effect reviews had, especially towards the end of the seventeenth and throughout the eighteenth century, was the amount of time intellectuals devoted to the activity of reviewing, so much so that some of them became professional reviewers, working more on this than on developing their own original ideas. Christian Wolff published more than 200 reviews, Lessing more than 500, and Albrecht von Haller the stratospheric number of over 9000 reviews. This activity had an impact on which ideas were created, considering possible counter-argument and attacks by others. It also generated a new style and rhetoric of writing, independently from the development of the topics and the soundness of the arguments, leading to the creation of manuals on how to write reviews, even without having read the books, as in the case of Samuel Christian Lappenberg's satirical textbook *Anfangsgründe der Rezensionskunst* (1778). The power that the review attained without really assessing the validity of ideas, but only as a literary exercise, was something alien at the very origin of the review, when it was not yet a specific literary genre.

At the dawn of the review, it was considered an extremely powerful tool for sharing ideas among different learned communities, for improving knowledge and testing its validity. Reviews never betrayed this original purpose, however with the passing of time and the increasing sophistication of the art of reviewing, their use certainly became less and less neutral and more and more partial in affirming a specific kind of knowledge.

⁶¹ A. Baillet, *Jugemens des Savants sur les principaux ouvrages des auteurs*, Moette, Paris 1722, p. 217.