# THE SUBJECT AGREEMENT CLITIC IN HEILTSUK

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## 1. INTRODUCTION

Those objects which do not fit neatly into a given model of some natural phenomenon are the most interesting. The mere existence of such objects belies some inadequacy of the model. In the study of language, a likely candidate for such an object is the clitic. Clitics sit on the fence between affix and word, morphology and syntax (Zwicky 1977). A descriptively adequate theory of language must be able to account for their behavior.

While the problem of clitics has been tackled by many (cf. Borer 1986; Halpern and Zwicky 1996; Halpern 1998), relatively few have looked at languages outside the Indo-European family. This paper looks at clitics in Heiltsuk, a Wakashan language spoken mainly around Bella Bella and Klemtu on the central coast of British Columbia.

It will be shown that the subject clitic in Heiltsuk can most easily be accounted for with Anderson's (1992) theory of clitics as phrasal affixes.

## 2. A BRIEF SKETCH OF HEILTSUK GRAMMAR

All the data cited in this paper is from Rath's (1981) grammatical introduction to his Heiltsuk-English dictionary. These are written in the Heiltsuk practical orthography.[1] An accent above a vowel represents high-tone; the lack of an accent represents low tone.

In the basic order of constituents in Heiltsuk the subject appears after the verb and before any other constituents:

(1) Dáduqvlá    wísm-á-x̌i    w'ác'-iá-x̌i.
    watch       man-$d_1$-$d_2$    dog-$d_1$-$d_2$
    'The man watches the dog.'

Noun phrases are marked by (up to) two deictic markers. As they are irrelevant to the discussion at hand, they are glossed simply as $d_1$ and $d_2$.

Modifiers appear to the left of that which they modify. Thus in (2) the adverb precedes the verb, and in (3) the adjective precedes the noun. These are obligatorily marked with what Rath called 'left-hand adjunct suffix', glossed as ADJ here.[2]

(2) 'Wála-nugva-s    dáduqvlá    w'ác'-iá-x̌i.
    really-SUBJ-ADJ  watch       dog-$d_1$-$d_2$
    'I really watch the dog.'

(3) aík-a-s         uxvthiás-x̌i
    good-$d_1$-ADJ  roof-$d_2$
    'a good roof'

The sentence in (2) also illustrates the fact that Heiltsuk is a pro-drop language. The agreement morpheme is sufficient to convey the person and number of the subject, and so no overt pronoun is required.

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[1] See Rath 1981, pp 4–63 for a discussion on its relation to phonetic representation.

[2] There are several words which do not take this adjunct suffix. This is addressed in Section 5.2 below.

Heiltsuk also displays some strange behavior with respect to the agreement morpheme; it is deleted when the subject is adjacent to it. This happens when the verb is sentence initial, as in (1) above. Anderson (1984) also notes the same phenomenon in the neighboring related language Kwakwala. He further notes that if the subject is stylistically moved into second position when the verb is non-initial, the agreement morpheme again deletes. Presumably the same mechanism is working in both languages, but the nature of this mechanism is unknown.

## 3. SUBJECT AGREEMENT MORPHEME

The subject agreement morpheme in Heiltsuk follows the first word in a sentence, regardless of its category. In (4) it follows a verb, in (5) an adverbial, in (6) a negative, and in (7) a connective.

(4) Dáduqvla-á-qi    wísm-á-x̌i.
    watch-SUBJ-OBJ  man-$d_1$-$d_2$
    'The man watches him/her/it/they.'

(5) 'Wál-i-s          dáduqvlá     wísm-á-x̌i     w'ác'-iá-x̌i.
    really-SUBJ-s   watch        man-$d_1$-$d_2$   dog-$d_1$-$d_2$
    'The man really watches the dog.'

(6) 'Kús-i      w'ála-s  dáduqvlá   wísm-á-x̌i     w'ác'-iá-x̌i.
    not-SUBJ   really-s  watch      man-$d_1$-$d_2$   dog-$d_1$-$d_2$
    'The man does not really watch the dog.'

(7) G-i         ăwá     t'hiy'á-qí.
    and-SUBJ   IMP     buy-OBJ
    'And he buys it.'

This morpheme's persistence in following the first word, no matter what part of speech it is, is suggestive of it being a second-position (2P) clitic. This is the hypothesis assumed in this paper.

## 4. A THEORY OF CLITICS

There has long been an interest in 2P clitics, going back at least to Wackernagel (1892), who examined such morphemes in the Indo-European family. More recently, two main approaches to 2P clitics have been proposed. The first, begun by Klavans (1980) and continued by Kaisse (1985) and Anderson (1992, 1993), considers clitics to be phrasal affixes, and 2P clitics to be the phrasal equivalent to infixes. The second, developed by Halpern (1995), gives 2P clitics a syntactic position preceding the first word, but, due to phonological considerations, they metathesize with the first word/constituent. The first approach will be taken in this paper. Henceforth all uses of the word 'clitic' refer to phrasal affixes, and 'affix' stands for lexical affix (in Anderson's (1992) sense).

Most studies of 2P clitics have dealt with auxiliaries and pronouns (cf. Halpern 1998). This has had the effect of producing analyses which assume clitics are prosodically deficient words which are base-generated in the same positions as full words and then moved into their final surface positions. Co-occurrence of a 'pronominal' clitic and an overt NP has been called 'clitic doubling', since it means that there were two syntactic arguments for one θ-role. By assuming that clitics are phrasal affixes, Anderson (1992) opened the door to the possibility of agreement clitics (such as the subject agreement clitic in Heiltsuk) because, as he argues, agreement is a sentential feature.

Some mention should be made of the assumptions of Anderson's (1992) theory of morphology, since this is the framework in which the present analysis is set. Morphology is distinct from both syntax and phonology, with its own processes and objects. Morphemes are not objects; morphology is a process of changing the phonological form of a word to mark specific morphosyntactic features. Some morphosyntactic features are the properties of phrases (as opposed to individual words). For example, case and possession are properties of the NP, not of a single word contained in it. The core process in this theory of morphology is the Word Formation Rule (WFR). Each inflectional WFR makes a change to the phonological form of a word based on its morphosyntactic features. Thus, WFRs which create clitics are mapping certain phrasal features onto the phonological form of the phrase. Each of these rules contains information on where the clitic is inserted, much the same as affixal rules do.

All clitic rules specify the value of three placement parameters (Anderson 1992:203):

(8) a. The clitic is located within some syntactic constituent (S vs. VP vs. NP, etc.) which constitutes its domain.

b. The clitic is located by reference to the {first vs. last vs. head} element of a specified sort within the constituent in which it appears.

c. The clitic {precedes vs. follows} this reference point.

Klavans (1995) also requires clitics to be specified as either pro- or enclitics, but Anderson (1992) attributes this to the Stray Adjunction rule of each particular language. This rule specifies the direction in which prosodically deficient material is incorporated. Since the Stray Adjunction rule operates on all such material in a language, it is predicted that all clitics will be either proclitics or enclitics in a given language.

In terms of these parameters, the subject agreement clitic's domain is the sentence, and it follows the first word in this domain. Take a sentence like (6), repeated as (9), for example. The entire utterance is a sentence the first word of which is *k'ús*. The clitic follows this word and attaches to it. The Stray Adjunction rule for Heiltsuk must therefore always attach prosodically deficient material leftward.

(9) 'Kús-**i** w'ála-s dáduqvlá wísm-á-x̌i w'ác'-iá-x̌i.
not-SUBJ really-s watch man-d₁-d₂ dog-d₁-d₂
'The man does not really watch the dog.'

## 5. POSSIBLE PROBLEM

Zwicky and Pullum (1983) point out that clitics can attach to a host following both affixes and clitics, while affixes can only attach to a stem following affixes, not clitics. This essentially means that all affixes must be attached before clitics.

Two things can follow the subject agreement morpheme in Heiltsuk: the left-hand adjunct morpheme (10), and the pronominal object morpheme (11). Neither of these can be affixes if the hypothesis that the subject agreement morpheme is a 2P clitic is true.

(10) 'Wál-**i**-**s** aix-s dáduqvlá wísm-á-x̌i w'ác'-iá-x̌i.
really-SUBJ-ADJ well-ADJ watch man-d₁-d₂ dog-d₁-d₂
'The man watches the dog really well.'

(11) Dáduqvla-**í**-**qi**.
watch-SUBJ-OBJ
'He/she/it/they watch(es) him/her/it/them.'

### 5.1. The Object Clitic

Fortunately, the object morpheme does behave like a clitic. It can appear either following a subject NP as in (12), or following the verb itself as in (7), repeated as (13).

(12) Dáduqvla wísm-á-x̌i-**qi**.
watch man-d₁-d₂-OBJ
'The man watches him/her/it/they.'

(13) G-i ăwá t'hiy'á-**qí**.
and-SUBJ IMP buy-OBJ
'And he buys it.'

The sentence in (13) also highlights a difference between the subject and object clitics: the object morpheme does not appear in second position in the sentence. This is likely due to a difference in the positioning parameters of the two clitics. However, a complete analysis of the object clitic is left for further study.

## 5.2. The Left-Hand Adjunct Clitic

In order to be able to say the left-hand adjunct morpheme is a clitic, we must first determine exactly what this morpheme is doing. According to Rath 1981, it marks certain modifiers which appear to the left of whatever they modify. Thus as we saw in (10), repeated in (14), *w'ál* and *aix* are both marked with the left-hand adjunct morpheme.

(14)   'Wál-i-s          aix-s          dáduqvlá      wísm-á-x̌i    w'ác'-iá-x̌i.
       really-SUBJ-ADJ  well-ADJ       watch         man-d₁-d₂    dog-d₁-d₂
       'The man watches the dog really well.'

This can be formulated as a structural assignment rule, much like how case is handled by Anderson (1992:118)

(15)   X → [+ADJ] / [$_Y$ __ Y ]

However, *k'ús* does not get marked with this morpheme, as shown in (16). But *k'ús* is the negative, and if, as is widely assumed, negatives head their own phrase, NegP (Pollock 1989), they are therefore not adjuncts. It seems plausible that all those words which appear to the left of the verb but are not marked with -*s* are not adjuncts, but heads of their own phrases, and hence are not subject to the rule in (15).

(16)   'Kús-i          w'ála-s   dáduqvlá      wísm-á-x̌i    w'ác'-iá-x̌i.
       not-SUBJ        really-s  watch         man-d₁-d₂    dog-d₁-d₂
       'The man does not really watch the dog.'

Now that we can say what the adjunct morpheme is doing, we need to account for its appearance following the subject agreement clitic. The answer must be that it is a clitic, not an affix. More specifically, it must actually be a simple clitic or bound word, not a phrasal affix.

The differences between these three objects are crucial, and some definition of the first two is in order. Simple clitics are reduced forms of words whose syntactic distribution is a subset of the distribution of their corresponding full forms (Zwicky 1977). I am borrowing the term 'bound word' from Zwicky, but modifying its definition. Zwicky used it to refer to clitics which have no full-word counterparts, but have the distribution of special clitics (which do have full-word counterparts). He used the English possessive as an example of a bound word. Clearly these are phrasal affixes in our present framework. As this term is obsolete, I shall appropriate it and have it designate a type of word, not a clitic. Bound words have their own syntactic position, but are prosodically deficient and so incorporated into neighboring prosodic units by the Stray Adjunction rule. Thus bound words, like simple clitics, are placed according to syntax, rather than morphology.

Now, let us see why the adjunct morpheme cannot be a phrasal affix. In terms of Anderson's (1992) clitic placement parameters, its domain would be the phrase marked with [+ADJ], and it would follow the last word. Thus in (16) above, the phrase headed by *w'ála* is first assigned the feature [+ADJ], then the adjunct clitic is located following the last (and only) word of this phrase. Heiltsuk's Stray Adjunction rule then attaches it leftward onto this word. If we try to apply this process to a sentence in which the subject agreement clitic is followed by the adjunct clitic, as in (14), we discover a problem. Since its domain is contained within that of the subject agreement clitic, the adjunct clitic would be attached first. This is clearly contrary to the facts.

Since there is no evidence that there is a corresponding free form, it is more likely that the adjunct clitic is a bound word, not a simple clitic. It would then have its own syntactic position, but, being prosodically deficient, be attached leftward by the Stray Adjunction rule. The syntactic position required would be to the right of the modifier, likely a specifier position. This is illustrated in the relevant section of the tree structure for the sentence in (14) (leaving aside the problem of categories):

(17)

      [+ADJ]

w'ál-i     -s
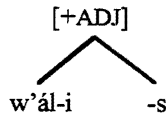
## 6. CONCLUSION

In this paper it was shown that Anderson's (1992) theory of clitics as phrasal affixes can account for the subject agreement clitic in Heiltsuk. While this clitic is occasionally followed by one of two morphemes, this is not problematic if they are also considered clitics. Such a hypothesis was shown to be consistent with the data.

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