

Preliminary Remarks on the Syntax and Semantics O'odham (Papago) Particles*

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0. Introduction.

An O'odham sentence, spoken in any situation which could be called "ordinary" or "normal," contains at least one particle — very often several particles — drawn from an impressive and diverse inventory (see Appendix II). Sentences without particles are perfectly grammatical, but in actual fact, ordinary speech virtually brims with them. For the most part, the particles catalogued in Appendix II, are those which are not part of a paradigmatic set (e.g., locatives, mood) or part of the inflectional system of the extended projection of the verb. With some exceptions, they are limited in their occurrence to the Left Field in the syntactic structures of grammatical sentences (see Appendix I). The principle exceptions are the "propositional particles," like *da:pī* 'I don't know,' which can constitute full utterances on their own.

Particles are the only "part of speech" which has vowel-initial members. Since no sentence can be vowel initial, various strategies are employed to avoid this in the interaction between a vowel-initial particle and those forms of the auxiliary which avoid initial position, giving rise to the aux-second order which prevails in O'odham finite clauses. The irrealis particle *o* (glossed FUT) either blocks aux-second or else employs the composite form *w-o*, with *w-* appearing in initial position. Where aux-second is blocked in the irrealis, and the *w-o* alternative is not taken, the auxiliary itself accommodates the situation by appearing with the complementizer *ku-*, and hence in "second position," the complementizer counting as initial. This *ku*-complementizer may itself delete, if the auxiliary base is overt, superficially leaving the

* This summary of thoughts on O'odham Particles is based on work currently being done together with two of my colleagues in O'odham linguistic research, Albert Alvarez and Ofelia Zepeda. Alvarez is in the process of extending the exemplification of the particles in Appendix II and preparing essays, in O'odham (with translation), on their meanings and semantic properties. The remarks on *ge* and *wud** are based on a project begun two years ago with Zepeda in which the grammatical and semantic properties of the copular particle *wud**, in particular, are examined. The extraction disparity between *ge* and *wud** came to light when we began to work on the latter, and though this is made the focus of interest in this paper, it is the grammar of *wud** itself, barely touched on here, which has been the focus of our still incipient work on the O'odham equational construction.

auxiliary in initial position and stripped, so to speak, of the initial CV support element ('*a-*') which would ordinarily appear on an unprefix auxiliary. The particles *as** 'just, merely' and *as*kia* 'still, yet,' actually block aux-second, giving the only true case in which the auxiliary must remain initial (thereby avoiding a vowel-initial sentence). These remarks are illustrated in the following:

- (1) (a) w-at o 'i gei.
w-tAUX3 FUT INCEP fall:PERF
'He/she/it will fall.'
'He/she/it is liable to fall.'
- (b) k-Ø hed*ai s*oak?.
COMP-AUX3 who cry:IMPERF
'Who is crying.'
- (c) (ku-)t o 'i gei.
(COMP)-tAUX3 FUT INCEP fall:PERF
'He/she/it will fall.'
'He/she/it would fall (generic).'
- (d) 'o as*kia ko:s* g 'ali.
AUX3 still sleep:IMPERF ART child
'The child is still sleeping.'

The subsequential particle *hahawa* ~ *ahawa* 'now, then, after that, subsequently, ...' employs the h-initial alternant in its (rare) pre-aux occurrences, as in *hahawa 'añ s-gegokig* 'I am able to stand now', beside *(ku)ñ ahawa s-gegokig*. Some particles, including the vowel initial referential particle *a* 'y'know, recall, ...', always occur somewhere to the right of the auxiliary in positions which never obtrude the aux-second principle.

It is unlikely that the pair (1a) and (1c) are true alternants in modern O'odham. The first has acquired a distinctive semantics, being primarily admonitive, or evitative, while the second is simply a prediction (or a generic, in the other principal use of the irrealis particle *o*).

The particles in the appendix are, for the most part, *non-paradigmatic* and highly diverse in their semantic and syntactic properties (see Mathiot 1974 for ample discussion of paradigmatic particles and clitics). With few exceptions, no two particles in Appendix II "behave the same." In what follows, just three particles will be discussed. The first, referential *a*, is cited simply as an expository device to exemplify a minimum of what must be said about any given particle to achieve some degree of descriptive adequacy for its entry in the lexicon. I will not pretend that the semantic and grammatical terminology that I employ here is necessarily correct or accepted (e.g., terms

like "referential" and "equational" are used without any attempt to adhere strictly to their technical uses in the literature). It is chosen primarily for the convenience of having a terminology at all, and it is hoped that the reader can come to an (at least) partial appreciation of the meanings and grammatical features of the particles through an examination of examples in the text and the alphabetized entries and accompanying examples given in Appendix II.

The other two particles to be discussed here (i.e., positive or affirmative *ge*, and copular or equational *wud**) are chosen both because of their importance and prominence in O'odham grammar and because they illustrate a certain difference in syntactic behavior which is initially unexpected and must be explained, or at least adequately described, in an acceptable account of O'odham particles and grammatical features generally. However, I cannot claim at this point that the account I will be giving is in any sense adequate, of course. In general, this discussion is intended as a "prolegomenon" to the study of O'odham particles, no more.

1. Referential *a*.

For each particle entered in the O'odham lexicon, we hope to establish the information a reader of an adequate O'odham dictionary would need to have in order to use the item in speaking the language. This includes at least the following categories of information:

- (i) phonological and morphological properties;
- (ii) syntactic properties;
- (iii) meaning and semantic properties;
- (iv) special uses and extensions;
- (v) consequences and problems arising from the inherent properties.

This is probably the minimum of information which must be provided for an adequate lexical entry for *any* category, in fact. I will remark now on what we know, so far, about each of the categories (i-v) as it relates to referential *a*.

(i)

The morphophonology of this particle is embodied in the lemma itself i.e., {*a*}, using curly brackets ({ }) to identify the lemma of lexical entries, where necessary. In short, the particle is vowel-initial and has no alternants.

(ii)

The syntax of a particle is taken to include, first and foremost, its basic position(s) in the Left Field. Particles of identical shape, viz /*a*/, appear in at least two positions in the Left Field, one high, the other relatively low. It is begging the question to assert that these are, or are not, occurrences of one

and the same particle. (They will be referred to as high-*a* and low-*a* for purposes of discussion.) High-*a* is always immediately preceded by the auxiliary; in reality, it functions together with the auxiliary in relation to the aux-second principle of O'odham word order. Consequently, in embedded clauses, it precedes a raised subject and/or object, if present (as in (2c,d) below; but in computerless main clauses, since it follows the auxiliary, it also follows any pre-aux constituent, including a subject or object DP (as in (2a,b). Low-*a* occupies the "slot," or relative order position, immediately following the future (or irrealis) particle *o* (glossed FUT). These locations are indicated in the Left Field diagram of Appendix I.

(iii)

The meaning and semantics of high-*a* are quite clear, and are suggested by the label "referential." The particle is an *event referential* marker, for lack of a better term, having the effect of "picking up an event referent" previously introduced in discourse or nonverbal context. Although it appears in simple sentences, as in (2a,b), it is especially frequent in relative clauses, as in (2c...), where it has an evocative force:

- (2) (a) Huan 'at a 'id mea jud*umĩ.
John AUX3 a this kill:PERF bear
'John killed this bear (as you know).'
- (b) Huan 'at a g jud*umĩ pi mea.
John AUX3 a ART bear NEG kill:PERF
'John didn't kill the bear (as you know).'
- (c) Hegai 'o'odham mats* a g ko'owĩ kei ('a)ts* mu:.
that person C:tAUX.RPT a ART rattler bite:PERF tAUX:RPT
die:PERF
'That man that (as you know) the rattlesnake bit died.'
- (d) No 'amai matt a go:k 'am ha-kokda g huawĩ.
Q:AUX3 there C:tAUX1p a two there 3p-kill:pl:PERF ART
mule deer
'Is that where we killed two mule deer (remember) ?'

It also appears in the discontinuous evocative particle complex *hemsĩ ... a*, the first part of which (though nonverbal) "takes" a relative clause "complement" containing high-*a*. This complex has the discourse effect of explicitly eliciting the addressee's memory of an event or eventuality, as in (3):

- (3) (a) **Hemsĩ** g Husi mat a g to:lo 'e:biñ.
hemsĩ ART Joe C:tAUX3 a ART bull scare:PERF
'Remember when the bull scared Joe.'

- (b) **Hemsi** 'ed*a mant a g si:kĩ gatwi.
hemsi then C:tAUX1s a ART deer shoot:PERF
 'Remember the time I shot the (whitetailed) deer.'

(iv)

Low-*a* is poorly understood, semantically, and we can say little about it as an autonomous element. I will classify my brief exemplification of it as belonging to category (iv), special uses and extensions. It typically appears as a final (often separated) component in formulaic and fixed expressions (as in (4a,b)) and in a number of particle complexes (represented in (4c,d) by the discontinuous necessitative expression *hemho ... a* 'must, have to'):

- (4) (a) Nt o a ('ep) m-ñei.
 C:tAUX1s FUT a (again) 2s-see:PERF
 'I'll see you (again).'
- (b) Jios* 'at o a s-m-ho'ige'el.
 God tAUX3 FUT a POS-2s-bless:PERF
 'God will bless you (= thank you).'
- (c) M 'at ha-'ui g 'o'ohon nas*pi hab 'e-'a:g
 'He took the books because he thought
- mat **hemho** o a ha-ñeokcul.
 C:tAUX3 **hemho** FUT a 3p-read:PERF
 'that he had to read them.'
- (d) 'A:ñ 'ant o cihä
 'I will order him
- (ku)t **hemho** 'am hab o a ju:.
 C:tAUX3 **hemho** there thus FUT a do:PERF
 and he'll have do it.'

(v)

High-*a* is syntactically dependent upon an auxiliary belonging to the finite declarative system, i.e., specified for subject agreement, by pronominal suffix to the aux-base, and for tense and aspect (the "plain" base being used for the unmarked imperfective, the t-base (tAUX) for the "marked" categories, future/irrealis tense and perfective aspect). Its high position and attachment to the auxiliary probably correlates with its semantic property of taking an entire proposition, and hence event structure, within its scope. Furthermore, its semantic character probably also accounts for its inability to

appear in presentational sentences with the neutral and unaltering, always clause-initial, presentational auxiliary *m*, as shown in in (5a,b), contrasting with ordinary finite declarative (5c):

- (5) (a) M gd* hu cikpan g ñ-'o:g. (presentational)
 pAUX there:below DISTAL work:IMPERF ART 1s-father
 '(Down) there (pointing) works my father.'
- (b) *M a gd* hu cikpan g ñ-'o:g.
 pAUX a there:below DISTAL work:IMPERF ART 1s-father
- (c) Ñ-'o:g 'o gd* hu cikpan. (declarative)
 1s-father AUX3 there:below DISTAL work:IMPERF
 'My father is working down there.'

High-*a* is also incompatible with the imperative auxiliary *g*, as shown by the grammaticality contrast in (6) below, a contrast which is perhaps understandable if imperatives always *introduce*, as opposed to *picking up*, a referent in discourse:

- (6) (a) B g si s*oñhin g gogs.
 there IMPERATIVE INTENSE strike:IMPERF ART dog
 'Strike/hit the dog!'
- (b) *B g a si s*oñhin g gogs.
 there a IMPERATIVE INTENSE strike:IMPERF ART dog

And there are limits, not yet fully known, on what can appear in pre-aux position in the presence of high-*a*, the verb cannot appear there, for example. Contrast the following:

- (7) (a) Mea 'at g Huan 'i:da jud*umï.
 kill:PERF tAUX3 ART John this bear.
 'John killed this bear.'
- (b) *Mea 'at a g Huan 'i:da jud*umï.
 kill:PERF tAUX3 a ART John this bear.

Thus, evidently, the verb must be entirely *within* the scope of the high-*a* referential particle.

A remaining problem, of course, is the question of the identification of low-*a* with high-*a*. The semantic differences could be due to the position the two elements occupy, rather than to the particles themselves. We cannot say anything about it at this point, but the solution may turn on the interpretation

of such sentences as (8b), in which low-*a* is as nearly "autonomous and independent" as it can ever be:

- (8) (a) 'A:pi 'ap hab ñ-'a:gid.
you AUX2s thus 1s-tell:IMPERF
'You told me about it.'
- (b) 'A:pi 'ap hab a ñ-'a:gid.
you AUX2s hab a 1s-tell:IMPERF
'You told me about it (after all).'

Here, low-*a* immediately follows the particle *hab* (approximately 'thus'), a regular companion of verbs of saying and doing. The English tag *after all* seems to me to capture the sense of it, and it is not impossible to imagine that this is within the semantic range of the referential particle in its high-*a* occurrences. The Saxton, Saxton and Enos, in their 1983 dictionary of O'dham, transcribe the particle as *wa/-a*, graphic *w* and the hyphen being their devices for indicating that a particle is vowel-initial, rather than '-initial. Of its meaning, they say that it "indicates shared knowledge or expectation," giving (4a) as one their examples — they also give the sentence (in their orthography) *kut 'am-o wa hih* 'he'd go there as we know'. This accords perfectly with our sense of the meaning of low-*a* in its most nearly autonomous — i.e., least dependent — uses. Here again, the meaning is not totally outside the range of the meaning of high-*a*. It is in some sense event-referential even here. If so, what do the differences in syntactic position contribute to the semantics of *a*?

If the high and low variants of this particle are occurrences of the same element, and if it is correct, as the orthography often suggests, that it is morphologically separate from what immediately precedes it, like a "true" particle, as opposed to an enclitic, we might then have evidence bearing directly on a question of long standing in regard to the aux-second principle. Does the auxiliary move to the right to reach aux-second, or does some other element move leftward, from Left Field, to fill the pre-aux position when that is "free", i.e., when C does not occupy it? If the particle and the auxiliary are separate constituents in Left Field, then fronting is the most economical alternative. The issue is not closed, however, as arguments still exist for the alternative aux-movement hypothesis (see below), especially if aux-second is a unified principle, a proposition which is itself very much in question.

We leave our discussion of this particle now and move on to the other two. Of these, *ge* has a much wider range of uses that does *wud**. For lack of time and space, however, the present discussion of the two will concentrate on the predicate nominal constructions in which they appear.

2. The particles {*wud**} and {*ge*}: the O'odham equational and possessive predicate nominal constructions.

(i)

The equational particle *wud** has an alternant *d** which, in many (perhaps most) people's speech is in fact the prevailing form. In absolute initial (pre-aux) position it is regularly reduced to the shorter alternant in all dialects and idiolects and, in the speech of most people, it is pronounced [d] (dental) in that position, rather than [d*] (alveolar); for those who pronounce [d] in initial position the initial glottal onset of the auxiliary is deleted.

The particle *ge*, used (optionally, but relevantly for the present discussion) in the possessive predicate nominal construction. In its general sense, however, it is simply a positive or affirmative marker. In the scope of negation, it is replaced by its polarity partner *ha*.

These features of *wud** and *ge* are exemplified in (9):

- (9) (a) Huan 'o (**wu**)*d** wakial.
John AUX3 **wud*** cowboy
'John is a cowboy.'
- (b) **D*** 'o wakial g Huan. (~ Do wakial g Huan.)
wud* AUX3 cowboy ART John
'John is a cowboy.'
- (c) Ban 'o **ge** bahi.
coyote AUX3 **ge** tail
'The coyote has a tail.'
- (d) Hegai ban 'o pi **ha** bahi.
that coyote AUX3 NEG **ha** tail.
'That coyote doesn't have any tail.'

(ii-iii)

The sentences of (9) above illustrate the principal function of *wud** and one of the major functions of *ge* — i.e., the licensing of equational and possessive predicate nominals, respectively.

The Left Field positions of these particles are indicated in Appendix I. Essentially, equational *wud** precedes the future particle, and possessive *ge* follows it (falling in the same position as a "floated quantifier" and certain manner adverbials). Their positions relative to the future particle *o* are illustrated in (10):

- (10) (a) Huan 'at (wu)d* o wakial-k(-ad).
 John tAUX3 wud* FUT cowboy-DCV(-FUTIMPERF)
 'John will be a cowboy.'
- (b) Ban 'at o ge bahi-k(-ad).
 coyote tAUX3 FUT ge tail-DCV(-FUTIMPERF)
 'The coyote will have a tail.'

These sentences illustrate as well a most important fact about predicate nominal constructions, namely, the fact that the nominal cannot function on its own but must be supported by a defective copular verb *-k* (glossed DCV, and shown in Appendix I as a constituent of VP, presumably the head of VP, in fact). This is an element which functions in the formation of a wide range of stative predication types in O'odham — all stative predicates probably involve this element. The *appearance* of predicate nominals functioning alone in the sentences of (9) is just that, an appearance. In fact, however, we must assume that the copula *-k* is present there as well. In keeping with its highly defective status in present-day O'odham, we can assume it is deleted in the surface representations of the simple nonpast predicate nominal clauses, where it is, so to speak, un protected by following suffixal inflectional morphology. It appears overtly only when it is further inflected, and therefore cannot drop; its retention is exemplified in the future imperfectives of (10). The future imperfective ending can itself drop, leaving the copula bare, an apparent suffix, or enclitic, to the nominal.

The status of the copula *-k* as a true and full verb, syntactically speaking, is established not only by its inflectional properties (essentially those of an ordinary verb) but also in extraction contexts, as in (11), in which the copula (despite its morphologically defective condition) is "left behind," like any other full verb, visibly so when inflected:

- (11) (a) S*a:cu 'apt wud* o k.
 what tAUX2s wud* FUT DCV
 'What are you going to be?'
- (b) Wakial 'ant wud* o k.
 cowboy tAUX1s wud* FUT DCV
 'A cowboy I am going to be.'

This type of (extraction) construction will be the focus of discussion in (v) below, after a brief aside.

(iv)

The particle *ge*, in its general positive (affirmative or non-negative) sense, has an extended use which, in modern O'odham — anecdotal, for our purposes here, but nonetheless interesting and historically real. A combination of the polar question complementizer *n-* and the negative particle *pi*, in addition to its literal force of a negative yes-no question, has come to serve as the principal "reason connective" (i.e., "because"), as in (12b), where it presumably represents the "grammaticalization" of a rhetorical question (no longer recognized as such in modern O'odham, so far as I know):

- (12) (a) N-apt pi bihugim.
QC-tAUX2s NEG hunger:PERF
'Haven't you become hungry? Aren't you hungry?'
- (b) Nt o ñ-gegos
tAUX1s FUT 1s-feed
'I am going to eat'
- n-ant pi bihugim.
QC-tAUX1s NEG hunger:PERF
'because I am hungry.'

In (12b) there is no longer any negative force; consequently the negative particle does not license negative polarity items in this construction, though it does so in the "literal" use of (12a).

What we can assume is the original logic of the reason construction carries over in the negative counterpart ('because not') — there, it is the particle *ge* which appears, having exchanged its status with the negative *pi*. In effect, the historic double negative in *n- ... pi pi* (QC ... NEG NEG) 'because not', also a possible construction, is replaced by the positive *ge*:

- (13) (a) Pi 'ant o ñ-gegos
NEG tAUX FUT 1s-feed
'I am not going to eat'
- n-ant ge bihugim.
QC-tAUX ge hunger:PERF
'because I am not hungry.'
- (b) Pi 'añ s*a'i ma:c
NEG AUX1s intense know:IMPERF
'I don't know'

n-añ **ge** **hebai** ñeid.
 QC-AUX1s **ge** anywhere see:IMPERF
 'I don't know exactly because I have haven't seen it
 anywhere.'

In this use, *ge* is a true negative now, capable of licensing a polarity item, as it does in (13b); it is equivalent to the double negative *pi pi*, which can in fact replace *ge* in this sentence.

This is merely an aside, and I will move now to (v), consequences and problems of analysis.

(v)

A certain silence was observed in illustrating extraction behavior in (11) above. No example of *ge* was given in an extraction context parallel to those in which *wud** readily appears. The possessive construction, despite its superficial similarity to the equational, cannot participate in extraction — that is to say, the predicate nominal cannot be extracted:

- (14) (a) *S*a:cu 'apt o **ge** k.
 what tAUX2s FUT **ge** DCV
 'What are you going to have?'
 (b) *Kamis* 'ant o **ge** k.
 shirt tAUX1s FUT **ge** DCV
 'A shirt I am going to have.'

There is a corresponding difference between *wud** and *ge* which is surely relevant to this problem. The equational particle licenses full — and fully referential — DPs in the predicate nominal function (as illustrated in (15)), while the possessive particle does not (as shown in (17) below). Material following the comma (,) is in Right Field (e.g., the extraposed relative clause, postposed DPs, etc.):

- (15) (a) 'Id 'o **d*** hegai si:kī, mant gatwi.
 this AUX3 **wud*** that deer:DCV, C:tAUX1s shoot:PERF]
 'This is the deer, that I shot.'
 (b) 'A:ñ 'añ **d*** hegai, mam hab 'a:g.
 I AUX1s **wud*** that:one:DCV), C:AUX2s PV talk:about
 'I'm the one, that you are talking about.'
 (c) **D*** 'apt o 'a:ñi-k.
wud* tAUX2s FUT me-DCV
 'You will be me (in a skit or movie, for example).'

- (d) 'A:ñi 'ant **d*** o Husi-k, pt 'a:pi **d*** o Mali:ya-k.
I tAUX1s **wud*** FUT Joseph-DCV, (ku)tAUX2s you **wud***
FUT Mary-DCV
'I'll be Joseph and you'll be Mary.'
- (e) Tt hig o cicwi hegai, matt o t-'e'estod*ad
(ku)tAUX1p HORT FUT play:PERF that, C:tAUX1p FUT
1p-hide:FUTIMPERF
'Let's play that (game), in which we keep hiding ourselves
- pt 'a:pi **wud*** o hegai-k, mapt o t-cecgad.
(ku)tAUX2s **wud*** FUT that-DCV / C:tAUX2s FUT
find:FUTIMPERF
and you are the one, that keeps finding us (i.e., you are "it").'

The predicate nominal licensed by *wud** need not be definite or specific, as shown by the most appropriate readings of (9a,b) and (10a), for example, and by the fact that the predicate nominal can be an interrogative ('what, who,' etc.). However, it seems always to be a full DP.

The pre-DCV position in equationals is not limited to "purely nominal" DP projections. Place expressions, PPs and their deictic proform counterparts, as well as place names, are also possible and frequent:

- (16) (a) **D*** 'o 'i:ya.
wud* AUX3 here:DCV
'It is here (that such and such happened).'
- (b) **D*** 'at o 'i:ya-k, mant 'ia o gatwi g si:ki.
wud* tAUX3 FUT here-DCV, C:tAUX1s here FUT
shoot:PERF ART deer
'It will be here, that I will shoot the/a deer.'
- (c) ó#í at o ki: 'ed*a-k, mant 'am o pa:nt.
wud* tAUX3 FUT [house in]-DCV, C:tAUX1s there FUT
make:bread:PERF
'It will be in the house, that I will make bread.'
- (d) Ba: 'o hab **wud*** Sikol Himidk.
where AUX3 PV **wud*** Swirling (Waters)
'Where (i.e., which place) is Swirling Waters?'
(answer: 'This (place) is Swirling Waters'.)

- (e) 'I:ya 'at (hab) **wud*** o Pisiñ Mo'ö-k.
 here tAUX3 (PV) **wud*** FUT Bison's Head-DCV
 'This will be Bison's Head (e.g., on a map of places to be
 named).'

By contrast, the possessive construction sanctioned by *ge* can only accept NP predicate nominals:

- (17) (a) Ban 'o **ge** bahi.
 coyote AUX3 **ge** tail
 'The coyote has a tail.'
- (b) Ban 'at o **ge** bahi-k.
 coyote tAUX3 FUT **ge** tail-DCV
 'The coyote will have a tail.'
- (c) *Ban 'at o **ge** hegai-k.
 coyote tAUX3 FUT **ge** that-DCV
 'The coyote will have that (thing).'

If questions words are DPs, or the corresponding category in PP projections, it then follows that extraction structures of the type represented in (14) are ungrammatical. What is left unexplained, of course, is *why* it is that *ge* sanctions only NP, and not DP as well.

The two constructions licensed by *wud** and *ge* share the property that a modifier can appear "floated" into the Left Field, begging the question of how this separation is brought about. The landing site is the position labeled FLQ and MADV (i.e., floated quantifier and manner adverbial) in the case of the possessive, as illustrated by (18b,c). In the possessive case, the floated modifier replaces *ge* itself. In the equational, the landing site is before the particle *wud**. In both constructions, the "floated" element can be further advanced to pre-aux position, as in these examples. And, where appropriate, the modifier agrees with its predicate nominal "associate" (visibly so in (18c), where reduplication marks plural number):

- (18) (a) 'Id 'at **s-'ap wud*** o wakial-k.
 this tAUX3 **POS-good wud*** FUT cowboy-DCV
 'He will be a good cowboy.'
- (b) **Cew** 'o bahi, g ban.
long AUX3 tail:DCV, ART coyote
 'The coyote has a long tail.'

- (c) **Ce'ecem** 'añ gogogsga.
RDP:little AUX1s RDP:dog:ALIENPRED
 'I have (some) little dogs.'

Only the equational nominal, however, can appear with a true determiner, or a possessor expression, separated from it and "floated" to the left, as in (19b,c), illustrating the "fronting" (or "raising") of a possessor from the DP-internal position shown in (19a):

- (19) (a) 'Id 'at **wud*** o [ñ-we:nag maliomga]-k.
 this tAUX3 **wud*** FUT [1s-brother boss:ALIEN]-DCV
 'He (lit. this one) will be my brother's boss.'
- (b) 'Id 'at ñ-we:nag **wud*** o [[ec] maliomga]-k.
 this tAUX3 1s-brother **wud*** FUT [[ec] boss:ALIEN]-DCV
 'He (lit. this one) will be my brother's boss.'
- (c) Ñ-we:nag 'at **wud*** o [[ec] maliomga]-k, 'i:da.
 1s-brother tAUX3 **wud*** FUT [[ec] boss]-DCV, this
 'He will be my brother's boss, this (one).'

There is evidence of a fundamental difference between the two kinds of "predicate nominal," above and beyond the type-difference suggested (DP versus NP) and the corresponding extraction possibilities.

The nominal in the possessive construction is a "true" possessive *predicate*, while the heretofore presumed predicate nominal licensed by *wud** is, in all probability, not itself a predicate, but an ordinary DP entering into construction with, and thereby *forming* a predicate, with the defective copula *-k*. The late Juan Dolores, in his writings on his native Kolo:di dialect of O'odham, in the early part of this century, often gave a "verbal" interpretation of nouns, especially those corresponding to the part member of a part-whole relation, e.g., 'have a tail', for *bahì* 'tail', and he regularly did this for alienable nouns bearing the suffix *-ga* (cf. Dolores, 1913, 1923; and Mathiot, 1973:41-2), e.g., *gogs-ga*. 'dog-ALIEN'. This latter element appears in both "pure nominal" (DP, exemplified in (19) above) and, in true predicational possessive projections, as in (20a):

- (20) (a) 'A:ñ 'ant o **ge** gogs-ga-k.
 I tAUX1s FUT **ge** gogs-ALIEN-DCV
 'I will have a dog.'
- (b) *'A:ñ 'ant **wud*** o maliom-ga-k.
 I tAUX1s **wud*** FUT boss-ALIEN-DCV
 'I will be boss (alienably "possessed").'

- (c) 'A:ñ 'ant **wud*** o maliom-k.
I tAUX1s **wud*** FUT boss-DCV
'I will be (the) boss.'

If alienable possessive expressions formed with *-ga* are true predicates, when they are in fact functioning as predicates, then the agrammaticality of (20b) follows automatically on the hypothesis that what *wud** licenses is a full DP complement, forming a predicate with its verbal governor *-k*; *wud** does not license a pure predicate nominal directly. Inherently predicational predicate nominals are not available for extraction, a fact which accounts for (14) above and is further supported by (21b), in which an ordinary stative predicator (a predicate adjective) is extracted leftward over *ge*:

- (21) (a) Huan 'at o **ge** cewaj-k.
John tAUX3 FUT **ge** tall-DCV
'John will be (just) tall.'
- (b) *Cewaj 'at o **ge** k, g Huan.
tall tAUX3 FUT **ge** DCV, ART John
- (c) Cewaj 'o g Huan.
tall:DCV AUX3 ART John
'John is tall.'

The predicate adjective can of course appear before the auxiliary, under the appropriate conditions — but that is under the auspices of the strictly local arrangement that achieves aux-second in O'odham. This all suggests, incidentally, that the *aux-insertion* hypothesis, rather than the alternative of fronting of non-aux material, is correct for this very local operation. Even in question formation, the true landing site for fronted question words is evidently *not* the pre-aux position, but rather a *post*-aux position, a position not yet perfectly established empirically, but possibly the same Left Field position as for raised post-aux subjects and objects (S, O; see Appendix D). That question word movement is fully within the scope of the auxiliary is evident from any embedded content question, as well as from root questions introduced by the (deletable) complementizer *ku-*:

- (22) (a) Pi 'añ ma:c [m-at **hascu** wud* o k, g Huan].
NEG AUX1s know [C-tAUX3 **what** wud* FUT DCV, ART
John]
'I don't know what John will be.'
- (b) Pi 'añ ma:c [m-as g Huan **hascu** o ha-nolawt].
NEG AUX1s know [C-sAUX3 ART John **what** FUT
3iDAT-buy:PERF
'I don't know what John will buy.'

- (c) (Ku-)t **hed*ai** ha-'e:s, g ñ-cuculga.
 (C-)tAUXt **who** 3p-steal:PERF, 1s-chicken:ALIEN
 '(And) who stole my chickens?'

The appearance of a question word in pre-aux position, as in (10a) and in (23a,b) below, is presumably the effect of the local aux-second principle. Interestingly, many content question words have two alternant shapes, one in pre-aux position, the other in what appears to be the "basic" raised Left Field position to the right of the auxiliary, above the negative and future particles (see Appendix I). The form appearing in this post-aux position is also the citation form — thus, for example, *hascu* (post-aux and citation) beside *s*a:cu* (pre-aux) 'what' (see Selkirk and Hale, 1987, for some preliminary discussion of this matter in relation to the special tonal phrasing and morphological behavior of certain pre-aux question words in O'odham):

- (23) (a) **S*a:cu** 'apt o ha-nolawt.
what tAUX2s FUT 3iDAT-buy:PERF
 'What are you going to buy?'
- (a') (Ku-)pt **hascu** o ha-nolawt.
 (C-)tAUX2s **what** FUT 3iDAT-buy:PERF
 '(And) **what** are you going to buy?'
- (b) **Ba:** pt o hi:.
where tAUX2s FUT go:PERF
 'Where are you going (lit. where will you go)?'
- (b') (Ku)pt **hebai** o hi:.
 (C-)tAUX2s **where** FUT go:PERF
 '(And) **where** are you going?'

3. Concluding remarks and problems remaining.

Tentatively, I propose that the syntactic, and semantic, difference between the nominal licensed by *wud** in equational constructions and the nominal licensed by *ge* in the possessive construction is to be explained ultimately in terms of the position of the nominal in relation to the VP.

The possessive construction is in effect an existential expression whose nominal component is generated within VP, the lowest phrasal constituent in Left Field. There is nothing to suggest that its surface position is anything other than that — accordingly, I propose that the possessive predicate nominal is generated in VP and remains there throughout the derivations of sentences containing it. To be sure, a modifier associated with a possessive predicate nominal may "separate" from it and appear in a more forward

position in Left Field (see Appendix I), but the head of the possessive predicate NP cannot itself separate from its supporting defective copular verb (DCV) *-k*; at least that is what I contend. Hence no fronting of this element is possible — this is a description of the situation, not the true and full explanation which remains to be found (but see Diesing, 1992, and Diesing and Jelinek, 1995, for much theoretical discussion which is directly relevant to an explanatory account).

By contrast, the nominal licensed by *wud** behaves much like a full "argument" DP, as it would do if it were simply a maximal extended projection of N functioning as the ordinary syntactic complement of a verb (in this case, by hypothesis, the defective verb *-k*). If this were the case, and I assume it is, this nominal type would be free to move and to appear outside the (existential closure) domain defined VP.

It is possible, of course, that the equational predicate nominal, licensed by *wud**, is simply "base generated" external to VP. There is, however, one phenomenon which suggests that the nominal in equational predicates is at least *not* base generated in the manner of other indisputable full DP complements and adjuncts. This is the default weak determiner *g*, a mere "place holder" for D, in effect, and itself neither definite nor indefinite. Normally, other things being equal, a full DP must have an overt determiner — if this is not a demonstrative, or "heavy" determiner (i.e., '*i:da* 'this', *hegai* 'that', or a plural counterpart), the default determiner *g* must occur. But this is a phonologically weak element and is subject to deletion in the phonology under specific conditions. In Tohono 'O'odham (Papago) it is deleted in absolute clause-initial position, although its stronger (still atonic) dialectal variant *heg* remains overt clause-initially in 'Akimel 'O'odham (Pima). In all dialects of 'O'odham, this weak determiner is absent from the surface phonological representations of nominals functioning as predicates. This would follow automatically for possessive predicate nominals, since these are by hypothesis NPs, not DPs. But it does not follow automatically for equational predicate nominals if these are DPs. The weak determiner is simply impossible in an equational predicate nominal:

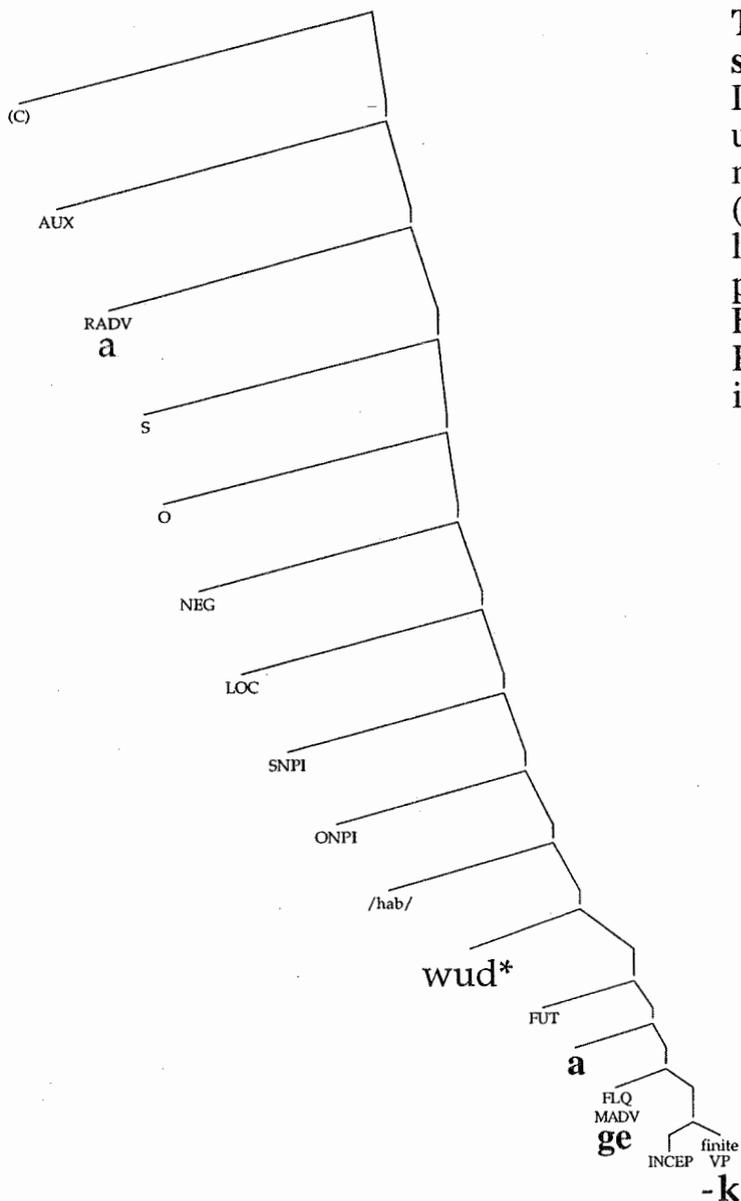
- (24) Huan 'o wud* (*g) maliom.
 John AUX3 wud* (*ART) boss
 'John is the/a boss.'

This remains a mystery, to me at least, but it may indicate a difference in basic syntactic position between true arguments and equational predicate nominals.

APPENDIX I

The Left Field:

A lexical head H (e.g., V) and all left branches in its extended projection (Grimshaw, 1991). The string following the AUX constitutes a single Tonal Phrase (in the sense of Selkirk and Hale, 1987) and exhibits certain other properties suggesting that it is "specially governed" by the verb (licensing traces, for example). S(ubject) and O(bject) are raised from VP. Particles appear in the Left Field (almost) exclusively. If C(omplementizer) is absent, something else must appear in pre-AUX position.



The Right Field (not shown):

If filled, this is an unstructured string of maximal projections (presumably adjuncts linked to argument positions in the Left Field). Each phrase in Right Field constitutes its own tonal phrase.

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