Balti Morphology

Jessica Kuleshov, Columbia University Language Documentation: Field Methods

Introduction

This paper first focuses on Balti morphology. Overall, Balti is an ergative-absolutive language and has case markings for the ergative, genitive, and dative cases. First will be discussed the nominal morphology and the case markers, followed by verbal morphology, focusing on tense and aspect. It is important to note here that there does not seem to be a clear future tense, and often the only ways to indicate the future tense would be through context or using irrealis verbs, but there is a potential explanation which will be explored in Mysteries, Section 3.3. All data has been elicited by me, unless otherwise noted.

1. Nominal Morphology

1.1 Bare Pronominals

Person	Number	Pol/Fam	M/F	Incl/Excl	Form		
1	sg				ŋa		
	pl						
2	sg	polite	jaŋ				
		familiar	k ^h jaŋ				
	pl	polite		j≀daŋ			
		familiar		k ^h I daŋ			
3	3 sg		masculine feminine		k ^h o		
					mo		
	pl		masculine, mixed		k ^h oŋ		
			feminine		moŋ		

1.2 Possessive Pronominals

Person	Number	Pol/Fam	M/F	Incl/Excl	Form		
1	sg		'n				
	pl						
2	sg	polite	polite				
		familiar	k ^h jeri				
	pl	pl polite					
		familiar			k ^h eti		
3	sg		masculine		k ^h oi		
			feminine		moi		
	pl		masculine, mixed		k ^h odaŋi		
			feminine		modaŋi		

1.3 Reflexive Pronominals

Person	Number	Pol/Fam	M/F	Incl/Excl	Form		
1	sg						
	pl						
2	sg	polite			jaŋ		
		familiar	k ^h jaŋ				
	pl	polite*					
		familiar*					
3	3 sg pl		masculine		kwaŋ		
			feminine		mwaŋ		
			masculine, mixed		k ^h odaŋi		
			feminine		modaŋi		

*Had not been elicited.

1.4 Reflexive Possessive Pronominals

Person	Number	Pol/Fam	M/F	Incl/Excl	Form	
1	sg					
	pl					
2	sg	polite	polite			
		familiar	k ^h e∩i			
	pl	polite	jeti			
		familiar			k ^h eti	
3	sg		masculine		ku∩i	
			feminine		mu∩i	
	pl		masculine, mix	ed	k ^h eti	
			feminine		meti	

1.4 Definite markers [-po], [-o]

[-po] is added on as a definite marker when the noun ends in a consonant I

(1) di	∫ok∫okʰ-po	^t∫i	fila	In
this	letter- DEF	who	for	is
'Who is th	is letter for?'			

If the noun ends in a vowel, the last vowel is changed to [-o]:

(2) b-o-is xtrax-po z-εn m-εt
 cow-DEF.ERG gift-DEF eat-PTCP NEG-AUX
 'The cow is not eating the gift.'

1.5 Plural Markers [-ŋ] and [-kʊn]

The plural marker [-ŋ] is used on V-final stems.

(3) k^hu∫u-ŋ 3unbo jʊt

apple-PL tasty COP 'Apples are tasty.'

The plural marker [-kun] is used instead of [-ŋ] on C-final stems.

(4) mendoq-kun marfe jut flowers-PL red COP 'All flowers are red.'

1.6 Case Markers

1.6.1 Ergative Markers

The ergative marker on its own is usually [-s] unless appearing after a back vowel in which case it is [-is]. The speaker who was elicited from said that typically the [-s] of the ergative marker is dropped at the end.

(5) ŋa-s	ŋaŋ-la	rg-ɛt
I-ERG	myself-DAT	love-PRS
'I love my	/self.'	

(6) bil-o-is na z-os
cat-DEF.ERG fish eat-PST
'The cat ate fish.'

1.6.2 Dative Marker [-la]

[-la] seems to be used as a dative marker just added on at the end of the stem.

(7) ŋa	bil-o-la	xrkjεl	taŋ-€n	jʊt-pa
Ι	cat-DEF.DAT	bath	make-PTCP	AUX.PST
'I was	making a bath for the	cat.'		

For verbs such as 'to know' or 'to like', the subject takes the dative marker, as in 'to me this is occurring'.

(8) ŋa-la îts^ho rga∫a ma-∫ɛs îtsar zɛ bana ŋa-la xrkjɛlba ∫jɛs m-ɛt
I.DAT lake like NEG-know because I-DAT swim know NEG-AUX
'I do not like the lake because I do not know how to swim.'

1.6.3 Genitive Marker [-i]

The genitive marker is [-i], and also always appears before postpositions.

- (9) b-o mwe-i In cow-DEF woman.GEN COP 'The cow is some woman's.'
- (10) $k^{h}o$ $ts^{h}o-i$ $k^{h}a$ $xrkj\epsilon lba$ go- ϵn jot He lake.GEN upon swim go.PTCP AUX 'He is going to the lake to swim.'

2. Verbal Morphology

2.1 Tense

2.1.1 Present tense

[-ɛt] indicates present tense :

(11) na-la $ts^{h}o$ rga $a fj\epsilon s-\epsilon t$ I-DAT lake love know-PRS 'I like the lake.'

2.1.2 Past tense

-s indicates simple past tense 1

(12) ŋa ît∫ulu-la xlta-s
I apricot-DAT see-PST
'I saw the apricot.'

2.2 Aspect

2.2.1 Imperfective Aspect

2.2.1.1 Present Progressive

The imperfective present progressive is shown with the participle marker $[-\varepsilon n]$ and the auxiliary $[j\sigma t]$ ¹

(13) ŋa xrkjεl-εn jʊt
I bathe-PTCP AUX
'I am bathing.'

2.2.1.2 Past Progressive

The past progressive is the present progressive with the past tense [-pa] marking I

(14)	na nan i	oŋ-ɛn	jʊt-pa
	I home to	come-PTCP	AUX.PST
	'I was coming home.'		
(15)	ŋa zunb-εn I smile-PTCP	jʊt-pa AUX.PST	
	'I was smiling.'	A0A.151	

2.2.2 Perfective Aspect

2.2.2.1 Present Perfect Progressive

The present perfect progressive is formed by adding the participle marker $[-\varepsilon n]$ to the verb, adding the auxiliary verb $[j\upsilon t]$ and the copula [In]. When $[j\upsilon t]$ appears in front of [In] it has an added ending [-pi] as shown, and in general the last letter of a verb is changed to [-i] in front of [In]^{Σ}

(16)	ŋa j€ri	bil-o-la	xrkjεl	taŋ-€n	jʊtp-i	In
	I your	cat-DEF.DAT	bath	make-PTCP	AUX.COP	COP
	'I have bee	en washing your cat.'				

2.2.2.2 Future Perfect Progressive

The future perfect progressive seems to take the same form as the present perfect progressive, and the future marking is indicated by stating a time earlier in the sentence (e.g. tomorrow, next week).

(17)	haskε	ŋa	NYC gw-En	jʊt-pi		In
	tomorrow I	NYC	go-PTCP	AUX.COP	COP	
	'Tomorrow I will go to New York.'					
	(Diana Abagyan; 2	2020/03	/06; GM)			

2.2.2.3 Past Perfect Progressive

In order to form the past perfect progressive, the present perfect progressive [-ɛn jʊt-pi In] has [pa], the past marker added at the end (with negation going between the Progressive[⊥]

(18) na furut z-en m-et-pi In-pa

I fruit eat.PROG NEG-AUX.COP COP.PST 'I had not been eating fruit.'

2.3 Modality

2.3.1 Imperative

The imperative seems to be the word stem alone.

(19)	kʰidaŋ	gaŋma	loxsε	zgo door	p⁵€s
	you all	all	together	door	open
	'All of you o	pen the door tog	ether!'		

Instead of following the negation rules in Section 2.4, a phrase is negated by placing [ma] before the verb[±]

(20) t^hat^ha ma bεs laugh NEG do 'Stop laughing!'

2.3.2 Potentiality

Potentiality is shown with [na], connecting the two phrases in the middle. However, the last verb's exact derivation is unclear (see mysteries in Section 3.3).

(21)niku∫ujʊt-panaŋa-sz-εt-pamyappleAUX.PSTPOTI-ERGeat-AUX.PST'If I had an apple, I would have eaten it.'

^ts^haniŋ (22)^t∫i ni xmul jot-pa na na-s naŋ My money AUX.PST with POT I-ERG house one lɛn-ɛt-pa buy-AUX.PST 'If I had money, I would have bought a house.'

2.3.3 Irrealis

Two words are used to show irrealis¹ [suk^h], used for the past tense, and [duktuk^h], which is the only word other than temporal words that can indicate future tense¹

(23)	kho-s	B zun	t ^h aŋf-i	In	suk ^h
	He-ERG	lie	make	COP	IRR

(Diana Abagyan; 2020/03/27; GM)

(24) ŋa haskε z-εn duktuk^h
 I tomorrow eat-PTCP IRR
 'I shall be eating tomorrow.'

2.4 Negation

The negation affects the last verb of the word by placing [ma] before the verb. A couple of exceptions are that It will show up as [ma] for all verbs except for $[j\sigma t]$ where the two combine and form [m ϵt], and for [In], [ma] combines with it to form [m ϵn].

3. Mysteries

3.1 Irrealis Markers

Although it does seem that [suk^h] and [duktuk^h] are being used to show irrealis, they do appear as well in sentences that do not seem to be containing that quality in English when the speaker was asked to transcribe the future tense¹

(25) ηa d $\epsilon ri\eta$ $ts^{h}a\eta$ -la $nit^{h}a\eta$ - ϵn duktuk^h I tonight sleep-DAT fall-PTCP IRR 'Tonight I will be falling asleep.'

A potential explanation for this is that the future is always seen as uncertain in Balti and the speaker interpreted the sentence in such a manner that it would require the irrealis to be used, but more data would most likely need to be elicited to know for sure.

3.2 Future tense

It is still unclear as to whether the future tense really exists, because whenever it was elicited it did not seem to have a set translation, and when it was elicited the speaker seemed to have some confusion as to how to interpret the sentence. When a time word is not indicated, it seems that the simple future would be indicated by just adding [In] to the end of the sentence (and having the verb change accordingly).

(26) ŋa-s bil-o [^]t∫ik^h lenm-i In
 I-ERG cat-DEF one buy-COP COP
 'I will buy a cat.'

In other cases, however, it is indistinguishable from the imperfective present progressive.

(27) ni $k^{h}i$ $t \int ik^{h}$ j σ tp-i In I dog one AUX.COP COP 'I will have a dog.'

The use of [In] in general is very confusing as it is not just seen in the future tense examples, which makes me think that perhaps it is not an indicator of future tense but of something else entirely. Hopefully with more data we can determine if there is a clear future tense or it can only be indicated by temporal words, but for the moment my hypothesis remains that examples 26 and 27 are not examples of future tense but rather just a different use of [In] that cannot be perfectly translated into English.

3.3 Potentiality - Final Verb Ending

The ending of the verb in sentences 21 and 22, while looking very similar to previously explained aspects, does not seem to make much sense here. The $[-\varepsilon t-pa]$ construction is just not seen anywhere, and it could be the present tense but also the past tense marker, but that seems highly implausible. Perhaps the $[-\varepsilon t]$ is being used here to also indicate potentiality along with the [na] used to combine the clauses, but it is unclear and requires more elicitation.

4. Conclusion

Overall, with the exception of the future tense, the irrealis markers, and a couple of pronouns and potentiality, much of the inflectional morphology seems to have been well-elicited. It is curious that [jʊt] and [In] are used so much in various forms throughout the various tenses and aspects. As more sentences will be elicited hopefully these can resolve themselves, but so far a lot of progress has been made.