Pandunia

sal, dunia! – Hello, world!

Welcome to learn about Pandunia, the evenly global helping language!



Image designed by Freepik

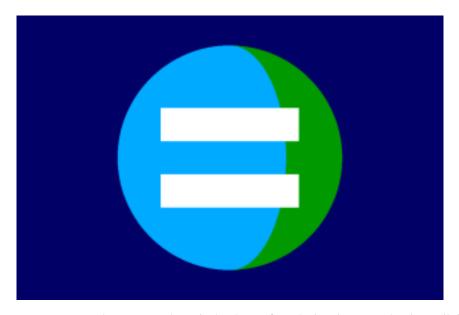
What is Pandunia?

Pandunia is a globally sourced constructed language that combines a simple grammar and international words from all continents into one language.

Pandunia is a helping language for world-wide use. It is an easy language that people can use to talk with each other when they don't talk any other common language. It is meant to supplement other languages in our multilingual world.

Pandunia is simpler, more regular and easier to learn than natural world languages, like English, French, Spanish, Chinese, Russian, Arabic and Hindi. Learning Pandunia is equally easy for everybody. Its words have been borrowed from many languages on all continents and all cultures of the world.

The second version of Pandunia was published in September 2021. It includes simpler grammar, more international word forms, and many new words.



You can contact the creator and a main developer of Pandunia, Risto Kupsala, via email risto@pandunia.info and in the aforementioned forums. # Pandunia - the evenly global helping language

Introduction

Pandunia is an equally global auxiliary language. In this article, we explain what makes Pandunia global and equal, why it was made to be global and equal, and how it could help people around the world communicate better with each other.

Principles of Pandunia

Pandunia is *fair*. Everybody has an equal chance of learning and speaking Pandunia well. It is supposed to be the *great equalizer* — a way of communicating that everybody can use on the same level.

Pandunia is *evenly global*. It borrows words from from all regions and all cultures of the world. It is the world language that stands for the whole world!

Pandunia is *practical*. It re-uses things that have already become international, including the basic Latin alphabet and international words from English, Greek, Latin, Sanskrit, Chinese and Arabic, among others. That way Pandunia can be used in real international communication right from the start.

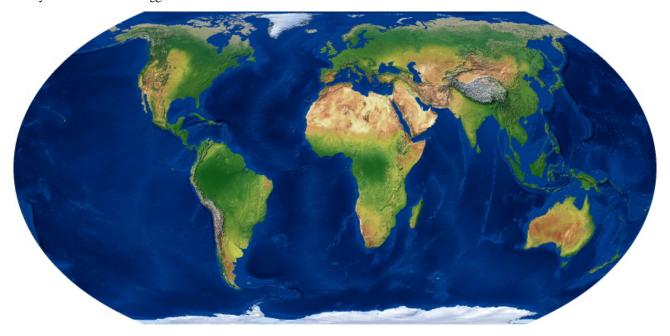
Pandunia is *simple*. In international situations it is best to use plain words, short sentences and simple language because they are much more effective than specialized words, long sentences and complex language. So, let's keep it simple!

How is Pandunia evenly global?

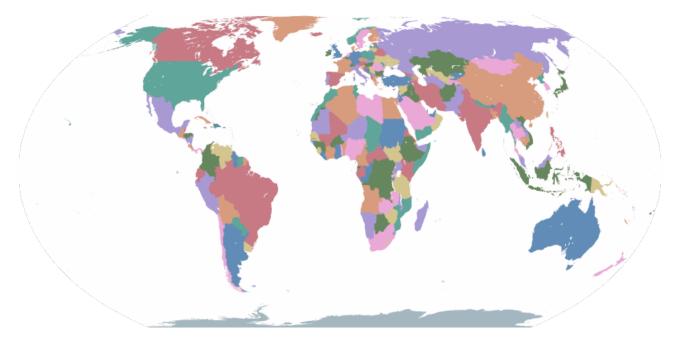
Many people are used to seeing the kind of world map below. It is the famous *Mercator projection* map. Unfortunately it distorts the size of countries badly.



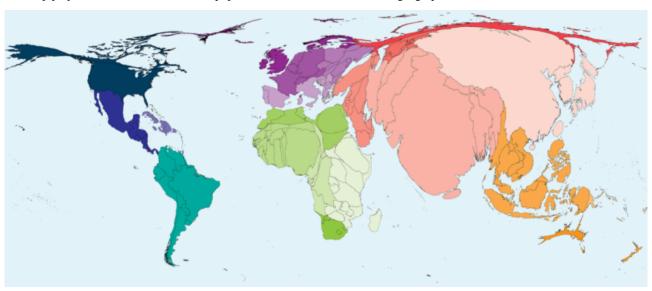
Why is that? The world is a three-dimensional globe and turning it into a flat, two-dimensional map is not easy. Equal-area projections, such as the *Equal Earth projection* below, show land areas more accurately. Compare the sizes of Greenland and Africa in these two maps. In the Mercator projection Greenland appears bigger, but the Equal Earth projection shows that in reality Africa is 14 times bigger than Greenland.



That is the physical world. We live also in a human world, which comprises of nations that are divided by borders. In a normal map of countries of the world, sizes of the countries are defined by their geographic area.



The map projection below is based on the population of countries, not on their geographic area.



In our opinion the world language should represent the human world. Every part of the world, every culture, should be treated fairly and democratically. The grammar should be easy for all. Areal linguistic characteristics, such as Standard Average European, are not suitable guidelines for the world language. Instead, the grammar should be built from things that are universally known and/or universally considered easy.

Words are included in Pandunia mostly from 21 main source languages. The six official languages of the United Nations are included: English, French, Spanish, Russian, Arabic and Mandarin Chinese. The language of the heart of Europe is included: German. The language of the South Atlantic is included: Portuguese. The most important East Asian languages are included: Japanese, Korean, Vietnamese, Cantonese and Malay. The most influential languages of the Indian subcontinent are included: Hindi, Urdu, Bengali and Tamil. The most widely spoken native African languages after Arabic are included: Swahili, Hausa and Fula. The other major languages of Middle East besides Arabic are included: Turkish and Persian.

All in all, they represent a good mix of cultures and regions of the world.



Only two languages have more than one billion speakers each: Mandarin and English. Mandarin is by far the largest language by number of native speakers, while English is the language with the greatest number of second language speakers.

In the following chapters we will use these two dissimilar languages as the points of comparison when we present some of the key features of Pandunia as a language. This approach is not meant to belittle the importance of the other languages but it would be impractical to compare Pandunia to all 21 source languages at once in a short and non-exhaustive presentation like this.

Spelling and pronunciation

The most widely used alphabet

There are many writing systems in the world today but only a handful of them are international. The most popular writing systems are the Latin alphabet, the Cyrillic alphabet, the Arabic script and the Chinese pictographic symbols.

Only the Latin alphabet has become truly global. Most languages of Europe, the Americas and Africa are written in the Latin alphabet. Also several notable languages in Asia, including Turkish, Malay and Vietnamese, are written in the Latin alphabet.

Therefore the Latin alphabet is the obvious choice for the international language.

Only five vowels

According to chapter 2 of The World Atlas of Language Structures, the vowel inventories in world's languages are categorized by size as follows:

small: 2-4 vowelsaverage: 5-6 vowelslarge: 7-14 vowels

Pandunia has only five pure vowels: a, e, i, o, u. The number is approximately the same as the global average. In this respect, Pandunia is close to languages like Spanish and Japanese as both have a system of five vowels.

Examples of large vowel inventories include English (12 vowels) and Mandarin (9 vowels).

Common consonants

According to chapter 1 of The World Atlas of Language Structures, the consonant inventories in world's languages are categorized by size as follows:

small: 6-14 consonants
moderately small: 15-18

• average: 19-25

moderately large: 26-33large: 34 or more consonants

Pandunia has only 20 consonants so its consonant inventory is average in size.

English and Mandarin, for example, have much bigger consonant inventories than Pandunia. Most consonant letters are pronounced in the same way in all three languages. The table below shows what consonant sounds correspond to each other in Pandunia, English and Mandarin. Sounds that are present in English or Mandarin but not in Pandunia are inside parenthesis.

Pandunia	English	Mandarin
m n (ng)	m n (ng)	m n (ng)
p b t d k g	p b t d k g	p b t d k g
lryv	lryw	l r y w (yü)
s z sh	s z sh (zh)	s z* x (sh)
f h	f h (v th th)	f h
ch j	ch j	ch j (c zh q)
	m n (ng) p b t d k g l r y v s z sh f h	m n (ng) m n (ng) p b t d k g p b t d k g l r y v l r y w s z sh s z sh (zh) f h f h (v th th)

Easy syllable structure

A syllable consists of one core vowel and possible consonants. In some languages syllables are simpler than in others. For example in Japanese the heaviest syllables consist of an initial consonant, a vowel and a final nasal consonant. This is why Japanese sounds light and vocalic. In English, on the other hand, it is possible to cram many consonants in one syllable, as in *strict parents*.

Pandunia is somewhere in the middle. Most syllables are simple a-consonant-and-a-vowel pairs but also more complex syllables are allowed, especially in internationally known technical terms. For example **kristal** (crystal) is a complex word by Pandunia standards

There are two ways to simplify words that are too complex for the international language:

- 1. Select a simpler variant of the same word from another language. For example, the English word *project* ends in two consonants but the same word in Portuguese is *projeto*.
- 2. Break the consonant clusters by adding vowels. For example, the English word *sport* is too complex but the same word in Portuguese is *esporte*, which breaks the difficult consonant clusters in the beginning and end by additional vowels.

Regular spelling

English spelling is notoriously irregular. Pīnyīn was created more recently, in the 1950s, but unfortunately it also has some irregularities, simply because there are more sounds in spoken Chinese than there are letters in the Latin alphabet. Still, in comparison to English, Pinyin is very regular. For example the English rhymes *my*, *sigh*, *lie*, and *rye* would be written in Pīnyīn *mai*, *sai*, *lai*, *rai*. It is as simple as that!

Pandunia can be spelled regularly because it has fewer speech sounds (24) than there are letters in the Basic Latin alphabet (26). The alphabet of Pandunia is:

a b c d e f g h i j k l m n o p r s t u v x y z

Pandunia has almost perfect letter-to-sound correspondence. One letter stands for one sound only. One sound is represented by exactly one letter. Every word is pronounced as it is written.

Regular accent

Pandunia has a regular stress accent. The place of the stress is decided by two simple rules. In the examples that follow, primary accent is indicated by an acute accent (\hat{a}) and secondary accent by a grave accent (\hat{a}) over the first vowel of a stressed syllable.

- 1. Basic words are stressed on the syllable that is before the last consonant of the word.
 - hálo! mí vól lóga la háu dúnia básha.
 - (Hello! I want to speak the good world language.)
- 2. Compound words are stressed according to their component words so that the primary stress is in the main word. pandúnia e dèmikrátili básha.

(Pandunia is a democratic language.)

Regular stress is easier to learn and more comfortable to use than irregular and unpredictable stress. English is an example of a language with irregular stress. In a written expression like "totally fantastic personnel", nothing shows that each word has the stress on a different syllable. If the stress was marked on the vowels, it might look something like this: "tótally fantástic personnél".

Pandunia doesn't have tones either. Chinese, on the other hand, is a tonal language. That's why texts in romanized Chinese are loaded with accent marks, as in *wŏmen yĕ huì shuō zhōngguòhuá*. They are there to mark tones. In Standard Chinese, each syllable is pronounced in one of the four tones or in the unmarked neutral tone.

Tones are hard to learn for people who are not used to them. Variable stress is hard to learn for people who are used to fixed stress. Neither word tone nor variable word stress are necessary in the world language.

The simplest structure

Languages can be categorized by two parameters:

- Is a single word made of few or many parts?
- Are those parts easy to separate or fused together?

The widely spoken languages can be categorized into four types according to these parameters.

- 1. Analytic languages Words are made of few, distinct parts.
 - Mandarin Chinese
- 2. Analytic fusional languages Words are made of few, fused parts.
 - English
- 3. Agglutinative languages Words are made of many, distinct parts.
 - Japanese, Malay, Tamil, Swahili
- 4. Synthetic fusional languages Words are made of many, fused parts.
 - · Spanish, Portuguese, French
 - German, Russian
 - · Hindi-Urdu, Bengali, Punjabi
 - · Arabic, Hausa

Usually languages are a mixture of different types. For example, in English the plural can be formed in several different ways. *Many a cat* is an analytic phrase that consists of three separate words. *Cats* is an agglutinative word that consists of two distincts parts, *cat* and *-s*. *Leaves* is a fused word that consists of two parts, *leaf* and *-s*.

Pandunia is an analytic language. Its words consist of few parts and they are clearly separable. This is a good thing because it makes the language easy to learn and use in comparison to languages where words are longer or fused of many parts.

Parts of word

The word is made of a root and optional affixes, which are attached to the root word. Prefixing languages put affixes before the root and suffixing languages put affixes after the root. Some languages put affixes on both sides or even inside the root. Usually languages use several different ways. For example English uses both prefixes (ex. un-kind) and suffixes (ex. kind-ly).

Suffixing languages are the most common type. Indo-European languages, Telugu, Chinese and Japanese are mostly suffixing.

Chinese has no inflection. Words are only combined into larger words. Some words have a special meaning when they appear as a part of a larger word. These so called bound morphemes are much like suffixes.

English, Spanish and Hindi-Urdu use mainly *root and affix system*. The meaning is changed by adding dependent parts before and after the root. For example "booklets" consists of root *book* and affixes *-let* (which adds meaning of smallness) and *-s* (which adds plural meaning). Most affixes can't stand alone, they always need to be fixed to a root.

Arabic uses transfixes. The root consists of (usually three) consonants and it is changed by inserting a pattern of vowels between them. Arabic also has many prefixes and suffixes for creating additional words.

Pandunia uses the simple root-and-affix system. Its words can consist of many, distinct parts that are easy to separate. Everybody can create new words easily.

Word orders

Different word orders are used in the languages of the world. Some of the most important areas of word order are:

- Sentence structure. Order of subject (S), verb (V) and object (O) in a transitive clause. The most common sentence structures are subject–verb–object (SVO) and subject–object–verb (SOV).
- Order of numeral and noun. Cardinal numeral can be either before (NumN) or after (NNum) the noun.
- Order of adjective and noun. There are two possible orders
 - 1. Adjective is before the noun (AdjN)
 - 2. Adjective is after the noun (NAdj)
- Order of adposition and noun.
 - 1. Prepositions are before the noun.
 - 2. Postpositions are after the noun.
- Order of relative clause and noun. The relative clause can be either before (RelN) or after (NRel) the noun.

The table below shows what are the typical, unmarked word orders in important world languages.	

Language	Sentence	Numeral	Adjective	Relative	Adposition
English	SVO	NumN	AdjN	NRel	pre
Chinese	SVO	NumN	AdjN	RelN	post
Spanish	SVO	NumN	NAdj	NRel	pre
Hindi-Urdu	SOV	NumN	AdjN	RelN	post
Arabic	VSO	both	NAdj	NRel	pre
Russian	SVO	NumN	AdjN	NRel	pre
French	SVO	NumN	NAdj	NRel	pre
Indonesian	SVO	NumN	NAdj	NRel	pre
Japanese	SOV	NumN	AdjN	RelN	post
Swahili	SVO	NNum	NAdj	NRel	pre

Also other word orders are possible. For example in English, which normally uses the SVO order in declarative sentences, the object can be fronted in interrogative and relative clauses, as in "What did you say?"

The previous table shows that the major languages don't agree about word orders. Pandunia supports several word orders but the default is to use the most common ones: subject-verb-object (SVO), numeral before the noun, adjective before the noun, relative clause after the noun and prepositions.

World words

Most Pandunia words are already international – at least in some part(s) of the world! The three key principles for selecting words for Pandunia are:

- Equality: Words are be borrowed equally from different regions of the world. In practice it means that Pandunia borrows words from the languages of Africa, Asia, Europe and the Americas.
- Prevalence: Widely spread words are favored. The more people know the word the better.
- **Simplicity**: Word forms with easy pronunciation are prefered.

However, sometimes it's hard to find international. The most frequent and at the same time the most basic words, like *me*, *you*, *one*, *two*, *be* and *do*, are typically the oldest words in languages, and they tend to be unique to a language or a group of closely related languages.

Therefore it's almost impossible to find international words for the most basic ideas, that are in common to unrelated languages in Africa, the Americas, Asia and Europe. Still, we have tried.

The personal pronouns are among the most frequently occuring words.

The first-person pronoun often begins with *m*- even in unrelated languages, for example English *me*, French *moi*, Spanish *me*, Hindi *main*, Finnish *minä*, Igbo *mu*, Kongo *mu*, Swahili *mimi*, and Zulu *mina*. In Pandunia it is **mi** (*I*, *me*).

The second-person pronoun tu comes from the Indo-European family of languages, including French tu, Spanish tu, Russian ty and Hindi $t\bar{u}$. In Pandunia it is a neutral pronoun that can be used both in informal and formal situations.

The third-person pronoun in Pandunia is **da**. It has the remarkable benefit that it can refer to both males and females as well as lifeless objects. So it covers the English third-person pronouns *he*, *she* and *it*, all at once.

The plural and possessive pronouns follow the super simple patterns of Standard Chinese.

Add men to form the plural:

English	Pandunia	Chinese
I	mi	wŏ
you	tu	nĭ
he/she/it	da	tā
we	mimen	wŏmen
you all	tumen	nĭmen
they	damen	tāmen

Add **su** to form the possessive:

English	Pandunia	Chinese
my	mi su	wŏ de
your	tu su	nĭ de
his/her/its	da su	tā de
our	mimen su	wŏmen de
your	tumen su	nĭmen de
their	damen su	tāmen de

By a fortunate coincidence, the second person plural pronoun is identical to Romani (Gypsy) *tumen* and not far from Hindi-Urdu *tum*.

The personal pronouns in Pandunia attain three important goals.

- 1. The basic pronouns (mi, tu, da) look and sound distinct.
- 2. The plural and possessive pronouns are built in a systematic way. They are not only a bunch of random words.
- 3. The words are international and come from many different language families.

Easy sentences

In this section we will compare the sentence structures of Pandunia with English and Chinese, the two most widely spoken languages of the world.

The normal sentence word order is subject-verb-object - just like in English and Chinese.

English: I love you, and you love me.

Pandunia: mi ai tu, tu ai mi.

Chinese: Wŏ ài nǐ, nǐ ài wŏ. (□□□□□□□□)

The auxiliary verb be is used when the object of the action comes first in the sentence. (This is the so called passive sentence.)

English: Apples were eaten.

Pandunia: aple be yam.

Chinese: Píngguǒ bèi chī le. (□□□□□□)

be is a loan word from Standard Chinese *bèi*, but it is also close to some uses of English "to be".

English: It can not be eaten. Pandunia: da no bil be yam.

Chinese: Tā bù néng bèi chī. (□□□□□□)

Like Chinese, Pandunia doesn't mark verbs with a word like "to".

English: I invite him to drink coffee.

Pandunia: mi ching da yam kafe.

Chinese: Wŏ qĭng tā hē kāfēi. (□□□□□□□)

In Pandunia and Chinese, nouns can be singular or plural depending on surrounding words. There's no plural ending like -s in English. Also verbs are not conjugated. In Pandunia, one word, **e**, is used instead of *am*, *is*, *are*, *was*, *were*...

English: It is an apple.

Pandunia: da e aple.

Chinese: Tā shì píngguǒ. (□□□□□)

English: They are apples. Pandunia: damen e aple.

Chinese: Tāmen shì píngguŏ. (□□□□□□)

1. The basic rules of Pandunia

These are the basic rules of Pandunia language. They are described in more detail later in this document.

(1) World words

Pandunia is an evenly global language. International words are borrowed from all parts of the world to Pandunia. They are adapted to the pronunciation and orthography of Pandunia. One basic word is admitted and additional words are built from it according to rule 10.

(2) Spelling and pronunciation

Spelling is simple and regular. Every word is pronounced exactly as it is written. Almost every letter and letter-combination indicates always the same sound.

(3) Regular stress accent

Basic words are stressed on the syllable that is before the last consonant of the word, f.ex. **háu** ('good'), **dúnia** ('world'), **básha** ('language'), **amén** ('amen'). Compound words are stressed according to their component words so that the main component carries the primary stress and other components may carry secondary stress, f.ex. **trabásha** ('translate'), **dúnialìsme** ('globalism'), **bàsha skóla** ('language school'). Primary accent is indicated by an acute accent (*â*) and secondary accent by a grave accent (*à*).

(4) Pronouns

The personal pronouns are:

mi I, tu you (sg.), da he/she/it, mimen we, tumen you (pl.), damen they.

The possessive pronouns are:

mi su my, tu su your, da su his or her, mimen su our, tumen su your, damen su their.

The interrogative pronouns are: ke what or who, ke su whose.

(5) Nouns

Nouns have only one form, always the same. Their form is not affected by number, gender or case. Number is indicated by number and quantity words. Their role is indicated by word order or by a preposition.

(6) Numerals

The cardinal numbers are:

0 siro, 1 un, 2 du, 3 tri, 4 nelu, 5 lima, 6 luka, 7 cheti, 8 bati, 9 tisa, 10 des.

Greater than ten: 11 des un, 12 des du, 13 des tri, etc.

Tens: 20 du des, 30 tri des, 40 nelu des, etc.

Hundreds: 100 un sento, 200 du sento, 300 tri sento, etc. Thousands: 1000 un kilo, 2000 du kilo, 3000 tri kilo, etc.

The ordinal numbers use the suffix **me**:

un me (first), du me (second), tri me (third), etc.

(7) Modifiers

The adjective and the adverb have the same form. The adjective modifier is before the noun that it modifies, and the adverb modifier is before the verb that it modifies.

un suga loga – A fast speech. tu suga loga. – You speak fast.

(8) Verbs

The verb does not change in person, number and tense. Auxiliary verbs indicate time.

- zai indicates an ongoing event.
- le indicates a completed event whose results have an effect on the present situation.
- pas indicates a completed event that has no connection to the present situation.
- sha indicates a future event.

(9) Word order

The word order is subject-verb-object. The same order is used in declarations and questions.

A passive sentence is created with the help of the passive auxiliary verb **be**. A similar effect can be also reached with the impersonal pronoun **men**.

pandunia be loga. – Pandunia is spoken.

men loga pandunia. – One speaks Pandunia.

In the pivot structure, the object of the transitive verb functions as the subject of the following verb.

mi ching tu loga pandunia. – I ask you to speak Pandunia.

Pronouns can be left out when they are obvious and redundant.

mi ching tu loga pandunia. \rightarrow ching loga pandunia.

- Please speak Pandunia.

(10) Word building

In Pandunia, words change only when their actual meaning changes. Words don't ever change only to serve in a different grammatical role. Compound words are made by combining the elements that form them. The main word stands at the end.

posta ('mail') + kase ('box') = posta kase ('mailbox')

2. Spelling and pronunciation

Pandunia is phonetic in two directions:

- 1. When you read a word, you can always pronounce it.
- 2. When you hear a word, you can almost always write it. (Foreign names can be an exception.)

Once you have learned the few rules and the way letters are pronounced, you can read Pandunia aloud and be understood.

Basic Latin Alphabet

Pandunia is written in the basic Latin alphabet – the same as English! It doesn't have any of the accented letters, which are different from language to language. So it can be typed, printed and used with computers and smart devices in most countries without any difficulty.

A B Ch D E F G H I J K L M N O P R S Sh T U V X Y Z

Note on phonetic notation

In this page, we use the symbols of the International Phonetic Alphabet (IPA) to show pronunciation in writing. We use square brackets and slashes to show that we're talking about a sound and not a letter.

Physical speech sounds are written between square brackets, for example [r] and [\mathfrak{I}] indicate two different r-sounds, the trill and the glide. However, [r] and [\mathfrak{I}] are not distinguished in Pandunia, but they are perceived as one sound. These mental sounds or **phonemes** can cover several physical sounds and are written between slashes. So, speakers of Pandunia perceive mentally always one sound, $\lceil r \rceil$, regardless of which physical sound, $\lceil r \rceil$ or [\mathfrak{I}], is actually heard. It is said that Pandunia has the phoneme $\lceil r \rceil$, which has alternative physical pronunciations [\mathfrak{I}] and [\mathfrak{I}]. This can be annotated $\lceil r \rceil = \lceil r \rceil \sim \lceil \mathfrak{I} \rceil$.

Sounds

Pandunia has its own sound system and its own spelling system that are mostly similar to those of the languages of continental Europe and Latin America.

The complete speech sound inventory of Pandunia is presented in the table below.

	Labial	Alveolar	Palatal	Velar	Glottal
Stops	b p	t d	ch j	k g	
Fricatives	f	S Z	sh		h
Nasals	m	n		ng	
Lateral		1			
Trill		r			
Semivowels	\mathbf{v}		y		

	Labial	Alveolar	Palatal	Velar	Glottal
High vowels	u		i		
Mid vowels	o	(e)	e		
Low vowels		a			
	Back	Central	Front		

Vowels

Pandunia has five oral vowel sounds. They are represented by the letters a, e, i, o and u in the writing system.

The list below shows how each vowel is pronounced by using the symbols of the International Phonetic Alphabet (IPA) as well as pronunciation advice in plain English.

- $\mathbf{a} = \mathbf{a}$
 - A is pronounced as in father.
- e = [e]
 - E is pronounced as in bet.
- i = [i]
 - *I* is pronounced as in *machine*.
- o = [o]
 - O is pronounced as in or.
- $\mathbf{u} = [\mathbf{u}]$
 - U is pronounced as in rule.

In addition, there is an optional mid central vowel sound [ə], which is also called the **schwa**. It is pronounced as the *a* in *about* /əbaut/ or the *a* in *sofa* /soufə/. It is the most basic vowel sound that can be created without much effort. It is called optional because it is never written and in many cases not even pronounced.

The purpose of the schwa is to make speaking Pandunia easier. It can be inserted after consonants that are difficult to pronounce without a vowel. Different people can insert schwas in different places depending on what is natural to them. (There are native languages that don't allow any consonant cluster and final consonants.) The schwa sound can be inserted between the consonants of a consonant cluster and after word-final consonants. For example the word *skol* can be pronounced /skol/ or /səkol/ (where the initial consonant cluster is broken apart by a schwa) or /səkolə/ (where the final consonant is followed by a schwa). All these pronunciations sound almost the same, because the schwa sound is always very short and unstressed. Schwas don't ever change what syllable of the word is stressed! Everybody is free to insert schwas or to omit them depending on what is most comfortable for them.

Semivowels

A semivowel is a sound that is phonetically similar to a vowel sound but functions like a consonant as the syllable boundary. Pandunia has two semivowels **y** and **v**. They appear only in the beginning of a syllable and they are always followed by a full vowel.

- $\mathbf{v} = [\mathbf{w}] \sim [\mathbf{v}] \sim [\mathbf{v}]$
- V is pronounced as the w in wet, but some speakers may pronounce it more like the v in vet.
- y = [j]
 - *Y* is pronounced as the *y* in *yes*.

There are also several common vowel sequences – au, eu, ou, ai, ei, oi – which are pronounced as the consecutive vowels with or without a hiatus in between.

Consonants

Pandunia has 19 consonant sounds. They are represented in the writing system by 19 Latin letters and their combinations. Most of them are pronounced in roughly the same way as in English.

If alternative pronunciations are possible, they are joined with the tilde (~).

- **b** = [b]
- **ch** = [t]

Ch is pronounced always like *ch* in *chat*, never as in *chateau* or *choir*.

- d = [d]
- f = [f]

• $\mathbf{g} = [\mathbf{g}]$

G is always hard as in get, never soft as in gel.

• $h = [h] \sim [x]$

H can be rougher than in English.

• $j = [d_3]$

J is pronounced always as in *judge* or as the soft g in gel.

• $\mathbf{k} = [k^h] \sim [k]$

K is preferably always pronounced with a puff of air as in kin.

l = []

L is always "light" as *lip* in and never "dark" as in *cold*.

- m = [m]
- $\mathbf{n} = [n] \sim [\eta]$

N is pronounced with the tip of the tongue except in combinations nk and ng, where it is velar [η] like in banker and finger. In the end of a word, the g in ng can be silent. So the word **pang** can be pronounced [pan] as well as [pang].

• $p = [p^h] \sim [p]$

P is pronounced with a puff of air as in pin.

• $\mathbf{r} = [r] \sim [\mathfrak{I}]$

R is preferably trilled as in Scottish and Indian English, or smooth as in American English. Never silent!

• s = [s]

S is always voiceless like s in sissy.

• sh = [[]]

Sh is pronounced as in *shop*.

• $\mathbf{t} = [\mathbf{t}^h] \sim [\mathbf{t}]$

T is pronounced with a puff of air as in tin.

• $x = [ks] \sim [s]$

X is pronounced as ks when it is between vowels. For example **maxim** is pronounced /maksim/. In other positions it may be pronounced as ks, for example **max** /mas/, **xenon** /senon/.

• $z = [z] \sim [dz]$

External letters and sounds

There are also additional letters and letter-combinations, which can be used only in *external words*, which do not belong to the ordinary vocabulary of Pandunia, like names of places and people. They are not used in any common Pandunia words.

• $\mathbf{c} = [\mathbf{t}\mathbf{s}]$

Like ts in bits.

• $\mathbf{kh} = [\mathbf{x}]$

Voiceless velar fricative, like ch in Loch in Scottish.

• gh = [y]

Voiced velar fricative

• **ph** = $[\phi]$

Voiceless bilabial fricative

• **bh** = $[\beta]$ Voiced bilabial fricative

• $\mathbf{q} = [\mathbf{q}]$

Voiceless uvular stop.

• $qh = [\chi]$ Voiceless uvular fricative.

• $\mathbf{l} = [K] \sim [K]$

Voiced uvular trill or fricative like *rh* in *rhume* in Parisian French.

• **th** = $[\theta]$

Like th in thing.

• **dh** = $[\eth]$

Like th in they.

• zh = [3]

Like z in azure.

• $\mathbf{w} = [\mathbf{w}] \sim [\mathbf{v}] \sim [\mathbf{v}]$

W is pronounced the same as v.

The additional letters and digraphs are used locally. Their purpose is to help to transfer names in local languages to the international language, so that local people can recognize them. It's OK if you don't know how to pronounce any of these sounds. The letters c, q, and w can be pronounced the same as ch, k, and v, and all digraphs can be pronounced as if the h was not there. So, for example, zh can be pronounced simply as z in the simplified international accent.

For example, the capital of Greece is called " $A\theta\dot{\eta}\nu\alpha$ " / $a\theta$ ina/ in the local language, Greek. The Pandunia version of this name is "Athina". It can be pronounced either / $a\theta$ ina/ (as the Greek do) or /atina/ (in the simplified international accent).

More examples:

Khartum Khartoum (the capital of Sudan)

Rhone Rhône (a river in France and Switzerland)

Word Structure

Pandunia words are structurally rather simple. Syllables are structured (C)(L)V(S)(N) where

- C is a consonant.
- L is a liquid consonant (1 or r).
- V is a vowel.
- S is a semivowel (i or u),
- N is a nasal (m, n or ng), a liquid (l or r), or a voiceless fricative (f, s, sh or h).
- The sounds between brackets are optional.

In the table below there are some syllables from the lightest to the heaviest. Each of them is also a word in Pandunia.

Syllable	(C)	(L)	V	(S)	(N)	Word meaning
a			a			'at'
ai			a	i		'love'
an			a		n	'un-'
pa	p		a			'father'
pai	p		a	i		ʻpie'
pan	p		a		n	'all'
plan	p	1	a		n	ʻplan'

Adapting Loan Words

As a general rule, loan words are adapted to the phonetic spelling system of Pandunia. This rule is applied to both common words and proper names.

Common words

A common word refers to a thing as a member of a group, not as an individual. For example *dog* is a common word but *Sam* is not, it is a proper name.

Common words, which are in general use, must fit into the normal word structure, and they can include only the normal sounds of Pandunia.

Most Pandunia words are structurally simpler than the corresponding English words. Difficult consonant groups are avoided in the beginning, middle and end of words, so *stadium* is **estade**, *act* is **ate**, and *saint* is **sante** in Pandunia. Also final stop consonants are avoided, so for example *soup* is **supe** in Pandunia.

Proper names

Proper nouns and rarely used common nouns can be more complex than ordinary words. They can even include sounds that don't belong to the normal sound inventory of Pandunia.

For example, family name *Smith* may remain **Smith** in Pandunia, although it is structurally more complex than common Pandunia words, and it has the external *th* sound. However, foreign people probably will pronounce this name incorrectly. Therefore it is advisable to adapt also proper names to the phonetic system of Pandunia.

Large and small Letters

Pandunia has its own rules for using the large letters (i.e. upper-case letters) and the small letters (i.e. lower-case letters).

The only case when large letters are absolutely necessary is writing standard international acronyms, because using wrong letter-case could result into wrong meaning. For example, 1 mm (un milimitre) means 'one thousandth of a metre' and 1 Mm (un megamitre) means 'one million metres'. Otherwise all text in Pandunia can be written in small letters. In particular, the first letter of sentences is not capitalized!

There are three reasons why large letters and rules about their usage are not necessary.

- 1. Writing represents speech and there are no "capital letters" in speech. Yet understanding spoken words is as easy as understanding written words in spite of this "shortcoming".
- 2. Most of the scripts and alphabets of the world have only one letter type, i.e. they don't have separate large and small letters.
- 3. It is simpler to use only small letters. No need for special rules for capitalization.

Proper names

Proper names *may* be capitalized according to the writers preference. Family names *may* be written completely in large letters. It is helpful because names are written in different way from language to language and they can include several given names and family names. However, all names may be written completely in small letters too.

Examples of written names:

- (1) ludoviko lazaro zamenhof, edgar de val, mizuta sentaro
- (2) Ludoviko Lazaro Zamenhof, Edgar de Val, Mizuta Sentaro
- (3) Ludoviko Lazaro ZAMENHOF, Edgar de VAL, MIZUTA Sentaro

Acronyms

Initialisms, like **ASEAN**, **EU**, **NAFTA** and **UN**, are always written in large letters. Other acronyms may use a mixture of large and small letters, like for example **GULag**, which is an acronym of the Russian words "Glavnoye Upravleniye Lagerey".

Capital letters are also used in the standard international acronyms. For example: 10 Mb (des megabite), 100 GB (sento gigabaite), 2 mm (du milimitre), 1 kJ (un kilojul).

Syllabification

«-» Words may be divided into syllables with a hyphen. The hyphen is placed between spoken syllables. For example: **bus**, **ka-fe**, **hu-mor**, **pos-te**, **hi-drar-gen-te**.

Punctuation

- « . » All kinds of sentences may end with a full stop.
- «? » Questions may end alternatively with a question mark.
- «! » Exclamation mark indicates loudness or emphasis.
- $\ll \dots \gg$ Three dots (i.e. ellipsis) indicates incompleteness or uncertainty.
- «: » Colon indicates the beginning of an explanation, quotation or list.
- «, » Comma indicates a small pause or separation between clauses or listed items.

Tip! Because the first word of sentences is not capitalized, sentences can be set apart with more than one space. One may (1) insert two spaces after the punctuation mark, or (2) insert one space before and after the punctuation mark. This practice helps to separate sentences more clearly.

```
(1) sal! tu hau, he? mi vol go a kafekan. tu vol lai kon mi, he?(2) sal! tu hau, he? mi vol go a kafekan. tu vol lai kon mi, he?
```

In informal texts, smileys, emoticons and emojis may be used like punctuation marks to end sentences but in addition they indicate the mood of the speaker. For example:) indicates happiness and:(indicates sadness.

```
mi visi tu:) – I see you.
tu no visi mi:( – You don't see me.
```

3. Word types in Pandunia

Introduction

Everybody knows at least two essential units of grammar: words and sentences. In written texts, words are separated by spaces and sentences begin with a capital letter and end with a full stop. However, there are also other grammatical units besides words and sentences.

Grammar involves a hierarchy of grammatical units, which are listed below from the simplest to the most complex.

- 1. Morpheme is the smallest part of language with a meaning or function.
- 2. Words are made up of one or more morphemes.

- 3. **Phrases** are made up of **one or more words**.
- 4. Clauses are made up of one or more phrases.
- 5. Sentences are made up of one or more clauses.

Morphemes don't have any syntactic function in Pandunia. Their job is only to help to build the vocabulary of Pandunia. So the simplest grammatical unit that one usually thinks of in Pandunia is the word.

One of the first things that an typical person notices about Pandunia is that its words don't ever change. Most words in Pandunia have one unchanging form, which does not change according to number, case, gender, tense, mood or any of the other inflectional categories known from other languages. Compare, for example, what happens to the words in the following two sentences in Pandunia and English.

- 1. mi ai da. I love him.
- 2. da ai mi. He loves me.

In Pandunia, the subject and object simply change places and that's it. All words stay the same, and only their order changes. In contrast, in English, the subject *I* changes to *me* when it becomes the object, the object *him* changes to *he* when it becomes the subject, and the verb *love* changes to *loves* in order to agree with the new subject. Changes like this are called grammatical inflections, and languages that use them are called *inflected languages*.

Languages with very few grammatical inflections are known as *isolating languages*. Pandunia is one of those languages that is free from all grammatical inflections, but it goes even futher. Pandunia words are multipurpose words that can be used as nouns, verbs or adjectives without any changes in the form of words. So you don't have to worry about using incorrect forms. This is one of the reasons why Pandunia is easier to learn and more convenient to use than other languages.

What is important is the order of words because grammatical relationships are encoded into the word order, not into words. However, the word order in Pandunia is very natural, so it is easy to learn.

Pandunia is so simple that we don't need specialized or complicated words to describe how it works. That's why all things in this grammar are explained in plain words and basic terms that you have probably already learned in school. And don't worry if you don't remember some of them, all terms are explained when they are met for the first time.

Analytic and isolating

Pandunia is an *analytic language*. It means that different parts of a sentence (like subject, verb and object) are independent, they are not fused together into single words like in *synthetic languages*, and their relationships are encoded into the word order, not into words. Therefore the order of words is very important in Pandunia.

Pandunia is also an *isolating language*. Grammatical information, like case, gender, number and tense, is not encoded into words by affixation, inflection or any other means. In fact, words don't ever change in Pandunia. So when one wants to express a new meaning or a nuance, one can't do that by modifying the words. One can express more things only by using more words or different words. For example, the verb **lai** ('to come') is changed to the past tense by adding a word that means the past: **pas lai** ('came' or 'to come in the past').

Content words and structure words

A word class is a group of words that have similar forms and similar use in sentences. In Pandunia, word classes belong to two superclasses: content words and structure words. Content words are the words for things in the real world. The job of structure words is to bind content words into meaningful phrases. They have little meaning or only an occasional meaning in the world outside the language.

Content words convey most of information and meaning. You can't say anything meaningful without them, but they don't make any sense without structure words, which are the necessary words for grammar. You need structure words to put content words together into more or less complex sentences. Content words are like bricks of information and structural words are like the mortar that holds them together.

In Pandunia, it is easy to identify structure words because they always consist of only one syllable. Content words, on the other hand, are typically longer. Structure words are best explained in the grammar, whereas content words are translated in the dictionary.

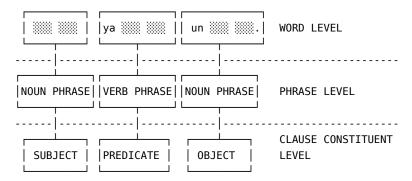
In Pandunia, sentences are held together by a fixed group of structure words. They include pronouns (such as **mi** 'I' and **tu** 'you'), determiners (such as **un** 'a, one' and **la** 'the') and various grammatical particles (such as the affirmative and negative particles **ya** and **no**). Structure words make the syntactical structure easy to see, because they mark out the boundaries between sentence constituents.

Therefore one can know the grammatical structure of a sentence by knowing the structure words only. It doesn't matter does one know any of the content words. It's because the structure words define the structure and the content words define the meaning. For example, consider the following sentence where only structure words are visible and content words are hidden.

```
ya un .
```

Here the structure words ya and un form a certain construction or mold where content words are inserted. The type and placement of the structure words reveals the structure of the mold. Namely, it is the transitive clause construction. It is identified by its three-part structure. First there is the subject (a noun phrase). It is followed by the predicate (a verb phrase), whose beginning is marked here by the affirmative particle ya. It is in turn followed by the object (another noun phrase), whose beginning is marked by the determiner un 'a, one'.

Figure. The transtive construction in three levels.



The transitive construction is one of the most common structures in Pandunia. Essentially it consists of following parts: (det.) + NP + TAM + VP + det. + NP

where det. = determiner, TAM = tense, aspect or mood particle, NP = noun phrase and VP = verb phrase. It can be filled with different content words in order to give different specific meanings for the sentence, as in the table below.

Subject	TAM	Predicate	Det.	Object
suka bacha The happy child	ya	kitabi writes	un	long letre. a long letter.
<i>jun man</i> The young man	ya	<i>visi</i> sees	un	<i>mei parke</i> . a beautiful park.
poli jen Many people	ya	<i>vol shope</i> want to buy	un	nova dom.* a new house.

So the key to decoding Pandunia is to know the structure words and the clause constructions. There is a small and fixed number of both of them, about 40 structure words and less than 10 clause constructions. They form the molds where an endless amount of content words can be inserted in order to say anything that we can think of.

Word classes

Structure words can be categorized into word classes as follows:

- 1. Pronouns: words that point to people and things.
- 2. Prepositions: words that relate things and actions into circumstances
- 3. Conjunctions: words that join phrases and clauses together
- 4. Particles: words that indicate temporal, modal and structural relations.

Content words can be classified further into the following word classes:

- 1. Nouns: words for things, ideas, places and people.
- 2. Adjectives: words for qualities of nouns, such as good, bad, and big.
- 3. Adverbs: words that describe degrees of qualities, such as less, more and very.
- 4. Numerals: words for numbers and amounts.
- 5. Verbs: words for actions and occurrences, such as to eat and to look.

However, the class of a content word is seldom permanent. A word like **ai** ('love') can function as verb, noun or adjective depending on its position in the sentence.

```
mi ai tu. – I love you. (verb)
tu fikre mi su ai. – You think about my love. (noun)
mi kitabi un ai anjil. – I write a love letter. (adjective)
```

4. Pronouns

Pronouns can substitute nouns and noun phrases.

Personal pronouns

Personal pronouns refer to people. They are used as substitutes for a person's name.

Singular	Plural
mi	mimen
I, me	we
tu	tumen
you	you all
da	damen
he or she	they

All pronouns can be used for all genders. In Pandunia, personal pronouns do not specify whether the person discussed is a woman or a man. For example, in the third person, one word $-\mathbf{da}$ – refers to women, men and people of other genders alike. It is a gender-neutral personal pronoun and it treats everyone equally.

There are three first-person plural pronouns. **tumimen** is the inclusive *we* that includes the audience: 'you, I and other people'. **damimen** is the exclusive *we* that excludes the audience: 'I and other people only'. Finally, **mimen** is the neutral *we* that can be both inclusive and exclusive. It is also the most common first-person plural pronoun, and the other two are used only occasionally.

The possessive pronouns consists of the personal pronoun and the possessive particle su.

Singular	Plural
mi su	mimen su
my	our
tu su	tumen su
your	your
da su	damen su
his or her	their

Reflexive pronoun

The reflexive pronoun is used when the object of a sentence is the same as the subject.

se – self

Note! The same reflexive pronoun is used for all persons, so it corresponds to English *myself*, *yourself*, *himself*, *herself*, *itself*, *ourselves* and *themselves* all at once.

mi visi se. – I see myself.

da visi se. - She sees herself. / He sees himself. / It sees itself.

mimen visi se. – We see ourselves.

The expression semen is used as the reciprocal pronoun.

semen - each other, one another

mi i tu visi semen. – Me and you see each other.

mimen visi semen. – We see each other.

Demonstrative pronouns

Demonstrative pronouns are used with nouns to make them more specific. The demonstrative pronouns in Pandunia are:

ye – this (near the speaker)

vo – that (far from speaker)

la – the (known by both the speaker and the listener)

The proximal demonstrative **ye** points to things that are near the speaker. The distal demonstrative **vo** points to things that are far from the speaker.

```
tu vol vo buku, he? – Do you want that book?
no, mi vol ye buku, no vo. – No, I want this book, not that.
```

The demonstratives can serve as subjects and objects in the same way as nouns.

```
ye e hau. – This is good.

vo e dus. – That is bad.

tu vol ye, he? – Do you want this?

no, mi vol vo. – No, I want that.
```

When the verb is a content word, there needs to be a modal particle, like ya or no, between the subject and the verb.

```
mi visi du jen. – I see two persons.
ye ya gani i vo no gani. – This one sings and that one doesn't sing.
```

The basic proximal and distal pronouns are used for introducing a new object. The topical demonstrative **la**, on the other hand, does not specify physical distance but it is used when the speaker has already mentioned the object or person in question and it is known by the audience or is topical within the discourse.

ye e mau. da vol yam vo mushu. – This is a cat. It wants to eat that mouse.

mi ha un mau i un vaf. la vaf e dai. da yam poli yam. - I have a cat and a dog. The dog is big. It eats a lot of food.

Abstract use

The demonstrative pronouns can be used also discourse internally. Then they refer to abstract entities of discourse, not concrete objects. **la** refers to things previously spoken, **ye** refers to things currently being spoken, and **vo** refers to things about to be spoken.

ye jumla e korte. – This sentence is short.

In the above, **ye jumla** (this sentence) refers to the sentence being spoken.

```
mi seme vo: mi ai tu. – I mean this: I love you. OR I mean that I love you. mi ai tu. mi seme la. – I love you. That is what I mean.
```

In the above, the pronoun vo refers to the content of the next statement and la refers to the content of the previous statement.

Interrogative pronouns

ke is a general-purpose interrogative pronoun. It does the job of English words who and what.

```
ke? - Who or what?
```

The adjectival interrogative pronoun is also ke and it means the same as English which.

```
ke she? - What? (Which thing?)
ke jen? - Who? (Which person?)
ke zaman? - When? (What time?)
ke loka? - Where? (In which place?)
ke mode? - How? (What way?)
ke sabu? - Why? (What reason?)
```

Also adjectives are questioned with **ke**.

```
ke nova? – How new?
ke koste? – How costy?
ke poli? – How many?
ke kam? – How few?
ke dai? – How big?
ke shau? – How small?
```

tu ha ke dai di mau? – How big a cat do you have?

5. Nouns

Only one form

A noun is a word that refers to a concrete or abstract object, such as *person*, *tree*, *house*, *life* and *speed*. Like all words in Pandunia, nouns don't ever change in form. The same word form is always used, no matter whether the referred thing is singular or plural,

definite or indefinite, subject or object, etc. Therefore the same Pandunia word form can correspond to many different word forms in English.

```
ite – a stone, stones, the stone, or the stones
meza – a table, tables, the table, or the tables
kursi – a chair, chairs, the chair, or the chairs
sui – water, the water
```

Number and definiteness are often known because they were previously mentioned in the conversation or because they are general knowledge. For example, normally the word **sol** refers to *the sun* and **lun** refers to *the moon*, our only sun and moon.

Indicating number

Pandunia nouns have the same form in singular (when there is one) and plural (when there is more than one). Therefore all Pandunia nouns are like the English words *sheep*, *deer* and *fish*, which also have only one form though they can refer to one or many things.

In Pandunia, the number is indicated only when it matters and when it is new information. It is done simply by inserting a number or a quantity word before the noun.

```
meme – (one or more) sheep
un meme – a sheep or one sheep
du meme – two sheep
tri meme – three sheep
men meme – many sheep
kursi – a chair or chairs
un kursi – one chair
du kursi – two chairs
tri kursi – three chairs
poli kursi – many chairs
```

It is possible to specify plurality also by reduplication, by saying the noun two times.

ite ite – stones and stones, a variety of stonesbuku buku – books and books, a variety of books

Quantity words should not be used together with reduplication. Therefore, a phrase like **men buku buku** is superfluous.

Proper names

Proper names are nouns for individual people, places and other things.

Names of people can be tagged with the universal title of respect si. Using it shows respect and politeness. In Pandunia, you use it in front of someone's name.

It can be used in formal and informal situations and for all age groups, for all social groups and for all sexes and genders. The closest translation for it in English is Mr or Ms or Mx.

There are different customs concerning honorific titles in different cultures. In some cultures it is not polite to use someone's name without a title of respect. Therefore it is advisable to use si always when you meet new people from different cultures.

A title of respect can be used with a given name, a family name, or both.

```
si Bili King – Mx Billy King
si Bili – Mx Billy
si King – Mx King
```

6. Numerals

Cardinal numbers

Ones	Ten and over	20 and over	30 and over
0 siro	10 (un) des	20 du des	30 tri des
1 un	11 des un	21 du des un	31 tri des un
2 du	12 des du	22 du des du	32 tri des du
3 tri	13 des tri	23 du des tri	33 tri des tri

Ones	Ten and over	20 and over	30 and over
4 nelu	14 des nelu	24 du des nelu	34 tri des nelu
5 lima	15 des lima	25 du des lima	35 tri des lima
6 luka	16 des luka	26 du des luka	36 tri des luka
7 cheti	17 des cheti	27 du des cheti	37 tri des cheti
8 bati	18 des bati	28 du des bati	38 tri des bati
9 tisa	19 des tisa	29 du des tisa	39 tri des tisa

Ones	Tens	Hundreds	Thousands
1 un	10 (un) des	100 (un) sento	1000 (un) kilo
2 du	20 du des	200 du sento	2000 du kilo
3 tri	30 tri des	300 tri sento	3000 tri kilo
4 nelu	40 nelu des	400 nelu sento	4000 nelu kilo
5 lima	50 lima des	500 lima sento	5000 lima kilo
6 luka	60 luka des	600 luka sento	6000 luka kilo
7 cheti	70 cheti des	700 cheti sento	7000 cheti kilo
8 bati	80 bati des	800 bati sento	8000 bati kilo
9 tisa	90 tisa des	900 tisa sento	9000 tisa kilo

Greater numbers follow the same logic as above.

10'000 = un des kilo 100'000 = un sento kilo 1'000'000 = un mega 10'000'000 = un des mega 100'000'000 = un sento mega 1'000'000'000 = un giga

The numerals that are greater than one hundred are borrowed from the International System of Units (SI). They are used in scientific words in the whole world.

Prefix	Symbol	Base 10	Decimal
kilo	k	10 ³	1'000
mega	M	10^{6}	1'000'000
giga	G	10^{9}	1'000'000'000
tera	T	10^{12}	1'000'000'000'000
peta	P	10^{15}	1'000'000'000'000'000
exa	E	10^{18}	1'000'000'000'000'000'000
zeta	Z	10^{21}	1'000'000'000'000'000'000'000
yota	Y	10^{24}	1'000'000'000'000'000'000'000'000

Cardinal number before noun

Quantity can be expressed with numerals and other quantity-words. They are put before the word or phrase that they qualify.

un sing – one star

 $\mathbf{du}\ \mathbf{sing} - \mathbf{two}\ \mathbf{stars}$

tri sing – three stars

kam sing – few stars

poli sing – many stars

un dai kursi – one big chair

du dai kursi – two big chairs

tri hau kursi – three good chairs

Ordinal numbers

Ordinal numbers are created with the particle me.

- un me first
- du me second
- tri me third
- **nelu me** fourth
- lima me fifth
- luka me sixth
- cheti me seventh
- bati me eighth
- tisa me ninth
- des me tenth

They are placed before the modified noun like normal adjectives.

```
un me fen – the first part
du me fen – the second part
tri me fen – the third part
```

Also the words for previous, next, first and last use the same particle.

```
pre 'before, precede' \rightarrow pre me 'previous, preceding' pos 'after, follow' \rightarrow pos me 'next, following' shuru 'begin' \rightarrow shuru me 'the first' fine 'end' \rightarrow fine me 'the last'
```

Ordinal numbers are put before cardinal numbers.

un me tri kupa kafe – the first three cups of coffee

Ordinal number after noun

Another way to form ordinal numbers is to place the cardinal number after the noun.

```
fen un – part one (the first part)
fen du – part two (the second part)
fen tri – part three (the third part)
```

Classifiers of measurement

The classifier of measurement is a word that occurs between a numeral and a noun. It indicates how the referent of the noun is measured, contained or packaged. Classifiers of measurement is an open class of words, which includes, among many others, litre 'liter', metre 'meter', botle 'bottle', kope 'cup, mug', pake 'package', pote 'pot', sake 'bag, sack', tin 'can, tin' tong 'cask, barrel', van 'bowl'.

```
du litre jus – two liters of juice

tri metre kable – three meters of wire

un kope kafe – a cup of cofee

du botle vin – two bottles of wine

tri sake patate – three sacks of potatoes

nelu tin limon jus – four cans of lemonade
```

Fractions

Fractions are formed with the help of the word fen 'part'.

Fractions can be interpreted in two ways. Firstly, the word **fen** can be interpreted as a classifier of measurement. Then, for example, **du fen tri** is interpreted as 'two parts of three (parts)'. Secondly, the last numeral can be understood as an ordinal number that modifies **fen**. Then, for example, **du fen tri** is interpreted as 'two thirds'. Both interpretations lead to the same result that **du fen tri** stands for '2/3' in mathematical symbols.

```
un fen du – a half (½)

un fen nelu – one fourth, one quarter (¼)

tri fen nelu – three fourths, three quarters (¾)

un fen sento – one hundredth, one percent (1%)

un fen kilo – one thousandth, one permille (1‰)
```

Fractions are connected to their noun head with **de** ('of').

```
un fen du de hor – a half (of an) hour
lima des fen sento de jen – fifty percent of people
du fen tri de keke – two thirds of a cake
```

In addition, there is also a longer pattern for forming fractions. It uses the pattern X de Y fen ('X of Y parts').

```
un de du fen – one of two parts, a half (½)
un de nelu fen – one of four parts, a quarter (¼)
tri de nelu fen – three of four parts, three quarters (¾)
un de sento fen – one of hundred parts, a percent, (1%)
un de kilo fen – one of thousand parts, a permille, (1‰)
```

Date and time

Days of the week

Days of the week are named after celestial bodies according to the historical international system and they include the word **den** ('day, 24 hours').

- 1. lunaden Monday
- 2. marisden Tuesday
- 3. merkurden Wednesday
- 4. **mushinden** Thursday
- 5. **zukraden** Friday
- 6. shaniden Saturday
- 7. solden Sunday

Months

Names of the months are made up of the number of the month and mes ('month') is used.

- 1. mes un January
- 2. mes du February
- 3. mes tri March
- 4. mes nelu April
- 5. mes lima May
- 6. mes luka June
- 7. mes cheti July
- 8. **mes bati** August
- 9. **mes tisa** September
- 10. mes des October
- 11. **mes des un** November
- 12. mes des du December

Date format

The date formats use the *ordinal number after the noun* pattern. The day, month and year ordered from the longest period of time to the shortest, i.e. day first and year last, or vice versa i.e. year first and day last. Month is always in the middle.

nen 2022 mes 9 den 17 ~ den 17 mes 9 nen 2002

There are also two short formats without the year.

mes 9 den 17 ~ den 17 mes 9

Telling time

Time can be told with the word hor ('hour'). The 24 hour clock is the standard.

```
hor des du – twelve o'clock
hor des du i tri des – twelve thirty, half past twelve
hor du des – eight PM
hor du des i des lima – quarter past eight PM
```

7. Modifiers

A modifier is a word that adds a particular quality or description, such as good, bad, big, and fast, to another word. In Pandunia, there is only one class of modifiers. The same word can modify nouns and verbs, whereas in English only *adjectives* can modify nouns and only *adverbs* can modify verbs. For example, the word **mei** ('beautiful' or 'beautifully') modifies a noun in sentence A and a verb in sentence B.

```
A. vo e mei kitabi. – That is a beautiful writing. B. tu mei di kitabi. – You write beautifully.
```

Modifying nouns

In Pandunia, "adjectives" are modifiers that are placed before the noun that they modify.

```
un neu karo – a new car
un suga karo – a fast car
poli dai meza – big tables
poli gau meza – high tables
un hau jen – a good person
```

Two or more modifiers can modify the same noun.

un shau neu karo – a little new car

Modifying verbs

A modifier that modifies a verb is placed immediately before the verb.

```
tu suga loga. – You talk fast.
damen hau kitabi. – They write well.
```

It is common to put the modifying particle di between the modifier and the verb. It makes the structure of the verb phrase clearer.

```
tu mei di kitabi. – You write beautifully. damen suga di marche. – They walk fast.
```

Modifying other modifiers

The particle di is used also when a modifier modifies another one.

```
un dai di hau buku – a greatly good book
poli bala di ai ja jen – strongly loving people
```

Degree words

Degree words tell us about the intensity of something.

```
tre – very
bas – quite, sufficiently, enough
mas – more
min – less mas ka bas – too
```

Degree words are placed before the word that they modify.

```
un dai man – a big man
un tre dai man – a very big man
un bas dai man – a big enough man / a sufficiently big man un mas dai man ka bas – a too big man
```

A degree word together with a modifier forms a *compound adverb* that can modify a verb or a sentence. The compound adverb is placed immediately before the verb that it modifies.

```
tre poli – very muchmi tre poli vol loga. – I want very much to speak.mi vol tre poli loga. – I want to speak very much.
```

It is also possible to place the compound adverb very last in the sentence, and then it modifies the sentence as a whole. The meaning is the same like when the compound adverb modifies the main verb.

```
mi vol loga tre poli. – I want to speak very much. sual tu sona bas hau? – Did you sleep well enough?
```

Adverbs of comparison

Adjectives can be compared with the adverbs of comparison.

- mas (more) indicates comparison of superiority
- masim (most) indicates the superlative of superiority
- min (less) indicates comparison of inferiority
- minim (least) indicates the superlative of inferiority
- par (as or equally) indicates the comparison of equality

The particle **ka** relates the adverbs of comparison to the object of comparison.

```
aple e mas hau ka aranja. = Apples are better than oranges.
aranja e min hau ka aple. = Oranges are less good than apples.
tu loga par hau ka mi. = You speak as well as me.
```

8. Verbs

Verbs are unchanging in Pandunia. Things like person, number, time and mood are indicated by separate words, not by changing the form of verbs as in English and other languages.

Person and number

Person and number are indicated by the subject. For example, the verb e ('to be') has the same form in all persons.

```
mi e dosti. – I am a friend.
tu e dosti. – You are a friend.
da e dosti. – He/she is a friend.
mimen e dosti. – We are friends.
tumen e dosti. – You are friends.
damen e dosti. – They are friends.
```

Also a noun can serve as subject.

mau e hevan. - The cat is an animal.

Frequently there is a marker between the subject and the verb to indicate where the subject ends and the verb begins. It is particularly helpful when the subject and the verb are content words that could serve as both. The marker is typically a particle or an auxiliary verb. One of the many suitable markers is **ya** ('yes'), which doesn't change the meaning of the sentence but only helps to clarify its structure.

```
tuzi yam. – Rabbit food. – OR Rabbit eats.
tuzi ya yam. – Rabbit does eat. ~ Rabbit eats.
karote e tuzi yam. – Carrot is rabbit food.
tuzi ya yam karote. – Rabbits eat carrots.
```

Other suitable markers include auxiliaries of time and mood, which are introduced next.

Auxiliaries of time

The relationship of an action, event or state to time is indicated with auxiliary verbs.

shuru 'begin, start' indicates beginning of an action or transition to a new situation.

```
mi shuru fuku la kote. – I start wearing the coat. ~ I put the coat on.
kaguji ya shuru hogo. – Paper starts to burn.
tu shuru yam. – You start to eat.
```

fin 'end, cease, quit, stop' conveys the idea of "to stop doing something".

```
damen fin haha. – They stopped laughing. kaguji ya fin hogo. – Paper ceased to burn. tu fin yam. – You stop eating.
```

pul 'fulfill, complete' indicates that an action is done completely.

```
tu pul yam un piza. – You ate a pizza completely.
```

mi pul visi la filme. – I completed watching the film. / I watched the film completely.

fen 'partially' indicates that the action is only partially done.

tu fen yam un piza. - You ate some of the pizza.

mi fen visi la filme. – I watched some of the movie.

zai 'be present' indicates that a situation is happening at present.

mi zai yam un piza. – I am eating a pizza.

dura 'keep on, continue, proceed' indicates that a situation is continuing or in progress.

mi dura yam la piza. – I keep on eating the pizza.

ada 'have a habit, be used to' indicates that an action is done regularly.

mi ada gul yo bir. – I have a habit of drinking beer.

le 'attain, accomplish, reach; already' indicates that an action has happened in the past and is still ongoing, or is relevant to the current situation. It is best translated by *already* or *(not) yet*. You can think of it somewhat like the present perfect in English (*I have done, I have eaten*).

da le e guru. – He/she is already a teacher.

mi no le gul yo alkohol. – I haven't drunk alcohol yet.

mi le no gul yo alkohol. – I am already not drinking alcohol.

mi le don la buku to damen. – I have given the book to them. Or: I already gave the book to them.

damen no le ridon da to mi. - They haven't given it back to me. Or: They didn't give it back to me yet.

mi le lai to siti. – I have come to the city. Or: I already came to the city.

pas 'pass, go past, go through' indicates that an action is finished and is no longer relevant to the current situation. You can think of it somewhat like the past simple in English (I finished, I ate).

mi pas don la buku to damen. – I gave the book to them. (Maybe they don't have it anymore or they gave it back.)

mi pas vizite Franse. – I have visited France.

mi pas ada gul yo bir. - I used to drink beer. / I had a habit of drinking beer.

mi pas lai to siti. – I came to the city.

sha 'will, shall' indicates that the event will take place later or in the future.

da *sha* e guru. – He/she shall be a teacher. mi no *sha* gul bir. – I will not drink beer.

Transitivity

In general, there are three types of verbs.

- 1. Transitive verbs need a direct object, which is the target of the action.
- 2. Intransitive verbs don't accept an object. Then the action is directed to the subject.
- 3. Ambitransitive verbs can be both transitive and intransitive.

Pandunia verbs are typically ambitransitive i.e. they may or may not require an object depending on the sentence structure. When there is an object, the verb is transitive, and when there isn't an object, the verb is intransitive.

mi bule sui. – I boil water. (transitive sentence)

sui bule. - Water boils. (intransitive sentence)

baker bake ban. – The baker bakes bread. (transitive sentence)

ban bake a tanur. – Bread bakes in the oven. (intransitive sentence)

Serial verb construction is a string of verbs that share the same subject, which is before the verbs. In serial verb constructions the verbs are interpreted so that the first verb (an auxiliary verb) is something that the subject possesses and the second verb is something that the subject does (when there is an object in the end) or experiences (when there is no object).

mi bil kitabi la javabe.

- \approx I have the ability to write the answer.
- I can write the answer.

mi halal kitabi la javabe.

- \approx I have the permission to write the answer.
- I may write the answer.

mi mus kitabi la javabe.

- \approx *I have the compulsion to write the answer.*
- I must write the answer.

Note that the same auxiliary verbs can be used alone as transitive verbs in the pivot construction.

guru halal mi kitabi la javabe. – The teacher permits me to write the answer. **guru mus mi kitabi la javabe.** – The teacher compels me to write the answer.

Prepositions

In Pandunia, prepositions are words that function almost like verbs. They always take an object.

a

The preposition a denotes a destination, goal or purpose, 'to, toward, for'.

damen marche a bazar. – They walk to the market. **mi vol don ye buku a tu.** – I want to give this book to you.

bi

The preposition bi denotes an instrument or tool, 'with, by, by means of'.

da bate bi hamar. – He hits with the hammer. **da kitabi bi kalam.** – He writes with a pen.

It also denotes means of exchange, 'for'.

da shope la juba bi unli 20 euro. – She bought the dress for only 20 euros.

It also denotes the language of speech or a text, 'in'.

mimen loga bi pandunia – We speak in Pandunia damen kitabi bi farsi – They write in Persian.

de

The preposition de denotes separation or departure, 'off, away from, from'.

damen lai de Brazil. - They come from Brazil.

ex

The preposition ex denotes location on the outside, 'out, outside'.

demi ya protesta ex la burgi. – People protest outside the castle.

in

The preposition in denotes location on the inside, 'in, inside'.

zulmivan ya sir in la burgi. – The tyrant hides in the castle.

kon

The preposition kon denotes togetherness, 'with, in the company of'.

da loge kon la shefe. - He/she speaks with the boss.

pos

The preposition **pos** denotes later position in time or space, 'after, later than'.

damen lai pos mi. - They come after me.

pre

The preposition **pre** denotes earlier position in time or space, 'before, in front of'.

damen lai pre mi. - They come before me.

pro

The preposition **pro** denotes intention, cause or motivation, 'for, for the sake of, in order to, pro'.

mi kurse pro salta. – I jog for health.

re

The preposition **re** denotes movement back, 'back, in return'.

da don la buku re mi. - He gave the book back to me.

tra

The preposition tra denotes piercing through, 'through'.

via

The preposition via denotes road or way, 'via, by way of'.

mimen lai a Berlin via Praha. - We come to Berlin via Prague.

vise

The preposition vise denotes substitution, 'instead of, on behalf of'.

da loga vise mi. – He speaks on my behalf.

9. Sentence structures

Building blocks for sentences

Sentences consist of clauses, which in turn consist of constituents, which are phrases, which consist of words and have a certain internal word order.

The clause constituents are listed below.

- The subject is the topic of the sentence. It is typically a noun phrase.
- The predicate says something about the subject. In the narrow sense it covers only the verb and its modifiers, which indicate the event or action that is occurring.
- The object is the participant that is affected by the event.
- The predicative is a complement of the predicate that describes the subject.
- Adverbial indicates means or circumstances that are involved in the event.

Subject	Predicate	Object	Adverbial
A young man	is driving should take	a car	on the street.
We		our old stuff	to the flea market.

Subject	Predicate	Predicative	Adverbial
You and me	are	happy	together.
My friend	got	upset	for the war.

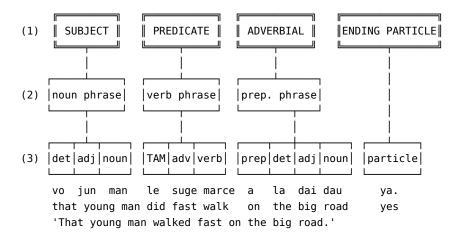
The clause constituents are phrases. The main phrase types are listed below.

- The noun phrase (NP) consists of a determiner (det.), adjectives and a noun. The noun is the head of the noun phrase, which means that it is the main word and the other words only add to its meaning. The head can serve alone as the noun phrase whereas the other words can't.
- The adjective phrase (AP) consists of an adjective (adj.) with any adverbs (adv.) that modify it.
- The verb phrase (VP) consists of a tense, aspect or mood marker (TAM), one or more adverbs and a verb (or a verb series). The verb is the main word of the verb phrase.
- The preposition phrase consists of a preposition (prep.) as head and usually a noun phrase as its complement.

Pandunia sentences are made up of the building blocks listed above. The figure below shows the decomposition of a Pandunia

sentence in three levels: (1) clause constituents, (2) phrases and (3) words.

Figure 1. Decomposition of a sentence structure in Pandunia.



Marking boundaries between constituents

Clause constituents can consist of more than one word. Subject and object can be noun phrases that consist of many words, and there can be a series of verbs (i.e. a serial verb) instead of a single verb. In such cases the boundaries between the clause constituents can become doubtful.

shau baku meme vol shuru yam hau seng chau. - Little white sheep want to start to eat good fresh grass.

Boundaries between sentence elements can be marked with little words. Determiners, like **un** 'a, one', **ye** 'this or these', **vo** 'that or those over there', **la** 'that or those', and **yo** 'some', help to indicate where noun phrases begin.

la shau baku meme ya vol shuru yam la hau seng chau. – The little white sheep want to start to eat that good fresh grass.

Clause types

Predicative clause

The basic predicative clause patterns are:

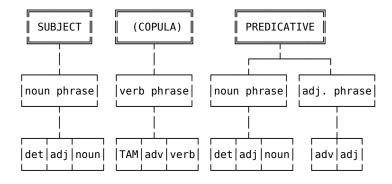
Someone is something.

Someone is of some kind of.

In short, the subject is what the predicative says.

The predicative clause is simple in Pandunia. What is new for English speakers, is that the copula verb 'to be' can be left out. It's not necessary in Pandunia. There are two types of predicative clause: verbal and nominal.

Figure 2. Decomposition of the copula clause.



Nominal predicative clause

A predicative completes the meaning of a sentence by giving information about a noun by either renaming it or describing it. Often there is no copula verb (i.e. linking verb) between the subject and its predicative complement.

da Ali. - He is Ali.

Ali guru. – Ali is a teacher.

Ali rike. – Ali is rich.

Ali a dom. – Ali is at home.

Verbal predicative clause

The copula verb e 'to be' can be used optionally in simple predicative sentences like the ones above.

da e Ali. - He is Ali.

Ali e guru. - Ali is a teacher.

Ali e rike. – Ali is rich.

Ali e a dom. - Ali is at home.

The copula verb is used when it is necessary in order to convey the desired meaning. For example, modal verbs, like **vol** 'to want', always need it as the main verb because the sentences would have a different meaning without it.

da vol e guru. – He (or she) wants to be a teacher.

Compare with:

da vol guru. – He (or she) wants a teacher.

da vol e rike. - He (or she) wants to be rich.

Compare with:

da vol rike. - He (or she) wants riches.

The linking verb is used also when structural complexity of subject and/or predicate makes the boundary between the two sentence elements doubtful.

mi su kar mede bacha. – My job helps children.

mi su kar e mede bacha. – My job is to help children.

It is also possible to use a pause, that is indicated by a dash in writing, instead of the linking verb.

mi su kar – mede bacha. – My job: to help children.

Negating the complement

All predicative complements can be negated by \mathbf{no} 'not' and the linking verb \mathbf{e} is optional in the same cases as before

da no Ali. ~ da no e Ali. – He is not Ali.

da no guru. ~ da no e guru. – He is not a teacher.

da no vol e guru. – He doesn't want to be a teacher.

da no rike. ~ da no e rike. – He is not rich.

da no vol e rike. - He doesn't want to be rich.

da no a dom. ~ da no e a dom. – He is not at home.

da su kar no e mede bacha. – His job is not to help children.

Adjective and verb subjects

In addition to noun subjects and pronoun subjects, the previous rules apply also to adjective subjects and verb subjects.

jun – mei. ~ **jun e mei.** – Young is beautiful.

jun – no lau. ~ jun no e lau. – Young is not old.

gani – hau. – gani e hau. – Singing is good.

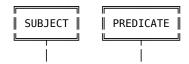
gani – no dus. ~ gani no e dus. – Singing is not bad.

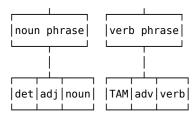
skolefa bacha – mede bacha. ~ skolefa bacha e mede bacha. – To teach children is to help children.

Intransitive clause

The purpose of the intransitive clause is to express an event, where someone does something, or where something happens. The intransitive clause contains only one participant, the subject. It is the doer or the experiencer of the event. Intransitive clause does not contain an object.

Figure 3. Decomposition of the intransitive clause.





Here are some examples of intransitive clauses. *Children run*. This sentence tells what the children do, they run. *The door opens*. This sentence tells what the old man experiences, he dies.

The actions described by intransitive clauses can be voluntary or involuntary. They are done by the subject, or they just happen to the subject.

In intransitive clauses, if anyone at all is affected by the event, it is the subject. So the action is directed at the subject. The subject undergoes a change. The change can be a change of state or a change of place.

In the sentence *the children run*, the subject changes place. In the sentence *the old man dies*, the subject changes state from living to dead.

Here are some intransitive clauses in Pandunia. The subjects are written in cursive.

bacha kurse. – Children run.

jun fem danse. - The young woman dances.

sen man morte. - The old man died.

Note that Pandunia verbs don't include tense. So they can express the past and present alike. Therefore for example **morte** can mean both 'died' and 'dies'.

So called intransitive verbs can take a cognate object, whose meaning is very close to the meaning of the verb. For example the sentence **bace kurse**, 'the children run', can take an object like **long kurse**, 'a long run'.

*Bache kurse long kurse. - 'The chilren run a long run.'

The meaning of the sentence doesn't really change. It is still about an activity and a change of place, but structurally it is now a transitive clause.

jun fem danse mei danse. – The young woman dances a beautiful dance. *sen man* morte hau morte. – The old man died a good death.

The intransitive clause is structurally similar to the nominal predicative clause, which has zero copula. Compare the first two examples below!

- (1) *sen man* morte. The old man died. (intransitive clause)
- (2) sen man morte. The old man (is) dead. (nominal predicative clause)
- (3) sen man es morte. The old man is dead. (verbal predicative clause)

The same sentence can mean both 'the old man died' and 'the old man is dead'. However, they mean almost the same thing, so their almost similar appearance is not an issue. One can use the copula verb to clarify the situation, as in the third sentence, when necessary.

Transitive clause

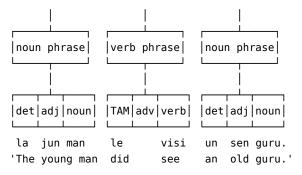
The transitive clause is the most versatile clause type in Pandunia, and it has many different realizations.

Transitive clauses are clauses where the verb takes a direct object. The purpose of the transitive clause is to express an event where someone does something to someone or something.

The three constituents of the transitive clause are subject, verb and object. In theory, they can be ordered in many different ways. In Pandunia, their normal order is subject–verb–object (SVO). This order is one of the most common word orders among world's languages. It is the most common word order by number of speakers and the second-most common order by number of languages.

Figure 4. Decomposition of the transitive clause.





Transitive clauses are called transitive because they express an event where some energy transits from the subject to the object. Subject-verb-object is a natural word order, because it follows the natural order of the event. The subject is the source of the energy and it sends the energy through the verb, which transits it to the object. The object receives the energy and is affected by it.

Ambitransitive verbs

In general, there are three types of verbs.

- 1. Transitive verbs need a direct object, which is the target of the action.
- 2. Intransitive verbs don't take an object. Then the action is directed to the subject.
- 3. Ambitransitive verbs can be both transitive and intransitive.

Pandunia verbs are typically ambitransitive i.e. they may or may not take an object. When there is an object, the clause is transitive, and when there isn't an object, the clause is intransitive.

In transitive clauses, the subject is the agent and the object is the patient. There is a lot of variation in the the roles of agent and patient, but their most basic types can be described as prototypical roles.

The prototypical agent

- 1. is alive
- 2. can move
- 3. participates in the event by its own will
- 4. causes a change in another participant
- 5. exists independently of the event.

The prototypical patient

- 1. might be a non-living thing
- 2. is standing still relative to another participant
- 3. is drawn into the event by another participant
- 4. undergoes a change because of the event
- 5. might not exist without the event.

In the event, energy flows from the agent to the patient in the form that the verb describes. Consider the following sentence, where the child is the agent that departs energy in the form of a push to the ball, the patient.

la bacha dape la bol. – The child hits the ball.

There can also be an instrument that mediates the flow of energy from the agent to the patient. The sequence agent > instrument > patient reflects the flow of energy in an action chain.

la bacha uze la bang dape la bol. – The child uses the bat to hit the ball.

The order of the participants is in line with the order of the action chain in reality. The agent, as the origin of the energy flow, is in the beginning, the instrument is in the middle, and the patient, as the recipient of the energy flow, is in the end.

In syntactical terms the order of the words is subject-verb-object (or SVO in short). This is the normal and neutral word order in Pandunia.

For example, in the following sentence, the subject is mi 'I', the verb is visi 'see', and the object is tu 'you'.

mi visi tu. – I see you.

If the words are arranged in the opposite order, the entire sentence will have the opposite meaning.

tu visi mi. - You see me.

The subject and object roles are related to syntax, which deals with word order and other grammatical phenomena. The agent, instrument and patient roles are related to semantics, which is about the meaning of words. The semantic and syntactic roles can be mapped together in many ways. Usually the most energetic semantic participant takes the role of the subject.

- 1. If there is an agent, it becomes the subject.
 - *la bace* uze la bang dape la bol. *The child* uses the bat to hit the ball.
- 2. Otherwise, if there is an instrument, it becomes the subject.
 - *la bang* dape la bol. *The bat* hits the ball.
- 3. Otherwise the patient becomes the subject and the clause type becomes intransitive.
 - *la bol* dape. *The ball* is hit.

When a sentence consists of a subject and a verb (SV), the role of the subject can be ambiguous. It can be either the agent or the patient. In such cases the interpretation of its role is based on probability. What is the most likely role that fits together with the situation that the sentence describes?

Often the other words in the sentence help to define the role of the subject, and the sentence can be interpreted in only one meaningful way that is in line with the reality. In the following examples, the subject is in all likelihood a patient i.e. the recipient or the undergoer of the action.

```
banana yam. – Banana is eaten. fuku gan. – Clothes dry. ite pada. – Stone falls.
```

(The alternative interpretations, where the subject would be agent, *banana eats something*, *clothes make something dry*, and *stone drops something*, would not make sense.)

There are also SV sentences where the subject is likely the agent, as in the following examples.

```
mau marche. – The cat walks.
sol lume. – The sun shines.
damen lai. – They come.
```

However, it is possible to clarify the roles of subject and object with the help of the auxiliary verbs **fa** 'do, make' and **be** 'undergo'. **fa** indicates that the subject is the agent or doer of the action, and **be** indicates that the subject is the patient or receiver of the action.

```
banana be yam. – Banana is eaten.

fuku be gan. – Clothes are dried.

ite be pada. – Stone is dropped.

mau fa marche. – The cat walks. ~ The cat does walk.

sol fa lume. – The sun shines. ~ The sun makes the shining.
```

It is also possible to add other objects with the help of fa 'make'.

```
mau yam peshe. – The cat eats fish.
mi fa mau yam peshe. – I make the cat eat fish. ~ I feed the cat with fish.
fuku gan. – Clothes dry.
sol fa fuku gan. – The sun makes clothes dry.
```

Pivot construction

Basic pivot construction

The **basic pivot construction** is a syntactic realization of an action chain that reflects the flow of energy from one participant to another. A basic sequence is that of agent > instrument > patient.

```
da uze un chaku kate la ban. – He uses a knife to cut the bread. da jete la bol dape la dike. – He throws the ball to hit the target. mi shofe la karo lai la site. – He drives the car to enter the city.
```

Another common sequence is that of causer > agent > patient. In such sequences the first verb typically indicates a modality such as desire, permission or obligation, and the second verb indicates what the causer wants the agent to do.

```
mi vol tu yam fito. – I want you to eat vegetables. (desire) mi sel tu yam fito. – I advise you to eat vegetables. (advice) mi halal tu yam fito. – I allow you to eat vegetables. (permission)
```

```
mi bil tu yam fito. – I enable you to eat vegetables. (ability) mi mus tu yam fito. – I compel you to eat vegetables. (obligation) mi rai tu yam fito. – I think you eat vegetables. (opinion)
```

Syntactically the pivot construction is made up of $subject-verb_1-pivot-verb_2-object$. The pivot is at the same time the object for $verb_1$ and the subject for the $verb_2$.

mi vol tu yam yo fite. – I want you to eat vegetables.

In the example above, **mi vol** has **tu** as its object. At the same time, the very same **tu** functions as the subject of the following predicate, **yam yo fito**. So **tu** is the pivot that links the clauses together.

A complete action chain is that of causer > agent > instrument > patient > recipient. The previous sequences, agent > instrument > patient and causer > agent > patient, were in fact only subsequences of this chain. One may pick any or all participants of the action chain into a sentence as long as they stay in the same order. In the following example sentence all optional participants and their verbs are enclosed in brackets.

(mi vol) (tu uze) (la chaku) kate la ban (don ma). – I want you to use the knife to cut the bread and give to mother.

Modal pivot construction

In pivot constructions where the first action indicates a modality, such as desire, permission or obligation, the first participant can be left out when it indicates the first person ('I'). The the remaining syntactic construction is verb₁-pivot-verb₂-object.

```
mi sual tu lai dom. – I ask (whether) you come come?
sual tu lai dom. – Do you come come?
mi ashe tu yam mas fite. – I wish you would eat more vegetables.
ashe tu yam mas fite. – Wish you would eat more vegetables.
```

In commands and requests also the second participant can be left out when it indicates the second person ('you'). The the remaining syntactic structure is verb₁-verb₂-object.

```
mi ching tu lai dom. – I ask you to come home.

ching lai dom! – Please come home!

mi amir tu kluze la mun. – I command you to shut the door.

amir kluze la mun. – Shut the door!
```

Serial verb construction

People tend to express actions that they want to or should do differently than actions that they want other people to do. They don't say, for example, *I want that I write* but they say *I want to write*. Looks like it is worthwhile to mention the participants only when they add new information to the sentence. The second participant can be left out from the pivot construction when it is the same as the subject.

```
mi yau mi kitabe letre. – I want me to write a letter. 
mi yau kitabe letre. – I want to write a letter.
```

This structure is called the verb series or the serial verb construction. It is very common in Pandunia. There can be two, three or even more verbs in a series. All verbs are about the same subject.

```
1. mi go a dom. – I go home.
```

- 2. **mi bil go a dom.** I can go home.
- 3. mi vol bil go a dom. I want to be able to go home. (Word for word: I want can go home!)

The last verb in the series is the main verb. The verbs before it are modal verbs.

```
tu vol yam yo fito. – You want to eat vegetables. (desire) tu sel yam yo fito. – You had better eat vegetables. (advice) tu halal yam yo fito. – You may eat vegetables. (permission) tu bil yam yo fito. – You can eat vegetables. (ability) tu mus yam yo fito. – You must eat vegetables. (obligation)
```

Changing the focus

The **topic** is what is being talked about, and the **comment** is what is being said about the topic. Typically the topic is something that is known before and the comment is a piece of new information about the topic. In Pandunia the topic comes first so it is a topic-fronting language.

The focus of the sentence can be changed by changing the order of the topic and comment.

Maria e guru. – Maria is a teacher.

guru e Maria. - The teacher is Maria.

In Pandunia, the topic can be fronted by using various sentence structures, such as passivization and change of word order. Consider the following sentence:

mi visi tu. – I see you.

The topic of the sentence is the subject **mi** 'I'. The object, **tu**, can be topicalized by moving it to the front. There are several ways how to do it. The simplest one involves a simple change of word order and a pause.

tu - mi visi. - (It's) you I saw.

One can also use the passive construction to a similar effect.

tu be mi visi. – You were seen by me.

Another way to front the object is to use the relative clause construction.

tu e ki mi visi. - You are the one whom I saw.

This sentence can be made more impactful by fronting the linking verb e. and then even more by dropping the relative pronoun.

e tu ki mi visi. – It's you whom I saw.

e tu mi visi. – It's you I saw.

Finally, the same e... constructions can be used for emphasizing the topicness of the normal subject too.

e mi ki visi tu. ~ e mi visi tu. – It's me who saw you.

e mi ki lai. ~ e mi lai. – It's me who came.

Questions

Yes-no questions

Yes-no questions are questions that expect 'yes' or 'no' as answer. The easiest way to form a yes-no question in Pandunia is to simply attach the particle **he** ('eh', 'huh') to the end of a statement.

tu yam un piza. – You eat a pizza. (statement) tu yam un piza, he? – Do you eat a pizza? (question)

It is also possible to use **no** ('no', 'not') or **ya** ('yes') instead of **he** to suggest the expected answer.

tu yam un piza, no? – You eat a pizza, don't you? tu yam un piza, ya? – You eat a pizza, right?

The third way to ask a yes-no question is to contradict the verb with the A-not-A structure.

tu yam no yam un piza? – Do you or don't you eat a pizza? tu bil no bil yam un piza? – Can you or can't you eat a pizza?

Finally, you can emphasize the question by using sual.

mi sual, tu yam un piza? – I ask do you eat a pizza? sual tu yam un piza? – Do you eat a pizza?

Yes-no questions are answered with ya ('yes') and no ('no').

tu visi mi, he? – Do you see me? ya. (mi ya visi tu.) – Yes. (I do see you.) no. (mi no visi tu.) – No. (I don't see you.)

Negative questions are answered so that ya and no apply to the verb, not the whole question.

tu no visi mi, he? – Don't you see me? ya. (mi visi tu.) – Yes. (I see you.) no. (mi no visi tu.) – No. (I don't see you.)

Alternative questions

Questions that offer alternatives end with the particle **he** or start with the word **sual** to indicate that an answer is expected. The question is answered by repeating the chosen alternative.

tu yam un o du banana. – You eat one or two bananas. (statement) **tu yam un o du banana, he?** – Do you eat one or two bananas? (question) **un.** – One.

Open questions

Open questions, or wh- questions, ask for more information. In Pandunia they use the word ke ('what').

piza e ke? – What is pizza?

The question word may be moved to the front of the sentence for emphasis. However, unlike in English, the word order may also be left alone.

ke tu zai yam? – What are you eating?tu zai yam ke? – You are eating what?da lai a ke zaman? – When does he arrive?tumen vizite a ke jen su dom? – Whose house did you all visit?

Relative clauses

A relative clause is a subordinate clause that modifies a noun phrase, most commonly a noun. For example, the phrase "the person who lives there" includes the noun *person*, which is modified by the relative clause *who lives there*.

There are different ways to build a relative clause in Pandunia. The relative pronoun in Pandunia is **ki** and it corresponds to English *that*, *who* and *which*.

In Pandunia, relative clauses are always set off by commas.

la buku, ki la jen fa kitabe, pada. – The book, which the person writes, falls.

It is also possible to leave ki out. This structure is called *reduced relative clause*.

la buku, la jen fa kitabi, pada. – The book the person writes falls.

The relative pronoun is necessary when the relativized noun is the subject of the relative clause.

la jen, ki fa kitabi la buku, pada. – The person that writes the book falls.

Also the object noun of a preposition can be the target of the relative clause. It's possible to use relative pronouns or the reduced relative clause structure.

la kalam, a ki la jen fa kitabi la buku, pada. – The pen, with *which* the person writes the book, falls. la kalam, la jen fa kitabi la buku a, pada. – The pen the person writes the book with falls.

The relative pronoun can be put in its right place in the pivot structure or it can be left out by using the reduced relative clause structure.

la jen, mi visi ki fa kitabi la buku, pada. – The person, whom I see write the book, falls. la jen, mi visi fa kitabi la buku, pada. – The person that I see write the book falls.

Also a resumptive relative pronoun can be used if needed.

la jen, mi fa kitabi la buku na ki su kalam, padu. – The person whose pen I write the book with falls.

Content clauses

A content clause is a subordinate clause that provides content that is commented or referred to by its main clause. In Pandunia they are typically introduced with the conjunction ki.

mi ken ki tu e dosti. – I know that you are a friend. damen fikre ki mimen le chute. – They think that we have left.

A content clause can be placed before or after the clause that talks about it. The demonstrative **vo** points to the following content clause and **la** points to the previous one.

vo e bari, ki mi le no visi damen. – It is important that I haven't seen them.

ki pan jen be sana ka par, la e klar. – That all people are created as equals; it is clear.

The content clause marker ki can be combined to the prepositions in order to construct conjunctions of cause and purpose.

to ki - so that, in order that, with the result that

de ki – because, for the reason that

mi dugu ye buku to ki mi trapas la teste. – I read this book so that I will pass the test.

mi le trapas la teste de ki mi dugu la buku. – I have passed the test because I read the book.

Conditional clauses

The word si means 'to suppose', and in conditional sentences, it works in the same way as English 'if'.

mi no yam da, si mi e tu. – I wouldn't eat it if I were you.

The rest of the sentence can optionally be preceded by the word asar, which means 'then'.

si tu tochu tava, asar tu pati hanu. – If you touch the pan, then you will hurt your hand.

Combining phrases with conjunctions

i – and (connects two similar words or phrases)

o – or (connects two alternative words or phrases)

ama - but (introduces a word or phrase that contrasts with or contradicts the preceding word or phrase)

mi suke mau i vaf. – I like cats and dogs.

mi suke mau o vaf. – I like cats or dogs.

mi suke mau ama no vaf. – I like cats but not dogs.

Particles

Affirmation and Negation

Affirmative

Expressions are affirmative by default.

mi e shefe. – I am the boss.

da e nova meza. - It is a new table.

Affirmation can be emphasized with the adverb ya ('yes indeed').

mi ya e shefe. – I indeed am the boss.

da ya e nova meza. – It indeed is a new table.

Negative

Such sentences can be simply negated with **no**.

da no e shefe. – He is not the boss.

da no e neu meza. – It's not a new table.

The word **no** is used for denying anything. It affects always the next word. Different scopes of negation may result depending on the location of the negative word.

mi visi tu. – I see you.

mi no visi tu. – I don't see you.

mi visi no tu ama damen. – I see, not you, but them.

mi ching tu safi la kamar. – I ask you to clean the room.

mi no ching tu safi la kamar. – I do NOT ask you to clean the room.

 \boldsymbol{mi} ching tu no safi la kamar. – I ask you NOT to clean the room.

Particles ya and no are used also for answering questions.

sual tu visi mi? – Do you see me?

ya. (mi ya visi tu.) – Yes. (I do see you.)

no. (mi no visi tu.) – No. (I don't see you.)

Negative questions are answered so that ya and no apply to the verb alone and not the sentence as a whole.

```
sual tu no visi mi? – Don't you see me?
ya. (mi ya visi tu.) – Yes. (I do see you.)
no. (mi no visi tu.) – No. (I don't see you.)
```

Modifier particles

Particles **di** and **de** are used to link a noun, an adjective or a verb phrase to a noun to modify it. **di** connects the modifying word or phrase to the main noun word. **de** works in the opposite direction, it connects the main noun to the modifying word or phrase.

Modification with noun phrases

One way to use these particles is to connect an adjective or other words with a noun. It gives us more information about the noun, and the particle makes it clear in which end the main noun is.

The modifier particles are useful for creating complex adjectives that consists of two or more words.

```
rode rang di labi – rose-colored lips
sama rang di yen – sky-colored eyes
```

Or in the opposite order:

```
labi de rode rang – lips of the rose-color yen de sama rang – eyes of the sky-color
```

The particles help in creating measure words too.

```
un sake di patate – one sack of potatoes
du sake di patate – two sacks of potatoes
mas sake di patate – more sacks of potatoes
```

Note that di and de connect phrases together. So a modifier phrase with and without de can mean a different thing.

```
mas mei hua – more beautiful flowers
mas de mei hua – more of beautiful flowers
```

Modification with verb phrases

Verbs are turned into modifiers by placing **de** or **di** immediately next to the verb. Verb phrases can also be made into modifiers in this way, but any objects must be moved to before the verb.

```
shute de grafe pente – the art of picture-painting (the art of painting pictures)ale su mede su suke – the joy of others-helping (the joy of helping others)
```

Possession

The possessive particle **su** works like the apostrophe-s ('s) in English. It indicates that the previous word has possession of the next one.

```
Maria su mama – Maria's mother

Maria su mama su dom – Maria's mother's house
```

The same particle is used with with personal pronouns too.

```
mi su dom – my house
tu su dom – your house
da su dom – his or her house
mimen su dom – our house
tumen su dom – your house
damen su dom – their house
```

Tense and Aspect Particles

In Pandunia, tense can be expressed with time words and time phrases if needed. The general time words are **pas** (past), **zai** (present) and **xa** (future, upcoming). They function like adverbs, so typically their place is before the verb.

```
mi pas ha mau. – I had cats.
```

ama mi no zai ha mau. - But I now don't have cats.

bil, mi sha ha mau. – Maybe I will have cats.

It's also possible to say it in a longer way like na pas zaman (in the past) etc.

mi ha mau a pas zaman. - I had cats in the past.

ama mi no ha mau a zai zaman. – But I don't have cats at present.

bil, mi ha mau a sha zaman. - Maybe I will have cats in the future.

Note! Verbs are not conjugated. So the verb ha stayed the same in all tenses in the examples above.

Naturally time words are used only when they are necessary. Usually it is enough to mention the time just once at the beginning of the text and not in every single sentence, if the tense doesn't change.

Sentence-ending particles

Sentence-ending particles are modal particles or interaction particles that occur at the end of a sentence. They indicate the speaker's mood or attitude to the meaning of the sentence. They can also indicate what kind of reaction to the sentence the speaker expects from the listener. For example, the speaker can use the particle **ne** to indicate that they expect the listener express their point of view.

ba indicates a suggestion or a command.

```
yam ba! - Eat!
```

fi indicates disdainment, disrespect or contempt. It translates as bah, fie.

tu fete da, fi. - You did it, bah.

fi! piza! mi no vole. - Bah! Pizza! I don't want (it).

he asks a direct *yes or no* question. It translates as *eh?* or *huh?*.

tu ai kafe, he? - You love coffee, huh?

me indicates indifference, boredom or lack of excitement.

me. da no neu. - Meh. It's not new.

ne asks for the listener's point of view on the matter, usually their agreement. It is different from **he** in that it's not directly asking a question but it only seeks confirmation. It roughly translates as *right?*, *isn't it?*, *isn't that so?*, etc. One uses it at the end of sentence if one is not completely sure about something but thinks it's probably true.

```
tu suke kafe, ne? sepe un kupe ba! – You like coffee, right? Grab a cup! da neu, ne? – It is new, isn't it?
```

na is used to introduce a statement. It can fill a pause, particularly at the beginning of a response to a question. It can also introduce a statement that may be contrary to expectations.

```
tu kitabe da, he? – na, no le. – Did you write it? – Well, not yet. da hau, ne? – na, ya. – It's good, isn't it? – Well, yes.
```

o indicates that the speaker is uncertain of the matter. It roughly translates as or...?.

```
da okei a tu, o... - It is okay for you, or...
```

va indicates that the speaker is excited, amazed or surprised. It can be used on its own or at the start or end of a sentence to express how amazing or surprising something is.

```
va! Wow!va, da dai! – Wow, it's big!da dai, va! – It's so big!
```

ya reinforces the meaning of the sentence or indicates agreement. The speaker is absolutely sure of what they are saying. It can be translated as *indeed* or *truly*.

```
mi le visi tu ya. – I truly saw you.
da ver, ya. – It is true indeed.
da neu, ne? – da neu, ya. – It is new, right? – It's new indeed.
```

Observations

Observations are the simplest sentence type. They may consist of only one word, which draws the listener's attention.

```
mau! – A cat!
barsha! – Rain! / (It) rains!
```

11. Word derivation

Making new words from existing words is called word derivation. Often a new word is made by adding a prefix or suffix, such as *un*- and *-ness* in English. For example, *un-happy* and *happi-ness* are derived from the root word *happy*.

New words can be built freely in Pandunia! Pandunia has a word derivation system that is regular and productive.

Zero Derivation

Zero derivation means conversion of a word of a certain word class to a different word class without any change in form. This is very common in Pandunia, where most words don't belong to any fixed word classes. Instead, the word class is determined by the word's place in the sentence.

For example, the word **hali** can function equally as an adjective (*blank* or *void*), noun (*a blank*) and verb (*to make blank* or *to get blank*).

```
tu ha hali papir, he? – Do you have some blank paper? don mi un hali! – Give me a blank! tu mus hali vo lexi. – You must blank out that word.
```

Likewise, the word **kitabi** can function as a verb (to write), a noun (a writing) and adjective (written or textual).

```
mi kitabi letre. – I write a letter.

letre e kitabi misije. – A letter is a written message.

mi ai tu su kitabi. – I love your writings.
```

Compound Words

A compound word is a word that is formed of two or more simpler words in order to yield a new meaning. New compound words can be created freely and easily in Pandunia. There are two types of compound words in Pandunia.

- 1. Closed compounds are written together and there is no space between the words. For example, **poste** 'mail' + **kan** 'place for working' = **postekan** 'post office'.
- 2. Open compounds are written separately and there is a space between the words. For example, **tomato** 'tomato' + **sos** 'sauce' = **tomato sos** 'tomato sauce'.

There is little or no difference between open compounds and closed compounds in Pandunia from grammatical point of view. Compound words that are well-established tend to be closed compounds, while unestablished and improvised compound words tend to be open compounds.

Pandunia's system of word derivation is designed to produce compound words that look and/or sound so close to international words that they are easy to recognize. They are not meant to be identical with words in English or in any other language, because international words tend to be written and pronounced in more or less different ways from language to language. In fact, compound words are built in a different way in Pandunia than in European languages, though the results usually look mostly similar.

For example, English word *antidemocratic* can be divided into parts thus: *anti-dem-o-crat-ic*. It is completely made up of bound morphemes, units that can't stand alone but that can only appear as part of another word. The corresponding Pandunia word, **antidemikratika**, is made up of stand-alone words and it could be written also as an open compound: **anti demi krati ka**. The structure of this compound word in Pandunia is identical with the corresponding word in Mandarin, *făn mín zhǔ de* (2020). So Pandunia's word derivation system is structurally closer to the East Asian type than the European type.

Pandunia	English	Mandarin
anti	anti-	fán
demi	dem-	mín
	-0-	
krati	crat-	zhŭ
ka	-ic	de

Affixes

Affixes, i.e. prefixes and suffixes, are very important and give great flexibility to the language. They are joined or merged to the base word.

For example, the word Geia 'planet Earth' consists of the base word gei 'earth, ground' and the collective noun suffix -ya.

```
gei 'earth, ground'
+ -ya 'collective noun suffix'
= Geia 'planet Earth, Gaia'
```

Two or more roots can be put together to make *compound words*. The last root is the most meaningful part in the compound and the preceding roots only modify its meaning.

The connecting vowel -o- is inserted between the elements in Greek compounds.

```
demi 'people, public'
+ krati 'rule, govern'
+ -ya 'collective noun suffix'

= demikratia 'democracy'

termi 'temperature'
+ metri 'measure'
+ -r 'agent or apparatus'

= termimetrir 'thermometer'
```

Pandunia has adopted international prefixes, including a-, de-, pro-, re- and su- among others, in order to re-create many international words as native Pandunia words.

```
'to, toward'
     a-
   sesi
              'go, pass'
  asesi
              'get past to, access'
   pro-
              'forward, to the front'
   sesi
              'go, pass'
prosesi
              'pass forward, process'
              'back to'
    re-
              'go, pass'
   sesi
 resesi
              'pass back, recede'
              'away, off'
    de-
   sesi
              'go, pass'
              'pass away, die'
 desesi
    su-
              'good, well'
   sesi
              'go, pass'
 susesi
              'go well, succeed'
```

Note that these prefixes are used only in compound words that really mean the sum their parts. Fossilized words whose meanings are no longer the sum of their parts, like *evolution* (originally 'rolling out') and *revolution* (originally 'rolling back'), are not compound words in Pandunia.

Prefixes

a-

The prefix a- means that the action is directed toward or closer to the speaker.

```
sepe 'take, catch' → asepe 'take to oneself, accept' liga 'tie' → aliga 'tie to oneself, ally'
```

an-

The prefix an- means being or doing the opposite of the base word.

```
deiste 'theist' → andeiste 'atheist'
alkolike 'alcoholic' → analkolike 'unalcoholic'
human 'human' → anhuman 'unhuman'
tabakiste 'smoker' → antabakiste 'non-smoker'
kluze 'closed' → ankluze 'unclosed, open'
uzebil 'usable' → anuzebil 'unusable'
```

de-

The prefix de- means that the action is directed away from or off something.

```
sepe 'take, catch' → desepe 'take away, remove'
dute 'lead, conduct' → dedute 'lead away, deduce'
parte 'part, chip' → departe 'part away, chip off'
kode 'code' → dekode 'decode, remove coding'
tape 'plug, cap, stopper' → detape 'unplug, remove the plug, cap or stopper'
```

dis-

The prefix dis- means that the action is directed apart or in many directions.

```
trata 'draw' \rightarrow distrata 'draw apart, distract'
```

dus-

The prefix dus- adds a quality of badness to the base word.

```
funte 'function' → dusfunte 'malfunction, dysfunction' rupa 'appearance, looks' → dusrupa 'bad-looking, ugly'
```

ex-

The prefix ex- means that the action is directed outside from something.

```
ex- 'out':

sepe 'take, catch' → exsepe 'take out, except'

jete 'thrust' → exjete 'thrust out, eject'
```

in-

The prefix in- means that the action is directed into something.

```
jete 'thrust' → injete 'thrust in, inject' kluze 'close, shut' → inkluze 'close in, enclose, include'
```

kon- or kom-

The prefixes **kon-** and **kom-** mean that something is done together. There are two forms of this prefix. The form **kom-** is used when the following word begins with a b, p or m, and the form **kon-** is used in all other cases.

```
teni 'hold, keep' → konteni 'keep together' strute 'structure' → konstrute 'construct, put together'
```

per-

The prefix **per-** means that something is done thoroughly or completely.

```
fete 'make, do' → perfete 'perfect, completely done' uze 'use' → peruze 'use up'
```

pos-

The prefix **pos-** means that something is after in time or space.

```
pozi 'put, pose' → pospozi 'put after, postpone' 
prodution 'production' → posprodution 'post-production'
```

pre-

The prefix **pre-** means that something is before in time or space.

```
pozi 'put, pose' → prepozi 'put before, prepend' dita 'tell' → predita 'foretell, predict' visi 'see' → previsi 'foresee, preview'
```

pro-

The prefix **pro-** means that something is moved onward or into the open.

```
pozi 'put, pose' → propozi 'put forward, propose' voka 'call, summon' → provoka 'call forth, provoke'
```

re-

The prefix re- means that something is done back or in the opposite direction than originally.

```
ati 'to act' → reati 'to act back, react' turne 'to turn' → returne 'to turn back'
```

ri-

The prefix **ri-** means repetition or doing again.

```
forma 'form' → riforma 'form again, reform' nati 'be born' → rinati 'be born again'
```

sin- or sim-

The prefixes sin- and sim- mean that something is one and the same. There are two forms of this prefix. The form sim- is used when the following word begins with a b, p or m, and the form sin- is used in all other cases.

```
sin-, sim- 'same, equal' : kronike 'timely, temporal, chronic' → sinkronike 'synchronic, happening at the same time' metri 'measurement' → simmetri 'symmetry, equal measurements'
```

su-

The prefix su- adds the quality of goodness into the base word.

```
sess 'pass, go by' → susess 'go well, succeed'
rupa 'appearance, looks' → surupa 'good-looking'
```

Suffixes

-bil

The suffix -bil means that something is possible or able to be done.

```
visi 'see, view' → visibil 'one that can be seen, visible' uze 'use' → uzebil 'one that can be used, usable'
```

-fa

The suffix -fa means to turn into the thing that is indicated by the base word.

```
simpli 'simple' → simplifa 'make simple, simplify'
lau 'old, aged, outdated' → laufa 'make or become old'
un 'one' → unfa 'make one, unify'
```

-je

The suffix -je means something that is made of or something that consists of the thing indicated by the base word.

```
baga 'bag' → bagaje 'baggage, luggage'
kore 'core' koreje 'guts, the things in the core'
misi 'send' → misije 'something sent, message'
fasa 'face' → fasaje 'facade, frontage'
limon 'lemon' → limonje 'lemonade'
```

-ki

The suffix -ki means something that is characterized by the thing or quality indicated by the base word.

```
un 'one' → unki 'only, sole, single'
makin 'machine' → makinki 'machine-like, mechanical'
```

-li

The suffix -li means that something belongs to or is related to the thing or person indicated by the base word.

```
    -li 'belonging or related to':
    fin 'end' → finli 'final, related to the end'
    dunia 'world, globe' → duniali 'global, worldly'
```

-ma

This rarely used suffix means a fundamental unit in the system of things that is indicated by the base word. For example, *lexime* 'lexeme' is the fundamental unit in the system of *lexi* 'words'. For example *spoke* and *spoken* are individual words but they represent the same underlying fundamental unit, which is *speak* in its basic form.

```
fone 'speech sound' → fonema 'phoneme, distinct speech sound' lexi 'word' → lexima 'lexeme' mite 'myth' → mitema 'mytheme, an archetypal story'
```

-me

The suffix -me means something that is in the position or rank that is indicated by the base word.

```
un 'one' → un me 'the first'
du 'one' → du me 'the second'
pre 'fore, front' → preme 'foremost, prime'
extra 'outside, exterior' → extrame 'outermost, extreme'
```

-r

The suffix -r means a doer or agent of the action that is indicated by the base word.

```
beke 'bake' → beker 'baker'

lide 'lead' → lider 'leader, the one who leads'

filsofi 'think deeply' → filsofir 'philosopher'

sapate 'shoe' → sapater 'shoemaker'

muskete 'musket' → musketer 'musketeer'

kase 'cash box, cash register' → kaser 'cashier'
```

-ria

This suffix is the combination of -er and -ia. It means the place for making, producing or selling the thing that is indicated by the base word.

```
beke 'to bake' → bekeria 'bakery'

perfume 'perfume' → perfumeria 'perfumery'
piza 'pizza' → pizaria 'pizzeria, pizza place'
enjener 'engineer' → enjeneria 'engineering'
```

-sme

The suffix -sme means an ideology, a way of thinking or a way of life.

```
alkol 'alcohol' \rightarrow alkolisme 'alcoholism' dei 'god' \rightarrow deisme 'theism'
```

By extension, the suffix -ste means a person who tends to behave or think in a certain way or an adherent of an ideology or a religion.

```
alkol 'alcohol' → alkoliste 'alcoholic, alcoholist' dee 'god' → deiste 'theist, one who believes in existence of a god or gods'
```

-ta

The suffix -ta means the state of being. It is used in abstract nouns of quality.

```
dai 'big, great' → daita 'greatness' long 'long' → longta 'length' huri 'free' → hurita 'freedom'
```

-te

The suffix -te indicates small size.

```
kase 'case, box' → kasete 'cassette'
pake 'pack, package' → pakete 'packet'
```

-vi

The suffix -vi means someone or something that typically does what the base word indicates.

```
ati 'act, perform' → ativi 'active, inclined to act' explozi 'explode' → explozivi 'explosive'
```

-ya or -ia

The suffix -ia has a variety of meanings, but fundamentally it means a collective of things or a community of people. There are two forms of this suffix. The form -ya is used when the base word ends in a consonant or a vowel other than i, for example hua + -ya = huaya. The form -ia is used when the base word ends in i, for example logi + -ya = logia.

```
human 'human being' → humania 'humanity, mankind, all the human beings as a group' kristi 'Christ' → kristia 'Christianity, all Christians as a group' filsofi 'view, outlook, life wisdom' → filsofia 'philosophy, the discipline of wisdom'
```

This suffix is often (but not always) used in names of geographical areas, especially in names of countries.

```
arabi 'Arab, Arabic' → Arabia 'Arabia' rus 'Russian, Ruski' → Rusia 'Russia' turki 'Turk, Turkish' → Turkia 'Turkey' itali 'Italic, Italian' → Italia 'Italy' Asia 'Asia' Indonesia 'Indonesia'
```

The suffix -ia is also used in names of scientific disciplines, where it can be understood as collection of scientific knowledge and practices.

```
kimi 'chemical' → kimia 'chemistry' filsofi 'view, outlook, life wisdom' → filsofia 'philosophy, the discipline of wisdom'
```

logi 'to study and reason systematically' → **logia** 'systematic study, logic' **biologia** 'biology, systematic study of organic life'

-yon or -ion

The suffix **-yon** means action or process. There are two forms of this suffix. The form **-yon** is used when the base word ends in a consonant or a vowel other than i, for example loga + -yon = logayon. The form **-ion** is used when the base word ends in i, for example fuzi + -yon = fuzion.

```
fuzi 'to fuse' \rightarrow fuzion 'fusion, the act of fusing' loga 'to talk' \rightarrow logayon 'talking, the act of talking'
```

-yum or -ium

The suffix **-yum** means an element. There are two forms of this suffix. The form **-yum** is used when the base word ends in a consonant or a vowel other than i, for example **Einstein + -yum = einsteinyum** 'einsteinium'. The form **-ium** is used when the base word ends in i, for example **kali + -yum = kalium** 'kalium'.

```
    kali 'base, alkali' → kalium 'kalium'
    Kuri → kurium 'curium, the chemical element named after Marie Curie'
    Einstein → einsteinyum 'einsteinium, the chemical element named after Albert Einstein'
```

-za

The suffix -za means to furnish or equip with the thing indicated by the base word.

```
auri 'gold' → auriza 'to gild, to coat with gold'
makin 'machine' → makinza 'to mechanize, to equip with machinery'
```

Affixes for chemistry

Words for chemical compounds are built in a special way with special suffixes that are not used anywhere else. When a suffix is added, the final e vowel of the base word disappears. For example, **malte** 'malt' + **-os** = **maltos** 'maltose' (a kind of sugar).

```
-al 'aldehyde':
metanal 'formaldehyde, methanal'
-an 'alkane group':
metil 'methyl' → metan 'methane'
-ate 'salt or ester':
sulfe 'sulfur' → sulfate 'sulfate'
-en 'alkene group':
meten 'methen'
-il 'alkyl group':
bute \text{ `butter'} \rightarrow butil \text{ `butyl'}
metan 'methane' → metil 'methyl'
-in 'alkyne group':
metin 'methyne'
-ite 'salt or ester':
sulfe 'sulfur' → sulfite 'sulfite'
-ol 'alcoholic compound':
etan 'ethane' → etanol 'ethanol'
-on 'ketone group':
propan 'propane' → propanon 'propanone'
-os 'sugar':
frute 'fruit' → frutos 'fructose'
malte 'malt' → maltos 'maltose' — hide: - toc —
```

Lessons

Introducing yourself

Dialog



Image designed by Freepik

- sal! = Hello!
- ② tu e ke? = Who are you?
- mi e Yusef. tu e ke? = I am Yusef. Who are you?
- © mi e Sara. da e ke? = I am Sara. Who is that?
- **4** da e mi su dosti. = That is my friend.
- © da su nam e ke? = What's her name?
- **4** da su nam e Maria. = Her name is Maria.

Grammar

Pandunia's sentences normally follow the topic-comment structure. The topic indicates who or what is being talked about. The comment tells something about the topic. For instance in **da e mi su dosti** the topic is the pronoun **da** (he, she, it), which is followed by the comment **es mi su dosti** (is my friend).

In Pandunia, the word **es** functions like *to be* in English. The same word is used for all persons. And to say the opposite, simply put **no** before it.

da e Sara. = She is Sarah.

da no e Sara. = She is not Sarah.

mau e hevan. = The cat is an animal.

dom no e hevan. = The house is not an animal.

In the same way you can describe yourself by saying mi es and a word that describes you.

mi e hau. = I'm good.

mi e man. = I'm a man.

```
mi e fem. = I'm a woman.
mi e nobi. = I'm non-binary.
```

Exercises

Try translating these sentences from English to Pandunia. The correct answers are after the word list.

- 1. Who are you?
- 2. I am Thomas.
- 3. Who is your friend?
- 4. She is Sarah.
- 5. What is your name?
- 6. My name is

Word List

mi I, me

mi su my

tu you

tu su your

da he, she or it

da su his, her, its

ke who or what

e to be

no no; not

hau good

dosti friend

nam name

fem woman

man man

mau cat

hevan animal

Answers to the Exercises

- 1. tu e ke?
- 2. mi e Tomas.
- 3. tu su dosti e ke?
- 4. da e Sara.
- 5. tu su nam e ke?
- 6. mi su nam e

Saying hello

sal = Hello!

This is how people often greet each other in Pandunia. They say sal. It is used for saying both hello and goodbye.

sal = Bye!

The word sal means 'hello' or 'hi'.

It has two origins. On one hand, it comes from the Latin greeting *salve* and related greetings like French *salut*. Also English *salute* and Spanish *saludo* are related to it. On the other hand, it comes from a common Middle Eastern word for wishing well-being, health and safety. It appears as *shlaam* in Aramaic, the language that Jesus of Nazareth spoke. In Hebrew it is *shalom*, and in Arabic it is *salaam*. So smething like **sal** is already a common greeting in hundreds of languages in Africa, Asia and Europe.

Pandunia is a constructed world language that borrows and blends together international words from all parts of the world.

The word sal means greeting or to greet.

mi sal tu. = I greet you. tu sal mi. = You greet me. These are active sentences. In active sentences the subject does the action to the object. In **mi sal tu** the first word **mi** is the subject, **sal** is the verb (action word), and **tu** is the object. The order of subject, verb and object is the normal word order in Pandunia.

Word order in active sentence: Subject + Verb + Object

Pandunia's personal pronouns are: $\mathbf{mi} = \mathbf{I}$, $\mathbf{tu} = \mathbf{you}$, and $\mathbf{da} = \mathbf{he}$, she, it. Note that the pronouns stayed the same in the previous example sentences. Words never change in Pandunia. They always stay the same regardless of their position in sentence.

In Pandunia sentences can be made shorter by leaving out pronouns that are obvious in the present situation.

```
mi sal tu! = I greet you.
sal tu! = Greetings to you! (It is obvious that the speaker is the one who greets.)
sal! = Greeting! (It is obvious that the listeners are greeted.)
```

Another Pandunia word for greeting is **halo**. It is also a very international greeting. You can choose freely, which word to use when you greet people.

```
halo! = Hello!
```

You may use both sal and halo to address people by name, kinship term or profession.

```
halo, toni! – Hello, Tony!
sal, mama! – Hello, mother!
halo, papa! – Hello, father!
sal, shefe! – Hello, chief!
```

Exercises

Try translating these sentences from English to Pandunia. The correct answers are after the word list.

- 1. You greet him/her.
- 2. Mother greets father.
- 3. Hello, mother!
- 4. Goodbye!

Word List

sal hello, hi, salaam, ciao
halo hello (said especially on the phone)
sal greeting(s), to greet.
sal to greet
mama mother, mom
papa father, dad
shefe chief, boss

Answers to the Exercises

- 1. tu sal da.
- 2. mama sal papa.
- 3. sal mama!
- 4. sal!

Making requests

Dialog



Image designed by macrovector

- halo, chin pa! = Hello, grandfather!
- © halo! ching side. = Hello! Please sit!
- shukre. = Thank you.
- © ching yam kafe o cha. = Please have some coffee or tea.
- ama mi yam un di cha! shukre. = But I drink only tea! Thank you.
- **e** chin pa, mi mus ga a zai. = Grandfather, I have to go now.
- ② oke. ching sal tu su mama! = OK. Please tell greetings to your mother.
- mi sal da. sal reste! = I will. Bye!
- \odot sal ga! = Bye!

Grammar

Pandunia's personal pronouns are: $\mathbf{mi} = \mathbf{I}$, $\mathbf{tu} = \mathbf{you}$, and $\mathbf{da} = \mathbf{he}$, she, it. Pandunia is a gender-neutral language. It doesn't distinguish between sexes in the third person pronoun or any of the pronouns. All the personal pronouns are present in the following example sentence.

mi ching tu sal da. = I ask you to say hello to him/her.

This sentence has a *pivot structure*. The first verb, **ching** ('to request), addresses **tu** as its object. At the same time **tu** serves also as the subject of the second verb, **sal** ('to greet'), whose object is **da**. So **tu** has a double role: (1) object of the first verb and (2) subject of the second verb. Hence, it is the *pivot* or hinge between the two verbs.

Pivot Stucture: Subject + Verb¹ + Object/Subject + Verb² + Object

The pivot structure is a common structure in Pandunia.

Remember that it is allowed to leave out pronouns that are known in the context. In other words the speaker can safely assume that the listeners know who he/she is talking about. So it is unnecessary to keep on repeating them. In this manner phrases can be made shorter.

mi ching tu sal da. = I ask you to say hello to him/her.

ching sal da. = Please say hello to him/her.

See how the translation of **ching** changed between the two sentences? The meaning of the word, the concept, did not change, but its use did. English reflects this change by using different words, to ask and please. Pandunia can cope with changes like this without resorting to different words. It is a principle in Pandunia that there is always exactly one word for one concept. Different words are not created just because the grammatical role of a concept changes.

The phrase **ching sal da** has a useful pattern that can be used for making polite requests.

ching side. = Please be seated.

ching don kafe. = Please give me some coffee.

ching don cha. = Please give me some tea.

ching yam cha. = Please have some tea.

ching safi kamar. = Please clean the room.

Commands are introduced with amir ('to command'). They employ the same pivot structure as requests with ching.

amir don cha. = Give (me) some tea!
amir safi kamar. = Clean the room!

In practice, direct commands can be also made with just one verb and a commanding voice.

safe da! = Clean it!

Exercises

Try translating these sentences from English to Pandunia.

- 1. He drinks tea.
- 2. The boss asked her to sit down.
- 3. Please have some coffee or tea.
- 4. Mother asked me to clean the room.
- 5. The boss sits and drinks coffee.

Word List

amir to order, to command

cha tea

chin pa grandfather

ching to ask; please

don to give

e and

ga to go

kafe coffee

kamar room

la the

mus must, have to

o or

safi to clean

shukre thanks

side to sit

un di only

yam to eat or drink

yo some, a(n)

Answers to the Exercises

- 1. da yam cha.
- 2. la shefe ching da side.
- 3. ching yam kafe o cha.
- 4. mama ching mi safi kamar.

5. shefe side i yam kafe.

Yes or no questions

Dialog



Image designed by pikisuperstar

- © sal! sual tu yam kafe o cha? = Hello! Would you like to have coffee or tea?
- **❸ cha.** = Tea.
- ② **tu ne?** = And you?
- ☺ mi no basha pandunia... = I don't speak Pandunia...
- © maf! sual da yam cha? = Pardon! Will he have tea?
- no. da no yam cha. da yam kafe. = No, he won't. He would like to have coffee.
- © sual tu yam supe? = Would you like to have soup?
- **9** ya. = Yes.
- © sual da yam supe? = Would he like to have soup?
- no yam. = No.
- © shukre. mi don un cha i un kafe i un supe pos des minute. = Thank you. I will bring one tea, one coffee and one soup in ten minutes.

Asking questions

Questions that can be answered by saying *yes* or *no* have the same pivot structure as requests with **ching**, which you learned in the previous lesson. Question sentences are introduced with **sual** 'to ask'.

mi sual tu yam cha. = I ask (do) you drink tea. sual tu yam cha? = Do you drink tea?

sual yam cha? = Drink tea?

Requests usually concern the one or the ones spoken to, but questions are often about other people. Therefore the second pronoun

is usually needed. It can be left out only when it is clear who is the topic of discussion.

```
sual da yam cha? = Does he/she drink tea?
sual tu yam supe? = Do you eat soup?
sual mimen yam sui? = Do we drink water?
```

Of course common and proper nouns can also be used.

```
sual shefe yam kafe? = Does the chief drink coffee?sual papa safi kamar? = Does the father clean the room?sual Niki basha pandunia? = Does Nicky speak Pandunia?
```

Giving answers

Yes/no questions can be answered with ya 'yes', and no 'no'.

```
- sual tu yam supe? = Do you eat soup?
- ya. = Yes.
```

- sual da yam supe? = Does she eat soup?

- **no.** = No.

Also more complete answers can be given.

```
- sual tu yam kafe? = Do you drink coffee?
```

- ya. mi yam kafe. = Yes, I drink coffee.
- sual da yam kafe? = Does he drink coffee?
- no. da no yam kafe. = No, he doesn't drink coffee.

It is also possible to answer yes by repeating the main verb of the question.

```
- sual tu yam sui? = Do you drink water?
- yam. = (Yes, I) drink.
```

Exercises

Try translating these sentences from English to Pandunia.

- 1. Do you speak Pandunia?
- 2. Yes, I speak Pandunia.
- 3. Does the mother drink coffee?
- 4. No, she doesn't drink coffee.
- 5. Does she eat soup?
- 6. She doesn't.

Word List

```
pos after
maf pardon, sorry
minute minute
bashe speak a language
ne sentence-ending tag for asking the other's point of view
sui water
supe soup
un one (1)
des ten
sual to ask a question
ya yes
```

Answers to the Exercises

- 1. sual tu bashe pandunia?
- 2. ya. mi bashe pandunia.
- 3. sual mama yam kafe?
- 4. no. da no yam kafe.
- 5. sual da yam supe?
- 6. (da) no yam.

Saying no

In the previous lesson you learned to answer **ya** and **no** to questions. The word **no** is used for denying something. Adding **no** in front of the verb turns an affirmative sentence to negative.

```
mi sal tu. = I greet you.
mi no sal tu. = I do not greet you.
```

Conceptually negation means the absence or non-existence of the negated word. In the phrase **mi no sal tu** the negative word **no** denies the existence of greeting.

In Pandunia the negative word affects the word that follows it. Different scopes of negation may result depending on the location of the negative word.

```
mi ching tu safi kamar. = I ask you to clean the room.mi no ching tu safi kamar. = I do NOT ask you to clean the room.mi ching tu no safi kamar. = I ask you NOT to clean the room.
```

The negated word can be of any type: verb, pronoun, noun, adjective and even numeral.

```
da no ha mau. = She doesn't have a cat.
da ha no mau, ama vaf. = She has no cats but dogs.
no da, ama mi ha mau. = Not she but I have cats. (It's not her, but me who has cats.)
mi ha no un, ama du mau. = I have not one but two cats.
```

Exercises

Translate these sentences from English to Pandunia. Sometimes there is more than one correct answer.

- 1. He didn't clean the room.
- 2. One cup is not empty.
- 3. Two dogs don't eat soup.
- 4. She has neither dogs nor cats.
- 5. The chief drinks tea but not coffee.
- 6. The mother has no dogs but (she has) two cats.

Word List

kupa cup, glass, mug hali empty ha to have mau cat vaf dog du two siro zero ama but

Answers to the Exercises

- 1. da no safi kamar.
- 2. un kupa no hali.
- 3. du vaf no yam supe.
- 4. da no ha vaf i mau. / da ha no vaf i no mau.
- 5. shefe yam cha ama no kafe.
- 6. mama ha no vaf ama du mau.

More Questions

To ask questions beginning with *what*, *which*, *how*, *who* and *when*, the interrogative pronoun **ke** is normally used. The question can be made more specific by adding words for person, time, manner or thing if needed.

```
da e ke? = What is that? / Who is (s)he?
da e ke jen? = Who is he/she?
da e ke she? = What (thing) is it?
ke jen lai? = Who is coming? (jen = person)
tu yam a ke zaman? = When do you eat? (zaman = time)
se danse a ke mode? = How to dance? (mode = manner, style)
```

In Pandunia, questions beginning with why are asked using ke sabu.

ke sabu tu suke mau? = Why do you like cats?

Questions asking about the cause or reason of something, are answered by adding de sabu before the cause or reason.

```
ke sabu tu suka mau? = Why do you like cats? de sabu damen e kavai. = Because they are cute.
```

Of course sabu can also be used to express the cause or reason for something, even when not answering to a question.

mi suke mau de sabu damen e kavai = I like cats because they are cute.

Exercises

- 1. Who likes soup?
- 2. The father does.
- 3. When will he come?
- 4. In ten minutes
- 5. Why doesn't she eat?
- 6. Because she doesn't like coffee and soup.

Word List

danse to dance
lai to come
a at, in, on
jen person
suke to like
yang manner, style
zaman period of time

Answers to the Exercises

- 1. ke jen suka supe?
- 2. papa suka.
- 3. ke zaman da lai?
- 4. pos des minute.
- 5. ke sabu da no yam?
- 6. de sabu da no suka kafe i supe.

Past, present and future

Expressing time

There are no verb conjugations in Pandunia. All verbs have only one form for all times. In a way they are similar to some English verbs, such as "to hit", which is the same in all tenses.

```
mi dape da. = I hit it.
```

In Pandunia all verbs are like that! For example, **mi yam ban** can mean both "I eat bread" and "I ate bread", but usually only one or the other meaning makes sense in the context of the discussion. For example when people talk about that morning's breakfast, the sentence tells about the past time.

mi yam ban a ye suba yam. = I ate bread for this breakfast.

There are also specific time words.

```
zai = currently, at the momentsha = later, in the future
```

They can be used for modifying nouns.

Sara e mi su pas shefe. = Sarah is my former boss. Yusef e mi su zai shefe. = Yusef is my current boss. Maria e mi su sha shefe. = Maria is my future boss.

The same words are used when you talk about actions and events in time. Simply put the word before the verb.

```
 \label{eq:mi_pas}  \begin{tabular}{ll} \textbf{mi} \ \textbf{pas} \ \textbf{dape} \ \textbf{da.} = I \ \text{hit it (in the past)}. \\ \textbf{mi} \ \textbf{zai dape} \ \textbf{da.} = I \ \text{am hitting it (currently)}. \\ \textbf{mi sha dape} \ \textbf{da.} = I \ \text{will hit it (in the future)}. \\ \end{tabular}
```

It's also possible to use preposition phrases of time.

```
mi dape da a pas. = I hit it in the past.
mi dape da a zai. = I hit it at present.
mi dape da a sha. = I hit it in the future.
```

It is not necessary to repeat the time expressions all the time. It would be awkward. It is enough to set the stage once in the beginning with a time expression. Another time word will not be needed until the tense changes or until it becomes useful to stress that you are still talking in the same tense.

```
mi pas ha un mau. = I had a cat in the past.
da e hau mau. = It was a good cat.
mi ha un vaf a zai. = I have a dog now.
```

Any expression of time is good for expressing the tense. When one time expression is present, other markers are not needed.

```
mi be gene a nen 2003. = I was born in 2003.
da safi la kamar a pos den. = He will clean the room tomorrow.
```

Exercises

Try translating these sentences from English to Pandunia.

- 1. My boss will celebrate in the future
- 2. I used to have two dogs.
- 3. You are eating soup right now.
- 4. She cleaned the room the day before.
- 5. The cat will drink milk tomorrow.
- 6. Your mother partied last night.

Word List

```
pas past, former
zai present, current
sha future
pre before
den day, 24 hours
noche night
dape to hit, to beat
ban bread
suba yam morning meal, breakfast
milke milk
```

Answers to the Exercises

- 1. mi su shefe festa a sha.
- 2. mi ha du vaf a pas.
- 3. tu yam supe a zai.
- 4. da safi kamar a preden.
- 5. mau yam milke a posden.
- 6. tu su ma festa a prenoce.