

What do Lepe, a Beard and a Sandwich Have in Common? The Earl of Sandwich's Translation of Alonso Barba's 'El arte de los metales'

ISABEL DE LA CRUZ CABANILLAS
Universidad de Alcalá
isabel.cruz@uah.es

Abstract

This paper explores the ways in which the Earl of Sandwich translated Alonso Barba's *El arte de los metales* into English, paying special attention to the translation techniques used and the vocabulary chosen. One of the problems the translator often encounters is the lack of specific lexical units in his language to name the metals and the procedures found by Alonso Barba in the region of Potosi. The strategies employed by the Earl of Sandwich to overcome such lack, as well as other techniques used in producing the target text will be analysed. The analysis adopts the translation techniques proposed by Vinay and Darbelnet ([1958] 1995) and Newmark (1991) closely, but other classifications have been consulted as well.

Keywords: Alonso Barba; Earl of Sandwich; El arte de los metales; translation

1. INTRODUCTION

Alvaro Alonso Barba was a Spanish priest and metallurgist, born at Lepe, who lived in the viceroyalty of Peru during the period when its silver mines were most productive. In 1640 he published a book entitled *El arte de los metales*, the earliest work on South American ores and minerals. He proposed a technique to improve the amalgamation process, the method used to extract silver from the ore. The ore was crushed and treated with mercury, which dissolved the silver. When the resulting amalgam was heated, the mercury evaporated and pure silver remained. Barnadas comments on the book's success at the time, by stating that

Between the seventeenth and the eighteenth centuries *El arte de los metales* went through only six Spanish editions, whereas during the same period it received seventeen European translations. In the years after the publication of Barba's book Spanish-American metallurgists turned to the easier, though more wasteful, patio amalgamation process. By the late eighteenth century Barba's improvements had been forgotten. The Spaniards had to relearn their own method from Europeans such as the Viennese metallurgist Ignaz Edler von Born, who was aware of Barba's achievements. (quoted in Cueto 1988, 730-731)

The first English translation was by Edward Montagu, the first Earl of Sandwich. Montagu was appointed ambassador-extraordinary to Spain in 1665, where he lived until 1668. During this period, Montagu translated two of the five books contained in Alonso Barba's *El arte de los metales* in 1669, being finally published in 1674. According to Bockmann, from this English edition several German translations were made (1846, 18).

This paper explores the ways in which the Earl of Sandwich translated the original text into English, paying special attention to the translation techniques used and the vocabulary chosen. To this end, Alonso Barba's *El arte de los metales* has been read from the original 1640 edition housed in the Biblioteca Nacional (Madrid). This edition has been compared with the first translation into English by the Earl of Sandwich in 1669, held at different British Universities, such as Glasgow University Library and Strathclyde University Library, among others. The transcription of the texts preserve the original spelling <u, v> distinction, but not the ligature in <ct> neither the long <s>.

One of the problems the translator often encounters is the lack of specific lexical units in his language to name the metals and the procedures found by Alonso Barba in the region of Potosi. The strategies used by the Earl of Sandwich to overcome such lack will be analysed, as well as other techniques employed in producing the target text. The analysis adopts the translation techniques proposed by Vinay and Darbelnet ([1958] 1995) and Newmark (1991) closely, but other classifications have been consulted as well (cf. Vázquez Ayora 1977; Molina and Hurtado 2002; Gil-Bardaji 2009, among others).

2. THE ANALYSIS

2.1 Additions, Omissions and the Layout

The differences between Alonso Barba's original and the translation can be perceived all along the work. The reader finds omissions, when the information is not considered useful for the British audience, and amplification, when an explanation is needed. Thus, on the front cover some omissions and amplifications are observed. The Spanish title has been shortened in the English version:

(1a) ARTE DE LOS METALES EN QUE SE ENSEÑA EL verdadero beneficio de los de oro, y plata por açogue. EL MODO DE FUNDIRLOS TODOS, y como se han de refinar, y apartar unos de otros

(1b) THE ART OF METALS, In which is Declared the manner of THEIR GENERATION AND THE CONCOMITANTS Of Them

The information on Alonso Barba has also been adapted to a British audience omitting the town where he was born and expanding the information on the region of Potosi:

(2a) Compvesto por el licenciado Albaro Alonso Barba, natural de la villa de Lepe, en la Andaluzia, Cura de la Imperial de Potosi, de la Parroquia de S. Bernardo.

(2b) Written in Spanish by *Albaro Alonso Barba*, Master of Art, Curate of St. *Bernards* Parish in the Imperial City of *Potosi*, in the Kingdom of Peru in the *West-Indies*, in the Year, 1640. Translated in the Year, 1669. By the R. H. Edward Earl of Sandwich.

Some other divergences are found in the preface where Alonso Barba's publication includes approval documents and letters to different people, as it was the usual practice at the time. All this material has been omitted by Sandwich, who writes a preface to convince the readers of the excellence of the work they have in their hands.

The English translation follows the original quite faithfully, but stylistic adaptations have also been made, inasmuch as Alonso Barba's long and complex sentences are usually rendered with shorter simpler sentences, which take the usual *subject + verb + object* pattern in English. Likewise, the heavy original paragraphs have been split into two or three to make its reading easier. This can be seen in Table 1, which reproduces samples of both texts as they were printed.

<i>El arte de los metales</i>	<i>The Art of Mettals</i>
Metales, piedras, tierras, y los que llaman jugos son quatro generos de mixtos, a que se reduzen todos los demas inanimados que la tierra produze en sus entrañas: crialos mezclados, y juntos la naturaleza, y porque la arte del beneficio de los metales no puede practicarse sin el conocimiēto de los otros tres generos, como se verà en sus preceptos, tratarè breuemēte dellos. (Cap. I)	All the inanimate things within the bowels of the Earth are reducible into one of These Four Kinds of mixtures, viz. Either {Mettals, Stones, Earth or Juices} Nature produces These mingled one with the other, and because the art of separating of Mettals cannot be put in practice without understanding the nature of the other three, (as will hereafter appear) therefor I shall treat of these a little. (Ch. 1, pp.1-2)
...vsase mas entre plateros, que entre Medicos. Es vno de los quatro que llaman espiritus, por volar del fuego todo humo, como el açogue, el açufre, y el salitre.” (Cap. VIII)	Goldsmiths use it more than the Physicians. It is one of those they call the four spirits, because the fire will convert them into smoak, and so they fly away: the other three are, {1. Quicksilver, 2. Sulphur, 3. Salpeter} (Ch. 8, p. 29)

Table 1: Differences in the layout

Regarding the simplification of the sentences, which are heavily loaded with subordinate clauses and learned vocabulary in Spanish, one may wonder whether the recently founded Royal Society could have circulated guidelines on how to write a scientific text or whether it is due to the essence of the English language which usually differs in this respect, resulting in a more readable text even to non-expert readers.

2.2 Adaptations

Often Sandwich feels the need to adapt the source text with an explanation. Thus, in the example number (3b) God's name is replaced by Adam and the Fathers. Some phonetic adaptations are also observed in initial double <ll> in *llamos* which is simplified into *lamos*, although *Pacos* is curiously turned into *Palos*:

(3a) (...) la juzgauan por el verdadero sitio en que criò, y tiene Dios oy el Paraiso Terrenal. Apacible olor es el que echan de si las minas de los metales que llaman Pacos, si otros medios minerales no los acompañan, y inficionan. Y este olor bueno no es pequeña señal de la riqueza que tienen sus piedras, o tierras que llaman llamos. (Cap. I)

(3b) (...) hath been thought by judicious men to be Paradise wherein Adam of old, and the Fathers now enjoy god upon Earth) The Mettal that comes out of the Mines (which the call Palos) is of a good smell, if they light not upon some bastard Mineral, that accompanies, and has infected it: and this good smell is a great sign of the richness of the stones of that Mine, and of the Earth which they get, there called *Lamos*. (Ch. 1, pp. 5-6)

In example number (4b) Sandwich clarifies the fact that some earthen vessels are very much appreciated in Europe, whereas the mention of the continent is absent in the source text:

(4a) En qual, y qual barro se halla tambien aqueste priuilegio, como en el de Estremoz en Portugal, y en el de Natà en Panamá, que aun en estas tan apartadas Regiones les da nombre, y estimacion. (Cap. 2)

(4b) Some Earthen vessels also have this privilege, as that of *Estremos* in Portugal, and of *Nata* (in Panama) which are highly esteemed in *Europe* for that quality. (Ch. 2, p. 5)

In terms of spelling practices, Sandwich's text shows a high degree of standardization. Originally <u, v> were both used to represent either a vowel or a consonant sound. At the beginning of the Early Modern English period usually <v> appears when it is at the beginning of a word and in the other positions <u> is used. The present convention, whereby <u> is used as a vowel symbol and <v> as a consonant symbol, came in round about 1630, under continental influence. Subsequently, the target text in this respect has been completely normalised to a modern reader.

2.3 Vocabulary

In translating the specific vocabulary of minerals and metals, Sandwich is quite systematic in the use of *quick-silver* for *açogue* to mean liquid mercury, while on other occasions he uses different strategies to render one given item. Thus, omissions and Spanish borrowings are found profusely, as well as non-adapted borrowings from Spanish.

2.3.1 Omission of synonyms

Whereas sometimes *saltpeter* (obsolete for *salpêtre*) is used to translate *salitre*, in "Caparrosa, salitre, o otros jugos" Sandwich omits it completely rendering the heading as "Vitriol, or other Juices." He also decides to omit other synonyms present in the Spanish original text. For instance, "Cap. VIII. Del Almojat্রে, o sal Ammoniaco, y otros sales" appears in the English version as "CHAP. 8. Of Salt Ammoniac, and other Salts", where *almojat্রে* has completely vanished from the heading.

2.3.2 Borrowings from Spanish

A different technique is to adopt the Spanish lexical unit either without or with a minimal adaptation, as in the following examples:

(5a) Cap. IX. De otros jugos se llaman Betunes

(5b) Chap. 9. *Of Juices, which the Spaniards call Betunes.* (31)

In Early Modern English, the word *bitumen* was available, as it was introduced in the Middle English period from Latin. An issue that may arise here is how familiar the Earl of Sandwich could be with some of these specialised terms and whether there were specialised dictionaries on the topic. In Spanish, García de Llano published his *Diccionario y maneras de hablar que se usan en las minas y sus labores en los ingenios y beneficios de los metales*, in Lima in 1611. In the preface to this work, Carrasco Galán claims that the dictionary was profusely used by Alonso Barba (2009, VIII). We wonder whether the Earl of Sandwich could have had access to this dictionary in Spanish or other specialised English ones, as the usual works on English lexicography of the period only provide information on general dictionaries, rather than on specialised ones (Starnes 1991; Hüllen 1999; Fernández Urdaneta 2010).

Some of Sandwich's adoptions cannot be easily explained, as the English lexicon had the same term in an anglicized way. For instance, in Table 2. some diverse cases of borrowings are shown:

<i>El arte de los metales</i>	<i>The Art of Mettals</i>
Ay doze generos del, aunque son muy pocos los que se hallan dellos mezcaldos con los metales, son Asphalto, Pissasphalto, Napta la piedra, Gagate, Açabache, Ampelites, Maltha, Piedra Tracia, Carbones de mina, Ambar q llaman de cuentas, Ambar oloroso, y Alcanfor. Cap. IX	There are twelve sorts of Betune, {Asphalto,} {Maltha {Pissasphalto,} {Piedra Thracia} {Naptal la piedra,} {Carbonos de mina} {Gagete,} {Ambar de Cuentas} {Azabache,} {Ambar Olorosa,} {Ampelites,} {Alcanfor.} Ch. 9, pp. 31-32.

Table 2: Spanish adoptions

Both *camphor* and *asphalt* were documented in Middle English, but Sandwich prefers the Spanish version of the words. He also prefers *azabache*, with <z> rather than <ç>, which could have been rendered as *jet*, as it corresponds to an Old French form of the word *gagate*. He also uses the word *ampelite*, despite being first documented in 1728, according to the *Oxford English Dictionary*. Nonetheless, Sandwich is using it as early as 1669, either because of the influence of the Spanish original text or as a sign that the word was already available in the English language.

Finally, some other Spanish words are used with minimal adaptations: *Pissasphalto* becomes *Maltha Pissasphalto*; *Napta la piedra* incorporates a paragogical <l> in the English version; *carbones de minas* and *ambar de cuentas* are taken as such, and *ambar oloroso* changes its gender in Sandwich's target text.

3. CONCLUSIONS

The Earl of Sandwich had a challenging task trying to render Alonso Barba's work into English. Many of the mineral names and metals were taken from the original Amerindian languages. Subsequently, this lack was patent in English, where the vocabulary related to the mineral field was not so extensive at the time. In order to overcome the lack several techniques were used. Sandwich either omits the synonyms present in the source text or adopts the Spanish lexical unit with minimal or no adaptation.

On the contrary, several stylistic adaptations have been made, in such a way that Alonso Barba's long and complex sentences are usually rendered with shorter simpler sentences, which take the usual *subject + verb + object* pattern in English. Likewise, the heavy original paragraphs have been split into two or three to make their reading easier, which makes the translation more reader-friendly in this sense.

REFERENCES

ALONSO BARBA, Álvaro. 1640. *Arte de los metales, en el que se enseña el verdadero beneficio de los de oro, y plata por açogue. El modo de fundirlos todos, y como se han de refinar, y apartar unos de otros*. Madrid: Imprenta del Reyno.

- . 1674. *The Art of Metals in which is declared the manner of generation and the concomitants of them. Translated in the year, 1669 by the R. H. Edward the Earl of Sandwich*. London: printed for S. Mearne.
- BECKMANN, John. 1846. *History of Inventions, Discoveries, and Origins*. London: Henry G. Bohn.
- CASTILLO, Manuel and Mervyn F. Lang. 2006. *Grandes Figuras de la Minería y la Metalurgia*. Cádiz: Servicio de Publicaciones de la Universidad de Cádiz.
- CUETO, Marcos. 1988. "Álvaro Alonso Barba (1569-1662): Investigaciones sobre su vida y obra. Josep M. Barnadas." *Isis* 79 (4): 730-731.
- FERNÁNDEZ URDANETA, Heberto. 2010. *Dictionaries in Spanish and English from 1554 to 1740 their Structure and Development*. Soria: Diputación provincial de Soria.
- GIL BARDAJI, Ana. 2009. "Procedures, Techniques, Strategies. Translation Process Operators." *Perspectives: Studies in Translatology* 17 (3): 161-173.
- HÜLLEN, Werner. 1999. *English Dictionaries, 800-1700. The Topical Tradition*. Oxford: Clarendon Press.
- DE LLANO, García. 1611. *Diccionario y maneras de hablar que se usan en las minas y sus labores en los ingenios y beneficios de los metales*. Lima, edited by the Consejo Superior de Colegios de Ingenieros de Minas. Madrid. 2009.
- MOLINA, Lucía and Amparo Hurtado Albir. 2002. "Translation Techniques Revisited: a Dynamic and Functionalist Approach." *Meta* XLVII (4): 498-512.
- NEWMARK, Peter. 1991. *A Textbook of Translation*. Harlow, Essex: Pearson Education.
- STARNES, De Witt T. 1991. *The English Dictionary from Cawdrey to Johnson 1604-1755*. Amsterdam: John Benjamins.
- VÁZQUEZ AYORA, Gerardo. 1977. *Introducción a la traductología*. Washington: Georgetown UP.
- VINAY, Jean Paul and Jean Darbelnet. 1995. *Comparative Stylistics of French and English: A Methodology for Translation*. Translated by Juan C. Sager and M. J. Hamel.