

Santa Maria and the Printing of Instrumental Music
in Sixteenth-Century Spain

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SEPARATA

*Livro de homenagem a Macario
Santiago Kastner.*

Ed. Maria Fernanda Cidrais
Rodrigues, Manuel Morais, Rui
Veiera Nery. Lisbon: Fundação
Calouste Gulbenkian, 1992

Scarcity of information concerning the processes and practices of music printing in sixteenth-century Spain has virtually excluded its consideration in musicological studies. The value of such insight in the case of instrumental music is particularly significant, not only from the viewpoint of printing practices, but also for the implications concerning the dissemination and use of printed music for solo instruments. The principal information available concerning the printing of instrumental music in sixteenth-century Spain concerns the *Obras de musica para tecla arpa y vihuela* (Madrid: Francisco Sánchez, 1578) of Antonio de Cabezón and the *Libro de musica para Vihuela intitulado Orphenica lyra* (Seville: Martin de Montedoca, 1554) by Miguel de Fuenllana (1). This study presents information concerning the printing of Tomás de Santa María's *Libro llamado arte de tañer fantasia*, produced in Valladolid in 1565 by the printer Francisco Fernández de Córdoba. It is based on a study of the contract made between the author and printer for the printing of the book discovered by John Griffiths and studied here by both authors, and on a comparative study of the surviving exemplars of the *Arte de tañer fantasia* made by Warren Hultberg. The issues that concerns us here are the relationship between author and printer, quality control typographical alterations made during printing, the time taken in book production, costs and profits, the size of impressions, and the social implications of the dissemination of instrumental music.

The contract for printing the *Arte de tañer fantasia* was drawn up by the *escribano* Juan de Rozas, and is dated 5 July, 1563 (2). It is similar in form and content to typical

(1) The Cabezón contract is reprinted in Cristóbal Pérez Pastor, "Escrituras de concierto para imprimir libros" (*Revista de Archivos, Bibliotecas y Museos*, 3ª Epoca, 1 (1987), 363-371; the Fuenllana contract is reprinted in Klaus Wagner, *Martin de Montedoca y su prensa: Contribución al estudio de la imprenta y bibliografía sevillana del siglo XVI*, (Seville: Universidad de Sevilla, 1982), pp. 110-111. Charles Jacobs also discusses typographical variants in the extant copies of this work in the Preface to his edition, Miguel de Fuenllana, *Orphénica Lyra* (Oxford: Clarendon Press, 1978), pp. xxv-xxviii].

(2) The documents is conserved in the Archivo Histórico Provincial de Valladolid, *Protocolos*, legajo 278, folios 376-377.

sixteenth-century printing contracts, and is composed with the customary prolixity of contemporary Spanish legal documents. The main thrust of the contract may be summarised as follows: 1) that Santa María was required to be present at the printing in order to supervise correction of the proofs; 2) that 1500 copies were to be produced, with printing beginning in January 1564; 3) that the price of the printing was to be determined by the quantity of paper used, at the rate of 23 *reales* per printed ream; 4) that a token payment of 20 *ducados* was made at the signing, a further 100 *ducados* were due on completion of printing, and the balance of payment was to be made from the sale of the first exemplars. The remainder of the document deals with penalty clauses, financial protection and the legal security available to each party in the case of default. The document is transcribed and translated below, omitting those passages of a general legal nature and which have no direct relevance. Abbreviations in the original are spelt out in full, and amendments or additions are shown in brackets.

En la noble villa de Valladolid a cinco dias del mes de jullio de mill y quinientos y sessenta y tres anos ante mi el escribano y testigos de yuso escritos pareçieron presentes de la una parte fray tomas de santa maria de la orden de santo domyngo rresidente en el monasterio de santo domyngo de la çibdad de guadalajara y de la otra parte francisco fernandez de cordoba ynpresor de su magested vezino desta dicha villa y dize-ron que por quanto el dicho fray tomas de santa maria da a enpremir al dicho francisco fernandez de cordoba un libro que se yntitula arte para taner fantasia en texla y en biyuela y harpa porende aquellos estaban conçertados y se conçertaron en la forma e manera siguiente

primeramente el dicho fray tomas de santa maria se obligo de entregar al dicho francisco fernandez de cordoba el registro del dicho libro para el tiempo que se ubiere de ynpremir bueno e cor-

In the noble town of Valladolid on the fifth day of July of the year 1563, before me the notary and below-signed witnesses appeared present as one party Fray Tomas de Santa Maria of the order of Santo Domingo, resident at the monastery of Santo Domingo in the city of Guadalajara, and as the other party Francisco Fernandez de Cordoba, printer of His Majesty [and] citizen of this said town, and stated that inasmuch as the said Fray Tomas de Santa María has given to the said Francisco Fernández de Córdoba a book to print called the Art of Playing Fantasia on the Keyboard, Vihuela and Harp, regarding which they are in accord and are agreed in the following form and manner.

Firstly, the said Fray Tomas de Santa María obligates himself to hand over to the said Francisco Fernández de Córdoba the register [manuscript?] of the said book for the time required to print it in

regido sin faltar cosa alguna y a de asistir a la ynprision y lo a de corregir sin que el dicho francisco fernandez de cordoba sea obligado a corregirlo y que si por culpa de no estar bien corrigido se perdiere algun pliego o forma sea cuenta de lo pagar de el dicho padre fray tomas de santa maria mostrando la proba senalada de su mano

Yten El dicho francisco fernandez de cordoba se obligo de ynpremir myll y quinientos libros del punto y letra que para ello senalare el dicho padre fray tomas de Santa maria y a de comenzar a hazer la dicha ynprision desde el mes de henero primero que viene del ano de myll y quinientos y sesenta e quatro y a de benyr el dicho padre fray tomas a de estar presente quando se comenzare la enpresion y el dicho francisco fernandez de cordoba a de ser obligado a no alçar la mano de la dicha ynprision hasta que se acaben los dichos myll y quinientos libros

Yten. El dicho padre fray tomas de santa maria se obligo de pagar al dicho francisco fernandez de cordoba por cada rresma de papel que le diere ynpresa del dicho libro a veinte e tres rreales por cada una rresma y el papel a de ser buen papel que no sea negro ni sumydo y si fuere mal papel que no sea obligado a lo tomar

Yten. El dicho padre fray tomas de santa maria dio al dicho francisco fernandez

good order and corrected, without lacking anything, and has to be present at the printing, and has to correct it, so that the said Francisco Fernández de Córdoba not be obligated to do it, and if for reason of not being well corrected, any sheet of paper or form be lost, the said Fray Tomas de Santa María shall be responsible to pay for it, showing the proof sheet signed by him.

And also: The said Francisco Fernández de Córdoba obligated himself to print 1500 books of music and text which the said Fray Tomas de Santa Maria will initial, and it is to begin in the month of January, first month of next year 1564, and Fray Tomas de Santa Maria has to come and be present when printing starts, and the said Francisco Fernandez de Cordoba is required not to cease printing until the said printing of the said 1500 copies is complete.

And also: The said father Fray Tomas de Santa María obligates himself to pay the said Francisco Fernández de Córdoba twenty-three *reales* for every ream of paper that is given to him, printed, of the said book, and the paper is to be of good quality, neither dark nor damaged, and if it should be poor paper, he is not obliged to take it.

And also: The said father Fray Tomas de Santa María gave to the said Fran-

de cordoba en senal e parte de pago veinte ducados en my presençia e delos testigos desta escritura de lo qual yo doy fee y que acabada la ynprision se obligo de le pagar a cunplimiento de cient ducados y lo demas que montare en los dichos libros sea obligado a se lo pagar del preçio que se hiziere de los primeros libros que se bendieren y que los dichos libros todos ellos enteramente an de quedar en poder del dicho francisco fernandez de cordoba hasta sea acabado de pagar de todos ellos

Yten. que si el dicho francisco fernandez de cordoba no hiziere la dicha ynpresion segun dicho es quel dicho padre fray tomas de santa maria le pueda conpelar por todo rremedio y rrigor de derechos a que ynprima los dichos libros segun dicho es y que no sea obligado a le pagar por cada rresma mas de tan solamente veynte rreales porque con este pacto e condiçion se haze esta concordia y se le aya de yr pagando este preçio como dicho es

Yten el dicho padre fray tomas de santa maria sea obligado y se obligo de no le quitar al dicho francisco fernandez de cordoba el dicho libro so pena de le pagar çient ducados de ynterese[s] con mas todos los danos yntereses e menos casos que se le siguieren y rrecrecieren y para lo ansi tener y guardar cumplir e pagar obligaron sus personas e bienes muebles y rrayzes derechos y açiones avidos e por aver y el dicho francisco fernandez

cisco Fernández de Córdoba as a token and as part of the payment twenty *ducados* in the presence of me and the witnesses to this document of which I give faithful testimony and, on completion of the printing, obligates himself to pay in fulfillment 100 *ducados*, and the remainder of the total cost of the said books he obligates himself to pay from the sale of the first books and the books are to remain in the possession of the said Francisco Fernández de Córdoba until payment for all of them is finalised.

And also: That if the said Francisco Fernández de Córdoba does not make the said printing according to the aforesaid [conditions], the said Fray Tomas de Santa Maria may compel him by all means and rigour of the law to print the said books according to the said agreement, and would not be obligated to pay for each ream more than twenty *reales*, because with this pact and condition the agreement is made, and he would have to pay this price as is stated.

And also: The said Fray Tomas de Santa Maria is obliged and obligates himself not to withdraw the said book from Francisco Fernandez de Cordoba under penalty of paying one hundred *ducados* in interest in addition to all the damages, interest and discredit that may follow and arise, and in order to have and protect [such] comply and pay, they obligate their persons, goods and property, dues and lawsuits past and future, and the

de cordoba para mas seguridad derecha juntamente consig[ui]o por su fiador al licenciado aleman rrelator desta rreal audiencia que estaba presente al qual rrogo que fuese su fiador e principal pagador en la dicha rrazon y el dicho licenciado aleman dixo que le plazia de salir e salio por tal fiador del dicho francisco fernandez de cordoba...

said Francisco Fernández de Córdoba, for greater security jointly under the law, obtained as his guarantor the Licenciado Aleman, relator of this royal court who was present, whom he asked to be his guarantor and principal payer in the said cause, and the said Licenciado Aleman said that he was agreeable to be, and as such became guarantor of the said Francisco Fernández de Córdoba...

[The normal formulae of legal guarantee and protection follow.]

..... en testimonyo de lo qual otorgaron ante my el dicho escribano estando presentes por testigos pedro de arze y alonso de salazar escribanos y alonso hernandez alocreter [?] estantes en esta dicha villa y los dichos otorgantes que yo el dicho escribano doy fee que conozco lo firmaron de sus nombres que an testados.....

..... in testimony of which they authorised before me the said notary in the presence of the witnesses Pedro de Arze and Alonso Salazar, notaries, and Alonso Hernandez, ?????, being in this said town, and the said authorisers whom I the said notary give faithful testimony that I know, signed their names as they had attested.....

[Certification of error correction follows.]

[signed:]

Francisco Fernandez de Cordoua
El licenciado Aleman

Fray Tomas de Santa Maria

ante my Juan de Roças

before me, Juan de Rozas

In evaluating the information found in the contract, reference is made to the Cabezón and Fuenllana contracts mentioned above as well as to the contract for the printing of *El Parnasso* by Esteban Daza (3).

(3) This document, also from the AHP in Valladolid, is being prepared for publication by Griffiths.

The Licence to print the *Arte de tañer fantasia* was issued by the King on 11 April 1563, less than three months prior to the signing of the printing contract. It is likely that the delay between signing and the commencement of printing the following January was due either to existing commitments of Fernández de Córdoba or to clerical commitments in Guadalajara preventing Santa María's presence in Valladolid until that time. The other contracts specify printing to start virtually immediately after signing. Assuming that printing commenced according to schedule, a total of sixteen to seventeen months elapsed before the book was completed on 20 May, 1565, according to the colophon. The time taken to print Cabezón's *Obras* was even longer: a total of 26 months elapsed between Hernando de Cabezón signing the contract with Francisco Sánchez on 29 May, 1576 and completion of the work at the beginning of August, 1578. The length of this job may have been extended because the contract specifically states that new type had to be cast for the job in order to be larger and more legible than in Venegas de Henestrosa's *Libro de cifra nueva* (Alcalá de Henares: Juan de Brocar, 1577). This condition was obviously met, but Pérez Pastor confirms that the textual material was not printed with new type (4). Both vihuela books about which information survives took considerably less time. Six months elapsed between signing the printing contract for Fuenllana's *Orphenica Lyra* on 29 March, 1554 and the completion of printing on 2 October of the same year. Martin de Montedoca states in the contract with Fuenllana's sponsor, the physician Juan de Salazar, that he hoped to have the printing completed by July, if not earlier, an anticipated time of approximately three months (5). *El Parnasso*, produced for Esteban Daza by Diego Fernández de Córdoba, who may well have shared the same workshop as his relative Francisco, was the most quickly produced of all works mentioned. It was completed on 12 April, 1576, three months after the signing of the contract, one month behind the stipulated schedule.

In common with the other contracts studied, Santa María's was produced with close collaboration between printer and author. It suggests that this may have been normal practice for music publications of the time. This observation clarifies any doubt concerning the status of these books as authoritative *Urtext* sources. It cannot be claimed that the musical texts were manipulated at the editorial stage. On the contrary, these contracts aim to ensure that the author's own work was faithfully reproduced. A clear distinction can thus be drawn between the artistic licence permissible of an author and the professional accuracy and integrity expected of a printer. The notion of artistic licence as practised by an arranger or editor, and taken to extremes by Venegas de Henestrosa, cannot be extended to the printer's workshop (6).

(4) Pérez Pastor, "Escrituras", p. 366.

(5) Wagner, *Martin de Montedoca y su prensa*, p. 110.

(6) See John Ward, "The Editorial Methods of Venegas de Henestrosa", *Musica Disciplina*, 6 (1952), 105-113.

According to the Santa María contract, the proof sheet of each *pliego*, bi-folio, of the book was to be checked by the author and signed by him to indicate his satisfaction with its accuracy. This condition is similarly stated in the Daza contract. In Fuenllana's case, the task was to be performed by a proxy in view of the author's blindness. In Cabezón's case, the condition is not as stringent. While there is no formal stipulation of checking proofs in the contract, it was agreed that the printer "*ha de tener muy particular quenta y cuidado de que, como dicho es, la impresion se haga conforme al dicho original*" [had to take particular care that, as stated, the impression be in accord with the said original] and that "*todos los dichos libros han de ir impresos a plana y renglon con el dicho original sin remitir ni pasar cosa alguna de una plana a la otra*" [all the books have to be printed page and line according to the original without shifting anything from one page to another] (7).

Of the 1500 copies called for in the contract, only about a dozen are known to have survived into the twentieth century. Three copies are found in Spanish libraries: in the Biblioteca de la Universidad in Barcelona (E:Bu), the Biblioteca de San Lorenzo del Escorial (E:E), and the Biblioteca de Menéndez y Pelayo in Santander (E:SM). The present location of the copy held at the former Biblioteca de la Casa Ducal de Medinaceli in Madrid (E:Mmc) has not been established. Another copy is held at the Bibliotheque Nationale in Paris (F:Pn) and has been reprinted by Minkoff. Two copies are in Great Britain, one at the British Library in London (GB:Lb1) and at the Euing Musical Library in Glasgow (GB:Ge). This copy has been reprinted by Gregg. Six copies are in the USA, two in the Houghton Library of the Harvard University Library, the so-called "Stetson" copy (US:CA Stetson) and the so-called "ELKAN" copy (US:CA ELKAN). Further copies are in the Newberry Library, Chicago (US:Cn), the New York Public Library (US:NYp), the Sibley Music Library, Eastman School of Music, University of Rochester (US:R), and the Library of Congress in Washington (US:Wc). The US:NYp copy formerly belonged to the Bibliotheque Albert Cortot in Lausanne, Switzerland. Another copy, whose provenance has not been established, was reprinted in facsimile by Arte Tripharia, Madrid, c.1975. It differs in various ways from other extant copies examined. A copy formerly held by Deutsche Staatsbibliothek, Berlin, was lost during World War II. The following observations are made on the basis of comparison of the following twelve exemplars: E:E, E:SM, E:V, F:Pn, GB:Ge, GB:Lb1, US:CA Stetson, US:CA ELKAN, US:Cn, US:R, US:Wc, and Arte Tripharia.

Although there are slight differences between the various copies, the basic measurements of the book are 28.5 cm × 21 cm. Edges are fairly smooth on most copies, and none are carelessly cut. None of the copies examined have watermarks, but the paper meets European standards of the time. Handwritten notes are found in several copies,

(7) Pérez Pastor, "Escrituras", p. 365.

some being corrections from the Errata. The printing process is typical for books of this type from the period: wood-blocks for texts use several sizes of fonts, while the music examples use movable wooden type with each note, clef or sign with its own section of staff. Several additional blocks are also employed. Those used for diagrams and the coat-of-arms on the title page appear to have been specially cut, while those bearing the printer's devices are also found in other Fernández de Córdoba prints.

The copies examined are similar in many respects: problems such as omitted or incorrect folio numbers, material in the Errata not included in the main text, are typical of all. The prefatory material is in the same order in all of the exemplars with the exception of US:R, which has been bound incorrectly. The considerable differences between the chapter titles as shown in the *Tabla* and the manner in which the chapters are headed in the text are the same in all the extant copies.

There are five principal variants among the surviving exemplars that demonstrate that revision of the plates was made during the course of printing. These are summarized as follows:

1. The Dedication of the book to the Reverendissimo S. Don F. Bernardo de Fresneda, included in the unnumbered prefatory folios, appears in two forms. In some copies Santa María is referred to as "*dela orden de los predicadores*" (sic) [E:SM, E:V, F:Pn, GB:Ge, GB:Lbl, US:CA ELKAN, Arte Tripharia] and in others as "*dela orden de sancto Domingo*". The two versions use a different decorative initial "D" to commence the text, and there are numerous other differences in the typography.

2. In the woodcut that illustrates the keyboard of the *monacordio* found in Libro I, on fol.56, the letter "G" is printed on the third white key from the left of the diagram in most exemplars, corresponding to the theoretical Gamaut. In two copies, however, this letter is missing [E:SM, US:CA Stetson]. This appears to be a correction to the same woodblock, and is the only change made to the entire page.

3. Two different versions of the diagram of a vihuela occur in the surviving copies in Libro I on fol 56v. This diagram shows part of the body of a vihuela with a hexagram of tablature representing the fingerboard, showing the position of various notes upon it in G-tuning. The version found in exemplars E:V, F:Pn, and US:Cn, gives single tablature figures showing some of the principal notes, with the tablature set in inverted form as found in the tablature of Luis Milán's *El Maestro* of 1536. All other exemplars examined show each respective note in its three octaves, shown as vertically aligned chords, with the tablature reversed to the standard Italian-Spanish format used in all other sources of vihuela music. It would thus appear that this more complete and more conventional version is a correction of the first described.

4. The two chapters found in Libro II, fol. 82v, *Del modo del asir las dos voces baxas*

con las dos altas, y las dos altas con las dos baxas and *Del modo de asir un duo con otro sin clausula* are headed as Cap. XXXVII and Cap. XXXVIII respectively in most exemplars. In the F:Pn and Arte Tripharia copies, the numerals are given incorrectly as XXXVI and XXXVII. In all copies, chapters 35 and 36 are both numbered XXXV in the text.

5. The music example on fol.122v of Libro II, in *Cap. LIII, Del modo de templar el monacordio y la vihuela*, also occurs in two versions. The example is set on two staves and exemplars differ only in their concluding measures. The two versions are identified here by the notes that begin the second staff. The first version, beginning with the ascending octave a-a' on the second staff is found in exemplars E:E, E:V, US:CA Stetson, US:Cn, US:R, and US:Wc. The second version, identifiable by the descending octave c-C at the beginning of the second staff is found in the exemplars E:SM, F:Pn, GB:Ge, GB:Lbl, US:CA ELKAN, and Arte Tripharia.

The only consistencies that can be found between these versions fall into two groups. Exemplars E:E, US:R, and US:Wc have the same versions of the five pages described: "orden de sancto Domingo", G on the keyboard diagram, chords on the vihuela, chapter numbering XXXVII and XXXVIII, and the a-a' music example. Another group, GB:Ge, GB:Lbl, and US:CA ELKAN, have a different set of consistencies: "de los Predictores" (sic), G on the keyboard, chords on the vihuela, chapter numbering XXXVII, XXXVIII, and the c-C music example. From all these observations it is impossible to conclude that two separate editions of the *Arte de tañer Fantasia* were produced, but rather that various corrections were made during the course of printing. This is in agreement with Santa María's comment at the end of the book's Errata where he comments *Adviertase que algunos hierros destos no estan en todos los libros, porque se corrigieron a su tiempo* [Note that several of these errors are not in all the books because they were corrected in time] (8). The information collected here is too inconsistent and insufficient to permit a chronology of these corrections to be established.

The size of the print run of the *Arte de tañer Fantasia*, like the other three books under consideration, was large in contemporary terms. In specialised areas such as medicine and law, print runs in Spain were often as small as three or four hundred copies, while books with greater expected circulation were commonly printed in batches of eight hundred to a thousand volumes. For the four books under consideration here, the print runs were significantly larger. The smallest, *Orphenica Lyra*, is 1000 copies, with the books of Santa Maria and Daza being half as great again, 1500 copies each. The Cabezón contract specifies a run of 1200 regular copies with an extra twenty-five to be printed on special paper. The size of these print runs is too large to argue that the books were

(8) Libro II, fol. 123.

intended for use in restricted noble or aristocratic circles. Indeed, the large number of intabulations in the anthologies of instrumental music suggests both their didactic and recreational use. They were obviously an important means of disseminating high quality art music to a sector of society that would have had virtually no access to it prior to the invention of music printing.

Table 1 breaks down the 957 works contained in the printed Spanish instrumental repertory into six compositional genres. It includes all the works in the keyboard tablatures of Venegas de Henestrosa and Cabezón and the vihuela tablatures of Milán, Narváez, Mudarra, Valderrábano, Pisador, Fuenllana and Daza. The category of intabulations, accounting for almost half the repertory, includes arrangements of vocal works as well as original accompanied songs which, in the vihuela tablatures especially, are not always possible to distinguish from arrangements. Such a high proportion of arrangements confirms their importance in the repertory, particularly in light of the broadening social base of art music occasioned by the advent of music printing. It is a phenomenon analagous with the role of keyboard arrangements of opera and symphonic music that proliferated in the nineteenth century. The abstract works are primarily the keyboard *tientos* and the synonymous vihuela *fantasias*, but also include works of similar style designated as *tres* or *cuatro* in the keyboard tablatures. Liturgical works, settings of plainsongs, hymns, psalms, *fabordones*, etc, are exclusive to the keyboard literature. Included among the miscellaneous works are *sonetos*, *duos*, *fugas*, freely-composed *glosas*, *entradas*, *finales*, and *discantes*. The small number of dances and variation sets is obvious from the statistics.

TABLE 1: *The genres of Spanish instrumental music*

	Intabulations	Abstract works	Liturgical works	Miscellaneous works	Variations	Dances	TOTAL
Keyboard	68	70	97	20	10	2	267
Vihuela	400	233	—	26	20	11	690
TOTAL	468	303	97	46	30	13	957
Percentage of repertory	49%	32%	10%	5%	3%	1%	

Of original compositions, the abstract compositions are the highest in number, accounting for one third of the repertory. The pinnacle of instrumental art in the six-

teenth century was the ability to improvise counterpoint, or to perform one's own works originally conceived through the improvisatory process. It is perhaps this that accounts for the production of such a large number of copies of the *Arte de tañer Fantasia*. As well as being a valuable treatise on keyboard technique, its principal objective, and the substance of its *libro segundo* is to instruct the reader in how to master the art of polyphonic improvisation. So, alongside the wider dissemination of art music that arose from technological innovation, printing also permitted non-professional amateur musicians to perform, improvise and compose in a manner that had formerly been the exclusive domain of a professional elite. Were it otherwise, it would be difficult to justify the production of so many copies of a theoretical treatise such as Santa María's.

In addition to details of the size and the impression of each book for which we have contractual information, Table 2 also gives comparative figures of the costs, prices and profits. Books of music were cheap to produce, affordable to buy, and the profit margins were apparently generous. Printing costs were established according to the volume of paper used, although the manner in which costs were expressed varies from contract to contract. In the case of the *Arte de tañer Fantasia*, Santa María was charged 23 *reales* for each printed ream of paper. As the manuscript for Cabezón's *Obras* was prepared in already paginated format, the amount of paper was quantifiable in advance, so the contract only stipulates a flat charge of 5000 *reales* plus an additional 110 *reales* on completion for purchase of the type and forms. The contract for Fuenllana's *Orphenica Lyra* stipulates a cost of two *maravedies* per *pliego*, while the Daza contract states a cost of 21 *reales* per ream. For ease of comparison these figures are expressed in Table 2 in *maravedies* per folio⁽⁹⁾. One ream of paper yields 1000 folios of quarto size, therefore for Santa María's book, the 23 *reales* (782 *mrs*) per ream may be expressed as a cost of 0.782 *mrs*/folio. Similarly, the Cabezón contract estimates 125 *pliegos* (250 folios) at a total cost of 5000 *reales* for the entire impression. All the copies of each folio would thus have cost 20 *reales* (680 *mrs*). For the 1225 copies, this may be converted to 0.56 *mr* for each printed folio. The fact that the edition only contains 215 folios would have given the printer a slightly greater profit from the job. In the case of Daza printing, *el Parnasso* was printed in octavo format, so the net cost of 0.30 *mr* per octavo folio has been doubled. It appears that music books were sold unbound as Pérez Pastor mentions that Juan Boyer, the famous book merchant from Medina del Campo, obtained a copy of Cabezón's *Obras* in 1591 and had it bound the following year by Juan de Sarria a *librero* from Alcalá de Henares⁽¹⁰⁾.

⁽⁹⁾ Spanish prices were calculated by the abstract unit of the *maravedi*. The gold currency unit, the *ducado* was valued at 375 *mrs* and the silver *real* at 34 *mrs*].

⁽¹⁰⁾ Pérez Pastor, "Escrituras", p. 365.

TABLE 2: *Printing costs, impressions and profits*

	Santa Maria	Cabezón	Fuenllana	Daza
No of copies printed	1500	1225	1000	1500
No of folios in book	219	215	185	119
Retail price*	640	563	868	136
Printing cost per folio*	0.78	0.56	1.00	0.60
Cost of impression*	257,278	173,740	185,000	53,550 ⁺
Revenue from impression*	960,000	689,063	868,000	204,000
Profit margin	372%	397%	469%	381%

* All prices are in *maravedies*.

+ This price is based on the estimate in the contract that 75 reams of paper would be required. It is estimated here that 90 reams would have been used. In this case, Daza would have had to pay 64,260 *mrs*, the cost per octavo folio would have been 0.36 *mrs*, and the profit margin considerably less, 317%.

The costs of printing are quite similar per folio. The highest rate was charged to Fuenllana, and could be due to a number of factors about which we can only speculate. These might include paper costs or the smaller size of the impression. The costs of the Cabezón and Daza books are almost identical, whereas the *Arte de tañer Fantasia* was more expensive, presumably because the labour involved in typography is much greater for a book set with small text type than one which uses the larger pieces of tablature type.

The retail price of books was established governmentally by assessors at court, in conjunction with the issuing of the printing licence to the author. The title page of the *Arte de tañer Fantasia* states: "Tassado por los Señores del Consejo Real, a veynte reales, cada cuerpo de papel" [Taxed by the Lords of the Royal Council at twenty *reales*, each volume of paper]. The difference between production costs and selling price was substantial, permitting the author to make a handsome profit. Santa María's potential profit was 372%, an average of 5 *reales* per book sold. The profit margin for *Orphenica Lyra* would have yielded Fuenllana significantly more; the 469% profit margin is equivalent to 20 *reales* per volume. The profit margins for the Cabezón and Daza books, published only two years apart, are remarkably similar and demonstrate a consistency in the official pricing mechanism.

Profit margins of such proportion may seem unusually high in the first instance, but it does not appear that their authors enjoyed greater prosperity than composers at any other point in history. Firstly, it must be taken into account that revenue from sales included the equivalent of a royalty, and thus compensation for the authors's intellectual property was built into the price. Secondly, there is evidence that the author also took on

a certain degree of financial risk with publication. There is little information available concerning marketing, or dealings with booksellers. The involvement of a bookseller as a third party would necessarily have diminished revenue. There is also little evidence to indicate the period of time required to dispose of the full stock of an edition. The only information presently available concerns the sale of Cabezón's *Obras*. A document cited by Pérez Pastor suggests that sales must have been slow. In May 1581, the bookseller Blas de Robles, incidentally one of the witnesses to the Cabezón contract, took 800 copies of the *Obras* at an agreed price of 8,000 *reales*, promising payment in eight annual installments of 1,000 *reales*. Thus, no more than 400 copies can have been sold during the first three years of publication (11). By 1586 Robles had only paid 2,000 *reales*, suggesting that he had probably not sold more than 200 copies in the intervening five years. Assuming sale at the official price, the bookseller obtained about one quarter of the profit margin for each volume sold. This evidence indicates the level of financial risk borne by the author. Hernando de Cabezón would have recouped the printing costs from the sale of the first 310 copies, and only after that point could the venture have been considered in any way profitable.

The granting of printing licences in Spain was a legal requirement, and the manner in which copyright and legal protection was secured by the author. The licence issued by the Kings was usually reprinted in the prefatory pages of each book. Santa María first petitioned a *licencia* in 1557, and this was granted in November of that year with copyright privileges for ten years. Owing to a stated shortage of paper, among other reasons, printing was delayed, and so his licence was renewed in April 1563, with the period of copyright commencing from the date of the licence renewal. A conflation of the two licences is printed in the *Arte de tañer Fantasia*. The need for protection was apparently not merely legal formality. The only known instance of music piracy in Spain during this period concerns *Orphenica lyra*. On 14 January, 1555, Fuenllana gave authority to his servant Juan Ruiz before the notary Mateo de Almonacid "*para que venda su Libro de musica para vihuela y recoja los exemplares de una edicion fraudulenta haciendo cumplir lo establecido en el privilegio de impresion que posee*" [that he might sell his book of vihuela music and collect copies of a fraudulent edition in accordance with that which is established in the publishing rights that he possesses], and to inspect copies of his book to see "*sy son por mi mandado ynpresos o de estampa por ellos hecha*" [if they are those ordered to be printed by me, or from a printing done by them] (12).

While insufficiency of data still limits us to speculation concerning certain aspects of this study, a picture emerges that enhances our image of printed instrumental music and its role in sixteenth-century Spain. Interpretation of detail concerning the printing and

(11) Pérez Pastor, "Escrituras", p. 370.

(12) This document is reprinted in Wagner, *Martin de Montedoca y su prensa*, p. 112.

publication of music permits a greater understanding of the impact of music printing on middle class society of the time. It can be concluded from our study of the contract drawn up for the printing of the *Arte de tañer fantasia* that, even as a treatise, it was intended to circulate widely, just as was the case with the music collections considered here. Although few copies of each of these books are extant, it can be confirmed that they were produced in large numbers at a reasonable price, with the expectation that they circulate widely among a wide sector of society that must have included the urban professional bourgeoisie in addition to the traditional consumers of fine music. Examination of the contracts, together with the comparison of the surviving exemplars of the *Arte de tañer Fantasia* indicates that there existed a healthy liaison between authors and printers who approached their labours with integrity and a mutual concern for the accuracy and quality of their product.