

Adjectives in Hueyapan Nahuatl: Do they exist? And if they do what kind of adjectives are they?¹

Magnus Pharao Hansen
Brown University

1.0 Introduction

In the study of 'exotic' languages a question that often surges and sometimes evolves into discussion, is whether they have adjectives, or whether property denominating words, that could be called adjectives, are in fact better grouped with either the word classes of nouns or verbs. This paper examines whether adjectives can be said to exist as a separate word class in the Oto-Aztecan language Hueyapan, Nahuatl spoken in central Mexico.

In recent studies of Mesoamerican languages for example Palancar (2006) argues that Otomi has no adjectives, but that the words referred to as adjectives by other Otomi scholars are in fact stative verbs. Oppositely, for Totonac, which has been claimed to be a language without adjectives, Beck (2000) argues that the property denoting words that previous scholars have relegated to the nominal category, are in fact adjectives. This paper investigates whether a class of adjectives can be defined by using Beck's arguments in Nahuatl - specifically the variety spoken in Hueyapan, Morelos - another Mesoamerican language for which there has been disagreement regarding the existence of a separate class of adjectives.

In order to arrive at conclusions about whether a language has adjectives or not,

¹ This working paper is based on fieldwork carried out in Hueyapan Morelos in several extended periods between 2004 and 2010. The author would like to thank all of his relations in Hueyapan many of whom have contributed data to this paper, an anonymous reviewer who made aluable suggestions for improvement, and the funding sources that have made research in Hueyapan possible, including Per Slomann's legat (2009) and an Internationalization Stipend from the University of Copenhagen (2006). Transcription used is phonemic. Transcription key: /ī, ē, ā, ō, / = [i: e: a: o:] /x ch, tz, tl, / = [ʃ tʃ ts tʂ] all other symbols are used with their IPA values. Gloss follows the Leipzig glossing rules which can be downloaded from the university of Leipzig homepage at <http://www.eva.mpg.de/lingua/pdf/LGR08.02.05.pdf>.

a linguist must decide on how to define the class adjective. At least two different approaches to this have been proposed. Dixon (2004) proposes to define as 'adjective' any discrete lexical class that contains property concept terms in a given language. This means that a class of adjectives can be separated from nouns or verbs through only morphological criteria, for example if the class of verbs describing property concepts are exempt from marking certain morphological categories. In terms of description this definition of 'adjective' seems rather vacuous. Defining for example a subclass of verbs as adjectives because they take slightly different morphology from other verbs, but otherwise behave syntactically as verbs, doesn't accomplish much in terms of describing the language and its categories.

Beck (2000) argues in a different vein. He maintains that word classes must be defined on syntactic grounds. He then proposes that a markedness could be the central concept when trying to separate adjectives from other syntactic word classes. He proposes that if a class of words have several functions e.g. if property words both have functions as predicates and as modifiers of nouns, it becomes relevant to see which of those functions is more marked than the other, and use only the least marked function to define the word class to which it belongs. He defines markedness in three separate ways.

Structural complexity: a sign is more marked than another if it requires a more structurally (morphologically or syntactically) complex expression. E.g. if a property word requires a copula particle or separate agreement morphemes when functioning as a predicate, but not when modifying an NP, then it would be said to be marked in its function as predicate and its function as NP modifier would be basic.

Another criteria would be contextual markedness: a sign is more marked in a certain environment if the sign displays a restricted or extended set of properties in that environment than when it occurs in other environments. Beck gives the example of English nouns that lose their referentiality when used attributively rather than as actants as an example of this kind of markedness. Another kind of contextual markedness not discussed by Beck could be frequency: a sign could be said to be

contextually marked in a certain environment if it appears with significantly lower frequency in this environment than in other environments in discourse.

The last kind of markedness discussed by Beck is cognitive markedness: a sign is more marked than another if it is a less direct expression of meaning (e.g. if it is less iconic).

Although one can imagine a situation in which the criteria of markedness are in conflict, Beck does not discuss what to do in such cases. For example there could be a situation in which it will be a basically arbitrary choice whether to see a sign as being structurally marked in environment A (because it requires more complex marking) or having restricted properties in environment B (because it can take less marking). Since no such situations arise in the following analysis, like Beck, I will refrain from undertaking that discussion here.

Following the criteria of markedness, in this way a class of adjectives can be distinguished if its members appear to be unmarked (in any of the previously mentioned senses of markedness) when occurring in the adjectival function (as modifiers of nouns). In the following I will test whether Beck's proposal of using markedness as a litmus test allows us to determine whether property words in Hueyapan Nahuatl can be considered a separate word class or not.

2.0 Hueyapan Nahuatl word classes

Hueyapan is a town in the north eastern corner of the state of Morelos in central Mexico. Located about 2500-3000 meters above sea level on the southern slopes of Mt. Popocatepetl, It is the home of approximately 6900 inhabitants of indigenous Nahua ethnicity. The Nahuatl language is a Uto-Aztecan language of the Aztecan branch, and the Hueyapan dialect belongs to the central dialect group in the classification of Lastra (1986). In Hueyapan the Nahuatl language is severely endangered since natural transmission ceased from about 1970, inhabitants born later than this are usually monolingual Spanish speakers or have only passive Nahuatl competence.

There is literature about other varieties of Nahuatl such as the textually documented colonial variety often called 'Classical Náhuatl' (described exhaustively in Launey 1983). The Hueyapan dialect has been the object of two published studies: Campbell's (1976) description of a specific morphophonemic rule, and Johansson's (1989) description of the system of the honorific registers, as well as my study of sociolinguistic processes in the Nahuatl language congregation of Jehovah's Witnesses in Hueyapan (Pharao Hansen 2010), and a forthcoming study the effects of linguistic contact with Spanish on morphosyntactic typology (Pharao Hansen in press).

Hueyapan Nahuatl has two large open word classes: verbs and nouns. Nahuatl scholars have often noticed that the distinction between these two classes is much less strict than in many other languages. Among the similarities between the classes are that both function as predicates or as syntactic arguments of VPs without any overt marking. For example the examples 1 and 2 are structurally identical although one uses a verbal and the other a nominal predicate, examples 3 and 4 are structurally identical although 4 uses a noun as the object argument of the transitive verb and 3 uses a verb.

(1)	a. \emptyset -	<i>kochi</i>	b. <i>ti</i> -	<i>kochi</i>
	3SBJ-	sleep	2SBJ-	sleep
		<i>"it sleeps"</i>		<i>"you sleep"</i>

(2)	a. \emptyset -	<i>tlāka-tl</i>	b. <i>ti</i> -	<i>tlāka-tl</i>
	3SBJ-	man-ABS	2SBJ-	man-ABS
		<i>"its a man"</i>		<i>"you are a man"</i>

(3)	<i>ni</i> -	<i>k</i> -	<i>kwalitta</i>	<i>ni</i> -	<i>tla</i> -	<i>kwa</i>
	1SBJ-	3OBJ-	like	1SBJ-	OBJ.INDEF-	eat
	<i>"I like to eat" (lit. "I like it, I eat")</i>					

- (4) *ni- k- kwalitta naka- tl*
1SBJ- 3OBJ- like meat- ABS
“I like meat” (lit. I like it, meat)

However, morphologically, the classes of nouns and verbs can be separated, since only verbs take morphology relating to transitivity and tense, aspect and mood, and only nouns take possessive morphology. Also the two classes behave differently with respect to grammatical number, the honorific system, and they take different derivational markings. Nonetheless this overlap of syntactic functions between the two classes is bound to complicate the matter of comparing adjectives to nouns or verbs. For a more exhaustive treatment of the morphosyntactic typology of Hueyapan Nahuatl see Pharaoh Hansen (in press).

A third class of property words are also distinguishable on morphological grounds: property words such as *wēyi* 'big', *kwalle* 'good', *īstak* 'white' *katzāwak* 'dirty' *yānkwīk* 'new' are able to function both as predicates or arguments just like nouns or verbs, but they do not partake in any of the morphological categories that are specific to either verbs (T/A/M) or nouns (possession). This means that in Dixonian terms Hueyapan Nahuatl does have an adjective class – a class of words describing properties that is morphologically distinguishable. But as previously mentioned this definition seems too shallow to be really informative.

According to Launey (1992:107-111) Classical Nahuatl does not have adjectives because no class of words specifically have the function of modifying nouns. In Classical Nahuatl property words can function as arguments just like nouns, or like predicates just like verbs. And nouns can be modified by any other noun, not only property words. E.g. *in pātli xihuitl* “the medicinal herb” or *in mexicatl cihuātl* “the Mexican woman”. This explanation of course does not take into account the notion of markedness in function, but merely notes that both property words and nouns can take on the adjectival function.

The situation is more or less the same in Hueyapan Nahuatl, with a few complications. In Hueyapan Nahuatl property words can function as predicates or arguments just as in Classical Nahuatl and we get:

(5) *ti- tlāka-tl*
2SBJ- man-ABS
“you are a man”

(6) *ti- wēyi*
2SBJ- big
“you are big”

(7) *inin ø- wēyi*
this 3SBJ- big
“this one is big”

(8) *xi- nēch- maka in xok-tle*
IMP- 1OBJ- give DET pot-ABS
“give me the pot”

(9) *xi- nēch- maka in wēyi*
IMP- 1OBJ- give DET big
“give me the big one”

And while property words can function as modifiers of nouns, so can almost any noun denoting a concept with some salient property.

(10) *inin xiwi-tl ø- [wēyi pah- tle]*
this herb-ABS 3SBJ- [big medicine- ABS]

this herb is a potent medicine”

- (11) *inin tlanamakak* \emptyset - [*se* *pitzo-tl* *soā-tl*]
this vendor 3SBJ- [one pig-ABS woman-ABS]
“this vendor is a dirty woman”

Again this merely exemplifies that there is an overlap between functions of nouns and predicates, but does not address the notion of markedness.

3.0. Markedness analyses of Hueyapan Nahuatl data

3.1. Frequency of property words in functions as modifiers and arguments

In order to determine which function is more marked for property words in Hueyapan Nahuatl I analyzed the frequency with which property words occurred as modifiers of NPs, as arguments of predicates, or as predicates in 4 'Frog stories'.

Two stories were told by speakers who were highly fluent in Nahuatl and who use it in every day communication. One story contained 92 clauses (defined prosodically as a complete utterance), the other 302. Of these 394 clauses only one phrase used a property word, *wēyi* “big”, to modify a noun. No phrases used nouns to modify a noun. 14 phrases used a property word as a freestanding predicate. I also reviewed three longer narratives told by proficient speakers and found no occurrences of property words modifying nouns, confirming the low frequency of this construction among proficient speakers.

Two of the stories were told by speakers who can be classified as semi-speakers, and whose language use is markedly influenced by Spanish syntax. For example these speakers have much higher frequency of free standing NP arguments than the more

proficient speakers, and more rigid SVO word order than the free, pragmatically driven verb initial word order used by the more proficient speakers. The two stories contained 88 and 98 phrases respectively and used property words as modifiers of nouns 2 and 4 times respectively. They did also not use nouns as modifiers of other nouns, nor were there any occurrences of property words as predicates.

The frequency analysis shows that the overall usage of both nouns and property words as predicates or as syntactic arguments is far more frequent than their use as modifiers. The analysis also revealed an interesting sociolinguistic phenomena, namely that syntactic influence from Spanish is positively correlated with a higher frequency of property words as modifier. However, the use of contextual markedness as a criterion does not offer us a definite answer. Apparently the modifying function of property words is unmarked for semi-speakers, but marked for proficient speakers for whom the unmarked function for both general nouns and property words is the predicative function.

3.2. Applying Beck's markedness tests

The idea of structural complexity as markedness appears to offer a more clear cut criterion. By examining how nouns behave in relation to property words when used as modifiers, and how property words behave compared to nouns when used as arguments, we may be able to discern whether one of the functions is less marked for either class. One important distinction that Beck shows between nouns and adjectives in Totonac, is that adjectives, when used as arguments, take an elliptical, anaphoric reading. i.e. if there is no easily recoverable antecedent that the listener can identify as being the referent of the adjective, the utterance is considered ungrammatical.² This according to Beck shows that Totonac property words are cognitively marked in the

2 . Beck, using a formal criterion, refers to this reading as 'elliptical' since the property word seems to omit the nouns that it modifies, the implicit head of the NP. Another more functional description of this phenomenon would be to see it as a deictic reading, as suggested by an anonymous reviewer.

function as actants, because their use here is not a direct reflection of their meaning (i.e. non-iconic).

In Hueyapan Nahuatl some property words behave like that while others do not: The sentences 12 and 13 are deemed acceptable as the beginning of a narrative, while 14-16 are deemed infelicitous as the beginning of a narrative, because they fail to identify the referent of the property word, the presumed protagonist of the narrative and topic of the following sentences.

(12) *ō- yī- ya sep-pa se tlatzih-ki*
PRF- be- IPFV one-time one lazy-AG
“there once was a lazy person”

(13) *ō- yī- ya sep-pa se ihiwiyān*
PRF- be- IPFV one-time one intelligent
“there once was an intelligent person”

(14) **ō- yī- ya sep-pa se kwal-le*
PRF- be- IPFV one-time one good-abs
“there once was a good one”,

(15) **ō- yī- ya sep-pa se wēyi*
PRF- be- IPFV one-time one big
“there once was a big one”

(16) **ō- yī- ya sep-pa se īstak*
PRF- be- IPFV one-time one white
“there once was a white one”

However, I am unconvinced that this is in it self a good way to distinguish adjectives from nouns. It seems to me that this test rather serves to distinguish words that describe

properties that are generally attributable to any kind of referent, from property words that proto-typically describe a specific kind of referent i.e. humans. Only the latter can be used without specifying the referent beforehand. In other words this may simply be a semantic subdivision of property words (with certain pragmatic implications), not necessarily a distinction between separate syntactic word classes. In this respect we can conclude that some property words (those that do semantically specify the prototype of their referent) are subject to restrictions (be they pragmatic/semantic or syntactic) that other words in the function as actant are not. This could be an argument to see those property words as a specific class of adjectives, but not a particularly strong one on its own.

Another test made by Beck is that of quantification with 'very' (*tunká* in Upper Necaxa Totonac). In Totonac *tunká* can quantify adjectival predicates and certain kinds of gradable verbal predicates but not nominal predicates. In Nahuatl the expressions comparable to Totonac *tunká*, *deh kwalle* "very/a lot" and *okachi* "more", can be used with nominal as well as verbal predicates, and with predicates made of property words:

- (17) *nin* \emptyset - [*deh. kwalle wēyi*]
this.one 3SBJ- [very big]
"this one is very big"

(examples 18-25 have the same basic syntactic structure as 17, so no gloss will be provided)

- (18) *nin deh kwalle īstak* "this one is very white "
(19) *nin deh kwalle katzawak* "this one is very dirty "
(20) *nin deh kwalle kwalle* "this one is very good "
(21) *nin deh kwalle tekiki* "this one is really a worker"
(22) *nin deh kwalle tekiti* "this one works a lot"

- (23) *nin deh kwalle tlakwa* “this one eats a lot ”
 (24) *nin deh kwalle xastle* “this one is really a drunk”
 (25) *nin deh kwalle pitzotl* “this one is really a pig”

Another aspect of quantification is the patterns of pluralization, which Beck also uses as an example of differences between nouns and adjectives in Totonac. This test also doesn't work well in Nahuatl, where pluralization in all word classes is variable and determined mostly by the kinds of derivational processes that nouns have undergone. E.g. property words derived from verbs with a *-(t)k* suffix (a remnant of the perfect suffix) take the verbal past plural suffix *-keh*. Those that are morphologically nouns (i.e. that take the absolutive suffix) take the nominal plural suffixes *-tin* or *-meh*. Those that are derived with diminutive endings *-tzin* or *-tōn* take the plurals *-tzitzīn* and *-totōn*. And finally a number are irregular forming the plural with reduplication, just as with some nouns.

	Sg.	Pl.
white	<i>īstak</i>	<i>īstak-keh</i>
bent	<i>koltik</i>	<i>koltik-keh</i>
dirty	<i>katzāwak</i>	<i>katzāwak-keh</i>
good	<i>kwalle</i>	<i>kwal-tin</i>
pretty	<i>kwākwaltzin</i>	<i>kwākwal-tzitzīn</i>
pretty	<i>kwaltōn</i>	<i>kwal-totōn</i>
intelligent	<i>ihīwiyān</i>	<i>ihīwiyān-tin?</i>
big	<i>wēyi</i>	<i>weh~wēyi</i>

Table 1. Plurals of property words in Hueyapan Nahuatl

Again we cannot use this test to determine whether property words are a separate syntactic class: nouns, verbs and property words behave the same with respect to

quantification, intensification and pluralization.

When forming predicates, property words align with nouns in that they both need a copula to inflect for tense:

(26) *ō- ti- ye-k ti- xas-tle*
PST- 2SBJ- be-PRF 2SBJ- drunk-ABS
“you were a drunk”

(27) *ō- ti- ye-k ti-wēyi*
PST- 2SBJ- be-PRF 2SBJ-big
“you were big”

(28) *ti- yē-s ti- xas-tle*
2SBJ- be-FUT 2SBJ- drunk-ABS
“you will be a drunk”

(29) *ti- yē-s ti-wēyi*
2SBJ-be-FUT 2SBJ-big
“you will be big”

In the function as modifier the noun or property word does not need this overt copula, but follows the tense of the main predicate, not even when forming relative clauses.

(30) *ō- yī-ya sep-pa se tlāka-tl tlatzih-ki*
PRF- be-IPFV one-time one man-ABS lazy-AG
“there once was a lazy man”

(31) *ō- yī-ya sep-pa se tlāka-tl non ø-tlatzih-ki*
PRF- be-IPFV one-time one man-ABS REL ø-lazy-AG
“there once was a man who was lazy”

This could be used as an argument in favor of seeing nouns and property words as marked when occurring in the function as predicates, because they require more marking (Further Means in the terminology of Hengeveld 1992) when used as predicates than when they are used as modifiers. But it doesn't suffice to show that property words are a distinct lexical class from nouns.

One parameter that may be of significance in Nahuatl, but seems not to be treated as such in Palancar's and Beck's treatments of Otomi and Totonac is the relative place of modifiers to the noun they modify. In Hueyapan Nahuatl modifiers of nouns may occur before (examples 10 and 11) or after (example 30) the noun they modify.

The investigation of relative order of modifiers and nouns become further complicated by the fact that since nouns and property words can both function as predicates with no overt marking, and since relative clauses can be unheaded, it is often impossible to distinguish simple adjectival modifiers from relative clauses.

For Classical Nahuatl, Langacker (1976) gave examples of preposed relative clauses, but suggested that post-nominal position was natural for the Nahuatl relative clause, and that it may be pre-posed under certain circumstances. He notes that examples of pre-posed relative clauses are scarce and that they are usually short. An example is

- (34) *in ø-ki-namaka ichka-tl*
DET 3SBJ-3OBJ-sell wool-ABS
"the wool that he sells"

I don't have any such clear examples of pre-posed relative clauses from Hueyapan Nahuatl, in fact the only modifiers that I have observed pre-posed the noun they modify are prototypical adjectives.

- (35) *wēyi pah-tle*

big medicine-ABS
'potent medicine'

(36) *se kwal-le tōnal-le*
one good-ABS day-ABS
'a fine day'

(37) *in chichiltik xōchi-tl*
DET red flower-ABS
'the red flower'

Intuitively, it seems to me that in Hueyapan Nahuatl modifiers that are post-posed the noun are usually best analyzed as relative clauses, i.e. as predicates rather than simple modifiers, whereas pre-posed modifiers are usually best analyzed as adjectives. But as I do not know of a test to determine whether a modifier is in fact a relative clause or an adjective, I am unable to corroborate my intuition with hard evidence.

At least, I can show that *only* post-posed modifiers can function as *headed* relative clauses, the relativizing particle *non* only ever occurs after the nouns it modifies:

(38) *se tlāka-tl non ø-tlatzih- ki*
one man-ABS REL ø-lazy- ag
“a man who is lazy”

(39) *se tlāka-tl non ø-tla- kwa*
one man-ABS REL ø-INDEF.OBJ- eat
“a man who eats”

(40) *se tlāka-tl non wēyi*
one man-ABS REL ø-BIG

“a man who is big”

This, admittedly sparse, data suggests that the adjectival modifying function is linked to the pre-nominal position, whereas post-posed modifiers are proto-typically relative clauses. This interpretation would allow us to determine as adjectives those modifiers that are contextually unmarked when occurring in the pre-nominal positions (a full study of a larger corpus would have to be carried out to determine which those words might be, but *wēyi*, *kwalle*, *kwaltōn*, color words, and other words derived with *-tik* would be probable candidates). It would also be helpful to be able to determine whether these words would then be structurally marked when occurring in post-nominal position e.g. whether they invariably function as relative clauses, or whether they can also function as adjectives in post-nominal position.

Another possibility is simply that Hueyapan Nahuatl does not allow pre-posed modifiers to be 'heavy' (in the sense of being either polysyllabic or syntactically/morphologically complex). This interpretation does not allow us to distinguish between adjectives and other modifiers, since the principle governing whether a modifier can occur in pre-nominal position is merely its relative 'weight' and not the lexical class to which the word belongs.

3.0 Conclusion

Summing up, we have not been able to determine whether words denoting property is a separate lexical class in Hueyapan Nahuatl according to the principle of markedness proposed by Beck (2000). Hueyapan Nahuatl property words behave like all other verbs and nouns in that they can both take on functions of predicates and as syntactic arguments of predicates Without Further Means. Except that they behave like nouns in that they require an overt copula to inflect for tense, aspect and mood. They also behave like both verbal and nominal predicates with respect to quantification. Some property words take an elliptical or deictic reading when used as NP arguments – this

may be a semantic/pragmatic rather than syntactic restriction. And possibly, a class of adjectives may be linked to the pre-nominal modifier position, but this could also be a question of relative weight being determining factor for whether a modifier can occur before or only after the noun it modifies. In short, if Hueyapan Nahuatl has a class of adjectives they are much less clearly so than the adjectives of Totonac, and they have much more in common with both nouns and verbs, than the Totonac adjectives do with nouns. It is also not the case that the property words of Hueyapan Nahuatl can be distinguished clearly as belonging to the either of the classes of nouns or verbs, as is the case in Otomi, they do seem to be a discrete class in some respects. This means that in the terminology of Dixon, Hueyapan Nahuatl property words *are* a class of 'adjectives'.

Personally, I would be inclined to analyze the word classes of Hueyapan as having a basic split between words that can form predicates and words that can't. Those that can't are for example particles, adverbs and locatives. Among those that can, there are three rough classes: verbs, nouns and statives. Statives are different from nouns and verbs in that they do not take any of the morphology associated specifically with those classes, and in that semantically they are used principally to make predications of qualities or states about referents in discourse. However I would prefer to avoid to label the class of statives as adjectives. This because whether or not the prototypical adjectival function (that of modifying nouns) is marked or unmarked for all or some stative words, it is a possibility that is very infrequently used in the language. To characterize modification of nouns as the primary function of all statives seems to me to be a mischaracterization of the language as it is used by its speakers, and to obscure rather than to illuminate the description of how property concepts are in fact expressed in Hueyapan Nahuatl. The possibility remains however that there is a subclass of statives that are primarily modifiers, in which case Nahuatl is likely to belong to the group of languages with a small closed class of adjectives. But as long as we can find no clear syntactic criterion to define this subclass, the existence of adjectives in Hueyapan Nahuatl remains dubious.

References:

- Beck, David (2000) The syntax, semantics, and typology of adjectives in Upper Necaxa Totonac. *Linguistic Typology*. 4:213–50.
- Campbell, Lyle (1985) *The Pipil language of El Salvador*. Berlin: Mouton.
- Campbell, R. Joe (1976) Underlying /ŋʷ/ in Hueyapan Nahuatl. *International Journal of American Linguistics*. 42:1. 46-50
- Dixon, R. M. W. (2004) Adjective classes in typological perspective. *Adjective Classes: A Cross-Linguistic Typology*, ed. R. M. W. Dixon and Alexandra Aikhenvald, pp. 1–49. Oxford: Oxford University Press.
- Hengeveld, Kees (1992) *Non-Verbal Predication: Theory, Typology, and Diachrony*. Berlin:Mouton de Gruyter.
- Johansson, Patrick (1989) El sistema de expresión reverencial en Hueyapan, Morelos. *Tlalocan XI*. 149-162
- Langacker, Ronald W. (1975) Relative Clauses in Classical Nahuatl. *International Journal of American Linguistics*, 41:46-68.
- Lastra de Suárez, Yolanda (1986) *Las áreas dialectales del náhuatl moderno*. Serie antropológica, no. 62. Ciudad Universitaria, México, D.F.:Universidad Nacional Autónoma de México, Instituto de Investigaciones Antropológicas.
- Launey, Michel. (1992) [1979] *Introducción a la lengua y a la literatura Náhuatl*. UNAM, Mexico. Translated from the French by Kristina Kraft.
- Palancar, Enrique. (2006) Property concepts in Otomi: A language with no adjectives. *International Journal of American Linguistics*, 72:325–66.
- Pharao Hansen, Magnus. (2010) Nahuatl among Jehovah's Witnesses of Hueyapan, Morelos: A case of Spontaneous revitalization. *International Journal of the Sociology of Language*. 203:125–137.
- Pharao Hansen, Magnus. (in press) Polysynthesis in Hueyapan Nahuatl: The status of NP's, basic word order and other concerns. *Anthropological linguistics*.

Author contact information:

Magnus Pharao Hansen: magnus_pharao_hansen@brown.edu