

## ***Ko, ningo, luego : an enactive approach to the emergence of an epistemic subsystem in jopara***

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### **Abstract**

*Paraguay's two co-official languages, Spanish and Guarani, have experienced close, extended contact. This has contributed to the emergence of dialectal variants known as « Jopara », in which units from both languages alternate. In this paper, we put forth the view that the alternation, in Jopara Spanish, of the discourse markers ko, ningo (both of Guarani origin), and luego (from Spanish) is the manifestation of a new epistemic subsystem based on the reanalysis of « biomechanically embodied » cognitive operators (Bottineau 2012), which are incorporated into a semiological network that transcends this semantic field alone. Our corpus is composed of excerpts from the online discussion forums of the newspaper Hoy, which belongs to the Multimedia group located in Asunción (Paraguay).*

**Keywords :** Jopara ; Paraguay ; submorphemes ; language contact ; embodied cognition

### **Résumé**

*La situation de contact étroit et prolongé que connaissent les deux langues co-officielles du Paraguay, l'espagnol et le guarani, a contribué à l'émergence de parlers dits « jopara » qui se caractérisent par l'alternance d'unités provenant de chacune des deux langues. Nous proposons dans ce travail d'envisager l'alternance, en espagnol jopara, des marqueurs discursifs ko, ningo (tous deux d'origine guarani) et luego (d'origine espagnole) comme la manifestation d'un nouveau sous-système épistémique fondé sur la réanalyse d'opérateurs cognitifs « biomécaniquement incarnés » (Bottineau 2012), lesquels s'insèrent dans un réseau sémiologique qui transcende ce seul champ sémantique. Notre corpus est constitué d'extraits de forums de discussions du Journal Hoy (en ligne), propriété du groupe Multimedia situé à Asunción (Paraguay).*

**Mots-clés :** Jopara ; Paraguay ; submorphèmes ; contact de langues ; cognition incarnée

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## Introduction

Paraguay's two co-official languages, Spanish and Guaraní, have experienced close, extended contact. This has contributed to the emergence of dialectal variants known as «Jopara»<sup>2</sup>, in which units from both languages alternate. Many structural and sociolinguistic studies have examined these mixed utterances, giving rise to as many conceptual propositions (Guaraní/Spanish interference, code-switching, language, dialect, variety, third language, interlect, interlanguage, etc.). Each of these attempt to give an account of a phenomenon that continues to resist analysis today<sup>3</sup>. In view of the attempts to characterise this array of mixing modes resulting from the contact of the two languages, enactive linguistics provides keys to understanding the interactive and embodied processes that direct the dynamic creation of meaning in this type of utterance. As a result, in this paper we will put forth the view that the alternation, in *Jopara*, of the discourse markers *ko*, *ningo* (both of Guaraní origin), and *luego* (from Spanish) is the manifestation of a new epistemic subsystem based on the reanalysis of their respective submorphemic components, which are incorporated in a semiological network that transcends this semantic field alone. We will rely in particular on Cognematics (Bottineau 2003 *et sq.*) in order to reveal the «biomechanically embodied» cognitive operators (Bottineau 2012) that the speakers were able to recognise in these elements of varied origins, which lead them to put them to use together in the interlocution. Our corpus is composed of excerpts from the online discussion forums of the newspaper *Hoy*, which belongs to the Multimedia group located in Asunción (Paraguay).

## 1. For an enactive approach to the *Jopara* phenomenon

### 1.1 Location of the object of study : Spanish, Guaraní, and *Jopara*

Located in South America, Paraguay is distinguished by its position as the only country in the region to give a Native American language, Guaraní, the status of a national, co-official language along with Spanish. While such institutional recognition of the language is to be appreciated, as it acknowledges widespread bilingualism in the population, it also gives rise to a much more varied linguistic landscape that explains the heterogeneity of the analyses that linguists undertake to account for it. We list four elements in our attempt to comprehend the complexities of this situation. The first is that «Paraguayan Guaraní», which is the dialectal variant recognised as the country's co-official language, is partly derived from what we call «the general language», meaning the language that served as a vector of communication for administrative and evangelical purposes after the Spanish Conquest (Melià, 2003). In other words, the very existence of this dialectal variant from the Tupi-Guaraní family cannot be dissociated from that of its contact with Spanish ; it is a historical fact<sup>4</sup>. Another point of merit is that viewing the nation as «bilingual»<sup>5</sup> implies the existence of two very distinct languages, each existing independently of one another. Yet, once again, the situation is a bit more complex. While the existence of the Spanish language, taken separately from Guaraní, is not difficult to conceive of –Spanish is spoken in twenty countries, which makes it easy to imagine that what is called «the Spanish language», aside from the standard promoted by the

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<sup>2</sup> Term composed of the Guaraní reciprocity morpheme *jo-* and *-para*, «mixture, diversity».

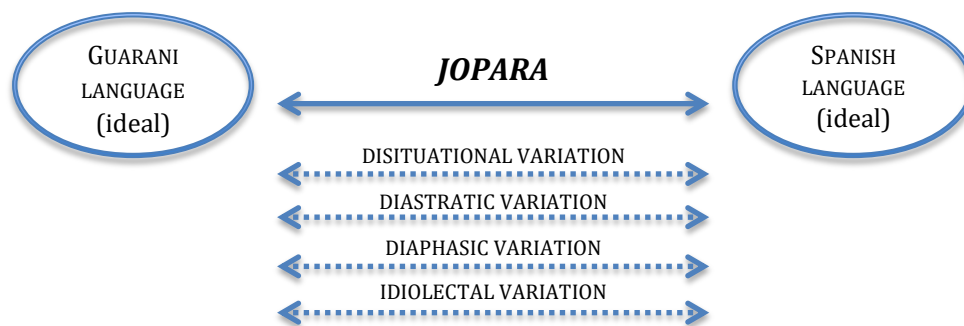
<sup>3</sup> On this subject, see the synthetic study by Penner (2014).

<sup>4</sup> See Estenssoro and Itier (2015) on «general language».

<sup>5</sup> De facto, the concept of bilingualism neglects seventeen other languages spoken in Paraguay, which account for four other indigenous language families other than the Guaraní family : Maskoy, Mataco Mataguayo, Zamuco, and Guaicurú. See Zuccolillo (2002) and Boidin (2012) on the ties between bilingualism and the nation.

Real Academia, is what subsumes all of these varieties as a whole— the same is not true for Guaraní. This is the case not only for the reasons discussed above —we are talking about a variant derived from the general language, the very existence of which was encouraged by the Conquest— but also because the linguistic samples that have until now been collected from speakers, in speech that could be deemed « spontaneous » —which is to say outside militant academic and institutional circles that advocate for the return to « pure » Guaraní— always present about 30% at a minimum of loanwords of Hispanic origin. This is the conclusion made by Rubin (1974 : 166), who speaks of « interference » in the oral conversations that she recorded during her fieldwork. To this must be added the fact that this is an instance of diglossia : Spanish, particularly since the War of the Triple Alliance of the 19<sup>th</sup> century, has come to occupy a preponderant place in all spheres of society and, to date, we have not yet found any monolingual speakers of Paraguayan Guaraní in the strict sense of the term. That is to say, even though these speakers have reduced skills in Spanish usage, they at least have passive knowledge of it, i.e. they partially understand it and are able to reproduce units without necessarily adapting them phonologically (Penner, 2014 : 211).

To complicate the picture even further, the existence, which is foreseeable in such a context, of dialectal variants known as « Jopara » must be acknowledged. « Jopara », the Guaraní word for « mixture », is the result of the modes of mixing —as diverse as they are varied— between the two languages. One could thus illustrate what *Jopara* is with an axis where the extremities would be composed, at one end, of a representation of « ideal Spanish », and of a representation of « ideal Guaraní » on the opposite end, with all the dialectal variants located in between amounting to a « continuum » (to borrow a term from Creolistics). This would then be a « Jopara » *continuum* which manifests differently according to idiolectal, diaphasic, diastratic, and disituational variables (Lustig 1996 : 3). This is shown in figure 1 :



**Figure 1. The « Jopara » *continuum***

Nevertheless, this « Jopara » cannot be deemed a *pidgin* language (the speakers do not/no longer necessarily speak the source language), nor is it a *creole* (which would feature new, fixed grammatical categories), nor is it simply *code-switching* (which would involve the conscious decision to switch between both languages). It is indeed a variety of different manners of mixing, which fluctuate greatly according to individual skill and the situation.

## 1.2 On the value of an enactive approach to language contact

This linguistic hybrid has inspired many studies since the 1970s (see Penner, 2010). Aside from the socio- and psycholinguistic approaches that seized upon the phenomenon, the analyses relating to the linguistic material that results from these mixtures essentially attempt to make a distinction between the forms of borrowing that are well established in each of the two languages (which would no longer require speakers to have bilingual skills) and alloglottic citations (the reproduction of entire segments from the other language, as if they were stored in memory), as well as segments illustrating code-switching, a mixture of codes, or even a mixed language, at the conclusion of phenomena of convergence between both languages (see Thun 2005 ; Gómez Rendón, 2006, 2008 ; Kalfell, 2016). What we can observe from these different approaches is that they are based on the two postulates that follow :

1- The speakers are either bilingual, in Guarani *and* in Spanish, or monolingual, in Guarani, Spanish, *or* in *Jopara*, the mixed language ;

2- The community of speakers has access to *two* or even *three* very distinct *codes* –factoring in those who recognise a « mixed language »—. These codes are *stored* in the memory of subjects who are considered monolingual, bilingual, or trilingual, depending on whether they master the Guarani « code », the Spanish « code », and/or the *Jopara* « code ».

In view of this, adopting an enactive perspective makes it possible to comprehend these phenomena in other terms. Indeed, in cognitive science, the paradigm of enaction considers that cognition resides in the coordination (possibly intersubjective) of embodied processes that allow for the joint advent of body and environment<sup>6</sup>. Transposed to the language sciences, this paradigm requires one to conceive of human language as a series of intersubjectively shared actions, behaviours, and coordinations that contribute to the emergence of meaning. From then, this meaning is not predetermined, since it arises from the interactive forms that produce it<sup>7</sup>. In our heuristic approach to *Jopara*, the consequence of this is that the question of whether speakers are monolingual or bilingual is temporarily placed aside, as is the question of to which « code » the units resulting from this contact should be assigned. We will consider all Paraguayans, whether they were born in Asunción or in a rural community in the backcountry, to have been exposed very early to behaviours and coordinations associated with both languages in their dialogical experiences<sup>8</sup> since, when viewed as a whole, the country is largely bilingual even though individual experiences, and therefore the resulting skills, vary widely according to factors that are far beyond the scope of the field of linguistics. Having experienced these behaviours does not necessarily involve the memorisation of a stock of available language units in either of the two languages, nor does it involve an awareness of this double origin : what the speakers experience are *behaviours* and *articulatory gestures* where the diachronic origin of the units resulting from these behaviours does not matter. In other words, one can suppose that Paraguayan children (there are no studies on the subject) are first confronted with behaviours and that it is only after having learned to speak that they learn these behaviours are Spanish or Guarani. The question of distinguishing spoken chain units from units to be assigned to each of the two languages comes into play after the children have attended school for a few years, if it comes into play at

<sup>6</sup> See Varela, Thompson & Rosch (1991 : 9) : « We propose as a name the term enactive to emphasize the growing conviction that cognition is not the representation of a pre-given world by a pre-given mind but is rather the enactment of a world and a mind on the basis of a history of the variety of actions that a being in the world performs. »

<sup>7</sup> For a presentation of the consequences of an enactive approach to speech, see Bottineau (2013).

<sup>8</sup> According to the most recent census taken by the *Dirección General de Estadística, Encuestas y Censos* in 2002, 90% of the Paraguayan population reports speaking Guarani.

all<sup>9</sup>. The study led by Guttandin *et al.* (2001 : 50-60) on the perception of utterances in Spanish or *Jopara* is quite instructive in this respect, since a clear gap appears between the perception of the utterances as Guaraní or Spanish and what they are from a strictly etymological point of view. This is due to the fact that, from the point of view of speaker perception, *Jopara* corresponds less to the presence of lexical elements foreign to either of the two codes –a perception that varies significantly according to the speaker’s skill level in each language– than to the manner in which the standard is conceived since speakers take to be *Jopara* anything that seems incorrect with regards to the standard that they have internalised, regardless of whether the utterance in one language contains elements with an etymological origin in the other language.

With this in mind, the question for us is no longer to ask what the linguistic results of the mixtures we might observe *are*, but what speakers *are doing* when they mix, and how these linguistic behaviours, be they Guaraní or Spanish in origin –that is no longer the question– *make sense* in the dialogical experience. Working from the assumption that the sensorimotor, physical, and sensitive experience of speech shapes meaning, we will examine herein the manner in which these mixing modes, by the very forms they switch between in speech, bear witness to the dynamic creation of unprecedented acts of conceptualisation in each language taken separately<sup>10</sup>.

## 2. The case of the discourse markers *ko*, *ningo*, and *luego*

### 2.1 Choice of corpus

In order to illustrate these reflections, we pondered a very precise example : that of the alternation of the discourse markers *ko*, *ningo* (both of Guaraní origin), and *luego* (from Spanish) in the most highly Hispanicised dialectal variants of the (Castilian *Jopara*) *continuum*. All three markers are traditionally analysed as the result of the contact with the Paraguayan Castilian language : the first two (*ko* and *ningo*) are considered to be loanwords from Guaraní, while the third (*luego*) is considered a case of semantic calque from its Guaraní equivalent, « voi »<sup>11</sup>. We based our work on a closed corpus derived from the online newspaper *Hoy* (ex-*Diario Popular*). It is a mass newspaper that presents a highly Hispanicised variant of *Jopara*. Beyond the pragmatic and identity-related motives behind this type of mixture, which is characteristic of such a discursive genre (see Zajícová 2011), this corpus provides access to rather long utterances that tend to be in Spanish, into which many Guaraní elements are inserted. We postulate that the presence of these Guaraní elements does not arise solely from communicative necessity, as is often claimed. Indeed, we believe that these units are subjected to a reanalysis of their submorphemic components, which are part of a semiological network that transcends their semantic scope, which has the effect of allowing a second reading of these discourse markers in light of this *signifier* network.

<sup>9</sup> That is the position of Cowley (2007 : 89) : « the child neither needs phonological nor semantic representations but a capacity to use situated experience in deciding how to vocalise. The baby integrates what can be perceived with expressive action. Later, as a fully fledged person, it will take the circular view that, as a member of Community X, it uses the words of Language X. »

<sup>10</sup> This study exclusively focuses on the articulatory nature of the signifier, giving a somewhat partial vision of enactivism given that embodiment of the signifier is the one aspect of enactivism, leaving aside other dimensions that could be studied elsewhere.

<sup>11</sup> It is important to note that, in the most highly Hispanicised dialectal variants of what we have called the « *Jopara continuum* », many Guaraní discourse markers are present. No one has drawn a particular link among these three specific markers, but we do so for reasons that will be explained further on.

## 2.2 Discursive functioning

Let's begin by observing two initial examples. As convention calls for, in both the original example and in the translation, Guaraní signifiers will be displayed in italics and the elements that we are studying (*ko*, *ningo*, and *luego*) will be displayed in small caps<sup>12</sup> :

(1) Liz Carolina, más conocida como Rico comida, habló en una entrevista con el Popu y contó que su vida dio un gran giro después de hacerse famosa y *avei* dijo cuáles son sus metas y sueños luego de terminar el Baila.

-Hola, Rico Comida, ¿ qué tal tu vida de famosa ?

Bien, muy bien *ja'e chupe*. Todo *ko* va *hína* súper, de maravilla *luego*.<sup>13</sup>

(Liz Carolina, more commonly known as Rico Comida, was interviewed by the Popu and explained that becoming famous was a major turning point in her life, and she also listed her goals and dreams after she finishes the Baila.

-Hi Rico Comida. How is your life as a celebrity going ?

Great, really great as they say. Everything *ko* is going great, wonderfully *luego*).

(2) Porque se fue *ningo* con otro mi señora, se fue con un tipo pililito y haragán, un tal burro (*itavyeterei* la tipo, por eso parece le dicen así) que seguro *ite* le va a sacar todo lo que tiene y le va a dejar plantada por allí, porque *ha'e* iguapa y tengo que reconocer que de ella nomás *luego* era todo lo que teníamos, porque pasa que me quedé un buen tiempo sin trabajo *ha ndaikatuvéi* a aportá *mba'eve*, *ha* de yapa estoy enfermo porque no puedo dejar de chupar [...]<sup>14</sup>.

(Because, *ningo*, my wife left me for another man. She left me for a lazy jerk. We call him the donkey. He is totally stupid, that guy. I think that's why we call him that.) We are absolutely positive that he's going to take everything she has and dump her afterwards, because she is beautiful and I must admit that all of our belongings were hers, *LUEGO*, because what happened is that I was out of work for a while and I couldn't provide anything any more, and on top of that I am ill because I can't stop drinking [...].)

In the first example, *Hoy* is interviewing a young woman nicknamed « Rico Comida » about how she is experiencing her new life as a celebrity. Her answer, « Todo *ko* va *hína* súper, de maravilla *luego* » could be translated as « Everything is going great, wonderfully, *actually* ». In this example, the Guaraní morpheme *ko* links the topic, « todo », to the focus, « va súper ». *Luego*, which in standard Spanish means « then, afterwards » could be translated, in the Paraguayan variety (in which it is often pronounced and even spelled [loo] / *loo*), and in this context, as « moreover » or « actually », perhaps « desde luego », in Peninsular Spanish.

In the second example, a man is complaining that his wife left him for another man (an idiot, a jerk, a deadbeat) who will undoubtedly strip her of her money and then dump her. In fact, this man admits that, when they were together, all of their belongings were hers because, since he had been out of work for a while, he could « contribute nothing » (he could not provide income for the household). The beginning, « Porque se fue *ningo* con otro mi señora » could be translated as « because in fact, what happened is that my wife left me for another man », while « tengo que reconocer que de ella nomás *luego* era todo lo que

<sup>12</sup> To avoid influencing the reader's interpretation, for the time being we have chosen to refrain from translating the discourse markers *ko*, *ningo*, and *luego*.

<sup>13</sup> 15/11/2015 - *Hoy*, « Quiero ser actriz » : <http://www.hoy.com.py/popular/quiero-ser-actriz>

<sup>14</sup> 27/09/2012 - *Hoy*, « Che jagua oguahu constantemente profesora » : <http://www.hoy.com.py/popular/che-jagua-oguahu-constantemente-profesora>

teníamos » would be translated as « I must admit that all of our belongings were hers, actually ». In Guarani, *ningo* is the variant in the nasal context of the epistemic morpheme *niko*. It is very often pronounced [njo], and sometimes spelled *nio*.

### 2.3 Limits of semantic calque

To avoid influencing the understanding of these markers with our own translations and before we show why we hypothesise that their signifieds are founded on signifier networks in which they are involved here (and from which these same signifieds arise), we will quickly review below the manner in which *ko*, *ningo*, and *luego* are presented in the scientific literature.

As we mentioned above, when postulating the existence of two very distinct codes, the deviations from the Pan-Hispanic standard are very often considered to be either loans or calques. Usher de Herreros (1976 : 94), for example, was the first to attribute this usage of *luego* to the semantic equivalent in Guarani, *voi*, which means « quickly », « straight away » and is also used as an emphasis marker :

Suponemos que el « luego » en Paraguay no es otro que el *voi* guaraní, de significación varia : « por supuesto, claro, así es » [...] y otras acepciones difíciles de delimitar, al punto que su frecuente repetición le ha privado de toda significación, excepto su función estilística. Generalmente va pospuesto al verbo<sup>15</sup>.  
(Usher de Herreros, 1976 : 94)

For Granda (1988), *ko* and *niko/ningo* are « partículas reforzadoras o intensificadoras » (*reinforcing or intensifying particles*), for which he also postulates a simply expletive value even though they are loanwords that have not been assimilated in Paraguayan Castilian, as they are integrated with their original forms, content, and functions. According to the same author (Granda [1993], 1999 : 205), *luego* is an indicator of « la certeza de la información transmitida por el hablante y de la implicación personal de éste en la valoración del mensaje por él emitido »<sup>16</sup>.

For her part, Palacios Alcaine (1997 : 811) opposes *luego* to the expression *dice que* and deems both of these to be « atenuadores o validadores modales » (*modal markers of reduction or validation*) : « [...] el hablante expresa mediante *luego* la certeza de que la información que está transmitiendo es verdadera, por lo que se convierte en un marcador modal en el que el hablante se implica »<sup>17</sup>.

As such, according to the same author, a process of grammaticalisation gives *luego*, a lexical unit already present in Spanish in the expression *desde luego*, the semantic value of *voi*, and it is with this new value that it is used in Paraguayan Castilian (*ibid.*).

Several observations can be made based on what these authors propose. First, the authors believe that the signifiers from either of the two languages convey semantic information independently of their articulatory properties and of the semiological networks that they maintain with the other elements of the spoken chain : via translation, *voi* transfers its semantic value to *luego*. Yet the fact that *luego* does not possess this meaning, alone, in other Castilian dialects, should be problematic : used alone, *luego* is *a priori* not proven to be the equivalent of « indeed, of course » outside of Paraguay. Furthermore, one could ask why

<sup>15</sup> We suppose that the Paraguayan *luego* is none other than the Guarani *voi*, which has various meanings : « of course, obviously, that's it » [...] and further meanings that are difficult to delimit, to the point where its frequent use has deprived it of all meaning, except for its stylistic function. In general, it is postposed to the verb.

<sup>16</sup> « the certainty of the information shared by the speaker and of the speaker's personal involvement in the evaluation of the message he or she is sending. » Our translation.

<sup>17</sup> « [...] the speaker uses *luego* to express the certainty that the information he or she is sharing is true, which is why it becomes a modal marker that involves the speaker. » Our translation.

some signifiers are borrowed as-is while others are translated : of the Guaraní loanwords, why were certain signifiers kept while others were not ? Why did *ningo* and *niko* prosper, when the Colonial Guaraní language had a vast amount of markers of this kind ? Why is the connector *ko*, used as-is, so successful while the element *voi* is most often translated as *luego* ?

### 3. A network of « biomechanically embodied » cognitive operators

In an enactive approach to language, we believe that the semantic value of these units does not exist *per se*, but that it is the sensorimotor, physical, and sensitive experience of speech that shapes the meaning. We therefore hypothesise that these three signifiers were recruited here, as biomechanically embodied cognemic operators have been identified in them. Such operators are at work in other grammatical subsystems in which they convey a shared semantic invariant. Indeed, when the signifiers in question are observed, one quickly notes that there is a certain semiological affinity among the three units that we examine in this study : all three present a velar (voiceless or voiced) –/g/ ou /k/ –followed by a close-mid back rounded vowel /o/ :

NIN	GO
NI	KO
	KO
LUE	GO

**Table 1. The velar phoneme as a pivotal element**

Here we see a ternary subsystem (temporarily, as other signifiers could be recruited in this network) in which the pivotal form *ko* is surrounded by units characterised by the presence of /l/ and /n/ at the onset :

NIN	GO
NI	KO
	KO
LUE	GO

**Table 2. Alternation of /l/ and /n/ at the onset**

These initial observations call for a two-part reasoning. We will first adopt the principles of Cognematics, a theory developed by Bottineau (2003 *et seq.*), according to which cognemes constitute minimal submorphological units for which the sensorimotor profile activates characteristic cognitive processes that make up grammatical operators. We will then undertake a reading of these cognemes laid out in syntax since we will hypothesise that the succession of these cognemes in the spoken chain also activates, at a second level of reading, networks that link these signifiers with other semantically related signifiers.

#### 3.1 First-level reading : K/L/N cognemes

These three signifiers present three phonemes to which the status of cogneme can reasonably be assigned. For a phoneme to be interpreted as a cogneme, it must be part of a network of semic and morphemic correspondences. Bottineau (2004 : 29) lists the non-cumulative circumstances in which the phoneme-invariant relationship can be considered to be activated :



1) il se manifeste dans une alternance récurrente [...]. 2) L'opérateur-mot dans lequel il se manifeste est lui-même globalement formé d'une agglutination de marqueurs extraits de telles alternances [...]. 3) Le submorphème, combiné à une racine ou à d'autres submorphèmes dans une position constante comme l'initiale ou la finale, classe tous les opérateurs concernés dans une catégorie donnée [...]¹⁸.

It is also possible to postulate that speakers use the *ko* element because it allows them to enter networks in which the occlusive velar phoneme at the semantic onset can be interpreted as the cogneme K. This cogneme, which is active in the interrogatives ¿ *qué* ?, ¿ *quién* ?, ¿ *cuál* ?, ¿ *cuánto* ?, is also present in subordinators in Spanish, as stated by Fortineau-Brémond (2012 : 152), for whom this cogneme amounts, by iconicity relative to the articulation itself of the velar phoneme, to « une interruption précoce, anticipée, marque d'une construction achevée avant terme, d'où un effet d'incomplétude, qui oblige à concevoir les signes qu'il informe nécessairement *en rapport avec* une entité préexistante » (*an early, anticipated interruption, the mark of a prematurely finished construction, resulting in an effect of incompleteness, which requires one to conceive of the signs it informs as necessarily being related to a pre-existing entity*). Moreover, this is what allows her to assert that K is « le signe de la dépendance, de la subordination » (*the sign of dependence, of subordination*). In this manner, the connector *ko*, which ties the focus to the topic in Guarani, has an articulatory counterpart in Spanish, in the grammatical operators that present this semantic invariant informed by K at the onset. It must further be noted that the activation of this cogneme does not involve the sonority feature, which explains why the *quien* ~ *alguien* network may also be activated (Poirier, this issue)¹⁹. In contexts of highly Hispanicised *Jopara*, like that of our corpus, it is understandable that *ko* finds its place playing the role of the connector, as is already the case in Guarani : speakers recognise it as belonging to a set of semantically related grammatical markers thanks to the presence of a velar at the onset, which here has the status of a cogneme, and the semantic invariant of which is that of dependence. Yet a single analogical process is responsible, in addition to the morpheme *ko*, for speakers' recognition of the units *luego* and *ningo*, which are excellent candidates for involvement in a second alternation : the L/N opposition that Fortineau-Brémond (2012 : 150) also showed to be in operation in *eL* ~ *uN*, *taN(to)* ~ *taL*, *cuaN(to)* ~ *cuaL*, an opposition that is found again in *aLguno* ~ *niNguno*, *aLgo* ~ *Nada* et *aLguien* ~ *Nadie*. The sensorimotor profiles of L and N share their partial reviation of air –towards the nasal fossae for N, to the sides of the tongue for L– but they appear to be opposed in these micro-systems, not in terms of the deviation/reviation of air feature, but in terms of the opposition of internality/externality. The articulatory properties of the lateral phoneme are probably what make it suitable for expressing otherness. On this subject, refer to the proposal of Poirier (forthcoming) :

L et N, formant un micro-système cognémique potentiel de par leur caractéristique articulaire commune de *reviation*, seraient alors mis en opposition dans des micro-systèmes grammaticaux où est mis en saillance non le trait déviation/reviation de l'air de /n/ –ce qui amorce la notion de négation– mais le trait « intériorité » (mise en résonance de l'air à l'intérieur des fosses nasales), vs. « extériorité » pour /l/ (déviation de l'air à l'extérieur du blocage occasionné par la langue contre le palais : /l/ fait circuler l'air en continu des deux côtés de la langue). [...] En espagnol, ce contournement de l'air dans /l/ via un double chemin le rend particulièrement apte à amorcer la notion sémantique d'altérité –alors

¹⁸ « 1) it appears in a recurring alternation [...]. 2) The operator-word in which it appears is itself formed overall of an agglutination of markers taken from such alternations [...]. 3) The submorpheme, combined with a root or with other submorphemes in a constant position such as initial or final, places all the relevant operators in a given category [...]. » Our translation.

¹⁹ This is why we allow ourselves to link *ko* with *ningo* and *luego* (see below). Moreover, *ningo* is the nasal allomorph of *niko* in Guarani.

conçue comme l'extériorité du moi –tel que le proposait Molho (1995 : 345), ou, par opposition à la « pluralité interne » (1988 : 298) d'un N, une pluralité non visualisée comme un tout formant unité, et que l'on pourrait alors dire « externe »<sup>20</sup>.

In the end, the phonemes from which the signifiers *ko*, *ningo*, and *luego* are formed can be recognised as entering into cognemic networks that structure different grammatical micro-systems in Spanish : K primes for the semantic notion of subordination (particularly in its alternation with T, see Fortineau-Brémond, 2012 : 152). The cogneme L is able to activate the semantic notion of externality/otherness, while N activates the notion of internality.

From this, one can deduce that the Guaraní connector *ko* is reread as belonging to the network of other Spanish subordinators in the broader sense (*como*, *que*, *cuanto*, etc.) : in this it is a good candidate from the point of view of its articulatory properties. As for *ningo* and *luego*, they can be envisioned as the manifestation of not one, but two cognemes : they are the succession, for the first, of N followed by K, and for the second, of L followed by K. These properties lead us to propose a second level of reading and to tie them with other elements in the spoken chain –lexical units or not– that present this same succession of cognemes.

### 3.2 Second-level reading : cognosyntax

#### 3.2.1 <N...K>

We propose that the cognemic series <N...K> can reflect a motion of creating a tie with an internality. Moreover, this hypothesis recalls the salience {nasal + velar} that was exposed by Grégoire (2012 and 2014) in the context of the Theory of Submorphological Salience<sup>21</sup> : the author (2012 : 160 et seq.) effectively identifies the paradigm of « shrinkage », to which he links the lexemes expressing anxiety (*angor*, *angustia*, *constreñir*) and narrowness (*rincón*, *esquina*, *silanga*, etc.). This is probably what explains the presence of this same series in terms such as *menguar*, *encoger* and also in botanical parlance with *hincar* (« to plant »), *tronco*, *junco*. We propose that here *ningo* finds a place amongst a semiological set with the common feature of reflecting this same invariant of semantic priming.

#### 3.2.2 <L...K>

To echo this <N...K> series, it seems that one could point to an <L...K> cognemic series, which, however, activates a motion of extension towards an otherness, which would explain the fact that a semiological and semantic relationship can be established between terms such as *algo*, *alguno*, *alguien*, *cualquier*, and *luego*. This series does not contradict the hypothesis set forth by Poirier (forthcoming), according to which the ALK group allows for an idea of selection from amongst an open plurality : « –ALK– opère un acte conceptuel de

<sup>20</sup> « L and N, forming a potential cognemic micro-system due to their shared articulatory characteristic of reversion, would then be placed in opposition in grammatical micro-systems where the salient feature is not the deviation/reversion of air in /n/ –which primes for the concept of negation– but the « internality » feature (in which the air inside the nasal fossae resonates), vs « externality » for /l/ (deviation of the air outside the occlusion of the tongue against the palate : /l/ circulates air continuously on both sides of the tongue). [...] In Spanish, this deviation of air in /l/ to a double route makes it particularly well suited to prime for the semantic notion of otherness –then conceived of as the externality of the self– as was proposed by Molho (1995 : 345), or, by opposition to the « internal plurality » (1988 : 298) of an N, a plurality not visualised as a unified whole, and that could then be deemed « external ». Our translation.

<sup>21</sup> In this theory, which he first applied to the lexicon, Grégoire (2012, 2014) postulates that only a portion of the signifier, which can vary according to the usages of the sign, can be solicited in discourse to reflect the meaning : these cognitively salient elements, which can be isolated, can act in lexical units, grammemes, or in deictics.

singularisation non encore arrêtée, dans le sens où est instruite une focalisation sur une unité non encore spécifiquement définie parmi un ensemble d'unités même ment sélectionnables »<sup>22</sup>.

This open plurality, not circumscribed in *algo*, circumscribed in *alguno* (by the cogneme N), also explains, according to Poirier, why *alguien* is a « *quién* à désigner parmi plusieurs » (*a quién to be designated from a group*). Beyond ALK (and *algo*, *alguien*, *cualquier*), it seems that the cognemic series <L...K> is what allows this extension towards otherness, and we submit the hypothesis that it is the series found in the lexicon in terms such as *seLeCcionar*, *desplegarse*, *holgado*, *prolongado*, or even *laxo*, *luengo*, *largo*, and so on. We then understand how, in the grammatical system, *alguno* is opposed to *ninguno*, by the same motion of creating a link towards otherness or internality. This opposition could also be found, in the same terms, between *ningo* and *luego*. In this manner, this <L...K> cognemic series, itself formed by the two cognemes that we have identified, explains why, alongside the Guaraní words *ko* and *ningo*, the Hispanic form *luego* was selected, as it is much more capable of conveying meaning in a submorphemic network that is, in short, very coherent. Furthermore, in this configuration, given that the series can emerge by the very presence of the correlate *ningo*, it is easier to understand how *luego* acquires this new meaning that until now was attributed to Guaraní : *luego*, confronted with *ningo*, makes sense : *luego* is a term that allows an element to be tied with an otherness –that of the knowledge shared with the interlocutor– which corroborates information, while *ningo*, by the motion of linking it with an internality based on the <N...K> series, signifies the opposite : that the information comes from the speaker alone. For this reason, we propose that all three terms, *ningo*, *ko*, and *luego*, amount to enunciative guiding marks : with *ko*, the speaker establishes a relationship between two bodies of knowledge in an unmarked, or rather non-controversial, fashion. With *ningo*, the speaker sets down this relationship by taking a position (the information originates solely from the speaker), while with *luego*, the establishment of the relationship must be tied to the knowledge of the allocutor in order to establish an interlocutively shared agreement on the validation of the information.

These three cases could be linked to the three dialogical configurations that Douay and Roulland (2014) describe in the *Theory of the Interlocutive Relationship* (TIR). These authors postulate that the interlocution parameter is involved in the very architecture of the linguistic system, and in that of grammatical systems in particular. According to these linguists, the fundamental challenge of any language act is to achieve understanding of meaning between the participants of the communication act. In this conception, the role assigned to the speaker is grammaticised, in the sense that the forms of the language are clues to the context of interpretation that will allow for interlocutive agreement on the meaning of the utterance. In this manner, these two authors are led to formulate the hypothesis that the interlocutive relationship can be configured in three different ways. In the first configuration, called « Configuration 0 », the data are immediately and simultaneously accessible to the interlocutors in the context of a direct interlocutive relationship, and are therefore presumed to be able to provide the basis of an immediate, unproblematic agreement. That is the case for *ko*. In « Configuration 1 », on the other hand, a partial and temporary agreement is said to already be established, already be concluded, prior to the present interlocutive situation : the speaker conjures the interlocutor's background by associating it by anticipation with the validation of the sign. This anticipatory motion aims to bring the interlocutor into the validation of the meaning in one way or another, which is what happens with *luego*. Lastly,

<sup>22</sup> « –ALK– operates a conceptual act of singularisation that has not yet been decided upon, in the sense that a focalisation on a unit not yet specifically defined, from amongst a set of likewise selectable units, is informed. » Our translation.

the third configuration, « Configuration 2 », blocks the interlocutor's validation, meaning that the reception is definitively imposed. That is how we propose the interpretation of *ningo*.

#### 4. Emergence of an epistemic subsystem in *Jopara*

We will end our reflections by examining a few examples to test our hypothesis. In sum, in view of the articulatory properties that are solicited in these signifiers, and in view of the usages that we can observe, we put forth the proposal that *ko*, *ningo*, and *luego* form a network of epistemic and metadiscursive morphemes, all three of which guide the co-enunciator in the ownership of the information shared. This ownership is presented in a neutral manner in the case of *ko*, as new information originating with the speaker in the case of *ningo* (information coming from an internality), and as information that requires validation from the interlocutor in the case of *luego* (link with an otherness).

In example 3, a person in the web forum tells of how he acted on the pressing requests of a young girl and went to her house before sneaking back out :

(3) Al principio *ningo* no le daba pelota o sino le daba cualquier excusa para chulearle, pero pasó el tiempo y de tanto insistir decidí irme la vez pasada a su casa, ella *luego* me provocó y no tuve otra que acostarme a su lado, pero no pasó nada porque venía su mamá de visita y tuve que salir escondido por el fondo. A mí medio me pesa la conciencia, pero está bien la tipa.<sup>23</sup>

*(In the beginning, ningo, I didn't pay any attention to her or I used any excuse to make fun of her, but time went by and she was so insistent that I decided to go to her house last time. She provoked me luego, and I had no other choice but to lie down next to her, but nothing happened because her mother came by for a visit and I had to sneak out the back. It's weighing a bit on my conscience, but the girl is fine).*

In the beginning, he says, he wasn't paying attention to the girl's requests. This information is presented as new ; it comes from him, and the interlocutor does not need to validate it : « al principio *ningo* no le daba pelota... ». But when he explains that he had to sneak out before the girl's mother caught them, he summons an additional element of information, « she provoked me », and asks, by using *luego*, for this information to be linked to the preceding statement (« I decided to go to her house »), such that a causality relationship that is not apparent can be validated.

In example 4, *ningo* appears on its own to allow the journalist to express his feelings about the fact that the fans appear to be getting along :

(4) Así *ningo* da gusto irnos a la cancha. Por un lado, la fanática olímpista y, por el otro, la cerrista que recibe un besito. Al final, las dos se fueron contentas porque este *superclásico* no tuvo ganador. Cero violencia.<sup>24</sup>

*(Like that, ningo, we're glad to go to the stadium. On one side, the Olimpia fan and, on the other, the Cerro (Porteño) fan who gets a kiss. At the end, both of them left happy because no one won the superclásico. Zero violence.)*

But this creation of a tie can be neutral, unproblematic from the point of view of owning the utterance :

<sup>23</sup> 12/07/2013 - Hoy, « Buen día profesora, vos sabés que mi conmadre me tira onda » : <http://www.hoy.com.py/popular/buen-dia-profesora-vos-sabes-que-mi-comadre-me-tira-onda>

<sup>24</sup> 10/11/14 Hoy (suplemento deportivo) : <http://archivos.hoy.com.py/popular20141110/archivos/assets/basic-html/page30.html>

(5) Tiene 17 años, está acostumbrado a andar por el campo, no pasó hambre y encima se habrá divertido un kilo. Ellos *ko* son esos religiosos que todo el día trabajan y rezan.<sup>25</sup>

*(He is seventeen years old. He's used to being in the countryside, he wasn't hungry, and on top of that he must have had a lot of fun. As for them, ko, they are those religious types who spend all day praying.)*

Moreover, a parallel should be drawn between the cognemic series <L...K> and certain typically Paraguayan syntactic layouts, like the emphatic, non-normative phrasing « lo...que », found in these examples :

(6) La criatura, que se apoda Tita, se enamoró de su madrastra : « me quiso enseguida ella, no sé por qué, porque yo no le daba mucha pelota, capaz porque no tenía mamá. Un día *lo que* yo le cuidé, porque a los dos días que estuve en esa casa su papá ya le contrató para su niñera y yo me volví la patrona de la casa [...]. »<sup>26</sup>

*(The child, nicknamed Tita, has fallen in love with her stepmother : « She liked me a lot from the start. I don't know why, since I didn't pay much attention to her. Maybe because she didn't have a mother. One day, lo que, I took care of her, because two days after I arrived in the house, her father had already hired a nanny for her and I became the boss of the house [...]. »)*

(7) No quiero abusar de vos, le dije, y me dijo que ella *lo que* abusa de mí porque se siente muy sola a veces en su casa, ya que tiene un solo hijo...<sup>27</sup>

*(I told her that I didn't want to take advantage of her, and she told me that she lo que takes advantage of me because sometimes she feels very lonely, at home, since she only has one child...)*

We can further question the relationships, from the semiological and semantic point of view, that exist among *luego*, *lo que*, and *igual*, which presents the inverted series <K...L> and which could be translated as « all the same » :

(8) « Nos portamos mal, pero *igual* recibimos regalitos »<sup>28</sup>

*(We behave badly, but we get gifts igual)*

(9) Aunque Stéfano ya era mayor de edad cuando conoció a la abogada, *igual* le pidió permiso a sus padres y fue su papá quien habló con la mujer ya que quería conocerla y asegurarse de que era una persona confiable.<sup>29</sup>

*(Even though Stéfano was an adult when he met the lawyer, he igual asked his parents for permission and his father was the one to speak with the woman since he wanted to get to know her and make sure that she was trustworthy.)*

*Luego*, *lo que*, and *igual* each present the particularity of creating a tie between an X element and a Y otherness. We once again hypothesise that this is an instance of conceptualisation that is based on the presence of the cognemes L and K.

<sup>25</sup> 27/12/14, Diario Popular « Arlan 'habrá tomado caña y fumado marihuana a gusto', según concejal » : <http://www.hoy.com.py/nacionales/arlan-habra-tomado-cana-y-fumado-marihuana-a-gusto-segun-concejal>

<sup>26</sup> 16/05/2016 - Hoy, « 'La verdad es que en la cama soy una campeona' » : <http://www.hoy.com.py/historias-reales/la-verdad-es-que-en-la-cama-soy-una-campeona>

<sup>27</sup> 12/02/2016 - Hoy, « 'Yo le dije bien : no quiero abusar de vos' » : <http://www.hoy.com.py/popular/yo-le-dije-bien-no-quiero-abusar-de-vos>

<sup>28</sup> 06/01/2013 - Hoy, « 'Nos portamos mal, pero igual recibimos regalitos' » : <http://www.hoy.com.py/popular/nos-portamos-mal-pero-igual-recibimos-regalitos>

<sup>29</sup> 11/09/2015 - Hoy, « 'Ya no soy un pendejo, le dije a la abogada...' » : <http://www.hoy.com.py/popular/ya-no-soy-un-pendejo-le-dije-a-la-abogada>

## Conclusion

In this paper, we have raised the question of language contact and have attempted to understand how the units derived from these mixtures could give rise to meaning. In an enactive and embodied approach to language, we have proposed that the semantic value of these units did not exist *per se*, but that the sensorimotor, physical, and sensitive experience of speech moulded the meaning through a process of semiological re-analysis that can be used to identify biomechanically embodied cognemic operators at work in priming for the meaning of different grammatical subsystems. In the precise case of this highly Hispanicised variety of Paraguayan *Jopara*, we have advanced the idea that, in view of the articulatory properties that are solicited in their signifiers, the discourse markers *ko* and *ningo* (of Guaraní origin) on the one hand, and *luego* (from Spanish) on the other hand, form a network of epistemic and metadiscursive morphemes that amount to enunciative guiding marks in the validation of the information. The creation of this tie operates in a neutral, non-controversial manner in the case of *ko*, as coming from the speaker in the case of *ningo* (information arising from an internality and therefore non-negotiable), and as a link with an otherness in the case of *luego* (request for validation via an otherness). We could further explore the relationships that *ningo*, *ko*, and *luego* have with the Guaraní interrogative *piko* (Var. [pio]/[pio]), also present in our corpus, or the locution *un poco* (equivalent to «por favor», which is traditionally postulated to be the calque of the Guaraní *-na*) and ponder whether this <P...K> series is able to delegate the responsibility for the information to the allocutor (the source of the semiological similarity amongst *por qué* (/porque), *piko*, and *pregunta*). This is a network upon which light still has not been shed.

More generally, we might note that although languages are usually considered as closed systems, if communities of plurilingual incorporate in their consensual domain of interactions a repertoire of low-level embodied operators such as cognemes, they will inevitably tend to mobilize them in both systems in similar conditions in spite of the typological distance, making connections that go far beyond simple analogy or borrowings, and permeating the boundaries between languages. This case study gives a clear example of how a linguistic system –or a coordination of linguistic systems– emerge through embodied collaborative use and sheds light on the nature of grammar : not abstract structures, but embodied coordinated routines bringing forth concerted worlds. That is why grammar can be formalized, but this is done better if embodiment is included in the formalizing or modelizing process.

## References

- BOIDIN, Capucine (2012). Le multiculturalisme au Paraguay, ou les habits neufs du nationalisme linguistique. In C. Gros & D. Dumoulin, *Le multiculturalisme au concret : un modèle latino-américain ?* (p. 295-307). Paris : Presses de la Sorbonne Nouvelle.
- BOTTINEAU, Didier (2003). Les cognèmes de l'anglais et autres langues. In A. Ouattara (ed.), *Parcours énonciatifs et parcours interprétatifs. Théories et applications* (p. 185-201). Gap : Ophrys.
- BOTTINEAU, Didier (2004). Le problème de la négation et sa solution dans la langue anglaise : le cognème N. In C. Delmas & L. Roux, *La contradiction en anglais* (p. 27-53). Saint-Étienne : Publications de l'université de Saint-Étienne.
- BOTTINEAU, Didier (2009). La théorie des cognèmes et les langues romanes : l'alternance i/a dans les microsystèmes grammaticaux de l'espagnol et de l'italien. *Studia Universitatis Babeş-Bolyai, Philologia, LIV*(3), 125-151).

- BOTTINEAU, Didier (2010). L'émergence du sens par l'acte de langage, de la syntaxe au submorphème. In M. Banniard & D. Philps (eds.), *La fabrique du signe : linguistique de l'émergence entre micro- et macro-structures* (p. 299-325). Toulouse : PUM.
- BOTTINEAU, Didier (2012). Submorphémique et corporéité cognitive. In D. Philps (ed.) *La Submorphémique, Miranda*, 7, np. Available at <http://miranda.revues.org/5350>.
- BOTTINEAU, Didier (2013). Pour une approche enactive de la parole dans les langues. In G. Louÿs & D. Leeman (ed.) *Le vécu corporel dans la pratique d'une langue, Langages*, 192(4), 11-27.
- DOUAY, Catherine & ROULLAND Daniel (2014). *La Théorie de la Relation Interlocutive : sens, signe, répliation*. Limoges : Lambert-Lucas.
- COWLEY, Stephen J (2007). How human infants deal with symbol grounding. *Interaction Studies*, 8(1), 83-104.
- ESTENSSORO, Juan Carlos & ITIER César (dir.) (2015). Introduction. *Mélanges de la Casa de Velázquez*, 45(1), 9-14.
- FORTINEAU-BREMOND, Chrystelle (2012). *La corrélation en espagnol contemporain. Morphologie, syntaxe et sémantique*. Rennes : Presses Universitaires de Rennes.
- GOMEZ RENDON, Jorge Arsenio (2006). Linguistic borrowing in paraguayan guaraní. *Suplemento Antropológico*, 41(2), 133-158.
- GÓMEZ RENDÓN, Jorge Arsenio (2008). *Typological and Social Constraints on Language Contact. Amerindian Languages in Contact with Spanish*. PhD, Amsterdam University.
- GRANDA, Germán de (1988). *Sociedad, historia y lengua en el Paraguay*. Bogotá : Publicaciones del Instituto Caro y Cuervo.
- GRANDA, Germán de ([1993] 1999). Calco funcional y retención por contacto. El elemento asertivo *luego* (guaraní *voi*) del español paraguay. In G. de Granda, *Español y lenguas indoamericanas en Hispanoamérica. Estructuras, situaciones y transferencias* (p. 199-211). Valladolid : Universidad de Valladolid.
- GRÉGOIRE, Michaël (2012). *Le lexique par le signifiant. Méthode en application à l'espagnol*. Sarrebruck : Presses Académiques Francophones.
- GREGOIRE Michaël (2014). Théorie de la Saillance submorphologique et neurosciences cognitives. In A. Eliman (dir.) *Énonciation et neurosciences cognitives, Synergies Europe*, 9, Cracovie, Pologne : Gerflint, 107-119. Available online at <http://gerflint.fr/Base/Europe9/gregoire.pdf>.
- GUTTANDIN, Friedhelm, GONZÁLEZ ALSINA, Carola & ORUE, Angelina (2001). *El guaraní mirado por sus hablantes. Investigación relativa a las percepciones sobre el guaraní*, Asunción : Ministerio de Educación y Cultura/Banco Interamericano de Desarrollo.
- KALFELL, Guido (2016). *¿Cómo hablan los paraguayos con dos lenguas ? Gramática del jopara*. Biblioteca Digital Curt Nimuendajú. Available at <http://www.etnolinguistica.org/biblio:kallfell-2016-jopara>.
- LUSTIG, Wolf (1996). Mba'éichapa oiko la guarani ? Guaraní y jopara en el Paraguay. *Nemity*, 33(2). Available at <http://www.staff.uni-mainz.de/lustig/guarani/art/jopara.pdf>.
- MELIÀ, Bartomeu (1982). Hacia una 'tercera lengua' en el Paraguay. *Estudios Paraguayos II*(2), 32-47.
- MELIÀ, Bartomeu (2003). *La lengua guaraní en el Paraguay colonial*. Asunción : Cepag.

PALACIOS ALCAINE, Azucena. Acerca del contacto de lenguas español y guaraní. *Actas del I Simposio Internacional sobre Bilingüismo : Comunidades e Individuos Bilingües* (p. 807-817). Vigo : Universidad de Vigo.

PENNER, Hedy (2010). *Jopara : la face méprisée du guarani ou/et du bilinguisme ?*. In H. Boyer (dir.), *Hybrides linguistiques. Genèses, statuts, fonctionnements* (p. 175-201). Paris : L'Harmattan.

PENNER, Hedy (2014). *Guaraní aquí. Jopara allá : Reflexiones sobre la (socio)lingüística paraguaya*. Bern : Peter Lang.

PENNER, Hedy, ACOSTA Soledad & SEGOVIA, Malvina (2012). *El descubrimiento del castellano paraguayo a través del guaraní. Una historia de los enfoques lingüísticos*. Asunción : CEADUC.

POIRIER, Marine (forthcoming). La « grammaticalisation » par le signifiant : le cas de *cualquier*. Submorphémie, réseaux et émergence du sens. In C. Fortineau-Brémond & É. Blestel (éds.), *Le signifiant sens dessus dessous. Submorphémie et chrono-analyse en linguistique hispanique*, Limoges : Lambert-Lucas.

RUBIN, Joan (1974). *Bilingüismo nacional en el Paraguay*. México : Instituto Indigenista Interamericano.

THUN, Harald. 2005. « Code switching », « code mixing », « reproduction traditionnelle » et phénomènes apparentés dans le guarani paraguayen et dans le castillan du Paraguay. *Rivista di Lingüística*, 17(2), 311-346.

VARELA Francisco, THOMPSON Eleanor & ROSCH Evan (1991). *The embodied mind : Cognitive science and human experience*. Cambridge (MA) : MIT Press.

ZAJÍCOVÁ, Lenka (2011). Differences in Incorporation of Spanish Elements in Guarani Texts and Guarani Elements in Spanish Texts in Paraguayan Newspapers. In C. Chamoreau, Z. Estrada Fernández & Y. Lastra (ed.), *A new look at Language Contact in American Languages* (p. 185-121). Munich : Lincom-Europa (Studies in Native American Linguistics).

ZUCCOLILLO, Gabriela (2002). Lengua y nación : el rol de las élites morales en la oficialización del guaraní en 1992. *Suplemento Antropológico*, 37(2), 9-308.

## **Corpora**

Paraguayan newspaper *Hoy*, available at <http://www.hoy.com.py>.