Baffling Cases: A Case/Reference Analysis of Hopi Nominal Constructions

Author(s): Herbert W. Luthin

Proceedings of the Thirteenth Annual Meeting of the Berkeley Linguistics Society (1987), pp. 170-183

BAFFLING CASES:
A Case/Reference Analysis of Hopi Nominal Constructions

Herbert W. Luthin
University of California, Berkeley

0. Introduction

This paper begins with an eccentricity, a puzzling gap in the relative clause paradigm of Hopi, and concludes with a unified analysis of case inflection that accommodates all the nominal types of the language—simple NPs, relative clauses, sentential complements, and possessives.[1]

The clause-type involved in the gap I mentioned follows the pattern, *The boy the fox bit ran home.* Such sentences are considered ungrammatical in Third Mesa Hopi, which is the particular dialect of Hopi I'll be looking at here. In order to account for this peculiarity, we will need to look carefully at the forms of the relative clause that Hopi *does* allow—both the way they are constructed syntactically and the way they get marked morphologically. This pursuit will lead us into an examination of two crucial systems of Hopi grammar—Case and Obviation. Eventually we shall see that these are not separable systems on the surface of the language.

1. Case

As a springboard into the present analysis, we need to understand the traditional view of case assignment in Hopi. Briefly, Hopi distinguishes subjects from all other noun phrases in the sentence. Subjects are unmarked, or zero-marked, and their case is called nominative. Direct objects, objects of postpositions, and lexical possessors in possessive constructions are marked with a suffix, generally the morpheme /-t/ (pausal form /-ta/),[2] and their case is called accusative. (Later in this paper I will relabel this case 'oblique'.) The examples in (1) illustrate some of these possibilities:

(1a) teepko-t tiki-t, pi' mooro-t naqvi-y-at
ironwood-ACC cut-SS then burro-ACC ear-ACC-POSS

a'ani wivitiva.
greatly hit

[He] cut a piece of ironwood, and started to beat hard on the burro's ear(s).

(1b) wii+taqa, i-kwa,
old+man(NOM) my-grandfather(NOM)

sǒhǒp+coki-hoya-t aw mooro-t soma.
cottonwood+tree-DIM-ACC to burro-ACC tied

The old man, my grandfather, tied the burro to a cottonwood sapling.

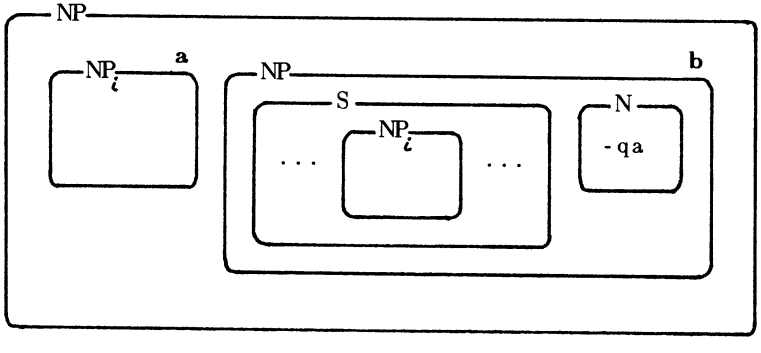
Complex nominals like relative clauses and sentential complements are also marked for case, and with these same affixes, but unfortunately, the simple principle outlined here won't stretch to cover these more complicated circumstances.

2. Mechanics and Preliminaries[3]

It will be useful to have a taxonomy for referring to the various patterns of the relative clause that are important to our discussion. Accordingly, I will distinguish four logical possibilities: **Subject/Subject** (S/S) relatives, where the subject of the main clause is coreferential with the subject of the embedded clause; **Subject/Object** (S/O), where the main clause subject is coreferential with an object of the relative; **Object/Subject** (O/S), where an object of the main clause is coreferential with the relative clause subject; and lastly, **Object/Object** (O/O), where objects of both main and embedded clauses are coreferential. In these terms, it is the Subject/Object-type relative clause that is forbidden by the Third Mesa grammar.

It would also help if we had some notion of the anatomy of the Hopi relative clause (Third Mesa's, anyway). The structure I am assuming for this analysis is an appositive construction, as shown in figure (2) below.

(2)



The overall spirit of this structure is compatible with the "pleonastic"

structure LaVerne Jeanne proposes in her 1978 dissertation, *Aspects of Hopi Grammar,* although the theoretical assumptions (or lack of them) behind it are quite different. For arguments against raising-type analyses for Hopi, or against the external-head analysis the Voegelins tried in 1975, your best bet is to look at chapter 3 of Jeanne's dissertation. Her coverage of these issues is quite detailed.

Lastly, a word on the identity of the suffix /-qa/. LaVerne Jeanne analyzes it as a "defective head noun," by which she means a bound noun that is invariant in form, yet fully referential and capable of inflection just like normal nouns. In my analysis, I simply treat it as a nominalizer—the derivational head of the b-phrase in the apposition. The fact that /-qa/ can be inflected for plurality I chalk up to agreement in number between the sister NPs of the appositive construction we've just looked at in (2).

3. Relative Clauses

Now let's look at some examples. Sentence (3) contains a Subject/Subject relative, sentence (4) an Object/Subject relative:

(3) "... pɨma hapi ɨng tɨɨva-to-qa-m
they(NOM) EMPH you(ACC) throw-PURP-NMZR-PL(NOM)
songqa pitɨ-ni."
surely arrive-FUT
"... for there are two who will yet come and try
to throw you off." (Malotki 1983:32)
(*lit:* They who really intend to throw you off will surely come.)

(4) nɨ' tiyo-'ya-t (pam) pakmɨmɨy-qa-t hoona.
I(NOM) boy-DIM-ACC he(NOM) is^crying-NMZR-ACC sent^home
I sent home the boy who is crying. (Jeanne 1978:196)

It would appear from this data that the case-marking of relative clauses is neatly parallel to the case-marking of simple noun phrases. In (3), the relative clause is in subject position in the matrix sentence, and the nominalizing head /-qa/ takes a ∅ for nominative case. In (4), the relative clause modifies a *non*-subject, and /-qa/ takes a /-t/ for accusative case.

However, if things were really as simple as that, we would be at a loss to account for the ungrammaticality of the Subject/Object relative in (5) (all examples drawn from Jeanne 1978 appear with my glosses, not hers):

(5) *mi' tiyo-'ya ni' (pi-t) wiva'ta-qa pakmimiya.
that boy-DIM(NOM) I(NOM) he-ACC hit-NMZR(NOM) is^crying
[..the boy that I hit is crying..] (Jeanne 1978:198)

Here, as in (3), the relative clause modifies the subject of the matrix, and /-qa/ appears to be properly marked by zero, as a good nominative should. Yet the sentence is bad. Clearly, then, there is something more than simple case-marking going on here.

Now let's take some more data on board. Sentences (6) and (7) offer examples of the Object/Object relative clause:

(6) talwipi [[coki-t]^{a} [tiyo aɳ wiip-qa-t]^{b}] mi'a.
lightning(NOM) tree-ACC boy(NOM) on climbed-NMZR-ACC struck
Lightning struck the tree that the boy climbed on.

(7) ni' [[taavo-t]^{a} [(ni') niina-qa-y]^{b}]. siskwa.
I(NOM) cottontail-ACC I(NOM) killed-NMZR-ACC skinned
I skinned the rabbit that I killed. (Jeanne 1978:244)

In (6), the clause nominalized by /-qa/ is inflected with the accusative suffix /-t/. The relative clause in (7), on the other hand, though every bit as accusative as (6), appears with the new suffix /-y/. The one significant difference between these sentences—the difference that must trigger the alternation between the /-t/ and /-y/ accusatives—is that of coreference or switch-reference between their matrix subjects and the subjects of their embedded relative clauses. Where switch-reference obtains, we get /-t/; where coreference obtains, we get /-y/.

The new data suggests that the inflection of nominalizations in /-qa/ (in this case, the relative clause) differs qualitatively from that of simple nouns. Earlier, we had observed the suffix /-t/ found on /-qa/ in the O/S relative in (4) and equated it with the /-t/ found on simple objects like *mooro-t* 'burro' in example (1). And we had likewise equated the zero or *absence* of marking on /-qa/ in the S/S relative in (3) with the zero-marking on the twin subjects *wii+taqa* 'old man' and *i-kwa* 'my grandfather' in (1). But now this desirable and very natural equation is threatened. In fact, it looks as if there are two phonologically (and for that matter, etymologically) identical suffixes, /-t^{1}/ and /-t^{2}/, one to signify switch-reference, the other to mark just case.

On the face of it, then, there must be two separate methods or modes of case assignment, one for nouns and one for nominalizations in /-qa/. This is the position LaVerne Jeanne (1978:286) settles on:

> The principles of QA-Case Assignment are to be kept rigidly distinct conceptually from the previous two rules [i.e., of "normal" NP-Case Assignment]. To be sure, QA-Case Assignment involves the *oblique endings* /-t/ and /-y/ [emphasis in original], but it does not involve their assignment in the sense of [NP-Case Assignment]. Rather, it is a special case of obviation.

This is not an unreasonable position to take.[4] And yet I find it unsatisfying. The partial intersection of these two processes, Case and Obviation—and the congruence of their morphology—remains as a puzzle.

4. The Case/Reference Hypothesis

I suggest that it is the genius of Hopi grammar to require that every nominal argument be formally classified as to the referential relationship that holds between itself and the matrix subject of its containing clause. A relationship of coreference will be termed **proximate**, one of switch-reference, **obviative**.[5] Thus a simple NP subject will always be classified as proximate with respect to itself, and a simple (nonreflexive) NP object will always be classified as obviative with respect to the subject of its clause.[6] In the case of *headed* constructions, like relative clauses or possessives, the tactics for establishing the referential status of a phrase are more complex, but are nonetheless based on the same principles.

With headed constructions, there is just one thing to keep in mind: a head noun always plays two roles in a sentence—one upstairs, as the representative head of an argument in its matrix clause, with responsibilities to the **matrix subject**; the other downstairs, as head of its own construction, with responsibilities to its **dependent**. The principle of obviation requires that such a phrase be marked to reflect this dual responsibility of its head. Accordingly, a noun phrase (say, the possessive 'Jed's uncle' in the sentence *Jake saw Jed's uncle)* will have an obviation value determined by the reference relation, proximate or obviative, that holds between its own dependent (here, the possessor, 'Jed'), and the matrix subject of the sentence as a whole (namely, 'Jake').

Where the head governs a **concrete** dependent, as 'uncle' governs 'Jed' in the example at hand, a reference reading is easily obtained: 'Jake' and 'Jed' are non-coreferential, so the construction would be obviative. But where the head governs an **abstract** dependent—like the embedded sentence governed by /-qa/ in a relative clause structure—the principle of obviation must "look inside" the dependent in order to find a concrete point of reference. It takes its reading from the subject of the embedded sentence itself—in other words, from the subject *of* the dependent. I'll refer to the NP that serves to characterize an abstract dependent as the **subordinate subject**. This reading is then compared to the subject of the matrix

sentence. As before, if the subjects "match", a value of proximate is given to the phrase in question, and if they don't, a value of obviative is awarded.

This process does not supplant case at all. Case proper is assigned as usual, by the expected governors (verbs, postpositions, possessed nouns) and according to the conventional principles: thus, clause subjects are still **nominative** and everything else is still **oblique** (formerly 'accusative'). Case and reference values come together and the outcome of their union is expressed by the case/reference (C/R) suffix appropriate to that particular combination of values. This is the gist of the Case/Reference hypothesis.

5. Simple Noun Phrases

Now, in order to get a quick feel for the way the hypothesis works, let's consider the following simple sentence:

(8) tiyo maana-t coocona.
boy{NOM, PRX} girl-{OBL, OBV} kissed
The boy kissed the girl.

The application of the case system is unexceptional, with *tiyo* 'boy' receiving nominative case as subject and *maana-t* 'girl', as direct object, receiving oblique case. At the same time, the reference system classifies *tiyo*, as matrix subject, proximate with respect to itself. By contrast, but in parallel fashion, the reference system classifies *maana-t* as obviative with respect to *tiyo*, the matrix subject.

The implication here, as I'm sure is obvious by now, is that the suffixes traditionally interpreted as strictly marking case—/-t/ for accusative and ∅ for nominative—are really more complex than that. Rather, /-t/ marks the cooccurrence of oblique case and obviative reference, and ∅ marks the cooccurrence of nominative case and proximate reference. (The two other logical possibilities, oblique/proximate and nominative/obviative, will be dealt with shortly.) My claim, then, is that there is no such thing as simple case-marking in Hopi: always a noun phrase is marked to represent this merger of case and reference.

6. Relatives Revisited

The next thing is to see how the analysis works on relative clauses. Examples (9-12) illustrate Subject/Subject, Object/Subject, and two types (proximate and obviative) of Object/Object relatives, respectively. I will discuss sentence (11) explicitly, although the methodology for derivation will naturally be the same for all four examples.

(9) [[hoonaw]^{a} [honani-t ŋi'a-qa]^{b}] waynima.
bear{NOM/PRX} badger-{OBL/OBV} caught-NMZR{NOM/PRX} ran^away
The bear that caught the badger ran away.

(10) ni' [[tiyo-t]^{a} [pakmimiy-qa-t]^{b}] hoona.
I{NOM/PRX} boy-{OBL/OBV} is^crying-NMZR-{OBL/OBV} sent^home
I sent home the boy who is crying.

(11) ni' [[taavo-t]^{a} [(ni') niina-qa-y]^{b}] siskwa.
I{NOM/PRX} cottontail-{OBL/OBV} I{NOM/PRX} killed-NMZR-{OBL/PRX} skinned
I skinned the rabbit that I killed. (Jeanne 1978:244)

(12) maana [[kiiyi-t]^{a} [ni' kwisiva-na-qa-t]^{b}] hiiko.
girl{NOM/PRX} water-{OBL/OBV} I{NOM/PRX} fetched-NMZR-{OBL/OBV} drank
The girl drank the water I fetched.

Look now in detail at sentence (11). First, since the appositional sisters, NP-a and NP-b, share direct object position in (11), they naturally are not "the subject" and so both receive oblique case. By the same principle, the two occurrences of first person *ni'* are both subjects in their own clauses and so receive nominative case. Both these subjects, of course, as subjects, are classified as proximate and thus carry the combined case/reference value of {NOM/PRX}, the combination realized by zero.[7] (But note that the subordinate *ni'* is optional in this setting.) The oblique NP-a, *taavo-t* 'cottontail', is obviative with respect to the matrix subject *ni'*, and so has a combined value of {OBL/OBV}, which is realized by the suffix /-t/. The classification of the b-phrase containing the relative clause, however, is more complicated. We've already established that NP-b is going to be oblique, so it's the reference value that we now must consider.

Remembering that a head noun plays a dual role in its sentence, and should be marked accordingly, we must check for a match or mismatch in reference between the dependent of /-qa/ and the matrix subject. The dependent here, of course, is abstract—an embedded sentence—so we look inside, to the subject *of* the dependent, and take a reference reading from the subordinate subject *ni'*—which of course compares favorably with the matrix subject *ni'*. And so a reference value of proximate falls on NP-b. Proximate reference combines with oblique case and the two find expression in the {OBL/PRX} suffix, /-y/.

And that is how the Case/Reference system handles relative clauses. In (11), as we have just seen, the outcome of the process is {OBL/PRX}. In

sentences (10) and (12), where case is oblique and reference—since matrix and subordinate subjects are different—is obviative, we find the {OBL/OBV} suffix /-t/ attached to /-qa/. And in sentence (9), where matrix and subordinate subjects are coreferential, /-qa/ takes the {NOM/PRX} marker, which is ∅.

It remains to be shown that this hypothesis, in addition to accounting for the clause patterns we *do* find, can provide a principled way of excluding Subject/Object relatives. Consider unlucky sentence (13) below:

(13)

*[[tiyo]^{a} [maana (pɨ-t) wɨva'ta-qa{-∅ / -y / -t}]^{b}] pakmɨmɨya

boy{NOM / PRX} girl{NOM / PRX} he-{OBL / OBV} hit-NMZR-{NOM / OBV} is^crying

(.. the boy whom the girl hit was crying..)

I think we can now see what is happening here. The appositive structure occupies subject position, so its sister constituents, NP-a and NP-b, naturally both receive nominative case. *tiyo* and *maana*, as clause subjects in their own right, are classified as proximate to themselves. Case and reference converge in a {NOM/PRX} combined value, and hence *tiyo* and *maana* take the ∅ ending—or would, if this sentence were any good.

The b-phrase, on the other hand, is a headed structure and, in keeping with the principles of the Case/Reference system, must be classified according to the condition of coreference between matrix and subordinate subjects. In the case of S/O relatives (excluding reflexives—see note 6), these subjects will *always* have different identities. And so the system brings together nominative case and obviative reference values for the b-phrase, which must be head-marked onto /-qa/. The only hitch is that there is no way, given the resources of Hopi morphosyntax, to make the sentence grammatical. As the various non-options of sentence (13) demonstrate, none of the case/reference affixes we have looked at are appropriate in {NOM/OBV} circumstances.

Given these observations, we can settle the morphological forms of the case/reference system into a defining paradigm, showing a gap where the {NOM/OBV} juxtaposition ought to be:

(14)

	NOM	OBL
PRX	∅	- y
OBV	*	- t

The constraint or filter we need to screen out S/O relative clauses in Third Mesa Hopi can now be represented succinctly, if somewhat informally (and with a little help from international road sign conventions), as follows:

(15)

The motivation for the constraint is obvious: since only subjects appear with nominative case, and all subjects by nature ought to "represent" themselves (in other words, be proximate), it's reasonable to want to rule out the possibility of subjects that do *not* represent themselves, but represent some other entity instead (in other words, subjects that are obviative). The *{NOM/OBV} combination is best viewed as a conflict of interests, which the grammar of Third Mesa Hopi simply throws out of court. Since this particular combination of case and reference values only arises in Subject/Object relatives, the constraint I've formulated does not affect any other nominal constructions but the one we want ruled out.

7. Sentential Complements

Certain verbs in Hopi (e.g., *naawakna* 'want', *navo'ti* 'know') take an embedded sentence as a complement. Like relative clauses, these complements are nominalized by /-qa/. Anatomically, sentential complements consist of just the b-phrase of diagram (2)—that is, an NP without an appositive left sister. (There is thus no call for number agreement on /-qa/, which explains why /-qa/, though pluralizable in other contexts, is never plural in sentences of this type.) Consider examples (16) and (17):

(16) nɨ' [nima-ni-qa-y] as naa-wakna.
I{NOM/PRX} go^home-FUT-NMZR-{OBL/PRX} IMPOT RFLX-want
I want to go home.

(17) nɨ' [pooko nima-ni-qa-t] as naa-wakna.
I{NOM/PRX} dog{NOM/PRX} go^home-FUT-NMZR-{OBL/OBV} IMPOT RFLX-want
I want the dog to go home.

Once we've made the adjustment for structure, the analysis is straightforward. The NPs derived by /-qa/ in these examples function as object complements of the matrix verbs in both sentences, and therefore will be

oblique in case. In its capacity as head, /-qa/ must be marked to reflect the differential in reference between its dependent and the matrix subject. Since the dependents are abstract, the subordinate subject is called on to "characterize" them in relation to the matrix subject. In the case of (16), these subjects are coreferential: both are *ni'* (although the subordinate *ni'* must be deleted), and the conjunction of proximate reference and oblique case is expressed as usual by /-y/. In (17), the subjects are *not* coreferential, and we accordingly find the {OBL/OBV} suffix, /-t/. And so the inflection of sentential complements follows the Case/Reference principles, too.

8. Possessives

The last nominal construction I'll discuss is the possessive. Consider the pair of examples in (18) and (19) below:

(18) taaqa [pooko-y-∅] caawina.
man{NOM/PRX} dog-{OBL/POSS}-{POSS/PRX} scared
The man$_i$ scared his$_i$ [own] dog.

(19) taaqa [maana-t pooko-y-at] caawina.
man{NOM/PRX} girl-{OBL/OBV} dog-{OBL/POSS}-{POSS/OBV} scared
The man$_i$ scared the girl's$_j$ dog.

In (19), where possessor and matrix subject are not coreferential, we see that the possessor NP *maana-t* has taken the {OBL/OBV} inflection appropriate to a non-coreferential argument in a non-subject position. Coreferential (proximate) third person possessors, however, never appear in the surface string, as (18) shows, so it's impossible to know what sort of inflection would surface in such cases. (The situation here is parallel to that of reflexive objects—see note 6—in that proximate possessors are non-distinct arguments in Langacker's sense.) As for the possessive construction as a whole, in both (18) and (19) the NP acts as object of the verb *caawina*, and in both instances it is oblique.

The principle of obviation operates no differently here than it does on any of the other nominal types we've discussed so far. Thus, the dependent is compared to the matrix subject and the outcome of the reading is posted as either obviative, as in (19), where *taaqa*$_i$ and *maana-t*$_j$ represent different identities; or proximate, as in (18), where *taaqa*$_i$ and the understood possessor refer to the same entity. At this point, however, the additional presence of the Possession relation (POSS) complicates the case/reference inflection in interesting ways that require special discussion.

The most obvious difference is that the possessee, head of the possessive

phrase, bears *two* suffixes, not one.[8] Witness *pooko-y-at* in (19). Furthermore, the complete absence of /-'at/ in (18) makes it clear that /-'at/ (pausal form /-'ati/) is not just a special suffix that head-marks possession exclusively: /-'at/, it turns out, codes reference information as well. This opens up the possibility that /-y/ and ∅, which we think we have recognized from other contexts, may have altered functions in the company of {POSS}. Before we try to solve the puzzle, though, we need to complete the paradigm of possession. Consider one last example, where the possessive construction, this time in subject position, is nominative in case:

(20) [taaqa-t pooko-∅-'at] waaya.
man{OBL/OBV} dog-{NOM/POSS}-{POSS/OBV} ran^away
The man's$_i$ dog$_j$ ran away.

This new data shows that /-y/ can't be a straight possession marker, either, anymore than /-'at/ can, since /-y/ can be absent, too.

In example (20), the dependent (*taaqa$_i$-t*) and the matrix subject (headed and characterized by *pooko$_j$-∅-'at*) are not coreferential. The reference value that the principles of obviation confer on the head is obviative—the same as in (19). In this light, then, notice how (19) and (20), both obviative, both carry the suffix /-'at/. Of course, (19) and (20) do differ in case. Conversely, (18) and (19), while differing in reference status, share the *same* case—oblique. And notice in turn that (18) and (19) both carry the suffix /-y/. Furthermore, /-y/ and /-'at/ are not mutually exclusive: *both* appear in (19). The form *pooko-y-at* tells us that these suffixes occupy different inflectional slots—/-y/ in the inner slot, /-'at/ in the outer. The inner slot is empty when case is nominative (example 20), whereas the outer slot is empty when reference is proximate (example 18).

The possessive construction may be simpler than relative or sentential complement constructions in having a concrete dependent, but in another crucial respect it is more complex. This complication is the presence, however characterized, of the semantic element of Possession itself, which of course is missing from the C/R configurations of other nominals. In addition to the standard mingling of case and reference relations, we now have the POSS relation to accommodate.

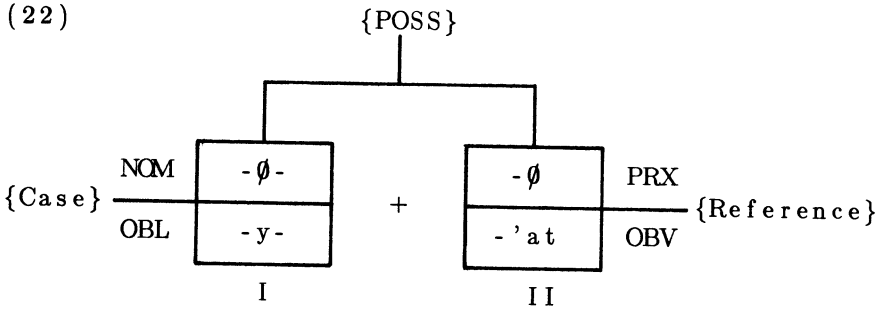
In a manner of speaking, the POSS relation actually triggers this peculiar mitosis of the familiar, one-slot inflectional ending. The table in (21) sums up the case/reference observations we've made so far, but with the POSS relation figured in:

(21)

	I					I	II	
NOM	/	POSS	/	OBV	:	-∅	-'at	(20)
OBL	/	POSS	/	OBV	:	-y	-'at	(19)
OBL	/	POSS	/	PRX	:	-y	-∅	(18)
				II				

I visualize the POSS relation as *intervening* somehow in the normal C/R process whereby case and reference values combine directly with each other. Instead, {POSS} disrupts this process. In (18), proximate reference does not combine with oblique case directly—the two values are intermediated by {POSS}. Similarly, what would seem to be a potentially calamitous interaction between obviative reference and nominative case in (20)—recall the *{NOM/OBV} constraint in (14)—is averted by the intervention of {POSS}. Thus the POSS relation splits the single position usually shared by case and reference, reacting with each by turns: with case, as manifested in the inner slot (I), and with reference, as manifested in the outer slot (II). The diagram in (22) represents this complex interaction paradigmatically:

(22)



At least some aspects of this paradigm begin to make sense if we think of the POSS relation as being, in large semantic terms, like the proximate relation of identity. After all, there is a conceptual, if not necessarily a physical or referential, relationship implicit in the bond of possession. And if we *do* regard the POSS relation as a form of proximacy, we should not be surprised to see that the interaction of {POSS} and nominative case corresponds to a ∅-marking in slot I, and that the interaction of {POSS} and oblique case corresponds to a /-y/.[9] These inflections, {NOM/POSS} and {OBL/POSS} respectively, are parallel to the ones we find on {NOM/PRX} and {OBL/PRX} nominals in normal, *non*-possessive situations where case and reference interact directly, unmediated by Possession.

If {POSS} supplants reference in slot I, it does the same to case in slot II. Nor is it difficult to see {POSS} in a case-like role, although 'genitive' is

the usual term.[10] So {POSS} has the ability to mimic both case *and* reference. The grammar exploits these talents as a way of maintaining its preference for portmanteau morphology that merges case and reference information simultaneously. At any rate, the Case/Reference hypothesis makes it possible to understand the split inflection on possessives in Hopi. Thus, as I have tried to show in this paper, a single set of general Case/Reference principles allows us to account for the inflection of all four of the nominal types we have examined—simple NPs, relative clauses, sentential complements, and possessives.

Notes

1. I owe thanks to Chuck Fillmore, Paul Kay, Carol Cantor, Leanne Hinton, Geoff Nunberg, and Orin Gensler for their help and comments on this and prior versions of this paper. Any mistakes you find are mine, not theirs.

2. The accusative suffix /-y/ (pausal form /-yɨ/) appears in place of the expected /-t/ on animate duals and plurals, and on a small set of singular nouns terminated by the augmentative suffix /-w(ɨ)/). The distinction between /-t/ and /-y/ (obviative vs. proximate reference, as we shall see) is thus neutralized in these circumstances. Of course, the distinction in the singular must still be accounted for.

3. Abbreviations not defined elsewhere in this paper are:

ACC = accusative	FUT = future	OBL = oblique	PRX = proximate
CAUS = causative	IMPOT = impotential	OBV = obviative	PURP = purposive
DIM = diminutive	NMZR = nominalizer	PL = plural	RFLX = reflexive
EMPH = emphatic	NOM = nominative	POSS = possession	SS = same-subject

4. It's not altogether clear to me whether these principles (NP- vs. QA-Case Assignment) persist as such into Jeanne's final analysis. But the dichotomy she sets up here between case and obviation *does* persist, and it is this dichotomy that I have tried to resolve.

5. I'm following the terminology of Jeanne and the Voegelins in this paper. The terms 'proximate' and 'obviative' are transplants into Uto-Aztecan from Algonkian. In U-A they relate to the phenomenon of Switch Reference (rather than to genuine third-person Obviation, as in Algonkian), and mean "same subject" (or co-reference) and "different subject" (switch-reference), respectively.

6. Reflexive and reciprocal objects never appear as surface lexical arguments in Hopi, and thereby constitute evidence neither for nor against this hypothesis, since we can't know what sort of inflection they would bear. Instead, reflexive arguments are indicated by a prefix, /naa-/, on the verb itself. Langacker (1976a, 1977b) discusses behavior of this type (which is pervasive in U-A languages), under the heading of "non-distinct argument phenomena". Coreference is a subset of non-distinctness.

7. Voegelin & Voegelin (1975:notes 5,8) attest to a generational difference within Third Mesa itself: in obviative sentential complements, their older consultants apparently require the subordinate subject to appear in oblique case. Jeanne (1978:258-9) discusses the fact that younger speakers have an option in this

circumstance: the subordinate subject may be {NOM/PRX}, which would be the "normal" situation as portrayed in the present paper; or the whole construction may appear as a kind of pseudo relative clause, with the subordinate subject surfacing in the matrix VP ("pleonastically", in Jeanne's terms) marked {OBL/OBV}, as if it were a regular matrix object. At the same time, a pronominal copy of the subject (happily re-marked as {NOM/PRX}) may optionally be left in its place—a fact indicating that the anomalously-marked subject is actually no longer *in* subject position.

8. In the oblique, where plurality of either possessor or possessee (or both) is involved, the suffix /-y/ is unaccountably copied at the end of the phrase. To wit, the form *pok-mi-y-ati-y* <dog-PL-{OBL/POSS}-{POSS/OBV}-COPY> "(their) dogs". I have found no explanation for this behavior.

9. And in fact, this parallelism is interesting from a diachronic perspective, as well (see Langacker 1979). Hopi /-y(i)/ started out as a third person possession marker, (P-UA *-yi) in the proto-language. The extension of the form to its modern accusative function occurred as an innovation in Northern UA, of which Hopi is a branch. Hopi retains the essence of the innovated *and* the original functions.

10. When {POSS} mimics case, though, the inflectional parallels with regular case/reference morphology fall through. There is no real connection in slot II between the {POSS/OBV} suffix /-'at(i)/ and the {OBL/OBV} suffix /-t(a)/, as the pausal forms reveal. I mention this to forestall anyone wondering about the further segmentability of /-'at/.

References

Jeanne, LaVerne Masayesva. 1978. *Aspects of Hopi Grammar.* Unpublished MIT dissertation.

Langacker, Ronald. 1976a. Non-distinct Arguments in Uto-Aztecan. University of California Publications in Linguistics 82. Berkeley and Los Angeles: University of California Press.

Langacker, Ronald. 1977b. *An Overview of Uto-Aztecan Grammar.* Studies in Uto-Aztecan Grammar, vol. 1. Summer Institute of Linguistics Publications in Linguistics and Related Fields 56. Dallas: Summer Institute of Linguistics and The University of Texas at Austin.

Langacker, Ronald. 1979. "Accusative Suffixes in Proto Uto- Aztecan". Journal of California and Great Basin Anthropology, Papers in Linguistics 1: 85-99.

Malotki, Ekkehart and Herschel Takaloma. 1978. *Hopitutuwutsi/Hopi Tales.* Flagstaff: Museum of Northern Arizona Press.

Voegelin, C. F. and F.M. Voegelin. 1975. "Hopi /-qa/." International Journal of American Linguistics 41: 381-398.