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The Debut of a Woman in the History of Logic: Baltasara Petronila Arce y Suárez's *Tractatus logicae parvae iuxta mentem Scoti*

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Abstract

In 1692, the Spanish noblewoman Baltasara Petronila Arce y Suárez published her *Tractatus logicae parvae iuxta mentem Scoti* in Salamanca. She thus became, according to some historians of philosophy, the first woman logician. This paper constitutes a short introduction to the study of Baltasara's work, which has been neglected by scholarly research so far. The exposition is divided into three parts. First, Baltasara's biography is outlined, with special emphasis on the crucial issue of her education. An overview of the historical-philosophical context follows, with a focus on the logical trend to which Baltasara belongs, namely, logic in the medieval tradition. The third section offers a general analysis of the *Tractatus*, presenting the structure and contents of the treatise and addressing the complex question of its sources. Some concluding remarks assess the originality and philosophical interest of the *Tractatus*. The purpose of the paper is to encourage further research on Baltasara and her work.

Keywords

Baltasara Petronila Arce y Suárez – female logicians – women's education in the early modern period – early modern logic – Scotism – history of disputation

1 Introduction

As the author of *Tractatus logicae parvae iuxta mentem Scoti*, published in Salamanca in 1692, the seventeenth-century Spanish noblewoman Baltasara Petronila Arce y Suárez has been called “the first woman in the history of logic” by Wilhelm Risse and Jacob Schmutz.¹ However, to my knowledge, neither she nor her treatise have hitherto attracted much attention in scholarly research.

As far as Baltasara’s life is concerned, the only existing biography is the brief entry that Manuel Serrano y Sanz devoted to her in his *Apuntes para una Biblioteca de Escritoras Españolas* (Serrano y Sanz 1903, 52–55). Apart from that, we have only a few texts which serve more to reconstruct her family relationships than to provide direct information about her life and studies. Some of these sources are biographies of Baltasara’s relatives, such as Juan Manuel Giraldo’s life of Diego Arce y Reinoso, Baltasara’s granduncle,² and the entry about Fernando Arce y Dávila, Baltasara’s father, in the *Diccionario Biográfico Español*.³ Others are genealogical studies on her family, such as the section dedicated to the house of Morales-Arce contained in *Nobiliario de Extremadura*,⁴ and Jaime Baillo de Porlier’s paper on the same house.⁵ Finally, in her *Picking Wedlock*, Shifra Armon mentions Baltasara and her cousin and husband, Juan Morales Arce, while discussing social ascent through marriage in early modern Spain (Armon 2002, 37–39).

As for Baltasara’s *Tractatus*, the bibliography is even scantier, since only three contributions are available, which, furthermore, do not provide a systematic account of the work. I refer here to the relevant sections in Risse’s *Die Logik der Neuzeit* (Risse 1964–1970, 1:357) and Schmutz’s *Scholasticon* (Schmutz 2017, s.v. Arce y Suárez, Baltasara Petronila), and to a paper on early modern disputation practices published by Marco Forlivesi (Forlivesi 2000, 258–260).⁶

1 Cf. Risse 1964–1970, 1: 357: “Offensichtlich die erste Frau in der Geschichte der Logik”; Schmutz 2002, 52: “Les scotistes peuvent sans doute s’enorgueillir de compter la première femme logicienne parmi leur rangs”; Schmutz 2017, s.v. Arce y Suárez, Baltasara Petronila: “Sans doute la première femme dans l’histoire de la logique.”

2 Cf. Giraldo 1695. Baltasara is mentioned on p. 6.

3 Cf. Anes y Álvarez de Castrillón and Olmedo Ramos 2009–2013, s.v. Fernando de Arce y Dávila. Baltasara is mentioned.

4 Cf. Barredo de Valenzuela y Arrojo and de Cadenas y Lopez 2000, 84–86. Baltasara is mentioned on p. 85.

5 Cf. Baillo de Porlier y Morales-Arce 2008, *passim*. Baltasara is mentioned on pp. 289–291.

6 I must add that in recent years Georgina Rabassó has presented papers on Baltasara at a congress of the Sociedad de Filosofía Medieval held in 2016 and at a symposium of the International Association of Women Philosophers held in 2021. However, to my knowledge, the two papers have not been published yet.

My paper is a general presentation of Baltasara's *Tractatus*. In order to understand it correctly, it is necessary to place the work within a broader context. Accordingly, this essay is divided into three sections. The first contains the author's biography, the second traces the historical-philosophical background to the *Tractatus*, and the third deals with this work itself.

At present, I cannot offer an exhaustive presentation of Baltasara's logic. My aim is simply to provide a short introduction to the study of her work, and thus to stimulate interest in a figure who has been neglected by scholarly research so far.

2 Baltasara's Life

Baltasara Petronila de Arce Suárez y Mosquera was born in Zalamea de la Serena, Extremadura, in about the middle of the seventeenth century, very probably not before 1657, the year of her parents' marriage. She belonged to an aristocratic family. After studying civil law at the University of Salamanca's College of Cuenca, her father, Fernando de Arce y Dávila, undertook a brilliant political career, becoming *alguacil mayor*, i.e., head of the guard, of the Inquisition courts of Toledo and Granada and a member of the Royal Council of Castille.⁷ Her mother, Baltasara Antonia Suárez y Mosquera, descended from a renowned aristocratic family.⁸ Most importantly, her granduncle, Diego de Arce y Reinoso (brother of Fernando's mother, María de Arce y Reinoso), was one of the greatest political and cultural figures in seventeenth-century Spain. After teaching civil law at the College of Cuenca, he was bishop first of Tui, then of Ávila and finally of Plasencia, general inquisitor of Spain, and a member of the Council of State.⁹

In 1687, Baltasara married Juan de Morales Arce y Reinoso, who was the son of one of Fernando's sisters, María de Arce y Dávila, and therefore her cousin. Like Fernando, Juan belonged to the religious military Order of Alcántara. He also served as a *familiar*, i.e., lay assistant, in the Inquisition courts of Llerena

7 For Fernando de Arce y Dávila, cf. Anes y Álvarez de Castrillón and Olmedo Ramos 2009–2013, s.v. Fernando de Arce y Dávila; Baillo de Porlier y Morales-Arce 2008, 288–290; Giraldo 1695, 5–6; Serrano y Sanz 1903, 52.

8 For Baltasara Antonia Suárez y Mosquera, cf. Anes y Álvarez de Castrillón and Olmedo Ramos 2009–2013, s.v. Fernando de Arce y Dávila; Baillo de Porlier y Morales-Arce 2008, 289; Giraldo 1695, 6; Serrano y Sanz 1903, 52–53.

9 For Diego de Arce y Reinoso, cf. Anes y Álvarez de Castrillón and Olmedo Ramos 2009–2013, s.v. Fernando de Arce y Dávila; Baillo de Porlier y Morales-Arce 2008, 280–287; Giraldo 1695, *passim*.

and Zalamea de la Serena. Baltasara and Juan had no descendants, and thus his brother, Diego, became his heir.¹⁰

In July 1690, in response to an explicit request submitted by the newly married couple in 1687, the king of Spain, Charles II, granted Juan the general title of 'count in Castille' as a reward for his family's services to the Crown, especially those of Fernando and Diego. Juan then asked the title to be defined as 'count of Torre de Arce', and the king approved his request in September 1692. Although in the royal document awarding the title 'count of Torre de Arce' Juan is the only addressee, and he and his heirs are the only ones explicitly mentioned as being entitled to it, his wife obviously received the title as well.¹¹ Accordingly, in the copy of the *Tractatus* that I have examined, Baltasara presents herself as 'countess of Torre de Arce' (*comitisa Turris de Arce*) both on the title page and in the dedication to the duchess of Pastrana, and this, or alternatively 'countess of Arce' (*comitisa de Arce*), is how she is addressed in most of the letters approving the treatise (*approbationes*).¹² Interestingly, Baltasara publicly adopted the new title before it was officially granted, as shown by the fact that all the *approbationes* were written before the royal document was issued.¹³ This point needs to be further investigated. Future research should also explore the hypothesis as to whether there was a tie between the publication of the treatise and the granting of the title.

Baltasara spent all, or at least most, of her life in her hometown. The date of her death is unknown, but it is certainly not before 1704, since we have some documents dated between 1702 and 1704 that she wrote and addressed to the duke of Bejar.¹⁴

The most crucial issue concerning Baltasara's life is that of her education, given that in her time women were excluded from institutions of higher education.¹⁵ The available printed sources do not permit us to reconstruct her education with any precision. Nevertheless, they provide evidence that she was in contact with an educated milieu. Thanks to the appointments of several

10 For Juan de Morales Arce y Reinoso, cf. Anes y Álvarez de Castrillón and Olmedo Ramos 2009–2013, s.v. Fernando de Arce y Dávila; Baillo de Porlier y Morales-Arce 2008, 290–291; Barredo de Valenzuela y Arrojo and de Cadenas y Lopez 2000, 85; Giraldo 1695, 6; Serrano y Sanz 1903, 53.

11 For the award of these titles, cf. Armon 2002, 37–39; Baillo de Porlier y Morales-Arce 2008, 238, 291; Forlivesi 2000, 258; Serrano y Sanz 1903, 53–54, where the royal document awarding the title of 'count of Torre de Arce' is reproduced in full.

12 Cf. Arce et Suarez 1692, Ducisae de Pastrana, p. [4]; *Approbationes*, pp. [5], [7], [8], [12].

13 Cf. the dates of the *approbationes* in Arce et Suarez 1692, *Approbationes*, pp. [6], [8], [12], [13].

14 My reconstruction of Baltasara's life relies on Forlivesi 2000, 258; Serrano y Sanz 1903, 52–55.

15 Cf. Tuck 1998, 11.

members of her family, namely her father, her granduncle Diego de Arce y Reinoso, her husband, and her father-in-law, Juan Antonio de Morales y Messía (*alguacil mayor* of the Inquisition courts of Toledo and Llerena),¹⁶ Baltasara was connected to the Inquisition and, more generally, to the higher clergy. Baltasara's family tie with Diego de Arce y Reinoso was also relevant for other reasons: he was politically close to João Poinso, a major figure in the history of the Dominican order and of the Thomistic movement (Forlivesi 2000, 258), and he was also the owner of one of the largest libraries in seventeenth-century Spain (Baillo de Porlier y Morales-Arce 2008, 281–283n126). This fact is even more noteworthy if we bear in mind that Baltasara inherited Diego's assets, as stated in the abovementioned 1692 royal document.

To all this, we have to add Baltasara's relationship with three religious communities, and with their corresponding religious orders, in Zalamea: the Monastery, and related College, of St. Blaise, home to the Discalced Trinitarian Friars; the Monastery, and related College, of St. Mary of the Angels, home to the Observant Friars Minor;¹⁷ and the monastery of the Franciscan nuns of the Immaculate Conception. Several elements attest to her bond with these places. As far as the Trinitarian monastery is concerned, Baltasara's father founded it in September 1665 and was therefore its patron, and at his death Baltasara inherited the patronage.¹⁸ As for the Franciscan friars' monastery, Baltasara's husband was patron of its chapel. Juan was also patron of the Franciscan female monastery,¹⁹ where three of his sisters, namely, María, Juana, and Leonor Polonia de Morales Arce y Reinoso, and one of Fernando's sisters, Catalina de Arce y Dávila, lived as nuns.²⁰ Baltasara's connection with the Trinitarian and the Minor monasteries is confirmed by the *approbationes*, all of which come from either one or the other.²¹

16 For Juan Antonio de Morales y Messía, cf. Baillo de Porlier y Morales-Arce 2008, 274–276; Barredo de Valenzuela y Arrojo and de Cadenas y Lopez 2000, 85; Forlivesi 2000, 258; Giraldo 1695, 6; Serrano y Sanz 1903, 53.

17 We learn that the friars Minor of St. Mary of the Angels belonged to the Observant branch of the Franciscan family from the license to print the *Tractatus*, which is reproduced in the initial pages of the copy that I have consulted. Here it is written that the task of examining the doctrinal orthodoxy of the *Tractatus* was assigned to Fr. Juan de Arias, presented as a friar of the Franciscan Observance living in St. Mary of the Angels. Cf. Arce et Suarez 1692, Licencia, p. [15].

18 For Baltasara's connection with St. Blaise, cf. Baillo de Porlier y Morales-Arce 2008, 289, 291; Giraldo 1695, 290.

19 For Juan's patronage titles, cf. Baillo de Porlier y Morales-Arce 2008, 291.

20 For María, Juana e Leonor Polonia de Morales Arce y Reinoso, cf. Baillo de Porlier y Morales-Arce 2008, 293–294; Giraldo 1695, 7. For Catalina de Arce y Dávila, cf. Baillo de Porlier y Morales-Arce 2008, 288; Giraldo 1695, 6.

21 Cf. the references in n13 above.

Besides providing information on the kind of cultural milieu to which Baltasara belonged, the available printed sources also offer good grounds for formulating a hypothesis about her educational formation. In his *approbatio*, Pedro de Leon, friar in the monastery of St. Mary of the Angels and lecturer at its college (Arce et Suarez 1692, *Approbationes*, pp. [8], [12]), states that he has known Baltasara since she was a child and attests to her early intellectual gifts and to her mastery of all the liberal arts (Arce et Suarez 1692, *Approbationes*, pp. [10]–[11]). We may thus conjecture that Baltasara was educated, at least partly, by Pedro himself or by someone else close to him, probably a friar Minor from the same monastery. This conclusion is supported by the fact that Baltasara places her *Tractatus* in the Scotist tradition, as the title itself already reveals.

In short, further investigation is necessary in order to shed light on Baltasara's education, and, more in general, to reconstruct her life. Spanish archives, which I have not researched so far, may provide useful information. A promising research path would address a figure in Baltasara's life whom I have not yet mentioned, Gregorio Antonio de Escobar. He wrote an encomium of Baltasara and her treatise that is attached to the opening pages of the copy on which my study of the work is based. What is most relevant in this short text is that its author presents himself as a 'fellow student' (*condiscipulus*) of Baltasara (Arce et Suarez 1692, *Ad comitisam Turris de Arce*, p. [14]). I have hitherto been unable to find information about Escobar, but evidently an exact determination of his identity could prove crucial in solving the question of her studies.

3 Seventeenth-Century Logic in the Medieval Tradition

Seventeenth-century logic is highly varied. With a certain degree of simplification, it is possible to distinguish six main currents: logic in the medieval tradition, Lullist logic, humanistic logic, Aristotelian logic, rationalistic logic, and empiricist logic.²² Due to the limits of the present inquiry, I can offer only a brief and general account of the first of these trends, which is the one to which the *Tractatus* directly belongs.

By expressions such as 'logic in the medieval tradition' or 'logic in the medieval style', I intend the continuation of the medieval logical tradition after the conventional end of the Middle Ages, in the form of an autonomous school of logic. In scholarship, this current has sometimes been called 'scholastic logic',

22 This partition is derived from Ashworth 1974, 3–4; Muñoz Delgado 1982, 280; Risse 1974, 1:12; 2:12–13.

a solution that nevertheless poses some problems.²³ Given its continuity with medieval logic, before considering seventeenth-century logic in the medieval style, I will sketch the basic features of logic in the Middle Ages.

Medieval logic developed in two fundamental directions. On the one hand, logicians of the time studied and further elaborated what they called ‘ancient logic’ (*logica antiqua*), i.e., the logical works that the Middle Ages inherited from antiquity, among which Aristotle’s *Organon* was the main authority.²⁴ Logicians mainly dealt with *logica antiqua* either in the *summulae* (originally meaning ‘short summaries’), general logical handbooks for beginners, or in exegetical works on the Stagirite’s logical treatises for advanced learners, mainly in the form of commentaries (*commentarii*) or questions (*quaestiones*). On the other hand, medieval philosophy created its own characteristic logical tradition, which originated from the reading of *logica antiqua* but cannot be reduced to those texts. Medieval masters called this new body of doctrines ‘modern logic’ (*logica moderna*). It includes a rich and heterogeneous set of topics, typical subjects of discussion being the properties of terms (*proprietaes terminorum*), syncategorematic words (*syncategoremata*), consequences (*consequentiae*), obligations (*obligationes*), insolubles (*insolubilia*), sophisms (*sophismata*), compounded and divided sense (*sensus compositus et divisus*), and proof of the proposition (*probatio propositionis*).²⁵ Such topics were also expounded either in the *summulae* or in monographic treatises for experts.²⁶

In the sixteenth century, medieval logic went into decline. The only geographical area where logic in the medieval tradition maintained its strength, and even underwent an important reform, was the Iberian Peninsula.²⁷ In

23 For the difficulties raised by the historiographical category ‘scholasticism’, cf. Forlivesi 2013, 98–107; Forlivesi 2023, *passim*.

24 For *logica antiqua*, cf. Ashworth 1974, 12n38; Ashworth 1988, 143; Maierù 1972, 9–16, where an exhaustive list of the works included in *logica antiqua* is provided; Vanni Rovighi 2006, 27, 33, 58.

25 For an overview of *logica moderna*, cf. Ashworth 1988, 146–150; Maierù 1972, 16–46. See also the very general remarks in Ashworth 1974, 1. The limits of this exposition do not permit me to illustrate the various topics of *logica moderna* even in broad terms. Introductions to each of them can be found in the corresponding sections in Kretzmann et al. 1982 and in Maierù 1972, and in the corresponding entries to the *Stanford Encyclopedia of Philosophy*.

26 As regards the literary genres mentioned here, for the *summulae*, cf. Ashworth 1988, 149–150; Kenny and Pinborg 1982, 33–34; Lohr 1974, 231; Maierù 1972, 38–40. For the different literary genres employed in the interpretation of Aristotle’s works, cf. Kenny and Pinborg 1982, 19–33; Lohr 1974, 230–231. For the monographic treatise, Kenny and Pinborg 1982, 34; Lohr 1974, 231.

27 For medieval-style logic in the sixteenth century, cf. Ashworth 1974, 4–8, 19–22; Ashworth 1982, *passim*; Ashworth 1988, 143–146, 151–172; Muñoz Delgado 1954, *passim*; Risse 1974, 1:308–439.

about 1600, it began to flourish again throughout Europe, thus becoming, together with Aristotelianism, the main logical trend of the first half of the seventeenth century. The circulation of logical works belonging to sixteenth-century Iberian medieval-style logic contributed to this revival. Consequently, the renewal of university logic that took place in the Iberian context in the sixteenth century played a crucial role in shaping seventeenth-century logic in the medieval tradition.²⁸

There are four features of seventeenth-century logic in the medieval tradition that must be recalled. The first concerns the degree to which the medieval logical heritage was preserved. In some respects, seventeenth-century medieval-style logic appears as a simplified version of medieval logic. The interest in many of the themes that had been characteristic of *logica moderna* considerably decreased or completely disappeared, so that the *proprietas terminorum* alone were discussed to any relatively significant extent. Furthermore, the analysis of the questions that nowadays would be placed in the domain either of logic or of philosophy of language no longer presented the degree of complexity and formalization that it had enjoyed in the fourteenth and fifteenth centuries.²⁹

Secondly, a tripartite subdivision of logic into small logic (*logica parva*), proemial logic (*logica prooemialis*), and great logic (*logica magna*) was generally accepted. *Logica parva* expounds the basic concepts of logic, which are considered propaedeutic to the reading of the *Organon*. *Logica prooemialis* addresses those issues that are thought to suit the prologue of a logical work (and which were traditionally treated in the prologues to the commentaries on Aristotle's logical treatises): these are, for example, the nature of logic; whether it is a science or not and, if so, what kind of science; its unity and internal articulation; and its object. *Logica magna* deals with the principles underlying the introductory notions presented in *logica parva*. It assumes the form of a selective exegesis of the *Organon*, where mainly Porphyry's *Introduction* and the *Categories*, and to a lesser extent *On Interpretation* and *Posterior Analytics*, are explained.³⁰

Thirdly, the prevailing literary genre is what may be called the 'systematic handbook', by which I mean a work that organizes its subject matter not according to the order of a previous authoritative text (as a *commentarius*

28 For the revival of medieval-style logic in about 1600, cf. Muñoz Delgado 1982, 284–285; Risse 1974, 1:12, 106–107, 417–418.

29 For the simplification of the medieval logical tradition in seventeenth-century medieval-style logic, cf. Ashworth 1988, 151–152, 164–170; Risse 1974, 2:294–295.

30 For the tripartition of seventeenth-century medieval-style logic, cf. Muñoz Delgado 1982, 280–283; Nuchelmans 1998, 105–107; Risse 1974, 1:336–337; 2:294–295, 296–297.

usually does), but according to the purpose of making concepts and their relations clear to the reader. This literary form, which was then called ‘*summa*’, ‘treatise’ (*tractatus*), or ‘course’ (*cursus*), already existed in the Middle Ages.³¹ However, it developed significantly between the sixteenth and seventeenth centuries, becoming dominant in seventeenth-century university philosophy.³²

Finally, another feature that was inherited from the past is the articulation into schools (*scholae*). A *schola* is, at the same time, a philosophical and theological tendency based on a medieval author, a set of academic institutional structures, and a political-academic party.³³ Two phenomena which are distinctive of the seventeenth century are, on the one hand, the identification between the different *scholae* and the doctrinal trends of the different religious orders, and, on the other, the multiplication of the *scholae*. The main *scholae* in the seventeenth century were Thomism and Scotism, each of which was articulated into various trends and forms that also corresponded to the different religious orders that adopted it.³⁴

4 The *Tractatus*

My research on the *Tractatus* relies on the copy owned by the Biblioteca Nacional de España in Madrid, which is the sole surviving one, as far as I have been able to discover.³⁵ A bibliographical description of the volume follows.

- Title page: ✠ / TRACTATVS / LOGICÆ PARVÆ, / DISTRIBVTVS IN TRIBVS LIBRIS, / IVXTA MENTEM / DOCTORIS IOANNIS DVNS SCOTI. / DICTATVS A DOMINA / BALTHASARA PETRONILA / ARCE ET SVAREZ, / COMITISA TVRRIS DE ARCE, ET DOMINA / de Bentrances, Figueroa, Iinzo, alijsque locis. / DEDICATVS / DVCISÆ DE PASTRANA, INFANTADO / & Lerma; Principisæ de Melito; Marchionæ de San- / tillana, & Cenete; Comitissæ del Real de Mançana- / res; Marchionæ de Arbueso, & Argocilla, & quatuor / Municipiorum del Infantado; & Baroniarû de Aio- / ra, & Alberique, & aliorum quingenta su- / pramille locorum. / (Typographic line) / SVPERIORVM

31 While talking about the literary genres of medieval logic, we mentioned two forms of systematic handbook, namely, the *summulae* and the monothematic treatise.

32 For the systematic handbook, cf. Forlivesi 2013, 62–71; Muñoz Delgado 1982, 280–283; Risse 1974, 2:294–295. Also see the references for the systematic handbook in the Middle Ages in n26 above.

33 This definition can be found in Forlivesi 2013, 31–34.

34 For the *scholae* in the seventeenth century, cf. Forlivesi 2013, 54–55, 66–71; Muñoz Delgado 1982, 283; Risse 1974, 2:344–347.

35 It is the only one listed in *WorldCat*.

PERMISSV. / Salmanticæ: Apud Viduam Lucæ Perez, Typ. Vniv. / Anno Domini 1692.

- Pagination: [16], 82.
- Format: 4° (200x149 mm).
- Signature mark: ¶–¶¶ 4, A–K 4, L 1.
- Fingerprint: t.is T.t! ode. noAl (3) 1692 (A).
- Location: Madrid, Biblioteca Nacional, 2/25615.³⁶

Baltasara's work is divided into three books, whose contents are distributed, as was usually the case in *logica parva* (Muñoz Delgado 1982, 280–281), according to the so-called 'operations of the intellect' (*operationes intellectus*), namely, simple apprehension, judgment, and reasoning.³⁷ The first book deals with the product of the first operation, namely, the term, providing a definition of it and distinguishing its various forms. The second deals with the product of the second operation, namely, the proposition. It starts with some preliminary topics, that is, the *oratio* (i.e., a particular complex unit of speech) and its parts (i.e., noun and verb), and the three ways of knowing (*modi sciendi*), namely, definition, division, and argumentation; it then discusses propositions in general, categorical non-modal propositions, categorical modal propositions, and exponible propositions. The last book deals with the product of the third operation, namely, the argument. Apart from a few remarks on arguments in general and on fallacies, this book is exclusively concerned with the syllogism, considered both in general and as a categorical non-modal syllogism.

Each book is articulated into disputations (*disputationes*), which are in turn articulated into *quaestiones*. The literary genre of the *disputatio* represents an evolution of the medieval *quaestio* that appeared in the sixteenth century. In a work of this kind, the contents are distributed into *disputationes*, each of which is divided into *quaestiones* dealing with the same general problem. The single *quaestio* is organized according to the typical early modern structure of the university disputation. In the seventeenth century, the form of the *disputatio* was widely employed in academic writings, and the systematic handbooks of the time were very often articulated into *disputationes*.³⁸ As far as logic is concerned, however, this literary form was typical of *logica prooemialis* and *logica magna* rather than of *logica parva*,³⁹ and thus its use in the *Tractatus* certainly represents an unconventional, albeit not

36 The bibliographical description of the surviving copy can be found in Forlivesi 2000, 259.

37 For the three *operationes intellectus*, cf. Gili 2019, 3–4; Muñoz Delgado 1982, 280–281; Nuchelmans 1998, 106.

38 For the literary genre of the *disputatio*, cf. Forlivesi 2013, 62–71; Lohr 1974, 231; Weijers 2013, 210–215, 218–219.

39 Cf. the references in n30 above.

entirely original,⁴⁰ feature. That said, it must be added that although several *quaestiones* reproduce the early modern university disputation,⁴¹ in most of the treatise the *disputatio* is reduced to just an organizational pattern, since the exposition merely consists in enumerating concepts and illustrating them through examples, without any significant argumentation. This is also a common feature of works dealing with *logica parva* (Risse 1974, 1: 336, 2:294–297).

The three books are preceded by a chapter that describes the way in which a university disputation ought to take place and are followed by a kind of appendix that defines some technical terms of the contemporary philosophical vocabulary. In the copy that I have consulted, the *Tractatus* follows some initial pages which contain, in order, a dedication to the duchess of Pastrana by Baltasara, five *approbationes* by different authors, an encomium of Baltasara and her work by Gregorio Antonio de Escobar, the authorization to publish the treatise by the competent authority, and a prologue to the treatise by Baltasara herself.

According to the general features of seventeenth-century logic in the medieval style, in the *Tractatus* little attention is paid to *logica moderna*. The doctrine most extensively considered is that of *proprietaes terminorum*, to which two whole *quaestiones* are devoted (Arce et Suarez 1692, I, d. 1, qq. 5.3.2, 5.3.3, pp. 22–28). *Syncategoremata*, *consequentiae*, *sensus compositus/divisus*, and *probatio propositionis* are only mentioned,⁴² whereas *obligationes*, *insolubilia*, and *sophismata* do not appear at all. In short, in this work neither

40 To limit my attention to Baltasara's sources, I note that Fuente's *Brevis tractatus de summulis* is articulated into *quaestiones*, which are in their turn articulated into difficulties (*difficultates*), which are in turn articulated into articles (*articuli*), whereas Mendoza's *Summulae* are articulated into *disputationes*, which are in turn articulated into sections (*sectiones*). Furthermore, although Alonso's *Institutiones dialecticae*, Mastri and Belluto's *Institutiones logicae*, and Punch's *Introductio ad logicam* are not organized into *disputationes* and/or *quaestiones*, they sometimes use the mode of exposition that is characteristic of these literary forms.

41 In some *quaestiones*, the exposition is entirely modeled on the university disputation: cf. Arce et Suarez 1692, I, d. 1, q. 1, pp. 3–6; I, d. 1, q. 2, pp. 7–9; I, d. 1, q. 3, pp. 9–12; II, d. 1, q. 1, pp. 29–34; II, d. 3, q. 1, pp. 42–45. In other *quaestiones*, the disputation form is applied only to part of the exposition: cf. Arce et Suarez 1692, I, d. 1, q. 4, pp. 13–14; I, d. 1, q. 5.2, pp. 16–18; I, d. 1, q. 5.3.2, p. 22; II, d. 1, q. 2, pp. 34–35; II, d. 2, q. 1, pp. 35–37; II, d. 2, q. 2, pp. 37–39; II, d. 2, q. 3, p. 40; II, d. 2, q. 4, pp. 40–41; III, d. 1, q. 2, pp. 65–66.

42 For *syncategoremata*, cf. Arce et Suarez 1692, I, d. 1, q. 5.2, pp. 15–16. For *consequentiae*, cf. Arce et Suarez 1692, Caput primum, p. 2; III, d. 1, q. 1, pp. 63–64. For *sensus compositus/divisus*, cf. Arce et Suarez 1692, II, d. 4, q. 1, p. 53. For *probatio propositionis*, cf. Arce et Suarez 1692, II, d. 5, q. 1, pp. 61–62.

the kind of subtle analyses nor the level of formalization that are typical of late medieval logic are to be found.

The problem of Baltasara's sources is a complex one. For the purposes of this paper, it is enough to say something about the explicit sources dating from the sixteenth and seventeenth centuries. This will permit us to place the *Tractatus* in the historical-philosophical context to which it is most closely connected. By 'explicit source', I mean a work on which Baltasara draws and which she acknowledges, whereas 'implicit source' indicates a work on which she draws without saying so. In the following list, all the sixteenth- and seventeenth-century explicit sources are enumerated. Authors are ordered alphabetically, and those adhering to Scotism are printed in bold. For each work, the year of the first printed edition is given in round brackets, and the number of occurrences in the *Tractatus* is indicated in square brackets.

- 1) Francisco ALONSO S.I. (1600–1649), *Institutionum dialecticarum libri quinque* (1639)⁴³ [2].
- 2) Gaspar CARDILLO DE VILLALPANDO O.Cist. (1527–1581), *Summa summularum* (1557)⁴⁴ [2].
- 3) Vincenzo CIORLA O.F.M.Conv. (1599–1655), *Tractatus summularum* (1646) [1].
- 4) Sebastião do COUTO S.I. (1567–1639), *Commentarii Collegii Conimbricensis e Societate Iesu. In universam dialecticam Aristotelis Stagiritae* (1606) [1].
- 5) Gaspar de la FUENTE O.F.M.Obs. (1596 c.–1665 c.), *Brevis tractatus de summulis* (1631) [3].
- 6) Pedro HURTADO DE MENDOZA S.I. (1578–1641), *Summulae* (1615)⁴⁵ [1].
- 7) Bartolomeo MASTRI O.F.M.Conv. (1602–1673) – Bonaventura BELLUTO O.F.M.Conv. (1600–1676):
 - A) *Institutiones logicae* (1639)⁴⁶ [6].
 - B) *Disputationes in Organum Aristotelis quibus ab adversantibus iaculis Scoti logica vindicatur* (1639)⁴⁷ [1].
- 8) Juan MERINERO LÓPEZ O.F.M.Obs. (1583–1663), *Introductio ad Aristotelis dialecticam seu logica parva* (1659) [3].
- 9) Pedro de OÑA O. de M. (1560–1626), *Dialecticae introductio, quam vulgo summulas vocant* (1593) [1].
- 10) John PUNCH O.F.M.Obs. (1599 or 1603–1661), *Logica* (1642)⁴⁸ [1].

43 The edition that I have consulted is Alphonsus 1642.

44 The edition that I have consulted is Cardillus Villalpandus 1608.

45 The editions that I have consulted are Hurtadus de Mendoza 1619 and Hurtadus de Mendoza 1624.

46 The edition that I have consulted is Mastrius and Bellutus 1646a.

47 The edition that I have consulted is Mastrius and Bellutus 1646b.

48 The edition that I have consulted is Poncius 1672.

- 11) Luis **RODRÍGUEZ O.F.M.**Obs. (fl. c. 1624), *Dialecticae Aristotelis compendium* (1624) [5].
- 12) Domingo de SOTO O.P. (1495–1560), *Summulae* (1529)⁴⁹ [1].
- 13) Miguel de **VILLAVERDE Y POZO O.F.M.**Obs. (d. 1660), *Logica docens seu directiva in doctrina Scoti* (1656) [1].⁵⁰

From this list, two conclusions can be inferred about Baltasara's sixteenth- and seventeenth-century explicit sources. First, most of them are Scotist. Second, those most frequently used are also Scotist, namely Fuente's *Tractatus*, Merinero López's *Introductio*, Rodríguez's *Compendium*, and, above all, Mastri and Belluto's *Institutiones*. As a result, as regards the explicit sources, Scotism is the doctrinal tradition represented best in the *Tractatus*.

Both in the title and in nearly all the *approbationes*, the *Tractatus* is presented as a Scotist work (Arce et Suarez 1692, *Approbationes*, pp. [5], [6], [7], [8]). Baltasara's aforementioned tendency to employ Scotist sources is relevant to the assessment of her alleged inclusion in the Scotist movement. Another tendency of hers should also be taken into account, namely, that of tracing her opinions back to Scotist authors or to Scotus himself. These two features appear even more significant with respect to the question of Baltasara's Scotism, if we bear in mind that the doctrines of *logica parva* usually constituted a tradition shared among the different *scholae* (the controversies being mostly about *logica proemialis* and *logica magna*),⁵¹ and thus the contents of the *Tractatus* are not in themselves of any use in determining the *schola* to which it belongs. Hence, if, assuming a somewhat circular and thus inadequate definition, we conceive of a Scotist as a philosopher who mostly, or at least largely, draws on Scotus or Scotist thinkers, or tends to attribute his positions to Scotus or Scotist thinkers, then Baltasara is undoubtedly a Scotist. A well-grounded assessment of her Scotism would, however, require further analysis (and, first of all, an understanding of what being a Scotist meant in seventeenth-century logic), which goes beyond the scope of this presentation.

5 Conclusion

In many respects, Baltasara's *Tractatus* is conventional. When considered against the background of seventeenth-century medieval-style logic, it

49 The edition that I have consulted is Soto 1554.

50 In order to determine biographical data and years of editions, the following sources are particularly useful: Anes y Álvarez de Castrillón and Olmedo Ramos 2009–2013; Heijden and Roest 2022; Muñoz Delgado 1982; Risse 1964–1970; Schmutz 2017.

51 Cf. the references in n30 above.

appears to share all the general features that have been presented above. It is a systematic handbook dealing with *logica parva* and belonging to a specific *schola*, namely, Scotism. The way in which the work handles *logica parva* is also rather standard. It pays little attention to the traditional topics of *logica moderna*, it distributes its contents according to the *operationes intellectus*, and, even though it resorts to *disputationes* and *quaestiones* in its internal organization, the prevailing mode of exposition (namely, a mere juxtaposition of concepts without any relevant argumentation or in-depth investigation) is that usually found in treatises expounding *logica parva*.

Yet, the work does not lack originality. Let us consider, for example, the use of the *disputatio*. Although, as remarked above, both the organizational form and the exposition style of the *disputatio* are employed in some of Baltasara's sources, the theoretical framework in which these features are set in the *Tractatus* is not to be found in her explicit references. In the prologue, she justifies her choice to present the structure of disputation at the beginning of the work. Her reasoning is as follows: the purpose of the treatise is to search for truth in logic. Now, truth best reveals itself in the conflict of contrary opinions, and such a conflict occurs only in argumentation. Therefore, it is fitting to start the exposition with the rules that govern argumentation. Clearly, since the initial section of the *Tractatus* is a description of disputation, when Baltasara speaks of 'argumentation' (*argumentatio*) here, she has in mind that particular form of argumentation that is disputation. While legitimizing the order of subjects in the *Tractatus*, the argument proposed in the prologue also offers a justification of the application of the disputation form in the work.⁵²

The *Tractatus* is also interesting from a theoretical standpoint. As previously mentioned, in some *quaestiones* the structure of the doctrinal disputation is reproduced and, therefore, the discussion attains a remarkable degree of conceptual refinement and argumentative complexity. The best examples are provided by the *quaestiones* where the disputation form is most extensively applied, that is to say those devoted to, respectively, the nature of the term, the doctrine of the copula, the nature of the sign, the nature of the noun and verb, and the nature of the proposition. Here, Baltasara's philosophical skills can be appreciated more easily.

The *Tractatus* represents a unique case, that of a woman writing and publishing a treatise on logic at the end of the seventeenth century. A great deal of research still needs to be carried out not only on the text itself but also on its author and on the historical-philosophical context.⁵³

52 For the argument in the prologue, cf. Arce et Suarez 1692, Prologus, p. [16].

53 I thank Marco Forlivesi and Luca Gili who read the penultimate version of this paper.

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