DIRECTIONALITY AND AFFECTEDNESS: SEMANTIC EXTENSION IN CHICKASAW APPLICATIVES

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1. INTRODUCTION. In this paper, we consider the way in which the central directional meanings of three Chickasaw applicative verb prefixes are extended to encode various oblique semantic relationships human participants may bear within a clause.[1]

We begin by presenting the use of applicatives to introduce semantic obliques into Chickasaw sentences, Chickasaw agreement morphology, and the full system of eight Chickasaw applicatives. We then survey the syntax of Chickasaw applicative arguments. Finally, we consider semantic extensions of each of three goal-oriented directional applicatives and how these extended meanings are connected with specification of the ways humans are affected in the meanings of verbs.

2. CHICKASAW AND THE CHICKASAW APPLICATIVES: AN OVERVIEW.[2] Chickasaw, a critically endangered Western Muskogean language of south-central Oklahoma, has no prepositions or postpositions or oblique case markers of any kind. All nominals that would be case-marked or objects of adpositions in more typical languages must be licensed by applicative affixes on the verb, appearing as arguments rather than syntactic obliques.

Chickasaw is a language with very strict lexical transitivity. A simple transitive verb like *chompa* 'buy' (in (1)), for example, takes exactly two arguments, a subject and an object, which either are present overtly or whose identity is known from context. (1a) shows Chickasaw subjects and objects marked with the nominative and accusative suffixes *–at* and *–a*. Nominative case marking is required on subjects, but object nouns may be unmarked, as in (1b).[3] Nominal arguments need not appear overtly, as shown by (1c).

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[1] We chose this topic for presentation at this celebratory conference because of its connection with the work of Mary Haas, founder of the Survey and doyenne of Muskogean linguistics. Our paper is also a tribute to our advisor, Margaret Langdon, who taught us about fieldwork and looking carefully for meanings, and to Catherine Willmond, Chickasaw teacher supreme. We're grateful for many helpful comments from participants in the conference.

[2] Our initial description of the syntax of the Chickasaw applicatives is based on that presented in Munro (2000), which noted some of the grammatical similarities of the three applicatives we consider here.

[3] An unmarked object noun must immediately precede the verb, and is often loosely incorporated onto or cliticized to it.

(1a) *Ihoo-at* *bala'-a* *chompa.* 'The woman buys beans'[4]
woman-nom beans-acc buy

(1b) *Ihoo-at* *bala'* *chompa.* 'The woman buys beans'
woman-nom beans buy

(1c) *Chompa.* 'She/He buys it/them'
buy

Overt subjects of simple intransitive verbs like *malli* 'jump' (2) and *nokhánglo* 'be sorry' (3) similarly require nominative marking; again, however, these subjects need not appear overtly:

(2a) *Ihoo-at* *malli.* 'The woman jumps'
woman-nom jump

(2b) *Malili.* 'She/He/It jumps'
jump

(3a) *Ihoo-at* *nokhánglo.* 'The woman is sorry'
woman-nom be.sorry

(3b) *Nokhánglo.* 'She/He is sorry'
be.sorry

There is no way to include any nominals other than the subject and object in a sentence containing a simple transitive verb like *chompa,* or to add any non-subject nominal to a sentence with a simple intransitive verb like *malli* or *nokhánglo.* Instead, the verb of a sentence containing a locative, comitative, dative/benefactive, or other semantic oblique[5] must have an added applicative marker whose presence serves to license the inclusion of the oblique argument. (4) illustrates how three different semantic obliques appear in 'buy' sentences:

[4] The Chickasaw data are written in the practical orthography of Munro and Willmond (1994), which also describes various phonological changes we will not comment on here. The abbreviations used in our glosses include acc = accusative, ben = benefactive, cj = conjunction, com = comitative, cp = complement, ctr = contrastive, dat = dative, ds = different subject, imp = imperative, ind = indirective, irr = irrealis, loc = locative, neg = negative, nom = nominative, obj = object, obl = oblique, p = plural, pt = past/perfect (*-tok* suffix), s = singular. The three agreement classes (section 2 below) are glossed I, II, and III; first and second person are glossed 1, 2.

[5] Time words constitute the only potential exception, though it is not clear these are really nominal obliques.

(4a) *lhoo-at* *Vons-a* *bala'* ***aa-chompa.*** 'The woman buys beans at Vons'
woman-nom Vons-acc beans loc-buy

(4b) *lhoo-at* *i-hattak-a* *bala'* ***ibaa-chompa.***
woman-nom dat-man-acc beans com-buy
'The woman buys beans with her husband'

(4c) *lhoo-at* *chipot-a* *bala'* ***in-chompa.*** 'The woman buys beans for the child'
woman-nom child-acc beans dat-buy

Each of the sentences in (4) has three arguments, the original lexically subcategorized subject 'woman' and object 'beans', plus an oblique — a second syntactic object — whose appearance is licensed by the applicative prefix on the verb. (For ease of identification, we boldface applicative prefixes on the verbs of example sentences in this paper.) (4b) shows in addition that a dative prefix is used on nouns to indicate alienable nominal possession.) This added argument is generally more salient in the discourse than the original object (since the speaker feels it's worth adding to the basic sentence structure), and typically appears immediately after the subject, though other word orders are possible.[6]

Some of the semantic obliques that can be used with original intransitive verbs like 'jump' and 'be sorry' (with added applicative prefixes) are illustrated in (5) and (6):

(5a) *lhoo-at* *kasbi-a* ***aa-malli.*** 'The woman jumps in the yard'
woman-nom yard-acc loc-jump

(5b) *lhoo-at* *chipot-a* ***ibaa-malli.*** 'The woman jumps with the child'
woman-nom child-acc com-jump

(6) *lhoo-at* *i-hattak-a* *i-nokhánglo.* 'The woman is sorry for her husband'
woman-nom dat-man-acc dat-be.sorry

The sentences in (5) and (6) are transitive, with two arguments each: the original subject, plus the added semantic oblique, which functions as a syntactic object.

We will refer to the added arguments in sentences like (4-6), whose semantic roles in the sentences are indexed by the applicative prefixes on the verbs of those sentences, as applicative arguments. Thus, 'Vons' in (4a) and 'yard' in (5a) are locative applicative arguments, 'child' in (4c) and 'her husband' in (6) are dative applicative arguments (indexed with the dative prefix), and so on.

[6] In particular, any case marked argument may be postposed, an accusative marked object may appear before the subject, and the speaker may choose which of two non-subjects to mark accusative in a sentence like those in (4).

Many languages have applicative markers used to derive verbs taking an additional semantic oblique argument. For example, the Uto-Aztecan language Southern Paiute has an "indirective" applicative verb suffix *-ŋqï*, used to derive applicative verbs as in (7) (Sapir 1930-31: 144-45, 721):

(7a) *ya:-q:i-* 'to come to get'
carry-come-

(7b) *ya:-**ŋqï**-k:i-* 'to bring to'
carry-ind-come-

But Southern Paiute and the great majority of languages with applicative markers have only one such morpheme. As noted at the beginning of this section, then, the Chickasaw system for expressing all oblique semantic relationships with applicatives is typologically extremely unusual.[7] Chickasaw has no prepositions or postpositions, and no oblique case marking[8] (in contrast, Southern Paiute has over 30 postpositions). Semantic obliques that are not part of the original lexical subcategorization of a verb can appear in a Chickasaw clause only when licensed by applicative prefixes on that verb.

Cross-linguistically, there is usually no limit on the number of obliques that can be included in clauses in languages that use case marking or adpositions. In Chickasaw, however, there is generally no more than one applicative argument in a clause. Two appear on the same verb only very rarely, in sentences like (8):

(8) *lhoo-at* *hattak-a* *chipota* ***ibaa-in**-taloowa-tok.*
woman-nom man-acc child com-dat-sing-pt
'The woman sang to the child with the man' (i.e., both the woman and the man sang to the child)

More commonly, speakers use complex sentences with repeated verbs to refer to situations in which more than one semantic oblique needs to be mentioned, as in (9), a complex sentence each of whose clauses includes the verb *taloowa* 'sing' with one of the two applicatives that appear together in (8):

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[7] As Larry Hyman pointed out to us at the conference, there are certainly other languages with a variety of applicatives, such as Lai (Peterson 1998), which has six. This language does not accomplish all oblique specification through applicatives, however, as is the case in Chickasaw and other Muskogean languages.

[8] There is another marker that can appear on non-subject nominals in Chickasaw clauses, *-ak*, which was called "oblique" for lack of a better term in Munro and Willmond (1994: iii). This suffix has no special connection with applicative as opposed to other objects, however, and can generally be subsituted for the more common accusative *-a*; its use may be conditioned by so far obscure discourse factors.

(9) *Charles-at* ***chin-taloowa-ka*** ***ibaa-taloowa-l-a'chi.***
Charles-nom 2sIII.dat-sing-cp.ds com-sing-1sI-inc
'Charles will sing to you and I'll sing with him': 'Charles will sing to you with me'

The two objects of the 'sing' verbs in (9) are non-third person (with agreement as described in section 3). The first clause in (9) is followed by the different-subject switch-reference marker *-ka*, which indicates that the subjects of the two 'sing' verbs are different ('Charles' is the subject in the first clause, 'I' in the second).[9] Chickasaw generally limits the number of nominals per clause to four (Munro and Gordon 1982, Munro 2000).

3. VERB AGREEMENT. Chickasaw has three classes of agreement markers for first and second person verb arguments, which are presented in Table 1 below.[10] Classes I and II are simple markers, indicating a morphologically active agreement system, in which class I markers are used for most agentive or volitional intransitive subjects and for almost all transitive subjects; class II markers are used for many intransitive subjects (often non-agentive or non-volitional) and for most transitive objects. Markers from the third set, which are used for dative, benefactive, and various other objects and subjects, are segmentable, since they are based on the dative applicative prefix *im-* seen in (4c) and (6), which we will be considering further in this paper.

class	I	II	III (include dative *im-*)
first person singular	*-li*	*sa-*	*a+m-*
second person singular	*ish-*	*chi-*	*chi+m-*
first person plural	*ii-*	*po-*	*po+m-*
second person plural	*hash-*	*hachi-*	*hachi+m-*

TABLE 1. Chickasaw Agreement Markers

[9] In part the two-clause structure seen in examples like (9) is a function of a Chickasaw grammatical restriction that allows only one non-third person object per clause. Thus, in (8) only the first of the two applicative objects of *ibaa-in-taloowa* could be non-third person.

[10] Names for the three agreement classes, I, II, and III, follow Munro and Gordon (1982). A fourth set of agreement markers indexes negative or "hypothetical" (Davies 1986) equivalents of the class I markers. The presentation in Table 1 ignores predictable morphophonemic variation, some of which is illustrated in our examples.

Class I and II markers are added directly to bare verb stems, as in (10-13). For example, *chompa* 'buy' (10) is a transitive verb that takes a class I subject and a noun object (specified or not); *malli* 'jump (11) is an active intransitive verb that takes a class I subject; and *nokhánglo* 'be sorry' (12) is a non-active intransitive verb that takes a class II subject. Finally, *halili* 'touch' (13) is a transitive verb that takes a class I subject and a class II object.

(10) *chompa* 'buy', 'he/she buys it/them', 'they buy it/them'[11]
chompa-li 'I buy it/them' etc.

(11) *malli* 'jump', 'he/she/it jumps', 'they jump'
malli-li 'I jump' etc.

(12) *nokhánglo* 'be sorry', 'he/she is sorry', 'they are sorry'
sa-nokhánglo 'I am sorry' etc.

(13) *halili* 'touch', 'he/she/it touches it/him/her/them'
halili-li 'I touch it/him/her/them'
sa-halili 'he/she/it touches me', 'they touch me'
chi-halili-li 'I touch you' etc.

Such inflected verb words can all be used as complete sentences. Case-marked independent pronouns can be added, but are rare except in emphatic contexts.

As the first example lines in (10-13) show, bare verbs without first or second person affixes can be interpreted as having third person arguments (there are no third person markers in the chart in Table 1). Markers from class III (which we gloss in this paper as unit combinations with the dative prefix)[12] replace the dative prefix *im-* on a verb, as illustrated in (14-15).[13] The

[11] There is no distinction betweeen third person singular and plural in the three-way inflectional system described here. However, there is a third person plural subject prefix *hoo-* that can optionally appear on verbs of any inflectional class with third person plural subjects: *hoo-chompa* 'they buy it' (class I subject), *hoo-sipokni* 'they are old' (class II subject), *hoo-in-takho'bi* 'they are lazy' (class III subject) (Munro and Gordon 1982). Some verbs supplete for the number of an argument (cf. Carden, Gordon, and Munro 1982; Munro and Willmond 1994). For instance, *malili* 'run' takes singular subjects; the plural of 'run' is *tilhaa*. Similarly, *kahli* is 'lay down (plural object)'; *bohli* is 'lay down (singular object)'. We have generally chosen not to specify lexical restrictions based on number or other factors such as shape in our glosses.

[12] The phonologically conditioned variants of the class III/dative prefixes may include nasalized vowels, which are difficult to segment into pronominal element and dative marker. The *m* of the dative prefix assimilates to a following stop; a nasalized vowel replaces the *Vm* of the prefix before glides, nasals, and fricatives. The same principles govern the allomorphy of the 'on' prefix *on-* to be discussed below.

[13] Traditionally (e.g., by Nicklas 1973), the *im-* prefix has been analyzed as a third person dative marker. Following Ulrich (1986), we regard *im-* as the sign of the dative or a morphological indication of class III marking, but not as a third person prefix. Like class I and II agreement, then, class III agreement uses a bare (though derivationally

intransitive stative verb *in-takho'bi* 'be lazy' (14), for example, takes a dative subject and, thus, class III marking when the subject is non-third person. The transitive verb *i̲-hollo* 'love' in (15) takes a class I subject and a class III object.

(14) *in-takho'bi* 'be lazy', 'he/she/it is lazy', 'they are lazy'
an-takho'bi 'I am lazy' etc.

(15) *i̲-hollo* 'love', 'he/she loves him/her/them', 'they love him/her/them'
i̲-hollo-li 'I love him/her/them'
a̲-hollo 'he/she loves me', 'they love me'
chi̲-hollo-li 'I love you' etc.

Verbs taking class III agreement can be recognized by their stem-initial *im, in,* or *i̲* (underlining indicates a nasal vowel), but not all verbs that begin with these sequences take class III agreement: *impa* 'eat' is intransitive and takes a class I subject; *i̲sánna'li* 'be opposed to' takes a class I subject and a class II object; and many verbs that include a dative prefix can only take third person arguments and thus may not appear with class III marking.

A crucial feature of Chickasaw agreement is that it is not syntactically or semantically predictable. While the verbs exemplified in (10-13) and indeed the majority of Chickasaw verbs follow the basic semantic principles outlined at the beginning of this section (or the slightly different ones in studies like Payne 1981), a great many other verbs do not. There is no reason (other than convention) why the stative verb *toklo* 'be two in number', for instance, should take class I "active" marking, nor why the verb *issikopa* 'act mean, be mean', which can have either a volitional or a nonvolitional interpretation, should consistently take class II "non-active" marking. Like many other languages with active agreement, Chickasaw has some intransitive verbs, such as *hotolhko* 'cough' or *nosi* 'sleep' that may take "fluid" class I or II agreement depending on features like volitionality. But other semantically comparable verbs like *yaa* 'cry' that can vary for volitionality take only class I agreement, as do some completely non-volitional verbs like *lhabanka* 'snore'. Dative arguments are similarly problematical. Class III prefixes may index canonical datives or benefactives, as in *in-taloowa* 'sing to, sing for', and some class III arguments, like the object of *i̲-hollo* 'love', could be considered semantic experiencers, but the subject of *in-takho'bi* 'be lazy' does not seem like an experiencer, and there is no reason why the subject of *in-chokmishto* 'be healthy' should be a class III argument, while the subject of *abiika* 'be sick' is a class II argument. (For more discussion, see Munro and Gordon 1982.) Thus, while

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complex) stem as the third person form. Ulrich (1986) and Munro (1993) provide a number of arguments aginst considering the dative marker (or, we might add, any applicative) as marking third person. Crucially, these appear in many contexts without third person reference, which is inferred only in the absence of other person indicators.

semantic principles (some of which we consider in this paper) categorize the basic system, the agreement features of many verbs must be lexically marked.

4. THE CHICKASAW APPLICATIVES. The three Chickasaw applicative prefixes whose use was exemplified in section 2 are members of a set of eight applicative markers, seven prefixes (in addition to *aa-* locative, *ibaa-* comitative, and *im-* dative, these include *a-* 'against', *imaa-* 'from', *okaa-* 'in', and *on-* 'on') and an instrumental proclitic, *isht*. Table 2 presents examples of verbs containing each of these morphemes, with the corresponding non-applicative verbs:

applicative	**meaning**	**examples**
aa-	• locative: 'in', 'at', 'by' • 'from' (inanimate source)	*aa-nǫwa 'to* walk (around) in'; cf. *nǫwa* 'to walk' *aa-fammi 'to* whip in/at'; cf. *fammi* 'to whip' *aa-fama* 'to be whipped in/at'; cf. *fama* 'to be whipped' *aa-malli* 'to jump in, jump from'; cf. *malli* 'to jump' *aa-ikbi* 'to make from'; cf. *ikbi* 'to make' *aa-honkop*a 'to steal from (a place or institution)'; cf. *honkopa* 'to steal'
ibaa-	• comitative: '(along) with'	*ibaa-chokoshkomo* 'to play with (a co-subject)'; cf. *chokoshkomo* 'to play' *ibaa-fama* 'to be whipped with'; cf. *fama* 'to be whipped' *ibaa-abi* 'to kill with (a co-subject)'; cf. *abi* 'to kill' *ibaa-fammi* 'to whip with (a co-subject or object)'; cf. *fammi* 'to whip' *ibaa-kahli 'to* lay down [plural object] with'; cf. *kahli* 'to lay down [plural object]' *ibaa-chokoshkomochi* 'to make play with (a co-subject or co-causee)'; cf. *chokoshkomochi* 'to make play'

im-	• dative: 'to', 'for'	*im-alla 'to* come to (someone)'; cf. *ala* 'to arrive' *im-pilachi* 'to send to'; cf. *pilachi* 'to send' *im-anompoli* 'to talk to'; cf. *anompoli* 'to talk' *im-issikopa* 'to be mean to'; cf. *issikopa* 'to be mean' *im-acho'li* 'to sew for'; cf. *acho'li* 'to sew' *i̲-honkopa* 'to steal for'; cf. *honkopa* 'to steal'
a-	• 'against', 'onto' • 'along with'	*a-kooli* 'to break (a compact object) against'; cf. *kooli* 'to break (a compact object)' *a-piichiffi* 'to splat (something) against'; cf. *pichiffi* 'to splat (tr.), make go splat'[14] *a-bila* 'to melt onto'; cf. *bila* 'to melt' *a-chaakissa* 'to stick onto'; cf. *chakissa* 'to be sticky' *a-hotihnachi 'to* count with, include in the count'; cf. *hotihnachi* 'to count (tr.)' *a-lowa* 'to burn (intr.) with, catch fire from'; cf. *lowa* 'to burn (intr.)'
imaa-	• 'from' (animate source)	*imaa-chompa* 'to buy from'; cf. *chompa* 'to buy' *imaa-habina 'to* receive from'; cf. *habina* 'to receive' *imaa-honkopa* 'to steal from'; cf. *honkopa* 'to steal' *imaa-hobachi* 'to copy from'; cf. *hobachi* 'to copy' *imaa-ishi* 'to get from'; cf. *ishi* 'to get' *imaa-ithana* 'to learn from'; cf. *ithana* 'to come to know'
okaa-	• 'in', 'into'	*okaa-no̲wa* 'to walk in (grass, etc.)'; cf. *no̲wa* 'to walk' *okaa-ahánta* 'to live (completely enclosed) in'; cf. *ahánta* 'to live' *okaa-híkki'ya* 'to stand in'; cf. *híkki'ya* 'to stand' *okaa-tono'li* 'to roll around in, wallow in'; cf. *tono'li* 'to roll around [intransitive]' *okaa-howita 'to* vomit into'; cf. *howita* 'to vomit' *okaa-malli* 'to jump into'; cf. *malli* 'to jump'

[14] A short vowel in a stem-initial open syllable may change to a long vowel when the *a-* applicative prefix is added.

on-	• 'on', 'onto' • 'about' • 'in the direction of'	*o̲-no̲wa* 'to walk on'; cf. *no̲wa* 'to walk' *o̲-malli 'to* jump on'; cf. *malli* 'to jump' *o̲-habishko* 'to sneeze at/on'; cf. *habishko* 'to sneeze' *on-tasahli* 'to scream at'; cf. *tasahli* 'to scream' *o̲-howit*a 'to vomit on'; cf. *howita* 'to vomit' *o̲-loshka* 'to lie about'; cf. *loshka* 'to tell a lie'
isht	• instrumental: 'with (using)' • 'about' • 'bringing', 'taking'	*isht-abi* 'to kill with'; cf. *abi* 'to kill' *isht-alhtoba* 'to be paid for with (e.g., money)'; cf. *alhyoba* 'to be paid for' *isht-anompoli* 'to talk about'; cf. *anompoli* 'to talk' *ish-yaa* 'to cry about, mourn'; cf. *yaa* 'to cry' *isht-aya* 'to bring/take'; cf. *aya* 'to go' *ish-tossoola* 'to bring/take while bucking'; cf. *tossoola* 'to buck'

TABLE 2: Examples of the Chickasaw applicatives

As Table 2 suggests, most of the applicatives can be used to index a range of meanings (much like prepositions or case markers in more familiar languages) and some of them exhibit phonologically irregular relationships to the unprefixed verb. Munro (2000) argues that they should be considered derivational rather than inflectional, since almost all of them exhibit substantial semantic, lexical, syntactic, and phonological irregularity. (*Imaa-* 'from' appears to be the only applicative whose meaning and use are completely unproblematical. It is likely that this applicative is a relatively recent compound of the independent applicatives *im-* and *aa-*.)

We focus in this paper on three applicative prefixes with goal-oriented directional meanings — the dative *im-* 'to', *on-* 'on', and *a-* 'against' — that are used extensively to index human referents, and that share a number of properties within the applicative system.. (The other goal-oriented directional, *okaa-* 'in, into', cannot add a human (or even animate) argument to a clause, and also fails to share the other syntactic and semantic features we will examine in the remainder of this paper. *Imaa-* 'from' is a directional, but it is source- rather than goal-oriented; like *okaa-*, it also fails to share the syntactic and semantic features described below. It may be significant that this prefix appears to include dative *im-*, as just noted.)

5. THE SYNTAX OF THE DIRECTIONAL APPLICATIVES. Prototypically all the Chickasaw applicatives introduce object arguments into simpler clauses, as illustrated in section 2.

5.1 (16-18) illustrate the directional applicative objects in sentences. (Again, the applicative markers are boldfaced. Since the class III agreement markers cannot always be fully segmented

from the dative applicative, as illustrated in section 3, we have boldfaced the whole III-dative combination, as in (16c) or (9) above.)

(16a) *Hattak-at ona-tok.* 'The man went over there'
man-nom go.there-pt
(16b) *Hattak-at ihoo* ***im-ona-tok.*** 'The man went over there to the woman'
man-nom woman dat-go.there-pt
(16c) *Hattak-at* ***chim-ona-tok.*** 'The man went over there to you'
man-nom 2sIII.dat-go.there-pt

(17a) *Chipota-at howita-tok.* 'The child vomited'
child-nom vomit-pt
(17b) *Chipota-at ihoo* ***o-howita-tok.*** 'The child vomited onto the woman'
child-nom woman on-vomit-pt
(17c) *Chipota-at ach-o-howita-tok.* 'The child vomited onto you'
child-nom 2sII-on-vomit-pt

(18a) *Chipot-aat chaka'to pichiffi-tok.*
child-nom tomato splat-pt
'The child splatted the tomato (threw the tomato so it went splat)'
(18b) *Chipot-aat aboohapootak-a chaka'to* ***a-piichiffi-tok.***
child-nom wall-acc tomato against-splat-pt
'The child splatted the tomato against the wall'
(18c) *Chipot-aat chaka'to* ***a-chi-piichiffi-tok.***
child-nom tomato against-2sII-splat-pt
'The child splatted the tomato against you'[15]

As the (c) examples show, these applicative objects can be non-third person. A non-third person dative is marked with class III agreement, while a non-third person *a-* or *on-* argument is marked with II agreement.

5.2 Chickasaw has applicative subjects as well as applicative objects. Applicative subjects can be both lexical and derived.

There are a number of verbs containing the *im-*, *a-*, and *on-* applicatives that are intransitive, with the applicative argument as their subject. Here are a few examples:

[15] The allomorphy of class II prefixes is described in Munro (1993) and Munro and Willmond (1994: xxvii-xxix).

(19a) *im-* subjects (class III agreement)
im-alhtaha 'to be ready (of an animate)', cf. *alhtaha* 'to be ready (of an inanimate)'
im-palli 'to feel hot', cf. *palli* 'to be hot'
(19b) *on-* subjects (class II agreement)
on-oklhili 'to have it get to be dark on one'; cf. *oklhili* 'to be dark (of a location)'
on-tabookoli 'to have it get to be noon on one'; cf. *tabookoli* 'to be noon, have it be noon (of a location)'
(19c) *a-* subjects (class II agreement)
a-chamapa 'to have one's head ring'; cf. *chamapa* 'to bang together (intr.)'
a-lhoopolli 'to have diarrhea'; cf. *lhopolli* 'to go through'

The first of each pair of verbs in (19) contains a directional applicative prefix. The intransitive subjects of these verbs are in, respectively, 'to', 'against', and 'on' relationships with the original predicates given as the second member of each pair. Although the relationship between the pairs of verbs in (19) seems semantically well justified, there are only a limited number of verb pairs that work this way. We thus consider the applicative subjects of the first verbs in (19) to be lexical applicative subjects.

Applicative subjects can also be derived by the Possessor Raising and Oblique Subject rules (Munro and Gordon 1982, Munro 1999). These constructions, which characteristically have more than one nominative marked noun, are used to highlight the salience of their derived subject nouns.

In this paper, we restrict our attention to the semantics of Chickasaw applicative objects. We examine the syntax and semantics of applicative subjects in Gorbet and Munro (in preparation).

6. THE SEMANTICS OF THE DIRECTIONAL APPLICATIVES. Although each of the three Chickasaw applicatives we consider here have a range of meanings, we will argue that their basic sense is to indicate a directional relationship, and that this meaning is metaphorically extended to include the other uses we will discuss.

This is perhaps not an unusual occurrence. The Southern Paiute "indirective" applicative (perhaps significantly identified by Sapir as introducing an indirect object that must be animate) whose arguably basic directional use is exemplified in (7) can mean 'for', 'from', 'with', and 'against' as well as 'to' (Sapir 1930-31: 144). (However, Sapir does not present enough examples for us to understand the semantic range indicated by these English glosses.)

Semantically, the three Chickasaw applicatives we are concerned with here all have patterns of meaning extension — that is, of extension of the meaning of the relationship between the verb and the argument added by the applicative — many of which involve specifically human arguments and how they are affected by the verb. Moreover, those extensions involve relationships that are to some degree motivated by characteristically human experiences in events and situations.

6.1. The *im-* (dative) applicative is clearly the primary Chickasaw applicative. Cross-linguistically, semantically similar "dative" meanings are the most common and often the only meanings for applicative morphemes. This cross-linguistic tendency (and no doubt its motivations) are reflected in the Chickasaw dative applicative. It is the most frequently used of all applicatives, and it has the richest set of meanings, and it has what is surely the most productive applicative meaning (benefactive).

What seems to be central to the dative is a directional meaning with a human goal, as in *im-alla* 'to arrive to, come to (someone)' (cf. *ala* 'to arrive (at)'). This meaning has two aspects that it is difficult to rank in terms of priority. The first is the meaning reflected in the etymology of the term DATIVE, that of a human recipient of a transfer from an agent to the recipient, with the recipient getting possession in some sense, as in *im-atobbi* 'to pay to' (cf. *atobbi* 'to pay'). There is doubtless a connection here with the use of the dative prefix to specify possession on nouns. The second is simply directional movement, without the human goal necessarily either being reached or gaining possession of whatever moves, as in *in-tono'chi* 'to roll (a ball) to' (cf. *tono'chi* 'to roll (a ball)') or *im-pilachi* 'to send (something) to' (cf. *pilachi* 'to send (something)'). (The *im-* dative applicative examples discussed in this section are summarized in Table 3.)

im-alla 'to arrive to, come to (someone)' (cf. *ala* 'to arrive (at)')
im-atobbi 'to pay to' (cf. *atobbi* 'to pay')
in-tono'chi 'to roll (a ball) to' (cf. *tono'chi* 'to roll (a ball)')
im-pilachi 'to send (something) to' (cf. *pilachi* 'to send (something)')
in-toshooli 'to interpret for' (cf. *toshooli* 'to interpret')
in-toshaffi 'to break off a piece of (something) for' (cf. *toshaffii* 'to break off a piece of')
i-loshka 'to lie to' (cf. *loshka* 'to lie')
im-anompoli 'to talk to' (cf. *anompoli* 'to talk'),
i-moshmoli 'to wink at' (cf. *moshmoli* 'to wink')
im-aakánnalli 'to dodge (a person)' (cf. intransitive *aakánnalli* 'to dodge')
im-ashannichi 'to lock up (someone) in' (cf. transitive *ashannichi* 'to lock (something)')
im-ishi 'to take from' (cf. *ishi* 'to take')
im-olabi 'to want from' (cf. *olabi* 'to want, desire')
i-loma 'to hide (oneself) from' (cf. *loma* 'to hide (intr.)')
i-lohmi 'to hide (something) from' (cf.*lohmi* 'to hide (tr.)')
i-yimmi 'to believe (someone)' (cf. *yimmi* 'to believe (something)')

TABLE 3. *Im-* 'to' (dative) applicative object examples

There are two rather common other extensions of the two aspects of the basic directional meaning of the dative. The first is the benefactive, which is a common metonymic consequence of the recipient role. This sense is fully productive in Chickasaw, with benefactives added to both basic intransitives, as in *in-toshooli* 'to interpret for' (cf. *toshooli* 'to interpret'), and basic transitives, as in *in-toshaffi* 'to break off a piece of (something) for' (cf. *toshaffii* 'to break off a piece of'), as in (20).

(20) *Paska an-toshaffi-tok.* 'He broke off a piece of the bread for me'
bread 1sIII.dat-break.off-pt

The second is the addressee of a verb of communication, a metaphorical extension based on a conduit metaphor, as in *iloshka* 'to lie to' (cf. *loshka* 'to lie') and *im-anompoli* 'to talk to' (cf. *anompoli* 'to talk'), or even *imoshmoli* 'to wink at' (cf. *moshmoli* 'to wink'). With these, the addressee gains possession of the content of the communication.

Virtually all the uses of the dative have a strong association with animacy and in particular humanness. In some cases, an added dative argument allows the specification of a human participant in the event that cannot be specified in that clause if it is non-human. For example, consider intransitive *aakánnalli* 'to dodge'. This verb does not allow the specification of an inanimate object that is dodged. In (21a), the 'dodge' clause is intransitive; the object dodged, 'ball', can be specified as the subject of a separate motion clause. When the dodged item is human, however, the verb may take a dative prefix, and the dative applicative object may appear as an element of the 'dodge' clause, as in (21b):

(21a) *Aakánnalli-li to'w-aat oot-aya-tok.*
dodge-1sI.cj.ds ball-nom this.way-go-pt
'I dodged the ball: I dodged, as the ball was coming this way'
(21b) *Larry-a im-aakánnalli-li oot-aya-tok.*
Larry-acc dat-dodge-1sI.cj.ds this.way-go-pt
'I dodged Larry: I dodged Larry, as he was coming this way'

(22) provides a more complex example. *Ashannichi* is a transitive verb meaning 'to lock (something)' (22a), which cannot be used to name an inanimate object that is locked up or locked in – in (22b), the item locked in is specified in a separate locational clause. When the item locked in is human, however, as in (22c), it can be specified as a dative object of *ashannichi*:

(22a) *Abooha ashannichi-li-tok.* 'I locked the house'
house lock-1sI-pt

(22b) *Ta'oss-aat abooha anonka' a'sh-na ashannichi-li-tok.*
money-nom house inside be.loc-cj.ds lock-1sI-pt
'I locked the money in the house: The money was inside the house and I locked it'

(22c) *Lynn-a abooha im-ashannichi-li-tok.* 'I locked Lynn up in the house'
Lynn-acc house dat-lock-1sI-pt

The association of the dative with possession extends to expressions involving literally or metaphorically losing possession. Examples include *im-ishi* 'to take from' (cf. *ishi* 'to take') and *im-olabi* 'to want from' (cf. *olabi* 'to want, desire'). This 'from' meaning has been further extended to cases that less clearly involve possession or a source, such as *i-loma* 'to hide (oneself) from' and *i-lohmi* 'to hide (something) from' (cf. *loma, lohmi* 'to hide', intransitive and transitive).

Sometimes the dative marks a human in an at least partially patient role, where non-humans would be direct objects of the simple verb. An example is *i-yimmi* 'to believe (someone)' (cf. *yimmi* 'to believe (something)'. In such cases, significantly, adding an applicative argument does not increase the number of arguments specified by the verb.

Perhaps the most striking example of the association of the dative with humanness is in the formation of the *imaa-* 'from' applicative, whose source is a compound of the dative *im-* plus locative *aa-* applicatives. In cases like those in (23), adding the dative does not add an argument, but instead effectively specifies the source (original possessor) as human.

(23) *ithana* 'to learn, find out' — *aa-ithana* 'to learn one's way around (a place)' — *imaa-ithana* 'to learn from (a person)'
hobachi 'to copy' – *aa-hobachi* 'to copy from (a book)' – *imaa-hobachi* 'to copy from (a person)'
honkopa 'to steal' – *aa-honkopa* 'to steal from (a bank)' – *imaa-honkopa* 'to steal from (a person)'

6.2. The *on-* applicative is even more clearly locative/directional in its central meaning than the dative, with most uses not involving any metaphorical extension outside the literal spatial domain. (The *on-* applicative examples discussed in this section are summarized in Table 4.)

om-biniliili 'to sit on, ride' (cf. *biniili* 'to sit on')
o-holissochi 'to write on' (cf. *holissochi* 'to write')
o-hilha 'to dance on' (cf. *hilha* 'to dance')
on-talaali 'to put down on' (cf. *talaali* 'to put down')
o-loshka 'to lie about' (cf. *loshka* 'to tell a lie')
on-tasahli 'to scream at' (cf. *tasahli* 'to scream)
on-tastachi 'to talk loudly to (someone, so they can hear you)' (cf. *tastachi* 'to talk loudly')
on-chaffichi 'to sic (a dog) on' (cf. *chaffichi* 'to send away')

TABLE 4. *On-* 'on' applicative object examples

The primary meanings of the *on-* applicative are quite similar to those of the spatial preposition *on* (or *onto*) in English, encompassing notions of both support from beneath (e.g. *om-biniliili* 'to sit on, ride'; cf. *biniili* 'to sit on') and surface contact (e.g. *o-holissochi* 'to write on' (24); cf. *holissochi* 'to write') and including both static location (e.g. *o-hilha* 'to dance on'; cf. *hilha* 'to dance') and direction of movement (e.g. *on-talaali* 'to put down on'; cf. *talaali* 'to put down' (25ab)).

(24) *Aboohapootaka'* *ish-o-holissochi-nna!* 'Don't write on the wall!
wall 2sI-on-write-neg.imp

(25a) *Ishtakafa'* *talaali-li-tok.* 'I put the cup down'
cup put.down-1sI-pt
(25b) *Yamm-ako ishtakafa'* ***on-talaali-li-tok.*** 'I put the cup down on that one'
that-ctr.acccup on-put.down-1sI-pt

The meaning of *on-* gets extended in several metaphorical ways. Two of these involve human arguments of speech act verbs. The first marks a human spoken about as being somehow adversely affected by the speech act (e.g. *o-loshka* 'to lie about'; cf. *loshka* 'to tell a lie'). The second suggests that the speech act is performed with a strong intention of affecting the human to whom it is directed (e.g. *on-tasahli* 'to scream at' (cf. *tasahli* 'to scream); *on-tastachi* 'to talk loudly to (someone, so they can hear you)' (cf. *tastachi* 'to talk loudly')). In a very few cases, this applicative simply indicates that a human is somehow affected by the action of verb, as in *on-chaffichi* 'to sic (a dog) on' (cf. *chaffichi* 'to send away').

6.3. The meaning of the *a-* applicative is also extended but its extensions are primarily in spatial domains and rather than to human arguments. Its primary meaning is something like that of English *against* (in its spatial sense), as in *a-piichiffi* 'to splat against' (cf. *pichiffi* 'to splat'), but

it sometimes has an 'onto' sense that is not clearly distinct from that of *on-*, as in *a-bila* 'to melt onto' (cf. *bila* 'to melt'). (The *a-* applicative examples discussed in this section are summarized in Table 5.)

a-piichiffi 'to splat against' (cf. *pichiffi* 'to splat')
a-bila 'to melt onto' (cf. *bila* 'to melt')
a-balalli 'to grow together with' (cf. *balalli* 'to grow on the ground')
a-kashapa 'to split off from' (cf. *kashapa* 'to split off')
a-kaniya 'to go off with (somebody, and marry them)' (cf. *kaniya* 'to go away')
a-chilita 'to pester' (cf. *chilita* 'to be persistent')

TABLE 5. *A-* 'against, onto' applicative object examples

One extension of the basic 'against, onto' meaning is to 'together with', mostly with inanimate arguments that are in some sense intermingled with the subject of the verb (and thus distinct from the true comitative sense of the *ibaa-* applicative, whose argument is virtually always human), as in *a-balalli* 'to grow together with' (cf. *balalli* 'to grow on the ground'). The range of meanings of the *a-* applicative is fairly broad, including the 'from' sense in *a-kashapa* 'to split off from' (cf. *kashapa* 'to split off').

Extensions to specifically human arguments seem to be on an item-by-item basis, rather than showing multiple instantiations of one or two general metaphorical patterns. For example, *kaniya* 'to go away', when prefixed with the *a-* applicative is *a-kaniya* 'to go off with (somebody, and marry them)'. *Chilita* 'to be persistent' with the *a-* applicative is *a-chilita* 'to pester'.

7. CONCLUSION. From a diachronic perspective, it is clear that Chickasaw has seen a spreading of both the applicative system in general and of the metaphorical and metonymic extension of individual applicative morphemes. The former is evident in the sheer number of applicative morphemes, which make prepositions and oblique case markings unnecessary. The latter, radiating from and perhaps shaped by the dative applicative is evident in the variety of extended meanings and in the entrenchment of at least one productive extension (the benefactive dative).

Synchronically, the meanings of many applicatives verbs must be specified in the lexicon, but some the extended meanings of some applicative morphemes are either productive or becoming so. New uses of the directional applicatives follow the morphosemantic patterns we have examined in detail for the dative, motivated, of course, by the communicative needs of Chickasaw speakers.

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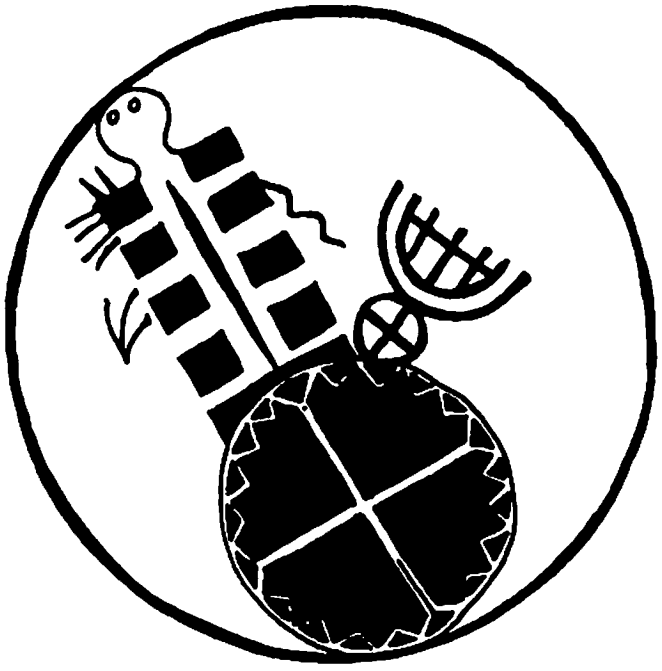

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