

A Sketch of the Sadian Language

April Füller

Department of Linguistics, University of Moose Jaw*

1. Introduction

The Sadian language <Десдашпвк> *Desdashpvk* [dɛ.'sad.ʃpvk]) is spoken by a community of about 350 people in three valleys of the central Caucasus. It is apparently a linguistic isolate, like many languages of the region. All speakers of Sadian speak at least two other languages; Russian and Georgian are the most popular second languages for Sadophones, and are viewed as “easy to learn.”

1.1. Typological characteristics

Sadian has achieved a certain amount¹ of notoriety among linguists for its extremely rich consonant and vowel inventory, complex interactions of lexical tone and stress, highly synthetic morphosyntax, OSV word order, unparalleled use of suppletion, and intricate lexico-semantic word choice paradigms: in fact, it has proven something of an embarrassment,² as it is an apparent exception to the assumption that no language is intrinsically “more difficult” than another (Hamhand 2001).

*It is with not unmixed gratitude that I acknowledge the contributions of my Sadian language consultant, Ms. Marina Slkhtvchyes; her belief that my devotion to the study of Sadian is God’s way of punishing me has restrained me from becoming overly buoyant. I must acknowledge the support of the Sadian Culture Centre, Trstryaochghk, Russia, for instructing the populace to exempt me from the usual reception afforded to non-Sadians (stoning). The Fund for Indefinite Studies promised support for this project; it was, however, held up in committee. Ultimately, the research was supported by a grant from my parents. My thanks are also due to my husband, Tohtel Füller, for keeping our children’s *schmaltz*-coated hands off the proofs.

¹ 6.7 kg, according to Wrocławski (2011).

² Jürgen Booti resigned his endowed chair in Comparative Philology at Freiburg shortly after being asked to review Hamhand’s (2001) paper on second-language acquisition of Sadian. Rumour (2008) has it that he is now employed in industrial plastic sales.

The speakers of Sadian are aware of this, and our consultant, Ms. Slkhtvchyes, has remarked that her compatriots take great pride in being the speakers of a language that almost no one else can learn. (She explained the universality of multilingualism among Sadian speakers by observing, “If you can learn Sadian, you can learn anything.”)

1.2. Status of the language

Despite the small number of speakers of Sadian, it cannot be characterized as endangered, as it is being acquired by almost all children of current speakers. This situation may be due to the fact that, as Mittenloop (1985) points out in *Hunting the Mountain Octopus*, his brilliant anthropological study of Sadian culture, virtually all Sadian speakers are members of the Brethren of Righteousness, an extremely dour sect of Calvinism, whose adherents feel that learning this excruciatingly complex language is a form of suffering that purifies the soul.³ Nevertheless, efforts by outsiders to learn Sadian tend to meet with reactions from native speakers ranging from scorn to incredulity. Foreign accents, in particular, receive hearty ridicule, an attitude that is particularly puzzling when compared with the commonly met opinion among Sadians that “there is no correct way to pronounce Sadian.”⁴

³ Obtaining copies of this important work is problematical today, as following a decree by the Elders of the Brethren of Righteousness, expatriate Sadians worldwide bought up copies in order to burn them. Ms. Slkhtvchyes has explained that Mittenloop’s offence lay in referring to Sadian as a “language” rather than an “ordeal”.

⁴ The Rev. Zhyireoum Dzhktsseou Qhyes, a minister of the Brethren, explained this situation as akin to that of original sin. Speakers are foreordained to err in pronouncing Sadian, and to be punished for their errors. When presented with the linguistic commonplace that all native speakers are competent in their own language, his response was to reach for his ritual bundle of birch twigs.

3. Phonology

3.1. Inventory

Sadian's large and complex phonemic inventory has attracted the attention of numerous researchers.⁵

3.1.1. Consonants

Sadian has an inventory of 104 consonant phonemes (Table 1).

The aspirated plosives and affricates are generally pronounced with strong aspiration; in fact, Sadian children with loose teeth are traditionally told to repeat tongue-twisters replete with aspiration, to encourage the teeth to come out. The ejectives, on the other hand, are often articulated so lightly in initial or medial position as to resemble geminates; this may be confusing, as geminated consonants do exist in this language. Minimal pairs that often cause confusion include the following:

- (1) a. /kæp'Λ/ 'why not'
 b. /kæppΛ/ 'never'
- (2) a. /kxɪm'xmu:ŋ/ 'she (over there) wants to be able to dance'
 b. /kxɪmmxmu:ŋ/ 'half a butterknife'
- (3) a. /ʔαʔhæt'i/ 'dinner theatre'
 b. /ʔαʔhæti/ 'ulcer on a puppy'
 c. /ʔαʔhætti/ 'trucker's tan'

The dental, alveolar and retroflex stops are all laminally pronounced. In the case of the dental stops, this may be one reason many older Sadians

⁵ Apparently most of them have been stoned to death before being able to publish their results; see acknowledgements on page 1.

Consonant Inventory of Sadian		Bilabial	Linguolabial	Labiodental	Dental	Alveolar	Alveopalatal	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosives	VI. asp.				t ^h			t ^h	c ^h	k ^h	q ^h		ʔ ^h
	Vd. asp.	b ^h			ɗ ^h			ɖ ^h		g ^h	g ^h		ʔ
	VI. unasp.	p			t			t	c	k			
	Vd. unasp.	b			ɗ			ɖ	ɟ	g			
	VI. eject.	p'			t'				c'	k'			
	Vd. eject.	b'						ɖ'	ɟ'	g'			
Affricates	VI. asp.	pɸ _h		pɸ ^h	tθ ^h				ɟɟ _h	kx _h			
	Vd. asp.				ɗɗ _h		dʒ _h	ɖ ^h					
	VI. unasp.			pɸ	tθ		tʃ	tʃ ^h		kx			
	Vd. unasp.	bβ	bɣ	bɸ	ɗɗ	dʒ	dʒ			gɣ			
	VI. eject.			pɸ'			tʃ'			kx'	qɣ		
	Vd. eject.			bɸ'		dʒ'							
Fricatives	VI.	ɸ	f	θ	s	ʃ	ʃ	ʂ	ç	x		ħ	h
	Vd.		v	ð		ʒ			ʒ	ɣ		fɣ	ɦ
	VI. eject.	ɸ'	f'	θ'						x'			
Nasals	VI.	ɱ			ɳ					ŋ			
	Vd.	m		ɱ	n		ɳ	ɳ	ɳ	ŋ			
	Eject.	m'								ŋ'			
Liquids	VI.				l								
	Vd.				l								
Approx- imants	VI.	ʍ							j	ɰ			
	Vd.	w				ɹ			j				
Ingressives		ɸ			ɗ						ɣ		
Co-articulated		kɸ							kɟ				

have sharply protruding front teeth; however, it is difficult to separate cause from effect. The voiceless nasals, especially ɱ, are pronounced

with little or no preaspiration, and are often entirely inaudible without the aid of powerful amplifiers. (For this reason, we urge the serious student of Sadian to invest in high-quality stereo equipment before commencing field work. It is true that it is a non-trivial expense for many researchers; however, as the Sadian words for ‘morning’ and ‘afternoon’ consist solely of voiceless nasals, failing to equip properly may well result in missing all your appointments.)

Other allophony in Sadian depends largely upon phonetic space, and gaps in the phoneme inventory tend to be competently filled – yea, packed – with allophones of nearby phonemes jostling for room. Thus the sound [d̥], while non-existent as a Sadian phoneme, is one of the allophones of /t̥/, as well as of /t̥ʰ/, /d/, /t/ and /tʰ/.

3.1.2. Vowels and other nuclei

Table 2 illustrates the segments that can act as syllabic nuclei.

Nucleus inventory of Sadian

Monophthongs	i	y			u				u
	ɪ	ʏ							ʊ
	e	ø			ə				o
		ɛ	œ		ʌ	ɔ			
				a		ɑ			
Diphthongs	eɪ	ɛɪ	œu	uj	oj	ɔj	aj		
	eu			au					
Triphthongs	ɛəu						yao		
Syllabic Consonants				ʂ	ʃ	x	χʷ		
	β	v	z	ʒ	ʒ	ɣ			

Sadian is remarkable for its large number of syllabic consonants. It has been postulated (by Turnpiker, 1997) that these segments arose historically from syncope of post-fricative schwa before a series of now-

vanished voiced postglottals.⁶ Asked for her opinion on the origin of the syllabic consonants, Ms. Slkhtvchyes replied “[gʏ:ɖ dzʰvm]” (‘it happened just because’).

There are seventeen Sadian monophthongs. Most of these exhibit a three-way length distinction (V/V·/V:). Darby (1993) opines that this feature is a borrowing from Estonian, explaining the geographical distance involved by positing a borrowing date subsequent to the invention of television.⁷ This length distinction is, however, not present for the high tense vowels, which show a two-way distinction (V/V·), with the exception of /y/, which shares with /ə/ the lack of any length distinction whatsoever.

The Sadian diphthongs are all falling, so much so that the second element is often auditorily imperceptible, so that they can sometimes be mistaken for monophthongs. This has given rise to tonogenesis; younger speakers especially tend to pronounce the diphthongs as monophthongs with a salient low tone. Those who might express a hope for this tendency to be exceptionless are obviously even more Pollyannish than Darby. Indeed, the diphthong /œu/, when monophthongized, is generally realized as [a] with a salient high-falling tone, while /oj/ is realized as [oj], to be sure, but with a salient high-rising tone.⁸

The two triphthongs in the inventory are, according to Turnpiker (1997), modern reflexes of historical diphthongs that underwent a regular breaking process in word-final environments. This analysis is plausible

⁶The present researchers are sceptical of this claim, as we have calculated that these voiced postglottals, if they existed, would have stressed the respiratory tract in a manner roughly equivalent to two cigarettes per utterance.

⁷Certain other assumptions in Darby’s paper imply a belief in the Tooth Fairy as well.

⁸Widdershins (2004) devoted her Ph.D. dissertation to an attempt to explain this phenomenon. Judging by her recent e-mails (Widdershins, pc, 2005-6) her struggle for sanity has now become a desperate rearguard defence.

but boring. For another view we can turn once again to Darby (1993), who assumes a massive wave of Anglophone Australian immigrants in the late nineteenth century. The present researcher prefers the more conservative approach of ridiculing both Turnpiker and Darby without suggesting any alternatives.

Sadian vowels have no nasality distinction either phonemically or as a result of assimilatory processes.⁹

Returning reluctantly to the syllabic non-vowels, we find that they are all fricatives.¹⁰ An interesting feature of these phonemes is that there is partial but not total overlap with the purely consonantal fricatives. The syllabics /β z ʒ χʷ/ do not appear in the consonant inventory; furthermore, /χʷ/ is the only labialized fricative in the language.¹¹ They are generally pronounced with a high-rising tone; this tone, however, is in younger speakers apparently subject to complex interactions with the diphthong tones. At least one of these interactions, by which the high-rising tone on the syllabics becomes a mid-rising tone when it adjoins the high-falling tone of the monophthongized /œʊ/, is characterized by many older Sadophones as “Satan’s pronunciation” <HHOYCT HHAM> [ɲœʃt ɲʔʰam]. The other interactions are still imperfectly understood.

3.2. Phonotactics

Sadian syllable structure can be described as C_mVC_n, where V is a vowel, diphthong or triphthong of any length, and *m* and *n* are numbers ranging from zero to eight. In practice, onsets of more than five consonants are relatively rare, as are codas of more than four. Students of the language should glean what comfort they can from this fact. One area of controversy is how to analyze syllables such as /vjltʃɛkbʰl/

‘interior surface of a birch bud’, which do not so much violate the Sonority Sequencing Hypothesis as tear it to bits and stamp on it.

The large number and variety of consonant clusters occasionally presents a challenge in identifying instances of syllabic non-vowels. For example, in the word /ʃtʒvɔ/ ‘swim-bladder’, how are we to tell whether the /z/ or the /v/ is the syllabic nucleus? Research on this matter is continuing; Darby (forthcoming) is apparently preparing to claim that sequences like /zv/ are consonantal diphthongs.¹² Futaba (2006) remarks offhand that study of Sadian phonotactics has so far claimed the lives of two of his graduate students, and his department is considering the creation of a mandatory waiver for all those wish to pursue this area of investigation.

3.3. Prosodics and Suprasegmentals

Stress in Sadian is partly lexical, but is strongly tied to syntactic category, lexical tone and other factors. In general, nouns are stressed on the first syllable of the root unless that syllable contains a syllabic non-vowel, in which case stress shifts to the following syllable; if there is no following syllable, the solution is insertion of an additional, and stressed, schwa.¹³ Verbs, however, are stressed on the penultimate syllable, if there is one, with the exception of verbs borrowed from Russian, which are stressed on the syllable preceding the stressed syllable of the Russian original. Adjectives are stressed on whichever syllable bears the lowest tone, or, if the tone contour is level, on the ultima. Adverbs, conjunctions, and adpositions are unstressed, which has characteristically led Darby (1993) to consider them to be clitics.¹⁴

⁹ As Ms. Slkhtvchyes explains, [bv'ɑm ʃɪʃtɔ' tʰy: ʏəʃ'ɛʔɛ ɔ'tto], ‘We keep our noses out of our speech and so should you.’

¹⁰ Researchers who wish to try to articulate a syllabic plosive will not meet with any opposition from this quarter. Indeed, the suffocation likely to ensue will reduce the current intense competition for grant money.

¹¹ Ms. Slkhtvchyes characterized this sound as [ɬyaokp], ‘punishment.’

¹² He would.

¹³ “So, I say we aska everyone in the house if they gotta the picture.”

“What if no one has it?”

“Then we aska everyone in the house next door.”

“What if there is no house next door?”

“Well, then we gotta build one!” (Marx, Marx, Marx & Marx, 1930)

¹⁴ Mind you, Darby also considers the Maastricht Treaty to be a clitic.

All of these generalizations are rife with exceptions, of course, or, in the case of verbs, exceptions to the exceptions.¹⁵

This level of complexity has meant that the study of Sadian foot structure has advanced at a pace more usually associated with slime molds. All that can be said with confidence at this point is that if, indeed, Sadian has feet, they resemble Lord Byron's.

Sadian tone, as has been hinted already, is complex. All vowels bear a lexical tone, of which there are eleven: high (55), mid (44), low (11), high-rising (45), mid-rising (35), high-falling (52), mid-falling (31), low-falling (21), rising-falling (253), falling-rising (524), and ululating (52525). This last, for beginning speakers, may be simulated with a hand-held police siren. The tones are not indicated in Sadian orthography.¹⁶ They are left unmarked in this paper as well, not because they are not significant (they are) but because they are annoying.

In addition to lexical tone, tone is used morphologically, being overlaid on the underlying lexical tone and obscuring it as completely as a cloud of squid ink. An intriguing series of pro-forms are tonal in nature: thus a falling-rising tone on a verb indicates that its subject is coindexed with the subject of the last verb but one, and a rising-falling tone indicates that the verb is to be understood as second person plural, even if it otherwise marked for singular.¹⁷

¹⁵ Nouns referring to parts of the body or scientific disciplines, for instance, have primary stress on the penult, and secondary on the first syllable, while complementizers bear strong stress on the final syllable on Friday, or if the moon is gibbous. Verbs are somewhat more complex.

¹⁶ On the other hand, the Sadian digraph IOЯ, which never has any segmental realization, may play a role in indicating tone. As Ms. Slkhtvchyevs noted, [ʔʒm ʂəʔ tsʰiʃʃgyao ju ja uapstvi dantɬ ʎəbjɪŋktʃs] – “since IOЯ is silent, why not use it for all the tones?”

¹⁷ The nature of this situation would be better understood if the relevant elicitation session had not been interrupted by our lunch break.

4. Morphosyntax

4.1. Nominal elements

The Sadian noun and pronoun¹⁸ are inflected for eight and a half cases.¹⁹ There are four genders (traditionally called masculine, feminine, common and uncommon) five numbers (singular, dual, paucal, plural and innumerable), and six classes of nouns, four of adjectives, and two of pronouns; pronouns must agree with their referents in gender, number, and case, but not class. (The two pronoun classes combine with the six noun classes to create eleven subclasses.²⁰) Adjectives, however, never agree with the nouns they modify, and in fact actively oppose them. All noun and adjective categories are indicated by suffixes, except Noun Class 9, indicated by the prefix *ḏḡḏp-*, and feminine gender, indicated by the transfix *ḡ-ḡ-ə*.²¹ Consider the following examples:

(4a) [ɸf øitχ^wd
3SG.GEN.MASC.C4,2 pastry.DIM.PAUC.COM.C1
d̥əd̥ətʃstʃ]
ugly.PAUC.COM.UNC.C3
'his few ugly doughnuts'

(4b) [3øf̥ø 3øff̥ø
useless.turn.3INN.NML.GEN.COM.C6 work.NEG.GEN.C3
3øf̥ø]
3INN.ERG.UNC.C1.2

¹⁸ Except for those pronouns that only exist in underlying form, of which more below.

¹⁹ Nominative, ergative, accusative, genitive, ablative, dative, allative, elative and semicausative. The last is used in some cases.

²⁰ There are eleven subclasses rather than twelve because it is taboo to use a Class 2 pronoun to refer to a Class 5 noun. For full documentation of this phenomenon, see Mittenloop (1999).

²¹ This transfix is generally placed with the two consonants flanking the initial syllable's onset while the schwa does an end-run past the coda of the final syllable.

‘The whole lot of them are unemployed turnstile operators.’

As previously mentioned, Sadian’s basic sentence order is OSV. However, the language is not only exceedingly rich in pro-forms but also strongly pro-drop, so that often so few constituents of a sentence are present at the surface that it becomes very difficult to say anything meaningful about sentence order.²² In fact, in our analysis it is occasionally necessary to treat entire utterances as solely underlying, so that silence (often accompanied by gestures and grimaces) can be treated as a valid surface form. Consider the following data, where parentheses indicate deleted pro-forms:

(5) [gi:.dzyaoʒ qɣam mvd.i]
 (3S.F.ACC) PAST+NEG.kiss+INCEP.3S.SG (before) thirty year.PL
 ‘He stopped kissing her thirty years ago.’

(6) [tɣ^wp kœppʌ]
 (3S.F.ABL) (3S.N.ACC) buy (FUT) never (INT.NEG)
 ‘Won’t he buy it from her?’

(7) [() () ()]
 (3DEM.SIM+ADV) (3DEM.ACC) (do+3S.M.NOM)
 ‘He does that like that.’

Having considered them, throw them away.

4.2. Verbal elements

Verbs in Sadian are highly synthetic.²³ The Sadian verb shows agreement with its subject, direct object, indirect object, and the phase of the moon.²⁴ However, all these agreement markers can optionally be

dropped if they are obvious in context.²⁵ In fact, this is the usual situation: often a verb consists of nothing more than a root, or occasionally, not even that.

There are six classes of verbs: active, passive, neuter, middle, charm and strange.²⁶ Active and passive need no further explanation (an unusual situation in Sadian) except that they are not voices as ordinarily understood, but lexical subcategories. Active verbs cannot be passivized; rather, an active verb must be replaced with a passive verb that has a corresponding meaning:

(8a) [hmβfi θskrutst
 pig.ACC.COM.C5 man.NOM.MASC.C6
 qɣt[əŋm]
 eat.PAST.3OBJ.3SUBJ.FULL
 ‘The man ate the pig.’ (utterance at full moon)

(8b) [hzβfi θskruifi
 pig.ABL.COM.C5 man.NOM.MASC.C6
 rərərərə]
 be eaten.PAST.3SUBJ.FULL
 ‘The man was eaten by the pig.’

(9a) [kpvd maətɿi]
 reservoir.ACC.UNC.C1 fill.FUT.3OBJ.1SUBJ.CRES
 ‘I will fill the reservoir.’ (utterance at crescent moon)

²² Darby (1999) suggests that the pro-drop tendencies of Sadian were borrowed from Japanese after Gorbachev’s relaxation of Soviet import laws.

²³ Futaba (2006) found that on average, they contain over 75% polyester.

²⁴ See footnote 12 on stress. Paste it here too, if you wish.

²⁵ Context being a concept as elastic as a politician’s integrity, it will not be defined here.

²⁶ This nomenclature was devised by Wrocławski (1974) after an all-night drinking session with Richard Feynman.

- (9b) [kpvyd tuulstɲi]
 reservoir.NOM.UNC.C1 be filled.FUT.3OBJ.1SUBJ.CRES ‘I will
 drink the reservoir.’ (Lit., I will be filled by the reservoir.)

We now turn to middle and neuter verbs. The scope of this article does not permit me to explain the distinction between the two, nor would I if it did.²⁷ Let examples of each suffice:

- (10a) [kpvyd sɒti]
 reservoir.ABL.²⁸UNC.C1 **fill.FUT.1SUBJ.CRES**
 ‘The reservoir will fill.’
- (10b) [kpvyd tɕʰujti]
 reservoir. NOM.UNC.C1 **be full. FUT.3SUBJ.CRES**
 ‘The reservoir will be full.’

The verb of (10a) is neuter; that of (10b) is middle. Note that the four verbs of (9) and (10) are typical in that four verbs with identical lexical semantics are represented by entirely different phonological forms. Bunsocket (2008) suggests that all Sadian verbs are marked with one of four voice morphemes, each of which is invariant but also phonologically null.²⁹ This claim led one of his graduate students to joke with a Sadian consultant to the effect that Sadians always speak in low voices.³⁰

²⁷ Neuter verbs are those that in traditional grammars have been referred to as middle; middle verbs are those that have been referred to as neuter.

²⁸ The subjects of neuter verbs invariably take the ablative case, with the exception of neuter verbs of motion, whose subjects take the ergative case, except for the very common verb set meaning ‘become while going’, whose subject takes the semicausative case in the present tense and the allative case in the past.

²⁹ .

³⁰ The student was apparently set upon and stoned the following day, an outcome for which Bunsocket must bear a certain measure of responsibility.

There is a subclass of auxiliary verbs which have attitudinal interpretation. However, unlike most languages with such a system, Sadian attitudinals do not indicate the attitude of the speaker toward the situation described by the clause, but rather the inferred attitude of the listener. These auxiliaries are for the most part derived from adpositions, with the exception of *ɕxii* ‘despective’, which is apparently derived from the noun *jeɕxi-i* ‘little parsely frog’. Let the examples in (11) whet the reader’s appetite for the moment.

- (11a) [tɕʰroy tɕʰyffi]
 walnut.ABL.FEM.C3 eat.while.drinking.PRES.1SUBJ.QTR
- ɕxii]**
DESP
 ‘I am eating some of the walnuts while drinking (and you despise me for it, don’t you?).’ (utterance at quarter moon)
- (11b) [((θskruiɸi
 (3DEM.SIM+ADV) (3DEM.ACC) man.NOM.MASC.C6
- (**kcau]**
 (do+3S.M.NOM) **HUM**
 ‘That man does that like that (and I bet you find that funny).’

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