An incorporated topic marker in Takelma

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Proceedings of the LFG00 Conference

University of California, Berkeley

Miriam Butt and Tracy Holloway King (Editors)

2000

CSLI Publications

Abstract

This paper concerns the distribution of Takelma -k^hwa and its consquences for linguistic theory. First, it is argued that -k^hwa is an incorporated object topic marker. Second, the work of Aissen 1997, 1999a on syntactic obviation will be applied to Takelma -k^hwa, and the framework will be extended to shed new light on the notions of proximate and obviative. Finally,the beginnings of a typology of topic anaphora is suggested, in which -k^hwa is simply one type in a broader spectrum.

1 Introduction

Takelma (possibly Oregon Penutian) has two third person object markers (OMs) which occur with verbs.[1] One OM, by far the more common one, is usually morphologically null and unrestricted in its reference. The second OM ($-k^hwa$), the one of interest here, is restricted in reference to humans or anthropomorphized animals, and is only used in situations where the subject is also third person (Sapir 1922:168). Sapir also notes (p. 169) two other interesting properties of $-k^hwa$: it cannot occur with an overt object and it is used to disambiguate clauses (1).[2]

1. Disambiguation by $-k^hwa$ (Sapir 1922:169)

a. t'ipisi: t'ayák^h b. t'ipisi: t'ayá:<u>k^{h}wa</u>

   ants   found   ants   found-OM
  'He found the ants'   'The ants found him'

This paper concerns the distribution of $-k^hwa$ and its consquences for linguistic theory. What follows can be divided into three parts. The first part is devoted to the Takelma language and $-k^hwa$ in particular. I will argue, among other things, that $-k^hwa$ is an incorporated object topic marker.

The second part of the paper examines the generalizations about $-k^hwa$ through the lens of Aissen's work on syntactic obviation (Aissen 1997, 1999a). I will extend Aissen's work to shed new light on the notions of proximate and obviative.

After taking this clausal perspective, the third and final part of the paper returns to $-k^hwa$ itself and its properties. From this perspective, it is the fact that $-k^hwa$ is a topic marker which leads to the obviation analysis, and not simply a ranking of constraints. Furthermore, I also suggest the beginnings of a typology of topic anaphora, in which $-k^hwa$ is simply one type in a broader spectrum.

2 Basic facts

2.1 Background on Takelma

Sapir spent six weeks in the summer of 1906 working with Frances Johnson, one of the last speakers of Takelma. Takelma was spoken in southern Oregon along the Rogue River, but by 1906 all of the Takelma speakers were on the Siletz and Grand Ronde reservations in northwest Oregon, which is where Sapir worked with Frances Johnson.

Sapir's fieldwork resulted in "no less than the first modern description of an American Indian language" (Golla 1990:15). In addition to the grammar (Sapir 1922), Sapir also published a book of Takelma texts (Sapir 1909, henceforth TT), from which the bulk of

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[2]Examples are given in an IPA-based orthography rather than Sapir's original orthography. cf. Culy 1999, Kendal 1977. There are various phonological processes which affect the surface shape of $-k^hwa$.

the examples in this paper are taken. There are on the order of 3000 clauses in the texts with an estimated 700 or so transitive clauses, of which 56 contain -k^hwa.

Takelma has no clear genetic affiliation, though it does seem to be most closely related to Kalapuya, and it is often grouped with other Oregon Penutian languages. Takelma had numerous Athabaskan neighbors, and many of the other languages spoken at Siletz were/are Athabaskan, a point to which we will return in the third section.

2.2 Some facts
2.2.1 Ø OM
The Takelma object markers other than -k^hwa are given in (2). As can be seen, the third person is otherwise Ø, for both singular and plural.

2. Takelma object markers (cf. Sapir 1922:167,284)

Person	Singular	Plural
1	-xi	-am
2	-pi	-anp^h
3	Ø	Ø

The Ø third person can be used with the full range of NP objects, from human to inanimate, as seen in (3a,b). Furthermore, the object need not be overt (3c) (nor, for that matter, need the subject be overt).

3. Human, inanimate and covert objects with the -Ø object marker
a. Human object (TT 158:3)   b. Inanimate object (TT 56:9)

ani:ˀ ki: t'omomàˀn hamìˀt^{h}pan   K^{h}ài   nakaǐ:t^h
neg   1sg kill-1sg   father-2pl   something do/say-2sg
'I did not kill your father'   'What did you say?'

c. Covert object (TT 24:12)

alsinlò:k^h
face/to-nose-stick
'They met him'

2.2.2 -k^hwa with an overt subject
Turning now to -k^hwa, we can start with Sapir's observation that -k^hwa can be used to disambiguate clauses:

> "whenever the third personal object refers to a human being and the subject is expressed as a noun, suffixed -k^hwa must be used to indicate the object; if it is not used the expressed noun will most naturally be construed as the object of the verb." (Sapir 1922:169)

This type of disambiguation is illustrated in the examples in (1) given previously. As it turns out, 48 of the 56 -k^hwa clauses have an overt subject. An example from the texts is given in (4).

4. -k^hwa with overt subject (TT 28:10)

Mì: kasà:lhi ma:l   sa:nsàn<u>k^hwa</u>

now then   salmon-spear_shaft fight-k^hwa
'Now the salmon-spear shaft fought with him'

However, there are two questions which immediately arise with respect to Sapir's generalization that -k^hwa must be used with an overt subject. First, what about the other eight -k^hwa clauses without an overt subject? While they do not fall under the purview of Sapir's generalization, we should look at what factors govern the use of -k^hwa in those clauses.

The second quesion is, is it really true that -k^hwa "must" be used to when there is an overt subject? To answer the second question first, it turns out that -k^hwa is not in fact obligatory when there is an overt subject. One such sentence is given in (5).

5. Overt subject without -k^hwa (TT 118:5)

<u>nakàhiʔ</u> nihwík^{hw}

say-3sg.tr Black_Bear
'"…" said Black Bear to them'

To be fair to Sapir, these sentences are not common. In a detailed analysis I did of one of the stories ("The Four Otter Brothers and Chicken-Hawk"), out of 38 transitive clauses, there were 10 with human/animate objects, and no clear examples of an overt subject without -k^hwa.[3]

2.2.3 -k^hwa as topic
Turning now to the eight -k^hwa clauses without an overt subject, we find that in all eight instances the object is the main character (the topic) of the story. In fact, in 51 of the 56 -k^hwa clauses the object is (one of) the main characters of the story, i.e. the discourse topic. An example is given in (6). In this story Daldal is the main character, and Sinew-man is a character he encounters.

6. -k^hwa without overt subject; -k^hwa as discourse topic (TT 27:16)

Há:xan<u>k^hwa</u>hì:s

burn-k^hwa-almost
'He [Sinew-man] almost burned him [Daldal]'

When we look at the remaining five -k^hwa clauses, the object is always a local topic. For example in (7) from the same story as (6), the preceding section talks about how the women (referenced by -k^hwa) were quarreling after Daldal tied their hair together.

7. -k^hwa as local topic TT 27:5

Mì: taltàl tak^hwilì:tat^h uyù:ʔski<u>kwa</u>

now Taltal over-house-3sg laugh-k^hwa
'And Daldal from on top of the house laughed at them'

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[3]Of the four candidates for an overt subject without -k^hwa, two involve an object which is not portrayed as human at that point in the story, while the other two involve an overt emphatic subject pronoun, which is not what Sapir was considering.

Furthermore, in the detailed analysis of the story, the only example of a main character (the Otter brothers) as an object with the -Ø OM is when the subject is another main character (Chicken-Hawk), as seen in (8).

8. -Ø OM with (co-)topic (TT 152:4)

"…" nakàhiʔ
      say-3sg.tr
'"…", he [Chicken-Hawk] said to them [the Otter brothers]'

A further pair of contrasting examples is given in (9). In (9a), the object referenced by -k^hwa, Grizzly Bear, is one of the topics of the story, while in (9b), the object, Frog, is not one of the topics of that story.

9. -k^hwa as topic marker, -Ø OM with non-topic
a. -k^hwa as topic marker (TT 122:13)

xamkwitìk^{hw}takwa méːx
threw_into_water-OM   crane
'Crane threw her [Grizzly bear] into the water'

b. -Ø OM with non-topic (TT 108:5)

Skìsi lap^{h}áːm xamkiwitík^{hw}
coyote frog   threw_into_water
'Coyote threw Frog into the water.'

Thus, the topic status of the object is a significantly better predictor of whether -k^hwa will be used than is an overt subject.

Finally, this analysis of -k^hwa as a topic marker helps us understand the two examples in which -k^hwa occurs with an overt object, contrary to Sapir's generalization. The two examples are given in (10).[4] In both cases the overt object is not in its canonical preverbal position[5] but rather follows the verb. This suggests that the overt NP is acting as something in addition to being the notional object, namely the topic.

10. -k^hwa with overt object: non-canonical SVO order
a. TT 63:4

àniːʔ nek^h aĺxìːkʰwa kʰa-ilàːpʰa hàːpʰti
not   person see-k^{h}wa   woman   small
'No one did see the little woman'

b. TT 110:11

miː yap'a kàːʔm t'ayáːkʰwa hoːúː
now person two   found-OM   jack_rabbit
'now two persons had found Jack-Rabbit'

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[4]There are another two examples in Sapir's grammar (Sapir 1922:158) with SOV order. However, they seem to be invented, since they are not from any of the texts.
[5]cf. Kendall 1977 for Takelma as an SOV language

2.2.4 Summary

Given that -*kʰwa* occurs without an overt object, it is an incorporated pronoun. That is not uncommon (cf. Bresnan and Mchombo 1987, Jelinek 1984). What is less common is that -*kʰwa* is used only for topics. This point will be the topic (pun intended) of the third section.

Even though topicality of the object and overtness of the subject combine to account for all the -*kʰwa* clauses, there is one more property of -*kʰwa* which is worth mentioning, and which will be the point of departure for the next section. In the texts, -*kʰwa* is always used when the object is more animate than the subject. The example in (1) with "ants" as the subject illustrates this point. Another example is given in (11) (see also (25) below).

11. -*kʰwa* with an object more animate than the subject

mi: p'owó:<u>kʰwa</u>

now sting-kʰwa
'now they [the yellowjackets] stung him [Coyote]'

To sum up, we have seen three properties of -*kʰwa* which contribute to its distribution (12). Two of these properties (a,c) are new generalizations. The next two sections will discuss these properties in more detail.

12. Three properties of -*kʰwa*
a. The object is a topic
b. The subject is overt
c. The object is more animate than the subject

2.3 What -*kʰwa* is and isn't: OM vs. Switch Reference and Voice

Since -*kʰwa* is used being used to track entity references, I will now briefly discuss two reference tracking systems, switch reference and voice, and show that -*kʰwa* does not fit either of them. Obviation, another type of reference tracking system, will be the subject of the next section, when we return to the properties of -*kʰwa*.

First, we can show that -*kʰwa* occurs in the same position as the other overt object markers, immediately preceding the subject marker.

13. -*kʰwa* in position of OM
a. 2sg OM (Sapir 1922:167)

tó:mx<u>pink</u>ʰ

kill-2sg-3sg.fut.tr
'he will kill you'

b. -*kʰwa* (TT 94:2)

tʰa:n ka ná:<u>kʰwa</u>kʰ

Squirrel that say-kʰwa-3sg.infer.tr
'Squirrel it was that said that to him'

Switch reference tracks whether the subject is the same or different from an adjacent clause, usually the preceding one. It is clear that -*kʰwa* is not a switch reference marker,

since it does not show either a same subject or a different subject effect with adjacent clauses (14).

14. *-kʰwa* is not a switch-reference marker
-kʰwa when preceding subject = current subject (SS$_p$)   a.ii, b.ii
-kʰwa when preceding subject ≠ current subject (DS$_p$)   a.iii
-kʰwa when following subject = current subject (SS$_f$)   b.i
-kʰwa when following subject ≠ current subject (DS$_f$)   a.ii

a. (TT:180,24)
i. Background

ka xepèˀn

that does
'That one$_i$ does so'

    ii. SS$_p$, DS$_f$

ka c'olx   okoíːk̲ʰ̲w̲a̲

that dentalia give-kʰwa
'that one$_i$ gives him$_j$ [the go-between] dentailia'

      iii. DS$_p$

Yap'a toːmàˀs àniːˀ kʰai   okoíːk̲ʰ̲w̲a̲

person killer   not   something give-kʰwa
'The slayer of the person$_k$ does not give him$_j$ [the go-between] anything.'

b. (TT 142:4)
i. SS$_f$

ka maláːk̲ʰ̲w̲a̲

that tell-kʰwa
'that one$_i$ [the mouse] had told him$_j$'

    ii. SS$_p$

nakaíːk̲ʰ̲w̲a̲naˀ

tell-kʰwa-sub
'she$_i$ telling him$_j$'

It also seems clear that *-kʰwa* is not a voice marker. *-kʰwa* clauses are active, but the Ø-OM also occurs with active clauses. Takelma does have a passive voice marker which replaces the subject marker on the verb, leaving the OM in place. No examples have been found with *-kʰwa* and the passive.

3 Obviation

3.1 *k'wa* and characterizations of obviation
Traditionally, the term obviation has been used to describe a system of nominal morphology in which one noun in a clause is marked as proximate and the others are marked as obviative. Takelma clearly does not fit this description. Nouns have the same shape regardless of their grammatical or functional status.

However, Aissen 1997, 1999a extends the notion of obviation to *syntactic* obviation, and shows how this view can provide a unified account of phenomena in a range of languages. The rest of this section will consider $-k^hwa$ from the point of view of syntactic obviation.

Aissen gives two different characterizations of obviation. The first is as a system

> "which obligatorily rank[s] third person nominals according to a complex function which includes grammatical function, inherent semantic properties, and discouse salience" Aissen 1997:705

This characterization is quite broad and Takelma does seem to satisfy it, given the animacy and topicality factors governing $-k^hwa$.
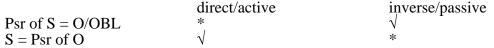
The second characterization that Aissen gives of obviation has to do with syntactic "gaps" which she associates with obviation. There are three types of such gaps. The first type of gap is animacy gaps. By this Aissen means roughly that the combination of more animate agent and less animate patient is not permitted in all relevant constructions, and similarly for less animate agent and more animate patient. As Aissen discusses, in Algonkian, the instances of the more animate agent are restricted to direct clauses, and the instances of the less animate agent are restricted to inverse clauses. In Tzotzil, the instances of the more animate agent are restricted to active clauses, while the instances of the less animate agent are restricted to passive and Actor Focus clauses. Takelma clearly has something like this type of animacy gap, since $-k^hwa$ is obligatory with a less animate subject and more animate object, as discussed earlier. We can summarize the animacy gaps in the different languages as in (15).

15. Animacy gaps in Takelma (here), Algonkian, and Tzotzil (Aissen 1997)

	Ø OM/direct/active/	$-k^hwa$/inverse/passive
S more animate than O	√	(*)
S less animate than O	*	√

The second type of gap Aissen associates with obviation is genitive gaps. By this Aissen means that a possessor of the subject may be coreferential with the non-subject only in certain constructions, while the subject may be coreferential with the possessor of the non-subject only in the complementary constructions. The situations in Algonkian and Tzotil are summarized in (16).

16. Genitive gaps in Algonkian and Tzotzil (cf. Aissen 1997)

	direct/active	inverse/passive
Psr of S = O/OBL	*	√
S = Psr of O	√	*

Takelma also seems to have the same types of genitive gaps. The facts in Takelma can be summed up as in (17), with supporting examples in (18).

17. Pattern of Takelma genitives

	-Ø OM	$-k^hwa$
Psr of S = O	Not attested	√
S = Psr of O	√	Not attested

18. Takelma genitives
a. Psr of S = O, with -*kʰwa* (TT 31:16)

hantatʰ   óːpxa   alxìːk̲ʰ̲w̲a̲
across-there elder_brother-3sg see-kʰwa
'From across there [the river] his$_i$ elder brother saw him$_i$'

b. S = Psr of O, with -Ø OM (TT 88:13)

miː òpxa   iːk̲ìːn̲a̲
now elder_brother-3sg throw_aside
'Now his$_i$ elder brother he$_i$ threw to one side'

The third type of gap Aissen associates with obviation is complement object gaps. By this Aissen means that a subject cannot corefer with the object in the complement clause. This constraint is not surface-true in all languages that Aissen considers to have obviation, so it is the least reliable indicator of obviation. Takelma does not have this type of gap, as seen in (19).

19. Subject coreferential with complement object
a. With -Ø OM (TT 150:22)

yokʼᵂoíː tóːm̲kulukwàn
know   kill-intend-pas
'he$_i$ knew that it was intended to kill him$_i$'

b. With -*kʰwa* (TT 116:18)

yokoíː tóːm̲k̲ʰ̲w̲akulúkʰ
know   kill-kʰwa-intend
'she knew that (Grizzly Bear) was intending to kill her'

It is worth noting that Takelma also does not have any alternative means to express this situation, since its passive does not promote the patient, but merely demotes the subject. This may lead to an explanation for why Takelma does not have this gap.

We can summarize the situation in Takelma with respect to evidence for obviation from noun morphology and the three types of obviation gaps as in (20).

20. Takelma and obviation evidence

Noun morphology	No
Animacy gaps	Yes
Genitive gaps	Yes
Complement object gaps	No

Takelma is thus very similar to some of the other languages that Aissen considers as having syntactic obviation (e.g. Algonkian, Kutenai), and I conclude that Takelma too has syntactic obviation.

3.2 Consequences for syntactic obviation
3.2.1 Aissen's OT account of obviation
Aissen's Optimality Theory account of obviation makes use of four hierarchies and four alignments of those hierarchies. The relevant portions of the four hierarchies are given in (21).

21. Hierarchies relevant to obviation
Participant Hierarchy   proximate > obviative
Relational Hierarchy   subject > primary object
Nominal-Relational Hierarchy   genitive > possessum
Animacy Hierarcy   animate > inanimate

The four alignments of these hierarchies are given in (22). All four involve a relationship between the Relational Hierarchy and one of the other hierarchies.

22. Alignments of the hierarchies for obviation as constraints
a. Direct Alignment of Relational and Participant = Direct Rel[ational]
b. Indirect Alignment of Relational and Participant = Indirect Rel[ational]
c. Direct Alignment of Nominal-Relational and Participant = Direct Nom[inal]
d. Direct Alignment of Animacy and Participant = Direct Anim[acy]

e. Comparison of alignments
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Direct Rel        Indirect Rel      Direct Nom         Direct Anim
S      O          S       O         Gen   Head         +Anim       -Anim
|      |           \     /           |     |            |           |
Prox  Obv          Prox  Obv        Prox  Obv          Prox        Obv
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Direct Rel means that subjects are proximate and objects are obviative. Indirect Rel means that subjects are obviative while objects are proximate. Direct Rel and Indirect Rel are each associated with particular clause types. Direct Rel is associated with active/direct clauses, while Indirect Rel is associated with inverse clauses.

Direct Nom means that the genitive is proximate and the possessum is obviative. Direct Nom is not restricted to any clause or nominal type.

Direct Anim means that when there is a difference in animacy between the agent and the patient, the more animate one will be proximate and the less animate will be obviative. Direct animacy is not restricted to any particular clause type. The final piece of information is that Direct Rel and Indirect Rel are ranked higher than Direct Nom and Direct Anim. There is no available evidence in Takelma for the relative ranking of Direct Nom and Direct Anim.

Let's see how these alignments might apply to Takelma. Direct Rel will be associated with -Ø OM clauses, while Indirect Rel will be associated with -k^hwa. (Note that that means that -k^hwa clauses are parallel to inverse clauses in Algonkian, a point to which we will return in the next section.) Let's consider the clause in (23), and the tableau of candidates with the -Ø OM and -k^hwa in (24). (Direct Nom is omitted from these and future tableaux where it is not relevant.)

23. Hunger was killing him.

24.

hunger killed him	Direct Rel	Indirect Rel	Direct Anim
a. hunger killed-Ø him Prox Obv			!*
b. hunger killed-Ø him Obv Prox	!*		
c. hunger killed-k^hwa him Prox Obv		!*	*
d. ☞ hunger killed-k^hwa him Obv Prox			

In (24a) and (24c), Direct Anim is violated since "hunger" is less animate than "him", but it is given as proximate in these candidates when it should be obviative. (24b) violates Direct Rel, since the subject is not proximate, while (24c) vioates Indirect Rel, since the subject is not obviative. That leaves (24d) as the winning candidate, which is borne out by the Takelma sentence in (25).

25. (TT 15:16)

Páːnx t'omóːk̲ʰ̲w̲a̲

hunger kill-kʰwa
'He was hungry' (lit. 'Hunger was killing him')

3.2.2 Proximate/obviative status as emergent
This discussion shows how the animacy restriction on -k^hwa can be accounted for, but we have not said anything yet about the other two factors governing the distribution of -k^hwa, namely that it is a topic marker and that it often occurs when there is an overt subject. Consider for example the tableau in (26) for "they told him", where animacy does not play a role. Without knowing the proximate/obviative status of the arguments, we cannot decide on a single winning candidate. While both candidates (a) and (d) correspond to potential Takelma sentences, in a given context only one candidate is possible. Clearly, we would like to be able to determine the correct candidate in context.

26. Preliminary tableau

they told him	Direct Rel	Indirect Rel	Direct Anim
a. ☞ they told-Ø him Prox Obv			
b. they told-Ø him Obv Prox	!*		
c. they told-k^hwa him Prox Obv		!*	
d. ☞ they told-k^hwa him Obv Prox			

The key to both of the factors governing -k^h*wa* (topic and overt subject) has to do with what determines proximate and obviative status. In particular, topicality is one thing that determines these, with topics being proximate and non-topics being obviative. Going a step further, overt arguments are generally very unlikely to be topics, and this is true in Takelma as well.[6] So overt arguments will be (or are more likely to be) obviative.

Implicit in the tableaux in (24) and (26) is the idea that the proximate/obviative status of the arguments is a property of the candidates that is subject to constraints. This view is different from that assumed by Aissen 1997,1999b and others (e.g. Sells to appear) who assume that the discourse prominence of the arguments is part of the input.

However, given that there is a range of factors which determine proximate/obviative status, it seems natural to treat those factors as constraints determining the optimal candidate rather than treating proximate/obviative stauts as an unanalyzable, immutable given. So far as I can tell, the position taken by Aissen, Sells and others is really a matter of convenience for their discussions[7] and not one that is crucial theoretically for their arguments.

In particular, if the constraints determining proximate/obviative status are necessarily ranked higher than the other constraints under discussion (here, Direct Rel, Indirect Rel, Direct Nom, and Direct Anim) then we will see exactly the same effects as if proximate/obviative information were part of the input. For example, if we add to the tableau in (26) a high ranking constraint whose effect is that topics are proximate, we get the tableau in (27) (omitting the irrelevant Direct Anim) for the Takelma sentence in (28).

27. Revised (not final) tableau

they told him(TOP)	Prox=Topic	Direct Rel	Indirect Rel
a. they told-Ø him(TOP) Prox Obv	!*		
b. they told-Ø him(TOP) Obv Prox		!*	
c. they told-k^h*wa* him(TOP) Prox Obv	!*		*
d. ☞ they told-k^h*wa* him(TOP) Obv Prox			

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[6] In the story that was analyzed, the distance between an argument and its most recent mention (Referential Distance, cf. Givón 1983) is a very good predictor ($p < 0.05$) of whether that argument will be overt.

[7] In this regard, it is like the glossing over of the choice of grammatical function in the tableau in (24). While the assignment of grammatical function to arguments is not part of the input, Takelma does not have any construction in which the patient/experiencer is the subject and the cause is a non-subject, so the grammatical function assignment is essentially fixed in this example.

28. (TT 60:7)

nakaĭ:k̲ʰ̲w̲aʔ

say-kʰwa
'they had told him'

Determining the full range of factors which determine proximate/obviative status is beyond the scope of this paper, and in any case it has received much discussion in the Algonkian literature. However, we can sketch how some of the factors might work for Takelma.

We can treat the factors that determine proximate/obviative status as hierarchies entirely parallel to the Participant, Relational, Nominal, and Animacy hierarchies, as in (29). In addition to topicality and overtness, another factor which may be relevant to proximate/obviative status in Takelma is individuation, since both of the examples (10) with an overt object have less individuated subjects (cf. Aissen 1999a for individuation as a factor in Tzotzil). The three hierarchies are given in (29).

29. Three (partial) prominence hierarchies for proximate/obviative status
a. Topicality: TOPIC > non-TOPIC
b. Overtness: OVERT > COVERT
c. Individuation: More Indivduated > Less Individuated

We can then align these hierarchies with the Participant hierarchies, just as we did the other Relational and Animacy hierarchies, as in (30). Direct Topic is then the replacement for the Prox=Topic constraint in tableau (27).

30. Three alignments with the Participant hierarchy
a. Direct Alignment of Topicality and Participant   = Direct Topic
b. Indirect Alignment of Overtness and Participant   = Indirect Overt
c. Direct Alignment of Individuation and Participant   = Direct Indiv
d. Comparison of Alignments

TOPIC   non-TOPIC   Overt   Covert   More individ. Less individ.
  | | | | | |
Prox   Obv   Prox   Obv   Prox   Obv

Given that the topicality of -kʰwa seems more important than the overtness of the subject, we can tentatively say that at least for Takelma Direct Topic > Indirect Overt. There is not enough information to rank Direct Indiv. We can reformulate the tableau in (27) as in (31). I leave open the possibility that the choice of overtness for the arguments may be determined by (higher-ranking) constaints as well.

31. Final tableau

they(Ø) told him(Ø,TOP)	DirTop	IndirOvert	DirRel	IndirRel
a. they(Ø) told-Ø him(Ø,TOP) Prox Obv	!*	*		
b. they(Ø) told-Ø him(Ø,TOP) Obv Prox		*	!*	
c. they(Ø) told-k^hwa him(Ø,TOP) Prox Obv	!*	*		*
d. ☞ they(Ø) told-k^hwa him(Ø,TOP) Obv Prox		*		

To sum up this section, Takelma seems similar to other languages with syntactic obviation, so Aissen's OT analysis can be applied. We also saw that it is possible to extend that analysis to treat proximate/obviative status as an emergent property rather than as part of the input.

4 Typology: topic markers

4.1 -k^hwa as paragraph topic marker

When we step back and look at the languages in which obviation plays an important role, there are two broad types, depending on whether Indirect Rel is active or not. In the Algonkian languages and Takelma, Indirect Rel is active, while in Tzotzil and Chamorro it is not. It is striking as well that in the languages with Indirect Rel, there is special morphology associated with it. In the Algonkian languages it is the inverse marker on the verb, while in Takelma it is -k^hwa.[8] The question naturally arises as to whether there are properties of these morphemes which lead to their association with Indirect Rel. At least for -k^hwa, I think the answer is pretty clearly affirmative. -k^hwa is a topic marker for objects, which are not usually topics — subjects are usually topics. While I won't explore *how* these morphemes are associated with Indirect Rel, I will take a look at the properties of -k^hwa that lead it to be associated with Indirect Rel.

We have seen that -k^hwa is a topic marker, but we can refine that a bit. -k^hwa usually corresponds to a story topic, but as the example in (7), repeated here in (32), shows, -k^hwa can correspond to a smaller, paragraph-level topic. I would suggest that -k^hwa's specification is as a marker of the paragraph topic. Of course, the story topic is often the paragraph topic, which explains why -k^hwa so often corresponds to the story topic.

32. (=7) -k^hwa as paragraph-level topic

Mi: taltàl tak^{h}wilì:tat^h uyù:ʔsk<u>ikwa</u>

now Taltal over-house-3sg   laugh-k^{h}wa
'And Daldal from on top of the house laughed at them'

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[8]It is peraps worth noting that -k^hwa is much more uncommon than the Algonkian inverse marker. The reason for that awaits further research.

Further evidence that *-kʰwa* is a paragraph topic marker (as opposed to a story topic) comes from stories in which it occurs with different referents. Some figures are given in (33).

33. *-kʰwa* with multiple referents in a story

Story	Referents of *-kʰwa*	n
Daldal the Transformer		7
	Daldal (unspecified as to which one)	3
	Daldal the younger	3
	The two blind women (= (7/32))	1
Grizzly Bear and Black Bear		6
	Black Bear	2
	Grizzly Bear	2
	Black Bear's daughters	2
Eagle and the Grizzly Bears		5
	Eagle	4
	Grizzly Bear brothers	1

The story of Grizzly Bear and Black Bear is particularly interesting in that the use of *-kʰwa* follows the story action. The first part of the story is about Black Bear and the events leading up to her murder by Grizzly Bear, and the two instances of *-kʰwa* referring to Black Bear occur in that section. The second part of the story is about Black Bear's daughters and the revenge they take by killing Grizzly Bear's daughters, and the two instances of *-kʰwa* referring to Black Bear's daughters occur in that middle section. The final part of the story is about Grizzly Bear's futile pursuit of Black Bear's daughters, and the two instances of *-kʰwa* referring to Grizzly Bear occur in this final section.

This evidence points strongly towards *-kʰwa* being a paragraph level topic marker. There is also evidence that *-kʰwa* is used to refer to the paragraph topic even when there is a more local topic. In the example in (34), at the local level, the Crows and their speech are what the sentences are about. However, the paragraph, and indeed the story as a whole, are about Chicken-Hawk.

34. *-kʰwa* is not sentence topic marker (TT 146:11)

tà:le:lákʰw, me:l tʰka: mìʔs texepè?n, ka c'ipìnkʰwa

listen_to   crows land   one   say_so   that address_to-kʰwa
'He$_i$ listened to them$_j$, the Crows$_j$ covering the land said so, that speech they$_j$ addressed to him$_i$.'

4.2 Other levels of topic marking

So far, I have talked about three levels of discourse, the sentence, the paragraph, and the story, and argued that *-kʰwa* indicates a paragraph topic. If the level of discourse structure is relevant to the definition of *-kʰwa*, then we might expect to find other topic markers which refer to the other levels of discourse structure. In fact, this does seem to be the case, as evidence from Athabaskan shows.

The Athabaskan *bi-* verbal prefix has received a lot of attention in the literature, most notably in Navajo, starting with Hale 1973. There are a variety of analyses, but a series of recent analyses of Navajo (Speas 1990, Uyechi 1996) argue that *bi-* is a sentence-level topic marker. In other words, *bi-* indicates what the sentence is about (cf. Platero 1974 on Navajo, Sandoval and Jelinek 1989 on Jicarilla Apache, and Thompson 1996 on a variety

of Athabaskan languages). Uyechi analyzes Navajo *bi-* in LFG as an incorporated pronoun which refers to sentence topics. An example is given in (35).

35. Navajo *bi-* as sentence-level topic marker (Uyechi 1996:123, citing Hale 1973)

łį́į́   dzaanééz biztał
horse mule   BI-kicked
'The horse, the mule kicked it'

A further interesting aspect of Athabaskan *bi-* is that it has been connected with syntactic obviation. Thompson 1989 argues that Koyoukon *bi-* is an inverse marker and Aissen 1997 connects the Navajo animacy and genitive gaps with syntactic obviation.

One final aspect of Athabaskan *bi-* is that it existed, at least in some form, in at least two of the Athabaskan languages neighboring Takelma, namely Galice Athabaskan (Hoijer 1966) and Tututni (Golla 1976). We might speculate wildly that Takelma borrowed the function of topic-anaphora from Athabaskan. Of course, much, much more work would have to be done to substantiate this speculation.

We have now seen pronominal topic markers for sentence-level (Athabaskan) and paragraph-level (Takelma) topics. A third level of discourse organization is the story or episode (often the whole text), and there is some evidence, again from Navajo, that there may be pronominals which refer to story-level topics. So-called fourth person pronominals in Navajo have not been the subject of much analysis, but at least one of the uses of them seems to be as a story level topic marker (Young and Morgan 1987, Willie 1991). However, unlike *bi-* and *-kʰwa*, the fourth person pronominals have other uses, e.g. to indicate politeness, and they are not restricted to objects but can be subjects as well.

4.3 The beginnings of a typology of topic marking
We've seen that Takelma *-kʰwa* and Navajo *bi-* only refer to topics. Furthermore, when the prior conditios on their use is satisfied (e.g. there is a third person subject, and in the case of *-kʰwa*, the humanness of the referent), only they can be used to refer to topics. For example, the Takelma Ø OM does not refer to paragraph topics; nor is Navajo *yi-* (also used when there is a third person subject) apparently used for sentence topics. We thus have forms (Takelma Ø OM, Navajo *yi-*) which we might call "anti-topic" markers.[9] Interestingly enough, Bresnan and Mchombo 1987 show that the independent pronoun cannot refer to a topic that is an object, making the Chichewa independent pronoun an anti-topic pronoun in this situation.

In addition to topic markers and anti-topic markers, there are also pronouns which may or may not refer to topics. English pronouns are one example. The Chichewa OM may also be neutral with respect to the topicality the object. Bresnan and Mchombo provide ample evidence that when the OM is used with an overt object, it is a topic. However, they also give in example in the second clause of (36) in which the OM is not used with an overt object and it does not seem to be a topic in any sense: Hyena seems to be the topic.

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[9]David Beaver (p.c. 7/00) suggests that the notion of "anti-topic" may not be needed. On this view, anti-topic markers are simply the elsewhere forms and need not be specified specifically as anti-topic. It is hard to see how this approach would account for the three-way distinction in Navajo, though, among *bi-*, *yi-* and fourth person.

36. Chichewa OM not referring to topic (Bresnan and Mchombo 1987)
Fîsi   a-na-dyá   chí-manga.
1A.hyena 1ASu-PST-eat 7-corn

Á-tá-chí-dya,   a-na-pítá   ku San Francisco
1A.s-serial-<u>7.O</u>-eat 1A.s-past-go to San Francisco
'The hyena ate the corn. Having eaten it, he went to San Francisco.'

Putting together the information about the different pronouns, we have the beginnings of a typology of what we might call topic-anaphora. A summary of this information is given in (37).

37. The beginnings of a topic-anaphora typology
(o) = the form has other uses

Discourse Level	Topic-marker	Anti-topic marker	Neutral
Sentence	Navajo *bi-*	Navajo *yi-* Chichewa independent pronoun (o)	English pronouns Chichewa OM
Paragraph	Takelma *-kʰwa*	Takelma Ø OM (o)	" " (?)
Story/episode	Navajo 4th person (o)	?	" " (?)

The existence of this range of topic anaphora also addresses a question that may have been nagging the reader: why couldn't we simply say that *-kʰwa* is an incorporated pronoun and be done with it? The answer is that topic anaphoricity is a separate dimension along which pronominals in general (not just incorporated pronouns) are classified. In particular, for Takelma, the Ø OM would also be treated as an incorporated pronoun, since it occurs without overt objects, just as *-kʰwa* does. What distinguishes *-kʰwa* from the Ø OM is their topic anaphoricity: *-kʰwa* is a topic maker while the Ø OM is an anti-topic marker.

What I have attemped to show in this section is that *-kʰwa* as a topic marker is not an aberration. Rather, it is one point in a larger typology of topic-anaphora. I have suggested that the level of discourse organization is one dimension of the typology of topic-anaphora. It remains to be seen if other aspects of topicality (e.g. continuing vs shift) are relevant to topic anaphora. For example, Givón 1990:913 lists a variety of constructions in English which correspond to different aspects of topicality.

5 Conclusion
In this paper, I have looked at Takelma *-kʰwa* from a variety of points of view, from a language internal perspective, from the perspective of obviation, and from the perspective of topic-anaphora. From the language internal perspective, I showed new generalizations about *-kʰwa*, namely that it indicates an inverse animacy relationship between subject and object, and it is a paragraph topic marker. From the perspective of obviation, I showed that proximate/obviative status can and should be treated as emergent rather than as part of the input. And finally, from the perspective of topic-anaphora, I suggested that *-kʰwa* fits into a of typology of topic-anaphora, the beginnings of which were explored here.

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