



“Wheat of Portugal”. The African adventure of maize

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Submitted: 26 February 2013; Accepted: 8 June 2013

ABSTRACT: This work focuses on the sixteenth and seventeenth centuries, and starts from the introduction of maize (*Zea mays*) in different places of Africa by the Portuguese. Likewise, it tries to open the way in the jungle of uncertain names and interpretations offered by various descriptions of the period under study, and it poses the need for cultural-historical readings of the phenomenon by comparing different descriptive traditions, with special reference in this case to Ethiopia.

KEYWORDS: History of maize; *Zea mays*; History of culture; Africa; America; 16th Century; 17th century

Citation / Cómo citar este artículo: Paz-Sánchez, M. (2013) “Wheat of Portugal. The African adventure of maize”. *Culture & History Digital Journal* 2(2): e028. doi: <http://dx.doi.org/10.3989/chdj.2013.028>

RESUMEN: “*Trigo de Portugal*”. *La aventura africana del maíz*.- Este trabajo se centra en los siglos XVI y XVII y parte de la introducción del maíz (*Zea mays*) en diferentes lugares de África por los portugueses. Intenta abrirse camino, asimismo, en la selva de nombres e interpretaciones dudosas ofrecidas por diversas descripciones de la época objeto de estudio, y se plantea la necesidad de lecturas histórico-culturales del fenómeno, mediante la comparación de diferentes tradiciones descriptivas, con especial referencia en este caso a Etiopía.

PALABRAS CLAVE: Historia del maíz; *Zea mays*; Historia de la cultura; África; América; Siglos XVI y XVII

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There is nothing so difficult to resolve as the problems of migration of plants useful to man, especially since communications have become so frequent among all continents.
Von Humboldt (1822), 249)

After its arrival in Europe, maize was taken aboard the ships of the spice route to the East, and at the same time sailors, settlers and traders spread it, sowed it and acclimatised it in the string of islands and coastal enclaves that Portugal had succeeded in establishing in Africa, after the signing of the Treaty of Tordesillas (1494), the discovery of the spice route by Vasco de Gama (1498) and, finally, the conversion of Lisbon, in the early sixteenth

century, into the new European capital of the traffic and trade of the demanded exotic condiments.

It is not always millet (*Panicum miliaceum*) or sorghum (*Sorghum*) which is grown in Africa and Asia in the sixteenth and seventeenth centuries, together with rice and classic cereals such as wheat, barley, etc., culturally entrenched crops and, in the case of millet and sorghum, of easy linguistic and formal confusion with maize (*Zea mays*); but, as we will try to verify, it is the unmistakable cereal of the West Indies, the *milho* or *millo* of the Lusitanian, which gradually opens its way in the route to the East Indies and which in several locations of Africa will be called “wheat of Portugal” or “Portuguese wheat”, being the result of a *manoeuvre* of cultural

adaptation of the plant to the computation of African expressions. The atmosphere was conducive, among other reasons because of the eagerness and the tireless pursuit of new plant products, which was triggered by the discovery of the New World, among which the maize, true grotesque wheat, was not at all an exception but rather the opposite.

The Lusitanian path of maize can be observed with accuracy from the Atlantic archipelagos and, after touring the West African coast towards the Cape of Good Hope and the beaches and islands of the continent bathed by the Indian ocean, it can be seen leading into the East Indies—including the island of Socotra or Socotora, actually a small archipelago in front of the Horn of Africa—. Some references to the presence of maize in various enclaves of this route are very curious and extend throughout the period under study (sixteenth and seventeenth centuries), but it is always a challenge to find out when travelers and chroniclers spoke of millet or sorghum and when, indeed, they were referring to *Zea mays*, because as J. D. La Fleur suggests, under abstract and generic terms, not only maize but also millet and sorghum would be designated as the Spanish of Portuguese origin millo [milho] (La Fleur, 2012: 7).

In this essay we intend, therefore, to examine the expansion of the grain in various African territories which, as we shall see below, have that common feature that we have been pointing out, namely, the presence of Lusitanians in all insular and continental regions of Africa to which we will refer, due to the processes of colonization of certain islands and coastal areas, which shall be likewise linked to missionary activities and / or to those activities related to the slave trade—as it is well known, since early date slaves were transported to Brazil and the Antilles in order to replace the indigenous labor, largely defunct because of the actions of the European settlers, diseases and vital reluctance.

We have tried to give an answer, firstly, to a series of questions, namely: at what point or chronological sequence occurs the introduction of maize in Africa? And in this sense, if we assume that those responsible for this plant “invasion” logically were the Portuguese, to what extent can we establish a geographical and chronological scale in the process of cultural assimilation of the American plant? Likewise, we have tried to leave proof of the process of creative adaptation, in line with, for example, the theory of Michael de Certeau, in the sense emphasised by Burke that the essential characteristic of cultural transmission is that what is transmitted changes (Burke, 2011: 246–247), starting with the name.

The main aim of this work, in short, is to offer some suggestions for a cultural-historical approach to the problem of the arrival and introduction of maize in Africa. In this sense, what we have tried is to propose a reinterpretation of the problem in

order to include not only aspects of food history, but other factors related to the arrival, the impact, the adaptation and the culture created by maize in the African continent during the sixteenth and seventeenth centuries. Naturally, we have only enunciated and barely suggested the dimensions of a historical problem that requires much more exhaustive studies.

The second part of the study constitutes, in turn, an incursion in the specific case of Ethiopia which, in our opinion, offers a great interest because we find a singular chapter of history of translation, which has also been called “cultural translation”. *Traduttore traditore*, in this case we will see a unique and worthy of study episode of unintended “manipulation” in the translation into Castilian of words and terms that, with the passage of time, will be associated with the maize, but which initially seem more typical of other local crops, deeply rooted in the region. This research may also provide, in the future, results of unquestionable historical and cultural value.

“WHEAT OF PORTUGAL”: THE AFRICAN DIFFUSION OF MAIZE

The grain diffusion takes place, as it seems, from the Atlantic archipelagos closer to Europe, and it slowly shows its presence in a number basically coastal enclaves of West and East Africa. In the next two decades, Spaniards and Portuguese spread variants of the name “maize” as rapidly as they spread variants of its seed through Europe, Africa, the Middle East and Far East (Fussel, 1992: 18–19, 236).

AFRICAN ARCHIPELAGOS: THE CANARY ISLANDS, CAPE VERDE, SÃO TOMÉ

The first edition of *Travels* published in 1550 by Giovanni Battista Ramusio (1485–1557) already includes the story of the journey to São Tomé—that is, the largest island of the archipelago of São Tomé and Príncipe, located two kilometers from the equator line in the Gulf of Guinea—of a Portuguese pilot, “& mandata al Magnifico Conte Rimondo della Torre gentilhuomo Veronese”, journey that had been translated from Portuguese into Italian. The navigation departed from Lisbon and went through the Canary Islands and Cape Verde. It is an interesting document, on which other authors have drawn attention (Miracle, 1966: 88), and in which we see references to “miglio zaburro” as synonymous with “mahiz” (maize), referring to the Cape Verdean island of Santiago:

Come entra il mese di agosto cominciano à seminare il grano, che chiaman miglio Zaburro, & in le Indie occidentali si chiama Mahiz, è come cece bianco, & è còmune a tutte l'isole sopradette, & a tutta la costa dell'Africa, & con quello si sostentano gli abitanti,

lo raccolgono in 40 giorni (Ramusio, 1550: 125v; Ramusio, 1588: 115r).

There is coincidence in the French edition of Ramusio, published in Lyon in 1556, in terms of the reference to the “mahiz” of the West Indies, stressing also in lateral note the expression “Millet Zaburre”:

Dés le commencement d'Aoust ils commencent à semer leurs grains qu'ils appellent, millet Zaburre, que l'on dit Mahiz aux Indes Occidentales: & ressemble aux pois blancs. Toutes les Iles susnommées vident communément de ce legumage, ensemble toute la côte d'Afrique, & les habitans dicelle, qu'ils recueillent dans quarante iours (Ramusio, 1556: I, 480–481).

In the Italian version of 1563 it is also stressed the importance of maize, although it does not seem possible to rule out the risk of confusing the concept of “miglio zaburro” with sorghum or two-colour sorghum (Silva, 1998). Nevertheless, in the margin it is also noted: “Miglio zaburro. Maiz grosso come ceci bianchi” (Ramusio, 1563: 115r).

François de Belle-forest (1530–1583) published in 1575 *La Cosmographie universelle de tout le monde*, based on the homonymous novel (*Cosmographie*, 1544) by the German Sebastian Münster or Muenster (1488–1552), in which we can see in relation with the cereal cultivation in Cape Verde—specifically in the cited island of Santiago and on the chapter relating to the Atlantic archipelagos of Cape Verde, Canary Islands and Madeira—a text very similar to those we have just quoted:

& dès le commencement d'aoust, ils se mettent à semer leur millet qu'ils appellent (comme i'ay dit) Zaburrò, mais aux Indes Occidentales on l'appelle Mahis, estant comme des pois blancs, & duquel usent tous ceux de cette Coste d'Afrique, & par toutes les Isles susdittes: comme encor on y sème du ris, & du coton qui y croissent bien, & dequoy ils font trafic avec les Negres en Afrique (Muenster, 1575: II, col. 2026).

The Venetian Livio Sanuto (c. 1532–1587 or, according to others, 1520–1576), in his *Geography*, which was published posthumously in the city of San Marcos and in 1588 by Giovanni Carlo Saraceni, claimed regarding the Cape Verdean archipelago that “Gli Spagnuoli col seminarui miglio Zaburro, che nell'Indie Occidentali si chiama Maiz, commodamente si mantengono: e per il rimanente sonui ad esse Isole d'intorno pescagioni mirabili” (Saraceni, 1588: 26v). And, like other authors of the time, referring in particular to the island of Santiago he talks about maize with special interest:

Nell'Agosto si semina il Maiz, qual si raccoglie in quaranta giorni: raccogliesi riso, e gottone assai, del qual gottone si prauagliano gli habitatori, lauorandolo

in panni vergati; liquali poi si spacciano per le terre de'Negri, et altri luoghi (Saraceni, 1588: 27r).

Barezzo Barezzi (h. 1560–1643) also included a brief reference to the cultivation of millet in Cape Verde Islands, noting “& in esse gli Spagnuoli col seminarui miglio zaburro, che nell'Indie Occidentali si chiama Maiz” (Barezzi, 1643 & 1669: 273).

The geographer Giovanni Battista Nicolosi (1610–1670) will also verify the relevance of maize in the archipelago of Cape Verde, according to the literary tradition of its predecessors: “& è piena di monti asperi, e di valli ricche di riso, cotone, e miglio zaburro (Grano turco si dice trà noi) che vi si semina, e raccoglie in quaranta giorni” (Nicolosi, 1660: I, 148). And in the edition of 1670, in reference to the island of Santiago, it can be read: “Orizà divitibus, Gossipio & Milio Zaburro, ut dicunt (*Grano Turco Italis*)” (Nicolosi, 1670: I, 118).

In addition to what is stated up to here in relation to the grain and speaking of the island of Santiago, in particular, and of the Cape Verdean archipelago, in general, in the account of the aforementioned Portuguese pilot it is also included, compiled by Ramusio and included in his *Primo volume delle Nauigatuioni et Viaggi*, a note about the presence of maize in the island of São Tomé itself (as part of the diet of slaves), which we copy according to the 1550 edition:

... di lauorar tutta la settimana per il patron, eccetto il sabbato che lauorano per causa del viuere, & in questi tali giorni si seminano il miglio Zaburro, che habbiam detto di sopra, & le radici di Igame, & molte herbe domestiche, cio è lattughe cauoli, rauani, biete, petre-semoli, le qual seminate, crescono in pochi giorni, & uengono in tutta bonta, ma la semenza che fanno non val niente per seminare (Ramusio, 1550: 127).

In the edition of 1563 it is marginally recorded, “Miglio Zaburro. Radici di Igame” (Ramusio, 1563: 117r). The atmosphere of the Portuguese island of São Tomé seemed conducive to experiment with new plants, among other purposes to feed the groups of slaves since, around 1520, the small island had a large number of mills that, according to sources of the time, produced the not despicable figure of 4,413,789.240 pounds of sugar (Oriol-Ronquillo, 1851: I, 296), leading to an intense commercial activity.

In the middle of the sixteenth century the physician and botanist Girolamo Cardano (1501–1576) emphasized the enormous dimensions of the wheat grown in La Palma (Canary Islands), with ears up to 24 ounces of weight; although it cannot be dismissed that, actually, he has been referring to maize or “wheat of the Indies” as it was called also in Spain, since an ear of *Triticum* of such features and weight seems disproportionate. Cardano also

underlined that the plants changed depending on the place where they grew, and that maize, specifically, grew much better in America than in Europe. At the same time he explained that Americans found maize more useful than European cereals, since they were used to it; it fed them better, they made wine with it and crops were bigger, as well as it was grown with less labour, since one person was enough to sow it, while for wheat it required a yoke of oxen:

Maizum enim in India occidentali, non solum melius prouenit quam in nostris regionibus, sed Indis ipsis utilius est quam tritricum: cum & ob consuetudinem melius alat eos, & ex eo uinum conficere soleant, magis'q, multiplicetur, minori'q, periculo seratur, indigeat'q, leuiori cura labore'q: cum unus homo sufficiat maizo serendo: tritico cum homine iuga bouum sint necessaria (Cardano, 1557: 15–16, 111).

In our opinion, some of the factors underlined by Cardano could contribute to an easier adaptation of maize to the requirements of its cultivation in different African areas.

Moreover, there is no doubt about the relevance that had the population of Portuguese origin in La Palma and indeed in the Canary Islands in general since the very end of the Spanish conquest (1496). In the countryside the importance of the peasantry of Galician-Portuguese origin as well as the imprint its presence has left in our surnames and in semantic variants of Spanish of the Canary Islands, is out of discussion (Serra-Ráfols, 1941; Pérez-Vidal, 1991; Álvarez-Santos, 2010). Therefore, it is not difficult to understand that the passage through the Canary Islands and, in fact, through the island of La Palma, of boats that left and brought men and resources to more or less remote places of the planet was, at this time, the most natural thing in the world. But also, as Manuel Lobo-Cabrera has noted, Portugal had always been a receiving market of the Canary grain and, in particular, the direct trade between Tenerife and Lisbon for this purpose starts in 1504. In 1522, up to eighteen ships departed from Tenerife full of wheat and barley with that destination (Lobo-Cabrera, 2008: 80–81, 232–233). There are no references, at least for the moment, about the commercialization of maize between the two points; but it is interesting to verify the importance of cereal traffic between the Canaries and Portugal in early dates, and likewise it is known that since 1560 there begins the cultivation of a representative American product in the Archipelago: the potato (*Solanum tuberosum*), with some shipments to Europe in 1567 and 1574.

In his *Cosmographie*, André Thevet (1502–1590) writes about the maize in the island known for the “barbares Poncas, et de nous S. Thomas”:

Ils sèment le millet (qu'ils appellent *Zaburro*, les Arabes du pais *Atahassel*, & les Indiens Occidentaux

Mahic) qui est tout ainsi que des pois blancs, dont usent toutes les isles de ces pais là, voire c'est le grain de toute la coste d'Afrique : lequel ils jettent en terre le mois d'Aoust, le recueillans dans cinquante iours apres (Thevet, 1575: I, 90).

Louis Gougeon, for his part, includes the presence of maize in continental areas more or less close to the African land equator, where “le terroir y este aussi divers, les plaines & les environs des rivières y sont très-fertiles en orge, millet, maiz & autres grains” (Gougeon, 1692: 264). And in reference to the archipelagos he does not hesitate to say that São Tomé “produit tout ce qui est nécessaire à la vie de ses Nègres Insulaires, & non pas pour les Europeans, car il n'y vient ni blé ni vin, mais bien du maiz, des palmiers, des batates, qui sont de grosses racines dont les Insulaires font leur pain, & une très grande quantité de sucre” (Gougeon, 1692: 287). And it happens the same with the “Isles du Cap vert”, where he emphasised its productions “du riz, du maiz, des ignanes, bananes, limons, citrons, oranges, grenades, cocos, des figues & des melons” (Gougeon, 1692: 289). Or, finally, with the Canaries themselves, of which this author claims that

L'Air de toutes ces Isles y est fort bon, mais un peu chaud, le terroir fertile en toute chose, comme froment, orge, millet, & vins excellens qui se transportent par toute l'Europe en telle quantité qu'on en transporte tous les ans en Angleterre seule jusques à 15. à 16. mille tonneaux (Gougeon, 1692: 290–291).

CONTINENTAL AFRICA

John Leo or Leo Africanus (Hasan bin Muhammed al-Wazzan al-Fasi), who lived approximately between 1488 and 1554, seems to mention maize or mahiz on the seventh part of *Della descrittione dell'Africa*, on which he talks about the “paese de Negri: et nella fine dell'Egitto” and, more specifically, about the kingdom of Walata and the mythical region of Timbuktu. It is true that the edition of Ramusio of 1550, which reproduces the journey of John Leo, literally says: “& nasce in questo paese poco grano: & questo è miglio, & vna altra sorte di grano tondo & bianco come cece che non se ne vede nell'Europa, di carne v'è grandissima carestia” (Ramusio, 1550, I: 84r), so it is unclear whether the author speaks of maize or of a variety of millet or sorghum.

Margaret Visser, whose chronology for São Tomé seems very early, says about it: “John Leo visited Africa as early as 1535, and two hundred miles inland on the Niger River he met a tribe who had ‘a great store of a round and white kind of pulse, the like whereof I never saw in Europe’. The Africans called it *manputo*, ‘Portuguese grain’. ‘This’, adds

Leo, ‘is called maiz in the West Indies’” (Visser, 1987: 36–38). And in the edition of Ramusio of 1563, next to the text quoted above, it is recorded in a marginal note: “Grano tonpo & bianco como ceci che nel Indie Occidentali e detto Mahiz” (Ramusio, 1563, I: 77v), although it could be an explanation of the editors.

This unique grain is also mentioned in the French translation of Ramusio printed in Lyon in 1556, regarding the text of John Leo:

Leur maniere de viure ne differe en rien à celle des voisins qui habitent au prochains deserts, & les terres produisent du grain en petite quantité: comme millet, & vne autre espece de grain qui est rond, & blanc, mais il ne s'en trouue en Europe (Ramusio, 1556, I: 323).

It should be noted, in any case, that the editors of the texts of John Leo Africanus and of other authors of the sixteenth century were not very careful when defining a particular type of plant which, at first, does not seem to be always so clear in the original descriptions of travelers and explorers.

In 1563 the editors of Ramusio, already died at that time, incorporated into his collection of travels a text by the Portuguese historian João de Barros (1496–1570), who has a special interest in this context since, as well as describing in more detail the plant to which he referred, he also includes a magnificent drawing of a head or corncob with its skin or *farfolla*, in the style of the engravings which, since some time ago, had been publishing the fathers of modern botany. Doubts began to clear up, although it is also true that the editors did not give up when meddling in issues that in essence were largely unknown for them.

In any case, the piece compiled by the editors of Ramusio alludes to *Primeira Década da Ásia* (an excerpt of the lib. III, cap. VIII), which first edition published in Portuguese dates from 1552, and refers approximately to the region of Senegal-Gambia. The text in Tuscan reads as this, according to the mentioned edition: “Et per crear li migli di maz-zocca che noi chiamiamo Zaburro, che è il commun cibo di quelli popoli, accio che'l possa nascere da poi asciutto il fango ò pantano che lassò il corso dell'acque” (Ramusio, 1563, I: 385).

Next to the aforementioned drawing of a corncob ear of maize, we also read the following note:

La mirabile & famosa semenza detta maiz nell'Indie occidentali, della quale si nutisce la metà del Mondo, i Portoghesi la chiamâ miglio zaburro, del qual n'è venuto già in Italia di colore bianco & rosso & sopra il polesene de rhoigo, & villa bona seminano i campi in tieri de ambedui i colori (Ramusio, 1563, I: 385)

In 1562 it was published in Venice, precisely, *L'Asia* by João de Barros, “nuouamente di lingua

Portoghese tradotta” by Alfonso Ulloa, in whose book III, chapter VIII, page 49, we read: “Et quando seminano i migli grossi, che chiamano Zaburro, ch'è il commune cibo di quei popoli, accioche possa nascere poi che hanno fatto netta la campagna della immondicia che lascia la crescente dell'acqua” (Barros, 1562: 49).

The original paragraph by Barros said so in Portuguese language (*Primeira década*, lib. III, cap. VIII):

E pera dar os milhos de maçaroca a que chamamos zaburro, que he o commum mantimento d'aquelles pouos: porque lhe possa nacer, depois de limpo o cisco que leixou o enxurro, lanção a semente sem maes lauras, & com hũa tona de area por cima o cobrem (Barros, 1628: 49v–50r).

The Grenadian Luis del Mármol Carvajal (1520–1600), in *Primera parte de la Descripción general de África* alludes, when writing about the quality of the “land of the blacks”, that on the banks of the rivers there were very good pastures for livestock and land where they grow “millet and Turkish millet in abundance, although the main sustenance of the blacks are roots like sweet potatoes, which they call yams”. He also explains that these inhabitants of the regions surrounding the Niger lacked fruits, and that they did not sow wheat or barley since the land was excessively warm (Mármol-Carvajal, 1573a, I: 16).

When referring to Ethiopia, Mármol probably uses excerpts by Francisco Álvares, as he mentions for example the huge abundance of wheat and barley, as well as of “all kinds of pulses as in Europe, and cereals grow so much that they cover a man on horseback, especially millet”, among other statements of this kind (Mármol-Carvajal, 1573a, I: 20), which remind us of the descriptions of the Lusitanian traveler, and which eventually become a cliché: “millet and maize grow at the same height of a man on horseback; and these two, with all other pulses are gathered three times a year” (Urreta, 1610: 380).

In the third book and second volume of the first part of *Descripción general de África*, Mármol stops in Morocco and border areas, and indicates in relation to the Berbers of Tenzara that they had their villages in high and rough places, and that they bred horses because the land was plentiful of barley and of “*mijo ceburro* [durum wheat], which is like *alcandía*” (Mármol-Carvajal, 1573b, II: 14v), i.e. sorghum.

Mármol's testimony is curious and of course fallible, like the rest of the information relating to the introduction of maize in Africa, especially during the first half of the sixteenth century. But, at first, if he was not able to detect the Musaceae, which in the Congolese region were called *nicéf-fos*, coconuts and other fruit trees of the area

(Pellicer-de Tovar, 1649: 50–55) that he describes, it seems reasonable that he cannot either offer news about maize, since when he talks about foxtail millet (Mármol-Carvajal, 1573b, II: 145–146, 150, 168, 174), we understand that basically he refers to millet, although he uses both words (millet and foxtail millet) at the same time.

Livio Sanuto had also emphasised the importance of maize in the African regions of Canaga and Gambia (Senegal):

In quel terreno poi, che dall'acqua s'è rasciutto, si gitta la semenza del miglio Zaburro, ouero Mahiz che si dica, che è il lor comune grano ...; perche fattasi essa dall'acqua molle, e per il gran calor del Sole diuenuta dura, impedisce e vieta il crescere del Mahiz (Saraceni, 1588: 80r).

In 1701, the inhabitants of the small island of Gorée, located three kilometres off Dakar (Senegal) and which was specialized in the slave trade, had not “more food than maize; there they did not know either what wine is, or wheat or fruit”; and the admirable issue, claimed the father of Tartre, was “that there were the unhappy in the intelligence, that this is the Earthly Paradise”, and so they always seemed so happy and smiling that “if it wasn't for fear of the blows and hits that Europeans did not spare them, they would always have the same countenance” (Davin, 1753, I: 190). According to Monique Chastanet (1998: 251–282) the arrival of maize in the valley of Senegal might be produced between the late seventeenth century and the early eighteenth century, although there are still many doubts about the way of penetration of the grain.

CONGO AND ANGOLA

There are, moreover, several references to the presence of maize in the Congo, especially from the second half of the sixteenth century. Some data are relevant since they allow us to document with quite certainty the identity of the plant at one of its many varieties (Escobar-Moreno, 2006), and which becomes known as “wheat of Portugal” in obvious allusion to the introducers of the cereal in the territory. As noted by the botanist Joseph Burt-Davy (1914: 14): “It is instructive to note that in Angola maize was at one time known by the name “blé portugais” (Portuguese wheat), which suggests its source of introduction”. And Kupperman (2012: 78) emphasizes that it was also known in Africa as “grain from the sea”, “from across sea”, “overseas Millet” or sometimes “white man's corn”, which reflected the first exchanges with European traders.

Filippo Pigafetta (1533–1604) and the Spanish (and not Portuguese) Eduardo López, who had departed to the Congo in 1578, left us this interesting

testimony in relation to the presence of the grain in that territory:

Vi è il miglio bianco nominato Mazza di Congo, cioè grano di Congo, & il Maiz che è il più vile de tutti, che dassi à porci, & così anco il riso è in poco prezzo, & al Maiz dicono Mazza Manputo, cioè grano di Portogallo, appellando essi Manputo Portogallo (López & Pigafetta, ca. 1600: 400).

In relation to maize in the Congo the Dutch Protestant (merchant and historian) Jan Huyghen Van Linschoten (1563–1611) says for his part:

There is also much barley, called Mazza di Congo, that is, grain of Congo, and also great quantitie of Maiz, that is, Turkishe wheate, which is there but little esteemed, and by their country people called Mazza Mamprito, that is, grain of Portingale, where with they fatten their hogges: of rice they have great plenty, but nothing worth (Linschoten, 1598: 209).

In his *Universal Relations* (1603) Giovanni Botero Benes (1543–1617) refers to the cultivation of broad beans, millet, “and other similar things” in the wide region of Benin and Guinea; and clarifies that wheat, barley, rice and grapes “never reach maturity nor have flavour due to the excessive moisture of that land”. Consequently, the natives lived mainly on “bread of some seed, which they call ‘mijo ceburro’ [durum wheat], which they sow after the rise in the levels of the rivers by spreading over it some soil in order to defend it from the heat that burns there excessively” (Botero Benes, 1603: 126–127).

Pierre d'Avity (1573–1635), when referring to the Congo, equally mentions, in relation to maize:

Ce pays [païs] porte encor du millet [millet] blanc en abondance, qui est appelé Mazzé, c'est-à-dire grain de Congo. Il produit [produit] aussi du maiz, ou bled de Turquie, qu'on estime toutesfois fort peu, & que les habitans nomment Mazza Mamprito, c'est-à-dire bled de Portugal. Il y a aussi force ris [riz], mais on n'en fait nulle estime (D'Avity, 1630, II: 943).

In his aforementioned book about the Capuchins in the Congo, the chronicler Pellicer-de Tovar (1649: 50) clearly refers to maize, although not mentioning it by its name:

El trigo que siembran no es como el nuestro, de que hacemos el pan; sino el que se llama *Turquesco*, que en su lengua dicen *Massa manputo*; que es lo mismo que *Trigo de Portugal*, por haberlo conducido allá los portugueses. Y de esto hay mucha cantidad. Siembran también ciertos géneros de mijo, muy semejante a la avena, unos blancos y otros rojos, y otro tan menudo que parece grano de mostaza, y este estiman en más por tener mejor sabor. Llamanle *Lucco* y multiplica fuera de medida.

The existence of American grain in the Congo soon becomes a manual concept, although older sources are copied and, probably, they were more rigorous. Jacques Robbe (1687: 219) claims therefore, in relation to the geography, that “du Pays de Congo”: “Il produit en abondance du riz, du maiz, du millet blanc, & un autre petit grain, que les Habitans appellent luco, dont ils font de fort bon pain”.

The Capuchin missionary Girolamo Merolla-da Sorrento, who developed his evangelical work in the Congo between 1683 and 1689 –after an initial stay in Brazil until he could sail for Africa–, unsuccessfully opposed the slave trade, suffered persecution for their missionary zeal and ended up moving away contrite from the black continent because of health reasons; he left us an interesting testimony, which was published in Tuscany in 1692 and then translated into other languages. Therefore, being an eye witness, Merolla-da Sorrento (1726: 119) writes: “Li seminati sono differenti legumi, à noi incogniti, eccetto il grano d’India, ed i faggioli piccioli, chiamandoli, Ncassa”. And immediately after he adds more accurately a series of data about cereals grown in the Congolese region, which is interesting because it allows to prove once again the plant exchanges between the two sides of the Atlantic, largely related to the infamous commercial link created by the slave trade:

La Ncanza portata dal Brasile, tiene la parità col fagiolo Indiano, il suo frutto è bianco, e si noma da Portoghesi, Fava del Brasile. Il Cangulù, legume, è da Neri in gran pregio stimato; da Bianchi Europei in poco stima tenuto. Il Mampunni, o Maiz, è pari al grano d’India. La Massa Mamballa con sue spighe, quasi quelle del formento; solleuandosi in alto, quanto è dell’istesso l’altezza, tiene la farina bianca, ed all’altrui stomaco meno è dell’altre nocivo (Merolla-da Sorrento, 1726: 120–121).

In the territory of Congo which, according to *Le Grand Dictionnaire Géographique et Critique* by Antoine-Augustin Bruzen de La Martinière (1737, III: 652), was composed of the three “pre-colonial” kingdoms of Loango (region encompassing provinces of the current countries of Angola, Congo and Gabon), Congo itself and Angola; it is repeated again and again the relevance of maize as a crop introduced by the Portuguese:

Comme les Rivières du Congo se débordent pendant les saisons pluvieuses & inondent les Campagnes qu’elles traversent, elles les rendent très-fertiles. La Province de Batta, celle de Pembo & les Contrées voisines rapportent si abondamment de plusieurs sortes de grains & de provisions qu’elles en fournissent les Païs qui en manquent ... Il y croît aussi du millet qu’on nomme *Mazza* & du blé de Turquie qu’ils appellent *Mazza Manputo*, c’est-à-dire, Bled de Portugal: ils en engraisent les pourceaux.

For his part, the Jesuit Alonso de Sandoval (1576–1652) published in 1627 in Seville an interesting treatise against slavery, in which book I, chap. 15 he referred to the presence of maize in Angola and Loanda in these terms:

Toda esta tierra de Angola o Loanda, que todo es uno, es muy estéril de mantenimientos, y así tiene necesidad para sustentarse de traerlos de fuera: en ella con todo hay principalmente la tierra adentro, algún maiz, y millo: a este llaman Mazafioli, y Mazamambala: y al maiz llaman Mazamamputo (Sandoval, 1627: 60r).

Further on (Book I, chap. 18), in the epigraph that he dedicated to the “frames of these blacks”, he talked about the conditions in which they were transported to America –to Cartagena de Indias “or elsewhere”, wrote Sandoval–; he denounced the despicable treatment to which they were subject aboard slave ships, and said with painful irony:

Y el refugio y consuelo que en él tienen, es comer de veinte y cuatro a veinte y cuatro horas, no más que una mediana escudilla de harina de maiz o de mijo, o millo crudo, que es como el arroz entre nosotros, y con él un pequeño jarro de agua, y no otra cosa, sino mucho palo, mucho azote y malas palabras (Sandoval, 1627: 72v).

The Capuchin Father Giovanni Antonio Cavazzi-da Montecuccolo (1621–1678) also referred to this wide region of continental Africa in the lower Guinea, as it was called at that time. He left us interesting testimonies about the introduction of maize by the Lusitanian: “quantunque per industria de Portoghesi siasi introdotto il Maiz, ch’è il Grano Turco, la Sagina che riesce d’ottima qualità, e molti altri legumi” (Cavazzi-da Montecuccolo, 1687: 19). And a little later he adds that

il più comune, e miglior seme di queste parti è il Grano d’India, o Turco, detto Maiz altroue, e Frumentone in alcune parti dell’Italia, che i Neri chiamano Massamampuntu, cioè semente portata da Portoguesi; questa, quando non succeda qualche straordinaria intemperie, nasce, e matura in trè mesi, e si raccoglie due fiati in vn’Anno (Cavazzi da Montecuccolo, 1687: 25).

In *Description de L’Afrique* by Olfert Dapper (1686: 361) it is also indicated, in the epigraph about Angola, «on y moissonne du Maiz, ou du blé de Turquie & du mil, en trois divers temps de l’année». And, for his part, Henrico Cosmio-Anglo (1687: 117), on the chapter dedicated to bread (“De pane”), writes:

In multis *Africae, Asiae* & plerisque *Americae* tractibus fructus plantae arundinaceae dictus *Maiz* est usitatum illis populis frumentum: duplex ejus species est

magnitudine, non facultatibus diversa. *Turcicum* minus, *Indicum* majus, & procerum est. Utriusque farina, furfuribus cribro pollinario exemptis, candida est.

In more recent times, Leo Wiener (1922 & 2012: 118–122) had already included in his essay on *Africa and the discovery of America* numerous words from African languages that referred to maize, among them the “mazza manputo” or “maza manputo”, which was in use at the end of the sixteenth century (Bahuchet & Philippson, 1998: 87–116). Henry Hamilton Johnston (1858–1927), a British scholar and colonizer, said for his part: “maize was introduced into the Congo (where it was called *maza manputo*) about 1560” (Johnston, 2011: 92–93). And, likewise, it is essential the exhaustive study of A. Warman (1988); it deals with the worldwide diffusion of the cereal.

Several authors have emphasised, consequently, that the geographical proximity between Brazil and Africa as well as the establishment in both continents of the Portuguese rule, were decisive factors in the exchange of plants (León, 2000: 41). Humboldt himself wrote: “Several travelers have claimed that the maize was wild in that part of Africa, and yet it is very true that the Portuguese had transported it there in the sixteenth century. There is nothing so difficult to resolve as the problems of migration of plants useful to man, especially since communications have become so frequent among all continents” (Humboldt, 1822, II: 249; Pozorski & Pozorski, 2011: 16–19). In our opinion, it could take place a two-way penetration: from Portugal, following their North-South African possessions, heading towards the East and, of course, also through contacts in the West African coast with Brazil and in fact with other places in Latin America. On this subject there has been for a long time an intense debate among scholars (Adandé, 1953, XV: 220–282; Portères, 1955: 221–231; Jeffreys, 1957: 111–135).

Morgan & Pugh (1969: 83) wrote about it:

Maize was introduced from the Americas by two routes. The hard maize varieties of Central America came via the Mediterranean countries, the Nile valley and Bornu; the soft maize varieties were probably brought directly from Peru and Brazil by the Portuguese. The latter appear to have been introduced first to the inland of São Tomé and later to lower Dahomey via the slave trading settlements.

The reception, acclimatisation, adaptation and cultivation of a plant is a complex process which may require more or less time depending on the historical and, of course, environmental circumstances. Although with the passing of years the plant is so integrated into the culture of the recipient that it seems incredible that it might not have been native. On this subject Nitza Villapoll, who included the

maize consumption “brought from America and introduced into Africa by the Portuguese” in what was called “culture of return or reflux”, stated that the grain was so integrated into the Yoruba diet that “some informants in Ife questioned its American origin”. Following in other scholars’ footsteps such as Pierre Verger, he also verified that in Lagos (Nigeria) it could be found “a whole culinary trend called “imoyó”, to which belong many dishes brought from America by the freed slaves who returned” (Villapoll, 1996: 331).

Other authors have pondered the early acclimatisation of maize in Africa, with regard to human consumption (Osseo-Asare, 2005), which will contrast with the food practices of some European countries as well as its wide current diffusion (Long, 1996; Cáceres, 2001).

EAST AFRICA

Speaking about Quilwa (Kilwa Kisiwani, which nowadays belongs to Tanzania), the aforementioned Sanuto emphasized its productions and, in particular, those of the durum wheat and other cereals: “Il comun cibo è miglio Zaburro, riso et altre semenze di radici piantate, con molti altri seluaticchi frutti, di che la gente pouera si mantiene” (Saraceni, 1588: 142).

On the shores bathed by the Indian Ocean we find, in short, the quasi-mythical Kingdom of Mutapa (Mwene Mutapa), which was located in South Africa and had great interest because it was an enclave on the route to the East, because of the gold traffic and subsequently due to the slave trade; it enjoyed a flourishing stage between the mid-fifteenth century and the third decade of the seventeenth century. It included the territory of present Zimbabwe and much of the territory (central and southern) of Mozambique.

Collins & Burns (2007: 198) have emphasized the role that, in the expansion of maize in Africa, had the introduction of the grain made by the Portuguese in the ancient Delagoa Bay (Mozambique) during the sixteenth century:

And was brought to Delagoa Bay in Mozambique by the Portuguese in the sixteenth century had spread erratically but steadily from southern and Central Africa to the northern grasslands of the continent.

However, although he throws, now he dodges a shot”, interesting episode from the point of view of gestural history. It was, in short, a cultural practice which, as the mentioned author said, resulted in “representations that often exercise those blacks brought to Spain”, and which concluded in a gift of maize offered by the monarch to his loyal subjects:

They come to be present at such entertainment those great and gentlemen resident in the Court. Finished it,

he orders to bring him a pot of cooked maize in grain, and pouring it around the room tells them to eat, because maize grows in the earth, and he is the lord of it. There is also flattering because they all come down to get who picks more, knowing that this one pleases him more, and when they have caught it they eat it more willingly then if it was fine jam (Faria e Sousa, 1674, II: 606–607).

In the Chicova Fort, about a hundred leagues from Sena (in the region of Mozambique), died the soldiers victims of an epidemic that was related to the excessive heat. Faria e Sousa says that, to give spiritual aid, came from Sena the Dominican Friar Juan de los Santos, “notorious for the curious book he wrote about eastern Ethiopia”. And he adds that it followed such a famine in the place that it became exposed and without resources necessary in the past to “buy maize in the lands of Sape” (Faria e Sousa, 1675, III: 289).

Faria e Sousa also placed maize on the beautiful and quasi deserted main island of the Socotra archipelago, located near the Horn of Africa and belonging to Yemen today. On this matter he had noted: “The common sustenance maize, dates, milk. All are Christian Jacobites of Abexines” (Faria e Sousa, 1666, I: 98).

Some of these recent testimonies relating to East Africa immerse us in the doubt of whether we are actually referring to maize or to other cereal most common and traditional in the area; but, as we will discuss below, this confusion is also perceived in other distinguished countries of the African continent, as it happens in particular with the mythical kingdom of Ethiopia.

THE MAIZE FIELDS OF PRESTER JOHN

The appropriation of the term *maíz* or *mayz* (*maize*) and its application to the corresponding plant sometimes acquire tinges of uncertainty. Maize, indeed, will be listed as a cereal commonly consumed in places where, at first, it does not seem to be sufficiently widespread, at least in the proportions that are proposed for the years 1520–1526 and in direct competition with other grains of deep tradition in the area. This seems to be the case of Ethiopia, which we will try to examine next.

Two Spanish translators –Friar Tomás de Padilla and Miguel de Selves– of the work by Francisco Álvares, who was the chaplain of the King, entitled *Ho Preste Ioam das Indias. Verdadera informaçam das terras do Preste Joam* and published in Lisbon in 1540, made a translation into Castilian in which surely millet (*Panicum miliaceum*) and durum wheat, this is, probably the variety of sorghum *Andropogum sorghum sudanensis* or simply *Sorghum*, seem to be confused with maize (*Zea mays*). However, we cannot absolutely reject the existence in such dates of

an emerging growing of maize in Ethiopian territory, where, as we will soon see, the plant soon adapts and achieves an important development that survives today.

After the failure of a first embassy that left for Ethiopia in the time of John II of Portugal, since the only survivor Pedro de Covilhan was retained in the country and not allowed to return to Europe, in 1515 King Manuel I sent a second delegation. This second embassy, which ended up being run by Rodrigo de Lima, could make a long visit to the country and returned to Portugal in the company of an Ethiopian monarch’s representative before the court of Lisbon. Francisco Álvares, as the chronicler of the voyage, had the honor of being the author of “the first ‘true’ information about Ethiopia known in the West”. The return of the retinue began in April 1526 and arrived in Lisbon in mid-1527 (Herrero-Massari, 2002: 304; Bouba-Kidakou, 2006: 57). The wonder of the travel and of the fabulous discovery, in short, seems to survive over the ruins of the ancient legendary tale.

The confusion between the African Ethiopia “or the Region of Blacks”, as Joseph Martínez de la Puente (1681: 78–79) called it, and the mythical lands of Prester John is old. On this matter, Fernão Lopes-de Castanheda (1554: 10–11) clearly emphasised, in his *History of the Discovery and Conquest of India by the Portuguese*, the mistake made when conferring on “the Emperor of Ethiopia” the title of Prester John, because the real one was “the one of whom Marco Polo speaks in his book, who reigned the region of India and confined his lordship with that of the large dog of Cathay, and finally the Prester was killed in a battle that he took with a large can, and then the lordship of Prester John was over, which already at this time did not exist”.

If it were not enough, the remote Judeo-Christian history of Ethiopia, that is to say, its legendary past in relation to the Queen of Sheba and Solomon and, already in the early days of our era, the process of its evangelization through the royal officer baptized by the apostle Philip, naturally add new legendary elements to this unique country which, except the brief occupation of Italy (1936–1941) around World War II, did not directly suffered the vicissitudes of European colonialism.

Thus, the Dominican Father Friar Tomás de Padilla, a bibliophile from the Canary Islands resident in Antwerp, personage with heterodox whims, whose collection of books passed into the hands of the humanist Páez de Castro (Domingo-Malvadi, 2011: 106–108, 139–140, 221), prepared for the printer Juan Steelsio a version more than a translation of the book by Francisco Álvares. Besides adding an introduction that, he said, he had missed in the work of Lusitanian, he also suppressed the references to the chapters, he introduced some Canary words such as *sereta* (handbag made

of plaited palm), *gofio* (roasted flour) or *pampillo* (*Argyranthemum*), and, finally, he took some interpretative liberties more or less in line with the typical translation methods of the time. In the present context we can think that if Padilla associated so strongly the maize to Portugal or, rather, to a Portuguese author, is because at the time he lived or should live in the country, he noticed the remarkable development of the plant which, under the name of millo (milho), as it was called precisely in his agnatic land, already constituted a food of great interest for consumption, both for livestock (as it was the case with other cereals and traditional grains in Europe) and, of course, for the people, particularly in those areas where the crop successfully replaced other grains less suitable to the arable land.

Let's see, in any case, some examples of the translation techniques of Padilla (1557) and also of other translators in relation to maize, although the translation of Miguel de Selves (1561 y 1588) is practically a copy of the previous one (Silva, 1859, II: 329–330). For this we will present, firstly, the Portuguese texts (in italics) and then the Castilian version, respecting the spelling of the time, and the pages with the indication recto (r) and verso (v):

Álvares cap. VIII: 5r:

Côtodo fomos auante e começamos achar gête da terra que guardauam milharadas de milho zaburro l e de longe vem semear aestas terras e serras enrrocadas que fazem nestas môtâhas.

Padilla: 7v–8r:

En fin passamos adelante, y començamos a encontrar gente, que guardauan vnos sembrados de mayz, los quales vienen delexos tierras a sembrar por estas sierras tan áspers y montuosas.

Álvares cap. XIII: 10v (corr.):

Os de mais comen tres e tres em húa grande gamellal nam he fûda mas châa como bandejal e seu comer he ben triste. Ho pão he de milho zaburro e ceuadal e outras sementes que chaman taffol semente pequena e negra. E fazen este pão redondo no tamanho e redondeza de zamboal e dam tres destes a cada hû: e aos nouiços âtre dous tres pâes he despâtar como se podem manter.

Padilla: 17v–18r:

Y ellos comúnmente comen de tres en tres en una gran almofia de palo, la qual no es honda, sino llana como arteza, y lo que comen es bien mísero. El pan es de mayz, y ceuada, y de otra semilla que ello[s] llaman tafo. A los nouicios dan entre dos, tres panes, y son tales, que cierto es de espantar como se pueden mantener.

At this point, the reference to *taffo*, *tafo* or *tefo* is noteworthy; i.e. the *teff* (*Eragrostis abyssinica*), which

stands out due to its resistance: «Native to the land is *tefo*, which is even smaller than the *nachenim* of India and the maize of Portugal; this seems to be why insects never enter it and why it lasts for many years» (Pankhurst, 1996: 15).

Álvares cap. XXV: 25:

Desta terra e dos lugares comarcãos he agente que vai fazer as milharadas a as serras de Bisam: a causa porque as vem fazer he esta ... E porque nesta terra ha iuernos diuididos entêporadas/ eas nouidades nã crescê senã cô as agoas/ vam fazer estas milharadas a ha serra de Bisam que he inuerno nomes de Feureirol Março/ e Abril ... l assi que por estas milharadas requererem chuiuas e serem estes inuernos fora de tempo as vem fazer onde chouel e assi aproueitam ambos os inuernos.

Padilla: 30v–31r:

Aquella gente que vimos sembrar mijo en las montañas de Bisam, eran de aquí de Barua, y de su comarca ... Y como en estas partes estén los inuiernos diuididos en temporadas, y los frutos no crezcan sino con las aguas, por esto van a sembrar el mijo a la serranía de Bisan, en la qual es inuierno por Febrero, Março, y Abril ... Assi que como estos mijos y mayzales requieran aguas, y sean estos inuiernos fuera de tiempo, por esto los van a sembrar donde llueve, y aprouechan ambos inuiernos.

Álvares cap. XXXIII: 30:

Caminhamos cinco dias por terras que estauam todas despouoadas e pellas canas de milho tan grossas como as mais grossas canas de empar vinhas que nã se pode dezer todas cortadas/ e machadas como que as macharã asnos/ tudo dos Gafanhotos.

Padilla: 39v:

Caminamos cinco días por tierras que estauan despobladas, y las cañas de los mijos, o mayzales que eran tan gruesas como las más gruesas cañas, con que se arman las parras, estauan todas cortadas, y comidas, como si las comieran algunas vacas, y auían sido destruydas por lagosta.

This excerpt is especially important and different specialists have drawn attention to it. Jeffreys (1976: 32–33), despite he confuses the ecclesiastical condition of Francisco Álvares, since he is not a friar but a priest (this is not a trivial observation since the cultural difference between a priest, who is also a royal chaplain, and a simple friar is simply enormous), says: “Álvares, the Portuguese friar, made other references to a grain identifiable with maize. He noted that: ‘bread is made from *milho zaburro*, and barley and other seeds which they call *tafo*, a small black seed’. Here *milho zaburro* is distinguished from

barley and from a grain with a small black seed”. And Beckingham and Huntingford (1961, I: 135–136) in their translation of translation of Álvares’s travels wrote: “We travelled five days through country entirely depopulated, and through millet stalks as thick as canes for propping vines”, translation that basically seems to be a recreation of the text by Álvares, much more explicit and exhaustive; but the data is still important, and in such context, Jeffreys emphasises that actually it is very difficult that maize had reached Ethiopia in the decade of 1520, according to Beckingham and Huntingford (1961, I: 88, 131–136), but reserve some room for doubt: “But it is unlikely, on general grounds, that maize had reached Ethiopia as early as 1520. Nevertheless, the expression ‘as thick as canes for propping vines’ does suggest (to a maize grower) maize rather than millet” (Jeffreys, 1976: 33).

Álvares cap. XLVII: 41v:

Por toda esta terra fazem pam de toda semente, de trigo l ceuada l e milhol acaburrol grãosl eruilhasl lentillasl feijoesl fauasl linhaçal tafol e daguça.

Padilla: 59r:

El pan que en estas tierras se come es de todas simientes, y aun hasta de garauços, aruejas, y lantejas hazen pan.

Álvares cap. XLVIII: 42r:

Partimos deste lugarl fomos caminhâdo per antre fortes milharadas altas como grandes canaueaes: e fomos dormir nâ muito lôgea ho pe dû cabeça jûto dúa igreja por que sempre de noite eramos forada estrada: e perto dos lugares por causa do comer que nos dauam.

Padilla: 59v:

Partidos deste pueblo començamos a caminar por entre unos mijos, o mayzales tan altos que parecían algunos cañauerales, y fuemos a dormir cerca de una yglesia, no muy lexos de la halda de un monte. Siempre de noche nos apartáuamos fuera del camino, y nos allegábamos a los lugares, por amor de la comida que nos dauan.

Álvares cap. LI: 44v:

Ha quarta feira seguinte caminhamos (nam grande caminho) começamos a decer per hum grande e fre-moso valle e grande ribeira e de muy grandes milhosl e fauasl e chamase esta ribeiral ha terra Dancona.

Padilla: 63v:

Otro día descendimos por un hermoso valle, ribe-ras de un gran río, por cerca del qual auía muchos mayzales, y hauales. Llamáuase esta jurisdicción Ancona.

Álvares cap. LXII: 55r:

Da qui caminhamos bem quatro legoasl per matos e atoleiros terra de muitos milhos e muitas agoas.

Padilla: 81r:

De aquí passamos quatro leguas adelante, por bosques, y atolladeros, y por tierras húmidas con muchos mayzales.

Álvares cap. LXII: 55v, 56:

Este lugar se chama ho Acel: esta sentado em hum pequeno cabeça antre duas ribeiras e boa campinal auia hi muitas e grandes milharadasl e de todas outras sementes e triguos. [...] Mas me disseram que aquineste outeiro apartauamos ha terrado do milho da do triguol que ja por diante nam achariamos mais milhosl se nam triguos e ceuadas.

Padilla: 81v, 82r:

Y llamábase Acel. Está este lugar asentado en un cerro entre dos ríos, y tiene muy buenas tierras sembradas de mayz o mijo, y de otras simientes. [...] También me dixerón que de aquí adelante no se hallauan mijos o mayz, sino que todos los sembrados eran de trigos y ceuadas.

Álvares cap. CIX: 97v:

E ho geral beber he húa beboragê que fazê de ceuada a que chaman çanha: e assi ha fazê de milho azaburrol e doutra semête chamada guça: e tâbem ha fazem de joyo. Este non bebê en quanto he frescol porque da con hos homens no châ: e tanto que he frio e assêtado he esto ho melhor que hi ha.

Padilla: 141v:

Algunos suelen beuer una cerueza hecha de ceuada, que ellos llaman caña, y también la hazen de mayz, y de guaça, que son otras simientes, y aun de joyo, pero la cerueza de joyo, nadie la osa beuer, si no después de fría, porque entonces es la mejor.

Álvares cap. CXXVI: 114r:

Porque hi nam ha soldos que pagar e cada hû traz consigo ho que ha de comer que he farinha de ceuada torrada que he boa vianda grãos torradosl milho torrado: este he seu mantimento pera has guerras que has vacas la has acham. Ese he em têpo de trigo cerolhol este he principal mantimento da guerra daquella gente.

Padilla: 167r:

Porque no tienen que aguardar paga ni sueldo, que ya cada uno lleva lo que ha de comer, que es gofio, hecho de harina de ceuada tostada, la qual es buena vianda,

y assí lleuan también garuanços tostados, y mayz tostado. Esto es el pan de la gente de guerra, que la carne y lo demás siempre la hallan en campaña.

This reference to roasted flour by Padilla (and not to mention to maize in general) has its history and its consequences. In 1561 the allusion to the peculiar food of the Canary Islanders, since the time of the Guanches, is already included in the Saragossan edition of the book by Álvares, because Selves merely copied the translation of the islander: “Because they do not have to wait pay, or salary, since each one carries what they have to eat: that is gofio, made of roasted barley flour, which is a good food, and so they also carry toasted chickpeas and roasted maize” (Álvares, 1561: 53v). We read the same in the edition of Toledo, published nearly three decades later (Álvares, 1588: 300v). This not only demonstrates Selves’ appropriation of Padilla’s translation, but it also served for the chronicler of the Order of St. Augustine, Jerónimo Román (1595, III: 115), who, besides quoting Francisco Álvares, also claims to have used original documentation which had met in Lisbon his benefactor “the very curious Luis César”, to write in relation to the same subject: “because each one carries their required provision, which is infinite barley flour and a bread called gofio which is the same as sponge cake, they carry roasted chickpeas and maize”. With this, as it can be seen, he chose to convert gofio into sponge cake before worrying about giving a more plausible explanation, since it was a food specifically from the Canary Islands, although of African origin in general, and North African in particular, which, undoubtedly, Padilla knew perfectly, in the same way that his peninsular colleagues ignored it.

Moreover, it must be recorded that prior to the translation into Castilian of Padilla, Ramusio had already translated into Italian and edited the text by Álvares in the compilation of travels that he published in 1550. In relation with this work it can be said, with respect to our topic, that the confusion among millet, sorghum and maize instead of decrease it rather tends to increase. We will see this more clearly in the following example:

Álvares chap. XIX: 14, writes:

Antre estes lugares ambos ahí mui singular terra câpinas de lauouras de triguos/ ceuadas/ milhos/ grãos/ lentilhas e de toda a outra semente de legumes que ha na terra a nos nã conhecidas. Da estrada a hũa e a outra parte parecê mais de cincoêta lugares/ diguo lugares grandes e mui boôs e todos nos altos.

Ramusio freely translated:

Fra l’uno & l’altro luogho è vn paese singulare, cioè terra molto lauorata, & campagne di formento, di miglio, d’orzo, di ciceri, di lente, & di molte altre sorti di semenze, che sono in quel paese, che à noi

sono incognite, cioè taffo di guza, miglio zaburro: & questo taffo di guza, è semenza tra loro molto buona & delicata, & è molto stimata, perche il verme non la mangia, che suol mangiare il formento, & altri legumini, & dura assai tempo. Per la strada, da vna banda, & l’altra, si veggono piu di cinquanta villaggi grandi, & molto bene habitati, & tutti in campagne verdissime (Ramusio, 1550: 212v).

Furthermore, as we see, Ramusio adds an explanatory passage that has been emphasised in italics, while at least in this case, Tomás de Padilla (1557: 24v) is much more sparing and moderate:

“Entre estos dos lugares —he translates— es la tierra muy singular, con muchas labores de trigos, ceuadas, mijos, garuanços, lentejas, y de toda la de más simiente de legumbres que ay en la tierra diferentes de las nuestras. Desde el camino se veen al vn lado y al otro, más de cinquenta lugares muy buenos y todos en altos”.

Ramusio’s decision to talk at length and add the “miglio zaburro” in this particular excerpt and, obviously, among the extraordinary diversity of cereals and other seeds that were grown in Ethiopia, does not seem innocent since in another text of those he reproduces (according to him an “antichissimo” excerpt entitled Discourse on the Navigation of Iambolo Mercatante which would come from a translation of Diodorus Siculus, Greek historian of the first century BC, born in the Roman province of Sicily), it is equated the “miglio zaburro” with the maize. It could be, perhaps, a new incursion in pursuit of the “meliga”, that mythical seed which some authors wanted to demonstrate how it spread through Europe since the early thirteenth century due to the Crusades, therefore long before the Discovery (Michaud, 1854, II: 340–342, 494–495; Paz-Sánchez & Carmona-Calero, 2006: 64), although the plant may have been a variety of sorghum or any other seed of similar features.

In the mentioned Discourse, in short, we read:

Ma ritornando all’isola di Iambolo, si uede in qsta scrittura cosi antica la particular descrizione di quel miglio grosso simile ai ceci bianchi, col qual al presente tutta l’Ethiopia, tutte l’isole et terra ferma dell’India occidentale si sostentano, et lo chiamano Mahiz et i Portoghesi miglio zaburro (Ramusio, 1550: 190r).

The French version of the work by Francisco Álvares, which came out with the title *Historiale description de l’Ethiopie* and was published in 1558 in Christofle Plantin’s presses (“à la Licorne d’Or”), apparently does not tend to invent or recreate the original text, although it does not always succeed. Here are some examples:

- Ils s’en aloyent parmy ces bois recueillans leurs millets, qu’ils y auoyent semez, avec les drois, que leur payent ceus, qui sement parmy ces bois (Álvares, 1558: 52).

- *Leur pain est fait de millet et orge, mellé avec vne autre semente, qu'ils nomment Tafo; laquelle est petite et noire: et le font rond, de la grosseur d'une pomme d'Adam: dont ils en donnent trois pour personne* (Álvares, 1558: 65r). Excerpt in which it can be noticed that, in the French translation, there is no distinction between millet and durum wheat but simply millet.

- *Or pour autant, que ces semences de millez requierent, la pluye, le plus fort de ce tans écoulé, on les va semer là, où on fait, que le pais est pluviéux: et par ce moyen s'aident de tous ces deus yuers* (Álvares, 1558: 83).

- Durum wheat is mentioned, in short, in relation to the excerpt quoted above (Álvares, 1540: cap. XXXIII: 30r/v) about the locusts that had snapped the plant stems off as if they had been eaten by livestock; although in this case it is a deduction of the French translator since Álvares did not refer in this excerpt to durum wheat but to *canas de milho tan grossas como as mais grossas canas de empar vinhas*, and Padilla speaks of millets or maize fields. But, in the end, the French version stated *et cheminâmes cinq journées durant, par les desers et détours, où étoient semez des millez zaburres, ayans les cannes fort grosses: qui étoient toutes foulees et brisees, non autrement, que si la tem-pête y eût passé: ce qui auoit été fait par les cheualettes. Et outre ce auoyent mangé tous les Fromens, Orges, et Seigles: telemet qu'on cût dit ces lieux n'auoir été jamais labourez, ny semez* (Álvares, 1558: 97v).

- In the following excerpt there is not either an allusion to sorghum or *milho acaburro*, which does appear in the original: *Par tout le pais on y fait le pain de toutes sortes de grains, comme de Froment, d'Orge, de Millet, de Pois chiches, Pois blancs, et Faiseus de diuerses couleurs, de Feues, de semence de Lin, de Tafe, de Guze* (Álvares, 1558: 127v).

- Obviously, in this reference (Álvares, 1540, cap. CXXVI: 114r; Padilla: 167r) it would be extremely unlikely that the French translator could refer to the *gofio*: *Et soy sa prouision, qui est farine d'Orge, Millet, et Pois chiches rotis, viande laquelle leur semble fort bonne pour aller en guerre. Quand aus Beufs, et Vaches, ils en trou vent par tout, ou ils vont: mais en temps de grains c'est le principal manger duquel ils vsent* (Álvares, 1558: 286v–287r).

Ethiopia ended up seeing the early growing, on its fertile fields, of the new seed from America. Given its new relations with the West and in particular its traditional trade with the area of Barbary is not unusual that the plant did not delayed its arrival in the lands of the negus, where it should not take too long to be accepted, understandably, with the natural interest among people who are used to the consumption of cereals of similar kind.

In any case, the translation of Friar Tomás de Padilla and, indeed, of his imitator Miguel de Selves,

should not surprised us because of the inclusion of maize among the rich range of Ethiopian cereals on dates perhaps too early; though not as much as the insertion that has been done, in a recent text, of maize in the Bible or, more precisely, between the Hebrew and classical myths, obviously mistaking it for millet or sorghum. This takes place in connection with the sacrifice of Isaac (34.6) and its comparison with a Kadmonite story, when it is said that “Ino created famine by secretly parching the seed-corn”, and, later, dealing with the death of Abraham (39.c) it is stated that “Rebecca baked some cakes with freshly harvested corn and Jacob took them to Abraham” (Graves & Patai, 2000: 219, 238).

In this context, moreover, we cannot share Isabelle Pantin's (2010: 198) statement, when she states that “during the sixteenth and seventeenth centuries it was not usual –though it does not result exceptional– [sic] that recently published works were translated shortly after their first edition”. She even adds that “in the field of scientific translations –not so in the fields of novels or propaganda, which, for obvious reasons, operated very differently– [sic], the translations of a vernacular language into another language were truly infrequent”. This is a risky statement if we consider the previous examples that show the frequent publication, in a short space of time, of several of the abovementioned works and of many others into the vernacular languages of Portugal, Spain, France, Italy and other European countries.

In 1605, based on the *Relationi universali* by Giovanni Botero, the Dominican Friar Jaime Rebullosa (ca. 1560–1621) stated, in relation to the Ethiopian Empire of Prester John, that it produced “lots of barley, oats, millet (does not have many wheat) and certain seed that can be preserved for a long time; durum wheat (which we call *wheat of the Indies*) in abundance, and all our pulses, without others of which we have no knowledge” (Rebullosa, 1605: 131r).

In 1620, according to *History of Ethiopia*, by the Spanish Jesuit Pedro Páez (1564–1622), maize was used, together with other seeds, to manufacture a type of local drink, a kind of beer to which Álvares had already referred although he did not cite maize as its raw material, and which Padilla translated into Spanish as “*çauna*” (Álvares, 1557: 117v). “There is also another kind of wine [or beer] which they make from maize and barley and other seeds, which is not found in Spain, and this is commonly drunk by those who cannot afford honey wine, because they hardly ever see any grape wine, as we shall say later”, indicates Páez. And, at another point, he writes: “Further on, a great crowd of tents is put up by taverners, who sell wine made from honey and another kind made from barley and maize and other seeds that they call *çaoa*, and they take in people from outside for a small free” (Páez, 2011, I: 215–216).

Faria e Sousa referred, for his part, to the abundance of grain in the Empire of Ethiopia, stating

that “of pulses and herbs, there are chickpeas, peas, lentils, beans and broad beans; cress, gergelim [sesame, *Sesamun indicum*, L.] macherim: maize of various shapes and sizes; hemp, which they do not use; teff [*Eragrostis abyssinica* or *Eragrostis tef*], smaller than manechim [sic] or Portuguese maize” (Faria e Sousa, 1674, II: 724).

In *The Travels of the Jesuits in Ethiopia*, Baltasar Teles (1596-1675) alluded, in short, to the maize fields in the region of Dancaz, in a suitable location for the founding of a city. “This is an excellent situation for a city, were it in Europe, being full of strings, and Rivulets, Meddows, and corn fields; tho’ there are few Trees, but that is not the Fault of the Soil, buy the Inhabitants, who are continually cutting them down, and never plant any” (Teles, 1710: 220).

In times of the Jesuit Pedro Murillo Velarde (1696–1753) the grain was obviously already spread not only in North Africa (Barbary, Barce, Tripoli or Tunisia): “there is wheat, maize, livestock and palm groves, from where they take delicious dates to Spain”, but also, of course, in Abyssinia itself, where some especially fertile places had a great deal of grains, “particularly millet and maize” (Murillo-Velarde, 1752, VIII: 123, 212). At this point, however, maize was already spread throughout the world.

CONCLUSION

According to the work of various authors it can be stated that the first phase of introduction of some maize varieties in the African continent should have been produced around the mid-sixteenth century, perhaps earlier, when it was already established in the archipelago of Cape Verde, probably in the Canaries and with some certainty also in São Tomé, island that knows an early and important sugar development that obviously is linked to the system of slave exploitation. The penetration of maize (without going into details about varieties and subspecies) in the area of the Gulf of Guinea are closely related also to the slave trade, which supplied Brazil and other American slave markets such as Cartagena de Indias itself, the Antilles, etc. with slave workforce from the region, generating a powerful exchange with the West Indies, apart from the one originated in the Lusitanian route of spices to the eastern markets, which comes under the control of Lisbon since the late fifteenth century and virtually monopolize in the early sixteenth century.

Thus, as the Portuguese presence consolidates in a number of coastal enclaves and, of course, in the islands geographically belonging to the African continent, there occurs the diffusion and the growing introduction of maize, which becomes known as “wheat of Portugal”, in the same way that in Spain it was known as “wheat of the Indies” or millet, and in the French Pyrenees it will be called “wheat of Spain”. However the most common expression in

Europe seems to be “Turkish wheat”, according to a tradition that seems to be linked to the exoticism of the plant (everything Turkish was grotesque and exotic), and which was helped to be consolidated by, among others, the German and French doctors, botanists and horticulturists of the sixteenth century.

The cereal goes around the African continent and moves forward to the East Indies along with Lusitanian sailors and merchants and, as their settlement takes place in different regions over which the Portuguese wielded control or with which they established important trade links, maize continues its trail crossing seas, valleys, rivers and continents. The global map of the cereal (Alexandros, 1995: 203–207; UNCTAD Atlas, 2004), in which there is represented the rate of consumption *per capita* of maize, shows in the first places Mexico, Guatemala, South Africa, Zimbabwe, Zambia and Malawi; i.e. six countries of which four are African and which, at that time, opened to Europe, in a broad sense, through the Portuguese and Iberian sailors and traders, diffusers of maize in the African continent and its adjacent archipelagos. Ethiopia, Mozambique and Tanzania, meanwhile, also occupy a prominent place on a worldwide scale in the consumption of *Zea mays*.

This work suggests, firstly, a reinterpretation of the original historical sources in order to deepen the reconstruction of the cultural map of maize in a large part of Africa, especially in the coastal regions of Lusitanian colonization; but without forgetting the relevance of the links with the East and the New World, which contributed to generate for the first time exchanges of worldwide dimensions that to a greater or lesser extent involved all continents. The comparative study of different descriptive traditions as well as an adequate knowledge of Iberian identities (which would avoid the conceptual confusion that is perceived in some foreign studies), in the style of what this work attempted to insinuate in the case of Ethiopia, could shed new light on the phenomenon. The point is that it seems reasonable to rethink the issue, above all after the methodological impact of the linguistic turn and bearing in mind, especially, the peculiarity and the identity of Portuguese and Spanish historical and literary sources.

ACKNOWLEDGEMENTS

Financed by the project HAR2012-37455-C03-01, CSIC (Spain). My gratefulness to Catarina Alexandra Costa Rodrigues for the English translation.

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