Karata

Jérémy Pasquereau

March 10, 2025

1 Introduction

1.1 Area and speakers

Karata (*k'ːirχːi mac'ːi*, Russian *karatinskij jazyk*) belongs to the Andic group within the Avar-Andic branch of the Nakh-Daghestanian family. It is an understudied language originally spoken in 10 mountain-top villages in Western Daghestan, Russia. These villages are given in (1) in Karata and Russian ; Avar is added as the Russian names are based on the Avar names (Magomedbekova 1971; 2000).

(1) Karata-speaking villages

Karata name	Avar name	Russian name
k'ːira	k'ːarat'a	Karata
arči	ʕarčo	Archo
ančiqː or *ančiχːi*	ʕančiq	Anchik
račʷaldi	račabalda	Rachabulda
mašːtada or mašːtajk'a	mašːtada	Mashtada
č'abaq'ːara	č'abaq'ːoro	Verkhnee Inkhelo
raciχː	raciχː	Ratsitl'
enχːeli	enχːelo	Nizhnee Enkhelo
siux or *siwux*[1]	siux	Siukh
t'ukja	t'okit'a	Tukita

The number of Karata speakers is somewhere between 5,000 and 20,000. The first and last census of the Karatas as a distinct people (from the Avars) dates back to 1926 (Kolga 2001). The number was then 5,305. Since then, the Karatas have been counted as Avars. The fairly close linguistic proximity of Karata and Avar within their linguistic family, in addition to their cultural and geographical promiximity may have motivated their classification as one cultural entity (Pasquereau 2009). Different sources give the approximate number of 20,000 speakers (Magomedova and Khalidova 2001; Khalidova 2022). In both the 2010[3] and 2020[4] censuses, the Karatas are counted as a subtype of Avars, 4,787 Karatas in 2010 and 7,343 in 2020. But these numbers can only be taken as indications of the actual number since Karatas are free to declare themselves as Avars

2. A consultant tells me *siwukh* is what young Karata speakers say.
3. Available at `https://rosstat.gov.ru/free_doc/new_site/perepis2010/croc/perepis_itogi1612.htm`.
4. Available at `https://rosstat.gov.ru/vpn/2020`.

or more specifically as Karatas. Given that many consider themselves Avars (and this is in fact what used to be written in their passport), this number must be taken as a mere estimation.

Focussing on Karata, the biggest Karata-speaking village, Khalidova (2022: 3) estimates the population in this village at 2,000 inhabitants, but the 2020 census gives a higher number, 5,277 (or 5,093 excluding the hamlets around it), and the 2010 census estimates the population at 4,153. These discrepancies aside, various sources concord that the population of Karata is linguistically homogeneous (Dobrushina, Staferova, and Belokon 2017; Khalidova 2022).

1.2 Dialects

Karata has been described in the literature as having two main dialects: the Tukita dialect spoken in one village, Tukita, and the Karata dialect spoken in nine villages including Karata, the administrative center of the Akhvakhsky District of the Republic of Daghestan. These nine villages each have their own variant which are mutually intelligible. By contrast, the Tukita dialect and the Karata dialect (as it is spoken in the village of Karata) are not mutually intelligible and there is now a consensus that Tukita is a separate language. The description presented in this paper is based on the variety spoken in the village of Karata.

1.3 Sociolinguistic situation

Karata is spoken by the whole population of (the village of) Karata, including children (Khalidova 2022). Karata is not taught at school, though it is used informally in the school and for homework along with Russian. In general Karata is used for every day communication within and outside family units.

Nowadays everyone is fluent in Russian, but, quite notably, Avar has retained its status as the regional *lingua franca* in this area unlike in other areas. Avar is taught in school as a foreign language, but the maintenance of Avar as a lingua franca in this area is perhaps better explained by the area's history (Dobrushina and Zakirova 2019). The territory inhabited by the Karatas is part of a larger homogeneous cultural Sunni Muslim area which is mostly Avar and traditionally associated with the use of Avar as the regional *lingua franca* (Karata was one of the districts (naibdom) of the Caucasian imamate in the 19th century) (Hoesli 2006).

Since Karata has no written tradition, its use is mainly oral although it is possible to write it using the Avar alphabet, Avar and Karata having similar sound systems. There are a few speakers of Karata who do write and publish in Karata, poetry, songs, and stories. A first dictation in Karata took place in 2020.[5] In recent years, there seems to have been a significant increase in the awareness of Karata as an endangered language by the Karatas themselves and there is a noticeable increase in the amount of writing published both through traditional and non-traditional means (e.g. Khalidova (2017; 2022), webpages, social media).

5. See for instance `http://193.232.252.253/obshchestvo/64293`.

1.4 State of research

The first remarks on the Karata language are found in Erckert 1895 on the basis of the variety spoken in Archo. Dirr 1909 also dedicates a few pages to the Karata variety of Karata. The Tukita variety is first dicussed in Bokarev 1938.

The study of Karata really takes off with the work done by Magomedbekova 1961; 1967, especially the monograph (Magomedbekova 1971) entirely dedicated to describing the grammar of the language spoken in the village of Karata. To this day, it remains the standard reference on the grammar of the Karata language.

The state of documentation of the variety spoken in the village of Karata has been considerably improved by a series of monographs (co-)authored by Rashidat Khalidova, professor at the Daghestanian Pedagogical University in Makhachkala and native speaker of this variety, over the past twenty years. In 2001, a second reference work was published, the Karata-Russian dictionary (Magomedova and Khalidova 2001), in 2017, a book of Karata tales was published (Khalidova 2017), and a Karata primer for Karata people came out in 2022 (Khalidova 2022). In addition, various books of poetry, proverbs, and sayings, music and other art forms are produced, sometimes published, locally in Karata and/or by Karata speakers (of note we can mention Bakhu-Mesedo Rasulova's numerous books of prose and poetry, Kamil Tarkho's songs in Karata as well as paintings of mountain scenery, Khizri Asadullaev's poems and songs). Some texts, audio and/or video recordings in Karata can now be found online.

Much work has been carried out in Daghestan, e.g. Khalidova 2016 on lexicology and phraseology, Dalgatov 2015; 2017 on the variety spoken in Siukh, or still Khalidova 1990; Kuraeva 1998; Pakhrudinova 2004; Gadžieva 2007; Kuraeva 2010; Umargadžieva 2010; Pakhrudinova and Akhmedova 2014; Mallaeva and Khalidova 2016 on various aspects of Karata and some outside of Daghestan by the author (Pasquereau 2010; 2011; Pasquereau and Khalidova 2017; Pasquereau 2018; 2023). Unfortunately, it must be said that work on Karata grammar has so far not progressed as much as one would have hoped. While Magomedbekova provides a good description of the morphology of the language, very little is known about its syntax (let alone its semantics and pragmatics).

1.5 Data

This paper is based on the insights of the grammar published in Magomedbekova 1971 and Magomedova and Khalidova 2001 as well as on my own analyses. The data presented in this chapter and on which my analyses are based come from several sources. I have used examples provided in the dictionary and others which I collected myself (in the field in 2011 and 2012, and then working remotely with Karata speakers). I have also made use of the texts provided in Magomedbekova's 1971 grammar, texts collected by myself, the texts published in Khalidova (2017) as well as *The Bald's tale* translated from Avar[6], all of which were translated into Russian and then analyzed in Flex.

6. Thanks to Gilles Authier for this text.

2 Phonology

2.1 Vowels and Consonants

2.1.1 Vowels

Karata has five contrastive vowel qualities (Figure 1) with contrastive long and nasal counterparts (e.g. *baɬa* 'brat' vs *baːɬa* 'take, buy'; *χːʷãnχːʷa* 'churek (type of bread)' vs. *χːʷãːnχːʷa* 'having run'). Long round nasals are not attested.

Figure 1: Contrastive vowel qualities in Karata

(a) Oral

	front	back
high	i iː	u uː
mid	e eː	o oː
low	a aː	

(b) Nasal

	front	back
high	ĩ ĩː	ũ
mid	ẽ ẽː	õ
low	ã ãː	

The extent to which vowels are nasalized varies: from lightly nasalized followed by a distinctly articulated nasal consonant to true nasal vowels with no trace of a consonantal constriction (as are found in French or Portuguese for instance). Vowels are more or less nasalized depending on their position in the word. Clear nasal vowels occur word-finally. In all other positions, if the phonetic nasal vowel is followed by a consonant in the coda of the same syllable, a nasal consonant may still be perceived.

2.1.2 Consonants

Karata has both central and lateral consonants, with a three-way distinction: voiced, voiceless aspirated, voiceless glottal, and a further two-way distinction: *lenis* vs *strong* for the voiceless consonants. Central sounds are articulated in various places whereas lateral sounds are all velar except /l/ which is dental. For the sake of conciseness, I present both central and lateral sounds in the same table (figure 2). In addition, all the phonemes (except bilabial and palatal phonemes) have labialized counterparts which are separate phonemes (see Pasquereau 2018 for arguments). A long consonant (Cː) indicates a *fortis* (a.k.a. *strong*) consonant. The phonetic realization of the *fortis* feature depends on the manner and place of articulation of the consonant that bears it. It can be realized as frication, gemination or length but for some consonants (e.g. affricates) the realization of the *fortis* feature is better characterized as an increase in energy, in the sense that the articulators are more rigid. In keeping with the conventions adopted in this volume, I transcribe *fortis* consonants with the length symbol.

Figure 2: Phonological table of Karata non-labialized consonants.

				Central									Lateral	
				Bilabial	Dental	Alveolar	Post-alv	Palatal	Velar	Uvular	Pharyngeal	Glottal	Dental	Velar
plosives	voiceless	aspirated	weak	p	t	c	č		k					
			strong			cː	čː		kː	qː				ƛː
		glottal	weak	p’	t’	c’	č’		k’			ʔ		ƛ’
			strong			c’ː	č’ː		k’ː	q’ː				ƛ’ː
		voiced		b	d		ǯ		g					
fricatives	voiceless		weak			s	š			χ	ħ	h		ɬ
			strong			sː	šː		xː	χː				ɬː
		voiced				z	ž			ʁ	ʕ			
nasals				m	n									
non-nasal sonorants					r			j	w				l	

2.2 Script and transcription

Most people I met in the village while on field trips knew how to read and write Russian at least, and most middle-aged and older people knew how to read and write Avar. From their knowledge of the Avar writing system, they could read and write Karata. How used they were to reading and writing Karata varied greatly however. Many Karatas have a smartphone with internet access and many households have (at least had in 2012) internet access with a computer providing new opportunities to write in Karata. In addition a few Karatas write poetry and songs in Karata, while others do not have any use for it.

The Karata-Russian dictionary and the collection of texts recently published by Khalidova (2018) use a version of the Avar cyrillic alphabet with a few additions to encode the consonants of Karata that have no equivalent in Avar (e.g. Avar and Karata both have the sounds /ƛ'ː/ transcribed in both languages as кь, however, of the two languages, only Karata has the sound /ƛ'/ for which Karata has the trigraph кьI). In the absence of a normalized orthography, possible variation in the phonetic realization of particular segments (especially high vowels, glides, palatalized/labialized C, nasal vowels, etc) often leads to variation in the transcription.

Regarding nasal vowels, the dictionary consistently uses superscripted н (e.g. aᴴ for /ã/) but when speakers write, they frequently omit indicating nasality at all. Strong consonants are rendered in at least three different ways: in the dictionary, strong consonants consistently have a macron above the consonant (e.g. к̄I for /k'ː/), but when Karatas write their language, one finds that they use different strategies, e.g. the whole symbol is doubled (e.g. кIкI for /k'ː/) or only part of it is doubled (e.g. кII for /k'ː/).

2.3 Phonotactics

The maximal syllable template is: C G V G R C, where G stands for 'glide' and R for 'sonorant'. Karata has no vowel-initial words, even though the transcription may not always reflect this transparently: words written with a vowel at the beginning actually always start with a glottal stop. Complex codas are found in loanwords, as in *port* 'harbor' from Russian.

(2) List of syllable types and examples

	syllable type	underlying form	surface form	meaning
(a)	CV	hane	ha.ne	'village'
		waša	wa.ša	'boy'
(b)	CVC	bert'in	ber.t'in	'cheese'
		w-ož-ud-o-w	wo.žu.dow	'trustful'
(c)	CGV	j-ah^{w}a-e	ja.hweː	'she played'
(d)	CGVC	dunjal	du.njal	'world'
(e)	CVRC	ʕajb	ʕajb	'guilt'
		port	port	'harbor'

Sequences of labialized consonants in onset positions are generally not allowed. In addition, a number of assimilation phenomena contribute to obscuring the underlying form of morphemes (for more details see section 2.5, Magomedbekova 1971 and Pasquereau 2018).

Hiatus is not permitted in Karata. Where it would occur, as a result of affixation, there are three ways to resolve it. If V1 is not low , either an epenthetic glide is inserted

in between V1 and V2 or V1 is itself reduced to a glide, [j] if V1 is a front vowel, [w] if V1 is back (e.g. *waša-šu-a* 'to the boy' is realized as *wašašuwa* or *waša-š^{w}a*). If however V1 is the low vowel /a/, it either merges with V2 into a long vowel (e.g. *c'eχːa-ida* '(one is) looking for (something)' is realized as *c'eχːeːda*) or V2 is reduced to a glide [j] if V2 is a front vowel, [w] if V2 is back (e.g. *hanq'ː-a-idja* '(one) is choking (someone)' is realized as *hanq'ːajdja*).

2.4 Prosody

Both the existing grammar (Magomedbekova 1971) and the dictionary (Magomedova and Khalidova 2001) describe Karata as having lexical, contrastive stress. Minimal pairs illustrating this are provided in Magomedova and Khalidova (2001: 444), for instance: *'hadir* 'to the face' vs. *ha'dir* 'to here', and *'haƛ'ːu* 'week' vs. *ha'ƛ'ːu* 'comb'. However, based on my research so far, it is not clear that Karata indeed has such a system.

Several factors suggest that stress may not be a salient or contrastive feature of the language. First, I, along with colleagues, have not perceived a consistent stress pattern in Karata. This impression is based on listening to recorded texts as well as examining purported minimal pairs, though admittedly, the data we have considered remain limited. Second, verification of reported minimal pairs in the grammar and dictionary, along with discussions with the dictionary's second author (a native speaker), suggest that Karata's prosodic system may differ from those of other Daghestanian languages, particularly its closely related Andic neighbors.

For comparison, the grammar of Bagvalal (Kibrik 2001) describes three types of words in relation to stress: (i) those with a clearly emphasized syllable (described by speakers as being 'like in Russian'), (ii) those with a less clearly emphasized syllable (termed 'weak stress'), and (iii) those with no apparent stress. It is possible that Karata exhibits a similar three-way distinction. If so, my research may have primarily encountered words from the third category, leading to the impression that stress is absent.

Further work may ultimately confirm the existence of stress in Karata. However, for now, omitting stress markings does not appear to affect the grammatical description. For this reason, I do not indicate stress in this paper, though the issue remains open for future investigation.

2.5 Morphophonemics

There is a number of phonological changes that occur when affixes are added to stems. In this section, I give an overview of some of these changes.

A few Karata consonant-final stems, verbs and adjectives, come with a nasal feature which is realized either on a suffixal consonant if it is /b/, /l/, or /r/ or, in the absence of one of these consonants, on a vowel.[7] As the examples below show, the verb stem *-oʔ˜-* 'go' comes with a nasal feature which is realized on the suffix-initial vowel, but which in the participle, specialized converb, and masdar forms is realized on the suffixal consonant making it nasal (see (3) illustrating forms of a stem without a nasal feature, and (4) illustrating forms of a stem with a nasal feature).

7. For vowel-final stems that come with a nasal feature, e.g. *-aɬːa˜-* 'make similar', one could alternatively say that the stems ends in a nasal vowel, say *-aɬːã-*, which transmits its nasality according to the conditions specified above.

(3) No nasalization, e.g. *-oqː-* 'remove'

	underlying form	surface form
infinitive	b-oqː-ała	boqːała
imperfective	b-oqː-ida	boqːida
participle	b-oqː-o-b	boqːob
sp. cvb	b-oqː-ala	boqːala
masdar	b-oqː-e-r	boqːer

(4) Nasalization, e.g. *-oʔ˜-* 'go'

	underlying form	surface form
infinitive	b-oʔ˜-ała	boʔãła
imperfective	b-oʔ˜-ida	boʔĩda (or boʔĩnda)
participle	b-oʔ˜-o-b	boʔom (or boʔõm)
sp. cvb	b-oʔ˜-ala	boʔana
masdar	b-oʔ˜-a-r	boʔãn (or boʔã)

The same is observed with adjectives.

(5) No nasalization, *ʕačo-* 'green'

	underlying form	surface form
I	ʕačo-w	ʕačow
II	ʕačo-j	ʕačoj
III	ʕačo-b	ʕačob
IV	ʕačo-baj	ʕačobaj
V	ʕačo-raj	ʕačoraj

(6) Nasalization, *c'ijo˜-* 'big'

	underlying form	surface form
I	c'ijo˜-w	c'ijõw
II	c'ijo˜-j	c'ijõj
III	c'ijo˜-b	c'ijom
IV	c'ijo˜-baj	c'ijomaj
V	c'ijo˜-raj	c'ijonaj

Another morphophonological change is consonant labialization arising exclusively as a result of affixation of a morpheme to a stem (see Pasquereau 2018 for more detail). In Karata, in vowel-initial verb stems (-$V_1C(V_2)$...-) that have a prefixal slot for a gender marker, C must be labialized when both of the following conditions hold:

(i) V_1 is underlyingly[8]round and high, i.e. V_1 = /u/

(ii) V_1 is realized as an unround vowel as a result of its assimilation to the gender marker prefix added to the stem

8. Non-low stem-initial vowels undergo a number of assimilation processes depending on the gender marker that precedes them. Vowels following the masculine singular gender marker *w-* are rounded, those following the gender feminine singular marker *j-* are unrounded/palatalized, and those following the plural gender markers *b-* and *r-* are lowered to [a] with certain verbs, see section 3.6.2. Because only the neuter singular marker *b-* can be followed by any of the five vowel qualities, the form of the verb stem following this marker is taken to be its underlying form. This form, the singular neuter form, is the citation form in the dictionary (Magomedova and Khalidova 2001).

In (7a), both conditions (i) and (ii) are met and it looks as though labialization shifts from /u/ to the stem C. For instance the consonant in the underlying stem /*uč˜*/ is realized as labialized once the stem-initial vowel has assimilated (delabialized) to the prefixal feminine gender marker *j-*. However, in (7b), the underlying stem-initial vowel is round but it is not high and, upon assimilation of the vowel to /j-/, the following consonant is not labialized.[9] This labialization change is observed across all forms of the paradigm where /u/ loses its labiality. In these examples (and in the rest of the paper), unless otherwise indicated, verbs are presented in the infinitival form (suffixed with the infinitival morpheme *-ała*).

(7) a. Labialization of stem consonant

	Underlying form	Surface form	Meaning
(a)	j-uč˜-ała	jičʷãɬa	'bathe'
(b)	j-uč'ã-ała	jič'ʷãːɬa	'open'
(c)	j-uƛ'ːˇ-ała	jiƛ'ːʷãɬa	'share'

b. The stem consonant is not labialized

	Underlying form	Surface form	Meaning
(a)	j-oχːa-ała	jeχːaːɬa	'thrust'
(b)	j-oʔ˜-ała	jeʔãɬa	'go'
(c)	j-oƛ'ː-ała	jeƛ'ːała	'warm up'

3 Morphology: word classes and inflection

3.1 Overview

Save for morpho-phonological processes, the morphology of Karata is agglutinative and the morphemes are easy to segment and recognize. Likewise, parts of speech are overall easy to identify, each presenting a distinctive set of morphological properties.

3.2 Nouns

3.2.1 Noun genders

The gender system of Karata includes three genders (a.k.a. noun classes in the Caucasological tradition) in the singular and two in the plural. The gender of non-derived nouns is not tied to specific markers in the citation form[10] but their gender becomes apparent when they control agreement with adjectives, demonstrative pronouns, numerals, verbs and derived forms of verbs, and even adverbs. Table (8) shows the five gender/number markers: masculine (M), feminine (F), non-human (N), human plural (HPL), and non-human plural (NPL). As suffixes, the plural gender markers appear with the *-aj* formative.

9. At this point, the reader may very reasonably wonder why an analysis according to which the consonant is labialized underlyingly cannot be entertained. See Pasquereau 2018 for arguments that such an analysis is incorrect.

10. Nouns like *w-aša* 'boy' and *j-aše* 'girl' are perhaps remnants of an earlier stage of the language where nouns were marked for gender or an indication that these nouns are reflexes of a denominal verb at an earlier stage.

(8) Gender markers (GM)

sg				pl	
morpheme	gloss			morpheme	gloss
w	M	male human	}	b(-aj)	HPL
j	F	female human			
b	N	non-human		r(-aj)	NPL

The label 'non-human' is only an indication of the kind of nouns one can expect to find in each of these genders. For instance, the word *mak'e* 'child' is non-human. Gender affixes appear on the agreement targets as prefixes, suffixes and sometimes as infixes. This is illustrated in (9) with the non-human singular gender marker *b*, which is the gender marker that citation forms are given with (see section 3.6.2).

(9) a. Prefix: ***b**-aχ'ːisː* 'middle'

b. Suffix: *bišdi-**b*** 'your'

c. Infix: *ha-**b**-al* 'this'

3.2.2 Oblique stem and number marking

The citation form of every noun is the singular nominative (a.k.a. absolutive) form. Nominal morphology is added to the singular or plural form of either the nominative or the oblique stems. Oblique stems are stems that are, in most cases, distinct from the nominative forms of a noun. Nouns can be inflected for plural number using a wealth of suffixes (and syncope) or vowel alternations (10) that are lexically specified. There is some evidence of variation, the extent of which remains to be quantified, eg *nuʕe* 'witness' has attested plural forms *nuʕ-di* and *nuʕ-badi*.

(10) Plural suffixes with examples

Suffix (variants)	Singular	Plural	Meaning
-bi/-ibi/-abi	šunk'a	šunk'-ibi	'leg'
-di/-idi/-adi	k'aze	k'az-idi	'shawl'
-bdi/-ibdi/-abdi	miʁaχ'ː	miʁaχ'ː-abdi	'crupper'
-badi	wacːi	wacːi-badi	'brother'
-baj	ɬic'el	ɬic'-baj	'finger'
-j/-aj/-ij	ming^{w}a	ming^{w}a-j	'spindle'
-i	mak'e	mak'-i	'child'
-li	unsa	unsa-li	'ox'

The oblique stems of nouns are formed by adding a suffix or changing the last vowel of the singular or plural nominative stems. Oblique stem formatives are distinct depending on the gender of the stem they are suffixed to. Typical oblique-stem formatives are given in (11).

(11) Common oblique-stem formatives according to gender/number

Masculine	-šːu
Feminine	-ɬːi
Non-human	-V, -ɬːi, -lo, -la
Human plural	-lo (-do with pronouns)
Non-human plural	-V (-ɬːi with nominalized adjectives, -da with pronouns, nom. numerals and adjectives)

While the oblique stem formatives of the human genders (i.e. singular masculine, singular feminine, and plural human) are clear, there is a lot of variation in the oblique formative of the non-human gender (both in the singular and plural).

An example with *waša* 'boy, son' is provided in (12). The citation form/singular nominative form is *waša* and the derived singular oblique stem is *wašašːu-*. Case suffixes are added to this form in the singular. From *waša* we can also derive the plural nominative form *wašaj* and from that form the plural oblique stem *wašajlo-* to which case suffixes can be added.

(12) Case-stem derivation of *waša* 'boy'

	singular		plural
nominative	waša	→	waša-j
	↓		↓
oblique	waša-šːu-CASE		wašaj-lo-CASE

3.2.3 Case

3.2.3.1 The inventory of cases

Karata nouns inflect for case. The case inventory includes four grammatical cases and 20 spatial cases, see (13). Among the grammatical cases, the nominative (a.k.a. absolutive) is the unmarked case, which is also used as the citation form of nouns. These cases are reviewed in the sections below.

(13) Case morphemes

'Grammatical' cases

nominative	-∅
ergative/instrumental	-(o)l
genitive 1	-GM
genitive 2	-ʁːaj)
dative	-a

Spatial cases

CFG +	DIR
1 -č'o-	LOC -∅
2 -ʁ'a-	ALL -r
3 -a-	ABL -gal
4 -χa-	
5 -qː-	
6 -i-	
7 -ʁːi-	
8 -ʁ'ːi-	

A few additional suffixes look very much like case suffixes but behave differently in that they do not obligatorily need to be added to the oblique form of the noun, for this reason these are discussed separately at the end of this section.

3.2.3.2 The ergative/instrumental

The ergative case suffix is *-l* after a vowel, *-ol* after a consonant. It is used to mark the agent in transitive constructions as in (20) (and very marginally in some intransitive constructions, see section 4.2.2.2) as well as instruments (14a) and temporal adjuncts (14b).

(14) a. imo-l waša-šu-b haduʔa χːãː besuno-l.
father.OBL-ERG boy-M.OBL[GEN]-N head shave.PF knife.OBL-ERG
The father shaved his son's head with a knife.

b. ho-b q'ːʷar-ɬːi-l ho-w χan-šu-l keƛ'ː-ẽː
DEM-N moment.OBL-FN.OBL-ERG DEM-M khan-M.OBL-ERG speak-PF
At this moment, this khan said: (Magomedbekova 1971, text 5)

3.2.3.3 The genitive

Karata has two genitive suffixes: genitive 1 with one of the gender markers (agreeing with the gender of the head noun), and genitive 2 with the suffix *-ƛːaj)*. The formative *-aj* is added when the head/possessum is plural. The genitive case suffix is used to mark dependent nominal phrases, like the possessor in a possessive construction. Which genitive suffix can be used depends on the gender/number of the possessor (see section 4.1).

3.2.3.4 The dative

The suffix for the dative case is *-a* (it is identical to configuration marker 3, see section 3.2.3.5).[11]

3.2.3.5 Spatial cases

Spatial cases consist of two formatives: a configuration marker (glossed CFG) which indicates the position of the Figure with respect to the Ground (in the sense of Talmy 1972), and a directionality marker which encodes whether the Figure is moving, and if so, whether it is going towards or away from the Ground.

CFG_1 conveys that the Figure is in contact with its Ground. The basic meaning of CFG_2 is 'on top of'. CFG_3 is the default configuration marker, merely encoding the existence of a spatial relationship. CFG_4 expresses 'at someone's house' with animates (like *chez* in French). CFG_5 conveys that the Figure is behind its Ground. The configuration 'in, inside' is conveyed by two markers: CFG_6 conveys that the Figure is 'in' an empty container, whereas CFG_7 conveys that the figure is 'in' a filled and compact portion of space inside the Ground. Finally CFG_8 straightforwardly encodes the *under* configuration. There are three directional suffixes. The locative describes that the figure is static with respect to the Ground, but it can also indicate, like the allative, that the figure is in motion towards the Ground. In Karata, locative is used for movement which results in contact between the Ground and *the holder* of the Figure, whereas allative is used if there is no contact. In (16b) for example, there is no contact between the hand

11. Because the ending *-a* corresponds both to the locative of configuration marker 3 (which has non-spatial uses) and to the purported dative case, it is in fact not clear that there are two separate cases.

that holds the salt and the porridge. Ablative indicates motion away from the Ground. For more information on the meaning of each of the cases, see Pasquereau 2010.

Thus each of the eight configuration markers combines with each of the three directionality markers except in four instances symbolized by an em-dash in (15).

(15) Spatial cases: attested formative combinations

	CFG_1	CFG_2	CFG_3	CFG_4	CFG_5	CFG_6	CFG_7	CFG_8
LOC	-č'o	-ƛ'a	-a	—	-qː	-i	-ƛːi	-ƛ'ːi
ALL	—	-ƛ'a-r	-a-r	-χa-r	—	-i-r	-ƛːi-r	-ƛ'ːi-r
ABL	-č'o-gal	-ƛ'a-gal	-a-gal	—	-qːi-gal	-i-gal	-ƛːi-gal	-ƛ'ːi-gal

Below in (16) is an example of configuration marker 7 in each of the three directional cases.

(16) a. č'irq'ːaj hane ɬːẽ-ƛːi b-acʷ-aː
Chirkai village water.OBL-CFG_7[LOC] N-flood-PF
'The village of Chirkai flooded.'

b. karšːi-ƛːi-r c'ːãji t'am-a
porridge-CFG_7-ALL salt throw-IMP.TR
'Put salt in the porridge!'

c. ɬːẽji-ƛːi-gal b-oqː-e herk'a-m č'ina
water.OBL-CFG_7-ABL N-extract-PF big-N log
'They[12]extracted a big log from (inside) the water.'

Spatial cases are also used more abstractly with non-spatial meaning and as part of the argument structure of predicates (Pasquereau 2011). For instance, the locative of CFG_5 is used to express 'in exchange for' (17a), and the locative of CFG_7 is used to encode one of the terms in a multiplication (17b).

(17) a. xːʷani-qː ičʷa χisaːɬa
horse.OBL-CFG_5[LOC] mare exchange.INF
'Exchange a mare for a horse.'

b. boʔoda-ƛːi ĩnštuda ƛ'ːaba-jbar k'ijac'ada b-ik'-uda
four-CFG_7[LOC] five mutliply-COND twenty N-be-IPF
'If you multiply five by four, you get twenty.'

3.2.3.6 Other cases (or case-like forms)

Case-like suffixes in this section can attach to the nominative forms of nouns under certain conditions. They are the comitative case, the functive-transformative case (a.k.a. essive), the mediative, and the directional case.

The suffix for the comitative case is *-k'el*. It is obligatorily added to the oblique stem of personal pronouns (19). However, with other nouns, the comitative is found suffixed to their oblique stem or their nominative stem (18).

12. This example does not contain an overt subject, see section 4.2.1.

(18) a. *waša-k'el* 'boy-COM'
b. *waša-šːu-k'el* 'boy-M.OBL-COM'

(19) a. * *den-k'el* '1SG-COM'
b. *di-k'el* '1SG.OBL-COM'

It is not clear whether this pattern is a recent development or not. Magomedbekova (1971: 171), Magomedova and Khalidova (2001: 466) already point out that *k'el* can be added to the nominative form of nouns and, perhaps on this basis, classify it as a postposition.

The functive-transformative case suffix (Creissels 2014) is *-ɬe(-b-oχa)*, perhaps a cognate of the inchoative morpheme *-(e)ɬ* or of the verb *b-eɬ-aɬa* 'become'. Its meaning is that of the essive in Finnic languages for instance, it marks a noun as describing the state of an individual. Thus in (20), the suffix marks the noun 'wife' to indicate that it describes a state that Mesedo came to be in; in (21) it marks the noun 'witness' to indicate that it describes a state that the village people will be in.

(20) mesdo=ƛ'ːibar sin-l hark'ːe-ɬe j-eɬ-a idja.
Mesedo=TOP bear-ERG wife-FUNC F-lead-PF[PF.CVB] COP
'As for Mesedo, the bear married her.' (Khalidova (2017), *Mesdo the khan's daughter.*)

(21) han-ƛːi-r b-aʔ-ala ha-šːu-l sːor-aː idja q'ːaj-ƛ'a-r
village-CFG$_7$-ALL HPL-PL\reach-SPCVB DEM-M.OBL-ERG turn-CAUS.PF COP home-CFG$_2$-ALL
han-ƛːi-sː-aj saru b-ak'^{w}-a-baj ʕandi b-oƛː-o-b
village-CFG$_7$[LOC]-ATBZ-PL together HPL-PL\be-PTCP-HPL people N-happen-PTCP-N
goh-o-b hedela-ɬːi-ƛː-aj nuʕ-badi-ɬe b-ak'^{w}-ała.
do-PTCP-N thing-FN.OBL-GEN-PL witness-PL-FUNC HPL-PL\be-INF
'When they reached the village, he made the village people who were with him go to his house so they would be witnesses of the things that were to happen.' (Khalidova (2017), *One event from the life of the young prophet*)

The mediative case ('through, by way of') is composed of an ablative spatial case and functive-transformative suffix *-ɬe(-b-oχa)*, e.g. *sawetij-a-gal-ɬeboχa* 'by way of the council'.

Finally, in addition to the spatial cases listed above, a suffix *-χːil* is often used in the dirtectional slot. It most often has the morphosyntax and meaning of the allative, and in fact in one of the texts this description is based on the *-χːil* suffix is explicitly given as an alternative to the *-r* allative (22).

(22) hadoʔa=l č'am-e-b-oχa, boɬon enχːe-ƛːi-χːil (enχːe-ƛːi-r) t'am-e
head=ADD chew-PF-N-PF.CVB pig stream-CFG$_7$-DIR (stream-CFG$_7$-ALL) throw-PF[PF.CVB]
idja.
COP
'He chewed his head off and threw the pig in the river.' (Magomedbekova 1971, text 10)

However it is not clear we can consider it to be an allomorph of the allative *-r* insofar as there are examples where it is followed with the ablative directional morpheme (23) (Magomedbekova 1971: 175).

(23) ɬanda-χːil-a-gal b-ah-a
close-DIR-CFG$_3$-ABL N-take-IMP.TR
Take (it/one) from the nearest spot! (Magomedova and Khalidova 2001: 467)

The directional suffix *-χːil* indicates motion *towards* when combined with a locative form or *from* when combined with an ablative form. It does not appear on allative forms. More research is needed to pin down its meaning and morpho-syntax. In particular, it does not seem to be part of the same paradigm as 'spatial cases' since it seems to be able to be added to any case marked form. It is cognate with Chamalal *χːin* (Bokarev 1949: 53) and probably cognate with the Avar directional suffix *χːun* (Magomedbekova 1971: 175) (see Charachidzé 1981: 54 for Avar).

3.2.4 Definiteness

NPs are often left bare, in which case they are underspecified with regards to definiteness. That is, bare NPs are compatible with both definite and indefinite interpretation, and context helps specify which is meant or possible. There are no known markers of pure definiteness (besides demonstratives which lexicalize other distinctions as well, see section 3.4.2), however the numeral *ce-GM* 'one' has uses that can be regarded as indefinite uses, where the cardinality of the referent doesn't matter as in (24).

(24) a. ... bercːe ce-b q'ːʷank'o-b hedela-ɬːij-a kaʔa-r b-ekːu
plough one-N hard-N thing-FN.OBL-CFG$_3$[LOC] on-ALL N-end_up-PF[PF.CVB]
idja.
COP
... the plough hit on something hard. (The Bald's tale)

b. ... amma ce-b=el miq'ːe b-ikʷ-a-č'e idja ħulo-šʷ-a.
but one-N=ADD way N-be-PF-NEG[PF.CVB] COP bald-M.OBL-CFG$_3$[LOC]
... but he had no other choice. (The Bald's tale)

The indefinite meaning of *ce-b* is especially clear when it is marked for plural number, e.g. *ce-baj, ce-raj*, as in (56) where the NP in the first part of the sentence mentions children for the first time in the text and the cardinality meaning 'one' is clearly not there but the indefiniteness remains.

3.2.5 Noun derivation

3.2.5.1 Nominal compounds

By far the most common way to form nominal compounds is by juxtaposing two nouns. The two nouns can be independently-meaningful as in (25).

(25) a. *bazar-zebu* 'day of the market/Sunday' from *bazar* 'market' and *zebu* 'day'
b. *ʕamal-ʕadlu* 'behavior' from *ʕamal* 'character' and *ʕadlu* 'discipline'
c. *kunt'a-hark'ːe* 'family' from from *kunt'a* 'husband' and *hark'ːe* 'wife'

Other noun-noun compounds are composed of one independently-meaningful noun and another noun which is not found outside of the compound (26).

(26) a. *χabalo-haƛːu* ‘wool comb’, from *haƛːu* ‘comb’

b. *alaj-bulaj* ‘pretention’, from *alaj* ‘pretention’[13]

c. *adab-χatir* ‘respect, politeness’, from *adab* ‘respect, politeness’

I am aware of two nouns that result from the compounding of a noun and an adjective, they are the proper names in (27).

(27) a. *kʷaj-herk’am* ‘Big Dipper (constellation)’ from *kʷaj* ‘scoop, ladle’ and *herk’a-m* ‘big’

b. *kʷaj-mik’ob* ‘Little Dipper (constellation) from *kʷaj* ‘scoop, ladle’ and *mik’o-b* ‘small’

3.2.5.2 Nominal derivation

Two suffixes are used fairly productively to form nouns from various parts of speech. The suffix *-ɬer* forms abstract nouns from nouns (28a), adjectives (28b), adverbs (28c).

(28) a. *čoq’ːa* ‘friend’ + *-ɬer* = *čoq’ːaɬer* ‘friendship’

b. *ǯigaro-b* ‘energetic’ + *-ɬer* = *ǯigarɬer* ‘energy’

c. *sweruq’ː* ‘around’ + *-ɬer* = *sweruq’ːɬer* ‘the surroundings’

The suffix *-qːan* forms nouns of profession from other nouns (29).

(29) a. *dane* ‘drum’ + *qːan* = *daneqːan* ‘drummer’

b. *lajla* ‘religious service’ + *qːan* = *lajlaqːan* ‘religious singer’

c. *paxːu* ‘copper’ + *qːan* = *paxːuqːan* ‘coppersmith’

The most important source of derived nouns is verbs however. So-called masdars, i.e. deverbal nouns, are derived by adding the suffix *-r* to the perfective form of the verb (see section 3.6.3.1). The derived noun retains the valency frame of the source verb. Participles can be nominalized via the addition of one of the oblique formatives (e.g. *b-axː-o-lo-l* HPL-PL\come-PTCP-HPL.OBL-ERG ‘the ones that came’).

3.3 Adjectives

3.3.1 Adjectival inflection

One can distinguish three groups of adjectives: adjectives with both a prefixal and suffixal gender marker (*b-eč’et’iro-b* ‘black’), adjectives with a suffixal gender marker (*ʕačo-b* ‘green’), and finally derived adjectives, these do not have gender markers (*qːajiƛː* ‘blue’ from the genitive form of *qːaj* ‘black clay’). As far as I am aware, there are no adjectives that have a prefixal gender marker but no suffixal gender marker.

All adjectives have the same inflection. In combination with a noun they modify, they express gender agreement with their head (provided that they have a gender marker), they do not inflect for case. Nominalized adjectives, on the other hand, are inflected for

13. This could be the result of a reduplication process.

gender and case. In the nominative, they take one of the (suffixal) gender markers, and in the other cases, they take an oblique stem formative, followed by the case marker. In the non-human plural gender, the oblique marker *ɬːi* is added *after* the gender marker.

(30) Case inflection of the nominalized adjective *hac'a-GM* 'white'

	M	F	N	HPL	NPL
NOM	hac'a-w	hac'a-j	hac'a-b	hac'a-baj	hac'a-raj[14]
ERG	hac'a-šːu-l	hac'a-ɬːi-l	hac'a-ɬːi-l	hac'a-lo-l	hac'a-raj-ɬːi-l
GEN	hac'a-šːu-b	hac'a-ɬːi-ƛː	hac'a-ɬːi-ƛː	hac'a-lo-b	hac'a-raj-ɬːi-ƛː
DAT	hac'a-šːu-wa	hac'a-ɬːi-ja	hac'a-ɬːi-ja	hac'a-lo-wa	hac'a-raj-ɬːi-ja
COM	hac'a-šːu-k'el	hac'a-ɬːi-k'el	hac'a-ɬːi-k'el	hac'a-lo-k'el	hac'a-raj-ɬːi-k'el

3.3.2 The formation of adjectives

3.3.2.1 Adjectival compounds

Adjectives can be created by compounding two adjectives together (31).

(31) a. *anzeʔo* 'snow-like' + *hac'a-b* 'white' = *anzeʔo-hac'ab* 'white like snow'

b. *c'ajʔo* 'fire-like' + *hero-b* 'red' = *c'ajʔo-herob* 'red like fire'

c. *minaro-b* 'other' + *c'ijo-m* 'new' = *minarob-c'ijom* 'new, fresh'

3.3.2.2 Adjectival derivation

Adjectives in Karata can be derived from nouns by means of the suffix *-ʔo-b* 'like' as in *waša-ʔo-b* 'like a son' from *waša* 'son', the privative suffix *-qːu-b* 'without' as in *unšːi-qːu-b* 'landless' from *unšːi* 'land', or the similative suffix *-godo-b* 'like' as in *ila-godo-b* 'like a mother' from *ila* 'mother' (on similative constructions, see section 4.6). The proprietive suffix *-χːu-b* derives adjectives from both nouns (a) and other adjectives (b).

(32) a. šiw-χːu-b
milk-ADJZ-N
'milky (of a cow)'

b. hero-χːu-b
red-ADJZ-N
'reddish'

Karata makes productive use of the genitive form of nouns with the suffix *-ƛː(aj)* in the function fulfilled in other languages by relational adjectives, for example *qːajƛː* 'blue' from *qːaj* 'dark clay', *obiƛː* 'yellow' from *obe* 'yolk', *t'ošiƛː* 'lead (adj.)' from *t'oše* 'lead'.

Adjectives equivalent to English 'such' can be derived from demonstrative pronouns (section 3.4.2) by adding the suffix *-šdo-b* to demonstrative stems, e.g. *ho-šdo-b*, *ha-ɬi-šdo-b*. The complex suffix *-šdo-ʔo-b* conveys the meaning 'as much as this/that' (lit. like such) (e.g. *ha-gi-šdo-ʔo-b* 'such as this, as much as this').

Karata productively uses the attributivizing suffix *-(i)sː(aj)* to derive adjectives from adverbs and nouns (*ƛ'ek'usː(aj)* 'spare, redundant, excessive, extra' from adverb *ƛ'ek'u* 'more'), with the formative *-aj* indicating that the head is plural. The attributivizing

14. Magomedbekova (1971: 89) notes that plural non-human forms can be formed with the oblique formative *-da* (see 11), thus NOM *hac'a-raj*, ERG *hac'a-da-l*, GEN *hac'a-da-ƛː*, DAT *hac'a-da-a*. She does not provide the comitative form.

suffix can be added to case-marked nouns, converting them into noun modifiers as in (33).

(33) *han-ƛ̓ːi-sː* hawa
village-CFG$_6$[LOC]-ATBZ climate
'village/mountain climate'

Finally, participial morphology very productively derives adjectives from verbs, for instance *gʷanʁ-o-b* 'light' from *gʷanʁaɬa* 'become light(er)'.

3.4 Pronouns

3.4.1 Personal pronouns

Karata has personal pronouns for first and second person, with an inclusive/exclusive distinction for the first person plural pronouns. The function fulfilled in other languages by specialized third person pronouns is fulfilled in Karata by demonstratives. Singular first and second person pronouns have a distinct suppletive oblique stem, and an irregular ergative form consisting of a suffix *-a* exceptionally added to the nominative stem. There is no distinction of the direct/oblique stem in plural pronouns. Note that personal pronouns only use one genitive form (genitive 1, see section 3.2.3), which is used in lieu of possessive adjectives (which Karata does not have).

(34) First and second person personal pronouns

	1 SG	2 SG	1 PL INCL	1 PL EXCL	2 PL
Nominative	den	men	iƛ̓i	išːi	bišːdi
Ergative	den-a	men-a	iƛ̓i-l	išːi-l	bišːdi-l
Genitive	di-GM	du-GM	iƛ̓i-GM	išːi-GM	bišːdi-GM
Dative	dij-a	duw-a	iƛ̓ij-a	išːij-a	bišːdij-a
Comitative	di-k'el	du-k'el	iƛ̓i-k'el	išːi-k'el	bišːdi-k'el

3.4.2 Demonstrative pronouns

There is a range of demonstratives in Karata. They can situate their referent according to two parameters: its height and distance relative to the speaker. They are based on the roots *ha* (proximal), *ho* (non-proximal), alone or expanded by one of the following three formatives expressing vertical deixis: *-ɬ* (higher), *-d* (same level), or *-g* (lower than the deictic center). The suffixal gender marker reflects the gender of the lexical item associated with the referent of the demonstrative.[15]

(35) Demonstrative pronouns in the nominative [16]

	proximal	non-proximal
no elevation specification	ha-b	ho-b
higher	ha-ɬi-b	hu-ɬi/u-b
same level	ha-di-b	hu-di/u-b
lower	ha-gi-b	hu-gi/u-b

15. For demonstrative determiners, see section 4.1.

Demonstrative pronouns inflect for gender and case. For all cases other than the nominative, case suffixes are added to their oblique stem, formed via *-šːu* (M), *-ɬːi* (F, N), *-do* (HPL), or *-da* (NPL).

(36) Case inflection of the demonstrative pronoun *hudu-GM* 'that one'

	M	F/N	HPL	NPL
NOM	hudu-w	hudu-j / hudu-b	hudu-baj	hudu-raj
ERG	hudu-šːu-l	hudu-ɬːi-l	hudu-do-l	hudi-da-l
GEN	hudu-šːu-b	hudu-ɬːi-ʔː	hudu-do-b	hudi-da-ʔː
DAT	hudu-šːu-wa	hudu-ɬːi-ja	hudu-do-wa	hudi-da-ja
COM	hudu-šːu-k'el	hudu-ɬːi-k'el	hudu-do-k'el	hudi-da-k'el

Demonstrative pronouns are the basis for a number of other forms: adjectives (see 3.3.2.2), adverbials, including locational and manner demonstrative adverbs (see 3.7.1), and presentative predicates (e.g. French *voilà*, Italian *ecco*, Greek *na*, Russian *vot* or *von*). A presentative predicate is formed by taking a demonstrative stem, adding a gender marker, and the suffix *-aj* , e.g: *huɬ-u-b-aj*, *ha-g-i-b-aj* as in (37). The suffix *-dol* or *-(h)edol* can be optionally added to this form to stress that the individual/object presented is present counter to what was previously said or expected.

(37) ilja q'ːaj-ʔ'a hač'e=ʔ'ːe j-ik'^{w}-a men, ha-j-e-dol[18],
mother home-CFG$_2$[LOC] COP.NEG=QUOT F-be-PF 2SG DEM-F-PRES-CTRST
j-ik'^{w}-a idja.
F-be-PF[PF.CVB] COP
'You said that mother may not be at home, but there she is, she's there.' (Magomedova and Khalidova 2001: 106)

16. Different sources vary in their description of demonstratives in Karata. The differences concern non-proximal demonstratives: whether there is actually a medial/distal distinction, the form of the stems for height-specified forms, and the form of the suffixes used for these forms.

The first difference concerns the existence of the medial vs distal distinction. Magomedbekova (1971) gives the stems *ha-, ho-, hu-, wu-*, but given examples of complete forms (with the optional vertical level marker, gender marker, case marker, ...) and their translations can be organized along two dimensions (proximal, non-proximal). On the other hand, Magomedbekova (2000) explicitly gives the simple forms *ha-b* 'this one', *ho-b* 'that one', *hu-b* 'that one further away' thus recognizing a three-way horizontal distinction, however examples of demonstratives that are specified for the elevation distinction do not reflect this distinction. Finally Magomedova and Khalidova (2001) explicit describe two forms, *ha-b* 'this one, in the sphere of the 1st person' vs *ho-b* 'that one, in the sphere of the 2nd person' in their grammatical sketch.

The second difference concerns the shape of the stems for height-specified forms. Magomedbekova (1971) gives both *hu-* and *wu-* for non-proximal forms that are specified for height (and *ho-b* for non-proximal forms that are not specified for height). Magomedbekova (2000) also gives examples of elevation-specified forms with either *hu-* and *wu-*. Finally, Magomedova and Khalidova (2001) gives *wu-* in their grammatical sketch, but lexical entries in the dictionary only have *hu-*, not *wu-*. Only forms in *hu-* are found in texts.

The third difference concerns the shape of the suffix after the elevation suffix of the non-proximal form(s). Magomedbekova (1971; 2000) gives the forms in *-ub* but in (Magomedova and Khalidova 2001) two forms are found: forms with a suffix *-ib* are given (e.g. *huɬib*, *hudib*, *hugib*, *wuɬib*, *wudib*, *wugib*) in the grammatical sketch at the end of the dictionary whereas forms with the suffix *-ub* are listed in the dictionary. Both *-ub* and *-ib* forms are found in texts.

It is difficult to say what exactly underlies this variation in the descriptions. It could reflect change (from a system with three or more distinctions to two distinctions), but it could also reflect phonetic variation of the same underlying form.

3.4.3 Possessive pronouns

Possessive pronouns are formed by taking the genitive 1 form of the relevant pronoun or demonstrative; the suffixal gender marker cross-referencing the gender of its head noun – *di-b* 'my', *du-b* 'your', *iχːi-b* 'our (incl)', *išːi-b* 'our (excl)', *bišdi-b* 'your (pl)'. The way the ergative, genitive and dative cases of nominalized possessive pronouns are formed depends on the gender of the (unexpressed) head noun: if it is singular (masculine, feminine or neuter), the ergative, genitive, and dative exponents are added to the oblique form of these pronouns, which is formed by adding *šːu* if the head noun is masculine, *-ɬːi* if it is feminine or neuter. If the head noun is plural, the oblique formatives – *-lo* for humans and *-ɬːi* for non-humans – are added to the gender markers. In the genitive, the gender marker reflects the gender of the head noun.

(38) Case inflection of the possessive pronoun *di-GM* 'mine'

	M	F/N	HPL	NPL
NOM	di-w	di-j / di-b	di-baj	di-raj
ERG	di-šːu-l	di-ɬːi-l	di-baj-lo-l	di-raj-ɬːi-l
GEN	di-šːu-GM	di-ɬːi-GM	di-baj-lo-GM	di-raj-ɬːi-GM
DAT	di-šːuw-a	di-ɬːij-a	di-baj-l^{w}-a	di-raj-ɬːij-a
COM	di-šːu-k'el	di-ɬːi-k'el	di-baj-lo-k'el	di-raj-ɬːi-k'el

An example of a possessive pronoun is given in (39): the first person singular pronoun in B's response to A has the oblique marker *-ɬːi-* because it refers to B's car – the word for 'car' is neuter – and is in the ergative case, as required by the predicate *awara gahaɬa* 'have an accident'.

(39) A: išːi-b mašina b-iʁ-e idja
1PL[GEN]-N car N-stop-PF[PF.CVB] COP
'Our car stopped.'
B: di-ɬːi-l awara geː
1SG-FN.OBL[GEN]-ERG accident do.PF[PF.CVB]
'Mine had an accident.'

(40) A: jacːo-χː mašina b-iʁ-e idja
sister.OBL-GEN car N-stop-PF[PF.CVB] COP
'My sister's car stopped.'
B: di-ɬːi-b mašino-l awara geː
1SG-FN.OBL[GEN]-N car.OBL-ERG accident do.PF
'Mine's (=my sister's) car had an accident.'

3.4.4 Intensive and reflexive pronouns

First and second person reflexive pronouns are formed by adding the enclitic *=da* to pronouns and demonstratives after the gender or case suffix.

18. The underlying form of this word is /ha-j-aj-edol/, the sequence /j-aj-edol/ underwent reduction to [jedol].

(41) a. den w-ok'-ã du-χa-r
1SG M-look-PF 2SG.OBL-CFG$_4$-ALL
'I looked at you.'

b. den w-ok'-ã di-χa-r=da
1SG M-look-PF 1SG.OBL-CFG$_4$-ALL=INT
'I looked at myself.'

For the third person reflexive pronoun, the intensive clitic *=da* is added to the pronoun *že-b*, with the suppletive oblique stem *in-*, which is inflected like demonstrative pronouns.

(42) Logophoric pronoun

	M	F/N	HPL	NPL
NOM	že-w	že-j / že-b	že-baj	že-raj
ERG	in-šːu-l	in-ɬːi-l	in-do-l	in-da-l
GEN	in-šːu-b	in-ɬːi-ƛː	in-do-b	in-da-ƛː
DAT	in-šːuw-a	in-ɬːij-a	in-dow-a	in-da-a (=indaː)

When not used with *=da*, *že-b* is used as a long-distance reflexive, both in logophoric and non-logophoric contexts. In strictly local configurations (i.e. when pronoun and its antecedent are clause-mates), the clitic *=da* is required on any bound pronoun (see section 4.2.2.3).

3.4.5 Reciprocal pronouns

The reciprocal pronoun is formed by combining two forms of *ce-b* 'one': one occurrence of *ce-b* bears the case of the controller of the reciprocal, the other occurrence of *ce-b* bears the case of the argument whose syntactic position it is in (see section 4.2.2.3).

(43) bišdi haƛːu-j=da=l hincːu-č'o b-ih-i ce-šːu-l
2PL seven-COLL=INT=ADD door-CFG$_1$[LOC] HPL-stand-IMP.INTR one-M.OBL-ERG
ce-šːu-č'o hadoʔa-bdi un-e-m-χ^{w}a
one-M.OBL-CFG$_1$[LOC] head-PL touch-PF-N-PF.CVB
'You seven stand by the door, hanging your heads against each other.' (The Bald's tale, line 165.1)

3.4.6 Interrogative pronouns

Karata has the interrogative pronouns in (44) (see section 3.5.7 for wh-quantity words and section 3.7.1 for wh-adverbs). They must be used with one of the question particles (see section 4.3).

(44) Karata interrogative pronouns
hede 'what'
heme 'who' (with oblique stem *ɬo-*)
hinšto-b 'which'

The pronoun *hinšto-GM* 'which', when used as a determiner, reflects the gender of the noun it takes as complement.

3.4.7 Indefinite pronouns

The numeral *ce-b* 'one' is used as an indefinite determiner and pronoun, with the suffixal gender marker reflecting the gender associated with its referent. It is also the basis for derived indefinite determiner/pronouns. The particle *-al* is added to *ce-b* to mean 'one (of two)', it can also be reduplicated to mean 'some'.

(45) gordi-ɤ꞉ ce-b-al kʷaχa b-eχ꞉ela-b idja
dress-GEN one-N-SELECT sleeve N-long-N COP
'One sleeve of the dress is longer.'

Interrogative pronouns (without the question particle) are also the basis for a number of indefinite pronouns. Indefinites can be formed by suffixing *bik'u(barel)* (e.g. *hede-bik'u(barel)* 'something'), the short form *bik'u* being a reduced version (46).[19]

(46) men-a hede-bik'u q'꞉am-as꞉
2SG-ERG what-INDEF eat-FUT
'You will eat something.'

In clauses whose main verb is negated, suffixing *-ʕagi* (e.g. *hede-ʕagi* 'anything') to wh-indefinites forms negative polarity pronouns.

(47) den ɬo-k'el-ʕagi ʕurmi ge-da hač'e
1SG who.OBL-COM-INDEF life do-IPF COP.NEG
'I do not live with anyone.'

3.5 Numerals

3.5.1 Cardinal numerals

The numeral system is decimal. Numerals from 'one' to 'ten' are non-derived simplex stems and they all include the morpheme *-(V)da* except for *ce-b* 'one' which has a gender agreeing suffix. Numerals from 'eleven' to 'nineteen' are formed by adding the numerals from 'one' to 'nine' to the word *hac'a-l* 'ten' (Table 1). The stem *hac'a-l* is the word for 'ten' minus the suffixe *-da* and to which the suffix *-l*[20] has been added.

19. The formative *bik'u-bar-el* can be analyzed as the concessive form of the verb *bikʷała* 'be', where *(u)barel* is itself composed of conditional *-ibar* and additive *=el*.
20. This suffix is presumably related to the additive particle *=(e)l*.

Table 1: Counting from 1 to 19 in Karata

Basic numerals		Numerals from 11 to 19	
1	ce-b	11	hac'a-l ce-b
2	k'eda	12	hac'a-l k'eda
3	ɬabda	13	hac'a-l ɬabda
4	boʔoda	14	hac'a-l boʔoda
5	ĩnšːtuda	15	hac'a-l ĩnšːtuda
6	ĩʔːida	16	hac'a-l ĩʔːida
7	haʔ'ːuda	17	hac'a-l haʔ'ːuda
8	biʔ'ːida	18	hac'a-l biʔ'ːida
9	hač'^{w}ada	19	hac'a-l hač'^{w}ada
10	hac'ada		

Multiples of tens are formed by adding the formative *-ac'ada* – which is the word *hac'ada* 'ten' without the initial /h/ – to *(V)da*-less stems from 'one' to 'nine' (Table 2). In case of hiatus, a glide is inserted, thus /k'e-ac'ada/ is [k'ejac'ada] 'twenty'. Numbers are added to multiples of tens up to 'ninety nine' by compounding the numerals from 'one' to 'nine' to the *-ada*-less forms of multiples of 'ten'. For instance, the word for 'forty' is composed of *boʔ-* – from *boʔoda* – and *-ac'ada* – from *hac'ada*. The word for 'forty one' is, as in English, the word for 'forty' minus the *-ada* ending – i.e. *boʔac'* – with the word for 'one' – *ce-b*.

Table 2: Counting in Karata

Multiples of 'ten'		Multiples of 'ten' + 'one'–'nine'	
-	-	11	hac'al ce-b
20	k'ej-ac'-ada	22	k'ejac' k'eda
30	ɬab-ac'-ada	33	ɬabac' ɬabda
40	boʔ-ac'-ada	44	boʔac' boʔoda
50	ĩšːt^{w}-ac'-ada	55	ĩšːt^{w}ac' ĩšːtuda
60	ĩʔːac'-ada	66	ĩʔːac' ĩʔːida
70	haʔ'ːʷ-ac'-ada	77	haʔ'ːʷac' haʔ'ːuda
80	biʔ'ːac'-ada	88	biʔ'ːac' biʔ'ːida
90	hač'^{w}-ac'-ada	99	hač'^{w}ac' hač'^{w}ada

The term for 100 is *bešanda* and multiples of 100 are formed by compounding *(V)da*-less forms of the basic numerals and *bešanda*. Numerals are further added to *da*-less *n*-hundred forms after they have been suffixed with the word *boʔːe*[21]. The word for 'thousand' is *ʕazar*. Multiples of 1000 are formed by combining the *(V)da*-less form of the basic numeral and the word for *thousand* without the initial pharyngeal. Further numbers are added to the thousand (multiples), the word *boʔːe* is used after the *n*-thousand term (Table 3).

21. The word *boʔːe* might be related to the past tense form of the verb *boʔːaɬa* 'happen'.

Table 3: Counting from 100 in Karata

100	bešanda	1000	ʕazar
150	bešanboχːe ĩnšːtʷac'ada	2032	k'ejazar boχːe łabac' k'eda
200	k'ebešanda	5847	ĩnštʷazarboχːe biχ'ːibešanboχːe boʔac' haχ'ːuda
267	k'ebešanboχːe ĩχːac' haχ'ːuda		
300	łabešanda		

Cardinal numerals can be nominalized and thus bear case inflection after suffixation of an oblique formative (48).

(48) Case inflection of the cardinal number *ce-GM* 'one'

	M	F/N	HPL	NPL
NOM	ce-w	ce-j / ce-b	ce-baj	ce-raj
ERG	ce-šːu-l	ce-łːi-l	ce-ba-lo-l	ce-raj-da-l
GEN	ce-šːu-b	ce-łːi-χː	ce-ba-lo-b	ce-raj-da-χː
DAT	ce-šːuw-a	ce-łːij-a	ce-ba-low-a	ce-raj-daː(/-da-a/)
COM	ce-šːu-k'el	ce-łːi-k'el	ce-ba-lo-k'el	ce-raj-da-k'el

3.5.2 Ordinal numerals

Ordinal numbers are formed by suffixing the morpheme *-χːo-b*[22] to full forms of numbers (i.e. forms that include the suffix *-(V)da*): *k'eda-χːob* 'second' or *bešanda-χːob* 'hundredth' (see Table 4).

Table 4: Ordinal numerals

1st	ce-b-χːo-b
2nd	k'e-da-χːo-b
3rd	łab-da-χːo-b
4th	boʔoda-χːo-b
5th	ĩnštu-da-χːo-b / ĩnšdʷa-χːo-b
6th	ĩnχːi-da-χːo-b
100th	bešan-da-χːo-b
1000th	azar-da-χːo-b

The ordinal form of *ce-b* 'one' is either the regular *ce-b-χːo-b* or *heč'esːigisːe-b*, which is composed of *heč'e* 'most', *sːigi* 'in front of', the suffix *-sː* 'ATTR', and a gender marker.

(49) wu-gu-w c'ːal-da ida hač'ʷada-χːo-b kalasːij-a.
DEM-LL-M study-IPF COP nine-ORD-N class-CFG$_3$[LOC]
'He is in the 9th grade.'

Ordinal numerals can be nominalized and thus bear case inflection after suffixation of an oblique formative (50).

22. The suffix *-χːo-b* might be related to the participle form of the verb *boχːała* 'happen'.

(50) Case inflection of the ordinal number *łabdaχːo-GM* ‘the third’

	M	F/N	HPL	NPL
NOM	łabdaχːo-w	łabdaχːo-j / łabdaχːo-b	łabdaχːo-baj	łabdaχːo-raj
ERG	łabdaχːo-šːu-l	łabdaχːo-łːi-l	łabdaχːo-lo-l	łabdaχːo-da-l
GEN	łabdaχːo-šːu-b	łabdaχːo-łːi-χː	łabdaχːo-lo-b	łabdaχːo-da-χː
DAT	łabdaχːo-šːuw-a	łabdaχːo-łːij-a	łabdaχːo-low-a	łabdaχːo-daː(/-da-a/)
COM	łabdaχːo-šːu-k’el	łabdaχːo-łːi-k’el	łabdaχːo-lo-k’el	łabdaχːo-da-k’el

3.5.3 Distributive numerals

Distributive numerals can be formed in two ways: by reduplication only or by (partial) reduplication and addition of the word *bikːe*.

(51) a. *ce-b-ce-b* ‘one each’

b. *ce-b-ce-b bikːe* ‘one each’

3.5.4 Collective numerals

Collective numerals are formed by suffixation of *-ij* (with allomorphs *-j* after a vowel, *-i(j)* after a consonant) to the stem, except for the numeral ‘two’ whose collective form is irregular (52).

(52) Collective numerals from 2 to 10

2	k’ena-j
3	łab-ij
4	boʔo-j
5	ĩnšːdu-j
6	ĩnχːi-j
7	haχ’ːu-j
8	biχ’ːi-j
9	hač’ʷa-j
10	hac’a-j

These numerals have oblique forms and can be suffixed for case (with allomorph *-i* when followed by a consonant; see 53).

(53) gʷa, ha-b haχ’ːu=da=l k’ark’an men-a b-eq’ː-a iχij-a
there DEM-N seven=INT=ADD egg 2SG-ERG N-share-IMP[TR] 1PL[INCL].OBL-DAT
łab-i-low-a=da reqːemaː-b-eχʷa.
three-COLL-HPL.OBL-DAT=INT make_equal.PF-N-PF.CVB
‘There, share these 7 eggs equally among us 3.’ (l 23.1, Text 8, Magomedbekova 1971)

3.5.5 Multiplicative numerals

The suffix *-c’e* added to the short form of a numeral *n* produces forms that mean ‘n times’: *łab-c’e* ‘three times’, *bešan-c’e* ‘a hundred times’. The numeral for ‘two’ is irregular here too in that it is derived from another stem *k’an-c’e* ‘twice’.

3.5.6 Year numerals

The morpheme *-ilja-b* is suffixed to the *(V)da*-less form of a numeral *n* to form an adjective that means 'being n years old' about animals, e.g. *inχː-ilja-b* 'being six years old'.

3.5.7 Other quantity words

Other quantity words include those in (54): some contain a gender marker (the lexical items are given with the neuter singular *-b*), others do not. All these words can be used as nominal modifiers or on their own as pronouns.

(54) a. *gida-b(-da)* 'all' (a participial form of a copula)
b. *šːura-b(-da)* 'all'
c. *he-b-el* 'every'
d. *mik'i* 'little, few'
e. *χ'ːʷani* 'much, many'
f. *ce-b-k'eda* 'a few' (lit. one-two)
g. *čãc'e* 'how many times'
h. *čami* 'how much/many'

Another interesting quantity expression is not a word but the bound morpheme *-qːʷare* 'all' which is added to a participle modifying a noun (in a relative clause structure); *-qːʷare* 'all' is interpreted as quantifying the denotation of the modified noun.

(55) b-ik'ʷ-a-b-qːʷare ʕarse b-ič'-aː ho-šu-l
N-be-PTCP-N-UQ money N-be_spent-CAUS.PF DEM-M.OBL-ERG
'He spent all the money he had.' (Magomedova and Khalidova 2001: 468)

3.6 Verbs

The verbal system of Karata is relatively straight-forward as compared to that of other related languages (e.g. the Dargui languages): there is no root-based aspectual system, no preverbs, no thematic suffix, etc. Rather, Karata verbs are fairly transparently compositional. Each lexeme only has one root, aspectual distinctions are build uniformly across tenses and moods, and agreement is straight-forwardly with the nominative argument. This section details this system and expands to describe how verbs can be formed.

3.6.1 Types of verb stems and stem formation

Karata has both simple and complex verbs (compound and derived verbs). Bare verb stems cannot be used on their own: they must combine with affixes. All suffixes begin with a vowel. Some stems end in a consonant while others end in a vowel. This is, as far as I know, lexically specified.

There are two types of verbal stems in Karata: consonant-initial and vowel-initial stems (figure 3). C-initial stems never take a gender prefix while V-initial stems may:

there is a lexical distinction between vowel-initial stems that have a morphological slot for a gender prefix, marked with an underscore in Figure 3, and those that do not.

Figure 3: Verb stems in Karata (underlying forms)

Vowel-initial stems		Consonant-initial stems
GM	no GM	
_-ah- 'buy'	aba- 'sprinkle'	barka- 'congratulate'
_-iʁ- 'stop'	ij- 'attach'	bih˜- 'heat up'
_-eʔ- 'ripen'	er- 'lean on'	ɬer- 'move'
_-ut'- 'hollow out'	urʁ- 'miss'	bur- 'rise'
_-oq'ː- 'remove'	ob- 'shake'	t'oba- 'complete'

A significant number of consonant-initial stems begin with the consonant /b/, e.g. *barkaːɬa* 'contratulate'. Of course /b/ also happens to be the realization of two gender markers, namely the singular neutral and plural human genders (section 3.2.1). Still for these verbs, /b/ does not vary and can therefore not be analyzed (synchronically) as a gender marker. Perhaps related to this point is the question of variation. There is some textual evidence that some gender-prefix taking vowel initial verbs are sometimes analyzed as /b/-initial verbs. For example, *bežʷaɬa* 'believe' is sometimes used with an alternating gender prefix, sometimes with no such prefix in which case the initial /b/ does not alternate and is just considered part of the stem.

Simple verb stems in Karata are overwhelmingly monosyllabic (VC(V) or CVC), occasionally bisyllabic, and rarely longer. Vowel-final stems end in an oral or nasalized vowel[23]. The TAM markers are suffixed to the verb stems.

3.6.2 Agreement and cross-reference

Prefixal gender/number agreement on verbs is limited to some verb stems beginning with a vowel (see section 3.6.1); there is no person agreement. In addition, some TAM suffixes include a slot for a gender-number marker, see section 3.2.1 for gender markers, section 4.2.2.1 for examples.

A subset of the verbs which take prefixal gender/number agreement markers and whose initial vowel is not low reflect agreement with a plural nominative argument via a vocalic change of their initial vowel to /a/. All such stems starting with a round/back vowel undergo this change (e.g. *b-učanɬa* 'bathe' with singular neuter vs *b/r-ačʷanɬa*) with a plural gender marker), but only a subset of those starting with a non-round/front vowel do (e.g. *b-ikʲʷaɬa* 'be' with singular neuter gender vs *b/r-akʲʷaɬa* with a plural gender marker, but *b-ičʼaːɬa* 'kill' with singular neuter gender vs *b/r-ičʼaːɬa* with a plural gender marker).

3.6.3 Tense, aspect, mood, evidentiality

TAM and negative polarity suffixes are added to the (light) verb stem. These are synthetic verb forms. In addition to these synthetic forms, Karata has analytic verb forms where

23. If a verb stem ends in a vowel, this vowel is always *-a* or *-ã* which suggests that these are or were, at some level, derived verbs (Gudava 1959: 47, 51–52).

the lexical verb (in a converbial, participial, or infinitival form) is combined with another verb inflected for TAM categories.

3.6.3.1 Independent synthetic verb forms

Synthetic verb forms can be the nucleus of independent/finite clauses. They mark three tense distinctions: past, present, and future temporal reference. They occupy the same slot and cannot combine. Used on their own, they express meanings which have in common that they situate the event describe by the predicate before (56), at (57), or after (58) the utterance time. It is not known at present whether they additionally encode aspectual distinction. In the tradition of Kibrik's school, these are known respectively as perfective, imperfective, and future. In keeping with this tradition, I use the same labels to gloss and refer to these categories.

(56) ce-baj č'eč'u-ƛ'ː-aj b-aɬ-e, ce-baj solosolo-ƛː-aj b-aɬ-e, ce-baj q'ːʷapa
one-HPL stick-GEN-PL HPL-play-PF one-HPL ball-GEN-PL HPL-play-PF one-HPL hat
t'an-d-o-baj b-aɬ-e.
throw-IPF-PTCP-HPL HPL-play-PF
'Some played with sticks, others with balls, and others started throwing hats.' (Magomedbekova (1971), text 8)

(57) den b-ič-eː-χis-eː-rj-a w-uk'-uda
1SG N-sell-PF-exchange-MSD.OBL-CFG$_3$[LOC] M-be-PRS
'I am a tradesman.'

(58) gurħeː b-axː-ubič'e išːi du-χa-r
no_way HPL-PL\come-FUT.NEG 1PL 2SG.OBL-CFG$_4$-ALL
'Of course, we'll come to your place.' (lit. There's no way we won't come to your place.)

The paradigm of tense suffixes is listed in (59). Different perfective suffixes correspond to different inflectional verb classes. The imperfective suffix *-ida* has allomorph *-da* when it follows a nasal (/m/ or /n/), a liquid (/r/ or /l/), or the consonant /b/; allomorph *-da* or *-jda* after a vowel; and allomorph *-ida* everywhere else. Furthermore, allomorphs *-ida* and *-jda* are in free variation with their palatalized variants *-idja* and *-jdja*. The future negative suffix *-ibič'e* has allomorph *-bič'e* after a vowel (e.g. the causative suffix *-a*).

(59) List of synthetic-form tense suffixes

	Positive	Negative
perfective	-i/e/a	-i/e/a-č'e
imperfective	-(i)da	-(i)da-č'e
future	-asː	-(i)bič'e

In addition to these tenses, a suffix *-ƛːa* can be added to past and present forms of motion verbs (and the verb *xːoɬidaƛːa* 'be possible') (present stem: *xːoɬidaƛːa* 'it is possible', past stem: woʔãƛːa '(one) is going', also 60). Because of its cooccurrence with motion verbs, I gloss it 'andative' but what its meaning is requires further research.

(60) ha-b-aj-dol, b-axːʷ-a-ƛːa=l išːi
DEM-HPL-PRES-CTRST HPL-PL\come-PF-ANDT=ADD 1PL
'There we are, we've arrived.'

3.6.3.2 Independent analytic verb forms

In addition to the synthetic tenses listed in section 3.6.3.1, Karata also has a host of analytic verb forms formed by combining a lexical verb with the copula *idja* in the present or *b-ikʾʷała* 'to be' in the past or future tenses, or both to express aspectual and evidential distinctions (Table 5). Analytic verb forms follow the pattern in (61).

(61) lexical verb - auxiliary

Temporal reference is set by the auxiliary, whereas aspectual distinctions are expressed by the form the lexical verb takes: present *-(i)da* form for progressive aspect, present participle *-(i)do-b* form for habitual, past converb *(-b-(e/o)χʷa)* form for perfect, and infinitive *-ała* for prospective.

In addition, in the past (temporal reference), an evidentiality distinction is expressed, the past unwitness conveys that the event was not witnessed. The evidential past is formed by having the auxiliary part of the analytic verb form, *b-ikʾwa*, in the present perfect form, i.e. *b-ikʾwa idja*, plus the lexical verb in the relevant aspectual form.

Future temporal reference seems to be conveyed most often via the use of the verb *b-isãła* 'turn out, find oneself' but other verbs are also possible, e.g. *b-aqːãːła* 'end'.[24]

Table 5: List of analytic verb forms

	progressive	habitual
present	qːʷar-da idja	qːʷar-d-o-b idja
past	qːʷar-da bikʾʷa	qːʷar-d-o-b bikʾʷa
past unwit.	qːʷar-da bikʾʷa(-b-(e)χʷa) idja	qːʷar-d-o-b bikʾʷa(-b-(e)χʷa) idja
future	qːʷar-da bisãsː	qːʷar-d-o-b bisãsː
	perfect	prospective
present	qːʷar-e(-b-(e)χʷa) idja	qːʷar-ała idja
past	qːʷar-e(-b-(e)χʷa) bikʾʷa	qːʷar-ała bikʾʷa
past unwit.	qːʷar-e(-b-(e)χʷa) bikʾʷa(-b-(e)χʷa) idja	qːʷar-ała bikʾʷa(-b-(e)χʷa) idja
future	qːʷar-e(-b-(e)χʷa) bisãsː	qːʷar-ała bisãsː

3.6.4 Mood and modality

Karata has four non-indicative moods: the imperative, two optatives, and one other form I call jussive (62). As far as their morphology is concerned, note that the two positive optatives are morphologically identical to the past and present participles. Interestingly however, the negative perfective optative is based on the negative imperative, not on the negative participle.

24. These remarks reflect the knowledge of the system as per Magomedbekova (1971)'s observations and my own fieldwork data. In particular, I had the opportunity to elicit TMA-specific data using Dahl 1985's TMA questionnaire as a result of which I obtained data that was not reported in Magomedbekova (1971) nor in Magomedova and Khalidova (2001). These remarks summarize my current knowledge of the system but further work is needed to fully understand it.

(62) List of synthetic-form forming suffixes

	Positive	Negative
imperative	-a (tr) / -i (intr)	-(i)bisːe
perfective optative	-u/o/a-b	-(i)bisːo-b
imperfective optative	-(i)d-o-b	*not attested*
jussive	-a/i-ƛ'ːa	*not attested*

All verbs have the same suffixes except for the imperative suffix which makes a formal distinction between intransitive and transitive constructions (63).

(63) a. łãda-χːil-a-gal b-ah-a
close-DIR-CFG$_3$-ABL N-take-IMP.TR
'Take (it/one) from the nearest spot!' (Magomedova and Khalidova 2001: 467)

b. miłila-ƛ'ːi-gal χidi j-eʔ-ĩ
sun.OBL-CFG$_8$-ABL away F-go-IMP.INTR
'Go away from the sun! (lit. from under the sun)'

There are two optatives (just like there are two participles whose morphology they share): one based on the bare stem and the other based on the imperfective stem (see section 3.6.7).

(64) ilja imja č'ago b-aχː-ud-o-w
mother father alive HPL-PL\remain-IPF-PTCP-M
'May your parents remain alive!' (Khalidova 2017, *Request*)

The jussive form is based on a complex morpheme composed of the imperative formative and the suffix *-ƛ'ːa*, perhaps derived from the imperative form of 'say' *keƛ'ːã* (65).

(65) b-axː-u-ƛ'ːa ho-baj
HPL-PL\come-IMP[INTR]-JUSS DEM-HPL
'Let them come!' (The Bald's tale)

3.6.5 Negation

In general, Karata uses a suffix *-č'e* on verbs to negate them, this is the case for the indicative past and present tenses (62), and non-finite forms to some extent (see section 3.6.7). Sometimes the negative form of a inflectional TAM suffix is suppletive, e.g. the indicative future in an affirmative sentence is marked with the suffix *-asː* whereas, in a negative sentence, it is marked with the suffix *-ibič'e*. The prohibitive (i.e. negative imperative) used the suppletive suffix *-ibisːe*, which is also used for the negative perfective optative *-ibisːo-b* (see section 3.6.4). The negation of the copula *idja* is *hač'e* (66).

(66) a. ho-b zini išːi-b idja
DEM-N cow 1PL[GEN]-N COP
'This cow is ours.'

b. ho-b zini išːi-b hač'e
DEM-N cow 1PL[GEN]-N COP.NEG
'This cow is not ours.'

3.6.6 Valency-changing derivation

The only valence-changing derivation in Karata is the causative, productively formed via suffixation of the morpheme *-a* directly to the verb stem or via the verb *itaɬa* 'let'; e.g. *ħawaɬa itaɬa* 'make burn' (see section 4.2.2.2).

The morpheme *-a* is often realized fused to the morpheme in the next verbal slot, i.e. tense, mood, participial or converbial morpheme, thus yielding diverse morpho-phonological phenomena (lengthening (67a), devocalisation (67b)).

(67) Causative of *-iʁ-* 'stop (intr)'

a. Infinitive: b + iʁ+ a + aɬa = biʁaːɬa

b. Imperfective: b + iʁ+ a + ida = biʁaːjdja

In this respect, one should also mention the suffix *-(e)ɬ* which is found with a significant number of monovalent verbs. Inasmuch as many verbs are in correspondance with their causative-marked transitive counterparts, this suffix can be regarded as an intransitivity marker. For instance, the intransitive *b-it'-eɬ-aɬa* (68a) corresponds to the transitive (causative) *b-it'-aːɬa*, and this verb does not have a non-causative non-*(e)ɬ*-marked verb as the lack of attestation of (68c) shows. Note that even though the stem *b-it'* is not attested in the current state of the language in the would-be non-causative verb in (68c), it is attested in the adjective 'straight'. This state of affairs holds of a large number of verbs.

(68) a. *b-it'-eɬ-aɬa* 'become straight'

b. *b-it'-a-aɬa* 'straighten'

c. **b-it'-aɬa*

d. *b-it'-o-b* 'straight'

3.6.7 Non-finite forms

Non-finite/dependent forms (by which I mean, forms that cannot head an independent clause) in Karata include participles, converbs, masdars (a.k.a. nominalizations; with the suffix *-r* added to the perfective form) and infinitive (with the suffix *-aɬa*). Negative counterparts to the latter two forms are not attested. The rest of this section describes the derivation of participles and converbs.

Karata distinguishes three participle forms according to their temporal orientation (Table 6). The past positive particle is formed on the basis of the perfective form via rounding of the final vowel, except if this vowel is /a/, plus a gender marker. The

present positive participle is formed by suffixing *-o-b*, where *-b* is a gender marker, to the imperfective stem of the verb (which is derived by suffixing the imperfective ending *-(i)da*) minus its final *-a*. The future participle is formed by adding *-ƛ:o-b* to the infinitival form or to the perfective stem (this marker is possibly related etymologically to the ordinal numeral marker, section 3.5.2) . The copula *idja* has an irregular participial form *idja-b*.

The negative past participle is formed on the basis of the perfective form (without rounding), to which the negative suffix *-č'e* is added without its final *-e*, and to which the partipial ending *-o-b* is added. The negative future participle involve suppletion since it is formed by suffixing the complex suffix *-(i)bič'-o-b* (cf. negative future *-bič'e*), itself composed of the synthetic negative future suffix and the participial ending. No occurrences of a negative present participle have been found. The negative copula *hač'e* has participial form *hač'-o-b*.

Table 6: Participles of *q:amała 'eat'*

Type of participle	Positive	Negative	Example
past	-u/o/a-b	-i/e/a-č'-o-b	qːam-o-b
present	-(i)d-o-b	*not attested*	qːan-d-o-b[25]
future	-i/e/a-ƛːo-b	-(i)bič'-o-b	qːama-ƛːo-b / qːamała-ƛːo-b[26]

Karata distinguishes three tenses that can occur in the antecedent of a conditional structure (17b). These various conditional forms are built on different stems specified in Table 7. The copular *idja* has an irregular conditional form *idwar*.

Table 7: Conditional forms of *q:ʷarała*'write'

	Positive	Negative	Example
Conditional	[bare stem]-ibar	[pf stem]-č'ʷar	qːʷar-ibar
Hypothetical present	[present ptcp]-χoror	*not attested*	qːʷardo-χoror
Hypothetical past	[pf stem]-χoror	[pf stem]-č'e-χoror	qːʷare-χoror

Converbs are non-finite forms, similar to gerunds in English, which express a variety of relations between the event denoted by the verb and the main event. There are two main kinds of converbs: general and specialized converbs.

General converbs only constrain the temporal orientation of the event denoted by the verb they mark relative to the main clause event. For instance in (69), the event of putting on masculine clothes by the girls precedes the ploughing by the girls.

25. The root-final nasal consonant of *q:am-* undergoes homorganic assimilation in front of the alveolar-initial allomorph *-d(a)*.

26. Magomedbekova (1971) and Magomedova and Khalidova (2001) report that the suffix *-ƛ:o-b* must be added to the infinitival form of the verb. In my texts, I have also found *-ƛ:o-b* added to the perfective stem of the verb.

(69) jaš-i kunt'alo-b raƛ'ar=el b-aƛ'-a-b-aχ^{w}a beƛ'ː-ała b-aʔ-ã
girl-PL masculine-N clothes=ADD N-wear-PF-HPL-PL\PF.CVB plough-INF HPL-PL\go-PF[PF.CVB]
idja
COP
'The girls went ploughing after they had put on masculine clothes.' (Magomedbekova 1971, Text 3)

There are two general converbs, each with a positive and negative form, as shown in Table 8.

Table 8: List of positive and negative general converb forms

	Positive	Negative	
perfect cvb	V-i/e/a(-b-(e/o)χ^{w}a)	V-i/e/a-ʁe(-b-(e/o)χ^{w}a)	V-i/e/a-č'e(-b-(e/o)χ^{w}a)
non perfect cvb	V-(i)da-da	V-(i)da-ʁe	V-i/e/a-č'e-da

The positive perfect converb is formed by optionally suffixing to the perfective form of the verb a complex marker of the general shape *-b-(e)χ^{w}a* or *-b-(o)χ$^{(w)}$a* (with *-b-* the agreement marker). Because this marker is optional, very often the perfect converb form and the perfective form of the verb are syncretic. When the marker is used, there is considerable variation in how it is realized, something already noticed in (Magomedbekova 1971: 143) and (Magomedova and Khalidova 2001: 463), and which still needs further research[27]. Still, the following remarks can be made at this stage. First, the gender marker is sometimes dropped (perhaps as a result of fast speech). Second, it is not clear what conditions the presence of the mid vowel, and whether it is rounded or not when it is present.[28] Finally, it is useful to think of the agreement marker as 'prefixed' to the *-(e/o)χ$^{(w)}$a* part of the perfect converb marker: indeed, in some examples where the agreement marker is plural, it seems to trigger the lowering of the right adjacent vowel (just like plural gender prefixes do with some verbs, see section 3.6.2), e.g. *b-aƛ'-a-**b**-**a**χ^{w}a* 'having ploughed' in (69; and see section 4.4.4 on external agreement). Note that the variant in *-aχ^{w}a* is only found with plural gender markers.

The corresponding negative perfect converb form is derived by adding the suffix *ʁe* or *č'e*, the regular negation marker, just before the optional *-b-(e/o)χ^{w}a* suffix.

The positive non-perfect converb is formed by suffixing *-da* to the imperfective form of the verb. The corresponding negative converb form is derived by suffixing *-ʁe* to *-(i)da* or prefixing *-č'e-da* to the perfective form of the verb.

Specialized converbs (70) express more specific notions (see also section 4.4.5).

27. There is some discrepancy between what Magomedbekova (1971: 143) reports and what I have observed in texts. More research is needed to understand the reason for these discrepancies and to just fully understand the factors which condition the attested variants of this suffix.

28. For instance, the description in Magomedbekova (1971: 143) states that a feminine singular perfect converb form may only have the overt suffix *-j-eχ^{w}a* and not *-j-oχ$^{(w)}$a*, a state of affairs which is consistent with independently attested morphophonological rules in the language (i.e. gender marker *j-* triggers progressive assimilation, that is palatalization of the adjacent right vowel). However I have found a few examples with suffix *-j-oχ$^{(w)}$a* in my corpus, which I have no explanation for, hence my recognizing two allomorphs of this complex suffix.

(70) Non-exhaustive list of positive and negative specialized converb forms

	Positive	Negative
'when', 'because' ...	-i/e/a or -(i)da -(i)gil	-i/e/a or ? -č'e-gil
'until'	-i/e/a-lasː	*not attested*
'because'	-rik'el	*not attested*
'when' ...	-ala	-ala-č'e
'as if'	-i/e/a-gwala (-gola)	*not attested*

3.6.8 Verbal derivation

3.6.8.1 Suffixation

The suffix *-(e)ɬ* can derive intransitive verbs from adjectives.

(71) *qːajχː* 'blue' + *eɬ* + *aɬa* = *qːajχːeɬaɬa* 'become blue'

The suffix *-χː(ʷ)* can derive verbs from both adjectives, modulo removal of final gender marker, and nouns.

(72) a. *reɬːba-b* 'barren' + *χː* + *aɬa* = *reɬːbaχːʷaɬa* 'become barren'

b. *reɬe* 'laughter' + *χː* + *aɬa* = *reɬeχːaɬa* 'to laugh'

As mentioned in section 3.6.6, the causative suffix *-a* can often be added directly to the verbal roots or roots that may have been verbal at a previous stage but which are no longer attested in the language, to derive a transitive verb. It can also be added directly to non-verbal stems (73).

(73) *qːajχː* 'blue' + *a* + *aɬa* = *qːajχːaːɬa* 'make blue'

3.6.8.2 Compounding

Some verbal compounds are composed of a noun and a verb. Some of the most common verbs are in (74).

(74) a. *gahaɬa* 'do' (e.g. *awara gahaɬa* 'damage, lit. do damage')

b. *t'amaɬa* 'throw' (e.g. *rakˀʷa t'amaɬa* 'be bored, lit. throw (the) heart')

c. *b-ahaɬa* 'take' (e.g. *ħoxːel bahaɬa* 'breathe, lit. take air')

Other compounds from a noun and verb are such that the verb only exists in that compound, e.g. *hedela pilaɬa* 'have pimples'. Other verbs are formed from the morphological fusion of a noun and a verb as (75)[29].

29. Thanks to Denis Creissels (p.c.) for pointing out these examples to me.

(75) a. *eli* 'mouth' + *b-aʔaːɬa* 'to take away' = *elbaʔaːɬa* 'to warn someone'[30]

b. *kilo* 'manure' + *b-oqːaɬa* 'remove' = *kiloqːaɬa* 'fertilise'

Just like there are nouns formed from compounding two nouns, there are verbs formed from compounding two independently-meaningful verbs (e.g. *sːore-bikːaɬa* 'surround' from *sːoraɬa* 'spin' and *b-ikːaɬa* 'hold') or two verbs only one of which has a meaning (e.g. *bit'e-biχːaɬa* 'get settled, solved' from *b-it'aːɬ* a 'straighten up' and an unknown verb, *bek'an-bešːanɬa* 'examine', from *b-ek'anɬa* 'look' and an unkn'own verb). In both cases, the form of the prefixed first verb is the root suffixed with the vowel *-e* or *-a*. It is not clear that this process is very productive, in most cases, some degree of lexicalization seems to have taken place, as suggested by the absence of a factor determining the form of the vowel suffixed to the root.

3.6.8.3 Reduplication

Reduplication is very productive in Karata to derive so-called iterative forms of verbs (e.g. *ĩkʷaɬa* 'eat' and *ĩkʷakʷaɬa* 'eat many times'). Several types of reduplication apply to verb roots, which can be classified into two broad types.[31]

Type 1 reduplication involves copying the full root, according to the template root-(V-)root. Whether a V is present, and, if so, what its quality is, seems to be lexically specified.

(76) Type 1 reduplication, root-(V-)root

Meaning of V root	V root	Reduplicated V stem
'shiver'	ƛ'ːʷat'-	ƛ'ːʷat'-ƛ'ːʷat'-
'wave'	šam-	šam-šam-
'whiten'	parq'ː-	parq'ː-parq'ː-
'complain'	k'ur-	k'ur-k'ur-
'curl'	gur-	gur-a-gur-
'shake'	ger-	ger-e-ger-
'smile'	kim-	kim-e-kim-
'beat'	q'ːʷab-	q'ːʷab-a-q'ːʷab-

Type 2 reduplication copies only part of the root:

1. root-[C...]$_{root}$, when the root ends in /b/, /r/ or /m/ [32]
2. root-V-[...C]$_{root}$, everywhere else[33]

30. It is not known whether the gender marker becomes frozen in the process of noun verb fusion.

31. This assumes that roots ostensibly ending in *-a* (e.g. Ca or CVCa) do not in fact have *-a* as part of the root, but as a derivational suffix (see section 3.6.1 and Gudava (1959: 47, 51–52)). For instance, *k'ãc'aːɬa* 'jump' is assumed to have root *k'ãc'-*, augment *-a*, infinitive suffix *-aɬa*, this augment undergoes morphophonological processes in (79). A consequence of this assumption is that certain roots are assumed to be monoconsonantal.

32. The set of consonants /b, r, m/ (+/l, n/) behaves as a natural class in Karata for a number of morphophonological processes, e.g. only these consonants can be nasalized, only these consonants trigger the allomorph *-da* of present suffix *-ida*.

33. Actually, there is two more reduplication patterns in type 2, but they seem far less productive; each is attested in only one example.

- [CV]$_{root}$-root (1 example)

(77) Type 2 reduplication

a. root-[C...]$_{root}$

Meaning of V root	V root	Reduplicated V stem
'tear'	qːib-	qːib-qː-
'be creased'	χːʷab	χːʷab-χːʷ-
'chew'	č'am-	č'am-č'-
'pinch'	c'ːim-	c'ːim-c'ː-
'drip'	t'or-	t'or-t'-

b. root-V-[...C]$_{root}$

Meaning of V root	V root	Reduplicated V stem
'be covered in water	acʷ-	acʷ-a-cʷ-
'swell'	purχː-	purχː-e-χː-
'knock'	k'ut'-	k'ut'-a-t'-
'hold'	ikː-	ikː-i/e-kː-

Type 1 and type 2 reduplications are not in complementary distribution as (at least) some verbs can undergo both types of reduplications (only two examples in data).

(78)

Meaning of V root	V root	Type 1 red	Type 2 red
'jump'	k'ãc'	k'ãc'-k'ãc'	k'ãc'-e-c'
'knock'	k'ut'	k'ut'-k'ut'	k'ut'-a-t'

According to the dictionary entries (Magomedova and Khalidova 2001) and the examples provided there (79), type 1 and type 2 reduplications do not differ in their meaning (as given in translations), but this should also be checked more rigorously.

(79) a. k'ãc'∼ec'-e-j ce-b guri
jump∼PLUR-AUG-IMP one-N place[LOC]
'Bounce in place!'

b. k'ãc'∼k'ãc'-oː-w-χʷa[35] w-oʔ-ã-ƛːa idja ho-w
jump∼PLUR-PF-M-PF.CVB M-go-PF-ANDT COP DEM-M
'He is bouncing along.' (lit. He goes bouncing.)

Meaning of V root	V root	Reduplicated V stem
'grind'	q'ːir-	q'ːi-q'ːir-

- root-Vr-[...VC]$_{root}$ (1 example)

Meaning of V root	V root	Reduplicated V stem
'seek'	c'eχː-	c'eχː-er-eχː-

The morpheme -Vr is possibly a reflex of an imperfective marker cognate with current imperfective/present marker *-(i)da* (see (Filatov 2020) on Anchiq Karata, and (Gudava 1959: 70) for pan-Andic comparative work).

35. The underlying form is /k'ãc'∼k'ãc'-a-w-oχʷa/ 'jump∼PLUR-PF-M-PF.CVB' with the sequence /awo/ being realized here as [oːw]. Such changes are regular for the language, but more research is needed to understand how systematic they are.

3.7 Adverbs

3.7.1 Deictic, interrogative and indefinite adverbs

Karata has both non-derived (80) and derived adverbs.

(80) a. temporal adverbs: *eɬel* 'today', *aƛ:i* 'tomorrow', *suni* 'yesterday', *rahada* 'in the morning', *hera* 'now', etc.

b. manner adverbs: *saru* 'together', *dande* 'against or towards, together', *ƛ:ur* 'on foot', *nagah* 'sometimes', *barq:'a* 'early or fast', etc.

c. quantity adverbs: *mik'i* 'little/few', *ƛ':^{w}ani* 'a lot', *(ce)mik'i* 'a little', etc.

Some interrogative adverbs can also be given here inasmuch as their synchronic derivation from a possible root *hi/he* and other formatives is not transparent (81).[36]

(81) Karata interrogative adverbs

hinšda 'how'	*hinge* 'where/to where'
hinda 'when'	*hindir* or *hindiχ:il* 'to where'
hense 'why'	*hingal* 'from where'
heɬa 'why, what for'	

There's a range of derivational processes that derive adverbs. Spatial adverbs derived from demonstratives can be inflected for directional case—locative, allative, or ablative (82).

(82) Deictic spatial adverbs

	proximal	non-proximal	
higher	ha-ɬ-i	hu-ɬ-i	LOC
	ha-ɬ-i-r	hu-ɬ-i-r	ALL
	ha-ɬ-i-gal	hu-ɬ-i-gal	ABL
same level	ha-d-i-	hu-d-i-	LOC
	ha-d-i-r	hu-d-i-r	ALL
	ha-d-i-gal	hu-d-i-gal	ABL
lower	ha-g-i	hu-g-i	LOC
	ha-g-i-r	hu-g-i-r	ALL
	ha-g-i-gal	hu-g-i-gal	ABL

Deictic manner adverbs (equivalent to English 'thus') are also formed from demonstrative pronouns (section 3.4.2) by adding the complex suffix *-šd-a* to the demonstrative stem (e.g. *ho-šd-a* 'thus (i.e. in the manner of someone/something located relatively far from the speaker)', *hu-g-i-šd-a* 'thus (i.e. in the manner of someone/something located lower and relatively far from the speaker)'). More specifically, the suffix *-šd-* is added to demonstrative pronouns to convey the meaning 'such' and *-a* makes it an adverb (whereas *-o-b* makes it an adjective, see section 3.3.2.2). The use of the suffix *-a* to derive adverbs can also be seen in the examples in (83).

36. Quantity interrogative words are given in section 3.5.7 and pronominal interrogative words are given in section 3.4.6.

(83) *-a* suffix for adverbs (Magomedbekova 1971: 160)

Adjectives		Adverbs	
šːeb-o-b	'strong'	*šːeb-a*	'strongly'
tab-o-b	'soft'	*tab-a*	'softly'
herk'-o-b	'high'	*herk'-a*	'highly'
bat'ij-o-b	'separate'	*bat'ij-a*	'separately'

Other adverbs can be derived from adverbs (84a), adjectives (84b), and nouns (84c) using the *-qː* suffix (84).

(84) a. *χidi* 'behind' + *qː* = *χidiqː* 'backward(s)'

b. *b-it'o-b* 'straight' (adj) + *qː* = *b-it'oqː* 'straight' (adv)

c. *qˀːino* 'summer' + *qː* = *qˀːinoqː* 'in the summer'

3.7.2 Case-inflected non-deictic spatial adverbs

In addition, some spatial adverbs, including some place names (e.g. *harčˀːaqˀːara* '(in) Harchaqara', the name of an orchard near Karata), have the same directional case inflection as spatial forms of nouns. Their identification as adverbs follows from the fact that they cannot be analyzed as including a stem combinable with non-spatial cases. Except for (proper) place names, the ordinary nouns used to express these concepts (e.g. *misa* 'room', *reʎ'a* 'hand(s)', *baʕa* 'face') are not related to the spatial adverbs.

(85)

	LOC	ALL	ABL
'in the room/house'	eši	eši-r	eši-gal
'in the hand(s)'	kʷadi	kʷadi-r	kʷadi-gal
'in the face'	hadi	hadi-r	hadi-gal
'(in) Tukita'	t'ukija	t'ukija-r	t'ukija-gal

3.8 Postpositions

Karata has many postpositions (e.g. *caqːa* 'like', *sabaɬe* 'because of', *biɬebχʷa* 'thanks to'). Some postpositions of Karata are words that can also be used as adverbs, that is, they can be used on their own (86a) or they can be used with an NP, in what looks like a complement-head structure (86b; Pasquereau 2011).

(86) a. ho-w kaʔa w-uχː-u
DEM-M on[LOC] M-end_up-PF
'He wound up up there.'

b. ustulj-a kaʔa kuruška b-iɬj-a
table.OBL-CFG$_3$[LOC] on[LOC] cup N-put-IMP[TR]
'Put the cup on the table.'

Because nouns can independently infect for case, in particular spatial case, one question is what case the noun takes when it seems headed by a postpositions. Some of

these postpositions are listed in (87) with some configuration markers that they are attested with. More research needs to be done to understand what governs the choice of a particular configuration case.

(87) Adverbs/Postpositions

Adverbs/Postpositions	Meaning	CFG on NP
kaʔa	'on'	CFG_1, CFG_2, CFG_3, CFG_6
hini	'in (hollow space)'	CFG_1, CFG_3, CFG_6, CFG_7
keʁːi	'in (substance)'	CFG_1, CFG_3, CFG_7
baʁ'ːi	'between'	CFG_1, CFG_3, CFG_7
keʁ'ːi	'under'	CFG_1, CFG_3, CFG_8
sːigi	'in front of'	CFG_1, CFG_3
χigi	'behind'	CFG_1, CFG_3
χigi-sːigi	'around'	CFG_1, CFG_3

As regards directional case, postpositions differ in their behavior.

For the postpositions listed in (88), directionality (locative, allative, or ablative) must be marked on the postpositions. Directional case on the NP must then either be the same as on the postposition (88a), or the locative/unmarked case (88b). Thus, if the NP is in the allative or ablative case, the postposition must be in the same case.

(88) a. **q'ːaj-ʁ'a-gal** **kaʔa-gal** keʁ'ːi-χːil w-ox-a-ʁːo-w Sajgitj-a
home-CFG_2-ABL on-ABL under[LOC]-DIR M-come-PF-ANDT-PTCP-M Saigit-DAT
haʔ-an idja ho-w.
see-PF[PF.CVB] COP DEM-M
'Saigit, who was coming out of his house, saw him.' (Khalidova 2017, *Karata jokes collection: Saigit's nose and Mukhad's fingers*)

b. ha-b-aj Muʕaːdjːaːdjːaːdjːa b-is-an-m mesej-ʁː roša=l, **ho-ɬːi-č'o**
DEM-N-PRES Mukhad-DAT N-find-PTCP-N gold-GEN tree=ADD DEM-OBL-CFG_1[LOC]
keʁ'ːi-gal in-šːu-l b-oh-o-b ʁamasː=el, hini hede
under-ABL LOG.OBL-M.OBL-ERG N-take-PTCP-N chest=ADD inside[LOC] something
idwar haʔ-anɬa in-šːu-χa-r b-ax-u=ʁ'ː e
COP.COND see-INF LOG-M.OBL-CFG_4-ALL HPL-PL\come-IMP[INTR]=QUOT
k'ː-an idja han-ʁːi ida-b=al ʕadam.
call-PF[PF.CVB] COP village.OBL-CFG_7[LOC] COP-N-SELECT man
'"And here is the golden tree that Mukhad found, and the trunk that I took from underneath it, come to me to see if something is inside", the man in the village said.' (Magomedova 2017, *The golden tree*)

The postposition *χidi* 'away' behaves very differently with respect to directionality marking. First, it is only attested in the locative/unmarked case. Secondly, when it cooccurs with an NP, this NP must be in the ablative directional case (though it is free to occur with various configurationality markers): e.g. *miq'ː-i-gal χidi* 'off the road', *miɬila-ʁ'ː-i-gal χidi* 'away from the sun'.

3.9 Minor classes

Karata has interjections (e.g. *wuj* to express surprise, *hew, hej, jo* to attract someone's attention) and ideophones (e.g. *q'ːʷarq'ːʷari* 'rustling', *kʼʷarkʼʷarkʼʷar* 'the sound made when drinking').

There's a range of particles that play a role in Karata morphosyntax including the question particles *=(o)l(e), =la, =di*, the additive particle *=(e)l*, the particle *=al* used to convey the meaning 'the other one (of two)' when combined with the numeral *ce-b* 'one', the intensifier *=da*, the quotative clitic *=ƛ'ːe*.

4 Syntax

4.1 Noun phrase and Postpositional phrase

Every noun phrase is marked for case. In general the head of a phrase is aligned to the right with its dependent phrase (genitive DP, adjective, determiner, numeral, relative clause) on the left with marking expressing the dependence relation such as the attributivizer *-sː* in (89a).

(89) a. hã-ƛːi-sː hawa
village-CFG$_7$[LOC]-ATBZ climate
'village (mountain) climate'

b. hac'ada rešin
ten year
ten years

The main way to mark a nominal dependent is the genitive. As shown in (13), Karata forms the genitive in two ways: genitive 1 with one of the gender markers, and genitive 2 with the suffix *-ƛː(aj)*. Genitive 1 is used to form the genitive form of personal pronouns (including demonstratives) and M and HPL nouns. In (90a), the word *maduhal* 'neighbor' is in the genitive 1 case as the gender marker *-j* is added directly to the oblique form built with the suffix *-šːu*, the gender marker *-j* reflects the gender of the possessum *jaše* 'daughter'. The pronoun *išːi* 'we (exclusive)' is also in the genitive form, the gender marker *-w* reflects the gender of the possessum *maduhalšːu-* 'neighbor' whose referent is masculine as indicated by the choice of the gender I oblique formative *-šːu*. Similarly, in (90b), the pronoun *ho* is in the genitive 1 case because the gender marker *-raj* is added directly to the oblique form built with the suffix *-łːi*, the gender marker *-raj* reflects the gender of the possessum *mak'i* 'children'.

(90) a. išːi-w maduhal-šːu-j jaše
1PL.EXCL[GEN]-M neighbor-OBL[GEN]-F girl
'Our neighbor's daughter.'

b. ho-łːi-raj mak'-i c'aq'ːa kucaː-r-χʷa idja
DEM-FN.OBL[GEN]-NPL child-PL well breed.PF-NPL-PF.CVB COP
'Her children are well-bred.' (Magomedova and Khalidova 2001)

The genitive 2 suffix *-ʎː(aj)* is used to mark other possessors. The formative *-aj* is added when the possessum is plural.

(91) a. jaše-ɬːi-ʎː mak'e
girl-F.OBL-GEN child
'Daughter's child.'

b. jaše-ɬːi-ʎːaj mak'-i
girl-F.OBL-GEN.PL child-PL
'Daughter's children.'

Variation in the order of the head and its dependent(s) and its possible effect on the information structure on the sentence need more research. See section 3.8 on postpositional phrases in Karata.

4.2 Clause structure

4.2.1 Constituent order

Karata clause structure is characterized by extreme flexibility of constituent order, which plays no role in the expression of argument structure. One notable exception is wh-questions where the wh-word must occur before the verb (Pasquereau and Khalidova 2017). In all clauses, the verb tends to occur in the clause-final position, but this is just a tendency. It is very common in Karata texts and speech to leave out arguments whose reference is recoverable from context, or indefinite or arbitrary. For instance in (92) the unique argument of 'sleep' is not mentioned but its reference is recoverable from the context; the example in (93) illustrates this even more clearly as the logophoric pronoun in the embedded clause is necessarily interpreted with respect to the unmentioned individual whose speech is reported. Proverbs are typical cases where arguments are left out, e.g. (94) where the sentence is not about anyone in particular.

(92) Context: The merchant told himself:
cemik'i maʎ'u=l gaːsː
a_little sleep=ADD do.FUT
'I will sleep a little.' (The Bald's Tale)

(93) in-šːu-l it-ała hač'e=ʎ'ːe keʎ'ː-e.
LOG-M.OBL-ERG let-INF COP.NEG-QUOT speak-PF
'(He) said that he was not going to let us.' (Magomedova and Khalidova 2001)

(94) du-b=da metra b-ešːd-a hek'o-b reʎ'ːu b-as-ĩdja.
2SG-N.OBL[GEN]-N=INT meter N-leave-IMP[TR] foreign-N measure_unit N-measure-IPF
'The pot calling the kettle black.' (lit. leave your own meter, you measure someone else's X, where X is the distance between the middle and little fingers of one hand)

4.2.2 Case alignment

4.2.2.1 Basic transitive and intransitive alignment

Karata has ergative alignment both in case marking and gender agreement. Karata has no person agreement. In transitive constructions, the agent(ive) is in the ergative case and is not indexed on the verb, whereas the patient(ive) is in the nominative case and controls verb agreement in gender; thus in (95a), the absolutive argument of the verb *b-ekː-ała* 'give' is the phrase *k'eda waša* 'two boys' the gender of which, singular masculine, is reflected in the verb prefix. In intransitive constructions however, the sole argument is in the nominative case and controls verb agreement in gender. thus in (95b), the verb *b-ekːʷ-ała* 'happen, end up' shows the agreement prefix for 'singular masculine' which in this example is the gender of the unique argument *den* 'I'.

(95) a. kunt'^{w}-a den-a k'eda waša w-okː-e
husband.OBL-DAT 1SG-ERG two boy M-give-PF
'I gave my husband two sons.'

b. den roxːo-ƛːi-r w-okː-u
1SG forest.OBL-CFG$_7$-ALL M-happen-PF
'I wound up in the forest.'

Though these two basic case frames are the most widespread, many others are found (Pasquereau 2011). The third most frequent case frame <NOM, DAT> is mostly used with verbs of intellectual activity *b-ečˀečˀała* 'forget', *b-iʕała* 'know', verbs of perception and emotion *ãłała* 'hear', *cˀːobłała* 'feel pity for', with verbs of physical state *b-oƛˀ aːła* 'hurt', *čˀučˀałała* 'consider tasteless', etc. The experiencer is encoded with the dative case (96).

(96) ha-di-w hek'^{w}a haʕ-ã w-uk'-a dij-a
DEM-SL-M man see-PF[PF.CVB] M-be-PF 1SG.OBL-DAT
'I saw that man.'

Another very common case frame is <NOM, GEN> , it is used with the copula *idja* or the verb *bikʷała* in possessive constructions, and with verbs such as *b-ecˀała* 'be filled with', *boƛːała* 'become', *rešin b-exːʷała* 'turn (age)'. In the possessive construction, the possessor is in the genitive case (97).

(97) qˀːinja b-aƛˀ-ała raƛˀar hačˀe di-b
in_summer N-wear-INF clothes COP.NEG 1SG.OBL[GEN]-N
'I don't have clothes for the summer.'

4.2.2.2 Valency alternations

These basic codings/alignments can be altered by various valency alternations. As mentioned above, the only valency-changing morphosyntactically-marked derivation is the causative as marked by the suffix *-a* or the use of auxiliaries like *tˀamała* 'throw'. In addition to these lexically marked alternations, Karata has a number of constructions

which differ from the basic intransitive and transitive ones while not bearing any morphosyntactic marker on the verb, including the so-called binominative construction which is discussed below (see (Pasquereau 2011) for the other alternations).

The effect of the causative is more often than not (there are exceptions) to create an ergative slot which is to be filled by a new participant assuming the role of an agent causing the action expressed by the verb. Causatives can be formed from intransitive (including experiental) and transitive constructions. The causative of an intransitive construction results in the addition of a causer in the ergative case as in (98).

(98) a. c'elt'a b-iʔ-u
plate N-break-PF
'The plate broke.'

b. den-a urʁeːda b-iʔʷ-aː c'ːãt'ur
1SG-ERG on_purpose N-break-CAUS.PF bowl
'I broke the bowl on purpose.'

The causative of so-called experiental or mental-activity verbs, i.e. intransitive verbs whose experiencer is in the dative case, results in the addition of a causer in the ergative case as well (99). Causativized transitives are very rare and tend to only have two arguments overtly expressed (Pasquereau 2011), in fact there is no attested example with an expressed transitive causee.

(99) a. dij-a χːeχːa b-ečeč-ida hedela
1SG.OBL-DAT fast N-forget-IPF thing
'I quickly forget things.'

b. w-užu-w mak'ʷa b-ečeč-**aːsː** den-a duw-a
M-grow_up.PF.PTCP-M place N-forget-**CAUS.FUT** 1SG-ERG 2SG.OBL-DAT
'I'll make you forget where you were born.'

Although Karata has ergative alignment, it is possible in certain TMA configurations for the agent of a transitive construction to be coded in the nominative case (without any further overt marking on the verb). For instance, in analytical (progressive) forms, an argument normally marked in the ergative case (100a) can be marked in the nominative (100b).

(100) a. ho-ɬːi-l b-eq'ːu-b ʁano-ƛːaj kesek-abdi **r**-iɬ-id-o-**raj**
DEM-FN.OBL-ERG N-dry-N bread.OBL-GEN.PL piece-PL NPL-put-IPF-PTCP-NPL
r-ak'ʷ-a idja [...]
NPL-be.PL-PF[PF.CVB] COP
'She would put pieces of dry bread (in the pan) [...]' (The Bald's tale)

b. den enχːa-ƛi-gal ʕarse **b**-ač'-ida **w**-uk'-a=ƛːe idja
1SG stream.OBL-TOPO$_7$-ABL money N-pick_up-IPF M-be-PF=QUOT COP
ħosoq'ːi-l.
Khosok.OBL-ERG
I was collecting money from the (bottom of the) river, said Khosok. (Khalidova 2017, *Khosok*)[37]

This change in case-marking correlates with a change in agreement. In the ergative-nominative construction (100a), verbal agreement is exclusively with the nominative argument, thus both the auxiliary and the lexical predicate agree in neuter plural with the head of the internal argument 'pieces of dry dread'. But in the nominative-nominative construction (100b), both nominative arguments control agreement, thus the auxiliary agrees with the arguably external argument (that is, the A argument which would otherwise be in the ergative case) in masculine singular whereas the lexical verb agrees with the internal argument in neuter singular.

The construction in (100b) is attested in other languages of the family where it is known as the binominative construction (Forker 2012). However in Karata at least, it is not clear that the possibility of having an agent in the nominative (rather than the ergative) is tied to there being two arguments in the construction of the verb (as the prefix *bi-* suggests in binominative construction). Karata has a few monovalent verbs whose behavior is exceptional in that their unique argument can take ergative case, e.g. *χːanɬa* 'snore', *bibaɬa* 'cry'. In the present progressive (101) both the ergative and the nominative are licensed; however in the (synthetic) simple past, only the ergative is possible (102).

(101) a. imo-l biƛ' e χːan-da idja
father.OBL-ERG loudly snore-IPF COP
The father snores loudly.

b. ima biƛ' e χːan-da idja
father loudly snore-IPF COP
The father snores loudly.

(102) a. gugu-l ɬabc'e bib-eː
cuckoo-ERG three_times shriek-PF
The cuckoo shrieked three times.

b. *gugu ɬabc'e bib-eː
cuckoo three_times shriek-PF
Int. The cuckoo shrieked three times.

Such examples may suggest that the *bi-* in the construction known as binominative construction is epiphenomenal, and that this construction is more general.

4.2.2.3 Reflexive, reciprocal, anaphora

As shown in section 3.4.4, first and second person reflexive pronouns are formed by adding the enclitic *=da* to the corresponding personal pronouns. The third person local reflexive pronoun is formed by cliticizing *=da* to *že-b* in the appropriate case form.

(103) hu-gu-w w-ok'-ã in-šːu-χa-r=da
DEM-LL-M M-look-PF LOG-M.OBL-CFG$_4$-ALL=INT
'He looked at himself.'

37. A number of examples have *idja* heading the main speech clause with the translated meaning 'think' or 'say' in different tenses. More research is needed to understand this construction.

The pronoun *že-b* can also be used as a long-distance reflexive or as a logophoric pronoun. In these uses, it does not need the clitic *=da*.

(104) b-axːʷ-ala=da χan-šːu-l$_i$ [in-šːu-b$_i$ anɬer b-ičʼaː-čʼe-b-χʷa]-ƛʼːe,
HPL-PL\come-SPCVB=INT khan-M.OBL-ERG LOG-M.OBL[GEN]-N word N-destroy.PF-NEG-N-CVB-QUOT
keƛʼːˑ-ẽ idja: [že-w$_i$ xːʷanij-a-gal rušt'-an-čʼe]
say-PF[PF.CVB] COP LOG-M horse.OBL-CFG$_3$-ABL dismount-PF-NEG
'When we arrived, in order not to break his word, the khan said: I did not dismount my horse.'

In reciprocal constructions, each element of the reciprocal pronoun (reduplicated *ce-b* 'one') bears the case of the arguments in the reciprocal relation.

(105) a. mak'-i-lo-l kumak geː jaš-i-lo-wa.
child-PL-HPL.OBL-ERG help do.PF girl-PL-HPL.OBL-DAT
'The children helped the women.'

b. mak'-i-lo-l kumak geː **ce-šːu-l** **ce-šːʷ-a**.
child-PL-HPL.OBL-ERG help do.PF one-M.OBL-ERG one-M.OBL-DAT
'The children helped each other.'

4.2.3 Gender agreement & cross-reference

Nominative arguments are indexed on verbs. Karata also displays less usual agreement patterns. Some adverbs have a slot for gender agreement with the nominative: for instance in (106a), the verb has the human plural prefix *b-* on the verb *-oʔ-* 'go' (with concomitant vowel lowering, see section 3.6.2) and the human plural suffix *-baj* on the adverb *mirka-GM=da* 'forever', both reflecting the gender of the unexpressed third person plural nominative argument.

(106) a. han-ƛːi-gal mirka-baj=da b-aʔ-anɬa
village-CFG$_7$-ABL forever-HPL=INT HPL-PL\go-INF
'Leave the village forever.'

b. armi b-aqːˑ-e mirka-w=da w-oxːˑ-a.
army N-end-PF[PF.CVB] forever-M=INT M-come-PF
'After the army service ended, he came back for good.'

4.3 Major Sentence Types

4.3.1 Declarative clauses

Affirmative and negative declarative clauses do not have any particular morpho-syntactic peculiarities, they are discussed throughout this chapter.

4.3.2 Interrogative clauses

Questions are marked by dedicated morphology: all questions must contain a question particle—*=(o)l(e)* or *=la* in polar and constituent questions, and *=di* in alternative questions); in addition the main verb must be in participial form (without the final gender marker) except in the future tense where the future suffix is used.

A number of constraints apply to the distribution of the question particles. Polar and wh-questions differ in the positions they allow the question particle to be in. For instance, the question particle *=(o)l(e)* can appear at the right edge of the clause in a polar question but not in a wh-question (107).

(107) a. men sːuh-o=**ne**? polar question
2SG be.tired-PTCP-Q
'Are you tired?'

b. *hede gah-ała id=**ole**? wh-question
what do-INF COP[PTCP]=Q
Int. 'What will you do?'

However, in both types of questions, this question particle can appear in several positions. In polar questions, it can appear at the right edge of any constituent in focus, e.g. *hoɬːja* 'she' in (108).

(108) [ho-ɬːj-a]-**l** cːʷãda idja-b [ho-šːu-l hede-bik'u keχ'ːẽ]=χ'ːe?
DEM-F.OBL-DAT-Q think.IPF COP[PTCP]-N DEM-M.OBL-ERG what-INDEF speak-PF=QUOT
'Does *she* think that he said something?'

In wh-questions, the question particle *-(o)l(e)* can appear at the right edge of any constituent which contains the wh-word (as long as it is not clause final), e.g. at the right edge of the wh-word *hede* 'what' in (109a) or at the right edge of the infinitival constituent *hede gahała* 'do what' in (109b) (Pasquereau and Khalidova 2017).

(109) a. [hed]=**ol** gah-ała ida-b?
what=Q do-INF COP[PTCP]-N
'What will you do?'

b. [hede gah-ała]=**l** ida-b?
what do-INF=Q COP[PTCP]-N
'What will you do?'

4.4 Complex sentences

4.4.1 Coordination and subordination

Other than relativization (see below), complementation and adverbial clauses, Karata does not have means of subordination. Clauses can be coordinated via different means as discussed in section 4.7.

4.4.2 Relative clauses

Relative clauses are formed with the participial form of a verb modifying the head noun. Typically the relative clause precedes the head although the other order is also possible. There are three participles in Karata (see section 3.6.7): depending on the ordering of the time of the events in the relative and main clauses, the past, present, or future participle is used. For instance, in (110), the event of going to bring the ox follows the event of meeting a man, and so the future participle is used.

(110) [unsal b-eɬ-a-χʷa w-oʔ-ã-ƛːo-w] χan-šːu-w waša-šːuw-a
ox N-lead-PF-PF.CVB M-go-PF-FUT.PTCP-M khan-M.OBL[GEN]-M boy-M.OBL-DAT
dande w-okː-u idja [qːut'a b-ičaːɬa w-oʔ-ã-ƛːo-w] ce-w
together M-happen-PF[PF.CVB] COP rooster N-sell.INF M-go-PF-FUT.PTCP-M one-M
hek'ʷa.
man
'The khan's son who was to lead the ox met a man who was to go sell a rooster.' (Magomedbekova 1971, text 7)

Relativization in Karata seems to be unrestricted in terms of what NP position can be relativized: subject, object, indirect object, oblique, genitive, or adjuncts. I have not observed relativization of objects of comparison.

In (111), the transitive subject of the predicate *ʕadulu gahaɬa* 'set in order' is relativized and controls agreement on the participle.

(111) ... χaχol w-oʔ-an idja [hat'an-i sːaʕat-aba-ƛː ʕadulu
boot.OBL-ERG M-go-PF[PF.CVB] COP church-CFG$_6$[LOC] hour-PL.OBL-GEN order
geh-id-o-w] hek'ʷa-šːu-χa-r ...
do-IPF-PTCP-M man-M.OBL-CFG$_4$-ALL
'... the Russian went to the clock master's ...' (lit. the boot went to the man who puts order to the hours/hands in the church) (Magomedbekova 1971, text 9)

In (112), the possessor of the noun *c'ːeri* 'name' is relativized, the participle reflects agreemeent with it (human plural).

(112) ho-baj b-ak'ʷ-a idja [č'ikʷaro-baj χalq'ːi-č'o baƛ'ːi c'ːeri
DEM-HPL HPL-PF\be-PF COP beautiful-HPL people.OBL-CFG$_1$[LOC] among[LOC] name
anɬ-o-baj] ʕadan-di
hear-PTCP-HPL man-PL
'They were popular and beautiful people.' (lit. whose name was heard among beautiful people) (Magomedbekova 1971, text 9)

In (113), the temporal adjunct *zebu* 'day' is relatized. The suffixal gender marker on the relative clause verb reflects its gender, while the prefixal gender marker agrees with the absolutive argument inside the clause, i.e. *men* 'you'. Example (114) shows the relativization of a spatial adjunct.

(113) [men w-oxː-a-b] zebu-ɬːi-l den eši w-uk'-a-č'e.
2SG M-come-PF.PTCP-N day-FN.OBL-ERG 1SG home[LOC] M-be-PF-NEG
'The day you came, I was not at home.'

(114) w-oƛː-e, w-oƛː-e w-aʔ-a idja ʕali [ce-b herk'ã-m
M-walk-PF[PF.CVB] M-walk-PF[PF.CVB] M-reach-PF[PF.CVB] COP Ali one-N elder-N
χan-šːu-l hadoʔa-ɬer ge-d-o-b] han-ƛːi-r.
khan-M.OBL-ERG head-ABS do-IPF-PTCP-N village.OBL-CFG$_7$-ALL
'Ali walked and reached a village where an old khan ruled.' (lit. where an old khan did the heading) (Khalidova 2017, *Wise Ali*)

4.4.3 Complement clauses

Karata has one complementizer, the clitic *=ƛ'ːe* – cognate with *keƛ'ːaɬa* 'say'[38] – which is at the right edge of the complement sentence (115). As an argument of the matrix clause, the complement controls neuter singular agreement, default agreement, if the verb happens to have an agreement marker.

(115) [men hingal=ol t'am-asː q'ːaj-ƛ'a-r? hinc'ːu-q'i-gal=di jaɬibar
2SG where.ABL=Q throw-FUT home-CFG$_2$-ALL door-CFG5-ABL=Q or
tawχano-q'i-gal=di?]=ƛ'ːe b-ac'ː-en idja t'uko-l.
fireplace-CFG$_5$-ABL=Q=QUOT N-ask-PF[PF.CVB] COP tower.OBL-ERG
'The tower asked: "through where will I throw you home? through the door or through the fireplace?"' (Khalidova 2017, *The tower*)

This clitic is used to mark reported speech (115), hearsay, thoughts (116), but it is also used for more general complementation, such as in rationale/purpose clauses (117).

(116) χiri urʁeː išːi: [ha-gi-w ƛ'ːih-an-w=da=l w-ošːd-a-w-χa,
after think.PF 1PL.EXCL DEM-LOW-M sleep-PTCP-M=INT=ADD M-leave-PF-M-PF.CVB
mat'uge išːi-b=da raƛ'ar=el b-oq'-e-b-oχa, rošilaː-r
completely 1PL.EXCL[GEN]-N=INT clothes=ADD N-remove-PF-N-PF.CVB tree.OBL.CFG$_3$-ALL
kaʔa-r-el χːar-e-b-oχa, mat'uge ʕeče č'ːʷar-aɬa]=ƛ'ːe
on-ALL=ADD go_up-PF-N-PF.CVB completely apple hit-INF=QUOT
'Then we thought: after leaving this sleeping man, taking off all our clothes, climbing up the trees, let's pick apples from the tree.' (Magomedbekova 1971, text 1)

(117) q'artaj-ɬːi-l rekʷ-a idja c'aj [ʕulo-w w-ož-aɬa]=ƛ'ːe
witch-FN.OBL-ERG light-PF[PF.CVB] COP fire bald-M M-roast-INF=QUOT
'The witch lit the fire to roast the Bald.' (The Bald's tale)

Other complementation strategies involve non-finite complements, the embedded verb can be in the masdar form (118) or the infinitival form (119).

38. More specifically, the complementizer *=ƛ'ːe* seems to be derived from the perfective converb form of the verb 'say'. In fact, the form *=ƛ'ːeboχa* is also found in texts.

(118) [zini beː-rj-a-gal=da] rak'^{w}a-č'o reč'ː-e den
cow buy.PF-MSD.OBL-CFG$_3$-ABL=INT heart-CFG$_1$[LOC] pity-PF 1SG
'I regret buying (a/the) cow.'

(119) [mak'i-lo-χa-r b-ek'ãɬa] ʕadã-j q'or-a idja
child.PL-HPL.OBL-CFG$_4$-ALL N-look.INF person-F want-PF[PF.CVB] COP
'A woman is needed to look after the children.'

Another strategy used where other languages would use a complementizer is to use a relatively general noun modified by a relative clause. For instance in (120), the object of the verb *basãɬa* 'say' is the word *hedela* 'thing' modified by a relative clause.

(120) č'^{w}ač'^{w}arda:riqː bas-ã [b-oχː-o-b] hedela
without_hesitation tell-PF N-happen-PF.PTCP-PF thing
'He told what happened (lit. the thing that happened) without hesitation.'

4.4.4 Clause chaining

Karata has clause chains that combine a sequence of non-finite clauses with a final clause. The non-finite clauses are headed by general converbs (section 3.6.7) and the final clause must have a fully inflected independent verb form (section 3.6.3). Clause-chaining constitutes the usual way to encode series of event. As is typical, agreement occurs with the nominative argument (121).

(121) [q'ːardo-b ɬːẽj b-aʔ-a-b-χ^{w}a] di-r reχ'a haw-e.
hot-N water N-receive-PF-N-PF.CVB 1SG[GEN]-NPL hands burn-PF
'I burned my hands with hot water.' (lit. Having received hot water, my hands got burnt.)

While both the prefix and the gender marker in the converbial suffix both agree with the nominative argument of the verb they mark in (121), a number of examples show that the gender marking in the converbial suffix can agree 'externally' with the nominative argument of the main clause. Thus in (122), the hero of the story went to a place he had been summoned to after he had married a woman, the heterogeneous agreement on the head of the converbial clause *jeɬawoχa* reflects internal agreement with the nominative *hark'ːe* 'wife' in that clause via the feminine prefix, and external agreement with the (implied) nominative argument of the main clause 'he, the hero' in the main clause via the masculine marker in the converbial suffix.

(122) [hordi-r w-oʔ-ãn-χːa-jngil saru in-šu-j=da hark'ːe=l
there-ALL M-go-PF-ANDT-SPCVB together LOG-M.OBL[GEN]-F=INT wife=ADD
j-eɬ-a-w-oχa] w-oʔ-ã ida.
F-lead-PF-M-PF.CVB M-go-PF COP
'He went there with his wife.' (Magomedbekova 1971, text 9)

More research is needed to understand this construction (see Creissels (2012) on 'external agreement' in Akhvakh).

4.4.5 Adverbial clauses

Karata has a range of so-called specialized converbs (section 3.6.7). Specialized converbs express different relations between the main clause and the subordinate clauses. For instance the specialized converb *-jgil* can be roughly translated as 'when' (123).

(123) [ha-j in-šːuw-a kaʕa-r j-exːʷ-a-jgil] ha-šːu-l c'aq'ːa-b
DEM-F LOG-M.OBL-CFG$_3$[LOC] on-ALL F-come-PF-SPCVB DEM-M.OBL-ERG very-N
adab-qːatir gah-aɬa q'ːasː geh-e.
politeness do-INF intention do-PF
'When she came to him, he tried to be very polite.'

4.5 Negation

In Karata, clausal negation is expressed via verb inflection (see section 3). In clauses whose nucleus is a negative verb form, the determiners, pronouns, and adverbs expressing free choice in positive clauses function as negative determiners, pronouns, or adverbs.

4.6 Comparative constructions

Adjectives do not have special comparative morphology. Karata forms adjectival comparatives by adding a standard of comparison, marked by the ablative case, to a sentence that is otherwise the same as the corresponding non-comparative construction.

(124) jacːʷ-a-gal herk'ã-w idja wacːi
sister.OBL-CFG$_3$-ABL old-M COP brother
'(My) brother is older than (my) sister.'

The ablative can be added to configuration markers 1 (125) or 3 (124) (Pasquereau 2010: 37, 41).

(125) dij-a dãndesː herk'ã-j idja di-č'o-gal.
1SG.OBL-DAT sister_in_law old-F COP 1SG.OBL-CFG$_1$-ABL
'My sister in law is older than me.'

Such constructions allow direct comparison with a measure, e.g. a measure of time as in (126).

(126) haƛ'ːʷ-a-gal=el ƛ'ːʷani b-ak'ʷ-a išːi harge
week-CFG$_3$-ABL=ADD much HPL-PL\be-PF 1PL here
'We spent here more than one week.'

A measure phrase, in the ergative/instrumental case, can optionally be added (127).

(127) hač'^{w}ada reši̵-ɬ:i-l herk'ã-w idja ho-w dij-a-gal
nine year-FN.OBL-ERG old-M COP DEM-M 1SG.OBL-CFG$_3$-ABL
'He is nine years older than me.'

Comparative constructions expressing equality can be formed with different markers (section 3.2.2.2): *-šdo-ʔo(-b)* suffixed to a demonstrative, the marker *-godo-b* suffixed to a noun in the nominative (128a) or genitive case (128b), the marker *-ʔo* suffixed to a noun in any case form (128) (cf *-ʔo-b* to make an adjective).

(128) a. wac:i=l jac:i-godo-j x:oho-w idja.
brother=ADD sister-EQUAL-F good-M COP
'Brother is as good as sister.'

b. x^{w}ani-ƛ:-godo-b buʁura
horse-GEN-SIM-N hair
'thick hair' (lit. hair like (that) of a horse) (Magomedova and Khalidova 2001: 84)

(129) a. ho-š:uw-a heč'es:igi-s: han-ƛ':i=ʔo in-šu-b=da
DEM-M.OBL-CFG$_3$[LOC] at_first-ATBZ village.OBL-CFG$_7$[LOC]=SIM LOG-M.OBL[GEN]-N=INT
rak'^{w}a b-aq':-o-w ʕadam w-usan-č'e ida.
heart N-suit-PTCP-M man M-find-PF-NEG COP
'He didn't find someone he liked (as much) as in the first village.' (Magomedbekova 1971, text 8)

b. ho-šu-l=ʔo b-e: den-a
DEM-M.OBL-ERG=SIM N-take.PF 1SG-ERG
'I took as much as him.' (Magomedova and Khalidova 2001: 455)

Superlatives are formed with the word *heč'e*. The standard is then either in the genitive case or in the locative CFG$_7$ case.

(130) den hor-do-w heč'e herk'ã-w wa hor-do-ƛ:i heč'e
1SG DEM-HPL.OBL[GEN]-M very old-M and DEM-HPL.OBL-CFG$_7$[LOC] very
resmaħal idja-w, bečeda-w idja.
wealth COP[PTCP]-M wealthy-M COP
'I am the oldest of them and I am the wealthiest among them.' (Magomedbekova 1971, text 7)

4.7 Co-ordination

Borrowed particles like *wa* 'and', *am:a* 'but' can coordinate phrases of different sizes, NPs (131a) and full clauses (131b).

(131) a. ho-b=da zamana-ɬːi-l b-ikʼʷ-a ida ʁalmaʁal tʼuki-da-kʼel **wa**
DEM-N=INT time-FN.OBL-ERG N-be-PF COP argument Tukita-PL.OBL-COM and
halbi-lo-kʼel **wa** axːʷa-da-kʼel.
Khunzakh-HPL.OBL-COM and Akhvakh-PL.OBL–COM
'At that same time there was an argument with the people of Tukita, the people of Khunzakh and the Akhvakhs.' (Magomedbekova 1971, text 2)

b. ho-b zamana-ɬːi-l, urʁeː ida hor-do-baj ʕaqʼːlu
DEM-N time-FN.OBL-ERG think.PF[PF.CVB] COP DEM-HPL.OBL[GEN]-HPL intelligence
ida-baj ʕadan-di, **wa** sːoreqː in-dow-a-lo-l[40]
COP[PTCP]-HPL person-PL and around LOG-HPL.OBL-DAT-HPL.OBL-ERG
b-ešːti-da-ʁe b-akʼʷ-a-ri-kʼel, saro hor-do-l
HPL-leave-IPF.CVB-CVB.NEG HPL-PL\be-PF-MSD.OBL-COM together DEM-HPL.OBL-ERG
dande geh-e ida inštːuda hane.
together do\PF-PF[PF.CVB] COP five village
'At that time, wise people thought on the matter, and because those around them did not leave (them) in peace, they united 5 villages together.' (Magomedbekova 1971, text 2)

The clitic *=(e)l* is used to mean 'and' on each coordinands (132a) and it is used to translate 'also' (132b).

(132) a. mesedo=l musa=l ida išːi-čʼo
Mesedo=ADD Musa=ADD COP 1PL-CFG$_1$[LOC]
'Mesedo and Musa are at our place.'

b. dij-a-r=el bas-ã
1SG.OBL-CFG$_3$-ALL=ADD tell-IMP.TR
'Tell me too!'

Finally another conjunction is *jaɬibar* or *ja* 'or'.

(133) jaɬibar miʁi-χːi-r w-oʔ-ĩ, jaɬibar roxːo-χːi-r w-oʔ-ĩ
or field.OBL-CFG$_7$-ALL M-go-IMP or forest.OBL-CFG$_7$-ALL M-go-IMP.INTR
'Either go to the field or to the forest.'

4.8 Non-verbal predication

Almost every clause in Karata must contain an element akin to a verb as diagnosed by the possibility to inflect for tense, aspect, and mood. There is one kind of clause where such element is arguably absent, clauses where the predicative part of the clause is headed by the copula *ida*, usually pronounced with a palatalized consonant *idja*, which cannot be inflected (except for participial and converbial morphology) and can thus only be used in the present tense. In the past and future tenses, the verb *bikʼʷaɬa* 'be' is used.

40. This form is puzzling and requires more research. I have analyzed it here as a stacked case form, a nominalization of an adpositional phrase headed by *sːoreqː* 'around', that is [sːoreqː in-dow-a]-lo-l 'those [around us]'. But if this analysis is right, it is surprising that it is the only case like this in my corpus. On the other hand, it is not clear to me what other analysis could explain this form.

(134) a. di-č'o χigi ida wu-du-w
1SG.OBL-CFG$_1$[LOC] behind[LOC] COP DEM-SL-M
'He is behind me.'

b. c:ibero-q: iši hã-ƛ:i b-ak'^{w}-a
winter.OBL-CFG$_5$[LOC] 1pl.EXCL village.OBL-CFG$_7$[LOC] HPL-PL\be-PF
'We were in the village in the winter.'

The copula does not express gender agreement but it expresses polarity (*idja* is the positive copula, *hač'e* is the negative copula, see section 3.6.3.1).

4.9 Information structure

In Karata, the position of the copula can indicate which constituent is in focus. In this construction, the focused constituent is fronted and the copula occurs at the right edge of this constituent. For instance in (135), the DP constituent *hojol* is in focus (which is also indicated by the question particle) whereas in (136) the whole embedded question is in focus.

(135) ho-j=ol idja-j hed=ola ho-š:u-l in-ɬ:j-a b-ek:-e=ƛ':e?
DEM-F=Q COP[PTCP]-F thing=Q DEM-M.OBL-ERG LOG-F.OBL-DAT N-give-PF=QUOT
'Is she the one who wonders what he gave her?'[41]

(136) hede in-ɬ:j-a b-ek:-e=ƛ':e=la idja ho-j?
thing LOG-F.OBL-DAT N-give-PF=QUOT=Q COP DEM-F
'What did he give her? she thinks/wonders.'

Karata also makes use of the topic marker *-ƛ':ibar*[42]which is suffixed to a clause initial NP, as in (20) or (137b), where not only is the NP *rox:oƛ:i* 'in the forest' marked as a topic by the clitic, but also by the word order, since the auxiliary directly follow the topic (cf. the more usual order *zaraʁuda bik'^{w}a idja*).

(137) a. č':^{w}ar-e idja horgal bac'a rox:o-ƛ:i-r
hit.PF[PF.CVB] COP there.ABL wolf forest-CFG$_6$-ALL
'The wolf bolted out of there and into the forest.' (Khalidova 2017, *The miller and the wolf*)

b. rox:o-ƛ:i=ƛ':ibar b-ik'^{w}-a idja zaraʁ-uda
forest-CFG$_6$[LOC]=TOP N-be-PF[PF.CVB] COP be_cold-IPF
'In the forest, it was cold.' (Khalidova 2017, *The miller and the wolf*)

More investigation on this topic is needed.

41. In this example and the next, it is just the combination of the copula (in the matrix clause) and the quotative clitic that seem to encode the meaning 'wonder, think'. More research is needed to understand this construction.

42. This marker is transparently made up of the quotative morpheme *-ƛ':(e)* and the conditional morpheme *-ibar*; it can thus be translated as 'if (one) says'. Contrastive markers with an identical morphological make-up are found in other languages of the family such as Tabasaran, Andi, and Avar (Timur Maisak and Gilles Authier, p.c.)

5 Lexicon

The lexicon of Karata shows no salient characteristic in comparison with the other Andic languages. In addition to lexemes inherited from Proto-Andic, or whose origin cannot be established, it includes a sizeable proportion of borrowings from Avar, and also from Arabic, Persian, and Turkic languages. Russian is now the main source of borrowings. As mentioned earlier the only dictionary of Karata is Magomedova and Khalidova 2001.

6 Sample text

First few lines at the beginning of text 1 from Magomedbekova 1971: 178, told by Magomed Raǯabov in 1954, checked and translated to Russian by R. Khalidova, analyzed and translated to English by J. Pasquereau.

(1) azar-boχːe hač'ʷa-bešan-boχːe inšːtʷ-ac'ada-χːo-b rešen-ɬːi-l hac'a=l
thousand-PCL nine-hundred-PCL five-ten-ORD-N year-FN.OBL-ERG ten=ADD
inšːtuda-χːo-b eli b-ikːe ri-χːi, reɬada saʕat ɬabda q'ːot'i
five-ORD-N mouth N-hold-PF moment-CFG$_7$[LOC] at_night hour three agreement
geː b-aʔ-anɬa harč'ːaq'ːara-r xːindaɬerow-a χirχir.
do\PF HPL-PL\go-INF Harchaqara[LOC]-ALL fruit.OBL-CFG$_5$[LOC] after
'In the year 1950, on the fifteenth day of Ramadan, at three o'clock at night, we agreed to go to Harchaqara for fruit.'

(2) išːi ɬab-ij b-ak'ʷ-a horge ʕaxːalɬ-e-b-oχa.
1PL.EXCL three-COLL HPL-be\PL-PF there participate-PF-HPL-CVB
'There were three of us there who participated.'

(3) ho-b reɬa-ɬːi-l išːi b-ak'ʷ-a sawetij-a dežurni-ɬeboχa.
DEM-N night-N.OBL-ERG 1PL.EXCL HPL-PL\be-PF council.OBL-CFG$_3$[LOC] watchman-ESS
'That night we were in the townhall as watchmen.'

(4) sawetij-a-gal-ɬeboχa išːi b-aʔ-ã počij-a-r.
council.OBL-CFG$_3$-ABL-MED 1PL.EXCL HPL-PL\go-PF post_office.OBL-CFG$_3$-ALL
'We made our way by way of the townhall to the post office.'

(5) horge ce-b-k'eda istakan tamoxːu-χː q'ːer-e, χiri b-aχːe harč'ːaq'ːara-r.
there one-N-two glass tobacco-GEN cut-PF after HPL-PL\walk-PF Harchaqara[LOC]-ALL
'There we cut up about two glasses of tobacco, then we set off towards Harchaqara.'

(6) hugir b-aʔ-ã ri-ɤːi kʷano=gʷal b-ikʼʷ-a-čʼe.
there.ALL HPL-PL\go-PF moment-CFG[LOC] light=EVEN N-be.PF-NEG
'When we got there, it was pitch dark.'

(7) roš-ib-a-r χːar-e-b-oχa micʼːa-b ʕeče geh-ida b-akʼʷ-a.
tree-PL-CFG$_3$-ALL climb-PF-HPL-PF.CVB sweet-N apple pick-IPF HPL-PL\be-PF
'We climbed into the tree and picked apples.'

(8) kʷano haʔ-inda-ʁe ri-ɤːi ʕeče gah-ała zaħmaɬ-e.
light see-IPF-CVB.NEG moment-CFG[LOC] apple pick-INF become_difficult-PF
'Picking apple was no easy task at this dark time of the night.' (lit. Not seeing light, picking apple became difficult in that moment.)

Acknowledgments: I would like to express my deepest gratitude to Rashidat Khalidova for her invaluable help and friendship over the years. I am also grateful to all the linguists who have contributed to the study of Karata and Andic languages—especially Gilbert Authier, Denis Creissels, Rashidat Khalidova, Patimat Magomedbekova, and Patimat Magomedova—whose work has both made this paper possible and fostered my interest in Karata.

My sincere thanks go to Khadis Aliev for his assistance in preparing this paper. Any knowledge I have of Karata, including the examples presented here, is due to the generosity of my friends in the village of Karata and in Makhachkala, and I am profoundly grateful to all of them.

I also wish to thank Matthew Baerman and Patricia Cabredo Hofherr for their valuable comments on an earlier draft. All remaining errors are my own. Finally, I am grateful to the editors of this book series, whose insightful questions helped improve this paper, even if I was not able to answer all of them.

Abbreviations:

ABS: abstract nominalizer
ADD: additive
ABL: ablative
ANDT: andative
ATBZ: attributivizer
ALL: allative
CAUS: causative
CFG: configuration
COLL: collective
COM: comitative
COP: copula
CTRST: constrastive
CVB: converb
DAT: dative
DEM: demonstrative
DIR: directional
ERG: ergative
ESS: essive
EXCL: exclusive
F: feminine
FN: feminine or neuter
FUNC: functive-transformative
FUT: future
GEN: genitive
JUSS: jussive
HPL: human plural
INDEF: indefinite
INF: infinitive
INT: intensive
IPF: imperfective

LL: lower level
LOG: logophoric
LOC: locative
M: masculine
MED: mediative
MSD: masdar
N: neuter
NPL: neuter plural
NEG: negation
OBL: oblique
PF: perfective
PL: plural
PRES: presentative
PTCP: participle
Q: question particle
QUOT: quotative
SELECT: selects one of two
SG: singular
SIM: similative
SL: same level
SPCVB: specialized converb
TOP: topic
UP: upper level
UQ: universal quantification

References

Bokarev, A. A. (1938). Materialy po dialektologii ando-tsezskix jazykov. Narečie aula Tokita. [Materials for the study of Ando-Tsezic languages. Dialect of Tukita.]. In I. I. Meshshanicev (Ed.), *Pamjati akademika N. Ja. Marra (1864–1934) [To the Memory of N. Ja. Marr (1864–1934.)]*. Moskva: Akademija Nauk SSSR.

Bokarev, A. A. (1949). *Ocherk grammatiki chamalinskogo jazyka. [A sketch of the grammar of the Chalalal language.]*. Akademija Nauk SSSR.

Charachidzé, G. (1981). *Grammaire de la langue avar*. Paris: Editions Jean-Favard.

Creissels, D. (2012). External agreement in the converbal construction of Northern Akhvakh. *Clause linkage in cross-linguistic perspective*, 127–156.

Creissels, D. (2014). Functive-transformative marking in Akhvakh and other Caucasian languages. In M. Daniel', E. A. Lyutikova, B. A. Plungian, S. G. Tamevosov, and O. B. Fedorova (Eds.), *Jazyk, konstanty, peremennye: pamjati Aleksandra Evgen'evicha Kibrika*, pp. 430–449. Sankt-Peterburg: Aletejja.

Dahl, Ö. (1985). *Tense and aspect systems*. Oxford: Basil Blackwell.

Dalgatov, I. K. (2015). Siwuxskij govor v sisteme dialektov avaro-ando-tsezskoj gruppy dagestanskix jazykov [The Siukh dialect within the dialectal system of the Avar-Andi-Tsezic group of Daghestanian languages]. *Istoričeskaja i sotsial'no-obrazovatel'naja mysl' 7*(6-1).

Dalgatov, I. K. (2017). *Siwuxskij govor karatinskogo jazyka [The Siukh dialect of the Karata language]*. Ph. D. thesis, Dagestanskij gosudarstvennyj pedagogicheskij universitet.

Dirr, A. (1909). *Materialy dlja izuchenija jazykov i narechij ando-didojskoj gruppy [Materials for the study of the languages and dialects of the Ando-Didoic group]*. Tbilissi.

Dobrushina, N., D. Staferova, and A. Belokon (2017). Atlas of Multilingualism in Dagestan Online. Available online at `https://multidagestan.com`, accessed on 2024-07-16. Linguistic Convergence Laboratory, HSE.

Dobrushina, N. and A. Zakirova (2019). Avar as a lingua franca: a study in and around Karata. *Tomsk Journal of Linguistics and Anthropology* (1), 44–55.

Erckert, R. V. (1895). *Die Sprachen des Kaukasischen Stammes*, Volume 1. A. Hölder.

Filatov, K. (2020). Sistema indikativa anchikhskogo dialekta karatinskogo jazyka. Master's thesis, Higher School of Economics, Moscow.

Forker, D. (2012). The bi-absolutive construction in Nakh-Daghestanian. *Folia Linguistica 46*(1), 75–108.

Gadžieva, M. Z. (2007). Fonetičeskie i morfologičeskie osobennosti tukitinskogo dialekta karatinskogo jazyka [Phonetic and morphological peculiarities of the Tukita dialect of the Karata language]. Master's thesis, Dagestanskij Gosudarstvennyj Pedagogičeskij Universitet.

Gudava, T. E. (1959). *Sravnitel'nyi analiz glagol'nyx osnov v avarskom i andijskix jazykax [Comparative analysis of verbal stems in the Avar and Andic languages]*. Maxachkala: Dagestanskij filial akademii nauk, Institut istorii, jazyka i literatury imeni G. Tsadasa.

Hoesli, E. (2006). *À la conquête du Caucase: épopée géopolitique et guerres d'influence*.

Khalidova, R. (2017). *Karatinskie skazki [Karata tales]*. Maxačkala: Institut jazyka, literatury i iskusstva imena G. Cadasy Dagestanskij naučnij centr Rossijskoj akademii nauk i Federal'noe gosudarstvennoe bjudžetnoe obrazovatel'noe učreždenie vysšego obrazovanija.

Khalidova, R. (2022). *Govorim po-karatinski. Russko-karatinskij razgovornik [Let's speak Karata. A Russian-Karata primer]*. Makhachkala: IP Kikov T. M.

Khalidova, R. S. (1990). *Lingvodidaktičeskie osnovy obučenija russkomu literaturnomu proiznošeniju učaščixsja-nositelej bespis'mennyx jazykov (karatinskogo i ahvahskogo) [Lingvodidactic foundations of teaching Russian literary pronunciation to student speakers of unwritten languages (of Karata and Akhvakh)]*. Ph. D. thesis.

Khalidova, R. S. (2016). Zhivotnovodcheskaja leksika karatinksogo jazyka [Terminology used in animal husbandry in the Karata language]. *Izvestija Dagestanskogo Gosudarstvennogo Pedagogičeskogo Universiteta. Obščestvennye i gumanitarnye nauki. 10*(3).

Khalidova, R. S. (2018). Osobennosti funktsionirovanija glagol'nyx form v skazotchnom diskurse karatinskogo jazyka [Characteristics related to the use of verbal forms in Karata fairy-tales]. *Izvestija Dagestanskogo gosudarstvennogo pedagogitcheskogo universiteta. Obshshestvennye i gumanitarnye nauki. 12*(2).

Kibrik, A. E. e. (2001). *Bagvalinskij jazyk: grammatika, teksty, slovari [The Bagvalal language: grammar, texts, dictionaries]*. Moscow: Nasliedie.

Kolga, M. (2001). *The red book of the peoples of the Russian Empire*. Tallinn: NGO Red Book.

Kuraeva, M. N. (1998). *Somatičeskaja frazeologija karatinskogo jazyka [Somatic phraseology in the Karata language].* Ph. D. thesis, Institut jazyka, literatury i iskusstva imeni G. Cadasy Dagestanskogo naučnogo centra Rossijskoj akademii nauk, Makhachkala.

Kuraeva, P. G. (2010). *Leksičeskie i morfologičeskie sredstva vyraženija kategorii lokalizacii v avaro-andijskix jazykax [Lexical and morphological means of expressing the localization category in Avaro-Andic languages].* Ph. D. thesis, Institut jazyka, literatury i iskusstva imeni G. Cadasy Dagestanskogo naučnogo centra Rossijskoj akademii nauk.

Magomedbekova, P. (1971). *Karatinskij jazyk: grammatičeskij očerk, teksty, slovar' (Karata: grammar sketch, texts, dictionary).* Tbilisi: Mecniereba.

Magomedbekova, Z. M. (1961). *O fonetičeskix osobennostjax tokitinskogo dialekta karatinskogo jazyka [On phonetic peculiarities of the dialect of Tukita of the Karata language].* Tbilisi.

Magomedbekova, Z. M. (1967). *Jazyki narodov SSSR [The languages of the peoples of the USSR]*, Chapter Karatinskij jazyk [The Karata language].

Magomedbekova, Z. M. (2000). Karatinskij jazyk [The Karata language]. In I. K. Abdullaev, U. A. Mejlanova, A. G. Magomedov, M. C. M. Musaev, P. A. Saidova, B. B. Talibov, M. S. Xalilov, and B. G. Khanmagomedov (Eds.), *Jazyki Dagestana [The languages of Daghestan]*, Jazyki narodov Rosii [The languages of the peoples of Russia], pp. 408 – 421. Russian Academy of Sciences.

Magomedova, P. T. and R. S. Khalidova (2001). *Karatinsko-ruskij slovar'. [Karata-Russian dictionary.].* Maxačkala: Dagestanskij Naučnyj Centr Rossiskoj Akademii Nauk.

Mallaeva, Z. M. and R. S. Khalidova (2016). *Sistemy glagola v avarskom i karatinskom jazykax [Verbs systems in the Avar and Karata languages].* LAP LAMBERT Akademic Publishing.

Pakhrudinova, R. O. (2004). Slovoobrazovanie v karatinskom jazyke [Word formation in the Karata language]. Master's thesis.

Pakhrudinova, R. O. and Z. M. Akhmedova (2014). Suffiksal'noe obrazovanie imen suščestvitel'nyx v karatinskom i axvaxskom jazykax [Word formation of nouns by suffixation in the Karata language]. *Izvestija Dagestanskogo Gosudarstvennogo Pedagogičeskogo Universiteta. Obščestvennye i gumanitarnye nauki* (1 (26)).

Pasquereau, J. (2009). Eléments de sociolinguistique du karata. Unpublished manuscript.

Pasquereau, J. (2010). Spatial cases in Karata: spatial and non-spatial uses. Master's thesis, Université Lyon II.

Pasquereau, J. (2011). Valency in Karata: a preliminary study. Master's thesis, Université Lyon II.

Pasquereau, J. (2018). Phonological degrees of labiality. *Language 4*(94), e216–e265.

Pasquereau, J. (2023). A collection of twenty glossed and translated texts in Karata (Karata village variety, Nakh-Daghestanian). Available at `https://proclac.cnrs.fr/projets/projets-turcaucase/immocal/karata/`.

Pasquereau, J. and R. Khalidova (2017). A preliminary investigation of the formation of constituent questions in Karata (Nakh-Daghestanian). *Proceedings of the Linguistic Society of America 2*, 50–1.

Talmy, L. (1972). *Semantic Structure in English and Atsugewi*. Ph. D. thesis, University of California, Berkeley.

Umargadžieva, A. G. (2010). Fitonimičeskaja i zoonimičeskaja leksika v andijskix jazykax: na materiale karatinskogo, axvaxskogo i tindinskogo jazykov [Plant and animal terminology in the Andic languages: on the basis of materials from the Karata, Akhvakh, and Tindic languages]. Master's thesis, Dagestanskij Gosudarstvennyj Pedagogičeskij Universitet.