Lesson 1: Pronunciation

Your first clue that people are speaking a foreign tongue is the fact that their language sounds different. Therefore, the goal of this lesson is to familiarize you with the sounds of Hawaiian to the point where you can articulate them clearly, write them perfectly and read them accurately. Pronunciation is discussed initially in order to maximize the amount of practice you will receive sounding out words in subsequent lessons, plus this initializes good pronunciation habits.

While no text can demonstrate precisely how a language is pronounced, the best we can do is provide you with as much description as possible. While information as to how Hawaiian is spoken can only help you to a point when it comes to pronouncing the language yourself, it will at least sensitize you to various phonetic properties. Concentrating on such properties while listening to fluent speech can enhance your potential to effectively mimic them.

There is no vocabulary section in this lesson, however, animal words will be used in the examples and exercises. It is good to start out learning animal words since they refer to distinctive, tangible creatures, thus their English translations are usually quite straightforward. Chances are you might see some of these animals on a daily basis, especially since terms like pelehū (turkey) double as food items. If so, may you be prompted to recall their Hawaiian equivalents.

1.1 Sounds

“Hānau kū‘oko‘a ‘ia nā kānaka apau loa, a ua kau like ka hano;hano a me nā pono kīvila ma luna o kākou pākahi. Ua ku‘u mai ka no‘ono‘o pono a me ka ‘ike pono ma luna o kākou, no laila, e aloha kākou kekahi i kekahi.”

“All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.”

- Article 1 of the Universal Declaration of Human Rights

On first hear, English speakers commonly perceive Hawaiian as sounding somewhat ‘repetitious’, probably due to its remarkably concise inventory of sounds. Written Hawaiian constitutes merely ½ of English’s 26 letter alphabet, and spoken Hawaiian contains roughly ¼ of English’s 40+ sounds! For this reason you should find Hawaiian fairly easy to pronounce, especially since all of its sounds exist in English.

Devoid of ‘hiss-like’ S/SH/CH and guttural sounds, as well as consonant clusters, English speakers have also been known to characterize Hawaiian as sounding very ‘clean’ and ‘fluid’. Another popular description is ‘melodious’, which could be attributed to the fact that vowels are more bountiful than consonants.
Whether ancient Hawaiians once had their own writing system remains uncertain, but around the islands there are several sites containing **petroglyphs**; pictographs that were carved into solid rock.

**Some Hawaiian Petroglyphs**

![Petroglyphs](image)

Little is known about these carvings. Although ostensibly semiotic, these symbols bear a striking resemblance to the symbols of Rongorongo, an ancient script from nearby Rapa Nui (Easter Island) that has never been deciphered.

**Rongorongo Excerpt**

![Rongorongo Script](image)

In any case, today Hawaiian is written with the Latin alphabet, which was introduced by missionaries so that the Bible could be translated. As you probably noticed, this is the same script used to record English. For this reason, it should be quite easy for you to master writing in Hawaiian. In fact, Hawaiian writing is so straightforward that the first speakers to achieve literacy were writing flawlessly in as little as one month!

**Letters of English Alphabet Used to Write Hawaiian**

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

1.2 **Vowels**

As you may have noticed, Hawaiian is written with the same five vowels as English, yet unlike English, all of Hawaiian’s vowels are pronounced in one and only one way:

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>“ah” as in ‘fall’; <strong>IPA</strong>: /a/</td>
</tr>
<tr>
<td>e</td>
<td>“eh” as in ‘bed’; <strong>IPA</strong>: /e/</td>
</tr>
<tr>
<td>i</td>
<td>“ee” as in ‘ski’; <strong>IPA</strong>: /i/</td>
</tr>
<tr>
<td>o</td>
<td>“oh” as in ‘so’; <strong>IPA</strong>: /o/</td>
</tr>
<tr>
<td>u</td>
<td>“oo” as in ‘duke’; <strong>IPA</strong>: /u/</td>
</tr>
</tbody>
</table>

See **Appendix 1a** for a discussion of the IPA (the International Phonetic Alphabet), an alternate transcription system.

Even though the Hawaiian **u** and English U both sound like “oo”, this does not mean they are identical, and this goes for all other vowels. Hawaiian speakers consistently articulate vowels with
slightly different mouth and tongue positions than English speakers, causing the vowels to sound somewhat different. In fact, not only is the English “oo” is different from the Hawaiian “oo”, both the English and Hawaiian “oo”’s sound different from Japanese’s “oo”, which sounds different from Spanish’s “oo”, and so forth.

A Hawaiian speaker can detect your English accent simply by listening to the way you pronounce o. You may not realize it, but in English O is always pronounced with a W sound following it. This is obvious in words like ‘low’ or ‘mow’ because the W is written, but often times the W is not transliterated. Words like ‘go’, and ‘toe’ still end in a W sound, even though a W isn’t included in the spelling.

In contrast, all of Hawaiian’s vowels are pure, which means o does not necessarily pattern with w. Therefore, a word like no is always pronounced as “noh” in Hawaiian and never as “nohw” like it would be in English.

```
<table>
<thead>
<tr>
<th>English Pronunciation</th>
<th>Hawaiian Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>“nohw”</td>
<td>“noh”</td>
</tr>
</tbody>
</table>
```

To say no, try pronouncing the English word ‘no’ but freeze your lips exactly midway into the utterance. The resulting sound should resemble the Hawaiian pronunciation. The key is to keep your lips still.

Less noticeably, English speakers tend to form a W at the end of “oo” and a Y after “ee”, and perhaps after “eh” as well. Pay special attention to how native speakers of Hawaiian pronounce u, i and e. Make sure you are not producing them as uw, iy and ey.

### 1.3 Long Vowels

Hawaiian also has longer versions all five vowels. Whenever you see a line above a vowel that means you should double that vowel’s spoken duration. So, while u is pronounced as “oo,” ū should be pronounced as “ooo.” In English this line is known as a macron, but in Hawaiian it is called the kahakō.

<table>
<thead>
<tr>
<th>Long Vowel</th>
<th>Pronunciation</th>
<th>IPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ā</td>
<td>“ahh” as in ‘father’; IPA: /aː/</td>
<td></td>
</tr>
<tr>
<td>ē</td>
<td>“ehh;” IPA: /eː/</td>
<td></td>
</tr>
<tr>
<td>ī</td>
<td>“eee;” IPA: /iː/</td>
<td></td>
</tr>
<tr>
<td>ō</td>
<td>“ohh;” IPA: /oː/</td>
<td></td>
</tr>
<tr>
<td>ū</td>
<td>“ooo;” IPA: /uː/</td>
<td></td>
</tr>
</tbody>
</table>

Note that English speakers tend to hear and pronounce ē as “ay” (as in ‘play’) but this is incorrect; only the segment ei is pronounced as “ay.” Ė is nothing more than a long “eh.” Also, note that when the kahakō is put above lowercase i, it replaces the dot rather than hovering over it. Many scholars who write about the Hawaiian language still make this mistake.

Although vowel length is trivial in English, it makes a very big difference in Hawaiian; ignoring the kahakō will lead to some catastrophic miscommunications!
1.4 Consonants

Hawaiian has only eight consonants. L, m and n sound more or less as they do in English, however, h, k, n, p, and w differ slightly. There is also an additional consonant represented by a single apostrophe.

<table>
<thead>
<tr>
<th>Consonant</th>
<th>Pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>l, m, n</td>
<td>Same as English more or less. IPA: /l, m, n/</td>
</tr>
<tr>
<td>lio (horse)</td>
<td>“lee oh”</td>
</tr>
<tr>
<td>moa (chicken)</td>
<td>“moh ah”</td>
</tr>
<tr>
<td>nūnū (pigeon/dove)</td>
<td>“nooo nooo”</td>
</tr>
<tr>
<td>h</td>
<td>Some claim that the Hawaiian h is a bit stronger than the English H, resembling the H of Spanish and Arabic. IPA: /h/</td>
</tr>
<tr>
<td>hē (tiny caterpillar)</td>
<td>“hehh”</td>
</tr>
<tr>
<td>k</td>
<td>In Hawaiian, unlike English, h can go between two vowels. Make sure you pronounce h in this position. Kamehameha, the name of Hawaii’s first king is pronounced “kah meh hah meh hah” NOT like kameamea.</td>
</tr>
<tr>
<td>kia (deer)</td>
<td>“kee ah”</td>
</tr>
<tr>
<td>p</td>
<td>As with k, the Hawaiian p is usually less aspirated, sounding more like the P in ‘spit’ than the one in ‘pit’. Although it's pronounced with less aspiration from the lungs, it is accompanied by a puff air from the mouth, which causes the lips to become somewhat lax in its formation. IPA: /p/</td>
</tr>
<tr>
<td>pea (bear)</td>
<td>“peh ah”</td>
</tr>
<tr>
<td>w</td>
<td>The Hawaiian w can resemble either an English W or a light V. When pronounced as a light V, the bottom lip gently grazes the top row of teeth. After o or u it usually sounds like a W, and after e or i it usually sounds like a light V. Otherwise, it is variable. IPA: /w/ [w, v]</td>
</tr>
<tr>
<td>piwa (beaver)</td>
<td>“pee vah”</td>
</tr>
</tbody>
</table>
‘uwī’uwī (triggerfish) “–oo weee –oo weee”
awa (milkfish) “ah wah”/“ah vah”

In fact, there is some debate over which pronunciation of ‘Hawaii’ is correct. Some people say “hah wai –ee,” others, “hah vai –ee.” Well, now you know that both pronunciations are completely acceptable!

In Hawaiian, this sound is called the ‘okina (break) because it represents a short pause in the start or middle of a word. It has also been called the ‘u‘ina (snap).

In English it is called the glottal stop because it is articulated by closing one’s glottis. It is found in exclamations like ‘uh-oh’ and ‘uh-huh’; the dash in the middle is where the glottal stop occurs. It can also be heard in the middle of the words ‘button’ and ‘kitten’ – notice how neither of these words actually contain a T sound. IPA: /ʔ/

i‘a (fish/marine animal) “ee –ah”

The ‘okina cannot be capitalized. If a word beginning with an ‘okina begins a sentence or proper name, the vowel after it is capitalized instead.

Certain fonts and handwriting styles change the shape of the ‘okina from a single, reversed apostrophe (‘) to a straight apostrophe (’), or a grave accent (‘).

Although the ‘okina is technically a break in speech, it is by all means a consonant. Therefore, disregarding the ‘okina in your writing or speech will lead to some significant mistranslations!

koa (warrior) ko‘a (coral)
apo (to circle) ‘apo (to catch)
a‘a (root) ‘a‘a (belt)

Until recently (post World War II), the kahakō and the ‘okina were not considered significant to Hawaiian, since they are unimportant in the English language. If you have the chance to look at old Hawaiian texts, you might not encounter them.

Genesis 1:29 of Ka Baibala Hemolele (The Hawaiian Bible)

29 ¶ I mai la ke Akua, Aia hoi, ua haawi aku au na olua i na launahele a pau e hua ana i ka hua maluna o ka honua a pau, a me na laau a pau iloko ona ka hua o ka laau e hua ana i ka hua; he mea ai ia na olua.

29 ¶ Then God said, "I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food."
Eventually it was realized that failing to including these sounds in writing is very problematic since it results in high levels of ambiguity. For instance, when encountering a word like ia (in the last line), the reader must choose between four possible selections depending on whether it is pronounced as ia, iā, ‘ia, or i’a; and since each of these individual words have multiple meanings, the translator must sift between a total of ten possible intensions!

**Exercise 1.4 Transcription Practice**

Directions: The following English words are pronounced differently from how they are written. Say each word out loud and listen carefully to the individual sounds. Then, record how these sounds would be written in the Hawaiian language.

Answers may vary if your dialect does not resemble General American English. Check your answers in the *Answers* section at the end of the lesson.

<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>many (“meh nee”)</td>
</tr>
</tbody>
</table>

1. who = ____________________________
2. holly = ____________________________
3. achy = ____________________________
4. wily = ____________________________
5. anyway = ____________________________

**1.5 Alphabet & Spelling**

A good way to fine-tune your pronunciation of Hawaiian is to recite the letters of *Ka Pīʻāpā Hawaiʻi* (*The Hawaiian Alphabet*). The name Pīʻāpā, was derived from the process of explaining how syllables are formed. Hawaiians were instructed “B, A: Ba” to which they repeated pī, ‘ā, pā.

Every letter of the alphabet has a name that sounds close to the way it is pronounced. The order is nearly identical to the English alphabet except for the fact that all of the vowels appear initially, followed by the consonants.

**Kā Pīʻāpā Hawaiʻi**

A a ʻā
E e ‘ē
I i ʻī
O o ʻō
U u ʻū
Ā ā ʻā kō
Ē ē ‘ē kō
Ī ī ʻī kō
Ō ō ʻō kō
Ū ū ʻū kō
H h hē
This Hawaiian alphabet song can help you remember all of the letters. It was composed by Mary Kawena Pukui, a fervent advocate of Hawaiian language and culture.

E nā hoa kamali‘i,
O fellow children,
E a‘o mai kākou
Let us learn together
I pa‘ana‘au ka pī‘āpā.
Till we’ve memorized the alphabet.
‘Ā, ‘ē, ‘ī, ō, ū,
A, e, i, o, u,
Hē, kē, lā, mū, nū,
H, k, l, m, n,
‘O pī me wē nā panina,
P and w are the last two,
‘O ka pī‘āpā.
Of the pī‘āpā.
(Elbert 1979, 6)

A few words of borrowed origin are pronounced with these additional consonants. Most borrowed words conform to the sound system of Hawaiian, however, there are a few exceptions such as ‘ōta (otter) and Kristo (Christ). Z commenced a handful of words, mostly from Greek (Schütz 1976, 87).

Before the spelling of words was standardized p was often written as b, d as r or l, k as g or t, and w as v. This is because monolingual Hawaiian speakers could not hear the difference between these sounds and whenever they produced what sounded like to an English ear as a p that approximated ‘b’, an l that was especially ‘r’-like, and so forth, English speakers spelled words as such. Thus, lilo (to be lost) could have been written as liro, rilo, riro, lido, dido, rido, or diro!

A Hawaiian Language Spelling Bee would last almost indefinitely! Because Hawaiian is written so close to how it sounds, there is little need for knowing how to spell words aloud. In fact, speakers
used to spell a word simply by reciting its syllables. However, sometimes knowing how to spell may come in handy. For instance, is not clear exactly how a word like ‘āweoweo (*bigeye fish*) is usually spelled. One could spell it ‘āueoueo, ‘auceoweo, or ‘aweoueo.

When it comes to spelling out proper names like Hawai‘i, you might want to specify *uppercase* by saying ma‘aka after a letter, or *lowercase* by saying na‘ina‘i after a letter. Between words you can say huaʻōlelo hou (*new word*).

‘okina ‘ō kō mū ‘ā ‘okina ‘ō pī ‘ī ‘ō

huaʻōlelo hou

‘ā lā ‘ā nū ‘ū ‘ī

See *Appendix 1b* for some printable Hawaiian Alphabet flash cards.

**Exercise 1.5 Spelling Practice**

Directions: Write the pronunciation of each letter that comprises the following Hawaiian animal words. Check your answers in the *Answers* section at the end of the chapter.

<table>
<thead>
<tr>
<th>Example</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>meli (<em>bee</em>)</td>
<td>= mū ‘ē lā ‘ī</td>
</tr>
<tr>
<td>walu (<em>oilfish</em>)</td>
<td>=</td>
</tr>
<tr>
<td>mo‘o (<em>reptile</em>)</td>
<td>=</td>
</tr>
<tr>
<td>kīpoka (<em>porcupine</em>)</td>
<td>=</td>
</tr>
<tr>
<td>lakuna (<em>raccoon</em>)</td>
<td>=</td>
</tr>
<tr>
<td>hope‘ō (<em>wasp</em>)</td>
<td>=</td>
</tr>
</tbody>
</table>

**1.6 Reading**

By now you can write words you hear, and even spell them aloud, but you might find that reading them is a bit more complicated. Quite naturally, native English speakers tend to read Hawaiian as if they were reading English, perhaps pronouncing a word like *liona* (*lion*) as “lye  uhn  uh” because it looks like the English word ‘lion’, rather than as “lee  oh  nah.”
When most people learn how to read English they are taught phonics, little conventions that help them navigate spelling irregularities. For instance, phonics would dictate that the letter I is pronounced consistently as “ih” before N, in words like ‘shin’, ‘fin’, and ‘pin’, and as “ai” after NE, in words like ‘shine’, ‘fine’ and ‘pine’.

Phonics are only necessary because English spelling is so warped. Take a look at the letter P or the sequence GH. P can be silent (as in ‘psychology’), but it can also sound like F before H (as in ‘philanthropy’). The sequence GH can also be silent (as in ‘thought’), or it can sound like an F (as in ‘laugh’), or it can even sound like a G (as in ‘ghost’). In fact, you'd be hard pressed to find a single letter that doesn't have an alternate pronunciation.

The main reason why English spelling is so disorganized is because while the pronunciation of words changed over hundreds of years, the way they’re spelled has remained standard. However, and since Hawaiian has only been written down for a couple centuries, its spelling has remained for the most part straightforward. Thus, whereas an English letter such as A can sound like “ah” as in ‘tal’, “ae” as in ‘tack’ or “ay” as in ‘take’ depending on what word it’s found in, the Hawaiian a will always sound like “ah” no matter what the word is.

Therefore, it is important never to apply English phonics to Hawaiian words. This might prove difficult since for the average adult, knowledge of phonics has become largely subconscious. However, try to make sure you never do any of the following:

- change the sound of any letters
- add any letters
- ignore any letters

**Exercise 1.7 Reading Practice**

Directions: The following English words are also found in Hawaiian. However, each of them is pronounced differently between the two languages. First, say each word aloud as you would in English. Then, pronounce it like a Hawaiian speaker.

You do not need to write anything; just check to see if your pronunciation matches the description given in the *Answers* section at the end of the lesson. Answers may vary if your dialect does not resemble General American English.

**Example**

<table>
<thead>
<tr>
<th>word</th>
<th>English pronunciation</th>
<th>Hawaiian pronunciation</th>
</tr>
</thead>
<tbody>
<tr>
<td>home</td>
<td>“hohwm”</td>
<td>“hoh meh”</td>
</tr>
</tbody>
</table>

1. mole
2. aloe
3. like
4. menu
5. manila

1.7 Syllabification & Diphthongs
Hawaiian is notorious for containing some very long words. Take humuhumunukunukuāpua‘a – the name of Hawaii's former state fish (it means triggerfish with a pig-like snout!)

The Reef Triggerfish [Rhinocanthus rectangulus]

This word is incredibly long, but by breaking down words into syllables you can make it much easier to pronounce. It just so happens that Hawaiian has one of the easiest syllabification patterns of any language! Every syllable within a word can only consist of a:

1. V: Vowel or Long Vowel
2. CV: Consonant + Vowel or Long Vowel

So, when broken down into syllables, humuhumunukunukuāpua‘a looks like this:

```
hu mu hu mu nu ku nu ku ā pu a ‘a
CV CV CV CV CV CV CV V CV V CV
```

Now that's a lot more pronounceable!

Singers are often criticized for butchering words by reciting them in a different tempo, as in pronouncing the word honu (turtle) as hon u – which would violate rule 1 – instead of ho nu. Learning the syllable structure of Hawaiian will not only allow you to tackle long words, it will also make your speech more authentic sounding.

As inferable by rule 2, ordinarily a vowel cluster cannot exist inside a single syllable. A combination such as koala (koala bear) is syllabified as ko_ a_ la. However, certain pairs of vowels are exceptions to this rule. In each of the following vowel combinations, the sounds mix together, and as a result these pairs are actually pronounced as quickly, or perhaps near as quickly, as single vowels. These combinations are called diphthongs.

<table>
<thead>
<tr>
<th>Diphthong</th>
<th>Pronunciation</th>
<th>IPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ae</td>
<td>“ah” + “eh” (no English equivalent)</td>
<td>/ae/</td>
</tr>
<tr>
<td>ai</td>
<td>similar to the word ‘eye’</td>
<td>/ai/</td>
</tr>
<tr>
<td>ao</td>
<td>“ah” + “oh” (no English equivalent)</td>
<td>/ao/</td>
</tr>
<tr>
<td>au</td>
<td>similar to the exclamation ‘ow’</td>
<td>/au/</td>
</tr>
</tbody>
</table>
ei 
  similar to the “ei” in ‘eight’; **IPA:** /ei/

eu 
  “eh” + “oo” (no English equivalent); **IPA:** /eu/

oi 
  similar to the “oy” in ‘boy’; **IPA:** /oi/

ou 
  similar to the word ‘owe’; **IPA:** /ou/

It is important to learn the diphthongs of Hawaiian because they are syllabified as if they are single vowels, rather than as separate vowels. Thus, a two-vowel word like kao (**goat**) is actually only one syllable long due to the fact it contains the diphthong ao.

```
\begin{array}{ll}
\text{kao (goat)} & \{ \times \text{ k a o} \\
& \checkmark \text{ kao} \\
\end{array}
```

Since some Hawaiian diphthongs are not found in English, you might have trouble telling certain pairs apart. For instance, **ae** and **ai** might sound nearly identical to you, and the same goes for **ao** and **au**.

Try pronouncing “ah” and then “eh” slowly. Increase the speed until you hear them as one. Now do this with “ah” and “ee.” After a while the difference should become clearer. Repeat the process with “ah” + “oh” and “ah” + “oo.”

**Exercise 1.7 Syllabification Practice**

Directions: Break the following words into syllables. Check your answers in the **Answers** section at the end of the lesson.

```markdown
<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>hu hu</strong> (termite) = h u  h u</td>
</tr>
</tbody>
</table>

1. **lāpaki** (**rabbit**) = .................................................

2. **moi** (**threadfish**) = .................................................

3. **alalā** (**crow**) = .................................................

4. **mocone** (**flounder**) = .................................................

5. **pueo** (**owl**) = .................................................

6. **ʻōpae** (**shrimp**) = .................................................

7. **hailepo** (**stingray**) = .................................................

8. **pāpaua** (**clam**) = .................................................

9. **ʻōpeʻapeʻa** (**bat**) = .................................................

10. **uouoa** (**false mulletfish**) = .................................................
1.8 Stress Groups

In English, certain vowels in a word are emphasized more than others. For instance, in the word ‘present’, as in “I received a present,” the first E is more noticeable than the second. Contrast this with the ‘present’ in the sentence “I present you with this.” In this case the second E is more significant than the first. Accent marks are used to show which vowel is most prominent.

a présent to présent

This property of language is called stress and it works differently in Hawaiian than it does in English. For example, an English speaker would normally stress a word like kikonia (stork) primarily on the second syllable, ko, whereas a Hawaiian speaker stresses the second-to-last syllable more, ni.

Fortunately you don’t have to memorize how each Hawaiian word is stressed since stress occurs in patterns. Hawaiian has a rule that allows you to predict which vowels in a word receive stress.

Hawaiian Stress Rule

<table>
<thead>
<tr>
<th>Stress the second-to-last vowel of every stress group.</th>
</tr>
</thead>
</table>

A stress group (sometimes called an accent unit) is just a section of a word to which the Hawaiian Stress Rule applies. Some words consist of only one stress group.

1 stress group: nahēka (snake)

However, many other words consist of two or more. Dictionaries put periods between them to let you know where they are.

2 stress groups: pōle.wáo (pollywog)

3 stress groups: ‘āi.nào.náo (anteater)

It is essential to remember that the Hawaiian Stress Rule does not apply to words per say. Naheka, polewao, and ‘ainaonaono are all three syllable words, but they are all stressed differently. This is because the second-to-last vowel of every stress group within each word is stressed; not the second-to-last vowel of each word itself.

It is easier to see the Hawaiian Stress Rule applying to long vowels if you think of them as sets of two identical vowels. In other words, for the purpose of assigning stress, ā is really aa, ē is really ee, and so forth.

māpū (baboon) = màa.pūu

Generally, the last stressed vowel is the loudest of all the stressed vowels within a word.
ʻùu.híni (grasshopper/cricket) = “OOO hEE nee”
ʻùu.híni.pûle (praying mantis) = “OOO hEE nee pOO leh”

**Exercise 1.8 Stress Group Practice**
Directions: Apply the Hawaiian Stress Rule to each stress group of the following words. Check your answers in *Answers* section at the end of the lesson.

<table>
<thead>
<tr>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>polo.lia (jellyfish) = pòlo.lía</td>
</tr>
</tbody>
</table>

1. ula (spiny lobster) = ____________________
2. koho.lâ (humpback whale) = ____________________
3. kelō.kokile (crocodile) = ____________________
4. 'ou.lana.kana (orangutan) = ____________________
5. hipo.pō.kamu (hippopotamus) = ____________________

**1.9 Predicting Stress**

Normally, stress groups are not indicated in writing since the way in which a word is stressed does not affect its meaning. Hawaiian has no words like ‘present’ in which the meaning can change based on which vowels are stressed; all words can only be stressed in one way. In other words, unlike if you were to leave out a *kahakō* or *ʻokina*, misappropriating a word’s stress will not lead to a misunderstanding; it will just cause you to sound foreign.

Fortunately though, you don’t have to look up every word you encounter in the dictionary in order to find its stress groups since stress occurs in patterns. These guidelines can help you to predict where a word’s stress groups lie. They only fully predict stress on words up to three syllables long, but this still lets you account for a total of 11,390,625 possible words (Schütz 1994, 20)!

**Hawaiian Stress Group Guidelines**

1. Every syllable with a *kahakō* constitutes its own stress group.

   mū (insect) = múu
   nēnē (goose) = nèe.nèe

2. Every syllable with a diphthong constitutes its own stress group.

   pīwai (wild duck) = pìi.wái
   nuʻao (porpoise) = nuʻáo

3. 2-3 syllable words having no *kahakō* or diphthongs constitute their own stress groups.

   manu (bird) = mánu
   kolōa (domestic duck) = kolóa
4. 2 syllables next to a stress group, none of which has a kahakō or diphthong, constitutes its own stress group.

- kāmano (salmon) = kàa.máno
- makalē (mackerel/sardines) = màka.lée

The word naiʻa (dolphin) appears to consist of one stress group since there are no dots in the word. If this were the case it would be stressed on the i: naiʻa. However, notice how this word contains the diphthong ai. According to rule 2, it should really be stressed on the a: náiʻa. Remember that dots are only put between two stress groups. Náiʻa consists of a stress group, nai, followed by a non-stress group, ʻa. Thus, only by knowing these rules can you always accurately predict where stress falls, even after you look a word up in the dictionary to find its stress groups.

- naiʻa (dolphin) } × naiʻa
  ✔ náiʻa

While rules 1 and 2 apply to every Hawaiian word, rules 3 and 4 only apply seamlessly to words under four syllables. This is why stress on words longer than three syllables is not fully predictable; long words like pelikana (pelican) and kanakalū (kangaroo) have additional stress not predicted by these guidelines.

However, in these cases stress will usually fall on the first and second-to-last vowels of the word.

- pelikana (pelican) = pèli.kána
- kanakalū (kangaroo) = kãna.kalúu

The guidelines you have learned do not apply to compound words, rather, they apply to each word within a compound. The word ʻilioholoikauaua (monk seal) seems to contain two instances of the diphthong au, but Rule 2 does not apply. This is because ʻilioholoikauaua is a compound word, and there are no diphthongs in the individual words that make it up: ʻi.lio (dog) + holo (to sail) + i (in) + ka (the) + ua.ua (rough) = ‘dog that sails in the rough [seas]’.

- ʻilioholoikauaua (monk seal) } × ʻiilíoholòikàuáua
  ✔ ʻiilíoholòikaùaúa

**Exercise 1.9 Predicting Stress Group Practice**

Directions: Indicate where stress would normally fall on the following words. Traditionally, the final stress of a word is marked with an acute accent (´), and each preceding stress is marked with a grave accent (`).

Feel free to refer back to the rules mentioned in this section; this is an exercise that helps the stress guidelines sink in, not a test that makes sure you remember what they are. Check your answers in the Answers section at the end of the lesson.

**Example**

<table>
<thead>
<tr>
<th>hāhālua (manta ray)</th>
<th>= hàa.hàa.lúa</th>
</tr>
</thead>
</table>

1. makika (mosquito) =
2. ‘iole (mouse/rat) = ____________________________

3. pāpa‘i (crab) = ____________________________

4. ‘ō‘io (bonefish/ladyfish) = ____________________________

5. ae‘o (stilt bird) = ____________________________

6. lachaokela (rhinoceros) = ____________________________

7. palaoa (sperm whale) = ____________________________

8. manō (shark) = ____________________________

9. pāpulō (buffalo) = ____________________________

10. mākinikā (monkey) = ____________________________

1.10 Fast Speech

Following a fluent Hawaiian conversation might prove more difficult than you’d expect, even once you’ve mastered everything in this lesson. You see, the Hawaiian language undergoes a number of subtle changes when uttered rapidly. Some of these changes affect a large number of words, like the fact that certain vowels may change into other vowels; for instance ‘īlio (dog) can turn into ‘īliu. Other changes affect only a handful of words, such as the following: a can be deleted before ‘a; for instance a word like puq‘a (pig/boar) can become pu‘a.

Unfortunately, changes like these have not been adequately studied so there is not enough data to identify solid principles. So while it is good to be aware of their existence, you don’t have to pay them much mind.

1.11 Common Words & Phrases

Now that you know how to read Hawaiian words correctly, why don’t you try sounding out these commonly used words and phrases. Memorizing them would be a good idea, since they are used so frequently.

In English, certain greetings have informal versions. For instance, one says “good bye” in seeing a person off, but just plain “bye” is common as well. Hawaiian shares this feature in that certain parts of words/phrases can be dropped in colloquial speech. Any part of a word/phrase enclosed inside parenthesis, ( ), is optional.

Common Hawaiian Words & Phrases

Aloha! hello/goodbye

Aloha really means love, and as far as Hawaiian society is concerned both arrivals and departures are perfect times to remind one another of this pleasant emotion.

An older greeting is welina (salutations).
Aloha wau iā 'oe. I love you.

(e komo) mai welcome
E komo mai means welcome as in “welcome to my home” and cannot be used in response to someone thanking you. Use ‘ae (yes) or ‘a'ohe pilikia (no problem) for that.

Literally, e komo mai means enter this way!

Pehea ‘oe? How are you?

Maika'i au. I am well.
Maika'i (good) can be replaced by a number of other states of being such as kaumaha (sad/depressed), hau‘oli (happy), māluhiluhi (tired), ma‘i (ill), etc.

Oia mau same as always

(e) kala mai excuse me/sorry
* also: kala mai ia‘u

Auē! Gosh!
Ano ‘ē! (Weird!/How strange!) is a similar interjection.

(e) ‘olu‘ole (‘oe) please
Literally, this phrase means: be nice, you!
* also: ‘olu‘olu mai

Mahalo thanks

‘a‘ole pilikia not a problem
‘A‘ole (not) is pronounced as ‘a‘ale even though it is not written that way.

‘A‘ole pilikia is often used to express you’re welcome in response to mahalo. Older speakers may say ‘a‘ohe pilikia (no problem) instead.

Ā hui hou until we meet again

Lesson 1 Notes
1 By ‘sounds’ in this sentence I am referring strictly to phonemes; several studies have noted that allophonic variation is quite common in Hawaiian, especially when stress is involved. In her work, A phonemic analysis of Hawaiian, Helen Luise Newbrand identified [ʌ, ə] as allophones of /a/, with [ə] usually occurring in unstressed positions, and [ɛ] as an allophone of /e/, usually occurring in stressed positions. Certain phonological environments are also known to trigger e → ɛ, such as when /e/ follows a syllable containing [ɛ], or when /e/ is adjacent to /n/ or /l/ (Elbert 1979, 14). Other allophones were reported as well including some for consonants. See Newbrand.

2 The technical terms for ‘hiss-like’ sounds are ‘sibilant fricatives’ and ‘affricates’.

Since one must speak English in order to read this document, explaining Hawaiian pronunciation in terms of how it relates to English pronunciation is an effective teaching strategy. While not every one speaks English natively, nor the same dialect of English, General English was selected because it is the standard dialect of the country in which Hawaiian is spoken, and even if a student does not speak that variety, at least it can be heard on major television and radio programs. Besides, it would be infeasible to cater to each variety of spoken English.

By ‘W sound’ I am referring to [ʊ].

Albert J. Schütz hypothesized that /w/ could have originally been /ʋ/ (Schütz 1994, 121).

Originally, b, d, r, t, and v were used to write Hawaiian and f, g, s, and y were used to record foreign terms.

None of these words are cognates and they share the same meaning due to either coincidence or borrowing. Mole refers to mole as in the animal, not the blemish. The word for aloe is spelled with an initial ‘okina in Hawaiian: ‘aloe, but this fact was ignored since in English a glottal stop precedes the A in ‘aloe’ as well. Like means like in the sense of as or similar to, not in the sense of ‘to like something’.

There is much debate over what Hawaiian’s diphthongs are, (though everyone agrees on ae, ai, ao, au, ei, eu, oi and ou). It has been observed that Hawaiian diphthongs are not adjoined as closely as English diphthongs, but it is accepted that these combinations are longer than say, their opposites: ea, ia, oa, ua, ie, ue, io and uo.

Some authors add āi, āe, āo, āu, ēi, ōu, but not everyone agrees that this analysis is correct. Some add iu and/or ui.

ui similar to the exclamation ‘wee’! IPA: /ui/

iu similar to the word ‘you’; IPA: /iu/

Since Hawaiian diphthongs and stress have not been adequately studied, however, I kept to the most conservative span of: ae, ai, ao, au, ei, eu, oi, for which there is consensus.

The Hawaiian Stress Rule is by no means specific to the Hawaiian language; it is merely an amiable way of saying ‘penultimate stress’.

Elizabeth Tatar has also recorded several other dramatic changes that occur when Hawaiian is sung or chanted, identifying [æ] as an allophone of /a/, [i] as an allophone of /i/, and [ʌ] as an allophone of /o/, and so forth, not to mention a plethora of consonant allophones (Tatar 1982, 80). In addition to these, Helen Roberts reported that a sound between TH and Z was used interchangeably with t and k in chanting (Roberts 1967, 72).
ʻīlio → ʻīliu and puʻa → puʻa are specifically documented instances taken from Ruby Kawena Kinny’s work *A non-purist view of morphomorphemic variations in Hawaiian speech*, (Kinny 1956, 284).

**Lesson 1 Review**

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Pronunciation</th>
<th>IPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>“ah” as in ‘above’</td>
<td>/a/</td>
</tr>
<tr>
<td>e</td>
<td>“eh” as in ‘bed’</td>
<td>/e/</td>
</tr>
<tr>
<td>i</td>
<td>“ee” as in ‘ski’</td>
<td>/i/</td>
</tr>
<tr>
<td>o</td>
<td>“oh” as in ‘so’, never followed by a W sound</td>
<td>/o/</td>
</tr>
<tr>
<td>u</td>
<td>“oo” as in ‘duyne’</td>
<td>/u/</td>
</tr>
</tbody>
</table>

e is not ey, o is not ow, i is not iy, u is not uw

The **kahakō/macron** is a line above a vowel that means you should extend that vowel’s spoken duration.

<table>
<thead>
<tr>
<th>Long Vowel</th>
<th>Pronunciation</th>
<th>IPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ā</td>
<td>“ahh” as in ‘father’</td>
<td>/aː/</td>
</tr>
<tr>
<td>ē</td>
<td>“ehh,” never “ayy” as in ‘play’</td>
<td>/eː/</td>
</tr>
<tr>
<td>ī</td>
<td>“eee” (line replaces dot)</td>
<td>/iː/</td>
</tr>
<tr>
<td>ō</td>
<td>“ohh”</td>
<td>/oː/</td>
</tr>
<tr>
<td>ū</td>
<td>“ooo”</td>
<td>/uː/</td>
</tr>
</tbody>
</table>

**Consonant**

<table>
<thead>
<tr>
<th>Pronunciation</th>
<th>IPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>l, m, n</td>
<td>/l, m, n/</td>
</tr>
<tr>
<td>h</td>
<td>/h/</td>
</tr>
<tr>
<td>k, p</td>
<td>/k, p/</td>
</tr>
</tbody>
</table>
| w             | After o or u = W  
               | After e or i = light V  
               | After a = variable; IPA: /w/ [w, v] |

‘okina/glottal stop as the break in ‘uh-oh’; IPA: /ʔ/ 

**Alphabet & Spelling**

- A-U = ‘ + long vowel
• Ā-Ū = ʻ + long vowel + kō
• H-L, W = consonant + ē
• M-N = consonant + ū
• P = pī
• ʻ = ‘okina

maʻaka (uppercase), naʻinaʻi (lowercase), huaʻōlelo hou (new word).

Syllabification

1. V: Vowel, Long Vowel or Diphthong
2. CV: Consonant + Vowel, Long Vowel or Diphthong

<table>
<thead>
<tr>
<th>Diphthong</th>
<th>Pronunciation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ai</td>
<td>as in the word ‘eye’; IPA: /ai/ [ai]</td>
<td></td>
</tr>
<tr>
<td>ae</td>
<td>“ah” + “eh” (no English equivalent); IPA: /ae/</td>
<td></td>
</tr>
<tr>
<td>ao</td>
<td>“ah” + “oh” (no English equivalent); IPA: /ao/</td>
<td></td>
</tr>
<tr>
<td>au</td>
<td>similar to the exclamation ‘ow’! IPA: /au/</td>
<td></td>
</tr>
<tr>
<td>ei</td>
<td>similar to the “ei” sound in the word ‘eight’; IPA: /ei/</td>
<td></td>
</tr>
<tr>
<td>eu</td>
<td>“eh” + “oo” (no English equivalent); IPA: /eu/</td>
<td></td>
</tr>
<tr>
<td>oi</td>
<td>similar to the “oy” sound in the word ‘boy’; IPA: /oi/</td>
<td></td>
</tr>
<tr>
<td>ou</td>
<td>similar to the word ‘owe’; IPA: /ou/</td>
<td></td>
</tr>
</tbody>
</table>

Reading

Never:
• change the sound of any letters
• add any letters
• ignore any letters

Stress

Hawaiian Stress Rule: Stress the second-to-last vowel of every stress group.

For words under four syllables, apply the Hawaiian Stress Rule to:

1. long vowels
2. diphthongs
3. words consisting of 2-3 syllables, none of which is a long vowel or diphthong
4. parts of words consisting of 2 syllables, none of which is a long vowel or diphthong
The last stressed vowel in a word is the loudest.

**Common Words & Phrases**

Aloha! (hello/goodbye), welina (salutations), Aloha wau iā ‘oe. (I love you), (e komo) mai (welcome), Pehea ‘oe? (How are you?), Maika’i au. (I am well.), Kaumaha au. (I am sad/depressed.), Māluhiluhi au. (I am tired.), Ma‘i au. (I am ill.), oia mau (I feel same as always), (e) kala mai, (excuse me/sorry), kala mai ia‘u (excuse me/sorry), Auē! (Gosh!), Ano ‘ē! (Weird!/How strange!), (e) ‘olu‘ole (‘oe) (please), ‘olu‘olu mai (please), mahalo (Thanks) ‘a‘ole pilikia (not a problem), ‘a‘ohe pilikia (no problem), ā hui hou (until we meet again)

**Lesson 1 Quiz**

The following is a short quiz designed to test your knowledge the topics discussed in Lesson 1. If you cannot answer a question with certainty, feel free to browse the Review section, or even the entire lesson; no one can stop you anyway! Check your answers in the Answers section at the end of the lesson.

1. Which of these letters does not exist in written Hawaiian?
   a) P  
   b) Y  
   c) W

2. Which of the following is not a possible Hawaiian word?
   a) llama  
   b) mope  
   c) piano

3. What is the correct pronunciation of aloha?
   a) “ah loo hah”  
   b) “ah lohw hah”  
   c) “ah loh hah”

4. ‘Elelū (cockroach) should be spelled as:
   a) ‘ē lā ‘ē lā ‘ū kō  
   b) ‘okina ‘ē ma‘aka lā ‘ē lā ‘ū kō  
   c) ‘ē ma‘aka lā ‘ē lā ‘ū

5. How would the English word ‘canopy’ be recorded in Hawaiian?
   a) kaenopi  
   b) kanopi  
   c) none of the above

6. How many syllables does the word mūhe‘e (squid/cuttlefish) have?
   a) 2  
   b) 3  
   c) 4

7. Which of the following words contains a diphthong:
   a) kēuli (blue jay)  
   b) naonao (ant)  
   c) hiena (hyena)

8. Moano (goatfish) should be broken down into syllables as:
   a) mo a no  
   b) moan o  
   c) moa a no

9. ‘Aeko (eagle) should be stressed as:
   a) ‘aēko  
   b) ‘áeko  
   c) ‘àéko

10. Ponumomi (ladybug) is a compound of the words ponu (beetle) and momi (pearl). Ponumomi should be stressed as:
    a) ponumómí  
    b) pónumomí  
    c) pònunómí
Lesson 1 Answers

Answers to Exercise 1.4: Writing Practice
1. who (“hoo”) = hū
2. holly (“hah lee”) = hālī
3. achy (“ay kee”) = eīkī
4. wily (“wai lee”) = wailī or uailī
5. anyway (“eh nee way”) = entweī or eniuei

Answers to Exercise 1.5: Spelling Practice
1. walu (oilfish) = wē ‘ā lā ‘ū
2. mo‘o (reptile) = mū ‘ō ‘okina ‘ō
3. kīpoka (porcupine) = kē ‘ī kō pī ‘ō kē ‘ā
4. lakuna (raccoon) = lā ‘ū kē ‘ū nū ‘ā
5. hope‘ō (wasp) = hē ‘ō pī ‘ē ‘okina ‘ō kō

Answers to Exercise 1.6: Reading Practice
1. mole = English pronunciation: “mowhl”
   = Hawaiian pronunciation: “moh leh”
2. aloe = English pronunciation: “ae lohw”
   = Hawaiian pronunciation: “ah loh eh”
3. like = English pronunciation: “laik”
   = Hawaiian pronunciation: “lee keh”
4. menu = English pronunciation: “meh nyoo”
   = Hawaiian pronunciation: “meh noo”
5. manila = English pronunciation: “muh nih luh”
   = Hawaiian pronunciation: “mah nee lah”

Answers to Exercise 1.7: Syllabification Practice
1. lāpaki (rabbit) = lā pa kī
2. moi (threadfish) = moi
3. alalā (crow) = a la lá
4. moone (flounder) = mo  e  o  ne
5. puco (owl) = pu  e  o
6. ‘ōpae (shrimp) = ‘ō  pae
7. hailepo (stingray) = hai  le  po
8. pāpaua (clam) = pā  pau  a
9. ‘ōpe‘ape‘a (bat) = ‘ō  pe  ‘a  pe  ‘a
10. uouoa (false mulletfish) = u  ou  o  a

Answers to Exercise 1.8: Stress Group Practice
1. ula (spiny lobster) = úla
2. koho.lā (humpback whale) = kòho.láa
3. kelo.kokile (crocodile) = kèlo.kókile
4. ‘ou.lana.kana (orangutan) = ‘òu.làna.kána
5. hipo.pō.kamu (hippopotamus) = hipo.pòo.kámu

Answers to Exercise 1.9: Predicting Stress Group Practice
1. makika (mosquito) = makíka
2. ‘iole (rodent) = ‘ióle
3. pāpa‘i (crab) = pàa.pá‘i
4. ‘ō‘io (bonefish/ladyfish) = ‘óo.‘io
5. ae‘o (stilt bird) = áe‘o
6. laehaokela (rhinoceros) = làe.hào.kéla
7. palaoa (sperm whale) = paláoa
8. manō (shark) = manóo
9. pāpulō (buffalo) = pàapulóo
10. **mākinikā (monkey)** = `màa.kìni.káa`

**Answers to Lesson 1 Quiz**

1. Which of these letters does not exist in written Hawaiian?
   - b) Y

2. Which of the following is not a possible Hawaiian word?
   - a) llama; Hawaiian does not allow consonant clusters like ll

3. What is the correct pronunciation of aloha?
   - c) “ah loh hah”

4. ‘Elelū (cockroach) should be spelled as:
   - b) ‘okina ‘ē ma‘aka lā ‘ē lā ‘ū kō

5. How would the English word ‘canopy’ be recorded in Hawaiian?
   - c) none of the above; the ‘ae’ sound in ‘canopy’ does not exist in Hawaiian

6. How many syllables does the word müheʻe (squid/cuttlefish) have?
   - b) 3; mü he ‘e

7. Which of the following words contains a diphthong:
   - b) naonao (ant); naonao contains two instances of the diphthong ao

8. Moano (goatfish) should be broken down into syllables as:
   - a) mo a no

9. ‘Aeko (eagle) should be stressed as:
   - b) ‘áeko; aeko contains the diphthong ae, which must be stressed on its first member, a

10. Ponumomi (ladybug) is a compound of the words ponu (beetle) and momi (pearl). Ponumomi should be stressed as:
    - c) pònumómi; each word in compounds receives stress

**Lesson 1 Appendices**

**Lesson 1 Appendix 1a: IPA for Hawaiian**

IPA stands for the International Phonetic Alphabet; a special selection of characters devised by linguists in order to represent every sound, or phone, of all the world’s languages. Of course, since many languages share the same sounds only about 100 letters are required, especially since the IPA makes use of diacritics. Just a tiny fraction of the IPA is needed to record the Hawaiian language in particular.

The characters of the IPA derive mostly from European scripts since they are alphabets as opposed to abjads, syllabaries or other systems not suitable for the discussion of individual sounds. Further, many of the major world languages such as English, French and Spanish are written with the Latin alphabet, along with the majority of aboriginal languages from the Americas, Africa and Australia.
All sounds can be mapped out in charts for convenience, and consonants are graphed according to two parameters: their **place of articulation** (the part of your mouth most associated with the sound) and their **manner of articulation** (the way in which you use that part of your mouth to produce a sound).

For instance, P is similar to M in the sense that both of these sounds both require the lips to move. This would mean their place of articulation is the same. P and M are classified under **labials**, which means ‘lip’ in Latin.

In addition, P and K are also similar in that you cannot extend their durations for a long period of time. You can keep making the sound M for many seconds, but when you make a P or K you cannot continue the sound. This suggests that P and K are similar in terms of their **manner of articulation**. P and K fall under the category of **stops** because shortly after you start making them you are forced to quit.

With this in mind, each individual sound is identified by both its place and its manner. Thus, since P is a labial like M, but it is also a stop like K, P alone is called a **labial stop**.

The following chart identifies all of the IPA symbols needed to transcribe Hawaiian consonants:

<table>
<thead>
<tr>
<th></th>
<th>labial</th>
<th>alveolar</th>
<th>velar</th>
<th>glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>stop</strong></td>
<td>p</td>
<td></td>
<td>k</td>
<td>?</td>
</tr>
<tr>
<td><strong>fricative</strong></td>
<td></td>
<td></td>
<td>h</td>
<td></td>
</tr>
<tr>
<td><strong>nasal</strong></td>
<td>m</td>
<td>n</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>lateral</strong></td>
<td></td>
<td>l</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>approximant</strong></td>
<td>w</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notice that on this chart the places of articulation are ordered from the front-most area of the mouth to the back-most area.

**Places of Articulation**

- **labial**: sounds made using both of the lips
- **alveolar**: sounds made using the front of the tongue and the alveolar ridge (the roof of the mouth right before the top row of teeth)
- **velar**: sounds made using the back of the tongue and the velum (the muscles in the back of the throat)
- **glottal**: sounds made using the glottis (the space between your vocal chords)

**Manners of Articulation**

- **stop**: sounds that cannot be continued
- **fricative**: sounds made by making a buzz-like or static-like noise
- **nasal**: sounds made by directing airflow out through the nasal cavity (the sinuses)
- **lateral**: sounds made by aligning the tongue vertically
- **approximant**: sounds made by nearing (but not quite touching) a place of articulation

Vowels in IPA are graphed according to a different set of parameters. At minimum, languages must have at least three vowels, which contrast from one another based on they are produced in the mouth. At the very least, a language will contain these three vowels:
Part of what changes the way vowels sound is the mouth’s amount of open space, and, where that open space is distributed. What determines such things is the position of the tongue. Thus, we can pinpoint the place where a vowel is being produced in the mouth as long as we know two things about the tongue; 1) its *height*; whether the tongue is located in the top or the bottom of the mouth, and 2) its *backness*; whether the tongue is located in the back or front of the mouth.

For instance, in producing an “ah” sound the tongue is relatively low, so a is called a *low vowel*. In contrast, when producing the “oo” sound the tongue is relatively high, leaving empty space in the bottom of the mouth. This is why u is called a *high vowel*.

In addition, the tongue is further back in the mouth when you produce “oo” than when you produce “ee,” so u is additionally a *back vowel*. All things considered, u is a *high-back vowel*, i is a *high-front vowel*, and a can vary from being a *low-front vowel* to a *low-central vowel* to a *low-back vowel*.

The following is chart summarizes the IPA symbols used to transcribe Hawaiian vowels. In addition to the *High* and *Low* categories, Hawaiian (like English) has a pair of vowels that lie between, which we will call *mid*.

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>central</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>i</td>
<td></td>
<td>u</td>
</tr>
<tr>
<td>low</td>
<td>a</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Some call high vowels *close vowels*, and low vowels *open vowels*. Also, IPA users put a colon - consisting of two triangles - after vowels if they are long; thus ā would be transcribed as /aː/ in IPA (right angled brackets, / /, or square brackets, [], are placed around the IPA transcriptions, except in tables).

**Lesson 1 Appendix 1b: Hawaiian Alphabet Flash Cards**

Directions: If your printer is capable of printing double-sided pages, go to File, select Print and make sure the box that says ‘Collate’ is checked. Print pages 26-31. Cut along the solid lines. These flash cards can be printed on standard paper, however, a stiffer paper such as ‘cardstock’ works better. Cardstock may be purchased at any office store or print shop.

If your printer is not capable of printing double-sided pages you can print page 26, manually flip over the printed page, feed it back into the printer, and then print page 27. Depending on the specific nature your printer you may have turn the page upside down as well. Repeat this process for the rest of the document. Cut along the solid lines.

As an alternative to this method you could print pages 26-31 and then use a copy machine that is capable of making double-sided copies. This will also ensure that the boxes on both sides of the page will line up properly.

If this is too complicated, or if you cannot manage to find a stiff paper, you could always print pages 26-31, cut along the solid lines, and then paste the pieces to the fronts and backs of note cards.
<table>
<thead>
<tr>
<th>ʔ</th>
<th>ʻē</th>
<th>ʻo</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;ge&quot;</td>
<td>&quot;ēʔ&quot;</td>
<td>&quot;ʻo&quot;</td>
</tr>
<tr>
<td>ō</td>
<td>ū</td>
<td>ʻo</td>
</tr>
<tr>
<td>&quot;oʔō ō&quot; ō &quot;oʔō ō&quot;</td>
<td>&quot;ū&quot;</td>
<td>&quot;ʻo&quot;</td>
</tr>
<tr>
<td>ō</td>
<td>ō</td>
<td>ō</td>
</tr>
<tr>
<td>&quot;oʔō ō&quot; ō &quot;oʔō ō&quot;</td>
<td>&quot;ʻiʔō ō&quot;</td>
<td>&quot;ʻeʔō ō&quot;</td>
</tr>
</tbody>
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ū h k
l m n
p w `
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<thead>
<tr>
<th>imageSize</th>
<th>imageSize</th>
<th>imageSize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ке</td>
<td>ке</td>
<td>ко</td>
</tr>
<tr>
<td>&quot;ке&quot;</td>
<td>&quot;ке&quot;</td>
<td>&quot;кө&quot;</td>
</tr>
<tr>
<td>Му</td>
<td>мо</td>
<td>ле</td>
</tr>
<tr>
<td>&quot;мо&quot;</td>
<td>&quot;мо&quot;</td>
<td>&quot;ле&quot;</td>
</tr>
<tr>
<td>Окана</td>
<td>мө</td>
<td>би</td>
</tr>
<tr>
<td>&quot;о'кана&quot;</td>
<td>&quot;өр&quot;</td>
<td>&quot;бө&quot;</td>
</tr>
</tbody>
</table>

This page contains a table with Hawaiian language characters and their translations. The table includes characters such as "ке", "кө", "мо", "ле", "о'кана", "өр", and "бө".
<table>
<thead>
<tr>
<th>b</th>
<th>d</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>g</td>
<td>r</td>
<td>s</td>
</tr>
<tr>
<td>t</td>
<td>v</td>
<td>y</td>
</tr>
</tbody>
</table>
References


