

# Lexical Language Contact Phenomena: A Combined Model Based on the Vocabulario español-guarani (18th century)

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#### **Abstract**

The purpose of this work, which falls within the areas of lexicography (studying missionary linguistics) and sociolinguistics (studying cultural contact), is to analyse the linguistic and cultural contacts between Spanish and Guarani, based on lexicographic material extracted from the *Vocabulario españolguarani* by Pablo Restivo (1728). The basis of the analysis is provided by the names of animals—one of the 'secular' fields where the highest frequency of borrowings is found (Cerno & Obermeier 2013). The methodology applied is the Haspelmath model (2009) and the Gruda model (2018). The premise is that the arrival and work of the Jesuit missionaries created cultural contact that is reflected in the codified language and, in turn, in this dictionary of the time. The main contribution is a new combined model of lexical reflections in a situation of cultural contact that can be applied in the analysis of this kind of lexicographic work, while an additional section provides a presentation of Restivo's work and its background.

Keywords: historical lexicography; missionary linguistics; language contact; Pablo Restivo

# 1. Historical and lexicographical overview

The Spanish colonizers conquered the lands of ancient Paraguay in 1537 and, using the conflicts between the tribes and the rights and duties associated with kinship, they managed to establish themselves in the region (Perusset 2008: 246). The first Guarani Jesuit mission (San Ignacio Guazú) was founded in 1609. Seven more followed and one of them, called the Jesuit reduction of Nuestra Señora de la Candelaria and founded in 1627, was the head-quarters of the *Provincial de las Misiones de Guaraníes* and its administrative centre and, at the same time, the location for Pablo Restivo's missionary work. His lexicographical production, being part of the language standardization process, is located at a time when the reductions were already more consolidated and particular linguistic differences began to be emphasized (Rodríguez 2017: 54).<sup>2</sup>

In the territory in question, it was Fray Luis de Bolaños who first encoded the Guarani language, and his followers, especially Antonio Ruiz de Montoya, then refined this process. Thus, Guarani went from being an unwritten language to being a language with a written code.

Acero Durántez (2003) presents the achievements of bilingual Spanish indigenous lexicography as an instrument to facilitate the needs of direct communication with the indigenous people, as experienced by missionaries or administrators, and rightly highlights the role of missionaries in the description and codification of indigenous languages. To all this we must add the evangelizing purpose of these publications, which is also visible in Restivo's work.

Just as Latin served evangelization and education in medieval Europe, a few centuries later Spanish and Portuguese served as points of reference in the New World, and the art of translation therefore became of the utmost importance:

'Translation played a prominent role in the evangelization of indigenous populations in all continents. Missionaries were engaged with the study of the indigenous languages, and after having completed the necessary field work, they composed grammars (*artes*), dictionaries (*vocabularios*, *diccionarios*) and religious texts such as catechisms (*catecismos*, *confesionarios*, *doctrinas*, *sermonarios*)' (Zwartjes 2014: 1).

Thus, missionary dictionaries constitute an ideal example of cultural texts<sup>3</sup> and there are works (cf. Caballos Piñero 2013, Gruda 2018) that take advantage of lexicographic material from the colonial era to carry out studies of a linguistic, cultural, or ethnographic nature.

## 2. Pablo Restivo: biographical information and his Vocabulario

When first publishing his work on Guarani (and also his grammar), Pablo Restivo used a pseudonym, "Blas Pretovio", an anagram of his real name. Born in 1658 in Mazzarino (Sicily), at the age of 19 he entered the Society of Jesus of Sicily and then requested to be sent to the missions. In 1691 he arrived in Buenos Aires, from where he travelled to the Jesuit reductions in Candelaria. He spent a period in the Viceroyalty of Upper Peru (now Bolivia) and, upon returning to the Viceroyalty of Peru (now Paraguay), he became the *superior general* of the Guarani missions (1719-21) and then the rector of the Jesuit college of Asunción (1723-24). Once his time in office had concluded, he returned to the reduction of Candelaria, where he died in 1741.

Pablo Restivo learned Guarani during his missionary stay and his main role model was Father Antonio Ruiz de Montoya, whose works he republished, expanding them considerably. His legacy includes: Arte de la lengua guarani por el P. Blas Pretovio and Vocabulario del P. Blas Pretovio de la Compañía Jesús, dated 1696. In 1721, Manuale ad usum Patrum Societatis Jesu was published, followed in 1722 by Vocabulario de la lengua guarani and in 1724 by Arte de la lengua guarani.

Hernández mentions the Vocabulary of the Guarani language in his detailed catalogue and adds that this dictionary is currently to be found in the Jagiellonian Digital Library in Kraków (Hernández 2018: 159). So far, the only description of it has been prepared by Czopek (2008).<sup>7</sup>

The *Vocabulario* is a unidirectional dictionary (Spanish-Guarani), the entries are ordered alphabetically. They begin with the letter A (p. 3 r°), end with *zurdo* 'left' (p. 252 v°), and in total there are about 7,000 entries. Czopek (2008) assumes that the *Vocabulario* was used as a manual of the Guarani language for Jesuit missionaries; the first part of the manuscript had been created by Restivo first and probably belonged to the copyist of the second part (written eight years later), and then both of them were bound together. In comparison with the 1722 version of the *Vocabulario*, it is noted that the remarks at the beginning of the work are identical, although the 1728 version is broader, dialectal differences are also added, and out-of-use words are eliminated. For all these reasons, it can be assumed that the 1728 version is an expanded version of the 1722 one (based in turn on the work of Ruiz de Montoya) to which another Jesuit (with the initials J.B.) added some texts in Guarani or copied the texts authored by Pablo Restivo.<sup>8</sup>

#### 3. Loan as an effect of cultural contact

Since the middle of the 20th century, together with the appearance of Weinreich's monograph (Weinreich 1953), the topic of language contact has been widely studied and the number of publications, to list the most relevant (cf. Appel & Muysken 1987, Thomason & Kaufman 1988, Bakker & Mous 1994, Thomason 2001, Matras 2009), is enormous. Likewise, the topic of contact between Spanish and indigenous languages in the colonial era is the subject of abundant literature (cf. Bravo-García 1988, 2013, 2016, 2018, Enguita Utrilla 1994, Gómez Mango de Carriquiry 1995, Hernández 1998, 2019, Zimmermann 2006a, 2006b, Bravo-García & Cáceres Lorenzo 2011, Bastardín Candón 2013, Olko 2015, Gruda 2018, Haimovich & Szeminski 2018). This is not to mention works on the current situation, as that is not the subject of this work.

Contact between languages is rightly associated with contact between cultures. Castillo Fadic (2002: 469) summarizes it as follows: 'Language being a cultural object, every exchange in the field of culture implies a linguistic exchange. (Contreras 1953: 177)'.

This finding coincides with the point of view of Hagège (1987) and Palacios (2010, 2011), who present the more creative, even positive, view of loans, compared to representatives of the purist approach who see loans as a threat. Then it is assumed that the cultural encounter is reflected at the linguistic level, since '(...) loanwords do not only constitute a linguistic problem of a structural order, which affects language as an instrument of communication, but also stand as indicators of cultural penetration through language conceived as a sign of identity of a language community'<sup>10</sup> (Castillo Fadic 2002: 487). Further, 'there is no linguistic penetration without cultural penetration'<sup>11</sup> (Castillo Fadic 2002: 469), that is, any linguistic contact occurs as a result of contact between cultures.

As is well known (cf. Moreno de Alba 1992,<sup>12</sup> Castillo Fadic 2002), lexical borrowings constitute the most recurrent phenomenon associated with linguistic contact and, as just explained, cultural contact. The number of works dedicated to this topic, from the classic (cf. Haugen 1950) to the most recent projects (cf. Gómez Capuz 1997, Winford 2003, Haspelmath & Tadmor 2009), is therefore not surprising.

# 4. Choice of topic, methodology applied, and body of text

## 4.1 Choice of topic

The appearance of the Jesuits in the Guarani-speaking area was inevitably accompanied by cultural contact. Adopting Thomason and Kaufman's (1988) typology of contact intensity (1. casual contact, 2. slightly more intense contact, 3. more intense contact, 4. strong cultural pressure, 5. very strong cultural pressure), one could say that the situation in the Jesuit reductions (bearing in mind both the duration and nature of the coexistence) belongs on the second half of the scale.

The names of animals are an example of such contact since, together with the names of tools, plants, and materials, they constitute one of the semantic fields most prone to the appearance of loanwords (cf. Rodríguez 2017, Cerno 2018a).\(^{13}\) Haspelmath (2008: 9) also mentions it when describing his Loanword Typology project: 'For instance, victorious invaders will typically borrow placenames, names for local plant and animal species, and languages of peoples ruled by foreign invaders will typically adopt military terms.' In fact, in the same article Haspelmath coins the term *borrowability* according to the class of words: 'Thus, it is of paramount importance for lexicon-based historical linguistics to get a clearer idea about the differential borrowability of different types of words.' (Haspelmath 2008: 3). The works he cites (cf. Hock and Joseph 1996, Thomason 2001) mention the so-called core vocabulary or basic vocabulary which is less prone to all types of borrowing.

In turn, Haspelmath, based on the observations of Myers-Scotton (2002), draws a distinction between cultural borrowings and core borrowings. The first are lexemes to name the objects or concepts new to the borrowing culture (e.g. *espresso*), while the second tend

to duplicate already existing words thanks to their prestige (e.g. *OK*), so animal names would belong to the first category. Likewise, when citing 77 items of acculturation (concepts unfamiliar to Indigenous Americans before the European invasion) in 292 Indigenous American languages (Brown 1999 in Haspelmath 2008: 12), the authors start with *coffee* (present in 81 Indigenous American languages) and finish with *fork* (present in 10 languages). The animal names appear in the following order (in parentheses is the index of borrowability which is the number of Indigenous American languages in which a particular name appears): *cat* (70), *donkey* (64), *cow* (58), *pig* (55), *mule* (54), *goat* (53), *horse* (52), *sheep* (44), and *chicken* (16).

Of course, as mentioned above, linguistic and cultural contact was bi-directional. And so, in the first stage of conquest the Europeans came across animals such as jaguar, toucan, agouti, and piranha but, on the other hand, they introduced species such as donkey, ox, horse, goat, pig, sheep, cow, chicken, cat, dog, and bee. In fact, in the same dictionary some cases are documented where the donor language is Guarani, e.g. ostrich or capybara. In the first case, the Guarani equivalent  $\tilde{n}$  and  $\tilde{u}$  was documented in the Spanish language according to the diachronic corpus CORDE in 1745, and *capibara* has been documented in the CORDE since 1780, which, in both cases, would provide an antedate. We present the two entries in full extension:

(4r°) Abestruz. Ñandu, I[dem]. Churî, Plumas de Abestruz. Ñanduà y assi llaman al plumero,

(67v°) Capibara animal conocido. Capiyba. r.

These examples raise the question of donor language and recipient language as, given the reciprocal nature of the contact, situations may arise where the indigenous language is the donor language. However, to maintain the clarity of the study, we analyse only the names of animals introduced in the second stage of contact, that is, the names of the animals imported by the Europeans and introduced into the indigenous reality, so Guarani is the recipient language, while Spanish is the donor one. It is also important to note that there are some species of animals which were already present in America (e.g. wild rabbit), while others were introduced during the conquest (e.g. domestic rabbit). For this reason we rely on the works that describe this type of influence of the European invaders in America (cf. Crosby 1972, Guintard 2017). The exact description of the animal names can be found in the overview of the analysis below (4.3.).

## 4.2 Methodology applied

Despite the proliferation of studies on borrowing, in our analysis we have decided to compare and apply two models. The first is Haspelmath's (2009) typology which, since it is presented as a general one, should cover the full spectrum of the possible results of linguistic and cultural contacts as far as borrowings are concerned. The second is Gruda's (2018) taxonomy, since it is the one applied in a typologically similar case (that of Spanish-Nahuatl contact). We therefore briefly present both typologies here.

The first concept of loans is the one according to Haspelmath proposed in his 2009 article. There he differentiates between *material borrowing* and *structural borrowing* (*matter/pattern borrowing* in the classification of Matras & Sakel 2007) that is, between lexemes (sound-meaning pairs) and syntactic/morphological/semantic structures. Loanwords constitute the most common type of material borrowing and loan translations (calques) the most common type of structural borrowing. Loanwords are complex lexical units created by an item-by-item translation. Among structural borrowings there are also loan meaning extensions, when a polysemy pattern of a donor language word is copied into the recipient language. Finally, he mentions loanblends, a category not widely attested, 'which consist of partly borrowed material and partly native material' (Haspelmath 2009: 39), and an

additional category mentioned by some authors, **loan creations**: 'formations that were inspired by a foreign concept but whose structure is not patterned on its expression in any way' (Haspelmath 2009: 39). This gives us five categories as follows:

- 1. loanwords,
- 2. loan translations (calques),
- 3. loan meaning extensions,
- 4. loanblends (hybrids),
- 5. loan creations.

The second model applied in this analysis is that proposed by Gruda (2018) while describing culture and language contact phenomena attested in the Nahuatl entries of the sixteenth-century *Vocabulario trilingüe* in Spanish, Latin, and Nahuatl. In this study the whole material has been divided into two broad groups. The first consists of innovations triggered by contact with the Spaniards and their culture (neosemanticisms and coinages), while the second group includes lexical items from the Nahuatl language created under the influence of lexical items from Spanish or other Old World languages. The classification adopted was the one provided by Winford (2003), based on Haugen (1950) but modified to better suit the needs of the analysis. In sum, the taxonomy applied comprises the following categories.

Neosemanticism is a category not covered by Winford's typology and refers to lexical units which existed in Nahuatl prior to contact, but which changed their semantic content. Native creations (coinages) are innovative lexical items created in response to the situation of contact, but without the influence of another language. Borrowings are divided into the two subcategories of loanwords, that is lexical units imported into the recipient language, and loanshifts, which are 'lexical units consisting only of native morphemes of the recipient language (...), whose function changed in accordance with a foreign model (...) due to the pattern borrowing.' (Gruda 2018: 78). In sum, we have four categories:

- 1. neosemanticisms,
- 2. native creations (coinages),
- 3. loanwords,
- 4. loanshifts.

These are the two classifications that we applied to the lexicographic material. It may be observed that while Gruda's work focuses on lexical effects of linguistic contact in general, Haspelmath is exclusively concerned with different kinds of borrowings. Therefore, the only shared category is loans and while Haspelmath's typology seems to focus on the donor language (loan translations, loan meaning extensions, loan creations, and loanblends), Gruda's typology operates from the point of view of the recipient language (neosemanticisms, native creations, and loanshifts). The analysis was carried out according to the two models. We now present the results of this and suggest a new, combined model, which may be suitable for this type of analysis.

## 4.3 Body of text

As for the body of text, first all entries containing animal names were selected. In total we excerpted 90 entries and 118 animal names. Among them are mammals (e.g. cow, ox, donkey, weasel, bat, tiger, and deer), insects (e.g. bee, woodworm, louse, and horsefly), birds (e.g. duck, owl, quail, sparrow, dove, and parrot), arachnids (e.g. scorpion and spider), fish (e.g. eel and catfish), reptiles (e.g. alligator, rattlesnake, crocodile, lizard, and turtle), molluscs and crustaceans (e.g. snail and lobster). We also include names of young animals (e.g. calf, lamb, puppy, lamb, and chick). More than half are made up of cases where the Spanish

entry appears accompanied by a Guarani equivalent, therefore they are not taken into consideration in this analysis. We quote by way of example:

- abispa 'wasp' cab (curr. kava),
- alacrán 'scorpion' mbói repoti, yapeuça (curr. japeusa),
- caracol de tierra 'land snail' yatǐtà (curr. ýatīta),
- gato montes 'mountain cat' mbaracaya (curr. mbarakaja),
- mariposa 'butterfly' panambi (curr. panambi),
- oso hormiguero 'anteater' yoqui (curr. jurumi),
- piojo de la cabeça 'head louse' quǐ (curr. ky),
- pulga 'flea' tunguçu (curr. tungusu).

As can be seen from the examples cited, several of the names remain intact, some have slightly modified their phonic or graphic form and many others have been replaced by other names. Sometimes the name of an animal is created by the internal elements of the recipient language, namely:

- diminutive suffix tî: cf. codorniz perdizita 'small quail' ynambutîtî (perdiz 'quail' + DIM DIM); leon pequeño 'small lion' yaguatî (jaguar 'jaguar' + DIM),
- postponed adjectives ete 'true, real': javali 'wild boar'- tayaçuete 'real pig'; tigre 'tiger'yaguarete 'real jaguar',
- postponed adjective guaçul yuçul ruçu 'big': buho 'owl' vrucureà guaçu 'big owl; cocodrilo 'crocodile' yacarè guaçu 'big caiman'; culebra 'viper' mboi yuçu 'big viper'; galgo 'greyhound' yaguaruçu 'big jaguar'; lobo de la tierra 'earth wolf' aguara guaçu 'big fox',
- raĭ 'son, child' in reference to all types of young animals: lechon 'piglet' tayaçu raĭ 'piglet':
- colour adjectives: *leon* 'lion' *yagua pitâ* 'red jaguar', *lobo marino* 'sea wolf' *yagua-rû* 'black jaguar'.

All this constitutes very interesting lexical material, but in this study we focus only on the names of the animals imported by the colonizers. The list includes the names of the animals that, according to the sources consulted (Crosby 1972, Jolís 1972, Guintard 2017), were introduced by European colonizers in America and is limited to animals such as horse, ox, donkey, cow, pig, sheep, goat, rabbit, pig, dog, cat, hen, rooster, bee, crow, and goose, along with the words for young animals and for some specific states (e.g. laying hen/broody hen). Likewise, we realize that some species are typical of both continents and the European subspecies are the domesticated ones (e.g. bee, rabbit, and dog). In the case of synonyms (e.g. asnolburro 'donkey', cochinolpuerco 'pig') and in the case of variants (e.g. bacalvaca 'cow') we include both forms. Entries are arranged alphabetically. In total there are 29 entries placed in 26 rows in the table, since the lexemes gallina 'hen' and clueca gallina 'broody hen', baca 'cow' and vaca 'cow', and oveja 'sheep' and ovejas 'sheep' have been placed in the same section of the table:

- 1. gallina (145v°) and clueca gallina (72v°) because they refer to the same animal,
- 2. baca (52r°) and vaca (247r°) because they are graphic variants of the same word,
- 3. oveja (188r°) and ovejas (192r°) because they are the same word in the singular/plural.

We omit from the analysis those elements in the entries that are not animal names even though they contain a borrowed element, like *cuero de vaca* 'cow leather':

Likewise, we do not cite in this article the part of the entry that does not correspond to the topic of the study, as in the case of the entry for *caballo* horse':

(61r°) Caballo 'horse' (Cabayu). Caballo manso 'tame horse'. N y yaraquaabae, I. y mboaraquaapĭ. De passo 'horse for a walk', y yatapiĵ, Que no siente la espuela, y no quiere andar 'that does not feel the spur, and does not want to walk', y pĭyĭ, I. ypĭaguaçu, vsolo (sic) un Indio, y preguntando, dixo 'and an Indian saw (?) it and asked: noñemondĭĵ ocuturamo, hoçângatu. Dexarlo andar à su passo 'let it walk at its pace', y yatarecorupi, iré à caballo 'I will go on horseback', Cabayu à ramo ahane.

We have documented in detail all the material necessary for the study and, to maintain clarity, we have organized it in table form (see Supplementary Online Material).

## 5. Analysis of the lexicographic material

## 5.1 Preliminary observations

We have analysed 29 entries (placed in 26 table rows) with the names of animals which, according to the cited sources, were possibly introduced by European missionaries.

The names refer to 19 animals in total but the number of lexical units is larger as it also includes words for young animals (e.g. calf, lamb, chick etc.), animals in particular states (e.g. broody hen, laying hen etc.) and types (e.g. small/ big rabbit, duck that flies, domestic duck etc.). Among the names submitted to analysis there are synonyms proper of Spanish (e.g. asno/burro 'donkey', bezerro/terneron 'calf', cochino/puerco 'pig') or due to the authors' interpretation of fauna (e.g. ganso 'goose' and pato 'duck' placed in the same entry), orthographical variants (e.g. baca/vaca 'cow' for Spanish, becha/vecha for Guarani) or flexive variants (e.g. oveja/ovejas 'sheep'/ 'sheep' pl.).

All of these translated into Guarani constitute the number of 39 Guarani lexemes that may provide a possible reflection of linguistic and cultural contacts. However, among them, there are some cases where a Spanish lexeme appears together with a native Guarani equivalent, sometimes even accompanied by a comment from the author, as in the first example: 'Varias especies ay de Abejas, que tienen su nombre proprio.' (Eng. There are several types of bee, which have their own name). These are: (1) abeja 'bee', (2) anade 'duck', (11) cachorro 'puppy', (13) cochino 'pig', (14) conejo grandelchico 'big/ small rabbit', (17) gansolpato 'goose/duck', (18) gato 'cat'<sup>16</sup>, (22) paloma 'pigeon', (23) perro 'dog', (25) puerco 'pig', and (26) raton 'mouse'. This corresponds to the above-mentioned point that some of the animals or some subspecies of these animals already existed in the American continent.<sup>17</sup> The only exception seems to be the name of Sp. conejo 'rabbit' translated into Guarani by the word acuti. Acuti, currently agutí 'agouti', is in fact of Guarani origin, attested first in 1853 (acutí) and in 1846 (agutí), which gives rise to another antedate. The fact of explaining the name of a certain animal by reference to the name of another quite similar one seems to be a fairly common translation technique:

'Hence in his Natural History of the Gran Chaco (in the North of Modern Argentina) the Catalan Jesuit José Jolís noted that the first Europeans in America found many new animals, but whether because they ignored the names given to them in the various provinces, or because those names were so foreign and hard to retain, pronounce and write down, they imposed new names, albeit often inappropriately, since they took them from those animals already known in Europe, merely on the basis of finding any small similarity.' (Rubiés 2019:118).

The remaining material covers the names of the following animals: donkey, cow, calf, lamb, ox, horse, goat, ram, hen, broody hen, laying hen, rooster, mule, steer, sheep, and chick and these names undergo the application of both methodologies.

#### 5.2 Method

As the main objective of this paper is to apply and compare the two methodologies in order to present a new model, which in the case of cultural contact and, therefore, language contact appears to be more suitable, we proceed to the analysis (placing in parentheses the entry number from the table).

According to the Haspelmath model, we clearly have some examples of the first category, that is loanwords. This is no surprise as this category is mentioned as the most common type of borrowing. The loanwords are mainly the names of domestic animals: donkey, cow, ox, horse, goat, mule, sheep, and, on one occasion, the word for a young animal, that is a young neutered male cow: steer. This last word is the most controversial because of its unattested Guarani form *noovi* (20), which makes us think of a Spanish lexeme *novillo* 'steer' as the etymon. We have been unable to find this word attested in any other text. Curiously, another variant of this form, *novi* (7) is documented as the equivalent of Sp. *buey* 'ox'. The remaining forms are loanwords with varying degrees of integration into the Guarani system. The Guarani equivalent of the Spanish synonyms for donkey (*asno* (3) and *burro* (8)) is the word *buro*. The fact that only one of these Spanish lexemes provided the origin of the Guarani form is probably due to its morphological structure which lacks the consonant cluster found in the form *asno*, which was still more popular in the analysed period. <sup>18</sup> The other loanwords are: (4) *vaca* 'cow', (9) *cabayu* 'horse', (10) *cabara* 'goat', and (21) *vecha* 'sheep'.

There seem not to be any examples of loan translations (calques) in the body of text. However, there are several cases of hybrids (loanblends), which consist of partly borrowed and partly native material, used mainly in the case of young animals (calf and lamb) but also in the case of some animal names (ox and ram). In the first case, the combination of the native and foreign element consists of the loanword from Spanish for the animal name (*vaca* 'cow' or *vecha* 'sheep') and the Guarani variants *ray* or *rai* used generally with the meaning 'son': (5) *vaca ray* 'calf', (6) *becha rai guaçu* 'lamb' (lit. big sheep offspring), where *guaçu* 'big' is another native word. This mechanism is also used in the case of pure Guarani names for young animals (e.g. (11) *yaguarai* 'puppy', (22) *apicaçu rai* 'squab', and (24) *uruguaçu rai* 'chick').

The other hybrid combination is that of a loanword from Spanish to name the animal and the Guarani lexeme *cuymbae* 'male': (12) *vecha cuymbae* 'ram'. Again, the same approach has been applied in the case of the native Guarani form: (16) *uruguaçu cuimbae* 'rooster'. Another example of a loanblend is (7) *toro caàpi* 'ox' (lit. ploughing bull), which consists of the foreign element *toro* 'bull' and the Guarani element *caàpi* 'to weed the land' which may also refer to the action of ploughing the land. There is also a special sort of loanblend, combined with a semantic shift, where the name of one animal (donkey) was imported into the Guarani system in order to name another one (mule). This is the case (19) with the word *mburica* 'mule', which consists of the Guarani nasal element *m*- and the adapted diminutive form *burica* (form Sp. *burra* 'she donkey').

Yet there are certainly some names of animals imported to the American extralinguistic world which cannot be covered by any of the Haspelmath categories for not being borrowings. That is why in his model, there is no apt category for the Guarani neologisms or semantic shifts. They are: hen (together with broody or laying hen), rooster, and chick. The Guarani word for Sp. gallina 'hen' is uruguaçu 'type of big bird' (15). According to Montoya's testimony, it is applied to name another bird and because of the similarity was transferred to name the new animal. So we can consider it a semantic extension, as a result of semantic change, in terms of a classical semantic theory, but it definitely cannot be classified as a loan meaning extension (when a polysemy pattern from a donor language word is copied into the recipient language).

Similarly, the words for (15) broody hen (Guar. ocurobaé), (15) laying hen (Guar. oyeupia mòmbobae), and (15) hatching hen (Guar. uruguaçu oyeerubae, oyeupia erubae) are Guarani neologisms created in order to describe the typical states of this animal. In the case of (16) rooster (Sp. gallo, Guar. uruguaçu cuiambaè or tacuarò), we are dealing

with a descriptive composition 'type of big bird male' that starts to function as an animal name or, again, a semantic extension, when the native word for male (*tacuarò*) expands its denotation in reference to a new animal. All these cases can be classified as some internal mechanisms (neologisms) combined with semantic changes (neosemanticisms), but they do not meet the requirements of a loan meaning extension. It could possibly be classified as the last category mentioned by Haspelmath, loan creation (a formation inspired by a foreign concept but whose structure is not patterned on its expression in any way), yet it would be quite hard to prove whether or which Spanish concept was connected with this process.

The second methodology proposed in this paper is Gruda's typology, which consists of neosemanticism, native creations, loanwords, and loanshifts. As the category of loanwords is common to both typologies, there is no need to explain it, as it covers the same cases (3, 4, 7, 8, 9, 10, 20, and 21).

As far as neosemanticism is concerned, in the body of text there are some lexical units which existed in Guarani prior to contact and which changed their semantic content to include new classes of designates. The clearest is that of Spanish *gallo* 'rooster' (16), as the Guarani word *tacuarò* 'male' started to be used in reference to this species of bird. It is likely that the same mechanism operated in the case of the Spanish *acuti* 'agouti' as the name of (a type) of rabbit. But this category could also be applied to all the Guarani names present in precolonial times that started to be applied to certain sorts of animals introduced with the Europeans, such as (1) bee, (2, 17) duck, (11) puppy, (14) the other two names for rabbit (Guar. *pag*, *tapijti*), (22) pigeon, (23) dog, (13, 25) pig, and (26) mouse, although, as has been said, this sort of supposition requires more complete historical or historiographic studies.

The category that seems to cover perfectly the cases such as hen or laying/broody hen (15), Guar. *uruguaçu cuiambaè* for 'rooster' (16), and *uruguaçu raĭ* for 'chick' (24), is that of coinages or native creations: when an innovative lexical item is created in response to the situation of contact, but without the influence of Spanish.

Finally, the category of loanshifts understood as lexical units consisting only of native morphemes from the recipient language, whose function changed in accordance with a foreign model, does not appear in the body of text. This lack can perhaps be explained by the nature of the semantic field analysed: calques tend to occur more in the case of abstract names and not concrete ones, such as animal names (cf. Gruda 2021).

What seems to be lacking in this typology are hybrid creations composed partly of Guarani morphemes or lexemes and partly of incorporated (Spanish) elements. These would be the cases categorized as loanblends in the Haspelmath typology: (5) vaca ray 'calf', (6) becha rai guaçu 'lamb', (12) vecha cuymbae 'ram', (7) toro caàpi 'ox', and (19) mburica 'mule'. Yet, if we accept Gruda's view that 'coinages can consist of just native morphemes or they can include borrowing previously integrated into the recipient language (this kind of coinages is sometimes referred to as hybrid creations or blends)' (Gruda 2018: 77), they can all be assigned to the category of native creations.

#### 6. Conclusions

As the Haspelmath model focuses on the borrowings and the Gruda model turned out to be suitable yet insufficient in this kind of analysis, we propose a new combined model which may prove useful for similar investigations. This would cover loanwords, of course (this being the category shared by both models), hybrid creations (a category that comes from the Haspelmath model), and the remaining categories of the Gruda model: neosemanticisms, native creations, and loanshifts. Hence, the final model would include:

- 1. loanwords the result of item-by-item translation,
- neosemanticism lexical units which existed in the recipient language prior to contact and which changed their semantic content to include new classes of designates,

3. native creations – when an innovative lexical item is created in response to the situation of contact, but without the influence of the donor language, i.e. it is restricted only to native morphemes,

- 4. hybrid creations lexical units which consist partly of borrowed material and partly of native material,
- 5. loanshifts lexical units consisting only of native morphemes from the recipient language, whose function changed in accordance with a foreign model.

Likewise, it must be taken into account that sometimes these categories can overlap, as in the case of internal mechanisms (native creations) combined with semantic changes (neosemanticisms). However, we hope that this typology is suitable for future analyses.

Although it was not an objective of the above analysis, we have been able to observe some examples of borrowing in the opposite direction: when a Guarani lexeme was integrated into the Spanish system during the first stage of conquest:  $acut\acute{u}$  'agouti', capibara 'capybara', and  $\tilde{n}and\acute{u}$  'suri'. This demonstrates the mutual nature of this meeting of languages and cultures:

'In the case of language contact, even if the donor language enjoys greater prestige, the recipient language can be a donor, where the extralinguistic situation forces the system to fill the existing gap (cultural loans, of necessity).'19 (Castillo Fadic 2002: 476).

In all of them it was possible to find an antedate:  $\tilde{n}$  and  $\tilde{u}$  1745  $\rightarrow$  1728, capibara 1780  $\rightarrow$  1728, agutí 1846  $\rightarrow$  1728, acutí 1853  $\rightarrow$  1728.

On the other hand, the forms that still await detailed study are the Guarani equivalents of the Spanish lexeme *gato* 'cat' (*bechi*, *bibi*) and the Guarani variants *novi* and *noovi* 'calf'. Based on the material prepared, diachronic studies could be carried out in the Guarani area, as we deal with the cases when the word basically remains intact: (1) bee, (4) cow, (5) calf, (6) lamb, (9) horse, (10) goat, (11) puppy, (12) ram, (13, 25) pig, (14) hen, (19) mule, (21) sheep, (22) pigeon, squab, (23) dog, and (26) mouse/rat; when only one of the forms proposed by Restivo has survived: (2, 17) duck/goose, (14) rabbit, (15) broody hen, (16) rooster, and (18) cat; or when another word has replaced the documented equivalents: (3, 8) donkey, (7) ox, (20) steer, and (24) chick. In this last group, the case of ox is especially interesting as, instead of the Guarani equivalents mentioned (*novi* and *toro caàpi*), the word encountered nowadays is the Guarani loanword form *gwéi*, from Spanish *buey*.

Although the main objective of this paper was to establish the most appropriate model for the analysis of lexical language contact phenomena, the present study shows that lexicographic sources can constitute an interesting and fruitful basis for various linguistic and cultural studies and that dictionaries are not merely a means or tool for documenting and transmitting information about a language, but are also a specific repository of the collective experience of a given community.

#### **Notes**

- 1 For more information on the activity of the Jesuits in the Río de la Plata, see e.g., Mörner 1968.
- 2 About this process in other languages, cf. Calvo Pérez (2005) or Oesterreicher (2019).
- 3 For the concept of the dictionary as a cultural text, see e.g. Rudnicka (2016).
- 4 More details about his life can be found in: Chamorro (2018).
- 5 Poggi (2017: 242) mentions two works by Montoya published in Santa María la Mayor by P. Restivo: *Vocabulario de la lengua guaraní* in 1722 and the *Arte de la lengua guaraní* in 1724.
- 6 Informationabouttheauthorandalinktothisworkaccessibleonline: http://www.cervantesvirtual.com/obra/arte-de-la-lengua-guarani-por-el-p-blas-pretovio-de-la-compania-de-jesus-en-el-vruguay-ano-de-1696/.
- 7 Her study is part of a larger project called Fibula, carried out between 2008 and 2011 (Fibula 2023), the purpose of which was to investigate the history of the collection of Romanesque manuscripts

- from the 'Berlin' fund available in the Jagiellonian Library in Cracow. More information can be found at: https://romansos.github.io/fibula/info.filg.uj.edu.pl/fibula/en.html.
- 8 For more information about this dictionary, see e.g. Stala (2022).
- 9 Sp. 'Siendo el lenguaje un objeto cultural, todo intercambio en el ámbito de la cultura implica un intercambio lingüístico'.
- 10 Sp. '(...) los préstamos no constituyen sólo un problema lingüístico de orden estructural, que afecta a la lengua en cuanto instrumento de comunicación, sino que se yerguen como indicadores de penetración cultural a través de la lengua concebida como señal de identidad de una comunidad idiomática.'
- 11 Sp. 'no hay penetración lingüística sin penetración cultural.'
- 12 Especially chapter IX, p. 195-230.
- 13 Another field of interest would be, for example, kinship names (cf. Cerno 2018a, 2018b, 2021; Mello-Wolter 2010).
- 14 For contacts between the Guaranis and Spaniards, see for example, Mörner 1968, Perusset 2008, for the presence of American animals in Jesuit historiography, see Segundo Torres (2021) and for the wild-domesticated semantic field of colonial Guarani, based on some colonial Jesuit vocabularies, see Schiavoni (2022).
- 15 Assuming the difference between *loanword* and *borrowing*, loanword 'a word that at some point in the history of a language entered its lexicon as a result of borrowing (or transfer, copying)' (Haspelmath 2009: 36), where *borrowing* can refer to both the effect and the process itself.
- 16 We refer only to the equivalence Sp. *gato* 'cat' Guar. *chibi*, as the other two words (*bechi*, *bibi*) are not attested in any other consulted material and require further studies.
- 17 The Catalan Jesuit Josep Jolís notes this in his *Ensayo sobre la historia natural del Gran Chaco* (1789), basing his conclusion on observations of animals, but also on the fact that the languages of America have names for these animals.
- 18 On the use of both synonyms at different times, see Stala (in press).
- 19 Sp. 'En el caso de contacto de lenguas, aun si la lengua donante goza de mayor prestigio, la lengua receptora puede resultar donante, donde la situación extralingüística obliga el sistema a llenar el vacío existente (préstamos culturales, de necesidad).'

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## Overview of analysis

We have documented in detail all the material necessary for the study and, to maintain clarity, we have organized the following information in table form:

- 1. number of the page where the entry appears,
- 2. appropriate fragment of the entry which contains the Spanish entry and the Guarani form(s) proposed by the author in the original version,
- 3. Spanish original lexeme together with the English translation and, when necessary, the current orthographic version,
- 4. Guarani original lexeme with the English translation and the current Guarani lexeme,
- 5. observations which cover the information contributed by other dictionaries of the time (mainly those of Ruiz de Montoya), a specific explanation concerning the Guarani word, or other additional comment.

### ABBREVIATIONS LIST

curr. currently

3 third person hisp. hispanic

I active paradigm lit. literally

ADJZ adjectivizer REF reflexive

Eng. English sup. supposedly

Guar. Guarani tr. v. transitive verb

v. see

Sp. Spanish

	Page number	Relevant fragment of the entry in the original version	Spanish form with its English translation	Guarani form with its English translation	Observations (current form, other sources etc.)
1.	3r°	Abeja. Eyru.	abeja 'bee'	eyru 'bee' curr. eiru.	Giménez Gómez (2010: 465) mentions: eiraru, eirarúa / káva 'abeja'. In the same entry Restivo adds: 'Varias especies ay de Abejas, que tienen su nombre propio.' (Eng. There are several types of bee, which have their own names).
2.	31v°	Anade que buelan. I. ĭpeg, I. ĭpegapa. A los demesticos. Guarimbe, I. narîmbe.	anade que vuelan (curr. ánade que vuelan) 'ducks that fly' a los demesticos (curr. a los domésticos) 'domestic ones'	ipeg 'duck' curr. ype. ipeg-apa (lit. duck- lagoon) 'lagoon duck' guarimbe 'domestic duck' curr. guarimbe. narîmbe 'domestic duck'  Current form is ype for duck (Guasch 1998: 41; Gregores & Suárez 1967: 227; Giménez Gómez 2010: 449; MEC 2022: 83) and guarimbe 'goose' (Giménez Gómez 2010: 216; MEC 2022: 20).	Gregores & Suárez (1967: 227): ipe 'pato'.  Giménez Gómez (2010: 449): ype 'Pato. Ave que puede ser domesticada de pico chato, vuelo corto y andar lento' (Eng. Duck. Bird that can be domesticated with a flat beak, short flight and slow walk).
3.	45r°	Asno. Buro.	asno 'donkey'	buro 'donkey'  curr. mburika for 'mule' (Guasch 1997: 41, Giménez Gómez 2010: 298, Gregores & Suárez 1967: 234) or 'donkey' (Estigarribia 2020: 295) and muihára 'donkey' (Gregores & Suárez 1967: 234).	

4.	52r°	Baca. idem.	curr. vaca 'cow'	baca 'cow'	Giménez Gómez (2010: 445) documents Guar. vaka 'vaca (hisp.)'.
	247r°	Vaca. idem.	vaca 'cow'	sup. vaka 'cow'	Neither <i>baca</i> nor <i>vaca/vaka</i> appears in Ruiz de Montoya's works.
5.	55v°	Bezerro, terneron. Vaca raÿ.	curr. becerro 'calf' curr. ternero 'calf'	vaca ray  (lit. cow offspring)  'calf'  curr. vakara'y.	Giménez Gómez (2010: 396) explains: ra'y 'hijo (del varón) / tener hijo (refiriéndose al padre)' (Eng. son (of the man) / have a son (referring to the father).
6.	58v°	Borrego. Becha raĭ guaçu.	borrego 'lamb'	becha raĭ guaçu (lit. sheep offspring big) 'big sheep offspring, lamb' curr. vechara'i wasu.	
7.	60r°	Buey. Novi. I. Toro caàpi.	buey 'ox'	novi  toro caàpi²  'ploughing bull'  curr. gwéi (Guasch & Ortiz 1998: 78, Estigarribia 2020: 30, Gregores & Suárez 1967: 224).	Word unknown in Guarani, perhaps a variant of Sp. novillo 'steer'.  Giménez Gómez (2010: 253): ka'api 'carpir, limpiar de malezas un terreno' (Eng. clear a field of weeds).
8.	60v°	Burro. Idem.	burro 'donkey'	sup. 'donkey' curr. mburika, muihára.	Sp. <i>asno</i> and <i>burro</i> are synonyms, see <i>asno</i> (entry no 3).
9.	61r°	Caballo. Cabayu.	caballo 'horse'	cabayu 'horse'	Ruiz de Montoya (1724: 6) 'las dos ll las suplen con la y, consonante, pues dicen: <i>casuya</i> casulla; <i>cabayu</i> caballo'

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<sup>&</sup>lt;sup>1</sup> The nominal stem -r-a'y ~ t-a'y ~t-a'yra 'his son', h-a'y 'his (his) son' is in lexical opposition to t-ajy ~ -r-ajy 'his daughter' and memby 'child of a woman'. In the Guarani spoken in San Luis del Palmar (Corrientes, Argentina), this morpheme is expressed only 'with names that designate species of animals, to signify offspring' (Cerno 2013: 254-255), e.g.: vaka-r-a'y 'calf, son of the cow', ovecha-r-a'y 'lamb, son of the sheep', jakare-r-a'y 'small alligator, baby alligator'. Since the analysed corpus (Pretovio [Restivo] 1728) deals only with a list of animals, in all cases it is translated as offspring.

<sup>&</sup>lt;sup>2</sup> The verbal root -*ka'api* can be segmented into the following morphemes: *ka'a* 'yerba' *pi* (from -*kopi*) 'carpir'; the latter, analysed as hispanism (Armatto de Welti 1988: 60, 78), that is, as a loan from Spanish adapted to the Guarani phonological system (CV.CV). In native words, Guarani does not present consonants that come after a vowel in the same syllable and end this syllable (Estigarribia 2020: 35), e.g. *r* in *car-pir*.

					(Eng. the two lls are replaced with y, a consonant, because they are pronounced: <i>casuya</i> casulla; <i>cabayu</i> caballo).  Giménez Gómez (2010: 258): <i>kavaju</i> 'caballo (del español)' calls this transphonetization.
10.	62r°	Cabra. idem	cabra 'goat'	sup. cabara 'goat' curr. kavara.	Ruiz de Montoya (1639: 85) documents the Guarani lexeme <i>cabará</i> 'cabra'.  Another case of transphonetization
11.	62v°	Cachorro,	cachorro	yagua raĭ (lit. jaguar	according to Giménez Gómez (2010: 258): <i>kavara</i> 'cabra (del español)'.  For <i>yagua</i> , see entry n° 23.
11.	02V	yaguaraĭ.	'puppy'	son) 'dog offspring, puppy' curr. jaguara'y.	The original meaning of <i>yagua</i> was 'jaguar'. The semantic shift (jaguar $\rightarrow$ dog) is probably an effect of cultural contact and that is why, probably, both Restivo and Montoya translate <i>yagua</i> as 'dog'.
12.	69r°	Carnero. Vecha cuymbae.	carnero 'ram'	vecha cuymbae (lit. sheep male) 'ram'  curr. ovecha kuimba'e.	Compare with entry nº 16: Gallo 'rooster', Guar. <i>uruguaçu cuimbaè</i> (lit. big bird male).
13.	73r°	Cochino. Tayaçu.	cochino 'pig'	tayaçu 'pig'  The current word for pig is kure (Armatto de Welti 1988: 88, Guasch & Ortiz 1998: 613, Estigarribia 2020: 295, Gregores & Suárez 1967: 231, MEC 2022: 42).	
14.	79v°	Conejo. Acuti. Conejo grande. Pag, chico, tapijti.	conejo 'rabbit'  conejo grande 'big rabbit'	acuti 'agouti'  pag 'ground rabbit'  tapijti 'rabbit'	Gaspar y Roig (1853: 32) acutí see agutí.  Zerolo (1895: 50) explains acutí as a Guarani word 'wild rodent of South America, similar to the rabbit'.

			[conejo] chico 'small rabbit'	The current form is tapiti 'rabbit' (Gregores & Suárez 1967: 242, Armatto de Welti 1988: 80, MEC 2022: 80); <sup>3</sup> 'hare' (Giménez Gómez 2010: 417). curr. akutí 'agouti' (Gregores & Suárez 1967: 219); 'a type of rabbit' <sup>4</sup> (Giménez Gómez 2010: 93).	Ruiz de Montoya (1639: 260) pág 'conejo de la tierra' (Eng. ground rabbit).  Ruiz de Montoya (1639: 355) tapyyti 'conejo' (Eng. rabbit).
15.	145v°	Gallina. Uruguaçu, llueca, ocurobaé. ponedera, Oyeupia mòmbobae.	gallina 'hen'  llueca (curr. clueca) 'broody [hen]'  ponedera (curr. ponedora) 'laying [hen]'	lit. 'type of big bird'  ocurobaé (3I- broody- ADJZ) 'what is broody; broody'  o-ye-upia mòmbo- bae  (3I-REF-egg to throw- ADJZ) 'what throw egg; laying'5  Current form for hen is ryguasu (Armatto de Welti 1988: 208, Giménez Gómez 2010: 468, Guasch 1997: 41) and for broody hen uruguasu kuro.	Ruiz de Montoya (1639: 407) 'vn paxaro, y por su semejança lo han trasladado a las gallinas' (Eng. a bird, and because of its similarity they have applied it to hens).  Guar. momó (mombó) 'to throw' a momó 'I am throwing' (Armatto de Welti 1988: 143); momó tr.v. 'to throw; to send' (Gregores & Suárez 1967: 234).  Giménez Gómez (2010: 265): kuru 'estar clueca la gallina' (Eng. hen being broody).
	72v°	Clueca gallina. Uruguaçu curò. I.	clueca gallina 'broody hen'	uru-guaçu curò <sup>6</sup> (lit. type of big bird) curr. uruguasu kuro.	Giménez Gómez (2010: 258): ryguasu.

<sup>&</sup>lt;sup>3</sup> Although the Spanish-Guarani part also mentions *tapiti*, *akuti* 'rabbit' (MEC 2022: 108).

<sup>4 &#</sup>x27;Dasiprocta agutí azarae, del orden de los roedores, de carne comestible. Muchas variedades. Akuti sa'uyu, akuti jagua (llamado también jaguarundy), akutiju, akutipay, etc.' (Giménez Gómez 2010: 93).

<sup>5</sup> Since *bae* functions as an adjectivizer or nominalizer (Estigarribia 2020) or participle (Ruiz de Montoya 1639),

it can also be translated as 'laying'.

<sup>&</sup>lt;sup>6</sup> Curó, ocurú: said about broody hens; Ocuró curó. Ocúrú cúrú Vruguaçú 'es llueca la gallina' (Eng. the hen is broody) (Ruiz de Montoya 1639: 110). Nowadays: -kurú (intransitive verb) 'to be a brooder (hen)' (Gregores & Suárez 1967: 231); ryguasú kurú 'broody hen' (Armatto de Welti 1988: 89).

		ocurobae. Gallina que esta empollando, Uruguaçu oyeerubae, I. oyeupia erubae.	gallina que está empollando 'hen that is brooding'	o-curo-bae  (lit. 3I-broody- ADJZ) 'what is broody; broody'  uru-guaçu o-ye-eru-bae 3I-REF-echar-ADJZ) (lit. hen that lies down) curr. uruguasu kuro.  o-ye-upia eru-bae  (lit. 3I-REF-egg throw-ADJZ) 'what starts to hatch' curr. uruguasu kuro.  The most common form nowadays is -kuru 'to be a broody (a hen)' (Giménez Gómez 2010: 265, Gregores & Suárez 1967: 231); 'broody' (Armatto de Welti 1988: 89).	Giménez Gómez (2010: 405): ryguasu 'gallina'. De uruguasu 'ave parecida a la gallina, pero más pequeña. Abundan en la orilla de los ríos' (Eng. ryguasu 'hen'. From uruguasu bird similar to the chic, but smaller. Often found on riverbanks').
16.	145v°	Gallo. Uruguaçu Cuimbaè, I. Tacuraò.	gallo 'rooster'	uru-guaçu cuimbaè lit. 'type of big bird male'  tacuraò 'male'  Nowadays the word ryguasu 'hen' is used together with kuimba'e 'male', ména 'husband' or me 'male'. <sup>7</sup>	Ruiz de Montoya (1639: 407) uruguaçú cuî mbaé 'gallo'.  Tacuraò does not appear in Ruiz de Montoya's dictionaries.  Giménez Gómez (2010: 258): urutue 'gallo'.
17.	146r°	Ganso pato. Guarimbe, l. Ñarimbe, otro	ganso 'goose' pato 'duck'	guarimbe, ñarimbe 'domestic duck'	See anade (entry n° 2).

<sup>&</sup>lt;sup>7</sup> Estigarribia (2020: 62) notes: 'Like English nouns, Guarani nouns do not have inherent gender. When necessary, gender can be marked by adding  $ku\tilde{n}a$  "woman" or kuimba'e "man" to a noun.'

		genero muy	otro género	<i>ỹpeg</i> 'duck'	
		pequeño. ÿpeg.	muy pequeño 'another very	curr. ype.	
18.	146v°	Gato. Bechi, I. Chibi, I. Bibi.	small type' gato 'cat'	bechi unknown word  chibi 'domestic cat'	Of all these words, Ruiz de Montoya (1639: 81) only documents <i>bĭbĭ</i> 'menear, levantar y bajar' (Eng. to move, to lift and lower), while the cited
				curr. chivi	forms are:  mbaracaîa 'gato' (Eng. cat), mbaracaîa  caape gûara 'gato montés' (Eng. wild
				bibi 'to move, to lift and lower'	cat), mbaracaîa guaçú 'otra especie de gatos' (Eng. another type of cat) and mbaracaîa mỹmbá 'gato café' (Eng. lit. coffee cat) (Ruiz de Montoya 1639: 213).
				The current word for cat is <i>mbarakaja</i> (Guasch 1997: 40, Gregores & Suárez 1967: 232, Estigarribia 2020: 295, Guasch & Ortiz 1998: 236). At the same time Guasch & Ortiz (1998: 236) document two Guarani equivalents: <i>mbarakaja</i> and <i>chivi</i> .	Dooley (1988: 116) and Martins (2003: 104) mention the form <i>xivi'i</i> 'domestic cat' for mby'a guarani, a language of the Tupi-Guarani family, one of Guarani's closest sister language.
19.	184v°	Mula. mburica.	mula 'mule'	mburika 'mule' curr. mburika. See also entry no 3.	Ruiz de Montoya (1639: 217) <i>mburicá</i> 'iumento, mula, ó macho' (Eng. donkey, mule or male).  Perhaps it is an internal creation in Guarani: <i>m</i> (realization of the nasal bilabial phoneme) + <i>burica</i> (adapted diminutive of Sp. <i>burra</i> 'she donkey').
20.	187r°	Novillo. noovi.	novillo 'steer'	noovi 'steer' curr. vakara'y.	Unknown word in Guarani, it does not appear in Ruiz de Montoya's dictionaries.  See <i>buey</i> 'ox' (entry no 7).
21.	188 r°	Oveja. Vecha.	oveja 'sheep'	vecha 'sheep' curr. ovecha.	Gregores & Suárez (1967: 236): ovecha Spanish oveja 'sheep'.
	192rº	Ovejas. Vecha.	ovejas 'sheep' pl.		Curiously, the author proposes the singular form for both (singular and plural) Spanish words.

22.	193r°	Paloma.	paloma	apicaçu 'pigeon'	Currently: pikasú 'tipo de paloma'
		Apĭcaçu.	'pigeon'	curr. pykasu.	(Eng. type of dove) (Gregores & Suárez
		Palomino,	palomino		1967: 238).
		Apicaçu rai.	'squab'	apicaçu rai (lit.	
				pigeon son) 'pigeon	
				offspring'	
				curr. pykasura'y.	
23.	200r°	Perro, yagua.	perro 'dog'	yagua 'jaguar'	For more details about this animal and
					its introduction by European colonizers
				curr. jagua (Ortiz	see Villar (2005).
				Mayans 1997: 423).	
24.	204v°	Pollo.	pollo 'chick'	uru-guaçú raĭ	
		Uruguaçú raĭ.			
				(lit. type of big bird	
				offspring) 'big bird	
				offspring'	
				curr. ryguasu.	
25.	211v°	Puerco.	puerco 'pig'	tayaçu 'pig'	Puerco and cochino are synonyms.
		Tayaçu.			See entry no 13.
				curr. tajasu.	
26.	216r°	Raton.	ratón	anguya 'mouse'	Gregores & Suárez (1967: 220):
		Anguya.	'mouse'	curr. anguya.	anguya 'rat', anguyatutu 'mouse'.

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