Jay Kaiser

Clarissa Tokash

DeJuan Pendergrass

Jack Moskowitz

Henry Lay

Sake: A Primer

25

26

Table	of Contents	
1.	Introduction	
2.	Phonology	3
	1. Sake Phonemic Inventory	3
	2. Syllable Structure	13
	3. Stress	13
	4. Phonotactic Rules	14
3.	Morphology	16
	1. Sake Pronominal System	16
	2. Word-building3. "Meta-words"	20
	4. Numerical System	20
	5. Particles	22
	1. Particles of Quantity	23
	2. Particles of Position, Direction, and Motion	23
		24

3. Particles of Possession, Benefaction, and Instrumentation

4. Particles of Time

4.	Syntax
----	---------------

		27
	1. Conjunctions	27
	2. Noun Phrases	
	3. Adjective Phrases	29
	4. Verb Phrases	29
	5. Relativity	30
		31
	6. Relative Clauses	32
	7. Questions	33
5.	Conclusion	
6.	List of Meta-Words Referenced	34
		35

1. Introduction

Sake [sakɛ] is a constructed language created with two primary goals: the language is an auxlang, or an auxiliary language, so it must be fairly easy-to-learn for people of a diverse number of cultures; and the language must be beautiful to listen to and speak. In fact, in Sake itself, "sake" translates to "flowing speech." Below, we present a detailed description of Sake, through which we hope to prove our commitment to these two goals during its development.

2. Phonology

2. 1. Sake Phonemic Inventory

In maintaining Sake's original two goals, the phonemic inventory (described in the International Phonetic Alphabet below in *Table 1*) has been designed to consist only of sounds commonly found across the world's languages. In the case of any rarer phonemes that are found in fewer of the world's languages or are more difficult to pronounce for some speakers, like both [r] or [f], sounds not widely found in languages like Japanese, a wide amount of allophonic variation is allowed to ensure anyone of many different language backgrounds could pronounce any sound of the language with ideally as little difficulty as possible. This will be further explained below in *Table 2*.

Pulmonic Consonants								
	Labial Coronal Palatal Dorsal						rsal	
Plosive	p		t	,			k	
Fricative	f	b	S	d	l		h	g
Nasal	n	n	1	1				
Rhotic			ı	r				
Approximant	V	V			j	İ		

Table 1: The Phonemic Inventory of Sake

In following our second goal, to ensure the language sounds as beautiful as possible (at least as perceived by Western speakers like ourselves), the number of plosives has been limited to be as few as possible, as these phonemes cause the greatest interruption in speech of all phonemes. Because of this, there exist only three purely plosive consonants in Sake: [p], [t], and [k]. All of these sounds are extremely common across the world's languages, and as such even though they create full stops in speech, they will never be seen as peculiar or revolutionary sounds to most speakers of Sake. The other apparent plosives—[b], [d], and [g]—actually only appear as true voiced stops word-initially. Intervocalically, they spirantize (as they do in Spanish, a commonly-cited beautiful language).

Phoneme	Transcription	Allophones
[p]	p	[p ^h]
[b]	b	[v], [β]
[f]	f	[Φ]
[m]	m	
[t]	t	[th], [t], [t], [c], [t], [t6]
[d]	d	[d_], [z], [ð], [ɟ], [ʤ], [ʒ], [ζ], [ʑ], [ʤ]
[8]	S	[s ₋]
[n]	n	[n_]
IJ	sh (c)	[§], [ø]
[k]	k	[k ^h], [q]
[g]	g	[ɣ], [Ġ], [ĥ]
[h]	h, '	[x], [χ], [ʔ]
[r]	r	[r], [ɹ], [ɹ], [t], [ʁ]
[w]	w (u)	[щ], [υ]
[1]	1	[1_], [4], [†]
[j]	y (i)	[٨]

Table 2: Sake Consonants, Written Transcriptions, and Allophonic Variations

As seen in *Table 2*, almost every consonant found in Sake has some range of allophonic variation to ensure that no matter the speaking base, at least an approximation of each sound can be made with relative ease. This is one positive trait of languages with particularly small sound

inventories: variation can be seen as a feature of the language, as opposed to mere pronunciation errors.

Also described above is how Sake words are transcribed in text. For almost every sound, its written description is identical to that of its ideal International Phonetic Alphabet (hereafter "IPA") transcription. The only exceptions can be found in the phonemes $[\int]$, [r], and [i].

- [ʃ] is transcribed in Sake as "sh," a convention of English that has not been made rarified worldwide due to English's widespread influence. If maximum clarity is required (however slim the occurrence of "sh" appearing written together actually is), the latin letter "c" can be used instead. This practice, however, is extremely uncommon, and would only occur in particularly pedantic situations where clarity is the most pivotal factor.
- [r] is transcribed as "r," as can be found to describe rhotic sounds across most of the world's languages that are written using the Latin alphabet. As such, due to the widespread variation of rhotics in general as a sound class, the ambiguity of "r" ensures that any rhotic variation will be accepted into the language.
- [j] is transcribed as "y." This is perhaps the most controversial change made to the language, as "y" is not a very universal way to write [j] across the world's languages that utilize the Latin alphabet. However, this letter was chosen mostly to ensure that it was not instead used as it is in English and French as [t] and [3] respectively (both of which are transcribed allophonically instead as "d").

Finally, it is important to note three other transcriptions whose usage is either rarer or stylized (and as such is uncommon or unconventional). These are the written forms "',""u," and "i," representing [h], [w], and [j] respectively.

- "' " is used to transcribe [h] only in very specific contexts; this is used to separate two vowels that otherwise could be misconstrued as a diphthong (as would often occur using stylistic "u" or "i" as described below). In this manner, words like "si'an" *always* are known to be pronounced as [sihan], and not as [syan].
- "u" and "i" can be used to transcribe the glides [w] and [j] respectively. This variation occurred early on in Sake's development, and it remained prominently utilized until well into the development of its grammar, when the explicit choice was made to reduce ambiguity by using "w" and "y" instead, respectively. This initial variation is due to the fact that these two phonemes can also be described as semivowels or components of diphthongs when they appear before or following other vowels. They remain mostly for stylistic choice (such as in poetry), although their use is dispreferred in most contexts, due to the ease ambiguity they provide. Further discussion of such convention can be found in the description of Sake's vowels below.

The vowel inventory of Sake was too derived based on both beauty and ease-of-learning, and the full range of the language's monophthongs are described in *Table 3* below.

Vowels							
Front Mid Back							
Close	i		u				
Close-Mid	e		0				
Open		a					

Table 3: Vowel Inventory of Sake

Each of Sake's five monophthong vowels are nearly universal across the world's languages in some form or another, and all are written in their ideal IPA transcription. If any are to be missing in a language (for example due to a language having less than five vowels), it is either [e] or [o], hence leading to their greater possible allophonic variation, as shown in *Table 4* below. Moreover, no rare vowel monophthongs are present, to ensure a feeling of familiarity with speakers across languages.

Phoneme	Transcription	Allophones
[i]	i	[1]
[e]	e	[ε], [æ]
[a]	a	[a]
[0]	0	[ɔ], [ʌ]
[u]	u	[ʊ]

Table 4: Sake Vowels, Written Transcriptions, and Allophonic Variations

Moreover, Sake utilizes a wide variety of diphthongs (and even two triphthongs), which can either be analyzed as such or as combinations of pre-vowel and post-vowel glides. The full list of all diphthong combinations is described below in *Table 5a*, while the triphthongs are found in *Table 5b*. (Note that allophonic variation as described in *Table 4* translates into diphthongs and triphthongs as well.)

Ascending Diphthongs	Transcription	Descending Diphthongs	Transcription
[ai]	ay (ai)	[ia]	ya (ia)
[au]	aw (au)	[io]	yo (io)
[eu]	ew (eu)	[ua]	wa (ua)
[oi]	oy (oi)	[ue]	we (ue)
[ui]	wi (ui)	[iu]	yu (yu)

Table 5a: Diphthongs Found in Sake

Triphthongs	Transcription
[iau]	yaw (iau)
[uai]	wai (uai)

Table 5b: Sake's Two Triphthongs

As opposed to expanding the number of possible vowel values in Sake using a method such as vowel lengthening or nasalization, diphthongization was chosen as the preferred method. This was mostly because it was feared that aspects such as nasalization or vowel lengthening would be too subtle an addition and would possibly lead to ambiguity or miscomprehension. It was because of this that diphthongs were chosen instead, as each diphthong sounds distinct from each other and their monophthong constituents. In rare cases where two vowels co-occur but are not to be diphthongized (such in the case of suffixing or various other morphological processes), an epenthesis [h] (transcribed as "'," is inserted between the opposing vowels.

To ensure minimum confusion between diphthongs and to improve acoustic saliency, all diphthongs must travel across the entire span of mouth in distance at least two levels of separation in nature. This means that all diphthongs either consist of two vowels such that the second vowel differs from the first vowel by either two levels of height or backness, or one level of each. This exact process is documented below in *Figure 1a* for diphthongs, and *Figure 1b* for triphthongs, and *Table 6* below explicitly describes these separations.

Front→Back	Back → Front	Low→High	High→Low	Mixture
/iu/	/ui/	/au/ /ai/	/ia/ /ua/	/eu/ /ue/ /oi/ /io/

Table 6: Diphthongs and their Types of Separation

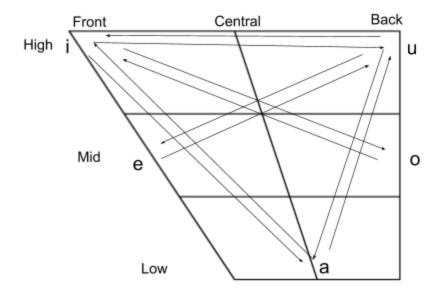


Figure 1a: Diphthongs in Sake (note the distance each diphthong travels)

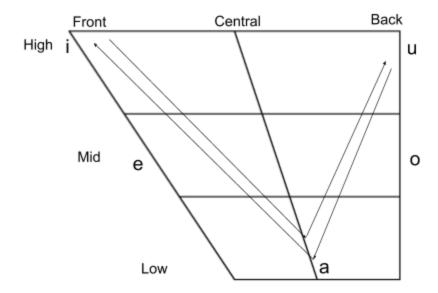


Figure 1b: Triphthongs in Sake (note the distance each triphthong travels)

As mentioned above, because of the hazy nature of Sake's diphthong system (whether they be considered glides, semivowels, or diphthongs), there exist two methods of transcription for each. In either case, only the letters representing the high vowels change (as they start or end every diphthong and triphthong in Sake), and a change only occurs when [i] or [u] begins or ends the vowel cluster, never changing the main vowel itself. Therefore, if "Glide-Notation" "w" or "y" is used, ambiguity is reduced, especially when compared with that of "Semivowel Notation" "u" or "i" respectively.

The Latin alphabet was chosen as the primary script of Sake for one essential reason, even though a new, featural alphabet may have been better-suited for long-term communication: the Latin alphabet is nearly universal today, and worldwide a vast majority of language learners have encountered it in some form, be it in languages as diverse as English, French, Spanish, Chinese, Indonesian, Swahili, etc. Across all these languages, the sounds as transcribed above

are identical (or nearly identical) in written form, thus ensuring maximal comprehension with as little effort required as necessary.

2. 2. Syllable Structure

In following both of our original goals for its creation, Sake utilizes a very minimal syllable structure, especially when compared to languages like English. In Sake, the maximal syllable projection is presented in *Figure 2* below.

FIgure 2: Maximal Projection of a Sake Syllable and Examples

In this manner, the optional onset of the syllable, C, represents any non-semivowel consonant (like [w] or [j]). The nucleus, V, is the only mandatory element of the syllable, and it represents the variety of vowels and diphthongs whose combination are legal in Sake. Finally, the coda of a Sake syllable too is optional, and it can only be one of two phonemes: [n] and [l]. Due to allophonic variations (described in greater detail below), [n] often assimilates in place to following consonants in multisyllabic words. Moreover, [l] can appear either as it is or as the distinctly English "dark-l" [†] with no change in meaning to the syllable.

2. 3. Stress

Stress does not play as prominent a role in Sake as it does in languages like English. In Sake, stress is placed on the first syllable of the root morpheme in compound words. For example, the Sake word for "tear" (as in crying) is *salyusay*, literally "water-eye." This is written in IPA as [¹sal₁iu.sai], with stress on *sal*, "water." As water is the primary element of tears, it receives the most stress of the word. However, even with this in mind, the stress is not strongly pronounced, and in words of greater complexity, this method of marking stress becomes

unwieldy to use effectively. Moreover, because the roots of words come before their bound morphemes in word formation (see **Morphology**), the most important morpheme of each word starts that word, so stress is more secondary than vital to proper pronunciation of Sake.

2. 4. Phonotactic Rules

There are three explicit phonotactic rules in Sake, all of which have been already explained previously but will be further expanded below.

- Intervocalic Voiced Spirantization (IVS)
 /+voiced, +plosive/ → [+fricative] / [+vowel] ___ [+vowel]
 A voiced plosive becomes a voiced fricative between two vowels.
- Nasal Place Assimilation (NPA)
 /n/ → [αPlace] / ___ [+obstruent, αPlace]
 /n/ assimilates to the place of a following consonant.
- Intervocalic /h/ Epenthesis (IHE)
 ∅ → [h] / [+vowel]_σ ___ [+vowel]
 [h] is inserted between two vowels of different syllables (to prevent diphthongization).

Each of these three explicit rules help to further our language's original goal in some manner. IVS makes voiced stops softer whilst between vowels to create a smoother sounding flow to the language, as well as to limit the number of plosives present in Sake as a whole. NPA is used to improve ease-of-speaking; because the only nasal that can end a syllable is /n/, this nasal can freely deviate and match the place of articulation of the following consonant, allowing both a smoother flow of speech and giving a natural quality to the language. Finally, IHE is used both to beautify multisyllabic words as well as to help disambiguate otherwise mergeable morphemes in word construction; using a fricative [h] as opposed to a plosive [?] for this task

was an explicit choice, as /h/ is a very common sound across languages and provides less of a divide between morphemes.

Apart from these three explicit rules, there are a wide variety of phonotactic rules that will be described below. These, however, differ based on the native language of the speaker, and they do not prevent any form of understanding by being or not being applied in speech. These rules are inherent properties of phoneme interaction, made solidified for the purpose of covering all possibilities that could be found in our language.

• Vowel Nasalization

[+vowel] → [+nasal] / ___ [+nasal] Vowels become nasalized when preceding a nasal.

• Word-Initial Derhoticization

• High-Vowel Palatalization

 $/s/ \rightarrow [\int] / \underline{\hspace{1cm}} [+vowel, +high]$ /s/ becomes $[\int]$ when occurring before a high vowel.

• Nasal-Rhotic Assimilation

• Nasal-Liquid Assimilation

 $/n/ \rightarrow [l] / __/l/$ /n/ becomes [l] when occurring before /l/.

• Syllable-Final Dark-L

$$/I/ \rightarrow [\uparrow] / __]_{\sigma}$$

/l/ becomes [†] syllable-finally (especially for English speakers).

3. Morphology

Because Sake is a largely isolating language, syntax forms the bulk in describing relations between elements of the sentence. However, in word-formation regular rules are applied in combining smaller morphemes to create larger words, and a small set of particles are utilized in marking more adjunctal phrases, such as locational or instrumental phrases. This parallels the particles used in East Asian languages like Japanese and Korean that attach to the end of the words they modify; in this manner the particles used in Sake could be classified as post-positions, in contrast to English's own prepositions. It is also through the binding of featural roots that Sake's pronominal system is formed

3. 1. Sake Pronominal System

Sake utilizes a regular pronominal system that marks a person, number, and inclusivity or exclusivity where applicable. The full chart of pronouns is listed below in *Table 7*.

		Singular (S) (Ø)	Dual (D) (dai)	Plural (P) (ra)	Reflexive (REFL) (wa)
1st	Inclusive (i) (ban)		adaiban (aiban)	araban (aban)	
Person (a)		а	adai	ara	wa
2nd Person (ya)		ya	yadai	yara	
3rd Person (go)		go	godai	gora	
Nondescript (ONE)		mi			

Table 7: Sake Pronouns

Sake pronouns are distinguished by three levels of person: first person, second person, and third person. First person is further expanded into inclusive and exclusive distinctions for groups of two or more, and third person does not distinguish the genders of those it refers to, as opposed to how it does in English. Pronouns are also divided by number: singular, dual, and paucal (indicating three or more). To form the correct pronoun to be used, the person and number of the referent are compounded together. All these points are expanded in greater detail below.

Clusivity is a rare phenomenon in Western languages, but it plays an important role for Sake. The need for a distinction of clusivity in instances of first-person can be explained using the following scenario: Three friends, A, B, and C, are excitedly discussing something when a fourth person, D, arrives and greets them. On his arrival, A yells to D, "D! *We* just won the lottery!" In the exclusive case, D did not participate, and as such he will not share the earnings. In the inclusive case, however, the money will be split four ways across all four friends. Such an example shows the importance of clusivity in the real world, and as such it has been explicitly added to Sake to remove ambiguity that could arise otherwise.

The range of third person pronouns in Sake are gender neutral, taking on the English definition of "they" in both singular and plural instances. To specifically refer to an individual as "he" or "she," the closest translations in Sake directly translate to "that man" or "that woman," respectively. This choice was made for two reasons: many human languages do not share this distinction in pronouns that English does (although they do share the distinction between men and women); and by explicitly marking gender, one quickly arrives at the conclusion that all people fall along a gender binary, an idea that, while well beyond the scope of this primer, leads to the eventual forced inclusion of a means to represent those not along this binary (e.g. singular

"they" in English). Languages with a gender distinction must create a means to circumnavigate such, and therefore, Sake is built without this distinction to limit unnecessary complexity.

Apart from a singular and paucal (general plural) distinction between pronouns, there is also a dual distinction included as well, representing groups of two. This distinction was chosen simply because there are many instances of countable items in nature whose natural count is two: hands, feet, eyes, lips, testicles, the number of people in a relationship or marriage, the sides of a coin, the number of sides in a debate. Moreover, in an average conversation there are two people, marking a special significance to this number such that its distinction seems relevant for Sake.

Sake also utilizes a special reflexive pronoun *wa* that is used for anaphors' referring back to their antecedents. Its usage is used to eliminate ambiguity in phrases where the existence of multiple agents could result in more than one available parse of the sentence, as is what is common in the "Gay Fanfiction Problem." This can be exemplified in the following example English sentences, assuming the existence of two men Jack and John who hold deep feelings for one another but can only show it in subliminal and secretive ways due to society's deep-seeded hatred for things new or strange:

- (1) $Jack_1$ rubbed $his_{1/2}$ arm slowly.
- (2) $John_1$ shivered as $Jack_2$ reached for $his_{1/2/3}$ belt.

In both these example sentences, there is some level of ambiguity as to who is being affected by the actions of each sentence. In both sentences, 'his' can refer to either Jack or John, or even some third-party not aforementioned (like Jack's estranged ex-lover Philippe). By default, the reflexive targets the closest subject to it in the sentence in its own binding domain, not the one

stated earliest. Utilizing an all-inclusive reflexive pronoun means that these sentences (1) and (2) can be translated unambiguously in Sake, as seen in sentences (3) and (4) below, respectively:

- (3) Shan la fasa ral pal {wa / go}.

 [∫an la fasa ral pal {wa / go}]

 Jack PAST slow rub arm {REFL / 3S}.

 "Jack rubbed {Jack's / John's} arm slowly."
- (4) Shon la raldu duru Shan figo nipiroylla {wa / go}.

 [∫on la raldu duru ∫an fiyo nipiroilla {wa / go}]

 John PAST shiver while Jack reach.for belt {REFL/3S}.

 "John shivered as Jack reached for {Jack's / John's} belt."

Finally, there is one last nondescript pronoun whose sole function is to represent an unknown agent. This structure is also used in the formation of what would be called passive tense in English. Sentence (5) below shows this structure being used, with this special pronoun represented as "ONE" in the gloss.

(5) Mi bu dyatoydya laba sakya. [mi bu diatoizia la β a sakia] ONE FUT noon catch fish The fish will be caught at noon.

3. 2. Word-building

Many of Sake's various words are constructed of smaller words whose meanings help to derive that of the larger word. For example, the Sake word for "church" is *wishalul*, which directly translates to "house of gods" or even "god house." In this manner, the main word root is positioned at the froom of the word, while auxiliary words that help to clarify meaning are placed at the end of the word. With *shalul* meaning "god" or "diety," and *wi* meaning "house," *wishalul* is a HOUSE that is used for GODS, as opposed to the other way around. (For fun, one could also reverse the roots to create a *shalulwi*, which would be a "house god," or a "god of the house.")

3. "Meta-words"

Our language is mostly isolating, utilizing a series of pre-verbal meta-words as opposed to complex conjugations found in many natural languages. As such, verbal roots do not inflect for number, person, tense, aspect, honorific status, etc; meta-words take on this role instead. Grammatically, pre-verbal meta-words are separate, distinct entities, but in writing and speech they can blend together for ease of pronunciation and elegance. *Table 10* lists the Sake meta-words and their English translations.

Negation/	Tense	Aspect	Modality
Affirmation	(Mandatory)	(Mandatory)	
ne	me	tun Progressive ¹ (PROG)	<i>len</i>
Negation (NEG)	Present¹ (PRES)		Volition (VOL)
yay	la	ren	fi
Affirmation (AFF)	Past (PAST)	Habitual (HAB)	Possibility (POSS)
	bu Future (FUT)	lan Perfective (PERF)	<i>nyu</i> Ability (ABIL)

lala Remote Past (rPAST)	hen Inception (INC)	fo Obligation (OBL)
<i>bubu</i> Remote Future (rFUT)	hon Conclusion (CONC)	gwe Necessity (NEC)
fe Hypothetical (HYP)		ashe Allowance (ALL)
<i>no</i> Relative (REL)		gye Appearance (APP)
soy Command (COM)		

Table 8: Sake Meta-words

Meta-words are ordered as before the verb in the order they are provided in the table, and in the case of multiple aspects, the order they appear is in the order of descent down their column of the table. Meta-words with a subscript ¹ are unmarked unless they are showing emphasis or comparison to a previous sentence. By stacking meta-words, one can achieve a similar effect to modal and auxiliary verb stacking in English. Sentences (5) and (6) below compare the structures of Sake sentences with their English counterparts.

- (6) A nenyu bwasi rilnal go.[a neniu buasi rilnal go]1S NEG.ABIL believe story 3S"I could not believe his story."
- (7) Mi yaylatunlan tu'ya bol bolpaw.[mi iailatunlan tuhia bol bolpau]ONE AFF.PAST.PROG.PERF yesterday build building"The building had been being built yesterday."

3. 4. Numerical System

The numerical system of Sake reflects that of those found in East Asian languages. In these systems as well as in Sake, numbers are formed through compounding. For example, the number twenty-one (21) is a simple compound of the individual morphemes for two, ten, and one, such that twenty-one literally translates to two-ten-one. Therefore, the Sake word for twenty-one is *daiti'a*, from the individual words *dai*, *ti*, and *a*. In contrast to East Asian numeric systems, however, the Sake numerical system uses the Western standard of base ten and thousands as opposed to myriads (base 10,000). A partial chart of the numerical system is shown below in *Table 9*.

zero/none	па	ten	ti
one	а	hundred	bai
two	dai	thousand	bui
three	та	million	bue
four	moi	billion (thousand million)	buibue
five	shi	trillion (fuckload)	kwala
six	sha		
seven	fua		
eight	hai		
nine	e'a		

Table 9: Sake Numerical System

3. 5. Particles

While Sake uses word order to distinguish subjects and objects, other nominal elements of the sentence are marked using postpositional particles, each of which declares a different case or semantic function. These are described in the following sections. Note that particles are separated from the words they modify with a space, unless they are modifying a pronominal element. In this case, they are merged directly with the pronoun. Examples of this will be shown in example sentences in the following sections as well.

3. 5. 1. Particles of Quantity

When describing the quantity of something, a quantity modifier appears following the noun that it modifies, acting similarly to an adjective (to be explained in **Syntax**. Morphemes of quantity exist to distinguish indirect amounts of a substance, emphasizing the object being quantified rather the numerical quantity itself. *Table 10* below shows the morphemes of quantity most common in Sake, and *Figure 3* shows a graphical representation of how much or many of a group of objects each particle could represent. Finally, sentences (8) and (9) show examples of a few of the particles in actual usage.

quantity	pabyo	some	mero
none	na	few/little	noydi
all	loy	moderate/half	leba

Table 10: Sake Morphemes of Quantity

(8) Shon la shen ke'iki amero!

[∫on la ∫en kehiki amero]

John PAST eat cake 1S-some

"John ate some of my cake!"

(9) Pirati loy kada posebu? [pirati loi kaza pose β u] rum all why disappear "Why is all the rum gone?"

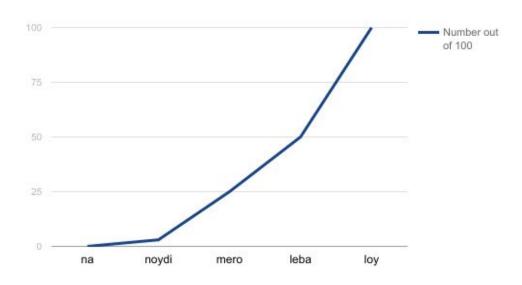


Figure 3: General Count for Sake Morphemes of Quantity

3. 5. 2. Particles of Position, Direction, and Motion

A wide range of particles exist in Sake to mark an object's position, general direction, and movement. These are all outlined in *Table 11* below.

north (of)	ko	up	то	far (from)	sebu	inside	an
south (of)	roy	down	swe	very far (from)	sebubu	outside	man
east (of)	shwa	left (of)	риро	very near (to)	linnana	into	anhu
west (of)	lun	right (of)	odo	underneath	fay	out from	manhu
stationary (of)	ben	near/close (to)	linna	over	sayso	through/a cross	mitu

next (to) / by	mwaybi	top (of)	bibyo
after/behind	hin	between	shey
before/front	tu	middle (of)	fira
bottom (of)	yobi	around	koydi

Table 11: Sake Position and Direction Particles

In any sentence, these can be placed following the noun they modify, or if they modify a verb, they can be placed in the subject's adverb position instead. These are both shown in sentences (10) and (11) below. Moreover, for direct motion to and from something, there exist the locative particle fu and the ablative particle ga respectively.

- (10) Myaw o shewday bibyo.[miau o ∫euzai bi β io]cat BE chair top"The cat is on top of the chair."
- (11) Go la shwa kinpyol holbwelne fu.[go la ∫ia kinpiol holbuelne fu]3S PAST east run town LOC"She ran eastward toward the village."

3. 5. 3. Particles of Possession, Benefaction, and Instrumentation

There also exist several particles in Sake that mark other adjunctal semantic elements, like possession, benefaction, and instrumentation. Possession indicates what is a part of or is owned by something else, and is marked with the genitive particle bi; when marking possession by a pronominal element, the pronoun alone as an adjective following what is possessed marks the genitive case. Benefaction indicates what is done for someone or is given to someone, and is marked with the benefaction particle di. Instrumentation indicates that something is being used

as a tool or for a purpose, and it is marked with the instrumental particle *rile*. These are all shown in use in example sentences (12) and (13) below.

- (12) Go la mal Shon bi kyunhol di.[go la mal ∫on bi kiunhol di]3S PAST give John GEN dog boy BEN "He gave John's dog to the boy."
- (13) A la fotel kyun dalbol kanfotel warile.[a la fotel kiun dalbol kanfotel warile]1S PAST see man old telescope REFL-INST"I saw the old man through his telescope."

3. 5. 4. Particles of Time

The Sake particles that mark the locative case and ablative case (to and from respectively) for motion parallel in time usage as well. Sentences (14) and (15) below mark these respective cases temporally.

- (14) Soy aylpoposha a moyfu.[soi ailpopo∫a a moifu]COM wake 1S 4-LOC"Wake me up at 4."
- (15) Goday bu pon shiga fwafu.[gozai bu pon ∫iɣa fuafu]3D FUT be.gone 5-ABL 7-LOC"We will be gone from 5 until 7."

4. Syntax

Sake is a Subject-Verb-Object language, as is English. The language uses a complex word order system to distinguish agents and patients in sentences, as well as to mark adjunctial phrases and additional information. These are explained in greater detail in the following sections.

4. 1. Conjunctions

Before each section is expanded, it is important to note Sake's complicated set of conjunctions. These are especially important to consider when looking at Sake's translation for English "and," of which there are seven translations in Sake. All the major conjunctions are listed in *Table 12*, and the case for Sake's "and" is expanded below.

and _{Sentence}	en	however	sashe
and _{Verb Phrase}	e	while	kule
and_{Verb}	el	before	hin
and _{Noun Phrase}	а	after	tu
and _{Noun}	al	"and/or"	aw'al
and _{Adjective Phrase}	и	so	sosone
and _{Adjective}	ul	if	hi
or	aw	although/despite	fanta

Table 12: Sake's Major Conjunctions

In English, the word "and" can be used in a variety of places in a sentence, be it between verbs, nouns, adjectives, or even sentences themselves. This is not a standard practice across languages, however, and it leads to instances of ambiguity in English.

(16) I want to buy blue birds and fish.

(17) He is very stupid and athletic.

In sentence (16), there are two possible readings: the speaker wants blue birds and blue fish, or he wants blue birds and fish of any color. In sentence (17), the person being referred to is either very stupid and very athletic, or he is very stupid and somewhat athletic. In both of these instances, ambiguity does not cripple the sentence, but it can lead to unnecessary confusion, all because "and" is not being descriptive enough in what it is framing in the sentence. As such, the seven different forms of "and" in Sake all frame different explicit elements of the sentence, and ambiguity is resolved. This is seen in sentences (18) and (19) below, which show Sake's translations for (16) and (17) above, respectively.

- (18) A len baswal ryukya moldwan a sakya. / A len baswal ryukya al sakya moldwan.
 [a len basual riukia molduan a sakia | a len basual riukia al sakia moduan]
 1S VOL buy bird blue and NP fish. / 1S VOL buy bird and fish blue.
 I want to buy blue birds, and fish. / I want to buy blue birds and blue fish.
- (19) Go ashu de'wan e yola. / Go ashu de'wan el yola.
 [go a∫u dehuan e iola. | go a∫u dehuan el iola]
 3S very stupid and_{VP} strong. / 3S very stupid and_V strong
 He is very stupid, and athletic. / He is very stupid and very athletic.

Note that while "or" could have received this same level of distinction, it was felt that "or" would not exist in enough different situations in everyday life to warrant this level of distinction.

Finally, not that there is an explicit word in Sake, *aw'al*, to mark what is usually described as "and/or" in English; this marks that logically, if there are two items conjoined with *aw'al*, both or either being selected would make the proposition true. In comparison, the Sake word for "or," *aw*, must be used for English disjunction "or"; if there are two items, one, or the other, must be selected, not both. This can be seen clearly in sentence (20).

Yara ashe shen shensal aw'al shenrosho. / Yara ashe shen shensal aw shenrosho.¹

[iara a∫e ∫en ∫ensal auhal ∫enro∫o | iara a∫e ∫en ∫ensal au ∫enro∫o]

2P ALLO eat soup and.or salad / 2P ALLO eat soup or salad

You can have soup "and/or" salad. / You can have soup **or** salad.

4. 2. Noun Phrases

Noun phrases in Sake consist at a minimum of a noun, upon which additional structures can be added. *Figure 4* below displays the order other, optional elements go in Sake noun phrases.

Determiner	Number	Noun	Adjective Phrase	Relative Clause
------------	--------	------	------------------	-----------------

Figure 4: Maximal Deep Structure of Noun Phrases in Sake

Numbers, be them for count, ordinality, or cardinality, all come before the noun they modify. Adjective phrases then follow it, themselves of which could expand using adverbs and conjunctions (all of which are explained further in **Adjectives**, **Adverbs**, and **Conjunctions** respectively). Finally, relative clauses can follow adjective clauses (which are further explained in **Relative Clauses**). (21) below shows the maximal structure of a Sake noun phrase (given that no infinite recursion were to occur).

(21) I day gewsotay ashu yebo a nola baswal ta. [i dai geusotai a \int u ie β o a nola basual ta] this two cup very beautiful 1S REL.PAST buy ta "these two very beautiful blue cups that I bought"

4. 3. Adjective Phrases

Adjective phrases in Sake come following the nouns they modify, not before as in English. The only required element of an adjective phrase is of course an adjective, which can be optionally modified by an adverb to its left and more adjectives to its right. The order of

¹ Sentence (16) is also the first instance of a Sake tongue-twister that we made (albeit accidentally).

adjectives in a phrase changes the meaning of what is being conveyed of the noun that is being modified, with the increment in ascending order of importance. (22) below shows a noun phrase modified with a maximal adjective phrase of depth three in Sake (although the depth could possibly even be infinite if wanted).

(22) Kulifodi gu kwa molkyasa tway turi [kulifozi gu kua molkiasa tuai turi] [Clifford that dog very red big dangerous] "the very big, red, dangerous dog, Clifford"

4. 4. Verb Phrases

Every complete Sake sentence consists of at least one noun (the subject), one meta-word (at least implied), and a verb. As explained in the **Morphology** section, verbs are uninflected in any way, and any possible inflection is instead handled by pre-verbal meta-words. Word order provides the placement for both subjects and objects, with subjects immediately preceding meta-words and objects immediately following the verb. Verb-modifying adverbs appear between the meta-words and the verb they modify. These elements of the sentence are static, and cannot be changed. However, following the direct object, more flexibility is possible. Using a variety of postpositional particles, adjunctal noun phrases can be added to sentences to provide additional detail that does not fit under the normal sentential framework. In general, adjunct phrases that are most important appear at the end of the sentence, while those consisting of previously known information appear earlier on.

In Sake, the copula *o* only is used to bind two noun phrases. Unlike in English, adjectives directly follow the subjects they describe, no copula auxiliary necessary. This process mimics how non-modifying adjectives are applied to sentences in East Asian languages. Sentences (23)

through (26) demonstrate the structure of Sake sentences ending in nouns, adjectives, intransitive, and transitive verb phrases, respectively.

- (23) Shan fe o kwaynkulnen ashu kilin.

 [∫an fe o kuainkulnen a∫u kilin]

 Jack HYP BE doctor very skillful

 "Jack would be a very skillful doctor."
- (24) Mi law pawpya loy fyawndan a kalki fu.
 [mi lau paupia a∫e loi fiaundan a kalki fu]
 ONE do thing all love and NP war LOC
 "All is fair in love and war."
- (25) A'ilwil ren mani kinpyol.
 [ahiluil ren mani kinpiol]
 elephant HAB much runs
 "The elephant runs often."
- (26) Swayla la shen ryonyu en kyun la shen dol.
 [suaila la ∫en rioniu en kiun la ∫en dol]
 woman PAST eat peanut and_s man PAST eat dirt
 "The woman ate peanuts and the man ate dirt."

4. 5. Relativity

Relativity is described very easily in Sake. To mark comparatives (e.g. "bigger than"), apply the comparative marker *gwi* to the end of the adjective. To mark superlatives (e.g. "the biggest"), apply the superlative marker *dya* to the end of the adjective. When a comparative is meant to modify a verb instead of the copula, it is treated as an adverb when conveying the meaning "VERB ADJECTIVE-er than NOUN." All three possibilities are represented in sentences (27) through (29) below.

(27) Shan kobagwi Shil. [∫an ko β ayui ∫il] Jack tall-COMP Jill "Jack is taller than Jill."

- (28) Shan benlegwi kinpyol Shil.

 [∫an benleɣui ∫il]

 Jack fast-COMP run Jill

 "Jack runs faster than Jill."
- (29) Eberesu tudwil o tudwil kobadya.
 [e β eresu tuzuil o tuzwil ko β azua]
 Everest mountain BE mountain tall-SUPER
 "Mount Everest is the tallest mountain."

4. 6. Relative Clauses

To form a relative clause in Sake, two special grammatical elements exist: the TRACE marker ta, and the special relative clause meta-word no. Relative clauses are sentences that modify nouns by accepting the noun in one of its semantic positions. In English, this position is left empty; syntactically, it is said that a "trace" has been left behind in the empty position. In Sake, however, this trace-position is explicitly marked, such that no ambiguity to the noun that the relative clause is modifying is maintained. Moreover, to ensure that it is understood that the modifying-sentence is not an element of the matrix sentence's structure, the special relative clause meta-word is put into the relative clause. This removes any ambiguity as to the meaning behind the clause.

In Sake, gerund phrases are also marked using relative clauses. Therefore, the closest approximation to "the running dog" in English would translate to 'the dog that runs' in Sake. Sentences (30) through (35) below provide in detail examples of the structures of relative clauses. (30) through (32) contain relative clauses in the matrix clause's subject position, and (33) through (35) show them in the object position. Finally, each set of three sentences shows relative clauses of subject, object, and gerund, respectively.

- (30) Kwa nola ta disway myaw nyusyon a. [kua nola ta disuai miau niusion a] dog REL-PAST T bite cat hate 1S "The dog that bit the cat hates me."
- (31) Myaw kwa nola shen ta nakya. [miau kua nola ∫en ta nakia] cat dog REL-PAST eat T dead "The cat that the dog ate is dead."
- (32) Shahla ta no kinpyol la tinpi el newl.

 [∫ahla ta no kinpiol la tinpi el neul]

 horse T REL run PAST trip and_v fall

 "The running horse tripped and fell."
- (33) A la fol tokihol ta nola shal kubu mwayle kule.
 [a la fol tokihol ta nola ∫al ku β u muaile kule]
 1S PAST chase rabbit-DIM T REL-PAST beat turtle race while "I chased a bunny that beat a turtle at a race."
- (34) Kubu eki sugwi toki mi nola shal ta. [ku β u eki suɣwi toki mi nola ∫al ta] turtle any good-COMP rabbit ONE REL-PAST beat T "Any turtle is better than a rabbit that was beaten."
- (35) Ka ya syon sho'yal kopi ta no ryushe? [ka ia sion ∫ohial kopi ta no riu∫e] QU 2S like taste coffee T REL steam "Do you like the taste of steaming coffee?"

4. 7. Questions

Unlike in English, question words in Sake remain in-situ, or in the place where they would originate were there no movement in the sentence. Therefore, making questions simply consists of solely replacing the semantic location of the sentence with the appropriate question-word, as seen for example in sentences (36) and (37). The list of all question words can

be seen below that in *Table 13*. *Pun* "which" and *kwada* "how much/many" act as adjectives, while the rest act as isolated noun or adjunct phrases.

- (36) Kwa syondya yabi hilsyon o kyede? [kua siondia ia β i hilsion o kieze] dog like-SUPER 2S-GEN name BE what "What is the name of your favorite dog?"
- (37) Yaday la po kidi?
 [iazai la po kizi]
 2D PAST go where
 "Where did y'all go?"

who	kudu	why	kada
what	kyede	how	kodo
where	kidi	how much, how many	kwada
when	kede	which	pun

Table 13: Question Words in Sake

Finally, there is a special question meta-word *ka* that comes at the very beginning of a yes/no question. Sentence (38) shows *ka* in use.

(38) Ka ya ne syon myaw?
[ka ia ne sion miau]
QU 2S NEG like cat
"Don't you like cats?"

5. Conclusion

Thus concludes this general primer of the structure of the Sake language. We hope that through this, you can learn to speak our language with relative fluency, especially provided the **Lexicon** provided below in section **6**, and we hope that you can see a means for us to reach our original goals of creating a language that is both beautiful and easy to learn.

6. List of Meta-Words Referenced

ABILITY	(ABIL)	nyu
ABLATIVE	(ABL)	ga
AFFIRMATION	(AFF)	yay
ALLOWANCE	(ALL)	ashe
APPEARANCE	(APP)	gye
BENEFACTOR	(BEN)	di
COMMAND	(COM)	soy
COMPARATIVE	(COMP)	gwi
CONCLUSION	(CONC)	hon
COPULA-BE	(BE)	0
DIMINUTIVE	(DIM)	hol
FUTURE	(FUT)	bu
GENITIVE	(GEN)	bi
HABITUAL	(HAB)	ren
HYPOTHETICAL	(HYP)	fe
INCEPTION	(INC)	hen
INSTRUMENTAL	(INST)	rile
LOCATIVE	(LOC)	fu
NECESSITY	(NEC)	gwe
NEGATION	(NEG)	ne
NON-DESCRIPT	(ONE)	mi

OBLIGATION	(OBL)	fo
PAST	(PAST)	la
PERFECTIVE	(PERF)	lan
POSSIBILITY	(POSS)	fi
PRESENT	(PRES)	me
PROGRESSIVE	(PROG)	tun
QUANTITY	(QUAN)	pabyo
QUESTION	(QU)	ka
REFLEXIVE	(REFL)	wa
RELATIVE CLAUSE	(REL)	no
REMOTE FUTURE	(rFUT)	bubu
REMOTE PAST	(rPAST)	lala
SUPERLATIVE	(SUPER)	dya
TRACE	(T)	ta
VOLITION	(VOL)	len