

**Classification of Verb Morphology in Sangesari: Insights into the
Grammatical Patterns of an Endangered Language**

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Abstract

This study presents a paradigmatic description of the Sangesari verbal system, and explores the implications for language learning. Phonological features including consonants, vowels, syllable structure, and stress patterns are briefly described. Syntactic categories, such as nouns, pronouns, adjectives, and adverbs, are also discussed. The research reveals three paradigm classes for the past tense and a single paradigm for the present tense within the Sangesari verb system. Moreover, it highlights markings for phi-features, tense (present and non-present), aspect (progressive, perfect, double-perfect and imperfect), and mode, providing insight into Sangesari verb morphology. Based on these findings, recommendations are provided for effective language learning. Learners are encouraged to focus on mastering the complex verb morphology of Sangesari through practices such as verb stem formation, recognition of tense and aspect features, and contextual usage. By focusing on verb structure, learners can build a strong foundation for proficiency in Sangesari.

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Abbreviations¹

1	First person	NPRS	Non-present
2	Second person	OBJ	Object
3	Third person	PL	Plural
ABL	Ablative	PP	Prepositional phrase
ACC	Accusative	PRF	Perfect
ADVP	Adverbial phrase	PRF2	Double-perfect
C	Consonant	PRS	Present tense
DAT	Dative	PST	Past tense
DUR	Duration	SBJ	Subject
F	Feminine	SG	Singular
fas	Persian	sgr	Sangesari
IPFV	Imperfective	SVC	Serial verb construction
INF	Infinitive	V	Verb
M	Masculine	VP	Verb phrase
NP	Noun phrase		

¹ All abbreviations in glosses are based on the Leipzig Glossing Rules unless noted otherwise.

Chapter 1: Introduction

1.1 Sangesar (Mahdishahr)

Sangesari [sæŋgəsəri] (also pronounced as Sangisari [sæŋgisəri] and Sangsari [sæŋsəri]) belongs to the northwestern Iranian branch of the Indo-European language family (Dabir Moghaddam, 2013). Sangesari is mainly spoken in ‘Mahdishahr’. Mahdishahr is a recent name which is interchangeably but less commonly used to refer to Sangesar (the location) (Mohammadi, 2018). Sangesar is one of the cities of Semnan which is located on the southern slopes of the Alborz mountains. Sangesar is 15 kilometres away from Semnan and 6 kilometres from Shahmirzad and Darjazin.

According to the last census in 2016, Sangesar has population of 24,485 people in 7,679 households. The number of its population decreased during the summers due to their jobs, because the Sangesari people were mainly nomads, and they need to pasture their sheep. The people of Sangesar were mainly nomads who relied on livestock (Teedadi Sangesari, 2002). Typically, they would settle in Sangesar from September to March and migrate to the Alborz Mountain with their tribes in summer season. Sangesari people are considered the most important tribe of the Alborz Mountain region and have the longest nomadic path among all nomadic tribes of the Iranian plateau (Teedadi Sangesari, 2002).

Figure 1. Map of Sangesar2



1.2 Sangesari Language (ISO code: sgr)

Sangesari is spoken by the residents of Sangesar and Darjazin. According to the latest census in 2006, the number of native speakers of Sangesari was 36,000 (Lewis et al., 2013). Based on the language vitality scale, Sangesari is a language at risk (Grenoble and Whaley, 2005). Hajjalian stated that the number of Sangesari speakers is beginning to shrink (personal communication, 2022). Sangesari is used mostly by adults aged 35 and older but not by younger parents. Sangesari is threatened, but the threatened status of Sangesari is not widely recognized,

² Among the residents, the usage of 'Mahdishahr' is common, and scarcely does anyone use the term 'Mehdishahr'. Interestingly, maps and texts consistently refer to it as Mehdishahr.

and it is omitted from UNESCO's 2010 *Atlas of the World's Languages* book (UNESCO, 2010, <https://unesdoc.unesco.org/ark:/48223/pf0000187026>). According to Ethnologue.com, a widely used language database, there is an explicit statement asserting the stability of the Sangisari (Sangesari) language, claiming its usage by every member of the community (<https://www.ethnologue.com/language/sgr/>). However, it is crucial to note that I do not validate this statement. Although it is the language of my grandparents, I am not a speaker, and my situation is not uncommon in my generation. Accordingly, I do not agree that the language is stable. Any language that is not learned as a 'mother tongue' by at least 30% of a community's children needs to be considered seriously 'endangered' (Hallett et al., 2007).

Figure 2. Sangesari among the Iranian Languages (Windfuhr 2009, p.11)

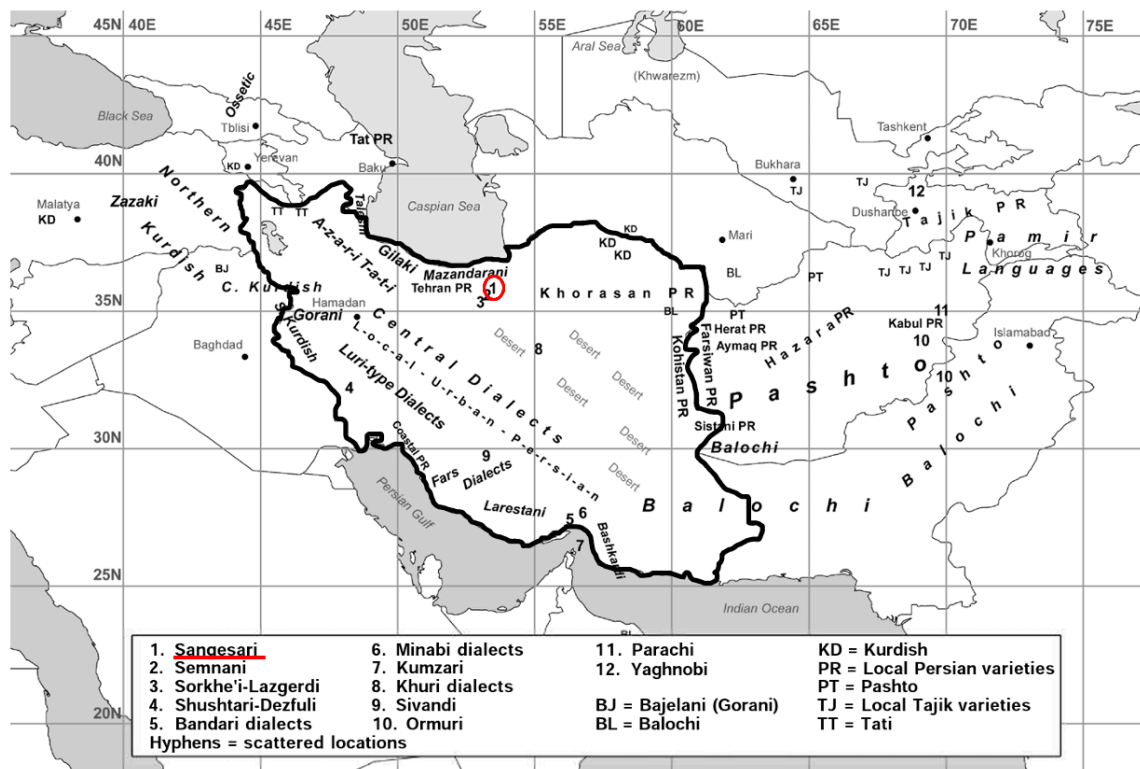
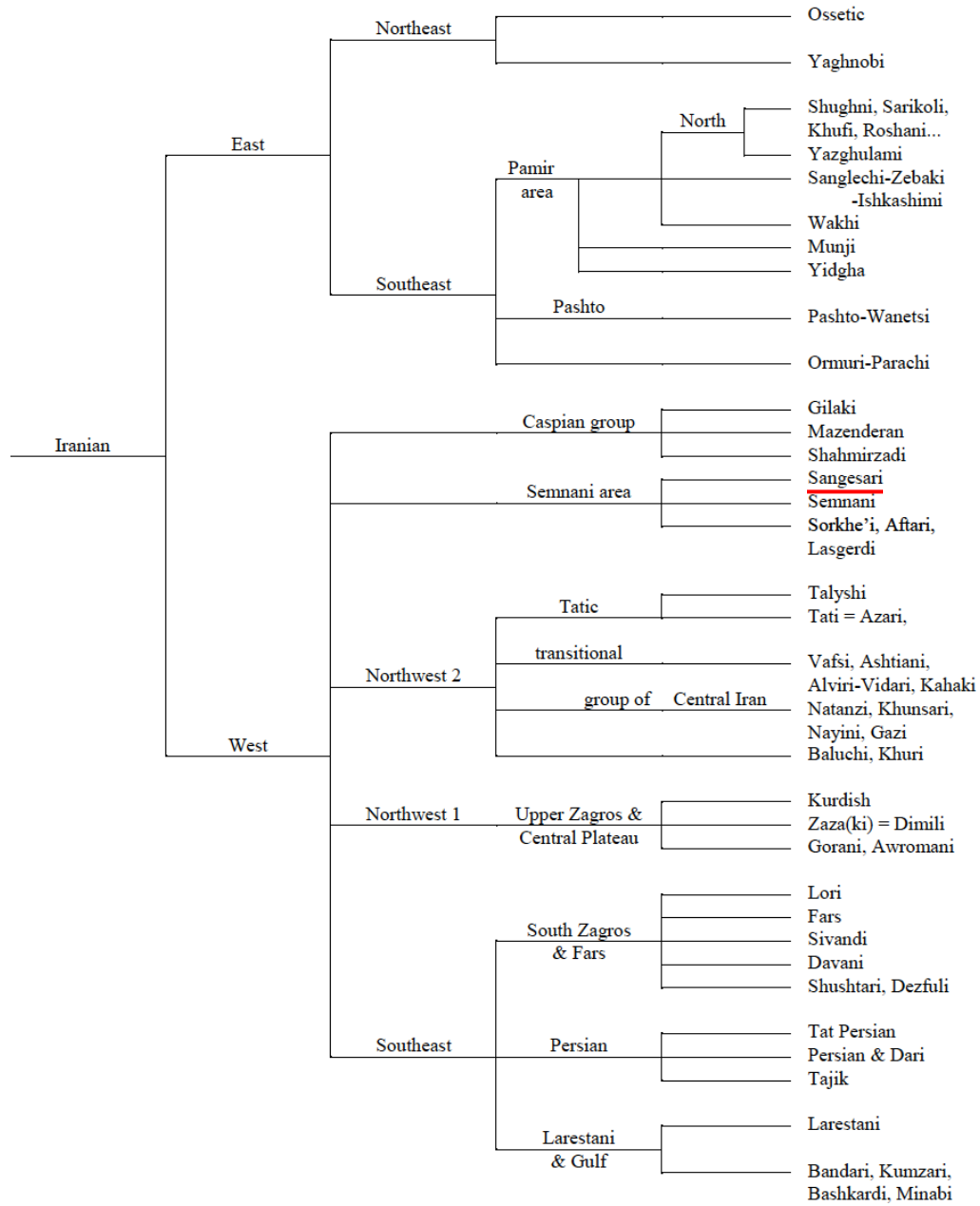


Figure 3. Sangesari in classification of the Iranian language

Classification of the New Iranian languages (Windfuhr 2010, 12–15)



1.3 Objectives and Significance of the Study

Nowadays, in many parts of Iran, with the increasing expansion of urbanization, many customs and traditions of rich local cultures and languages are in danger of disappearing. Therefore, we must invest effort to avoid losing these valuable treasures. One of the best ways to preserve these rich cultures is to preserve their languages. Sangesari, like all natural languages, reflects the culture of its native speakers and residents. There are specific words that lack exact equivalents in other languages. These words are mainly cultural and historical ones that reflect the culture and intellectual diversity of the city and its people. When people think of an endangered language, they often think of the culturally specific words. In the context of teaching endangered languages, instructors often impart a lexicon comprising culturally significant words. However, without acquiring knowledge of verbs, learners cannot effectively utilize the language, hindering their ability to sustain proficiency in it. Hence, verbs play a central role in constructing clauses and sentences, and the continuity of a language relies on new speakers mastering the verbal system (Gentner, 1981; Tanenhaus et al., 1993; Hirsh & Golinkoff, 2006). Therefore, the primary objective of this study is to provide a comprehensive description of the verb structure of the Sangesari language. This thesis aims to create a description of verb paradigms for the benefit of future language researchers as well as future speakers. To date, there are no extensive studies on Sangesari verb paradigms. Unlike its neighboring language, Semnani, Sangesari has remained under-documented in case of verbs and only mentioned in the literature briefly. I, as a heritage speaker of Sangesari, am motivated to contribute to the field of linguistics by addressing this gap in the literature through this work.

Despite being a distinct language, not mutually intelligible with Persian, Sangesari is often considered by many of its speakers as a dialect of Persian, due to the lack of extensive

research on the language. Before discussing speakers' notion of language, it would be wise to first define what constitutes a language, and what is a dialect. Dialects are typically considered as non-standard versions of a particular language. When differentiating between a language and a dialect, the primary linguistic criterion is mutual intelligibility: if speakers of two language varieties can communicate, then it is a dialect; if not, then the distinction leans toward separate languages (Mesthrie 2006, cited in Anttonen, 2017). Since the ordinary people of that area are not linguists, and they do not know the differences between a language and a dialect, they tend to consider it a dialect of Persian, the official language of Iran. Sangesari and Persian are linguistically related. They share some features, vocabulary, and grammatical structures (Sabbaghian, 2009); hence, this leads speakers to consider their language as a dialect due to these similarities. On the other hand, insufficient comprehension regarding linguistic distinctions can cause the perception that one language is a version of another, particularly when academic investigations are limited. I aim to clarify this misconception by introducing Sangesari as a language and highlighting its unique features by illustrating its differences from Persian through this study, which specifically focuses on the verb structure of the language. The availability of materials such as this thesis will facilitate a better understanding of Sangesari verbs among its learners. Native speakers can use this as a basis for more extensive linguistic work, which can further advance the study of Sangesari verbs. Furthermore, this thesis emphasizes the importance of preserving the Sangesari language for future generations. With the availability of materials such as this study, future learners can have access to description of verb paradigms and other linguistic structures, facilitating a better understanding and appreciation of their language. In addition, Adult Language Learning, which has been successful in recent revitalization efforts in North America (Hinton, 2011), requires structurally informed documentation in the creation of

language learning materials. Sangesari has not yet reached the point where A.L.L. is necessary, but in case it does, this thesis will be a very important study.

1.4 Methodology

This section presents the information regarding the process of data elicitation and analysis. To gather data on Sangesari verb forms, four Sangesari native speakers aged between 55 to 88 years old were interviewed. All native speakers were raised in monolingual Sangesari homes and had never left the province for a long period of time. All consultants were audio recorded or interviewed through the phone and online applications such as Skype, WhatsApp, and Facetime.

The research was discussed with the consultants, and they agreed to cooperate in this project. This study was granted ethical approval in June 2022. The ICEHR Reference number is 20222712. The consultants were provided with the Consent Forms to sign and then the forms were translated into English. A confirmation letter was also obtained from the Cultural Heritage office of the Sangesari community.

For the interviews, I spoke with them through video calls and asked them to translate specific sentences from Persian (the dominant language) to Sangesari and vice versa. Also, the participants were asked to respond to questions in Sangesari using various tenses and in different contexts and timeframes. With their permission, most interviews were recorded, and I asked questions while taking notes. All elicited data has been classified in Google Sheets. The interviews lasted approximately 15-20 minutes, and there were 12 interviews in total.

A few additional sources of data were video files recorded in Sangesari and released through social media or TV programs³, and from some books that contain vocabulary, grammar, songs, idioms, proverbs, and folklore stories written in Sangesari (such as Sabbaghian 2013, Azami and Windfuhr 1972, Hajialian 2020, 2018, 2017, 2016 & 2015, and Teedadi Sangesari 2002). These publications were used as additional sources of verb forms and were important sources of information.

1.5 Theoretical Background

All the collected data is analyzed through a descriptive and qualitative approach. As mentioned in the previous section, the aim is to present the structure of the verb in this language. Since previous works have only briefly discussed this topic, this is the first attempt to document Sangesari verb paradigms. This thesis draws on the following theoretical and methodological works such as Hewson & Bubenik (1997), Botne (1981) and Harrison, Rood & Dwyer (2008). The definitions of terms are taken from various linguistic works such as Payne (1997). My thesis discusses paradigms within the framework of Generative Grammar and use terms (Noun Phrase, Verb Phrase, etc.) drawn from Chomsky (1957, 1965), while avoiding further technicalities to keep it accessible to readers from other linguistic backgrounds. The goal is to build the foundation of a verb paradigm dictionary akin to those found in the Barron series, such as ‘201 Japanese Verbs’ (Lange, 1998).

³ https://t.me/zabane_sangesari
<https://t.me/dechekhabar>

1.6 Review of Related Literature

To date, there have been no studies which are mainly focused on Sangesari verb structure. However, Azami and Windfuhr (1972) published a dictionary of Sangesari with a grammatical outline, Sabbaghian (2009) provided some information about phonological, morphological, and syntactic structures, Rezapoor & Abdollahi (2018) analyzed word order in Sangesari from a typological perspective, Jamaledin (2013) discussed word formation, and Mohammadi (2018) focused on documenting the lexicon of Sangesari and published a trilingual dictionary of Sangesari through SIL. Despite this documentary research and the current risk to the language, there is still no study specifically on verb documentation.

1.7. Limitations

The thesis consists of two main parts. The first part provides an overview of Sangesari language, while the second part focuses on the verb classes. The study analyzes the structure of Sangesari verbs with a detailed discussion of phi features (i.e., person, number, and gender agreement), tense, and aspects. However, mood and complex properties, such as the subcategorization of verbs (i.e., argument and complement structure) are not included. Due to the time constraints of the master's program and the limited number of consultants, there may be certain aspects that only native speakers can comprehend and are not extensively discussed in this study. Moreover, the COVID-19 pandemic limited the recruitment of more consultants, and thus, all the data were elicited from only four native speakers. Also, the oldest consultant did not feel comfortable being interviewed online due to a hearing problem. Nonetheless, it is expected that this study will be useful for future researchers interested in studying Sangesari language,

which will contribute to the linguistic studies on Iranian endangered languages as well as further efforts to revitalize them.

1. 8 Structural Organization of the Thesis

The thesis is outlined as follows: Chapter 2 describes an overview of the language and discusses the phonological, morphological, and syntactic structure of Sangesari. In Chapter 3, Sangesari classes of verbs are addressed. I also introduce Sangesari verb structure. Then, I describe tense, aspect, and phi feature agreements in Sangesari. Additionally, I discuss verb stems in this chapter. Lastly, in Chapter 4, I summarize the findings and implications, discuss the recommendations for effective L2 learning, followed by answering the research questions based on the results and findings in Chapter 2 and Chapter 3.

Chapter 2: An Overview of the Language Structure

In this chapter, I introduce the background relevant to the current study. I begin section 1 with an overview of the Sangesari phonological system, followed by morphological system in section 2 and syntactical structure in section 3.

2.1 The Phonological System of Sangesari

In this section, I introduce the phonological system of Sangesari. I begin with the phoneme inventory of the language. Then, I describe its syllable structure and stress patterning.

2.1.1 Phoneme Inventory

2.1.1.1 Vowels

As represented in Table 1, there are eight distinct vowels in Sangesari /i, e, a, u, o, ɑ, ə, ʊ/ (Sabbaghian, 2009; Ghanian, 2013). The vowels are categorized into three groups based on vowel quality; a pair of front vowels e/i, two pairs of back vowels a/ɑ and o/u, as well as two central vowels which do not form a pair, /ə/ and /ʊ/. There are also five diphthongs in this language, including /ɔɪ/, /aɪ/, /ɑi/, /eɪ/ as well as the most common diphthong in the language, /oʊ/ (Sabbaghian, 2009).

⁴ Due to lack of data, I cannot confirm the existence of /ʊ/ and /ə/ in Sangesari. However, following my primary source for this section (Sabbaghian, 2009), I mentioned these two vowels in the vowel inventory.

Table 1. Sangesari vowel inventory

	Front		Central		Back			
					Unrounded		Rounded	
	short	long	short	long	short	long	short	long
Non-low	e	i		ɯ			o	u
Mid			ə					
Low					a	ɑ		

The examples in 1 provide minimal pairs attesting to the phonemic status of some of these vowels (Sabbaghian, 2009)

(1) Minimal pairs involving Sangesari vowels:

- e/ə /ke/ ‘house’ /kə/ ‘one’
u/ɯ /dune/ ‘whey’ /dɯne/ ‘rice’
o/ɯ /lor/ ‘from Lorestan’ /lɯr/ ‘a type of dairy’
ɯ/a /tɯm/ ‘seeds’ /tam/ ‘cooked rice’

Because vowels will not be studied in detail, I leave all other details aside for the purpose of this thesis.

2.1.1.2 Consonantal Phonemes and Allophones

The consonant inventory of Sangesari is like Persian consisting of 23 consonants (Samareh, 1977; Sabbaghian, 2009). The classification of Sangesari consonants, according to place and manner of articulation, is given in 2, in addition to voicing contrasts among obstruents.

Table 2. Sangesari consonant inventory

	Bilabial	Labio-dental	Dental-alveolar	Alveolar	Alveo-palatal	Velar	Uvular	Glottal
Stop	p b		t d			k ⁵ g	q	ʔ
Fricative		f v		s z	ʃ ʒ		χ	h
Affricate					tʃ dʒ			
Nasal	m			n				
Glide						j		
Trill				r				
Lateral				l				

As shown above, Sangesari has 18 obstruents, which consist of eight stops /p, b, t, d, k, g, q, ʔ/, eight fricatives /f, v, s, z, ʃ, ʒ, χ, h/, and two affricates /tʃ, dʒ/. All obstruents except the uvulars /q/ and /χ/ and laryngeals /h/ and /ʔ/ have voiceless/voiced counterparts. Sangesari also displays the five sonorants /j, l, r, n, m/.

2.1.2 Syllable Structure

The Sangesari syllable template is CV(C)(C), with an obligatory consonantal onset followed by an obligatory nucleus consisting of a vowel (Sabbaghian, 2009). The nucleus may then be followed by a single tautosyllabic coda consonant, which is sometimes followed by another consonant (see table 3).

⁵The velars [k] and [g] alternate allophonically with the palatals [ç] and [j], respectively. However, the issue of which variants are underlying is controversial. Some scholars consider the velars to be underlying (Hall 2007; Mahootian 1997; Zarifian et al., 2015), while others consider the palatals as representative of the underlying phonemes (Bijankhan 2018; Hansen & Myers 2017; Pisowicz 1985). In Sangesari, I followed Sabbaghian (2009) who considered velars as the underlying phonemes.

Table 3. Sangesari syllable structure

Syllable template	Example
CV	/vo/ ‘water’
CVC	/tar/ ‘wet’
CVCC	/vist/ ‘twenty’

Similar to Persian, syllable onsets are obligatory in Sangesari, given that underlyingly vowel-initial words must begin with a [ʔ] in surface representations. Examples include /orsu/ [ʔorsu] ‘bride’. Sangesari does not allow word-initial clusters (Sabbaghian, 2009). All the consonants of the Sangesari phoneme inventory can appear in syllable-initial and syllable-final positions, and there is no restriction on which consonants may appear at the end or initial of a word.

2.1.3 Stress

In Sangesari, as in Persian, the stress is placed on the rightmost syllable in nouns (both in singular and plural forms), adjectives, and most adverbs (Sabbaghian, 2009). In Persian stress is word final in simple nouns, derived nouns, compound nouns, etc. (Mahootian, 1997). In Sangesari, stress in verbs remains on the root for the past tense verbs, and the attached affixes do not affect stress, while in present tense, stress stays on the rightmost syllable (Sabbaghian, 2009). A distinct pattern for stress placement in verbs for Persian language supports this idea for Sangesari verbs too. For non-prefixed verbs, the proposed rule is called ‘End Rule Right’, indicating that stress tends to fall on the rightmost syllable. However, for prefixed verbs, there is a different pattern called ‘End Rule Left’, suggesting that stress in these cases tends to be on the left side, away from the end of the word. This provides a clear distinction between how stress is

placed on verbal and non-verbal elements within the Sangesari and Persian language (Amini, 1997). The stress in past imperfective verbs is always located on the prefix *mi-* (the durative marker) (Sabbaghian, 2009). Moreover, there is a similar argument in Persian. Verbs with durative marker *mi-* are exceptional in Persian, as seen in example like '*mi.χor.e* 'she/he eats'. Despite the expectation for the main stress to fall on the second syllable **mi.χor.e* to skip the *-e* and go to the root, this does not happen. Instead, in all verbal forms involving the durative marker *mi-*, stress consistently falls on the durative marker itself. This stress pattern is also evident with other markers such as the subjunctive marker *be-* and the negative marker *na-/ne-* (Kahnemuyipour, 2003). Examples of some of these arguments in Sangesari are provided in (2):

(2)

word	Gloss	stress pattern	Part of speech
/χak/	'sister'	'σ	noun
/χa. 'kun/	'sisters'	σ 'σ	noun
/'gol/	'flower'	'σ	noun
/gol. 'ab/	'rose water'	σ 'σ	noun
/gol. ab. 'dun/	'flower pot'	σσ'σ	noun
/χa. 're/	'good'	σ'σ	adjective
/χet. 'te/	'bad'	σ'σ	adjective
/be. 'pat/	'she cooked'	σ'σ	verb (past)
/be. 'nest/	'he sat'	σ'σ	verb (past)
/be. ' fu.ji/	'I went'	σ'σσ	verb (past)
/ fun. 'di/	'I go'	σ'σ	verb (present)

/mun.en. 'di/	'I stay'	σσ'σ	verb (present)
/ter.sen. 'di/	'I fear'	σσ'σ	verb (present)
/'mi. fu.je/	'you were going'	'σσσ	verb (past, imperfective)
/'na. fu.ji/	'I didn't go'	'σσσ	verb (past, negative)

This completes my overview of the Sangesari phonological system. In the next section, I will summarize the morphological sketch of Sangesari.

2.2 The Morphological Sketch of Sangesari

In this section, I discuss the morphological structure of lexical categories in Sangesari. I begin with nouns and introduce various types of nouns and pronouns existing in this language. Then I discuss the verb structure in the verb section. And lastly, I discuss the adjectives and adverbs followed by their examples.

2.2.1 Types of Nouns

Various types of nouns exist in Sangesari such as proper noun, common noun, count noun, mass noun, etc. (Sabbaghian, 2009). In the following examples, I illustrate the most common types of nouns that exist in this language:

Types of nouns	Word	Gloss
proper noun	<i>'Irun'</i>	'Iran'
common noun	<i>'hejvun'</i>	'animal'
count noun	<i>'livun'</i>	'glass'
mass noun	<i>'daste'</i>	'group'

A proper noun is a unique name given to identify and specify persons, places, or things.

Proper nouns often represent specific names (Payne, 1997), such as people’s names (e.g., John, Sarah) or geographic locations (e.g., Sangesar, Iran). Common nouns refer to a class or collection of entities like town, continent, tree, etc. (Anderson, 2007). Languages often distinguish between count nouns, referring to countable items, and mass nouns, which refer to materials like water, sand, air, wood, etc. In Sangesari, like English, mass nouns typically do not pluralize. Furthermore, count and mass nouns exhibit distinct but partially overlapping features (Payne, 1997). It is worth mentioning that even for count nouns, the explicit marking of plural is optional rather than obligatory: *vist mallem* ‘twenty teacher(s)’.

There are many languages that have a noun classes system, sometimes referred to as grammatical gender (Payne, 1997). Sangesari also has a noun class system. Nouns are classified into two categories in Sangesari: feminine and masculine. Masculine nouns refer to male humans, inanimate objects and plants. Feminine nouns refer to female humans and animals. This classification system reflects both gender and animacy distinctions, which can vary across languages. The following table illustrates this system more clearly:

Table 4. Gender Classification in Sangesari

Category	Masculine	Feminine
Humans	male humans	female humans
Animals	-	animals (regardless of sex)
Plants	plants	-
Inanimate objects	objects	-

Below are sample sentences demonstrating how gender classification is applied in the language:

(3) Feminine

(a) reva	qeza	χun- da
cat	food	eat-F

‘ The cat eats food’

(b) dudu	ʃikiri	bardam	nest- bu
pigeon		in front of the door	sit-F

‘ The pigeon was sitting in front of the door’

(4) Masculine

(a) yun	roz	χali	χof buy- a
this	rose	very	fragrant is-M

‘This rose flower is very fragrant’

(b) no	ke	χali	ʃakil- a
that- M	house	very	beautiful is- M

‘That house is very beautiful’

2.2.2 Pronouns in Sangesari

The classes of pronouns in Sangesari are recognized as personal, demonstrative, interrogative, reflexive and indefinite pronouns (Sabbaghian, 2009). Acquiring pronouns is essential because they are closely linked to the verb morphology (Bock, Eberhard & Cutting, 2004). When we acquire this knowledge, it assists us in comprehending the fundamental principles shaping sentence structure and the connections between various sentence components. The purpose of this research is to focus on verb structure in Sangesari; thus, it is worth mentioning some examples of nominative, accusative and genitive pronouns for more comprehensive understanding. In table (5), each type of pronouns is provided:

Table 5. Pronouns in Sangesari

	nominative	accusative/genitive
1 SG	a	ma
2 SG	to	ta
3 SG.M	na	ni
3 SG.F	no	ne
1 PL	ham	ham
2 PL	χα	χα
3 PL	enun	enun

I provided examples for each person to illustrate the pronouns. Examples (5) to (11) are nominative pronouns, (12) to (18) are genitive pronouns and (19) to (25) are accusative pronouns:

- (5) [(a) ketab χun-endi]
 (I) book read-1. SG. PRS
 ‘I read books.’
- (6) [(to) ketab χun-ende]
 (you) book read-2. SG. PRS
 ‘you read books.’
- (7) [(na) ketab χun-enda]
 (she) book read-3. SG. F. PRS
 ‘she reads books.’
- (8) [(no) ketab χun-ende]
 (he) book read-3. SG. M. PRS
 ‘he reads books.’

(9) [(**ham**) ketab χun-num]
 (we) book read-1. PL. PRS
 ‘we read books.’

(10) [(**χa**) ketab χun-nin]
 (you) book read-2. PL. PRS
 ‘you read books.’

(11) [(**enun**) ketab χun-nen]
 (they) book read-3. PL. PRS
 ‘they read books.’

As previously noted, in Sangesari, nominative pronouns are often optional. Here are the genitive pronouns:

(12) [jun **ma** ketab-a]
 this my book- is-3. SG. PRS
 ‘This is my book.’

(13) [jun **ta** ketab-a]
 this your book- is-3. SG. PRS
 ‘This is your book.’

(14) [jun **ni** ketab-a]
 this her book- is-3. SG. PRS
 ‘This is her book.’

(15) [jun **no** ketab-a]
 this his book- is-3. SG. PRS
 ‘This is his book.’

(16) [jun **ham** ketab-a]
 this our book- is-3. SG. PRS
 ‘This is our book.’

(17) [jun **ça** ketab-a]
 this your book- is-3. SG. PRS
 ‘This is your book.’

(18) [jun **enun** ketab-a]
 this their book- is-3. SG. PRS
 ‘This is their book.’

The structure below demonstrates that the accusative pronouns share the same paradigm as possessive pronouns (genitive):

(19) [na **ma-re** zang be-ze⁶]
 she me-to call PST-hit-3. SG. F
 ‘She called me.’

(20) [a **ta-re** zang be-ze]
 I you-to call PST-hit-1.SG
 ‘I called you.’

(21) [a **ni-re** zang be-ze]
 I her-to call PST-hit-1. SG
 ‘I called her.’

⁶ ‘zang beze’ is a light verb.

(22) [a **ne-re** zang be-3e]
 I him-to call PST-hit-1. SG
 ‘I called him.’

(23) [to **ham-re** zang be-3e]
 you us-to call PST-hit-2. SG
 ‘You called us.’

(24) [a **χa-re** zang be-3e]
 she me-to call PST-hit-1. SG
 ‘I called you.’

(25) [a **enun-re** zang be-3e]
 I them-to call PST-hit- 1. SG
 ‘I called them.’

However, in complement sentences or dative construction, the indirect objects are used as complements with three case markers as accusative, dative and ablative case respectively: [de], [re] and [mun]. This can be observed in the following examples:

(26) [(na) **ma-de** be-di]
 (She) me- ACC PST-see-3. SG. F
 ‘She saw me.’

(27) [(na) **ma-re** be-vat]
 (She) me- DAT PST-tell-3.SG. F
 ‘She explained for me.’

- (28) [(na) ma-**mun** entezar da]
 (She) me- ABL expectation have-3. SG. F. PST
 ‘She expected me to be there.’

2.2.3 Verbs

The most important lexical category of language is the verb because verbs have the main role in developing a sentence. Every sentence needs a predicate, and verbs are the commonest kind of predicate (Miller and Fellbaum, 1991). ‘The most sentences contain a verb, and the choice of the verb has a great deal to do with the use of other elements in a sentence’ (Crystal ,1985). Verbs carry the main semantic information in a sentence. Verbs are indispensable and not optional like nouns or adjectives. Subjects can be omitted from sentences, but predicates never can.

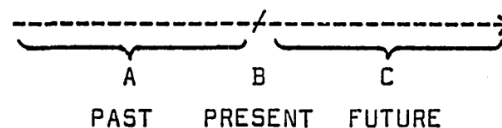
Verbs have unique distributional and structural properties. Distributional properties refer to words function in phrase, clause, and text. Structural properties are about the internal structure of the verb itself, such as tense, aspect, mood, and agreement (Payne, 1997). In this research, I will discuss the structural properties of the verb in Sangesari. In most languages, the verb changes to show number, person, gender, and tense/ aspect/ mood (Dryer, 2013).

2.2.3.1 Tense

‘Tense’ represents the grammatical location in time (Comire,1985). By this definition, we could examine to establish whether a morphological marking conveys a sense of temporal position and whether it truly belongs to the category of verbs. Eventually, a determination would be made regarding its classification as tense or not. The commonest tenses in languages are

Present, Past and Future (Comrie, 1976). The present tense illustrates a time that is simultaneous with the act of speaking (e.g., John sings); the past tense designates a time preceding the moment of speaking (e.g., John sang); and the future tense designates a time following the moment of speaking (e.g., John will sing). As tense establishes the temporal position of a situation in relation to the act of utterance, it can be denoted as deictic. The provided definition would allow us, for example, to state that the distinction between ‘John sang’ and ‘John sings’ in English pertains to tense, whereas the contrast between ‘John sings’ and ‘John is singing’ is not about tense but rather concerns ‘aspect’ (Comrie, 1985). Aspect and tense represent distinct concepts (Comrie, 1976). The present moment bridges the gap between the past and future. The major time division is illustrated in Figure 4 (Jespersen, 1931 as cited in Botne, 1981).

Figure 4. Major Time Divisions



Tense is about the location of the event in time. Verb structure behaves differently in different languages (Bhat, 1999). In most languages with inflections like Turkish and Persian, the verbs are the most complex words in a sentence, while verbs in some other languages like English follow a simple pattern structure (Payne, 1997). Tense in English verbs is commonly marked on the verb by a suffix, for example in the present tense, the subject represents the third person singular with ‘-s’ or ‘-es’ as in (29) and (30).

(29) she/he/ it works.

(30) she/he/ it goes.

The regular past tense is also usually marked by ‘-d’ or ‘-ed’ as in (31) and (32).

(31) she/he/ it lived.

(32) she/he/it worked.

Verbs in Sangesari mark tense and a detailed discussion of this aspect will be presented in the following chapter.

2.2.3.2 Aspect

The contrast observed in French between ‘il lisait’ and ‘il lut’, or in English between ‘he was reading’ and ‘he read’ does not revolve around tense. This is due to both cases conveying an absolute past tense (Comrie, 1976). Thus, we discuss aspect as separate from tense in this context. We emphasize distinctions like perfective and imperfective being treated as aspects, even if the grammatical terms traditionally label them as tenses. In broad terms, aspect can be defined as diverse perspectives for observing the inherent temporal structure of a situation. Aspect and tense share a connection; however, despite their common relation with time, they address temporal concepts in distinct manners. As previously highlighted, tense operates as a deictic category, specifying temporal situations, frequently in relation to the present moment and occasionally in combination with other circumstances.

Verb structure in Sangesari marks both tense and aspect, as well as person, number and (for third person singular) gender agreement. However, these categories are all morphologically fused, as will be shown in chapter 3 in detail.

2.2.3.3 Mood/ Mode

‘Mood’ and ‘mode’ are two distinct concepts. There are three different moods in Latin and many Indo-European languages, including indicative, subjunctive and imperative moods. If

the verb is in indicative mood, it asserts a claim. If it is in subjunctive mood, it is commonly used to discuss results, causes, and logical relations to another clause. And lastly, the imperative mood is used by the speaker to issue commands or directives.

Mode indicates whether the clause refers to something real or something that might be possible but is not real (Magni, 2010). According to this description, these parameters include the speaker's opinion or judgment about the actuality of an event, the type of evidence available for the speaker to make this judgment, and the kind of need or requirement that forces the speaker to participate in an event or take an action. There are two different kinds of mode⁷: epistemic modes and deontic modes, which are related to knowledge-based and action-based, respectively (Palmer, 2001). Modes can be represented with different modal suffixes. In some languages like English and German, both kind of modes (epistemic and deontic) have the same form and in some other languages like Ladakhi different types of modes are represented by different markers (Bhat, 1999). Some verbs like *may*, *can*, *must*, *will* and *shall* are modal verbs in English (Palmer, 2001). Different languages have different modal verbs, for example, modal verbs in Sangesari are like: *arbuni* 'wish', *pinde* 'must', *fajad* 'may', etc. In literature, mood and mode are frequently conflated, and in this research, I will not delve into further distinctions due to space constraints. However, it is crucial for someone to explore these differences in Sangesari before initiating any future project; instead, my focus in this project will be on exploring the tense and aspect of the verb which will be discussed in detail in the following chapter.

⁷ Palmer (2001) refers to these as mood, but I am distinguishing between 'mood' as I discussed above (indicative, subjunctive, imperative), and 'mode' for the distinction between epistemic and deontic.

2.2.4 Adjective

Adjectives are descriptive words that can be used in a noun phrase to specify some property of the head noun of the phrase (Payne, 1997). Adjectives are commonly described as words that identify qualities or characteristics (Baker, 2003). They can be used with words like ‘very’ or ‘too’, as in ‘too/very beautiful’. In the context of Sangesari, adjectives (comparative and superlative) receive suffixes *-tar* and *-tarin* like in ‘*fakil-tar*’ and ‘*fakil-tarin*’ :

(33) *fakil* > *fakiltar* > *fakiltarin*
beautiful > more beautiful > the most beautiful

Adjectives in Sangesari unlike the dominant language, Persian, normally precede their heads. For example, ‘beautiful girl’ in Persian is *doxtar-e ziba*, the adjective follows noun in an *Ezafe* construction⁸. While, in Sangesari ‘beautiful girl’ translate as *fakil dot* and follows the same order as English.

2.2.5 Adverb

‘Adverbs is a catch-all category’ (Payne, 1997, p.69). Adverbs are kind of lexical words that do not fit into nouns, verbs, or adjectives classes clearly. Adverbs cover a wide range of ideas, making them diverse and not easily defined. Unlike phrases, adverbs often affect entire sentences or larger units. Adverbs usually are identified by their use in sentences. There are different classes of adverb in different languages and these classes may not be found in every language (Payne, 1997). Persian adverbs may share the same form as nouns and adjectives or be

⁸ The *Ezafe* construction, which is also widely used in Persian, shows modification, possession, origin, material, and more. The *Ezafe* affix appears as *-e* or *-ye* (after vowels) and can be added to different range of categories like count nouns, mass nouns, pronouns and adjectives (Karimi, 2018).

formed from them (Mahmoodi Bakhtiari, 2018). As mentioned earlier, Sangesari and Persian exhibit a variety of common features. Adverbs in Sangesari modify verbs, adjectives, and other adverbs, adding extra detail, especially with verbs. They demonstrate aspects of time, place, manner, degree, or frequency. Unlike other parts of speech, removing an adverb from a sentence usually does not cause significant semantic ambiguity.

(34) [(na) **sebaj** i-nda] *'time'*
 (she) tomorrow.ADV come-PRS.3. F
 'she will come tomorrow'

(35) [(a) **ostu** i-ndi] *'manner'*
 (I) slowly.ADV come-PRS.1
 'I come slowly'

2.3 Sangesari syntactical structure

2.3.1 Phrase Structure

Phrase structure rules are a set of rules that describe how words and phrases can be combined to form sentences. These rules specify the order of the different constituents in a sentence, as well as the possible combinations of words and phrases (Radford, 2004): noun phrases (NP), verb phrases (VP), prepositional phrases (PP), and adverbial phrases (AdvP), among others. Each of these types of phrases has its own structure and function in a sentence, and they can be combined in various ways to create complex sentence. A phrase structure rule for a simple sentence in English might be: S --> NP VP

Sangesari, like other languages, has its own unique set of rules and structures for organizing words and phrases in a sentence. Like Persian, the Sangesari language has various types of NP, VP, PP, etc. As my research primarily focuses on verbs, I will provide some examples of VPs to illustrate their unique features in Sangesari. Sangesari possesses simple VP, complex VP, auxiliary VP, infinitive VP, etc. Various kinds of verb phrases (VP) in Sangesari show differences in how they are constructed and formed. The Simple VP involves a single verb without additional complements or modifiers, exemplified by expressions like:

(36) [_{TP} (a) [_{VP} **fu-ndi**]]
 (I) SBJ go-1. SG. PRS
 ‘I go.’

(37) [_{TP} (a) [_{VP} **va-ndi**]]
 (I) SBJ say-1. SG. PRS
 ‘I say.’

On the other hand, complex predicates consist of two or more verbs, as seen in examples (38) and (39):

(38) [_{CP} (a) **tasmim gi-ndi** **ba- fu**]
 (I)SBJ decision make-1. SG .PRS SBJ⁹-go-1. SG
 ‘I decide to go.’

⁹ This marker function as a subjunctive marker. However, as stated above, the analysis of mood is beyond the scope of the present thesis, and further examination will not be pursued.

(39) [_{CP} (a) **dus da-ndi** ba-χun-i]
(I)SBJ love have-1. SG. PRS SBJ -read-1. SG
'I like to read.'

It is worth mentioning that both verbs are inflected in this context. In many languages, it is more common for one verb to be in the infinitive form, as in the English translations. However, in certain languages, having identical inflection between verbs, as we see here, is not unusual. In some languages like Sangesari, complex predicates are quite common. This highlights the importance for learners of mastering verb inflections, especially in languages where such patterns frequently occur.

Auxiliary VPs incorporate one or more auxiliary verbs, demonstrated in phrases like:

(40) [_{CP} (a) **pinde** **ba- fu**]
(I)SBJ should SBJ -go-1. SG
'I should go.'

(41) [_{CP} (a) **bek-endi** **ba- fu**]
(I)SBJ can-1. SG. PRS SBJ -go-1. SG
'I can go.'

Lastly, Infinitive VPs use the infinitive form of a verb, such as:

(42) [ketab **be-χund-eten**]
book NPRS-read-INF
'to read a book'

(43) [be-raqs-eten]

NPRS -dance-INF

‘to dance’

These differences highlight the various ways verbs are organized in Sangesari sentences.

2.3.2 Word Order

Word order refers to the arrangement of words in a sentence, and it can vary widely between different languages. The subject, verb, and object are the most fundamental sentence constituents, and the order in which they appear can convey important information about the relationships between the elements of the sentence (Karimi, 2003). In many languages, the order of words in a sentence is fixed, but in Sangesari, the order is more flexible. This means that speakers can change the word order to emphasize different parts of the sentence and create different meanings. Sangesari is a language which allows scrambling. Scrambling is defined in the literature of morphosyntax as ‘the freedom of constituents’ (Ross, 1967; Corver, 1997) in which the arguments and adjuncts move and appear in different positions. The phenomenon happens in most languages, and it is more common in languages like German, Japanese, Turkish, Russian as well as Persian (Karimi, 2005). Subject-object-verb (SOV) is the most common word order in Iranian languages (Windfuhr, 2009), and this is also the basic word order of Sangesari. However, Sangesari is a relatively free-word-order language, which means that the order of elements within a sentence can be rearranged for emphasis or pragmatic reasons. However, this flexibility makes the syntax complex and demands a deep understanding of the grammar and syntax to use it effectively. In Sangesari, the object is marked by an accusative case suffix *-de*, and the verb takes different forms depending on the tense, aspect, and mood. These inflections

allow the speaker to identify what each constituent is. In addition to the basic SOV order, Sangesari also allows for object-subject-verb (OSV), verb-subject-object (VSO), and other orders in certain contexts, depending on the pragmatic focus of the sentence. I provide an example for scrambling in Sangesari:

- (44) a. [_{CP} arja ketab-de nazanin-i de] SOV
 Arya (SBJ) book-ACC Nazanin-DAT give-3. SG. PST
 ‘Arya gave the book to Nazanin.’
- (45) b. [_{CP} ketab-de arja nazanin-i de] OSV
 book-ACC Arya (SBJ) Nazanin-DAT give-3. SG. PST
 ‘Arya gave the book to Nazanin.’

(a) provides the SO(PP)V underlying form of the sentence and (b) is the scrambled form. In (b) *ketab-de* which is the object, scrambles over the subject and moves leftward to the initial position of the sentence. This structure is grammatical and common in Sangesari.

2.4 Sangesari vs. Persian Verb Morphology

Key differences in verb morphology between Sangesari and Persian are crucial for understanding how Persian speakers will learn Sangesari. Since most learners are native Persian speakers, they may transfer regular Persian verb patterns to Sangesari, leading to L1 transfer errors. For example, Persian speakers might expect subject-verb agreement in all verbs, which is common in Persian but not in Sangesari. Such errors are like those Persian speakers make when learning other languages like English. To address these challenges, it is important to teach the

differences, focusing on verb paradigms, tense/aspect/mood marking. Future research could explore more detail to improve teaching strategies for Persian speakers learning Sangesari.

2.4.1 Verb Paradigms

A major distinction between Sangesari and Persian is the complexity of verb paradigms in Sangesari. Persian has two main paradigms for verb conjugation, one for the present tense and one for the past tense, while Sangesari presents a more complex system with one paradigm for the present and three for the past.

2.4.2 Tense and Aspect

According to Perry (2007), Persian verbal morphology is highly regular, with each verb consisting of two stems and three persons in two numbers (singular and plural). In contrast to Persian, verbs in Sangesari are morphologically complex, with frequent verb stem suppletion. Sangesari verbs inflect for tense, aspect, and agreement (person, number, and gender) within a single morphological unit. In contrast, Persian lacks such morphological complexity and suppletion in verb stems and typically expresses these grammatical categories through distinct morphemes, often using auxiliary verbs to mark aspect within the verb phrase (Mahootian, 1997). In addition, some verbs in Sangesari exhibit gender agreements, a feature absent in Persian. Sangesari's structure is partly prodrop, which contributes to the complexity of the language. Notably, Persian also exhibits this feature.

The following chapter will discuss the Sangesari verb structure in depth, focusing on tense, aspect, and agreement.

Chapter 3: The Structure of Sangesari Verbs

This chapter explores Sangesari verbs, their classes, and morphology. In the following sections we look at their structure, including tense and aspect. We will dive into the verb stem and explore agreements on person, number, and gender. The chapter wraps up with a look at how verbs take shape, giving a clear picture of Sangesari verbs and how they express ideas.

3.1 Structure of Sangesari Verb

In linguistics, a paradigm class of verbs refers to a group or set of verbs that share similar conjugation patterns or morphological characteristics. These classes help organize and understand how different verbs behave in terms of tense, aspect, mood, and other grammatical properties. Verbs sharing the same paradigm class generally exhibit similar transformations in their forms depending on the grammatical context. It is worth noting that the degree of complexity in these paradigms can vary across languages. Some languages, like Sangesari, have more detailed and complex verb systems, making the study of linguistic structures more intricate. In this section, I discuss the different aspects of the Sangesari verb. Sangesari, like other Indo-Iranian languages, has two stems each verb (Sabbaghian, 2013). Although, Sangesari verbs are more complex than the dominant language in the community, Persian (see Section 2.4.2). In the following sections, I will discuss the Sangesari verb's tense, followed by aspect, mood/mode marking, verb stems, person agreement, number agreement and gender agreement.

3.1.1 Tense

Sangesari has rich verbal morphology which includes several different affixes that are represented in the present and past tense. Since Sangesari has very rich agreement, the suffixes carry the tense feature as well as phi-features. There is no morphological future tense in this language. Present tense can be used to refer to future events depending on the context. There is one paradigm class for the present tense and three or more paradigm classes for the past tense. In the present tense all verbs share the same set of inflections, but in the past, there are three different sets, whose use is determined lexically: these are the paradigm classes.¹⁰ These paradigm classes vary in two different ways: first, the prefix *be-* is obligatory for class 1 and class 2 and optional for class 3; second, the agreement inflection, which shows three different patterns in the past tense. In Sangesari, tense marking has additional complexity since each grammatical person has different forms in present tense and past tense.

The present tense in Sangesari differs in suffixes based on the final segment of the verbs. One set of suffixes is used with verbs ending in vowels, and another set is used with verbs ending in consonants. Verbs ending in vowels receive the inflectional endings *-ndi*, *-nde*, *-nda*, *-nde*, *-num*, *-nin*, *-nen* and verbs ending in consonants take a different set of affixes, containing *-endi*, *-ende*, *-enda*, *-ende*, *-enum*, *-enin*, *-enen* for the first person singular, second person singular, third person singular feminine, third person singular masculine, first person plural, second person plural and the third person plural respectively, showing the number, person, gender and tense/aspect of the verb. This pattern of verbal agreements is exemplified through verbs such as /*ju*/ meaning ‘go’ and /*dozd*/ meaning ‘steal’ in examples

¹⁰ Present tense inflectional agreement has a single pattern, as mentioned above; it is only in the past tense marking that the paradigm classes are significant. Past tense is in fact marked triply: by the prefix *be-*, by the past inflectional agreement markers, and by stem suppletion in some verbs.

(48) and (49).

(48) Example of the inflection of the verb ‘go’

Present ‘ju’ (go)	singular	Plural
1st person	(a) ju-ndi (I) go-PRS.1.SG ‘I go’	(ham) ju-num (We) go-PRS.1.PL ‘We go’
2nd person	(to) ju-nde (You) go-PRS.2.SG ‘You go’	(χa) ju-nin (You) go-PRS.2.PL ‘You go’
3rd person (feminine)	(na) ju-nda (She) go-PRS.3.SG.F ‘She goes’	(enun) ju-nen (They) go-PRS.3.PL ‘They go’
3rd person (masculine)	(no) ju-nde (He) go-PRS.3.SG.M ‘He goes’	

(49) Example of the inflection of the verb ‘steal’

Present ‘dozd’ (steal)	singular	Plural
1st person	(a) dozd-endi (I) steal-PRS.1.SG ‘I steal’	(ham) dozd-enum (We) steal-PRS.1.PL ‘We steal’
2nd person	(to) dozd-ende (You) steal-PRS.2.SG ‘You steal’	(χa) dozd-enin (You) steal-PRS.2.PL ‘You steal’

3rd person (feminine)	(na) dozd-enda (She) steal-PRS.3.SG.F 'She steals'	(enun) dozd-enen (They) steal-PRS.3.PL 'They steal'
3rd person (masculine)	(no) dozd-ende (He) steal-PRS.3.SG.M 'He steals'	

The paradigm classes of Sangesari verbs

In the past tense of Sangesari, the verbs are classified into different paradigms, and each paradigm has different patterns of agreement.

Class 1 verbs belong to a paradigm characterized by prefix *be-* and null agreement in suffixes that indicates the past tense in Sangesari.

They lack specific suffixes to indicate person, number, gender, etc. A good example is the verb /χa/ meaning 'eat', as demonstrated in (50).

Class 1

(50) Example of the inflection of the verb 'eat'

Past 'χa' (eat)	singular	Plural
1st person	(a) be-χa-∅ (I) PST-eat-1.SG 'I ate'	(ham) be-χa-∅ (We) PST-eat-1.PL 'We ate'
2nd person	(to) be-χa-∅ (You) PST -eat-2.SG 'You ate'	(χa) be-χa-∅ (You) PST-eat-2.PL 'You ate'

3rd person (feminine)	(na) be-χα-∅ (She) PST-eat-3.SG.F 'She ate'	(enun) be-χα-∅ (They) PST-eat-3.PL 'They ate'
3rd person (masculine)	(no) be-χα-∅ (He) PST -eat-3.SG.M 'He ate'	

Class 2 verbs, on the other hand, display agreement through the prefix *be-* and the suffixes *-iji, -ije, -e, -e, -ijum, -ijin, -ijen* for consonant-ending verbs, and *-ji, -je, -u, -o, -jum, -jin, -jen* for vowel-ending verbs in the past tense. I provide illustrative examples in (51) and (52) for the verbs /dozd/ 'steal' and /ju/ 'go', respectively, showing the conjugational differences within this paradigm.

Class 2

(51) Example of the inflection of the verb 'steal'

Past 'dozd'(steal)	singular	Plural
1st person	(a) be-dozd-iji (I) PST-steal-1.SG 'I stole'	(ham) be-dozd-ijum (We) PST-steal-1.PL 'We stole'
2nd person	(to) be-dozd-ije (You) PST-steal-2.SG 'You stole'	(χα) be-dozd-ijin (You) PST-steal-2.PL 'You stole'
3rd person (feminine)	(na) be-dozd-e (She) PST-steal-3.SG.F 'She stole'	(enun) be-dozd-ijen (They) PST-steal-3.PL 'They stole'

3rd person (masculine) (no) be-dozd-e
 (He) PST-steal-3.SG.M
 ‘He stole’

(52) Example of the inflection of the verb ‘go’

Past ‘fu’ (go)	singular	plural
1st person	(a) be-fu-ji ¹¹ (I) PST-go-1.SG ‘I went’	(ham) be-fu-jum (We) PST-go-1.PL ‘We went’
2nd person	(to) be-fu-je (You) PST-go-2.SG ‘You went’	(χa) be-fu-jin (You) PST-go-2.PL ‘You went’
3rd person (feminine)	(na) be-fu ¹² (She) PST-go-3.SG.F ‘She went’	(enun) be-fu-jen (They) PST-go-3.PL ‘They went’
3rd person (masculine)	(no) be-fo (He) PST-go-3.SG.M ‘He went’	

For class 3 verbs, the past tense inflections are represented by prefix *be-* which is obligatory in class 1 and class 2 but optional in class 3, and the suffixes *-ti, -te, -to, -ta, -tum, -tin, -ten*. An example for this class is given in example (53), which features the verb ‘sleep’.

¹¹ All forms show the agreement suffixes for vowel-final Class 2 stems; for the third-person singular forms, see below, footnote 10.

¹² The verb *fu* does not receive suffix *-e* for the third person singular feminine and masculine. Having just one instance of this type of verb makes it challenging to identify a consistent phonological pattern. As a result, we decide not to discuss this observation further.

Class 3

(53) Example of the inflection of the verb ‘sleep’

Past ‘χot’ (sleep)	singular	plural
1st person	(a) (be-) χot-ti (I) (PST-) sleep-1.SG ‘I slept’	(ham) (be-)χot-tum (We) (PST-)sleep-1.PL ‘We slept’
2nd person	(to) (be-) χot-te (You) (PST-)sleep-2.SG ‘You slept’	(χα) (be-)χot-tin (You) (PST-)sleep-2.PL ‘You slept’
3rd person (feminine)	(na) (be-) χot-to (She) (PST-)sleep-3.SG.F ‘She slept’	(enun) (be-)χot-ten (They) (PST-)sleep-3.PL ‘They slept’
3rd person (masculine)	(no) (be-) χot-ta (He) (PST-)sleep-3.SG.M ‘He slept’	

Examples of each class in clause:

(54)	[(a) ketab de be-χund-ø] (I) book the PST-read.1.SG ‘I read the book’	Class 1
(55)	[(a) ke re be- fu-ji] I home to PST-go-1.SG ‘I went home’	Class 2
(56)	[(a) (be-)χot-ti] (I) PST-sleep-1.SG ‘I slept’	Class 3

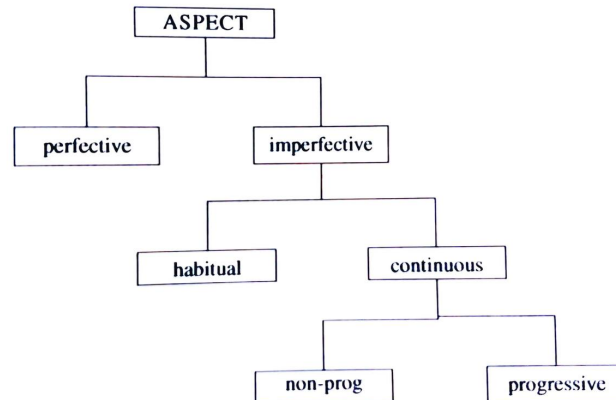
In Sangesari, the verbal morphology extends to the simple past tense, marked by the prefix 'be-' and distinct phi-agreement markers for each class, as well as different phi-features for the present tense. Sangesari exhibits rich affixes for both present and past tenses, with an absence of a future tense. This sophistication is exemplified through diverse forms for each person in paradigm classes, reflecting unique agreements in both present and past contexts.

3.1.2 Aspect

Both English and Sangesari also can mark aspect in the verbal morphology. As mentioned earlier, aspect and tense are concerned with time. Aspect is about whether the event is described as a complete whole (perfective), or as an ongoing or interrupted process (imperfective/progressive), or as coming before another event (perfect). Tense and aspect could be studied by considering the relation between event time (E), speech time (S) and reference time (R). This argument state that the relation between event time and speech time is indirect and interposed by reference time. Moreover, the relation between refence time and speech time are likely to be contextually influenced, for example, by temporal position (Reichenbach, 1947 as cited in Butt & Rizvi, 2010).

As illustrated in Figure (5), aspect is classified into two main categories: perfective and imperfective. The imperfective aspect can be further categorized into two subtypes: habitual and continuous. Within the continuous aspect, there is a further division into non-progressive and progressive forms (Bybee et al, 1994)

Figure 5. Aspect classification according to Bybee et.al (1994)



Aspects are divided into three different groups: (i) perfectives and imperfectives, (ii) ingressive, progressive, egressive and resultative, and (iii) semelfactive, iterative, habitual and frequentative (inner aspect/lexical aspect). The first group represents the view of an event from inside versus the view of the event from outside. The second one distinguishes between various phases of an event and finally the last group is concerned with the various quantificational aspects of an event and in English they are often marked by the kind of predicate (Dik, 1997). To illustrate, some examples of progressive and perfective aspects are represented. In English progressive aspect can be recognized by the presence of the ‘to be’ verbs and present participle form of the verb. The following examples represent the progressive aspect in English (Bybee & Dahl, 1989):

(57) She is driving. (Present tense + progressive aspect)

(58) She was driving. (Past tense + progressive aspect)

(59) She may be driving. (Present modal + progressive aspect)

Perfective aspect is not explicitly marked in English morphology, but the combination of perfective meanings with tense results in perfect forms, such as the following examples:

(60) She has driven. (Present tense + perfective aspect)

(61) She had driven. (Past tense + perfective aspect)

(62) She may have driven. (Present modal + perfective aspect)

In Sangesari, verbs can exhibit various forms to show different aspects, such as imperfect,¹³ perfect, double perfect¹⁴, and progressive. Verb stems in Sangesari receive the prefix *mi-* and an auxiliary verb: *dar-/dab-* to form the imperfective and progressive aspects respectively. Imperfect aspect only exhibits in past tense and not in the present tense. Unlike Sangesari, prefix *mi-* in Persian occurs in both present and past tense to form imperfective. The semantics of *mi-* seem to be similar in both Persian and Sangesari. In Sangesari, the imperfect aspect appears in past tense by presence of prefix *mi-* and the verb stem with the subject-agreements:

(63) [(a) ketab **mi-χund-ø**] Class 1
 (I) book PST.IPFV-read-1.SG
 ‘I was reading a book’

(64) [(a) ketab be-χund-ø] Class 1
 (I) book PST-read-1.SG
 ‘I read a book’

(65) [(a) ke re **mi-ju-ji**] Class 2
 I home to PST. IPFV -go-1.SG

¹³ In Indo-European descriptive literature, the term 'imperfect' typically denotes the combination of past tense and imperfective aspect. For further reference, see Comrie (1976).

¹⁴ The terms double perfect and pluperfect are considered equivalent, but the term double perfect is specifically used in Persian literature to describe actions completed before another past action.

‘I was going home’

(66) [(a) ke re be-ʃu-ji] Class 2

I home to PST-go-1.SG

‘I went home’

(67) [(a) **mi**-χot-ti] Class 3

(I) PST. IPFV-sleep-1.SG

‘I was sleeping’

(68) [(a) χot-ti] Class 3

(I) sleep-PRS.1.SG

‘I am sleeping’

As it can be seen in the above examples, *mi-* as an aspect marker refers to an ongoing nature of the event in the past. In the subsequent examples, I compared some Persian and Sangesari to demonstrate the differences. In the examples below, the prefix *mi-* appears in both present and past tenses for Persian, while it is exclusively used in the past tense for Sangesari:

(69) fas¹⁵: qaza-ra **mi**-χor-am. **Present tense**

sgr¹⁶: qeza-de χu-ndi.
Food ACC eat-1. SG. PRS
‘I am eating the food.’

(70) fas: qaza-ra **mi**-χord-am **Past imperfect**

¹⁵ ‘fas’ for Persian (<https://iso639-3.sil.org/about>)

¹⁶ ‘sgr’ for Sangesari (<https://iso639-3.sil.org/about>)

sgr: qeza-de **mi-χa-0.**
 Food ACC DUR-eat- PST.1. SG
 ‘I was eating the food.’

Dar-/daft- in Persian and *dar-/dab-* in Sangesari are auxiliaries in progressives of present and past. The interesting matter about these auxiliaries is that they receive the subject agreements along with the main verb (‘eat’ in (71) and (72)) both in Sangesari and Persian. These structures are considered as complex predicates.

(71) fas: **dar-am** qaza-ra mi-χor-am. (Present Progressive)
 sgr: **dar-i** qeza-de χu-ndi.
 have-PRS. 1. SG food ACC eat-PRS. 1. SG
 ‘I am eating the food.’

(72) fas: **daft-am** qaza-ra mi-χord-am. (Past Progressive)
 sgr: **dab-iji** qeza-de mi-χa.
 have-PST. 1. SG food ACC DUR-eat-PST. 1. SG
 ‘I was eating the food’

Both the imperfective progressive present and past tenses in Sangesari require auxiliary verbs before the main verb. Like *dar-/daft-* in Persian, *dar-/dab-* in Sangesari indicate the progressive aspect which is discussed above in examples (71) and (72). However, it is important to note that the present progressive does not require an additional imperfective aspect marker, while the past progressive is marked with the prefix *mi-* before the main verb to indicate the imperfective.

In Persian, *bud-* and in Sangesari, *bo-* are auxiliaries that mark the perfect, which only exists in the past. Interestingly, in Sangesari, in the perfect aspect, neither the main verb nor the auxiliary receives subject agreement, while in Persian the auxiliary receives subject agreement.

In the perfect aspect, the past marker *be-* attaches to the verb stem, while the auxiliary *bo-* is realized independently:

(73)	fas:	(man) ketab ra	χand-e	bud-am.	(Perfect)
	sgr:	(a) ketab de	be-χund	bo	
		(I) book ACC	PST-read.1.SG	PRF-be.1.SG	
		‘I had read the book.’			

The double perfect in Sangesari and Persian, is used to express an action that occurred further in the past, and it is narrated through storytelling (Ahmadi Givi & Anvari, 2009).

To form the double perfect in Persian, the structure remains consistent with the previous example in the perfect aspect. In Persian, both the main verb stem and the auxiliary *bud* attach to *-e*, and then the auxiliary receives object agreement. In contrast, in Sangesari, the auxiliary *bo* undergoes transformation into *be* and subsequently receives object agreement:

(74)	fas:	(man) ketab ra	χand-e	bud-e-am.	(Double-perfect)
	sgr:	(a) ketab de	be-χund	be-ya.	
		(I) book ACC	PST-read.1.SG	PRF2-be-1.SG	
		‘I had read the book.’			

3.1.3 Mood/ Mode

In this study, I will not delve into mood/mode due to limitations in time and space. My primary focus will be on investigating the tense and aspects of the verb. The examination of this aspect will be deferred to future research conducted by another researcher.

3.1.4 Verb Roots

Sangesari verb roots can have up to two forms for each verb: the present and the past (or, more accurately, non-present) roots. For some classes of verbs, these are identical; for some they differ. From the appropriate stem, verbs are formed by adding aspect, tense and agreement affixes.

Before we delve into illustrating verb roots, it is important to mention how infinitive forms of verbs take shape in Sangesari. The infinitive form of a verb is marked by the suffix *-eten* attached to the past tense root. All verbs in Sangesari follow the same pattern to create the infinitive form. Verbs *besateten* ‘to build’, *bebaxfeten* ‘to forgive’ and *benesteten* ‘to sit’ that are presented below, belongs to class 1, class 2 and class 3 respectively:

(75) [be-sat-eten] Infinitive form
PST-ROOT-INF
‘to build’

(76) [be-baxf-eten] Infinitive form
PST-ROOT-INF
‘to forgive’

(77) [be-nest-eten] Infinitive form
PST-ROOT-INF
‘to sit’

In Sangesari, verb roots in class 2 have identical forms for both present and non-present tenses:

(78)	[be- baɣf -eten]	Infinitive form	‘to forgive’
	[be- baɣf -iji]	Past tense (1, sg)	‘I forgave’
	[baɣf -endi]	Present tense (1, sg)	‘I forgive’
(79)	[be- fahm -eten]	Infinitive form	‘to understand’
	[be- fahm -ijo]	Past tense (3, sg, f)	‘she understood’
	[fahm -enda]	Present tense (3, sg, f)	‘she understands’

Unlike class 2 verbs, some verbs in class 1 and class 3 exhibit distinct roots for each tense:

Class 1

(80)	[be- dut -eten]	Infinitive form	‘to sew’
	[be- dut - ø]	Past tense (1, sg)	‘I sewed’
	[duz -endi]	Present tense (1, sg)	‘I sew’
(81)	[be- sat -eten]	Infinitive form	‘to build’
	[be- sat - ø]	Past tense (1, sg)	‘I built’
	[saz -endi]	Present tense (1, sg)	‘I build’

Class 3

(82)	[be- ɣot -eten]	Infinitive form	‘to sleep’
	[be- ɣot -ti]	Past tense (1, sg)	‘I slept’
	[ɣos -endi]	Present tense (1, sg)	‘I sleep’
(83)	[be- nest -eten]	Infinitive form	‘to sit’
	[be- nes(t) -ti]	Past tense (1, sg)	‘I sat’
	[ner -endi]	Present tense (1, sg)	‘I sit’

As it is shown in the above examples, the infinitive form of the verbs like (81), *be-sat-eten* ‘to build’ is formed by attaching the prefix *be-* and suffix *-eten* to the non-present stem *sat* ‘I/you/she/... built’. For the present tense the suffixes is attached to the present root. For instance, in the case of (81), *be-sat-eten* ‘to build’ the present tense root would be *saz-endi* ‘I build’ for the first

person singular.¹⁷

3.1.5 Verb Agreements

In some languages verbs demonstrate tense/aspect/ mood marking, subject agreement, etc. In many languages it is difficult to distinguish the pronouns from agreement affixes (Payne, 1997). ‘The subject verb agreement means if a sentence has a singular subject it is followed by a singular verb, and if it has a plural subject it is followed by a plural verb; that is, the verb agrees with the subject’. Agreement refers to a type of syntactic connection where the grammatical form of a word or phrase needs to match the grammatical form of another word or phrase in the sentence that has a strong relation (Haspelmath & D.Sims, 2010). For example, in the sentence [the student]NP [walk-s] VP and the [students-s]NP [walk]VP, the verb *walk(s)*, corresponds in number with the subject NP. Similarly, in the context of *this student* and *these students*, *this/these* agrees with its head noun (*student/students*) in number.

Pro-Drop in Sangesari

Sangesari is a pro-drop language, which means that subject pronouns can be omitted from sentences when they are recoverable from the context or verb morphology. This phenomenon is common in languages like Chinese, Japanese, and Spanish, though it surfaces differently across languages. Pro-drop can be divided into two broad categories: radical pro-drop and ordinary pro-drop (Neeleman & Szendrői, 2007). Radical pro-drop allows the subject to be omitted even when no morphological agreement is available, relying instead on contextual clues, while ordinary pro-

¹⁷ The derivation of the past root from the present, or vice versa, may not be conclusively determined due to the limited available data at the moment. This aspect could be explored further in future research.

drop is typical of languages where subject pronouns can be omitted because the subject is always clear from verb agreement.

In Sangesari, both types of pro-drop are observed. For some verb classes, subject pronouns can be dropped even when there is no overt subject agreement in the verb. This is an example of radical pro-drop, which is exemplified in sentences like (84) below.

On the other hand, for other verb classes, full subject-verb agreement is present, resembling ordinary pro-drop. Here, the subject pronoun can be omitted because the verb carries sufficient agreement markers to indicate the subject's person, number, and gender.

Radical Pro-drop in Sangesari

Radical pro-drop occurs in Sangesari when the subject pronoun is omitted despite the absence of subject agreement morphology. This is evident in Class 1 past tense verbs, where the verb does not carry person or number markers. In these cases, the subject pronoun can be omitted based on contextual information. For example, in the sentence:

- (84) [(a) izi gol hage- \emptyset] Class 1
I yesterday flower buy- PST. 1 .SG
'I bought a flower yesterday.'

Ordinary Pro-Drop in Sangesari

In contrast, ordinary pro-drop in Sangesari is seen when subject pronouns are dropped because they are recoverable from the subject-verb agreement markers. In these cases, the verb's agreement features reflect the person, number, and gender of the subject.

For example:

- (85) [(na) madrese-re fun-da] Class 2

(She) school-to go- PRS.3. SG. F

‘She goes to the school’

(86) [(na) be-χot-to] Class 3

(she) PST-sleep-3. SG. F

‘She slept’

In both examples (85) and (86), the pronoun *na* (she) can be omitted because the verb forms *ɟunda* and *be-χot-to* carry sufficient agreement information to indicate the third person singular feminine subject. This is an example of ordinary pro-drop, where the pronoun can be omitted because the verb already conveys the subject’s features.

The pro-drop phenomenon in Sangesari is complex and cannot be fully explained by existing typologies. While Sangesari does exhibit radical pro-drop in certain verb forms, it also has rich subject-verb agreement that aligns with languages like Italian and Russian. Therefore, it is more accurate to describe Sangesari as a language with mixed pro-drop characteristics, rather than classifying it strictly as radical or ordinary pro-drop.

3.1.5.1 Person Agreement

In Sangesari, subjects are mostly optional. The agreement suffixes are sufficient to indicate the pronoun features. Which means that the independent pronouns may be dropped or used with an emphatic function in most cases. The verbal endings are formed based on the temporal and phi features (person, number, gender). Present and past tense verbs have different affixation forms, and there is no stem or affix for the future tense in Sangesari. The different types of personal endings in the present and past are summarized in Tables 6, 7, 8 and 9

respectively.

Table 6. verbal agreements in Sangesari (Present tense) for all verbs

Person and number	1SG	2SG	3SG.F	3SG.M	1PL	2PL	3PL
Present stem (consonant ending)	-endi	-ende	-enda	-ende	-enum	-enin	-enen
Present stem (vowel ending)	-ndi	-nde	-nda	-nde	-num	-nin	-nen

Additionally, it is noteworthy that the agreement in the 2nd person singular mirrors the agreement for the 3rd person singular masculine. As mentioned previously in section 3.1.1 (Tense), there are distinct patterns for agreements in the present tense. One set of agreements applies to verbs ending with consonants, while another set is associated with verbs ending in vowels.

Table 7. verbal agreements in Sangesari (Past tense, Class 1)

Person and number	1SG	2SG	3SG.F	3SG.M	1PL	2PL	3PL
Past stem	∅	∅	∅	∅	∅	∅	∅

As it is shown in the table above, in the past tense, all class 1 verbs have null agreement; they do not receive any suffixes.

Table 8. verbal agreements in Sangesari (Past tense, Class 2)

Person and number	1SG	2SG	3SG.F	3SG.M	1PL	2PL	3PL
Past stem (consonant ending)	-iji	-ije	-e	-e	-ijum	-ijin	-ijen
Past stem (vowel ending)	-ji	-je	-u	-o	-jum	-jin	-jen

Similar to the patterns observed in present tense verbs, past tense verbs in class 2 exhibit two

distinct patterns, one for verbs with vowel endings and another set for those with consonant endings.

Table 9. verbal agreements in Sangesari (Past tense, Class 3)

Person and number	1SG	2SG	3SG.F	3SG.M	1PL	2PL	3PL
Past stem	-ti / ∅	-te	-to / ∅	-ta / ∅	-tum	-tin	-ten / ∅

The above table indicates the possibility of the null version (∅) for some person agreements but not for others. Due to the limited data on class 3 verbs, finding a clear pattern was challenging. It might be due to dialect variations, and it is possible that speakers from different areas use the null pattern for all person agreements.

3.1.5.2 Number Agreement

In most Indo-European languages, person and number agreement are morphologically integrated. Sangesari adheres to this linguistic pattern, and it is not feasible to separate the person and number agreements. Regarding number agreement, Sangesari verb conjugation shows agreement for two numbers: singular (sg) and plural (pl) which are fused with person agreement. In the following tables, I demonstrated how subject agreements match with the verbs root in each tense and class of verbs.

Table 10. present tense (consonant ending)

Number: person	Singular	Plural
1	res-endi	res-enum
2	res-ende	res-enin
3, M	res-enda	res-enen
3, F	res-ende	

Table 11. present tense (vowel ending)

Number: person	Singular	Plural
1	ʃu-ndi	ʃu-num
2	ʃu-nde	ʃu-nin
3, M	ʃu-nda	ʃu-nen
3, F	ʃu-nde	

Table 12. past tense (class 1)

Number: person	Singular	Plural
1	bexund-∅	bexund -∅
2	bexund -∅	bexund -∅
3, M	bexund -∅	bexund -∅
3, F	bexund -∅	

Table 13. past tense (class 2)

Number: person	Singular	Plural
1	beraqs-iji	beraqs-ijum
2	beraqs-ije	beraqs-ijin
3, M	beraqs-ijo	beraqs-ijen
3, F	beraqs-ija	

Table 14. past tense (class 2)

Number: person	Singular	Plural
1	befu-ji	befu-jum
2	befu-je	befu-jin
3, M	befu-jo	befu-jen
3, F	befu-ja	

Table 15. past tense (class 3)

Number: person	Singular	Plural
1	bexot-ti	bexot-tum
2	bexot-te	bexot-tin
3, M	bexot-to	bexot-ten
3, F	bexot-ta	

Table 16. past tense (class 3)

Number: person	Singular	Plural
1	beχot-∅	beχot-∅
2	beχot-∅	beχot-∅
3, M	beχot-∅	beχot-∅
3, F	beχot-∅	

3.1.5.3 Gender Agreement

Sangesari exhibits grammatical gender agreement (masculine/feminine) in some classes of verb, observed in the third person singular. Gender is universally distinguished in the present tense, with both consonant and vowel endings, as well as in past tense class two with vowel endings and some occurrences within past tense class three. I demonstrated these patterns in the following tables:

Table 17. present tense (consonant ending)

3, singular, feminine	fahm- enda ‘She understands’
3, singular, masculine	fahm- ende ‘He understands’

Table 18. present tense (vowel ending)

3, singular, feminine	i- nda ‘She comes’
3, singular, masculine	i- nde ‘He comes’

Table 19. past tense, class 1

3, singular, feminine	be-χund-∅ ‘She read’
3, singular, masculine	be-χund-∅ ‘He read’

Table 20. past tense, class 2 (vowel ending)¹⁸

3, singular, feminine	be- fɯ ‘She went’
3, singular, masculine	be- fɔ ‘He went’

Table 21. past tense, class 2 (consonant ending)

3, singular, feminine	be-tars- e ‘She scared’
3, singular, masculine	be-tars- e ‘He scared’

¹⁸This is the only example in my data. More research is needed to determine how widespread this pattern is.

Table 22. past tense, class 3 (vowel ending)

3, singular, feminine	be-χot- to 'She slept'
3, singular, masculine	be-χot- ta 'He slept'

Table 23. past tense, class 3 (consonant ending)

3, singular, feminine	be-nest- ∅ 'She sat'
3, singular, masculine	be-nest- ∅ 'He sat'

Chapter 4: Discussion

In the exploration of Sangesari, a language steeped in history and cultural significance, this chapter highlights key findings that contribute to a comprehensive understanding of its unique features. These findings present the need for preserving the language. In the upcoming discussion, we will be discussing the implications of the study, suggesting effective learning strategies for L2 learning, and proposing ideas for future research.

4.1 The Findings and Implications

This research discusses various aspects of the Sangesari language in chapter 2, focusing on the verbs in morphological aspect in chapter 3. In chapter 2, The research begins with a study of its phonological system, with a brief investigation on consonant and vowel inventories, syllable structure, and stress patterns. The morphological exploration delves into lexical categories, commencing with nouns and pronouns. The focus then shifts to verbs, emphasizing their crucial role in sentence construction. Tense, aspect, and mood are discussed. Adjectives and adverbs are also covered briefly in this chapter, followed by the syntactical section that emphasizes phrase structure and word order. Sangesari's specific phrase structure rules, particularly in verb phrases, are detailed. Word order flexibility is explored, including the basic SOV order and variations like OSV and VSO, a phenomenon known as scrambling. Examples illustrate how constituents can move for grammatical and pragmatic reasons.

Moving forward, the focus narrows onto the Sangesari verb system. In Chapter 3 of this thesis, the complex Sangesari verb system is examined, containing paradigm classes, tense, aspect, verb stems, and agreement features. Present tense markings, past tense paradigms, and

aspectual distinctions are detailed. Mood/mode is briefly touched upon and left for future researchers. Additionally, verb roots, infinitive forms, and agreements in person, number, and gender are explored. Pro-drop features are highlighted, showcasing the radical nature of Sangesari and numerous examples of each topic are investigated through interviews with native speakers.

Mastering verbs is a key part of learning a language. If learners do not grasp verbs well, it becomes challenging for them to use the language effectively. In teaching endangered languages, instructors often emphasize culturally important words, which are almost always nouns, because these are easier to teach. Many publications in Sangesari include dictionaries, poems, idioms, and some folklore. During my interview with Hajjalian, I observed a new book aimed at teaching Sangesari to children, currently in publication. This book contains Sangesari poems for educational purposes, confirming the instructors' focus on cultural materials rather than grammar and structure. Neglecting verb knowledge can hinder learners' ability to maintain proficiency. Verbs, highlighted in my study, are essential for constructing sentences and expressing ideas. Therefore, revitalizing the Sangesari language relies on new speakers mastering the verbal system. This underscores the urgency of addressing gaps in my understanding of Sangesari verb construction, especially given the limited studies in this area so far.

4.2 Recommendations for Effective L2 Learning

Language could be taught through different endangered language teaching methods such as language nests and immersion schools which typically focus on child learners (Hinton 2001, Hinton 2011, and Okura 2017), as well as using other language teaching methods that are used for more widely spoken languages, such as communicative language teaching, task-based

language teaching, or grammar-translation approaches which are all discussed in Richards (2017), Richards (2015) and Nunan (2014). DeCaire et al., (2023) also investigate the role of adult learners and the reasons for focusing on them. DeCaire and his colleagues explained the domains of language use and the methods they used for teaching the language and specifically the verb forms, which could be used by future researchers. Moreover, there is a temptation of teaching lots of nouns because teaching nouns is very simple, while it is not much useful for learning to speak. Focusing on the teaching verb structure in Sangesari, helps learners to build a strong foundation that improves their language skills overall. Moreover, based on the findings of this study, it is recommended that adult learners of Sangesari focus on mastering the complex verb morphology of the language. There are several ways in which this could be achieved. Firstly, learners could practice the formation of different verb stems, which are the building blocks of Sangesari verbs. This could involve memorizing the different stem patterns and practicing their formation in different tenses and aspects. Secondly, learners could focus on recognizing the various tense, aspect, and agreement features that are used in Sangesari verbs. This could involve practicing the conjugation of verbs in different tenses and aspects, as well as recognizing the different agreement markers that are used for person, number, and gender. Additionally, learners could practice using Sangesari verbs in context, such as in conversation or in text, to develop their fluency and accuracy in the language. Finally, learners could use a variety of resources to support their learning, such as story books, folklore, poems, or audiovisual materials and online resources, to reinforce their understanding of Sangesari verb morphology. By focusing on mastering the complex verb morphology of Sangesari, learners can develop a strong foundation in the language and build their proficiency in all areas of the

language.

4.3 Future Research and Question

This section suggests some potential topic and interesting questions for future Sangesari language research, building on the unique features uncovered in previous chapters, particularly in verb morphology. It opens doors for further exploration, contributing to a deeper understanding of this culturally significant language.

A topic worth exploring in the future is extending the exploration of the verb system, like mood/ mode features. Although I could not dive into them due to time constraints and limited data, understanding them is crucial. Grasping these aspects not only helps us understand and speak the language better but also improves how we learn verbs.

Additionally, investigating the phonological processes involved in verb conjugation is a critical area to focus on for learners, teachers and for those who are interested in phonology. It is also essential for both learners and teachers to understand that verbs can undergo phonological changes, they change their pronunciation in ways that pure morphology cannot predict.

Future research endeavors may also focus on designing teaching curricula for Sangesari learners. The current study acts as an essential foundation, providing future researchers with organized information to shape teaching materials in accordance with the information presented in this thesis. This not only helps that future learners receive comprehensive and accurate linguistic instruction but also facilitates a more efficient approach to language acquisition.

Moreover, relying on DeCaire et al. (2023), future research could investigate deeper into how various age groups, including adults, acquire Sangesari verbs. Investigating proper teaching methods for adult learners and recognizing the factors influencing their engagement in language

preservation and language revitalization. Reflecting on my own experience within the cycle of language endangerment, I come from a family where my grandparents were fluent speakers of Sangesari, my parents do not actively use it in everyday situations such as raising children. My siblings and I were brought up solely speaking Persian. This familial trajectory illustrates the rapid decline of Sangesari from potentially hundreds of thousands of speakers to critical endangerment in just one generation. Considering this path, becomes evident that A.L.L. (Adult Language Learning) could be extremely helpful sooner than expected in preserving and bringing back endangered languages like Sangesari (Chew et al., 2021).

4.4 Limitations

There were challenges in conducting this research on the verb paradigm in Sangesari. COVID-19 made it hard to collect data in person. Doing it remotely was tough because of internet problems in my home country. Also, my grandparents, who were my consultants, found it hard to use technology because they were old. My grandfather had trouble hearing, so I always needed someone to help communicate with him. Despite these challenges, this research still offers valuable insights into the verb paradigm of Sangesari.

4.5 Appendix

Appendix A: Class 1

Class 1	Gloss	Present root	Non-present root
<i>bexorten/ bexorteten</i>	to eat	χu	χα
<i>bexundeten</i>	to read	χun	χund
<i>bediteten</i>	to see	vin	di
<i>bepateten</i>	to cook	peʒ	pat
<i>bevateten</i>	to say	van	vat
<i>befnundeten</i>	to hear	eʃnov	ʃnund
<i>bemmoʃteten/benvoʃteten</i>	to write	emmis	mmoʃt
<i>devoteten</i>	to wear	devoʒ	devot
<i>befarχeneten</i>	to spin	ʃarχen	ʃarχene
<i>beʃindeten</i>	to pick	ʃin	ʃind
<i>beduteten</i>	to sew	duʒ	dut
<i>berkiʃeneten</i>	to pull	erkiʃ	rkiʃene
<i>beɟundeten</i>	to chew	ɟun	ɟund
<i>bekoʃteten</i>	to kill	koʃ	koʃt
<i>bemaleneten</i>	to rub	malen	malene
<i>bemmarteten</i>	to die	mer	mart
<i>berbindeten</i>	to cut	erbin	rbind
<i>berʃuteten</i>	to sell	ʃurʃ	rʃut
<i>berʃindeten</i>	to buy	erʃin	rʃind
<i>besateten</i>	to build	saz	sat

<i>befkateten</i>	to break	eʃken	eʃkat
<i>befmorteten</i>	to count	eʃmor	eʃmord
<i>besuzeneten</i>	to burn	suz	suzene
<i>bevaten/bevateten</i>	to say	va	vat
<i>darten/darteten</i>	to have	dan	da

Appendix B: Class 2

Class 2	Gloss	Present root	Non-present root
<i>befoten/befoteten</i>	to go	ʃu	ʃu
<i>bebormeten</i>	to cry	borm	borm
<i>bemeten</i>	to come	i	m
<i>befsteten</i>	to stand	ʃt	ʃt
<i>beraqseten</i>	to dance	reqs	raqs
<i>bebaxʃeten</i>	to forgive	bexʃ	baxʃ
<i>bedozdeten</i>	to steal	dozd	dozd
<i>befahmeten</i>	to understand	fahm	fahm
<i>begardeten</i>	to search	gerd	gard
<i>bemuneten</i>	to stay	mun	mun
<i>bedʒangeten</i>	to fight	dʒeng	dʒang
<i>bereseten</i>	to arrive	res	res
<i>betarseten</i>	to fear	ters	tars
<i>bepareten</i>	to jump	per	par

Appendix C: Class 3

Class 3	Gloss	Present root	Non-present root
<i>bexoteten</i>	to sleep	χos	χot
<i>bessaerten</i>	to drop	sar	ser
<i>bensten</i>	to fall	nes	ner

Appendix D: Light verbs

Light verb constructions	Gloss	Paradigm class ¹⁹	Present root	Non-present root
<i>bar bemeten</i>	to appear	2	bar i	bar m
<i>bavar karteten</i>	to believe	1	bavar ke	bavar ka
<i>bihuf beveten</i>	to faint	2	behuf bu	behuf b
<i>art karteten</i>	to grind flour	1	art ke	art ka
<i>medzd hadeten</i>	to award	1	medzd d	medzd de
<i>ƒal karteten</i>	to bury	1	ƒal ke	ƒal ka
<i>bexo karteten</i>	to lock	1	bexo ke	bexo ka
<i>dal hadeten</i>	to encourage	1	dal d	dal de
<i>dars hadeten</i>	to teach	1	dars d	dars de
<i>dir vakarteten</i>	to delay	1	dir ka/dir vaka	dir ke/dir vake

¹⁹ The irregular light verbs belong to no paradigm class. Documentation of them is a topic for future fieldwork.

References

- Amini, A. (1997). On Stress in Persian. *Toronto Working Papers in Linguistics*.
- Anderson, J. M. (2007). *The Grammar of Names*. Oxford University Press.
- Anttonen, A. (2017). Zhuang Language Vitality: A Sociolinguistic Survey Based on the ELDIA EuLaViBar Model (Master's thesis). University of Helsinki, Department of World Cultures, East Asian Studies.
- Ahmadi Givi, H., & Anvari, H. (2009). *The Grammar of Persian Language 2*. Tehran: Fatemi.
- Azami, C. A., & Windfuhr, G. L. (1972). *A dictionary of Sangesari: With a Grammatical Outline*. Tehran: Franklin.
- Baker M.C. (2003). *Lexical categories: Verbs, Nouns, and Adjectives*. Cambridge University Press.
- Bhat, D. S. (1999). *The Prominence of Tense, Aspect and Mood*, John Benjamins B.V.
- Bijankhan, M. (2018). Sound Systems: Phonology. In *The Oxford Handbook of Persian Linguistics*, edited by Sedighi, A., & Shabani-Jadidi, P. Oxford University Press.
- Bock, K., Eberhard, K. M., & Cutting, J. C. (2004). Producing number agreement: How pronouns equal verbs. *Journal of Memory and language*, 51(2), 251-278.
- Botne, R. D. O. (1981). *On the nature of tense and aspect: Studies in the semantics of temporal reference in English and Kinyarwanda*. Northwestern University.
- Bybee, J. L., & Dahl, Ö. (1989). *The creation of tense and aspect systems in the languages of the world*. Amsterdam: John Benjamins.
- Chew, K. A., Manatowa-Bailey, J., Lukaniec, M., McIvor, O., & Linn, M. (2021). *Growing the fire within: Exploring innovative and successful adult language learning methods in Indigenous communities in Canada and the US*. NETOLNEW.
- Chomsky, N. (1957). *Aspects of the Theory of Syntax*. MIT Press.
- Chomsky, N. (1965). *Syntactic Structures*. MIT Press.
- Comrie, B. (1985). *Tense* (Vol. 17). Cambridge university press.

- Comrie, B. (1976). *Aspect: an introduction to the study of verbal aspect and related problems*. Cambridge University Press.
- Corver, N., & van Riemsdijk, H. (1997). *The position of the head and the domain of scrambling*. na.
- Crystal, D. (2008). *A Dictionary of Linguistics and Phonetics, 6th edition*. Wiley-Blackwell.
- Crystal, D. (1985). Some early problems with verbs. *Child Language Teaching and Therapy*, 1(1), 46-53.
- Dabir Moghaddam, M. (2013). *The Ontology of Iranian languages*. Tehran: Samt.
- DeCaire, O. R. (2023). The role of Adult Immersion in Kanien 'Kéha Revitalization. Doctoral dissertation. University of Hawai'i at Hilo.
- De che Khabar. (n.d.). *De che Khabar* [Telegram channel]. <https://t.me/dechekhabar>
- Deo, A. (2011). *The Oxford Handbook of Tense and Aspect* Edited by Robert I. Binnick. Oxford: Oxford University Press.
- Dik, S. C. (1997). *The theory of functional grammar: the structure of the clause*. Walter de Gruyter.
- Dryer, M. S. (2013). Expression of Pronominal Subjects. In: Dryer, M. S. & Haspelmath, M. (eds.), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology.
- Gentner, D. (1981) : Some interesting differences between nouns and verbs. *Cognition and Brain Theory* 4, 161-178.
- Ghanian, F. (2013). *The Study of Sangesari Language in Three Generations* (MA Thesis in General Linguistics, Islamic Azad University, Tehran, Iran).
- Grenoble, L. A & Walley, L. J (2006). *Saving languages: An Introduction to Language Revitalization*. Cambridge university Press.
- Hajjalian, Y. (2015). *Sangesari idioms: Zarbolmasal haye Sangesari*. Semnan: Hablerood.
- Hajjalian, Y. (2016). *A Sangesari story: Asenak Sho Yalda*. Semnan: Hablerood.
- Hajjalian, Y. (2017). *A Sangesari Legend: Nowrouyi Noumze*. Semnan: Hablerood.

- Hajjalian, Y. (2018). *A Sangesari story: Ajouk Bajouki Asenak*. Semnan: Hablerood.
- Hajjalian, Y. (2020). *A Sangesari story: Ham Pesheyi Miya*. Semnan: Hablerood.
- Hall, M. (2007). Phonological Characteristics of Farsi Speakers of English and L1 Australian English Speakers' Perceptions of Proficiency. MA thesis, Curtin University.
- Hallett, D., Chandler, M. J., & Lalonde, C. E. (2007). Aboriginal language knowledge and youth suicide. *Cognitive development*, 22(3), 392-399.
- Hansen, B.B., & Myers, S. (2017). The Consonant Length Contrast in Persian: Production and Perception. *Journal of the International Phonetic Association*, 47(2), 183-205.
- Harrison, K. D., Rood, D. S., & Dwyer, A. M. (2008). *Lessons from documented endangered languages*. John Benjamins.
- Haspelmath, M., & Sims, A. (2010). *Understanding morphology*. Routledge.
- Hewson, J., & Bubenik, V. (1997). *Tense and aspect in Indo-European languages: Theory, typology, diachrony* (Vol. 145). John Benjamins Publishing.
- Hinton, L. (2001). Language Revitalization. In *The green book of language revitalization in practice* (pp. 3-17). Brill.
- Hinton, L. (2011). Language revitalization and language pedagogy: New teaching and learning strategies. *Language and Education*, 25(4), 307-18
- Hirsh-Pasek, K & Golinkoff, R. M. (2006). *Action meets word: How children learn verbs*. Oxford: Oxford University Press.
- ISO 639-3 code 'sgr' for Sangesari language. Retrieved from <https://iso639-3.sil.org/about>
- Jamaledin, F. (2013). The Study of word formation processes in Sangsari dialect (MA Thesis, Alzahra University of Tehran, Tehran, Iran).
- Jespersen, O. (1931). *A Modern English Grammar: Syntax- Time and tense, Vol. 3*. Heidelberg: Carl Winters Universitates Buchhandlung.
- Kahnemuyipour, A. (2003). Syntactic Categories and Persian Stress. *Natural Language & Linguistic Theory*, 21(2), 333-379.

- Karimi, S. (2003). *Word order and scrambling* (Explaining Linguistics 4). Malden, Mass.: Blackwell Pub.
- Karimi, S. (2005). *A minimalist approach to scrambling: Evidence from Persian*. Mouton de Gruyter.
- Karimi, S. (2018). Generative approaches to syntax. In Anousha Sedighi & Pouneh Shabani-Jadidi (eds.), *The Oxford handbook of Persian linguistics*. Oxford University Press.
- Lange, R. A. (1998). *201 Japanese verbs: fully described in all inflections, moods, aspects, and formality levels in a new easy-to-learn format, alphabetically arranged*. Barron.
- Lewis, P., Gary F. Simons & Charles D. Fennig. (2013). *Ethnologue: Languages of the World, 17th Edition (2013)*. Texas: SIL International.
- Mahootian, S. (1997). *Persian Descriptive Grammars*. London, UK: Routledge.
- Magni, E. (2010). Mood and modality. *New perspectives on historical Latin syntax*, 2, 193-275.
- Mesthrie, R. (2006). Society and Language: Overview. In Brown (edit.) 2006, *Encyclopedia of Language & Linguistics (Second Edition)*, pp. 472–484. Elsevier.
- Miller, G. A., & Fellbaum, C. (1991). Semantic networks of English. *Cognition*, 41(1-3), 197-229.
- Mohammadi, A. N. (2018). ‘Trilingual Dictionary of Sangesari’. Webonary.org. Dallas: SIL International.
- Neeleman, A and Szendrői, K. (2007). Radical Pro Drop and the Morphology of Pronouns. *Linguistic Inquiry*. 38 (4)671-714.
- Nunan, D. (2014). Designing and adapting materials to encourage learner autonomy. In *Autonomy and independence in language learning* (pp. 192-203). Routledge.
- Okura, E. (2017). *Language Acquisition and Language Nests: An Empirical Analysis* (Doctoral dissertation, University of Hawaii at Mānoa).
- Palmer, F. R. (2001). *Mood and modality (2nd ed.)*. Cambridge University Press.
- Payne, T. E. (1997). *Describing morphosyntax: A guide for field linguists*. Cambridge University Press.

- Perry, J. R. (2007). Persian morphology. *Morphologies of Asia and Africa*, 2, 975-1019.
- Pisowicz, A. (1985). *Origins of the New and Middle Persian Phonological System*. Warsaw: Nakladem Uniwersytetu Jagiellonskiego.
- Radford, A. (2004). *English Syntax: An Introduction*. Cambridge University Press.
- Radford, A. (2004). *Syntax: A minimalist introduction*. Cambridge University Press.
- Reference to the Order of Meaningful Elements. In *Universals of Language*, edited by Joseph H. Greenberg, 73–113. MIT Press.
- Reichenbach, H. (1947). The tenses of verbs. In Meinster, J.; Schernus, W. (eds.), *Time from concept to narrative construct: a reader*. Berlin, 1-12.
- Richards, J. C. (2015). *Key issues in language teaching*. Cambridge University Press.
- Richards, J. C. (2017). *Curriculum development in language teaching*. Cambridge: Cambridge University Press.
- Ross, J. R. (1967). Constraints on variables in syntax. Ph.D. Diss., Department of Linguistics and Philosophy, Massachusetts Institute of Technology
- Rezapoor, E., & Abdollahi, T. (2018). Word order in Sangesari language: a language typology perspective. *Language and Linguistics*, 14(27), 115-145.
- Sabbaghian, N. (2009). *Survey of Sangesari dialect* (master's thesis). Payame Noor University, Semnan.
- Sabbaghian, N. (2013). *A study of Sangesari language*. Amol: Shomale Paidar.
- Samareh, Y. (1977). *The Arrangement of Segmental Phonemes in Farsi*. University of Tehran Press.
- SIL International. (n.d.). Farsi (Persian) (fas). SIL International. <https://iso639-3.sil.org/code/fas>
- SIL International. (n.d.). Sangesari (sgr). SIL International. <https://iso639-3.sil.org/code/sgr>
- Strain, J.E. (1968). A Contrastive Sketch of the Persian and English Sound Systems. *International Review of Applied Linguistics in Language Teaching*, Volume VI/I, 55-62.
- Taleghani, A. H. (2008). Modality, aspect, and negation in Persian. *Modality, Aspect and*

Negation in Persian. John Benjamins B.V.

Tanenhaus, M., Boland, J., Mauener, G. & Carlson, G. (1993) : More on combinatory lexical information: thematic structure in parsing and interpretation. In Altman, G. & Shillock, R. (eds.), *Cognitive models of speech processing: The second Sperlonga meeting*. Hillsdale: Lawrence Erlbaum, 297-319.

TeedadiSangesari, F. (2002). *Sangesari Folk literature*. Tehran: Sibe Sabz.

United Nations Educational, Scientific and Cultural Organization. (2010). Atlas of the World's Languages in Danger. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000187026>

Windfuhr, G. (2009). *The Iranian languages*. London: Routledge.

Windfuhr, G. (1979). *Persian grammar: History and state of its study* (Vol. 12). Walter de Gruyter.

Zabane Sangesari. (n.d.). *Zabane Sangesari* [Telegram channel]. https://t.me/zabane_sangesari

Zarifian, T., Modarresi, Y., Tehrani. L.G., & Dastjerdi Kazemi, M. (2015). Phonetic and Phonological Acquisition in Persian Speaking Children. *Proceedings of the International Symposium on Monolingual and Bilingual Speech*, p.430.