SPANISH AND NAHUATL CONVERGENCE; THE CASE OF PRE- AND POST-POSITIONS[*]

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This paper discusses the possible effects of Spanish on the structure of Nahuatl due to contact. In particular, I focus on adpositions (pre and postpositions). According to the Nahuatl classic grammars Nahuatl is a postpositional language and since Spanish is a prepositional language I predicted that a change from postpositions to prepositions could have taken place in Nahuatl because of its extreme contact with Spanish. The prediction was confirmed with the results. However, I also found evidence that showed that Nahuatl allowed prepositions even before this language started to be in contact with Spanish, even though modern Nahuatl prepositions are more frequent and in most cases the use of postpositions is ungrammatical. This research was carried out in two towns where Nahuatl and Spanish are spoken. In the first town (Cuetzalan), the traditional linguistic method of eliciting particular structures from a small number of informants (n=2) was applied. For the second town (San Isidro Buen Suceso) a production task was designed and then applied to the participants (n=6). I argue that the change from postpositions to prepositions in modern Nahuatl is due to convergence (between Spanish and Nahuatl) and not to transference. That is, Spanish did not introduce prepositions into Nahuatl; rather, it increased the preference for prepositions. This paper contributes evidence in favor to the Functional Convergence Hypothesis (FCH) proposed by Sanchez (2003).

1. Introduction: Socio-historical background of the contact between Spanish and Nahuatl

Mexico before the arrival of the Spanish was a place where many indigenous languages were spoken. Therefore, the Conquest of Mexico meant, besides the political and religious issues, the beginning of contact between Spanish and indigenous languages. In this paper I will focus only in the contact between Spanish and Nahuatl.

Nahuatl was one of the most important languages before and after the conquest because it was the language of the Aztecs, the group in power[1]. Nahuatl was considered the lingua franca among the different communities that spoke indigenous languages. However, after the conquest Spanish was imposed as the

[1] Nahuatl was also spoken for other indigenous groups such as toltecas and tlaxcaltecas (See Suárez, 1983 for more details).

official language and indigenous people were forced to switch from their mother tongue to the Spanish language, the language of the new group in the power. When I refer to Spanish as an official language I only mean the language of the majority, since there is no official or legal recognition for the Spanish language as such.

1.1 Nahuatl speakers in Mexico

The distribution of indigenous languages in Mexico is uneven. There are around 1.5 million Nahuatl speakers spread in little towns across the Mexican Republic. The geographical distance among Nahuatl speakers has resulted into a great variety of Nahuatl dialects that are, in most cases, unintelligible. In addition to the aforementioned description of the distribution of Nahuatl speakers in Mexico, the pressure that Spanish put on indigenous languages has made Nahuatl a language in danger (Hill, 1983).

Considering that indigenous languages in Mexico are a vulnerable target in a contact situation with Spanish, it is necessary to explore what happens with the language of an indigenous community that is trying to survive in a Hispanic environment.

2. Languages in contact: a brief overview and differences between Nahuatl and Spanish

The literature on languages in contact claims that in situations of extended and prolonged language contact, as in the case of Nahuatl and Spanish, the languages involved in a contact situation tend to adopt features from one another. Therefore, since Nahuatl and Spanish have been in contact for almost 500 years, one should expect the same tendency.

Nahuatl is a language that differs in a great deal from Spanish. Spanish is an inflectional language while Nahuatl is a polysynthetic one. Word order is more or less flexible in Spanish but in Nahuatl word order is free. There is grammatical gender and number in Spanish and Nahuatl does not have grammatical gender, and number is restricted to animate nouns. Both languages are pro-drop. In Spanish finite verbs agree only with the subject while in Nahuatl all verbs have to agree with the subject and the object of the phrase. Moreover, and this is the characteristic I will be focusing on, Spanish is a language with prepositions, while Nahuatl, according to the classical Nahuatl grammars, allows postpositions only. However, as I will show below, prepositions are also allowed in (old and modern) Nahuatl.

3. Prepositions in Spanish and Adpositions in Nahuatl

In the literature, which has been focused on classical Nahuatl, probably to avoid the dialect problem, Nahuatl is considered a postpositional language (Siméon, 1885; Sullivan, 1992, Kartunnen y Lockhart, 1976, Lockhart, 1992), that is, it locates adpositions after the object, as the example in (1) shows.

(1)   Kall- ijtek
        house-in-prep
        "In the house"

On the other hand, Spanish is a prepositional language, that is, it locates the adposition before an object, as shown in (2).

(2)   En   la casa
        In-prep the house
        "In the house"

However, as shown in (3) and (4), in modern Nahuatl adpositions appear either before or after the object.

(3)   Kall- ijtek
        house-in-postp
        "In the house"

(4)   Ijtek-   kalli
        in-prep   house
        "In the house"

4. Research Questions and hypothesis.

Considering the linguistic context of this research, I will answer the following questions:
a) Did Spanish introduce a new grammatical property on the structure of Nahuatl? That is, was the change from postpositions to prepositions in Nahuatl triggered by Spanish?
b) Is this a case of transference or convergence?
        I hypothesize that the change from postpositions to prepositions in modern Nahuatl is due to convergence between these two languages, that is, that such change has been motivated by Spanish, as an external factor. However, I also argue that prepositions existed in classical Nahuatl, therefore convergence has not led to a change in structure but rather to a change in frequency or preference: A change that could have taken place internally as well.

5. Convergence, transference and the Functional Convergence Hypothesis.

Convergence takes place in situations of extreme contact, in areas that are geographically close and where one of the languages is dominant (Winford, 2003) as in the case of Spanish and Nahuatl. Bullock and Toribio (2004:91) define convergence as "the enhancement of inherent structural similarities found between two linguistic systems. According to them and among others (Sanchez, 2004), convergence takes place when a feature already existent in one language becomes more frequent due to contact with another language.

Language contact then, accelerates a process of change that is already in development (Silva-Corvalan, 1986). Regarding the direction of convergence, it has been suggested by Thomason and Kaufman (1998) and Sanchez (2004) that it can be bidirectional. This would predict possible changes in both languages in contact. However this bidirectionality obeys grammatical restrictions (Bruhn de Garavito and Ramírez-Trujillo, 2007). Therefore, convergence differs from transfer, because transfer implies the imposition of a structural property from a foreign language source (Bullock and Toribio, 2004).

Sanchez (2003) proposes the Functional Convergence Hypothesis (FCH) which states that convergence takes place "when a set of features that is not activated in language A is frequently activated by input in language B in the bilingual mind" (Sánchez, 2003:15). According to this hypothesis, the areas of the grammatical system that are vulnerable to the external influence are those that are similar but not identical in both languages. Sanchez (2003), presents a case where interference in functional categories like determinants and clitics has given rise to changes in the syntax of both languages spoken by bilinguals (Quechua-Spanish) affecting the word order and the distribution of null objects. In Sanchez's (2003) research, interference takes place in spite of the low levels of lexical borrowings of nouns and verbs.

In the case of Nahuatl and Spanish, the latter is the dominant language, while Nahuatl is marginalized. That is, there is a sociopolitical asymmetry between these languages, as proposed by Myers-Scotton (2002), where the Nahuatl speaking community coexists with strong cultural, social, political and economical pressure by the Spanish language (Hill and Hill, 1986).

6. Methodology of the present study

The data collection was made using two methods in two different towns. The first method consisted of the traditional linguistic method of eliciting particular structures from a small number of informants. Participants were given several sentences in Spanish that included prepositions and they translated them in Nahuatl. If a preposition was produced, the alternate postposition was suggested, asking if it was a possible sentence. I elicited 35 sentences with adpositions.

The second method consisted of an elicited productions task. The reason for trying a different type of test was that, using the first methodology, sometimes the absence of a context made the sentence impossible to the informants, and this was not necessarily due to an error in syntax. Therefore, a context was given to participants, so that they could not reject any structure because of the difficulty in parsing the meaning of the phrase. Taking this into account, a story was written and then told to the participants. At the same time they were shown pictures related to the story. Afterwards, they were asked some questions about what they had heard. The story was told in Spanish, and the questions were asked in Nahuatl, taking care of not including an adposition in the question. The story I used was designed to elicit 10 adpositions. However, an average of six different adpositions was produced by each informant. Some of the included sentences were taken from the literature of Nahuatl, in order to ascertain whether change had actually taken place (Garcia Escamilla, 1994; Simeon, 1885; Sullivan, 1992 and Tuggy, 1991). The authors from where some

of the sentences were taken agree in the translation of the phrases in Nahuatl that include postpositions to Spanish. Only Garcia Escamilla (1994) suggests that prepositions may be used, however he is not convinced that these are real prepositions but pseudo prepositions. For Kartunnen and Lockhart, 1976; Lockhart, 1992; Simeon, 1885; Sullivan, 1992 and Tuggy, 1991 postpositions are the only possibility.

7. Participants

One of the informants was from Cuetzalan, a place located at the North of the State of Puebla, Mexico and the other informant was from San Andres Azumiatla at the center of the State of Puebla, Mexico (See map below).
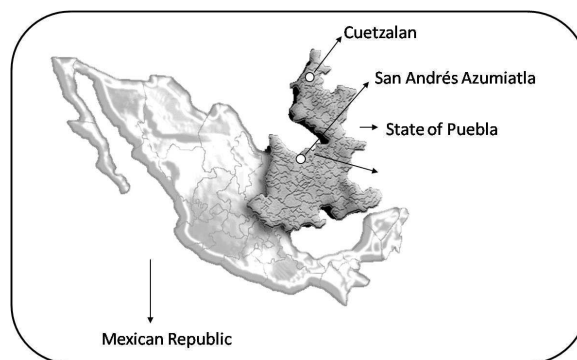

Figure 2. Map of the Mexican Republic and the location of the places where this research was carried out.

The participant from Cuetzalan was in her twenties, and knew how to read and write. She is from a family where the indigenous culture is very important. Nevertheless, she was strict in the conservation of a Spanish word order in the Nahuatl phrases. Both participants in this test have a high performance level, in both, Nahuatl and Spanish. The participant from San Andres was in her thirties and also knew how to read and write.
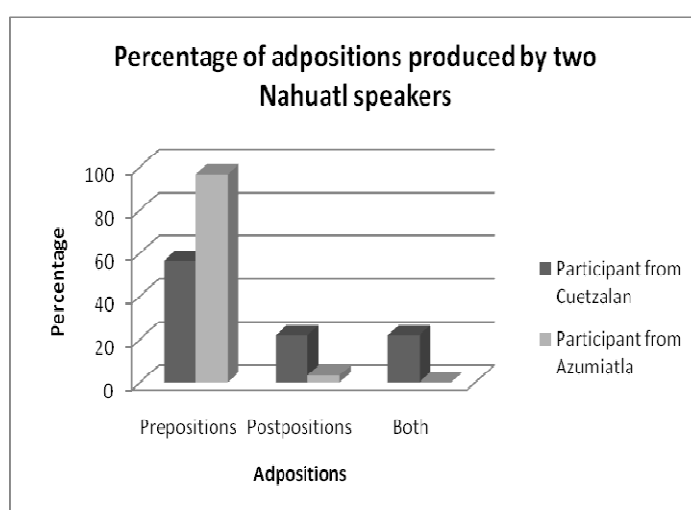
In the elicited production task, I had six participants from San Andres Azumiatla. The ages of the participants vary between 23 and 54 years. All of the participants are bilingual (Nahuatl/Spanish). They said that they speak more Spanish because they often travelled to the city of Puebla to work. Three of the participants (whose ages were between 46 and 53 years) mentioned that Nahuatl was only spoken with their close relatives and friends. The participants in this second methodology are people who do not know how to read or write.

I also had an interpreter; she was an inhabitant from San Andres Azumiatla who learned Nahuatl when she was about 18 years old. She learned Nahuatl when she got married because her mother-in-law (who speaks both languages perfectly) only addressed her in Nahuatl. This participant also shows

high levels of competence in both languages and has no problems communicating in both languages. She feels proud of the language she speaks because she says that it was difficult to learn. However, she mentioned that she speaks Spanish or Nahuatl depending on which language people address her in, although normally they would speak to her in Spanish.

8. Results

I grouped the sentences according to the adpositions that were produced. In this paper I will only present the most frequent answers.

Graph 1. Percentage of adpositions produced by two Nahuatl speakers

Two participants, one from San Andres Azumiatla and the other one from Cuetzalan, participated in the first method of elicitation. The participant from Cuetzalan produced more sentences that followed a prepositional order than a postpositional one. In contrast, the participant from Cuetzalan produced more sentences with postpositions (22%) than the participant from San Andrés Azumiatla. Nevertheless, the percentage of prepositions produced exceeded the percentage of postpositions produced by both participants (see graph 1). The participant from Cuetzalan accepted both possibilities (pre and postpostions) 22% of the time, contrary to the participant from San Andrés Azumiatla who accepted both options only 3% of the time, that is, only one sentence with a postposition.
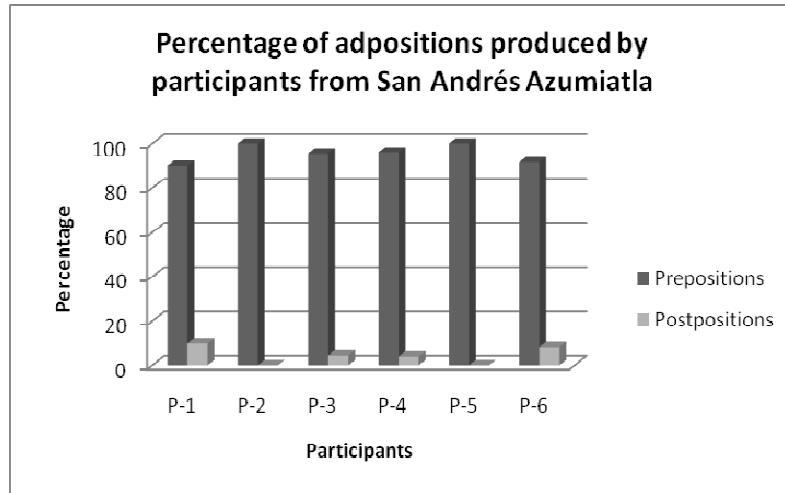
The informant from Cuetzalan accepted only 7 sentences in which both options (with pre and postposition) was possible, out of 35 cases. In the remaining 28, the postposition was rejected. The participant from San Andres Azumiatla showed a preference for prepositions, she only accepted one adposition out of 35 sentences. From her, we have the following examples:

(5) O ni - tek   in pan **con** cuchillo
Past-1sg. cut   IN bread with knife
'I cut the bread with knife'

(6)   Oni - k - tlali in talmatl i**pan** -   tlale
Past-1sg 3rd. put   IN blanket on-prep ground
'I put the blanket on the ground'

As you can see in (5) she even used the Spanish preposition "con" in one of her examples.

9. Elicited production task

In the elicited production task, participants from San Andrés Azumiatla produced more prepositions than postpositions (see Graph 2 below).

Graph 2. Percentage of adpositions produced by participants from San Andrés Azumiatla.

10. Is Nahuatl a prepositional or a postpositional language?

All authors agree that classical Nahuatl used mainly postpositions (see 1) (Tuggy (1991) and Karttunen (1976). However, there is some evidence for the presence of prepositions. For example, according to García Escamilla (1994):

"The flexibility of the Nahuatl language allows nouns to have another way to form the ablative. This less frequent alternative in the classical Nahuatl, has had a great development in the actuality because of the influence of Spanish, since it resembles the prepositional system, which

constitutes a characteristic of Romance languages, like Spanish" (García Escamilla, 1994:7:28) (translation mine)[2].

Tuggy (1999) and Karttunen (1976) also mention an alternative order for adpositions in classical Nahuatl, although in some cases they refer to them as pseudo-prepositions. Sullivan (1992) gives the following example from the Florentine Codex (translation mine):

(7) In   tlatoque   ca   quimocuitlahuitihui
    IN   kings   go-pl-pres   taking care

    ca   **i-**   **pan**   tlatotihui
    go-pl-pres   his/her-poss on-prep   talking

    in cuemitl, in   apantli
    IN arable land   IN   furrows

'The chiefs go taking care, talking on arable land and the furrows'
'Los reyes van cuidando, van hablando por los camellones, los surcos'

As example (7) shows, *pan* appears as a preposition in the phrase 'on arable land, and the furrows', However, Sullivan (1992) insists that the order is postpositional. Likewise, Simeon (1885) mentions the following constructions:

(8) a.   tlal   **pan**
          ground   sobre-posp
          'On the ground'

    b.   **i -**   **pan**   tepetl
          his/her-poss on-prep   mountain
          'On the mountain'

In these phrases prepositions and postpositions are used. However, the author also says that –*pan* in (8b) is a postposition (Simeon, 1885:371).
Further evidence for prepositions in Classical Nahuatl comes from Mexican toponyms and other names. Within this context we found several examples. Pantecatl and the toponym Panotla. Both words have a prepositional order. Panotla is the name of a locality situated in the State of Tlaxcala. A representation of its meaning is found in the Mendocino Codex (see Figure 1): it shows the sign for water and a human footprint in the middle.

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[2] Original quote: "La flexibilidad del idioma náhuatl permite que los sustantivos tengan otra manera de hacer el ablativo. Esta alternativa menos frecuente en la época clásica, ha tenido gran desarrollo en la actualidad por influencia del castellano, pues de algún modo se asemeja al **sistema preposicional**, tan característica en las lenguas neolatinas de las que el idioma español forma parte (García Escamilla, 1994:7:28).
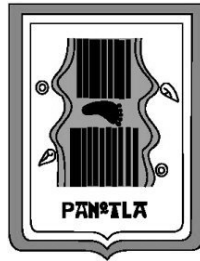
Figure 1. Glyph of Panotla, a locality in Tlaxcala, Mexico[3]

Literally we have the following:

(9)   Pan   -o-tla
        on-prep   -o-water
        'On water'

In this example, we can notice the prepositional behavior of *pan*. We can also rely on the last name *Panecatl*.

(10)   Pan   -ecatl
            on-prep   wind
            'On the wind'

In Garcia Granados (1997), we found the following (translation mine):

> "When the Spanish arrived to Guaristemba, they were welcomed, and when the people from Tzapotzingo knew of their arrival, they were guided by PANTECATL to welcome them too. When the cacique PANTECATL made sure that Nuño de Guzmán was going to continue his trip to Culiacán, he went back with his people to his town Tzapotzingo. Even though the cacique PANTECATL and his people were insulted by Nuño de Guzmán and his companion, they did not hurt the people who were leaving with Nuño de Guzmán, they comforted them instead" (García Granados, 1997:95)[4].

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[3] http://www.e-local.gob.mx/work/templates/enciclo/tlaxcala/mpios/29024a.htm

[4] Original quote: "Al llegar los españoles a Guaristemba fueron bien recibidos, y al saberlo los de Tzapotzingo son guiados por PANTECATL y van a verlo para darle la bienvenida. El cacique PANTECATL al tener noticias de que Nuño de Guzmán proseguía su viaje a Culiacán, y estando seguro de su ida, vuelve con su gente a su pueblo de Tzapotzingo. Aunque el cacique PANTECATL y los suyos habían sido agraviados por Nuño de Guzmán y los que lo acompañaban no hicieron mal alguno a los que se regresaban, sino que los consolaban" (García Granados, 1997:95).

This lets us see that the last name Pantecatl already existed since the conquest, that is, before contact with Spanish, and currently it keeps a prepositional behavior.

11. Discussion

As we have seen, prepositions existed in classical Nahuatl but they were few in number, the preferred structure being postpositions. I have shown that this is the opposite of what we presently find. It is important to note that neither in Classical Nahuatl nor in current Nahuatl were adpositions independent words. They rather function similarly to clitics, which have to be attached to another word. In the case of postpositions, these are attached to the noun. In the case of prepositions, these are attached to a possessive affix that may function as agreement (Bruhn de Garavito p.c.). For example, with the adposition -tech which means "on" with a postpositional order, the adposition is attached to the noun: as in (11) but when we have a prepositional order the adposition has to be attached to a possessive pronoun as in (12).

(11)   peta-tech (Sullivan, 1992:146)
         mat-on-prep
         'On the mat'

(12)   i-   tech   petatl (Sullivan, 1992:146)
         poss-on-prep   mat
         'On the mat'

According to Greenberg (1963), the order of certain grammatical elements is related to language word order. Greenberg proposes universal rules based on the characteristics of thirty languages. In universals 3 and 4 Greenberg argues that "languages with dominant VSO order are always prepositional (Universal 3)… [while] languages with normal SOV order are postpositional" (Greenberg, 1963:62). Since Nahuatl is a polysynthetic language and word order is free, according to Greenberg both options (pre and postpositions) are grammatically possible.

On the other hand, Travis (1984) proposes that the postpositional order in different languages is defined by the direction of case assignment, leading to prepositions in languages such as English and Spanish and postpositions in languages such as Hungarian and Turkish, for example. However, since there is evidence that Nahuatl has always permitted prepositions to a certain degree, although postpositions where by far more frequent in classical Nahuatl. I can only suppose that, being a polysynthetic language (see Baker 1996), the assignation of case is not the determining factor.

12. Summary and conclusions

As we have seen, prepositions already existed before contact with Spanish, but they were not as frequent as postpositions were. I have shown that postpositions are still possible in modern Nahuatl; however, they are not as productive as

prepositions. What Spanish did was that it opened the opportunity for speakers to choose. That is, it extended the range of syntactic possibilities, making more common the use of prepositions. That, together with the adpositional features that a language such as Nahuatl (a polysynthetic language) can have; (Baker, 2001; Bruhn de Garavito et al., 2005; Greenberg, 1963) lets us consider that both languages Spanish and Nahuatl have converged. In the case of adpositions, the change that has taken place is unidirectional, due to the fact that Spanish never had postpositions. It is important to mention that we differentiate convergence from transference. Since the last one implies the transfer of a property from one language to another where it did not exist before. Convergence, on the other hand, does not imply the imposition of a new characteristic, but as I mentioned it before, it refers to the process of comparison of structures that already existed in both languages; however, in one of them convergence is becoming more common than before. We have seen that Nahuatl is trying to survive with its own resources inside a Hispanic community, motivating changes in the language. Since Nahuatl is a language in danger I think that one of the most important factors that has to be considered in contact between Spanish and Nahuatl is the social factor, that is, the sociolinguistic history of speakers, in terms of Thomason and Kaufman (1988).

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