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Applicatives and Incorporation in Ubykh

Abstract

This article seeks to provide a description of verbal agreement and its relationship with applicatives and other incorporated elements in the Ubykh verb as well as an analysis of these structures grounded in a modern syntactic framework. Ubykh is a Northwest Caucasian language and displays many characteristics of a polysynthetic language, including polypersonal agreement and the incorporation of either nominal roots or postpositions into the verb complex. These latter constructions are analyzed as the incorporation of a complex head – consisting of the root or postposition merged with an agreement head generated in a functional projection dominating the structure out of which the incorporated element moves. Applicatives are treated as a subset of postposition incorporation, with the postpositional phrase generated in the specifier position of the applicative projection.

1. Introduction

The structure and function of applicative constructions have been the subject of a great deal of research in the past several years. Applicatives are responsible for increasing the valence of a verb by licensing an additional argument. This is commonly a benefactive or goal, but may also be an instrument or locative.

Applicatives are variously marked by specific verbal morphology and/or adpositional constructions and double object constructions. Polysynthetic languages in particular use verbal morphology which originates either as an inflection (i.e., the head of a functional syntactic projection) or an incorporated phrase. The Yimas language, of the Lower Sepik family, provides an example of the former while the Iroquoian language Mohawk exemplifies the latter.

Yimas

- (1) *awt ŋa-kra-yawra-mpi-waraca-ŋa-n.*
 fire IMP.1-1PLD-pick.up-SEQ-return-BEN-IMP
 ‘Bring fire back for us.’ (Foley 1991: 309)

Mohawk

- (2) *wa-hake-natar-a-kwétar-ʌ-ʔ.*
 FACT-3SGS.M>1SGO-bread-LNK-cut-BEN-PUNC
 ‘He cut the bread for me.’ (Baker 1996: 427)

Many of the polysynthetic languages which have been studied for their applicatives follow the above examples, in that the applicative is signaled by a morpheme suffixed to the verb stem.

Forms such as the above are analyzed by Baker (1996) with the applicative (*-ŋa-* and *-ʌ-*, respectively) heading its own VP which selects for three theta-roles, an agent, theme and goal. The goal of this applicative verb is a PP with a zero-postposition as its head. The adpositional object is a null pronominal in both the Yimas and Mohawk examples. The applicative verb is unusual in that its theme-role is assigned to a VP – *waraca* and *kwétar* in the above examples. The oddity of this applicative extends further, in that both it and the theme-VP select the same argument on which to discharge their agent theta-role. The theme-VP in both examples also selects for its own theme, the overt *awt* ‘fire’ in Yimas and the incorporated *natar* ‘bread’ in Mohawk.

Polysynthetic applicatives also may be, according to Baker (1996), derived through a form of incorporation. In languages where the applicative morpheme appears as a prefix, the construction is formed through postposition incorporation. The applicative postposition begins as an adjunct of a VP and early in the derivation (before the V° begins to move through the syntactic tree) the PP is moved as a whole and adjoined to AspP. The applicative P° then incorporates into Asp $^\circ$, and the V° raises to form a complex head.

Mayali (Gunwinguan)

- (3) *na-mege dabol dabol bandi-marne-ganj-ginje-ng.*
 CLI-that old.people 3PLS>3PLO-BEN-meat-cook-PST/PFCT
 ‘They cooked meat for the old people.’ (Baker 1996: 439)

The Mayali example is derived in this fashion. First, the benefactive PP is raised and joined to the AspP projection. Next the theme NP (*ganj*) is incorporated into the V° according to the principles of noun incorporation.

The complex $[N^\circ + V^\circ]$ further raises and incorporates into the $[P^\circ + Asp^\circ]$, forming the core of the above example.

O’Herin (2001, 2002) extends Baker’s theory of applicative formation through adposition incorporation by including an agreement phrase (AgrP) above the PP – which Baker posits for independent PPs in Mohawk under the title of Func(tional)P – to account for the presence of applicative agreement in Abaza.

Mohawk

- (4) *ka-nakt-óku.*
 3SGS.N-bed-under
 ‘Under the bed.’ (Baker 1996: 406)

Abaza (Northwest Caucasian)

- (5) *y-p-s-q’ə-t’.*
 3SGA.N-PV-1SGE-break-DYN
 ‘I broke it.’ (O’Herin 2001: 482)

Abaza

- (6) *yə-l-čʷə-p-s-q’ə-t’.*
 3SGA.N-3SGD.F-MAL-PV-1SGE-break-DYN
 ‘I broke it to her disadvantage.’ (O’Herin 2001: 482)

The Northwest Caucasian language Ubykh provides an example of a similar construction – one in which the applicative morpheme stands as a prefix and also shows agreement with the applied object.

- (7) *sá-laylak’ə-n za-g°ará-Ø Ø-s-x’á-nə-w-q’a.*
 1SGPSG-stork-ERG one-INDF-ABS 3SGA-1SGD-BEN-3SGE-bring-PST
 ‘My stork brought me something.’ (Dumézil & Esenç 1978: 25)

Ubykh has a rather productive system of postpositional applicatives similar to that described by Baker (1996) and O’Herin (2001, 2002). There is also what appears to be a limited amount of NI, which follows many of the technical properties of Baker (1996), but as will be shown is not the direct incorporation of a nominal.

This paper seeks to provide a description of the incorporation strategies found in Ubykh, beginning with an outline and analysis of the agreement system before moving on to a description of applicatives and incorporation. The paper closes with a proposal for an analysis of the Ubykh data.

2. Description

Ubykh is a member of the Northwest Caucasian family of languages. It was originally spoken along the Black Sea coast in the area of what is now the Russian city of Sochi, Krasnodar Krai. Virtually the entire population relocated to the then Ottoman Empire following the conquest of their homeland by the Russian Empire in the mid-19th century. The Ubykh assimilated into Turkish culture within the next generation or so, giving up their language in favor of Turkish or one of the other Northwest Caucasian languages spoken by the diaspora, such as Adyghe or Kabardian. Ubykh is now an extinct language, as Tefvik Esenç, the last native speaker, died in 1992.

It is a polysynthetic language having minimal nominal morphology and extensive verbal inflections. Ubykh verbs are polypersonal, and may agree with absolutive, ergative and a variety of dative/oblique arguments. They are also inflected for tense, aspect, mood, number and polarity and a wide variety of participials and gerundives.

Ubykh is, for the most part, a head-final language. The only exception to this is determiners such as the definite article, demonstratives and numerals, which are head-initial. Clauses always end with the verb. Matrix clauses must be terminated by a finite verb, and subordinate clauses are ended by a gerundive or other non-finite verb form. There is extensive pro-drop, and nominal arguments may be rather freely omitted. When nominals are present, the subject typically begins the clause and the direct object appears immediately before the verb. If an indirect object is present, the unmarked order places it between the subject and direct object. However, in a sampling of sentences where both the direct and indirect object appear, there is almost an even split between the orders IO-DO and DO-IO.

Much of the previous research on Ubykh has centered on its unique phonology – which has between 80 and 83 consonants and three phonemic vowels, which are differentiated only by their respective height – including work by Colarusso (1988, 1992), Dumézil (1955, 1957), Dumézil and Namitok (1954), Hewitt (1986), Leroy and Paris (1974) and Vogt (1963). A number of people have also prepared descriptive grammars or grammatical sketches of Ubykh, such as Charachidzé (1989), Dirr (1928, 1929), Dumézil (1931), Genko (1928), Hewitt (2005), Kumakhov (1998), and von Mészáros (1934). However, I believe the only work on Ubykh using modern syntactic theory is that of Özsoy (1988) which analyzes the system of relativization in the language.

2.1 Transitivity

Ubykh distinguishes transitivity by both case marking and verbal inflection. The subject of an intransitive verb and the patient of a transitive verb are case-marked with the absolutive, which surfaces as a zero-morpheme with no distinction in number. The agent of a transitive verb is marked by the ergative¹, which has the form *-n* in the singular and *-na* in the plural. Ubykh does not distinguish, in either case marking or verbal agreement, between unergative and unaccusative intransitives.

- (8) *a-tát-Ø* *Ø-q̄a-q'á.*
 the-man-ABS 3SGA-run-PST
 'The man ran.' (Charachidzé 1989: 370)
- (9) *a-čədə-Ø* *a-χasá-n.*
 the-donkey-ABS 3SGA-be.tired-PRS
 'The donkey is tired.' (Charachidzé 1989: 450)
- (10) *yə́-sa-k°abž'a-na* *á-lašq̄la-Ø* *Ø-q-k°-áwt°q'a.*
 this-three-man-ERG.PL the-army.chief-ABS 3SGA-3PLE-kill-FUT.PFCT
 'These three men will have killed the army chief.' (Charachidzé 1989: 390)

There is also a conjugation class of verbs having an absolutive subject and a dative object. The vast majority of these verbs have an incorporated postposition or the translocative prefix governing the dative argument.

- (11) *sə-w-by'a-k'a-n.*
 1SGA-2SGD-over-go-PRS
 'I conquer you.' (Lit. 'I go over you.')

There is a restricted sub-class of this group in which the dative appears without a governing morpheme as in ditransitive verbs.

- (12) *a-tát-Ø* *a-x'ə-n* *yə́-Ø-ya-q'a.*
 the-man-ABS the-prince-DAT 3SGA-3SGD-strike-PST
 'The man struck the prince.' (Charachidzé 1989: 439)

¹ Traditional descriptions of Ubykh grammar note only two primary case markers, the zero-marked absolutive and the oblique. The oblique is used to mark ergative, dative, adverbial and genitive cases, without discrimination. Throughout this paper, I have decided to clarify the specific functions of this case marker, especially in relation to the coindexing of the verbal agreement morphemes.

2.2 Agreement

The intraverbal agreement noting the first and second person, singular and plural, is the same for the absolutive, ergative and dative.

	SG	PL
1	<i>sə-</i>	<i>š'ə-</i>
2	<i>wə-</i>	<i>s°ə-</i>

The third person has several variants depending on number and syntactic alignment.

	ABS	ERG	DAT
SG	<i>a-, Ø-, (y)ə-</i>	<i>Ø-, n(ə)-</i>	<i>ya-; Ø-</i>
PL	<i>a-, yə-, Ø-</i>	<i>a-, nq-</i>	<i>aya-; q-</i>

The 3rd person absolutive form *(y)ə-/yə-* is used preceding a 3rd person singular dative inflection (which is always *Ø-*). The *a-* form is found before a 1st or 2nd person or a 3rd person plural dative. The absolutive forms are quite fragile and are often reduced to their zero-variant regardless of the following agreement morpheme.

- (13) *(yə)-Ø-w-t°ə-n.*
 3SGA-3SGD-2SGE-give-PRS
 'You give it to him.' (Dumézil 1975: 90)

- (14) *a-s°ə-š'-t°-qn.*
 3PLA-2PLD-1PLE-give-PRS.PL
 'We give them to you all.' (Dumézil 1975: 91)

The 3rd person ergative forms are conditioned by the valency of the verb. The forms *Ø-/q-* are found with transitive verbs which have no dative argument, and the forms *n(ə)-/nq-* are found elsewhere.

- (15) *wə-Ø-byá-n.*
 2SGA-3SGE-see-PRS
 'She sees you.' (Charachidzé 1989: 395)

- (16) *á-məš°a-n a-płaq°'aq'á-Ø yə-Ø-n-t°ə-n.*
 the-bear-DAT the-silver-ABS 3SGA-3SGD-3SGE-give-PRS
 'He gives the silver to the bear.' (Dumézil 1967: 165)

The dative uses a different series of intraverbal agreement than does the absolutive and ergative. This agreement uses the possessive singular inflections with the 3rd person singular having the variant Ø-/q- in all circumstances except before the translocative *q-*, in which case it has the form *ya-/aya-* (> *ya:q-/aya:q-*).

- (17) *wə-γá-zya-n.*
 2SGA-3SGD:TRLOC-question-PRS
 ‘You ask her.’ (Dumézil 1975: 76)

- (18) *w-ayá-zya-n.*
 2SGA-3PLD:TRLOC-question-PRS
 ‘You ask them.’ (Dumézil 1975: 76)

The dative bloc of inflections is located between the absolutive and ergative agreement and serves a variety of functions. Agreement with an indirect object is the simplest, and possibly the most common use.

- (19) *Nəzəm beyə-n sy^oa a-sə-n-q’adaž’-q’a.*
 Nâzim bey-ERG I.DAT 3SGA-1SGD-3SGE-tell-PST
 ‘Nâzim bey told it to me.’ (Dumézil 1965: 43)

A second use is agreement with an applied or adpositional object. This function requires the incorporation of an additional morpheme, depending on the nature of the object. It may be any one of five applicatives (benefactive, malefactive, comitative, translocative or ablative), a postpositional object or the object of an incorporated nominal, which will be covered in more detail below.

2.3 Incorporated Material

There are four types of elements which may be incorporated into the verbal complex. Three of these always appear with dative agreement: incorporated nouns, incorporated postpositions and applicatives. The fourth, directional preverbs, never appear with agreement. These elements may cooccur with one another, but to my knowledge there cannot be multiple occurrences of a single type of element in a single verbal complex.

2.3.1 Incorporated Nouns and Postpositions

Ubykh has a productive system of incorporated postpositions. Many of these are derived from obsolete nominals referring to body parts and which may also be used as incorporated nouns. A limited number of these incorporated postpositions may be used productively outside the verb complex as postpositions. Most of the spatial relations in Ubykh are handled by the incorporated postpositions, which may take a range of subtle senses based on the meaning of the verb root to which they are attached. The postpositions may have the sense of location (adessive), motion to (allative), motion from (ablative), or, with the addition of *-ya* to the postposition, motion through (perlative).

- (20) *á-y°anə-n sə-Ø-bac'a-q°'át°ə-n.*
 the-tree-DAT 1SGA-3SGD-under-stop-PRS
 'I stop under the tree.' (Dumézil 1975: 106)
- (21) *yə-šak''aq'a-n š'ə-Ø-bac'a-k'á-naw-məla...*
 this-shelter-DAT 1PLA-3SGD-under-enter.PL-PL-FUT1-GER
 'We will be entering this shelter...' (Dumézil 1975: 106)
- (22) *á-šanə-n Ø-Ø-bac'á-sə-wt°'ə-n.*
 the-table-DAT 3SGA-3SGD-under-1SGE-remove-PRS
 'I take it from under the table.' (Dumézil 1975: 106)
- (23) *a-q̄°'á-n š'ə-Ø-bac'aya-la-x°a-q'an.*
 the-cave-DAT 1PLA-3SGD-under:PERL-LOC-pass-PST.PL
 'We passed through (under) the cave.' (Dumézil 1975: 106)

Contrasting with the postpositions, Ubykh also has a fossilized system of incorporated nominals. Only one of these nominals (*d°ə*, 'outside') may appear either independent or incorporated and maintain a minimal semantic contrast between the forms. Another independent nominal *č'ə* 'horse' alternates with the incorporated nominal *č'a* 'knight' in a similar fashion as can be seen in the example below. The remaining incorporated nominals have formed idiomatic compounds from which they can no longer be separated.

- (24) *a-d°á-n sá-Ø-g'á-wá-n.*
 the-outside-DAT 1SGA-3SGD-in-enter-PRS
 'I leave, I go outside.' (Dumézil 1975: 112)
- (25) *sá-Ø-d°á-g'á-wá-n.*
 1SGA-3SGD-outside-in-enter-PRS
 'I go outside.' (Dumézil 1975: 112)
- (26) *a-č'á-n sá-Ø-by'a-wəsə-n.*
 the-horse-DAT 1SGA-3SGD-on-sit.down-PRS
 'I mount the horse.' (Charachidzé 1989: 431)
- (27) *sá-Ø-č'á-by'a-wəsə-n.*
 1SGA-3SGD-knight-on-sit.down-PRS
 'I mount a horse.' (Charachidzé 1989: 431)
- (28) *a-z-g'á-c°ac°á-n.*
 3SGA-1SGD-heart-hurt-PRS
 'I pity him.' (Lit. 'He hurts my heart.') (Vogt 1963: 124)

The distinction between incorporated postpositions and nominals is subtle. Many of the roots can be interpreted as either form with no overt marking to differentiate them. There are, however, several points where the two forms do not agree. Most clearly, the incorporated nominal but not the postposition may take agreement in the same person and number as the subject of the verb without using an overt reflexive marker.

- (29) *a-s-tá-sə-ya-n.*
 3SGA-1SGD-foot:TRLOC-1SGE-hang-PRS
 'I put on my shoes.' (Dumézil 1975: 104)

A similar structure with a postposition is ill-formed and requires a synthetic circumlocution to become grammatical. This is the same synthetic form which replaces the intraverbal reflexive.

- (30) **a-z-by'á-sə-wt°á-n.*
 3SGA-1SGD-on-1SGE-remove-PRS
 'I take it off of me.' (Dumézil 1975: 105)
- (31) *sá-g'á-n Ø-Ø-by'á-sə-wt°á-n.*
 1SGPSG-self-DAT 3SGA-3SGD-on-1SGE-remove-PRS
 'I take it off of myself.' (Dumézil 1975: 105)

Another distinction between the postpositions and nominals which can be seen in the above examples is the interpretation of the dative argument in relation to the incorporated root. The dative occurring with the postposition has the sense of a postpositional object, whereas that occurring with the nominal is seen as the possessor of the nominal. Often, this possessive relationship is lost due to the idiomatic nature of Ubykh incorporation, but in many instances the literal sense can be extrapolated.

- (32) *a-s-q'á-y-Ø*.
 3SGA-1SGD-hand:TRLOC-be.hanging-STAT.PRS
 'I have it.' (Lit. 'It is hanging from my hand.') (Dumézil 1975: 119)

2.3.2 Applicatives

Ubykh has five types of applicatives: benefactive, malefactive, comitative, translocative and ablative. Each of these is signaled by an incorporated morpheme preceded by an agreement inflection.

The benefactive is marked by *x'a-* in the verb complex and may indicate not only that the action is done for the benefit of or more simply for the applied object, but also a directive aspect of motion towards a goal.

- (33) *wəɣ°á pč'arəxá-n sə-w-x'a-š'-áw*.
 you.DAT squire-ADV 1SGA-2SGD-BEN-become-FUT1
 'That I (may) become a squire for you.' (Dumézil 1975: 140)

- (34) *sə-laylak'ə-n za-g°ará-Ø Ø-s-x'á-nə-w-q'a*.
 1SGPSG-stork-ERG one-INDF-ABS 3SGA-1SGD-BEN-3SGE-carry-PST
 'My stork brought me something!' (Dumézil & Esenç 1978: 25)

The malefactive is indicated by *c°ə-* and, contrary to the benefactive, denotes that the action is done to the detriment of or against the will of the object. It may also take a directive sense, like the benefactive, and indicates motion from a person or place.

- (35) *y-áɸa-Ø Ø-š'-c°ə-dwá-wt*.
 this-illness-ABS 3SGA-1PLD-MAL-die-FUT2
 'This illness will kill us.' (Dumézil 1975: 141)

- (36) *a-s-c°ə-q̄á-n.*
 3SGA-1SGD-MAL-run-PRS
 ‘He runs away from me.’ (Charachidzé 1989: 428)

The comitative, marked by *ǰ’ə-*, denotes that the action is done with the object, but not in an instrumental sense.

- (37) *wə-z-ǰ’ə-k’á-wt.*
 2SGA-1SGD-COM-go-FUT2
 ‘You will marry me.’ (Dumézil 1975: 139)

The translocative *a-*, which Dumézil (1975) called “la particule attributive,” and which is unique among the applicative inflections in that the 3rd person agreement shows up as a possessive prefix *ya-* instead of \emptyset -. The exact meaning of the translocative is difficult to establish in most cases, but when combined with an incorporated postposition it takes on a general sense of direction toward.

- (38) *sə-yá-zya-n.*
 1SGA-3SGD:TRLOC-question-PRS
 ‘I ask him.’ (Dumézil 1975: 142)

Finally, there is the ablative *ya-*, which indicates motion away from its object.

- (39) *a-w-yá-sə-wt°’ə-n.*
 3SGA-2SGD-ABL-1SGE-remove-PRS
 ‘I take it (away) from you.’ (Dumézil 1975: 80)

Similar to other languages which use a prefixed applicative morpheme, there is no transitivity restriction in Ubykh as to the addition of the applicative. It may equally appear with intransitive and transitive verbs. The issue of high versus low applicatives will be addressed below.

- (40) *a-s-c°ə-z°aps-q’á.*
 3SGA-1SGD-MAL-be.evening-PST
 ‘It became evening to my surprise.’ (Charachidzé 1989: 429)

- (41) *a-nd°aša-∅ a-Nartə-n ∅-∅-x’a-nq-ya-k’a-q’an.*
 the-rope-ABS the-Nart-DAT 3SGA-3SGD-BEN-3PLE-CAUS.PL-carry.PL-PST.PL
 ‘They brought the rope to the Nart.’ (Dumézil 1965: 164)

2.3.3 Directional Preverbs

Finally there are two directional preverbs, neither of which are found with agreement. The first is the cislocative prefix *y-* and the second the general locative *la-*.

The cislocative indicates, generally speaking, motion toward the participant. This participant is typically not stated overtly, but may be indicated using a postpositional phrase headed by *-laq* ‘at, near (to)’.

- (42) *sə-y-k''a-n*.
 1SGA-CIS-go-PRS
 ‘I am coming.’ (Dumézil 1975: 132)

- (43) *səy°a sə-laq a-y-n-wə-n...*
 I 1SGPSG-at 3SGA-CIS-3SGE-carry-PRS
 ‘He brought it to me.’ (Dumézil 1961: 50)

The general locative prefix indicates a static, general location.

- (44) *sə-la-g'ət°ə-n*
 1SGA-LOC-remain-PRS
 ‘I remain there.’ (Vogt 1963: 136)

2.4 Analysis of Transitivity and Ergative/Absolutive Agreement.

The underlying structure of Ubykh case-assignment and agreement may be analyzed along the lines of Baker’s (1996) Uniformity of Theta Assignment Hypothesis (UTAH) and Bittner & Hale’s (1996) theory of case assignment. According to the UTAH, thematic roles are always assigned to the same structural positions across comparable verbs. The theme appears in the specifier of the minimal VP. The agent likewise appears in the specifier of a VP-external phrase – termed *vP* – which is located immediately above the VP.

The assignment of absolutive case in both transitive and unaccusative verbs is conditioned by the fulfillment of Bittner & Hale’s (1996) K-Filter, given below.

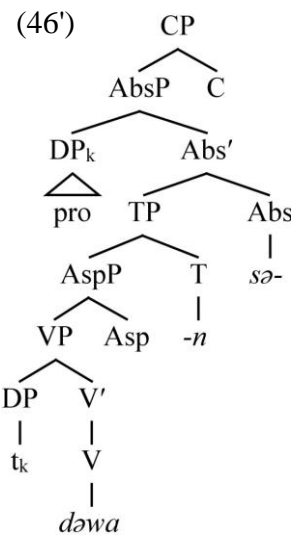
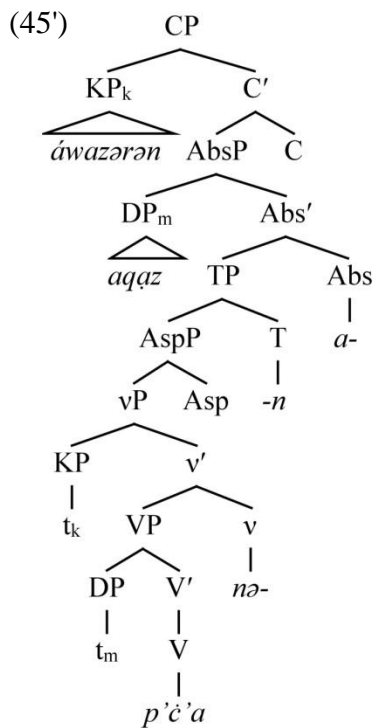
K-Filter

An argument chain headed by a K-less nominal (DP or NP) contains a position that is c-commanded and governed by K or C, and does not contain any Case-bound position. (Bittner & Hale 1996: 12)

The theme is required by this filter to raise to the specifier of the projection immediately below the CP, which in this analysis and that of O’Herin (2002) for Abaza is termed the Abslutive Phrase (AbsP). Once the theme is raised, the unmarked absolutive is licensed by its new structural position. Thus, the two examples below may be diagrammed as in (45’) and (46’) (the mechanics of the ergative phrase in (45) will be explained below).

- (45) *á-wazəɾə-n a-qáz-Ø á-nə-p’c’a-n.*
 the-vizier-ERG the-geese-ABS 3SGA-3SGE-clean-PRS
 ‘The vizier cleans the goose.’ (Dumézil & Esenç 1978: 59)

- (46) *sə-dəwá-n.*
 1SGA-die-PRS
 ‘I die.’ (Vogt 1963: 114)



As stated above, the agent theta-role is assigned to the specifier of vP. The agent, if it is a nominal and the subject of a transitive verb, has the form of a DP contained within a KP. Following Bittner & Hale (1996), case is

assigned to this position through case-binding from the Aspect Phrase (AspP) directly above the vP. I take AspP to be the lowest member of the “exploded” IP, which is composed of AbsP, a Tense Phrase (TP) and AspP. Bittner & Hale (1996) propose that in this position, K° must be realized as Ergative by their Direct Case Realizations below. After receiving its case, the agent KP raises to the specifier of CP.

Direct Case Realizations

If α Case-binds an overt empty-headed KP β , then the empty K of β is realized as:

- (i) ERG, if α is I (or D);
 - (ii) ACC, if α is V (or P) and has an adjoined D.
- (Bittner & Hale 1996: 11)

The agent theta-role is also assigned to the sole argument in unergative verbs. However, this argument does not take the ergative case as one would expect. Instead, it is assigned the absolutive case, as in Samoan (Austronesian) or Warlpiri (Pama-Nyungan).

- (47) *a-tát-Ø Ø-q̄a-q'á.*
 the-man-ABS 3SGA-run-PST
 ‘The man ran.’ (Charachidzé 1989: 370)

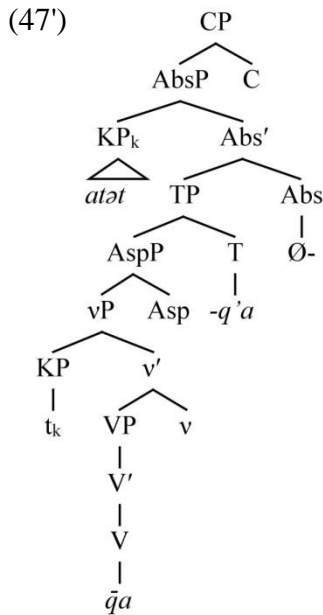
Samoan

- (48) *sa sola Ø le teine.*
 PST run.away ABS the girl
 ‘The girl ran away.’ (Bittner & Hale 1996: 29)

Warlpiri

- (49) *ngaju ka-rna parnka-mi.*
 me.NOM PRS-1SG run-NPST
 ‘I am running.’ (Bittner & Hale 1996: 31)

The Ubykh example (47) is diagrammed in (47').



The assignment of absolutive case to the agent of an unergative is a result of the K-Filter (see above). This filter, ultimately requires the specifier of AbsP to be filled. Normally this position is filled by the theme argument, but as unergatives only project an agent, it must raise in order to fill this position. The verb itself does not case-bind anything because it does not c-command any argument. Furthermore, though the Asp° locally c-commands the trace in the specifier of vP, it does not case-bind this position because there is no case-competition, which is required in order for Asp° to assign ergative case to the specifier of vP. The agent DP, by raising to the specifier of AbsP, fulfills the K-Filter and is assigned absolutive case by virtue of the fact that it is both c-commanded and governed by C° .

2.4.1 An Introduction to Applicatives

Pykkänen (2002) approaches the question of applicatives from a semantic standpoint. She divides applicatives into two classes, termed high and low. High applicatives denote a thematic relationship between an individual and an event, such as a benefactive. Low applicatives indicate a relation of possession, or transfer of possession, between the applied object and the direct object. The Venda sentence below illustrates the high applicative. The event, or action, of “building” occurs for the benefit of the applied object “father”. It is the applied object which registers agreement in the verbal complex and not the direct object. The Korean example shows a

transfer of possession of the direct object “ring” from “Mary” to the “thief”, and is thus indicative of a low applicative construction.

Venda (Bantu)

- (50) *ndi mu fhat-el-a nndu khotsi.*
 SM.1SG OM.CL1 build-APPL-FV hut.CL9 father.CL1
 ‘I build a house for father.’ (Ziervogel et al. 1972: 113)

Korean (Isolate)

- (51) *totwuk-i Mary-hanthey panci-lul hwumchi-ass-ta.*
 thief-NOM Mary-DAT ring-ACC steal-PST-DECL
 ‘The thief stole a ring from Mary.’ (Pylkkänen 2002: 21)

Structurally, high applicatives appear below the vP and above the VP, while the low applicative appears immediately below the VP with the direct object as the complement to Appl^o. Since the low applicative denotes a relationship between the applied and direct object, it can only appear attached to transitive or unaccusative verbs because unergative verbs lack a theme argument. High applicatives, on the other hand, are free to combine with unergative verbs as well as transitives and unaccusatives.

Finally, Baker (1996) analyzes polysynthetic applicatives as being split between two structural classes, those where the applicative morpheme appears as a suffix and those where it is a prefix. Languages such as Mohawk and Nahuatl are clear examples of the former group, as may be seen in the Classical Nahuatl (Uto-Aztecan) sentence below.

Classical Nahuatl

- (52) *ni-quin-tlaxcal-temo-lia-Ø in no-pil-huan.*
 1SGS-3PLO-tortilla-seeK-APPL-PRS IN 1SGP-son-PL
 ‘I seek bread for my sons.’ (Anderson 1973: 104)

According to Baker (1996) – and which was described above in the introduction to this article – suffixed applicative morphemes head their own verbal projection and may assign up to three thematic roles (agent, theme and goal/path) depending of the nature of the verb to which they are suffixed. Often, the goal/path theta-role is assigned to a adpositional phrase headed by a null P^o and an unpronounced pro which may be coindexed in the verbal agreement morphology. The theme is given to the higher VP which contains the action or state denoting verb stem. The theme of this higher VP is discharged on its own direct object or unaccusative subject – a form which is often incorporated in the polysynthetic languages described

in Baker (1996). If an agent theta-role is present it is assigned to the agent of the higher verb.

The applicative suffix *-lia* in the above example heads its own VP and assigns a goal theta-role to the phrase “my sons”. The theme role is assigned to a higher VP, headed by the verb *temo* ‘seek’; the theme of this verb is given to the incorporated nominal *tlaxcal-* (the full form of which is *tlaxcalli*). The agent theta-role of the applicative verb *-lia* and the higher verb *temo* is assigned to the same argument, in this case the phonetically null, 1st person pro.

Prefixed applicatives – such as those in Ainu, Mayali and the Northwest Caucasian languages – are the result of adposition incorporation. The applicative begins as a PP below the verb and raises to be adjoined to a phrase above the vP, which Baker (1996) analyzes as the AspP. The P°, hosting the applicative morpheme, merges with Asp° before the verb begins movement and later joins to the verbal complex as the verb passes through Asp°.

Ainu (Isolate)

- (53) *huci matkaci ko-paskuma.*
 grandmother girl APPL-tell.old.stories
 ‘Grandmother told the old stories to the girl.’ (Shibatani 1990: 54)

2.4.2 Low Applicatives

According to Pylkkänen (2002), the low applicative structure is responsible for introducing an additional argument below the VP which has a relationship with the direct object indicating possession or a transfer of possession. Following Pylkkänen (2002), Georgala et al. (2007) and Jeong (2006), the low applicative is generated as the complement of V°. The dative object appears in the specifier of ApplLP with the corresponding agreement in ApplL°. The theme object is generated as the complement of ApplL°.

This type of applicative is found with ditransitive verbs such as *t°ə* ‘give’ which indicate a transfer of possession from the direct object to the indirect object.

- (54) *waná-n za-tχáł-g°ara-Ø Ø-sá-n-t°-q'a.*
 that-ERG one-letter-INDF-ABS 3SGA-1SGD-3SGE-give-PST
 'He gave me a (certain) letter.' (Dumézil & Esenç 1978: 59)

The derivation of the surface form of the verb is the result of the V° raising and joining with v° to form the complex head $[v^\circ + V^\circ]$. At this phase boundary, the AppL° containing the dative agreement raises and joins with the complex head forming $[\text{AppL}^\circ + [v^\circ + V^\circ]]$.

2.4.3 High Applicatives

Contrasting with the low applicative, high applicatives introduce an additional argument between the vP and VP which indicate a thematic relationship (such as a benefactive) between the applied object and the event denoted by the verb (Pylkkänen 2002, Georgala et al 2007, Jeong 2006). The Ubykh high applicative (AppHP) generates the applied object in the specifier of AppHP in the form of a postpositional phrase.

According to Baker's analysis – which is also used by O'Herin (2001, 2002) to describe his Abaza data – PPs project a functional category immediately above themselves which hosts agreement with their object. Baker terms this FuncP , but following O'Herin (2001) I have simply termed this an Agreement Phrase (AgrP). This analysis is diagrammed in Figure 1.

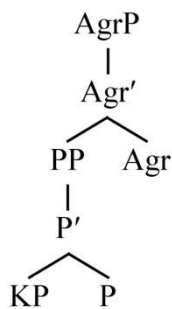


Figure 1. An analysis of preposition phrases according to O'Herin (2001).

The applicative construction fills P° with one of the applicative morphemes. The applicative P° selects for a KP, under which the applied object (either a DP or NP) is placed. The applicative always appears to require the dative case. The AgrP agrees with the applied object. The P° raises to Agr° and forms a complex head with it. This complex $[\text{Agr}^\circ + P^\circ]$

then incorporates into the verb at v° . Unlike the low applicative, the ApplH $^{\circ}$ remains vacant.

- (55) *a-x'á-n walá-na za-tχá-t-Ø Ø-a-x'á-n-tχ-q'ayt'*.
 the-prince-ERG those-DAT.PL one-letter-ABS 3SGA-3PLD-BEN-3SGE-write-PLUP
 'The prince had written a letter for them.' (Charachidzé 1989: 429)

While none of the languages displaying prefixed applicatives in Baker (1996) show agreement with the applied object, overt agreement is found throughout the Northwest Caucasian group. The applicatives in the examples below show oblique agreement with their objects.

Abkhaz (Northwest Caucasian)

- (56) *a-ph^oás a-xác'a a-xárp Ø-ya-zá-lá-ž^ož^oa-yt'*.
 the-woman the-man the-shirt 3SGA.N-3SGD.M-BEN-3SGE.F-wash-AOR
 'The woman washed the shirt for the man.' (Hewitt 1989: 67)

Shapsug Adyghe (Northwest Caucasian)

- (57) *mə xaš^we-r a-f-a-wəqebzə-β ležek^w'e.p:sewaq^we-me.*
 this field-ABS 3PLD-BEN-3PLA-clear-PST peasant-OBL.PL
 'This field was cleared for peasants.' (Lander 2010: 78)

Interestingly, both the high and low applicatives may be found in the same verbal complex, as in example (58) below. Also, multiple high applicatives may surface in a single verbal complex as in (59) below.

- (58) *za-má-Ø Ø-t-x'a-wá-s-t^oə-n tət-Ø.*
 one-apple-ABS 3SGA-REL-BEN-2SGD-1SGE-give-PRS man-ABS
 'The man for whom I give you an apple.' (Charachidzé 1989: 441)

- (59) *a-s-x'á-w-ya-nə-wt^o'-ay-awt.*
 3SGA-1SGD-BEN-2SGD-ABL-3SGE-take-ITER-FUT2
 'He will take it back from you for me.' (Dumézil 1975: 102)

The high applicative construction is also responsible for the assignment of dative case to the direct object of verbs such as *ya* 'strike', *k'at'a* 'approach', *pla* 'look at' and *məša* 'call (to)'. This class of verbs comprises approximately one dozen roots, most of which are derived directly from unergative verbs. These have their valence increased using a high applicative indicating a goal of the verbs' action.

- (60) *a-tát-Ø a-x'á-n yá-Ø-ya-q'a.*
 the-man-ABS the-prince-DAT 3SGA-3SGD-strike-PST
 'The man struck the prince.' (Charachidzé 1989: 439)

Compare also the monovalent unergative in (61) with the bivalent applicative in (62).

- (61) *wa-z°apsáǰ' za-p'č'á-g°ara-Ø a-mása-q'a.*
 that-night one-guest-INDF-ABS 3SGA-call-PST
 'That night a (certain) guest called.' (Vogt 1963: 148)

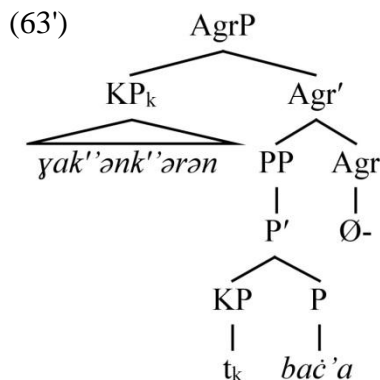
- (62) *Sáwsərəq°a-n s°ə-Ø-mása-n!*
 Sáwsərəq°a-DAT 2PLA-3SGD-call-PRS
 '(You all) call to Sáwsərəq°a!' (Vogt 1963: 148)

2.5 Ubykh Postposition Incorporation

The incorporation of postpositions in Ubykh is similar to the structure of applicatives, with the various postpositions, rather than an applicative marker, being hosted in P°. This postpositional phrase, instead of being generated in the specifier of a high applicative projection, begins below the VP. Example (63') details the AgrP of example (63).

- (63) *a-k'arax°a-Ø ya-k'ənk'ərən Ø-Ø-bac'a-n-q°a-q'a.*
 the-revolver-ABS 3SGPSG-adam's.apple-DAT 3SGA-3SGD-under-3SGE-stick-PST
 'He put the revolver under his throat.' (Alparslan & Dumézil 1964: 352)

- (64) *səy°á sə-yac'a-n Ø-Ø-yac'á-t-Ø a-w-č'á-nə-š?*
 I.GEN 1SGPSG-inside-DAT 3SGA-3SGD-inside-be-NFIN 3SGA-2SGE-know-PRS-Q
 'Do you know what is inside me?' (Charachidzé 1989: 373)



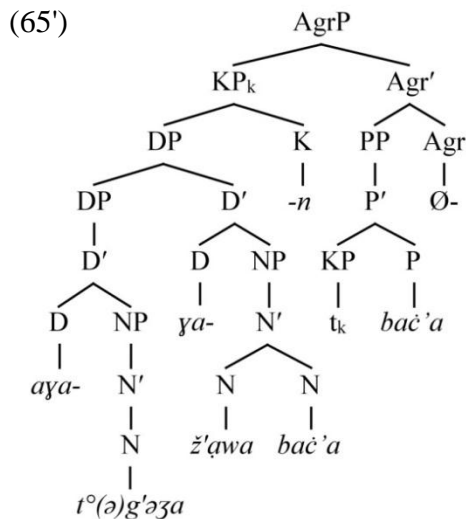
The PP raises and is adjoined to the vP. Once the verb raises and joins with v°, the [Agr° + P°] excorporates from the adjoined phrase and merges with the verbal complex in v°.

Another matter to be examined is the doubling of the incorporated element. Only the incorporated postpositions may be doubled in Ubykh. There appears to be no discernable difference in meaning between example sentences where both forms are given. This construction is infrequently used and is significantly more complex than its undoubled counterpart.

This construction relies on what may be called “relational nouns” set in a genitive relationship with their object as in example (64). The relational noun appears with a possessive prefix coindexed with the object, and one of three cases – the locative *-ya*, the instrumental *-awnə*, or the dative *-n ~ -na*. The selection of this case is dependent on the function of the structure. The locative typically indicates motion, either to or from, the instrumental marks motion by or through and the oblique is used elsewhere.

The relational noun may also appear compounded directly with its object as the example (65) below. The compound, as the structure examined above, may be inflected with the same array of cases in the same situations.

- (65) *aya-t°(ə)g'əʒa-Ø* *ya-ž'əwa-bac'a-n*
 3PLPSG-grandfather-GEN 3SGPSG-shadow-under-DAT
Ø-Ø-bac'a-χa-nan.
 3SGA-3SGD-under-be.PL-PRS.PL
 ‘(Sitting) under the shadow of their grandfather.’ (Alparslan & Dumézil 1964: 352)



2.5.1 Baker's Movement Theory of Noun Incorporation

According to Baker (1996), noun incorporation is derived through the head movement of a verbal object – typically a theme argument – from its base position to be joined with the verb stem. This movement is motivated by the Morphological Visibility Condition (MVC), given below.

Morphological Visibility Condition

Every θ -role associated with a head Y must be coindexed with a distinct morpheme in the word containing Y. (Baker 1996: 286)

Simply put, the MVC states that if a word assigns a theta-role to another word or phrase, that word or phrase must either show agreement on the theta-role assigner or incorporate into it. Gronemeyer (1996) develops this position and suggests that incorporation also stems from or may be triggered by a morphological defect which disallows certain stems from appearing as independent words, such as West Greenlandic post-bases. The morpheme *-qar* 'have' in the following example is required to be suffixed to another word form in order to be properly realized.

West Greenlandic (Eskimo-Aleut)

- (66) *kunngi-p panip-passua-qar-poq.*
 king-ERG daughter-many-have-3SG.IND
 'There are many king's daughters.' (Malouf 1999: 48)

She also notes, as does Baker (1996), that determiner phrases are defective in polysynthetic languages. If a nominal is dominated by a DP, that noun is prohibited from incorporating because doing so would violate the Head Movement Constraint by skipping over the D° .

Head Movement Constraint

An X° category Y can only adjoin to the head of the phrase that immediately dominates the maximal projection of Y. (Baker 1996: 284)

Incorporating first into the D° and then into the verb is also prohibited by the Proper Head Movement Generalization. Thus, noun incorporation can only affect a theta-marked, bare NP.

Proper Head Movement Generalization

A lexical category cannot move into a functional category and then back into a lexical category. (Baker 1996: 284)

Baker (1996) continues his analysis by examining why certain theta-roles incorporate and why others typically do not. Goals (and by extension, Paths) will not incorporate because ditransitive verbs in polysynthetic languages call for a PP headed by a null adposition to express the argument. This null adposition blocks the direct incorporation of the goal into the verb stem. Agents are simply never in a structural position where they are capable of incorporating into the verb.

Themes, on the other hand, are base generated as bare NPs, which does allow them to be incorporated into the verb before the verb begins its movement upward through the syntactic tree. Gerdts (1998) points out that certain languages can incorporate constituents such as instruments and passive agents (67) with its unincorporated counterpart in (68).

Southern Tiwa (Tanoan)

- (67) *khwien-ide Ø-kan-ẽdeure-ban.*
 dog-BAS 3SGS>3SGO-horse-kick.PASS-PST
 ‘The dog was kicked by the horse.’ (Gerdts 1998: 87)

Southern Tiwa

- (68) *khwien-ide Ø-ẽdeure-ban kan-ide-ba.*
 dog-BAS 3SGS>3SGO-kick.PASS-PST horse-BAS-INST
 ‘The dog was kicked by the horse.’ (Allen et al. 1984: 302)

Baker (1996), while not delving into the debate for lack of materials, believes that at least in the case of oblique incorporation it is a matter of lexical compounding instead of incorporation driven by head movement.

2.5.2 Ubykh Noun Incorporation.

Noun incorporation in Ubykh is not true noun incorporation (NI) in the traditional sense of the term. Typically, NI involves the head-movement of the theme N° from its base position to one where it is joined to the V° .

Mohawk

- (69) *kika á'shar-e' ka-natar-a-kwétar-as.*
 this knife-NSF 3SGS.N-bread-LNK-cut-HAB
 ‘This knife cuts bread.’ (Baker 1996: 207)

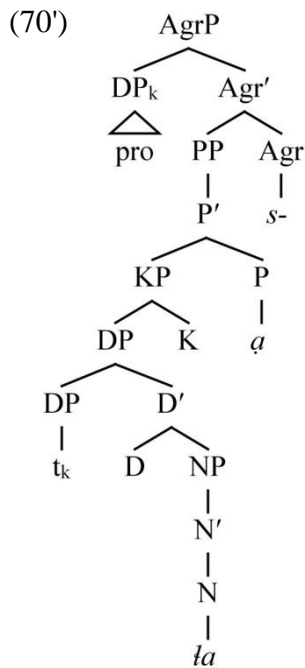
This movement is triggered by the MVC, as described above. The theme “bread” gets its theta-role from the verb but lacks any coreference in it,

violating the MVC. If object agreement were generated elsewhere, it would receive case from the verb which would mean the overt theme “bread” violates the Case Filter (which simply states that all overt nominal arguments must be case-marked). NI is therefore the only means to produce a grammatical construction in languages like Mohawk.

Ubykh NI, on the other hand, relies on a construction similar to that of postposition incorporation with an external doubled postposition. The incorporated nominal (IN) begins as the object in a genitive construction which is itself the object of a null postposition (or an overt postposition such as the translocative). The Agr° dominating the PP hosts agreement with the possessor of the nominal, which is most often a 3rd singular pro. This pro (or an overt nominal) raises to the specifier of AgrP in order to be coindexed with the agreement in Agr° . This nominal object raises and incorporates into the P° , and the $[\text{N}^\circ + \text{P}^\circ]$ complex raises to merge with Agr° . As with the incorporated postpositions, the $[\text{Agr}^\circ + [\text{N}^\circ + \text{P}^\circ]]$ merges with the verb in v° .

(70) *sə-təbʒ'a-∅* *∅-s-tə-sə-ya-n.*
 1SGPSG-shoe-ABS 3SGA-1SGD-foot:TRLOC-1SGE-put-PRS
 ‘I put on my shoes.’ (Dumézil 1975: 117)

(71) *š'a-∅-č'a-by'a-k'áz°a-na-n.*
 1PLA-3SGD-knight-on-sit.down.PL-PL-PRS
 ‘Let’s mount our horses!’ (Dumézil 1975: 109)

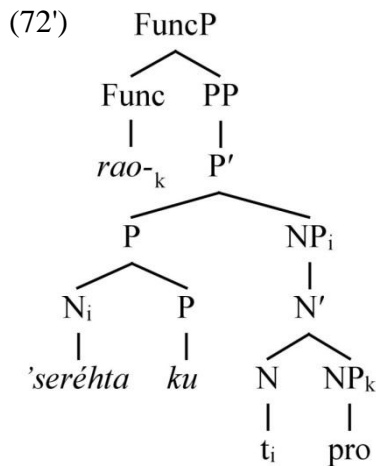


As may be seen in the above chart, the possessed object “foot” is moved out of its object position and forms a complex head with P° (the translocative *a-*), and the pair raise together to form an even more complex head with Agr°.

The form in (71) provides a relatively rare example of an incorporated nominal combined with an overt postposition (excluding the translocative and ablative forms). A variety of INs must occur with the translocative prefix *a-*, which, if it was not combined directly with the IN, would necessarily occur with a possessive prefix as *sə-*, *wə-*, *ya-*, etc.

This structure is akin to that found in Mohawk postpositions having a possessed object. Take, for example, the following sentence, with the postpositional phrase diagrammed below.

- Mohawk
- (72) *Shawátis rao-'seré-ht-a-ku wa'-ke-'nerohkw-íta-'.*
 Shawatis 3SGP.M-car-NMLZ-LNK-in FACT-1SGS-box-put-PUNC
 ‘I put the box in Shawatis’ car.’ (Baker 1996: 411)



The postpositional object “car” is governed by a phonologically null *pro* which is coreferenced with the agreement prefixed to the postpositional complex and also externally to the adjunct nominal “Shawatis”. This object is raised and incorporated into the postposition, and the complex is then raised to Func° to acquire the agreement.

Similar to the cooccurrence of the high and low applicatives, the incorporation of a nominal may also be found with a high applicative as in the following example.

- (73) *wába-n a-š'-x'a-z°a-nə-Ø-t°'a-q'ayla.*
 god-ERG 3PLA-1PLD-BEN-sky-3SGE-CAUS-descend-PLUP.PL.PTCP
 ‘Those (things) that god had made descend from the sky for us.’ (Dumézil 1975: 34)

Ubykh noun incorporation in many cases has a reading akin to possessor raising. Possessor raising constructions involve the incorporation of a possessed nominal into the verb stem. The possessor then raises to fill the now vacant thematic position left by the possessed object (van Geenhoven 2002).

West Greenlandic

- (74) *Nuka-p puisi-Ø ami-ir-p-a-a.*
 Nuka-ERG seal-ABS skin-remove-IND-TR-3SGS>3SGO
 i) ‘Nuka removed the seal’s skin.’
 ii) ‘Nuka removed the skin from the seal.’ (van Geenhoven 2002: 772)

Certain examples of NI in Ubykh seem to fit with van Geenhoven’s (2002) description of possessor raising. The absolutive arguments in the following two examples – *yatχ* and *yáməz*, respectively – can be interpreted as

possessors of the INs. Since the theme argument in each case has been incorporated, there is no argument left which can meet the requirement to fill the specifier of AbsP, save the possessor of the IN. The possessor is then marked by the absolutive case, instead of the genitive (which is typically reduced from *-n* to *-∅* before the 3rd person possessive prefix *ya-*).

- (75) *ya-tχ-∅* *a-∅-c°á-z-la-n*.
 3SGPSG-back-ABS 3SGA-3SGD-skin-1SGE-remove-PRS
 ‘I flay his back.’ (Charachidzé 1989: 431)

- (76) *yá-məz-∅* *a-∅-šá-n-q’ada-q’a-ma*.
 3SGPSG-child-ABS 3SGA-3SGD-head-3SGE-cut-PST-NEG
 ‘He did not decapitate his child.’ (Charachidzé 1989: 431)

The possessor remains in the genitive (which retains the full form since the phonological conditioning of the possessive prefix has been removed) when there is an argument present to fill the specifier of AbsP.

- (77) *a-qāp̄-∅* *a-nt°a-n* *∅-∅-č’°a-č’aw-q’a*.
 the-branch-ABS the-door-GEN 3SGA-3SGD-mouth-fall-PST
 ‘The branch fell in front of the door.’ (Dumézil & Esenç 1971: 44)

- (78) *á-nt°až-a-∅* *∅-∅-č’°á-nə-wt°ə-n* *a-č’°-∅*
 the-outer.door-ABS 3SGA-3SGD-mouth-3SGE-open-GER the-horse-ABS
a-g°áya-n *∅-∅-g’°n-ya-k’a-q’an*.
 the-enclosure-GEN 3SGA-3SGD-in-3SGE-CAUS.PL-enter.PL-PST.PL
 ‘(He) opened the outer door and made the horse enter the enclosure.’
 (Charachidzé 1988: 4)

3. Conclusion

This paper has sought to provide a straightforward description of the applicative and noun incorporation structures and the accompanying systems of agreement found in the Northwest Caucasian language Ubykh. Additionally, I have proposed an analysis of these data consistent with modern morphosyntactic theory. This analysis treats the four related constructions – dative verbal agreement, applicatives, incorporated postpositions, and incorporated nouns – as being derived from the same underlying structure. A structure which is not uncommon

crosslinguistically, but which is used in an unique way in Ubykh and the greater Northwest Caucasian family.

High applicatives in Ubykh are analyzed based on the theory proposed by Baker (1996) and subsequently extended by O'Herin (2001, 2002) and on the analysis of applicatives by Georgala et al. (2008). These proposals state that in languages where the applicative morpheme appears as a verbal prefix, this prefix may be regarded as the result of adposition incorporation. The applicative PP is generated in the specifier of a high applicative phrase (ApplHP) which is located between the vP and VP. The applicative P^o head raises within the PP and merges with an agreement head (Agr^o) and the complex form [Agr^o + P^o] incorporates into the verbal complex at v^o after the verb has raised and merged with the agreement located in v^o.

Low applicatives, on the other hand, are generated below the VP in a low applicative phrase (ApplLP). The applied object is generated in the specifier of this phrase while the corresponding agreement is found in the ApplL^o. Similar to the high applicative, the low applicative agreement raises and merges with the verbal complex in v^o. This low applicative construction is responsible for intraverbal dative agreement in the absence of a governing incorporated postposition or noun.

The incorporation of postpositions into the verbal complex is similar in form to that of high applicatives. The PP in this construction, rather than being generated in the specifier of an ApplHP, occurs below the VP. The PP raises and is adjoined to the vP. Once the verb raises and joins with v^o, the [Agr^o + P^o] exorporates from the adjoined phrase and merges with the verbal complex in v^o. The incorporated postposition may be doubled by using a relational noun with the same form as the P^o standing as the complement to P^o. The incorporation of the postposition and agreement proceeds without alteration.

Ubykh noun incorporation relies on a construction similar to that of postposition incorporation with an external doubled postposition. The incorporated nominal begins as the object in a genitive construction which is itself the object of a null postposition (or an overt postposition such as the translocative). The Agr^o dominating the PP agrees with the possessor of the nominal, which is most often a 3rd singular pro. This pro (or an overt nominal) raises to the specifier of AgrP in order to be coindexed with the agreement in Agr^o. This nominal object raises and incorporates into the P^o, and the [N^o + P^o] complex raises to merge with Agr^o. As with the incorporated postpositions, the [Agr^o + [N^o + P^o]] merges with the verb in v^o.

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Abbreviations

1 = 1st Person
 2 = 2nd Person
 3 = 3rd Person
 A = Absolutive
 D = Dative
 E = Ergative
 F = Feminine
 M = Masculine
 N = Neuter
 O = Object
 P = Possessive
 S = Subject

ABL = Ablative
 ABS = Absolutive
 ACC = Accusative
 ADV = Adverbial
 AOR = Aorist
 APPL = Applicative
 BAS = Basic
 BEN = Benefactive
 CAUS = Causative
 CL = Noun Class
 COM = Comitative
 DAT = Dative
 DECL = Declarative
 DYN = Dynamic
 FACT = Factive
 FUT = Future
 FUT1 = Future 1
 FUT2 = Future 2
 FV = Final Vowel
 GEN = Genitive
 GER = Gerundive

HAB = Habitual
 IMP = Imperative
 IND = Indicative
 INDF = Indefinite
 INST = Instrumental
 ITER = Iterative
 LNK = Linker
 LOC = Locative
 MAL = Malefactive
 NEG = Negation
 NFIN = Non-finite
 NMLZ = Nominalizer
 NOM = Nominative
 NPST = Non-past
 NSF = Noun Suffix
 OM = Object Marker
 PASS = Passive
 PERL = Perlative
 PFCT = Perfect
 PL = Plural
 PLUP = Pluperfect
 PRS = Present
 PST = Past
 PTCP = Participle
 PV = Preverb
 PUNC = Punctual
 Q = Question
 REL = Relative
 SEQ = Sequential
 SG = Singular
 SM = Subject Marker
 STAT = Stative
 TR = Transitive
 TRLOC = Translocative

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