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## NOTE ON DESCARTES'S ENTRANCE AT THE COIMBRA *COLÉGIO DAS ARTES* (MID-17TH CENTURY)

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**Abstract:** I will confront some testimonies on the earliest entrance of Cartesian ideas in Coimbra with a new testimony taken from a French travelogue (B. de Monconys), referring to a personal visit to the *Colégio* (Dec. 1645) and the newly appointed Professor of mathematics, John Rishton; only one year after the publication of Descartes's *Principia Philosophiae* (1644), this Jesuit, coming from Liège, was apparently very well informed on Cartesian ideas about the tides and gravity. This fact confirms again how very 'modern' ideas penetrated the milieu of the Coimbra *Colégio*, and the role of international contacts in it, in this case again Jesuit *'Indipetae'*. During the same 'tour' de Monconys also met in Lisbon (*São Roque*) the English Jesuit mathematician Thomas Barton, and received a copy of Cristoforo Borri's *Collecta Astronomica*.

**Key Words**: Coimbra – *Colégio das Artes* – Francisco Soares Lusitano – Ignatius Hartoghvelt – Balthasar de Monconys – John Rishton – Thomas Barton – G. Varenius).

**Resumo:** O presente artigo visa confrontar os testemunhos relativos à mais remota entrada das ideias cartesianas em Coimbra com um novo testemunho, proveniente de um relato de viagens francês (Balthasar de Monconys), que faz menção a uma visita pessoal ao **Riassunto:** Il presente articolo compara alcune testimonianze relative all'ingresso del Cartesianesimo a Coimbra con una nuova testimonianza proveniente da un diario di viaggio di B. de Monconys, il quale racconta della visita al Colégio nel dicembre del 1645, in

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"Colégio" (dezembro de 1645) e a um recém-nomeado professor de matemática John Rishton. Da sua menção resulta claro que, um ano após a publicação dos *Principia Philosophiae* de Descartes (1644), aquele jesuíta, proveniente de Liège, se mostra aparentemente muito bem informado sobre as ideias cartesianas acerca das marés e da gravidade. Este facto confirma de novo como ideias muito "modernas" penetraram o ambiente do Colégio de Coimbra e o

ideias muito "modernas" penetraram o ambiente do Colégio de Coimbra e o papel dos contactos internacionais nele existentes, no caso vertente por causa dos "Indipetae". Nesta mesma viagem, de Monconys também se encontra em Lisboa (São Roque) com o matemático jesuíta inglês Thomas Barton e recebe uma cópia dos *Collecta Astronomica* de Cristóvão Borri.

**Palavras-chave:** Coimbra, Colégio das Artes, Francisco Soares Lusitano, Ignatius Hartoghvelt, Balthasar de Monconys, John Rishton, Thomas Barton, G. Varenius.

occasione della recente nomina di John Rishton a Professore di matematica. Dal racconto appare chiaro quanto, a solo un anno dalla pubblicazione dei Principia Philosophiae (1644) di Cartesio, il gesuita belga fosse ben informato circa le tesi cartesiane riguardo le onde e la gravità. Tale episodio conferma ancora una volta che idee scientifiche avanzate penetrarono l'ambiente intellettuale del Collegio di Coimbra grazie alla rete dei contatti internazionali intessuti dai membri del Collegio, soprattutto grazie agli Indipetae. Nel corso dello stesso viaggio, de Monconys incontrò il matematico gesuita inglese Thomas Barton presso il Collegio di San Rocco a Lisbona, e ricevette in dono una copia dei Collecta Astronomica di Cristoforo Borri

**Parole chiave**: Coimbra, Colégio das Artes, Cartesianesimo, Francisco Soares Lusitano, Ignatius Hartoghvelt, Balthasar de Monconys, John Rishton, Thomas Barton; G. Varenius.

When studying the intellectual climate in Coimbra and the Jesuit *Colégio das Artes* in the 17th century, an important question concerns the way through which new ideas circulating in contemporary Europe arrived also in Coimbra, and penetrated this academic milieu, in a dynamic process of acceptance versus resistance. An appropriate method to describe this process is the identification of the individual agents in this process, and the books, which played a role in this process.

In earlier contributions I focused on the personalities of some Jesuit '*Indipetae*' teaching mathematics in the *Colégio* (Ferdinand Verbiest; Adam Aigenler; Antoine Thomas<sup>2</sup>) or living there in an unspecified position (Ignatius Hartoghvelt<sup>3</sup>) and some 'local' Jesuit *scholastici* (such as Francisco

<sup>&</sup>lt;sup>2</sup> See the website of *Conimbricenses.org*.

<sup>&</sup>lt;sup>3</sup> See Visto de Coimbra (forthcoming).

Pereira de la Cerda)<sup>4</sup>. In this note I will return to an 'old' problem, viz. that of the penetration of Cartesianism in Coimbra, the trajectory this new way of thinking had followed at its arrival and the moment on which this happened, by the application of a so far overlooked source.

The first echoes of Descartes arrived in Portugal from the Low Countries: Joaquim de Carvalho pointed to Jean Gillot (ca. 1613 – 1657), almost the only pupil of Descartes, who became in the 1640s "*Portugaliae Regis Mathematicus*" and died in 1657<sup>5</sup>; also the Flemish Jesuit *Indipeta* Johannes Cier(e)mans, *al.* João Pascàsio Cosmander (1602 - 1648) – living and teaching in Lisbon and the Alentejo in the same period – had Cartesian interests and sympathies<sup>6</sup>. Of Descartes's *Principia Philosophiae* (Amsterdam, 1644) the 1<sup>st</sup> edition was already acquired in some Jesuit libraries, such as that of the Lisbon *Casa Professa São Roque*.<sup>7</sup>

As for Coimbra and the *Colégio das Artes*, already in 1937 Domingos Mauricio has discovered some undeniable Cartesian echoes in the work of Francisco Soares Lusitano (1605 – 1659), professor of philosophy at the *Colégio* between 1636 and 1640 and of theology in the *Colégio de* 

<sup>6</sup> On Ciermans: Omer van de Vyver, "Jan Ciermans (Pascàsio Cosmander) 1602–1648, wiskundige en vestingbouwer", *Mededelingen uit het Seminarie voor geschiedenis van de wiskunde en de natuurwetenschappen aan de Katholieke Universiteit te Leuven* 7 (Leuven: KU Leuven, 1975). Ciermans's correspondence with Descartes and his criticism on some aspects of his doctrine on light and colors: Georges-Marie-Michel Monchamp, *Histoire du Cartésianisme en Belgique* (Bruxelles: F. Hayez, 1886), 61-72.

<sup>7</sup> João Pereira Gomes, "As antigas livrarias dos Jesuitas em Lisboa", *Brotéria* 40 (1945), 159-160; also in: Henrique Leitão and José Eduardo Franco, Jesuitas, ciência e cultura no Portugal moderno. Obra selecta de Pe. João Pereira Gomes, S.J. (Lisboa: Esfera do Caos, 2012), 232: concerning the 1<sup>st</sup> ed. of his Principia Philosophiae, originally in the 'Livraria publica da Caza de S(ão) Roque, now in the Biblioteca da Faculdade de Ciências, le secção, n° 18; this item is already mentioned in the Catalogus authorum qui sunt in D(ivi) Rochi bibliotheca (1710), BNP Cod. 7393, f° 56v.: "Renatus Des-cartes Principia Philosophia (sic) Tom. 1 Caixa 106"; confirmed on f° 88v.: cf. Luana Giurgevich and Henrique Leitão, Clavis Bibliothecarum (Lisboa: Sersilito, 2016), n° 701.

<sup>&</sup>lt;sup>4</sup> Noël Golvers, "A Ray of Light on Private Mathematical Culture in Coimbra in the mid-17<sup>th</sup> Century: Francisco Pereira de La Cerda († 1656)", *Revista filosofica de Coimbra* 27 (2018), 65-76.

<sup>&</sup>lt;sup>5</sup> Cf. Joaquim de Carvalho, "Descartes e a cultura filosofica Portuguesa", *Memorias da academia das ciências de Lisboa, Classe de Ciências* 2 (1939), 43 ff. On the evidence of this engineer, a student at Leiden University, in Portugal, see Henricus Johannes Witkam, "Jean Gillot (een Leids ingenieur)", *Leids jaarboekje* (1967), 29-54. For Cartesian influence in Portugal in the second half of the 17th and the 18th century, see: Manuel Moraes, S.J, *Cartesianismo em Portugal. Antonio Cordeiro* (Braga: Livraria Cruz, 1966) and Amândio Coxito, "Para a historia do cartesianismo e do anticartesianismo na filosofia portuguesa (sécs. XVII-XVIII)", *Cultura. historia e filosofia* 6 (1987), 23-38.

Jesus between 1640 and 1654<sup>8</sup>. The passage in question stems from the third volume of his Cursus Philosophicus, published in Coimbra in 1651; according to Mauricio, January 1649 is the 'terminus ante quem' for the draft of this volume, and thus also for the arrival of the Cartesian echo. In this volume are integrated references to the work of Harvey on the circulation of blood, which Soares knew through the work of the Dutch Cartesian physician Henricus Regius, i.e. Hendrik de Roy (1598-1679), medical Professor at the University of Utrecht, more precisely through his "Apologia adversus Primirosium ad animadversionem 1", i.e. in fact his Spongia, quâ eluuntur sordes animadversionum, quas Jacobus Primirosius, doctor medicus, adversus theses pro circulatione sanguinis in Academia Ultrajectina disputatas nuper edidit, Leiden: 1640. From the immediate context of the reference in Cursus Philosophicus, III, p. 15-b emerges Soares's positive attitude towards Harvey's (and by implication Descartes's) search for 'mathematical certitude': "Quae quidem doctrina (i.e. Harvey's doctrine on blood circulation) a peritissimis medicis adeo est recepta, ut certitudine mathematica comprobetur apud Henricum Regium in Apologia adversus Primirosium auae tota est defensio huiusce dogmatis ad animadversionem 1". We don't know which copy Soares used, and it is not impossible that a sample of Regius's work had arrived in Coimbra's University library or in Soares's own library<sup>9</sup>.

When this echo suggests, by consequence, that some Cartesian ideas had found – though indirectly – their way to a Jesuit philosophy teacher in Coimbra between 1640 (the year of Regius's publication) and 1649 (the year in which Soares had finished the 3rd volume of his *Cursus Philosophicus*), it remains after all a weak indication. A much stronger confirmation I found now in an unexpected source for the history of science, namely in the travelogue of Balthasar de Monconys (1611-1665), French physician, diplomat and traveller, former student of the Jesuits in Lyon and Salamanca; it is entitled *Iournal des voyages de Monsieur de Monconys. Voyage de Portugal, Provence, Italie, Egypte, Syrie, Constantinople et Natolie, Lyon:* Horace Boissat & George Remeus, 1665. As the sub-title promises, we could expect in this text "*un nombre infini de nouveautez, en machines de mathematique, experiences physiques, raisonnemens de la belle philosophie, curiositez de chymie, & conversations des illustres de ce siecle*", and indeed, it offers us the mention of some interesting meetings, incl. one with clear Descartes references.

<sup>&</sup>lt;sup>8</sup> João Pereira Gomes, in Leitão, Jesuitas, 254, nº 88.

<sup>&</sup>lt;sup>9</sup> No title of him is mentioned in the inventory of the 'public' (i.e. general) library of the Coimbra college (date: 2 Aug. 1766: ANTT, MNEJ, Maço 62 (61?), Caixa 50, n. 1): cf. Giurgevich, *Clavis*, 298-299. On this one testimony of Soares's knowledge of Descartes: João Pereira Gomes, in Leitão, *Jesuitas*, 133 and 146. Copies of three other titles of Regius are in the actual BNP.

According to his journal De Monconys was from 11 to 14 December 1645 in Coimbra and in February 1646 in Lisbon. As for his stay in Coimbra he reports, among other things, about his visit to a Benedictine father, Pedro de Meneses, OSB, who was teaching mathematics in the College of São Bento (p. 48); more interestingly for our purpose is his visit, on 13 December, to the Jesuits:

L'apresdiné ie fus dire adieu aux Iesuites, au Pere Anglois Mathematicien, qui me debita sa pensée du flux de la Mer, causée par la lune, qui poussant l'air, comprime la mer en un endroit, et la fait regorger ailleurs: & aussi la pensée de la gravité qui doit proceder d'une expulsion des corps contre la terre, soit par les rayons du Soleil, soit par le mouvement perpetuel des atomes, qui sont les pensées de Des-cartes<sup>10</sup>.

This eyewitness testimony does not leave any space for doubts: the English Jesuit father teaching at the College in 1645 was convinced of Descartes's ideas about the tides and gravity<sup>11</sup>. From the Jesuit *Catalogi*, studied by Ugo Baldini, we can identify this English Jesuit as John Rishton, originally called Farrington (c. 1615-1656); born in Lancashire, he was from 1639 theology student in the English College of Liège, and was sent to Portugal in 1644 or 1645 (*Angl.*, 11, f. 69r.)<sup>12</sup>, i.e. the year in which De Monconys met him in December. His teaching in Portugal is also confirmed in *Angl.* 15, f. 106v. and covered Greek, Hebrew and mathematics ("*docuit in Lusitania Hebraica, Graeca, Mathematica*"), a not unusual combination.

That Rishton explained already in 1645 Descartes's theory on the tides and on gravity in Coimbra is most interesting, as it anticipates by 5 years the publication of Bernard Varenius's *Geographia Generalis*, published by Else-

<sup>12</sup> Angl(ica) is an archival indication, which refers to a section of the *Catalogi* of the staff members in the Jesuit provinces and colleges, kept in the Central Jesuit archives of Rome (*Archivum Romanum Societatis Jesu*). For these data, see Ugo Baldini, "The teaching of mathematics in the Jesuit colleges of Portugal from 1640 to Pombal", in: *The practice of mathematics in Portugal. Acta Universitatis Conimbrigensis*, eds. Luis Saraiva and Henrique Leitão (Coimbra: Imprensa da Universidade de Coimbra, 2004), 293-465 (more precisely: 386-387); see also Dominic Aidan Bellenger, *English, Welsh priests 1558-1800* (Bath: Downside Abbey, 1984), s.v.

<sup>&</sup>lt;sup>10</sup> The spelling of the name *Des-Cartes* is the same as that on the title page of the 1st, Latin edition of his *Principia Philosophiae* (Amsterdam: L. Elzevier, 1644).

<sup>&</sup>lt;sup>11</sup> On Descartes's ideas on the tides, see Eric J. Aiton, "Descartes's theory of the tides", *Annals of Science* 11 (1955), 337-348; Tad M. Schmaltz, "Galileo and Descartes on Copernicanism and the cause of the tides", in: *Studies in history and philosophy of science* 51 (2015), 70-81; David Edgar Cartwright, *Tides: a scientific history*, Cambridge: Cambridge University Press, 1999; on Descartes's vision of gravity: Eric J. Aiton, "The Cartesian theory of Gravity", *Annals of Science* 15 (1959), 27-49.

vier in Amsterdam in 1650<sup>13</sup> and considered as the first source which spread broadly Descartes's theories. This raises the question of the early source of Rishton's information, which preceded Varenius's publication. Both the topic of tides and gravity were dealt with Descartes in his Principia Philosophiae, of which the first, Latin edition appeared in Amsterdam (Elzevier) in 1644, i.e. just one vear before De Monconvs's quotation from Rishton in Coimbra. Rishton may have known Descartes's work when studying theology in the Jesuit college of Liège<sup>14</sup> just before he left for Portugal, although the Jesuits in Liège were in general hostile towards Cartesian ideas<sup>15</sup>. Direct relations with Francis Line (al. Linus, 1595-1675), the most prominent mathematician and scholar in the college at that time are not documented; anyway, he was a peripatetic whose main interests and specialities were optical problems, the construction of sundials and the vexata quaestio of the quadrature of the circle<sup>16</sup>, and nothing about his interest in Cartesianism is known. It appears therefore at least possible that Rishton got access to these ideas and theories through more informal channels, which are hardly identifiable now.

Anyway, while De Monconys's testimony confirms that in 1645 Descartes's ideas were known in detail at the *Colégio das Artes*, this does not mean that these ideas were also generally accepted on the spot, on the contrary.

A first general reason may be, that Descartes's opinions were problematic for the Jesuits as his 'war' with the Jesuits started already in 1640. As for Coimbra, the bulwark of Aristotelianism and scholasticism: there is a significant though unknown testimony of Ignatius Hartoghvelt (1629-1658), another Jesuit *Indipeta*, which speaks of some aversion, if not resistance within the College to Cartesianism. Hartoghvelt was the son of a Catholic printer in Amsterdam, who was educated in the Jesuit colleges of the Southern (Catholic or Spanish) Low Countries, viz. in Antwerp and Louvain. After having been selected by Martino Martini in Louvain to accompany him

<sup>&</sup>lt;sup>13</sup> On Varenius's work, see, among others, Margret Schuchard (ed), *Bernhard Varenius* (1622–1650) (Leiden, Brill, 2007). On Descartes's theory on the tides, see G. Varenius, *Geographia Generalis* (Amsterdam: Elzevier, 1650), 180 ff.: "Acutissimus Carthesius mechanicum explicavit modum, quo luna motum hunc aquae ["de fluxu et refluxu"] tum aeris efficiat, etc."

<sup>&</sup>lt;sup>14</sup> On the themes and level of the instruction in this College: Carmelia Opsomer, "La science au service de l'apostolat: l'enseignement des jésuites anglais à Liège aux XVIIe et XVIIIe siècles", *Archives internationales d'histoire des sciences* 52 (2002), 212-226.

<sup>&</sup>lt;sup>15</sup> Alphonse Leroy, *La philosophie au Pays de Liège, XVIIe et XVIIIe siècles* (Liège: F. Renard, 1860), 48; Monchamp, *Cartésianisme*, 96. On the "dogmata scholae peripateticae" in the College of the English Jesuits of Liège: *Florus Anglo-Bavaricus Serenissimo Principi Maximiliano Emmanueli Duci Bavariae etc. et Marriae Antoniae (...) inscriptus* (Leodii: G.H. Streel, 1685), 30.

<sup>&</sup>lt;sup>16</sup> On Line's mathematical profile, see Conor Reilly, "Francis Line, Peripatetic (1595--1675)", *Osiris* 14 (1962), 222-253.

to China, together with other Jesuits from the Flemish-Belgian province (Albert Dorville, François de Rougemont and Philippe Couplet), he went through Amsterdam to Lisbon. Arrived in Portugal, he was temporarily sent, together with François de Rougemont, to the Colégio das Artes in Coimbra. On his period in Coimbra, roughly between 23 May 1655 and the early Spring of 1656, Hartoghvelt wrote a very detailed eyewitness report, with many first-hand observations on the daily life inside the College, including the intellectual, spiritual and didactical aspects<sup>17</sup>. Remarkably enough he presents himself as the 'first' to have introduced Cartesian themes in the discourse of the *Colégio*<sup>18</sup>. Apparently he did not know, or was not informed on the ideas Rishton already a decade earlier expressed on the spot. When Hartogvelt – following his self-presentation - once tried to introduce some questions from Descartes's philosophy in the discourse of the local professors, this was not received well, because - in their opinion - Descartes was not 'subtle' enough "in philosophia naturali", whatever the correct meaning of this term 'subtle' in this (indirect) testimony may be<sup>19</sup>. The short passage in Dutch with my English translation runs as follows:

(De discipulen van de filosofie) sijn lustighe jonghe schreeuwers, sy en handelen bijcants anders niet als Spaensche question, ende uyt Spaensche aucteurs, waerdoor het ghebeurt dat sij maenden lanck "de ente rationis" dicteren, "de ente impossibili", "de potentia obedientali", "de universali" ende "de infinito, infinita (sic)". Sij loopen over de reste ghelijck de haene oover de koolen; ghelijck oock over de casus de professeurs van de theologie doen: seer breet ende wijt, alle subtijle dingen uytlegghende; ende hoe dickwils bij hun een saecke duysterder is, hoe van veele de selve subtijlder geacht wordt, waerdoor het ghebeurt, dat oock niet eene questie in Descartes Philosophia Naturali, die ick eerst hier hebbe ghebrocht aende Professores aenstaet, ende sommige professeurs, mij reeden daer af gheevende, segghen dat hij niet 'subtijl' ghenoech en is, oock in philosophia naturali".

<sup>&</sup>lt;sup>17</sup> See my preliminary presentation 'The scholarly context of the Colégio de Jesus / das Artes in Coimbra in the second half of the 17th century, through the eyes of four 'extranei' (I. Hartoghvelt; F. Verbiest; A.Aigenler; A. Thomas)", in: *Visto de Coimbra - O Colégio de Jesus entre Portugal e o Mundo*, ed. Carlota Simões, Margarida Miranda, Pedro Casaleiro, Coimbra: Imprensa da Universidade de Coimbra, 2020 (forthcoming).

<sup>&</sup>lt;sup>18</sup> He may have learned these ideas during his stay in Louvain (1650-1654), where Cartesianist ideas were rather widely spread and publicly taught until they were condemned by the university authorities in 1662.

<sup>&</sup>lt;sup>19</sup> The testimony, which is part of a long letter in Flemish, is in the General State Archives of Antwerp (*Algemeen Rijksarchief Antwerpen*), now temporarily in Beveren, call number 3407 (see the Inventory by Hendrik Callewier, *Inventaris van het archief van de Nederduitse provincie der jezuïeten (Provincia Belgica, vervolgens Provincia Flandro-Belgica) en van het archief van het Professenhuis te Antwerpen (1388) 1564-1773* (Brussels: Algemeen Rijksarchief, 2006), 406.

The students of (the course of) philosophy are bustling young loudmouths; they deal almost exclusively with Spanish questions, and (taken) from Spanish authors. So it happens that during months they are dictating "de ente rationis", "de ente impossibili"; "de potentia obedientali"; "de Universali" and "de infinito, infinita (sic)". They are running down the rest, like 'the cock runs over the (burning) coal'<sup>20</sup>, as also the teachers of theology are doing, explaining all subtle topics in a very detailed and verbose way. And the more a question is obscure, the more it is by many considered as subtle. By this it happens that even not one sole question in Descartes's natural philosophy, which I brought here as the first, is pleasing the professors, and some of the professors, explaining to me their reasons, are saying that 'he (Descartes) is not subtle enough, also in natural philosophy".

As Hartoghvelt refers to the reserved, even negative reactions among the Coimbra professors, this puts Rishton's Cartesian conviction of ten years earlier, in 1645, in another light: it seems now that he had only ventilated towards his foreign visitor his private opinions / convictions, without ever having discussed them in his public courses in Coimbra.

Returning again to De Monconys's testimony, we learn he visited in the month of May 1647 also Lisbon and the Jesuit professed House of São Roque. There he found a Flemish Jesuit whom he had met before in Coimbra and the English Jesuit Barton:

(Le 17 Févr. 1646). L'apresdiné ie fus à S(aint) Roch voir le Père Flamand, que j'avois veu à Coimbre, qui me dit son sentiment de la façon que se fait la glace (p. 56 / 57).

While this 'Flemish father' he had seen shortly before in Coimbra and who was apparently transferred meanwhile to Lisbon remains unidentified and the reference to the 'formation of ice' – a physical question – is too vague to be recognized<sup>21</sup>, the meeting, three weeks later, with Barton in the Professed House *São Roque* is mentioned ibid., on p. 59:

<sup>&</sup>lt;sup>20</sup> This is the first testimony to my knowledge of a 17th-century Flemish proverb ("*zoals een haan loopt over de hete kolen*"), which refers to an action without intelligence and capacity, or of 'beating around the bush'.

<sup>&</sup>lt;sup>21</sup> As the *Catalogi* of this period for the Coimbra college are lacking, I can sofar not identify this 'Flemish father' nor describe his ideas on the 'formation of ice'. One could guess also here some Cartesian influence, as Descartes dealt with ice formation in his *Les Météores* (1637). Shortly later, in 1645-1646 this question ("*de Glacie*") had become a polemic question between Descartes and Martinus Schoock (1614-1669), professor in Groningen University, but a direct relation with the Jesuits of the Prov. Flandro-Belgica is not visible.

"(Le 6 Mars). L'aprésdiné ie fus à S(aint) Roch, voir le Père Barton, Anglois mathématique, qui me presta le livre du Système du Père Christophe Borri, intitulé Collecta Astronomica, imprimé à Lisbonne".

Barton certainly is Thomas Barton (1632-1696), an English Jesuit, who studied in the same Jesuit college of Liège until 1645, and then went to Portugal as an *Indipeta;* the *Catalogi* are mentioning him as a mathematical teacher in Lisbon since 1648-1649 (*Lus.* 45, f. 18v.)<sup>22</sup>; this testimony of De Monconys proves Barton was already present in São Roque in the academic year 1645-1646, confirming H. Baldini's assumption<sup>23</sup>. The full title of this work of Christoforo Borri, SJ (1583-1632) – mathematical teacher in Coimbra in 1626-1627 – is *Collecta astronomica ex doctrina Christophori Borri: Mediolanensis, Ex Societate Iesu,* published in Lisbon: M. Rodrigues, 1629 or its reprint *Collecta Astronomica ex Doctrina; De tribus Cælis, Aereo, Sydereo, Empyreo;* Lisbon: apud M. Rodrigues, 1631; it was the first printed and detailed presentation of the Galilean telescope and observations.

All in all, these small personal and almost simultaneous eyewitness testimonies (De Monconys [1645]; Hartoghvelt [1655]) contribute to a better understanding of how new ideas from Europe irresistibly though rather marginally penetrated also in Portugal and more precisely in Coimbra, especially through 'foreign' Jesuit *Indipetae*, demonstrating again that Coimbra was not cut off from these new ideas.

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<sup>&</sup>lt;sup>22</sup> Baldini, "Teaching", 387 note 154.

<sup>&</sup>lt;sup>23</sup> Baldini, "Teaching", 386-387 note 153: "so he could also have taught in the three preceding years", i.e. (1645/6-1647/8).

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