

Sounds and symbols

You will not learn much Chinese conversation without first developing two abilities: you need to get attuned to the sounds of the language so you can hear and repeat Chinese material; and you need to have some way to note down language material so you can keep track of what you are doing. However, it is monotonous – and probably inefficient – to try to learn the sounds and a written notation before you learn how to say anything. This lesson serves a short-term and a long-term purpose. In the short-term, it provides the information you need to proceed to the first speech samples in lesson 1. And in the long-term, it provides detailed information about the sounds and their notation which you will be able to refer to regularly as you progress through the book.

I. An overview of Hanyu Pinyin

As noted in the introduction, Hànyǔ Pīnyīn (literally ‘Chinese-language joining-sounds’), called *pinyin* for short, is one of a number of notational systems that have been developed over the past century and a half for representing Chinese. It has official status in China, and is generally used throughout the Chinese speaking world for purposes of representing pronunciation, and for producing typeable input that permits easy alphabetization, whether in teaching and reference materials or in computer input systems. Because it was developed in the 1950s when the Soviet Union was China’s main ally, the letters assigned to Chinese sounds were influenced by Russian systems of transcription, and the result can look counterintuitive to speakers used to English spelling conventions. But the system is not difficult to learn, and once it is learned, it provides an invaluable tool.

1. Sound versus symbol (letter)

From the start, it is important to make a distinction between sound and the representation of sound. In *pinyin*, for example, \bar{j} represents the sound *jee* (with ‘level tone’), \bar{q} is *chee*. Neither is hard (for English speakers) to pronounce, but the way the latter is represented – with a ‘q’ – is counterintuitive, and difficult to remember at first. On the other hand, *pinyin* \underline{r} represents a sound that (for many speakers of standard Mandarin) is a blend of the *r* of *run* the *s* of *pleasure* (or of the *j* of French *je*) -- in other words, an ‘r’ with friction. This sound

may be difficult for a non-Mandarin speaker to produce well, but associating it with the symbol ‘r’ is less problematical. So, as you learn pinyin, you will encounter problems of pronunciation on the one hand, and problems of transcription, on the other.

2. The syllable

When introducing the sounds of Chinese, it is useful to begin with the syllable, a unit whose prominence is underscored by the one-character-per-syllable writing system. The *spoken* syllable in Chinese is often analyzed in terms of an initial consonant-sound and a rhyme – the latter being everything other than the initial. The pinyin *written* syllable can be viewed in the same way, as an initial consonant and a rhyme, and in fact, Chinese school children, when focusing on pronunciation, often read out syllables (which are usually also word/characters) in an exaggerated initial-rhyme division: t-ù > tù, l-óng > lóng, sh-é > shé, etc. Whether initials are written with a single consonant letter (l, m, z) or several (ch, zh), they all represent only one sound unit. Chinese has no ‘clusters’ of the sort represented by ‘cl’ or ‘sn’ in English.

The written rhyme, in turn, is composed of a medial, a vowel, an ending and a tone, all four of which are present in the rhymes -iào and -uǎng.

There are only three **medials**: i, u and ü (the last representing a fronted ‘u’, similar to the sound represented as *ü* in German spelling, and found in French in words such as *tu*).

The **vowels** consist of a, e, i, o, u and ü

There are four **endings**: i, o and n, ng. However, after the vowel o, the o ending is written u – thus ‘oo’ > ou. The endings are a mixed group, represented by both vowel letters and consonant letters. While regional languages such as Cantonese have a lot more final consonantal sounds (-p, -t, -m, etc.), as did Mandarin in earlier times, modern Mandarin has an inventory of only two final consonants.

Tones are a particularly interesting feature of the Mandarin sound system and will be discussed in more detail later in this lesson. For now, we note that toneless syllables do occur; and for toned syllables, four pitch contours are possible.

Here is a complete inventory of (toned) written syllables:

<i>Vowel\Tone:</i>	è
<i>Initial+Vowel\Tone:</i>	tā, bǐ, kè, shū
<i>Initial+Medial+Vowel\Tone:</i>	xiè, zuò, duì, xué, jiù, nüé
<i>Initial+Vowel\Tone+Ending:</i>	hěn, máng, hǎo, lèi, dōu
<i>Initial+Medial+Vowel\Tone+Ending:</i>	jiàn, jiǎng, jiāo

Chinese also exhibits a final r that blends with the rest of the syllable according to rather complicated rules that will be discussed later. It appears regularly in a few words, such as èr ‘two’. But in Beijing and contiguous regions, final-r is also a word-building suffix found with certain commonly occurring nouns (and occasionally, other classes of words). Examples: diǎnr, huàr, bànr, huángr.

Placement of the tone marks: When a number of vowel letters appear in the syllable – as in jiāo, the tone symbol is always written over the core **vowel**, not the **medial** or **final**: cf. lèi, jiāo, zuò. As a rule of thumb, look to see if the first of two vowel letters is a possible medial; if it is, then the next vowel letter is the core vowel, and gets the tone mark; if not, then the first gets it: iè, ǎo, ué, ōu, iào.

II. Details

Now we will examine in greater detail the sounds of Mandarin and the way they are represented in pinyin. Since tones are quite limited in number, and found on almost every syllable, we begin with tones; tones are followed by the initials, which are more numerous but still fairly easily enumerated; and initials are followed by rhymes (minus tone), which are diverse and numerous, and which will take longer to get familiar with.

1. Tones

Most syllables in Mandarin have a fixed pitch, or ‘tone’. The word lǎoshī ‘teacher’, for example, is pronounced laoshi (‘low’ followed by ‘high’), which in English terms is like having to say ‘teacher’ rather than ‘teacher.’

There are four basic tones in Mandarin, more in some of the regional Chinese languages; Cantonese, for example, has from 7 to 9 depending on the analysis. Mandarin, particularly the variety spoken in Beijing and other parts of northeast China, differs from most of the regional languages in having a predilection for toneless syllables. The presence of tones in Chinese is often cited as another of those lurid features that makes the language unique and difficult to learn, but tones are, in fact, not unique to Chinese and probably no more difficult to learn than stress or intonation is for learners of English.

a) Tone names

It is difficult to learn to produce or even recognize tones from descriptions, though we will sometimes use the descriptive terms ‘high (and level), rising, low, falling’ as a way of referring to them. These terms are only suggestive of the actual shape of the tone, but they do underscore the symmetry of the system: a high and a low, a rising and a falling. In modern Mandarin, though the tones have formal names (that relate to the history of the language), it is common practice is to refer to them numerically by using the numbers 1-4 (yī, èr, sān, sì) and the word for sound, shēng [shuhng]: yìshēng, èrshēng, sānshēng, sìshēng. In English we can also refer to the tones as first, second, third and fourth. As noted earlier, in pinyin, tones are indicated iconically by marks placed over the ‘main’ vowel letter. Toneless syllables are unmarked, and as unstressed syllables their tone can – in most cases - be regarded as determined by the context.

b) Concepts

To learn to produce tones, it is useful to conceive of them in a particular way. The first tone, for example, which has a high and level contour, can be thought of as SUNG OUT, because singing a syllable in English usually results in sustained level pitch rather like the

high tone. The second tone, which rises from mid-low to high, can be associated with DOUBT: “Did you say Wáng?” “Máo?” The third tone is the subject of the next paragraph, but the fourth tone, which falls from a high pitch to a low, can usefully be associated with LIST FINAL intonation, or – for many people – CERTAINTY: ‘I said Wèi’ or ‘It’s *late!*’; or ‘1,2,3 (all rising) and 4!’

c) The low tone (or third)

You will notice that the pinyin symbol for the low tone is v-shaped, suggesting a contour that falls then rises. In isolation, it does fall and rise. *But in conjunction with a following syllable (other than another with a third tone - as we will note below), it tends to have a low, non-rising, pitch.* For learners, regarding it as ‘low’, then learning that it sometimes rises, seems to produce better results than thinking of it as falling-rising and canceling the final rise before certain following syllables. *So the third tone, we will refer to as ‘low’, and to produce it, you aim low and add the final rise only when the syllable is phrase final.*

d) Examples

The chart below takes 12 of the most common surnames to illustrate the four tones. (In Chinese, the surname is the first component of the full name, not the last: eg Lǐ in Lǐ Xiǎolóng, Bruce Lee’s Chinese name). In the chart, the four tones are characterized in terms of their pitch contours (high and level, rising, etc.) as well as by the four heuristic concepts (sung out, doubt, etc.) that help us to produce them correctly.

<i>tone:</i>	1	2	3	4
<i>egs.</i>	Zhōu	Wáng	Lǐ	Wèi
	Zhāng	Máo	Kǒng	Dù
	Gāo	Chén	Mǎ	Zhào
<i>description:</i>	high and level	rising	low (with rise)	falling
<i>concept:</i>	sung out	doubt (?)	low	certainty (!)

Exercise 1

The following short sentences consist of a pronoun tā ‘he; she’, the verb xìng (think *hsyìng*), meaning ‘be surnamed’, and one of the 12 surnames presented above. Keeping your tonal concepts in mind -- and, ideally, with feedback from a Chinese speaker -- focus on the different tones of the surnames while pronouncing the sentences.

Tā xìng Zhāng. His/her name’s Zhang.

Tā xìng Máo.

Tā xìng Wèi.

Tā xìng Wáng.

Tā xìng Kǒng.

Tā xìng Zhōu.

Tā xìng Dù.

Tā xìng Gāo.

Tā xìng Mǎ.

Tā xìng Chén.

Tā xìng Zhào.

Tā xìng Lǐ

e) A note on the origin and history of Mandarin tones

Tone systems as complex, or more complex than that of Mandarin are a feature of dozens of languages spoken in southwest China and adjoining regions of mainland Southeast Asia, including the national languages, Burmese, Thai, and Vietnamese. While tone may be a more or less permanent feature of the region, within particular languages, tone systems may appear, evolve, or disappear. Vietnamese, for example, seems to have evolved from non-tonal to tonal in historical times. The tonal system of Chinese is also known to have evolved over the centuries. Evidence such as old rhyme tables indicate that at an earlier stage – around the 7th century --the ancestor of modern Mandarin also had four tones. They were named píng ‘level’, shǎng ‘rising’, qù ‘going’ and rù ‘entering’ (Those are the modern pronunciations of the names given to them.) The names are suggestive, but we cannot know

precisely what the four sounded like. We do know, however, that the earlier tones were distributed differently from the modern. Mandarin tone-1 (level) and tone-2 (rising), for example, are both in the *ping* category in Old Mandarin. Apparently *ping-toned* words developed differently according to the type of initial consonant. Or, put another way, what was in Old Mandarin a difference in the initial consonant has become in modern Mandarin a difference of tone. Symbolically, what was *bā* and *pā* (the *ping* category) in Old Mandarin became *pā* and *pá* (level and rising) in Modern Mandarin.

The last of the four Old Mandarin tone categories, the *ru-tone*, was only found in checked syllables (ie those ending with a consonant -k, -t or -p). Such endings do not survive in modern Mandarin (though as noted before, they are present in Cantonese and other regional languages), and their loss correlates with the loss of the *ru-tone* as a category. Former *ru-toned* words are now scattered through the four modern tones.

With precedents like Vietnamese and Tibetan, languages which are now tonal but seem to have once been non-tonal, some linguists have adduced evidence for pre-tonal stages of Chinese. Chinese might have developed tones by mechanisms similar to the one described in the previous paragraph to explain the split in the Old Mandarin *ping-tone* into modern high and rising tones. For more on the history of tone, and other features of Chinese, see Norman's survey of Chinese and other books cited at the end of the previous chapter.

2. Initial consonants

Many *pinyin* letters are pronounced 'like English': the 'el' of lǎo, for example, is very like English 'l', and *pinyin* f, s, n and m all have more or less the same values in Chinese and English scripts. Unfortunately, such cases are liable to make you think of English even where the *pinyin* letters have rather *different* values from those of English. Below, we present a table of symbols that represent all the possible initial consonants of Mandarin. Following Chinese custom, they are presented with a particular set of vowels, and ordered from front of the mouth (labials) to back (velars, and glottals).

Two notes: first of all, w and y which do appear initially, and which might seem like consonants, are not treated as such in the system, for reasons that will be explained later; and second, the vowels conventionally placed with the different classes of initials to make them pronounceable turn out to be some of those that have quite idiosyncratic values for speakers of English. Thus ‘o’ in the first line is not pronounced ‘oh’, but ‘waw’; ‘e’ in the second line is ‘uh’; ‘i’ in the third and fourth lines is swallowed up by the initial, but in the fifth line, it represents the more expected ‘ee’. The vowel sounds will be discussed in more detail in section 3 below, but for now, you can use the hints provided (on the right), and imitate your teacher or some other speaker of Chinese:

		I	II	III	IV	V-sound
	1 lips	bo	po	mo	fo	(‘waw’)
	2 tongue tip at teeth ^	de	te	ne	le	(‘uh’)
dzz/tsz >	3 flat tongue at teeth _	zi	ci	si		(not ‘ee’)
jr/chr/shr >	4 tongue tip raised !	zhi	chi	shi	ri	(not ‘ee’)
‘yield’ >	5 spread lips <>	ji	qi	xi		(‘ee’)
	6 back of tongue high ~	ge	ke	he		(‘uh’)

Notes

Columns I and II

In English, the distinction between ‘b’ and ‘p’, ‘d’ and ‘t’ etc. is usually said to be one of voicing (vocal chord vibration): with ‘b’, ‘d’ etc., voicing begins relatively earlier than with ‘p’, ‘t’ etc. In Chinese the onset of voicing for the column I sounds is slightly different, so that the sound of pinyin ‘b’ is actually between English ‘b’ and ‘p’, that of pinyin ‘d’, between English ‘d’ and ‘t’, etc. That is why the Wade-Giles system of romanization (cf. the previous chapter) writes ‘p’ and ‘p’ (ie p + apostrophe) instead of ‘b’ and ‘p’; in phonetic terms, both are voiceless, but the first is unaspirated, the second aspirated. Being aware of this will help you to adjust to what you hear; and remembering to articulate the column I initials ‘lightly’ should keep you from sounding too foreign.

Row 1

These consonants are ‘labials’ - all involve the lips. Pinyin writes the sound ‘waw’ (cf. English ‘saw’) with just an o after the labials; otherwise it writes it uo. Thus bo, po, mo, fo rhyme with duo, tuu, nuu, luu (the latter set not shown in the short table). In other words, o always equals uo (and never ou). Apparently, the creators of pinyin felt that the presence of u, with its feature of lip rounding, was redundant after the labial initials. It will be important to keep the sound of o / uo separate from that of ou. (For the latter cf. English ‘oh no’.)

Rows 3, 4 and 5 – the crucial rows!

With z, c, and s in row 3, the tongue is flat and touching the back of the teeth at the gum line. The letter i following row 3 initials is *not* pronounced ‘ee’; it simply represents a continuation of the voicing of the consonantal sound. So for zi, ci, si, think ‘dzz’, ‘tsz’, ‘ssz’. English does not have consonants comparable to the first two row-3 initials except at the end of words and across root boundaries: *pads*; *cats*. In German and Russian, though, similar sounds do occur at the beginning of words, eg German *zehn* [*dzen*] ‘ten’, or Russian *cená* [*tsená*] ‘price’.

With zh, ch, sh and r in row-4, the tip of the tongue is raised towards the roof of the mouth (near the rough area behind the teeth known as the alveolar ridge) in what is called a retroflex position; as with the row-3 initials, the letter i in this position represents only a thickening of the consonantal sound. So for zhi, chi, shi and ri, think ‘zhr’, ‘chr’, ‘shr’, and ‘rr’. In English, an ‘r’ following a consonant will often produce the retroflex articulation of the tongue that is characteristic of the row-4 consonants; so another way to get your tongue in the correct position for the row-4 initials is to make reference to English, and match zh to the ‘dr’ of ‘drill’, ch to the ‘tr’ of ‘trill’, sh to the ‘shr’ of ‘shrill’ and r to the ‘r’ of ‘rill’.

Finally, with j, q, and x of row-5, the tongue is positioned like the ‘y’ in English ‘yield’; and this time, the letter i is pronounced ee, so for ji, qi, xi think ‘jyee’, ‘chyee’, ‘hsyee’. Later, we will note that row-5 initials are only followed by the written vowels i and u. The first will always be pronounced ‘ee’ in this context, and the second always ‘ü’.

The initial-r of row-4

R-sounds vary considerably among languages; the Scots trill their tongue tips; the Parisians flutter their uvulars; Spanish flap their tongues; and Barbara Walters has one that sounds like a cross between 'r' and 'w'. The Chinese \underline{r} is different again; it has a little bit of a buzz to it. Like zh, ch, and sh, it is retroflex (with tongue tip up) so it resembles the initial sound of English 'rill' or 'ridge'; but it also has friction like the 's' in 'pleasure' (or French *je* 'I'). You will observe considerable variation in the quality of Chinese \underline{r} , depending on the following vowel and on the particular speaker. Examples: rén, rè, rù, ràng, ruò, ròu, rì.

Exercise 2

1) Initials. Try pronouncing the following syllables on level (1st) tone:

qi si zhi zi ji qi si ri chi
xi shi ci zhi qi si chi ji xi

2) Now try pronouncing these well-known names:

Cí Xī	Qí Báishí	Lǐ Shízhēn	Qízhōu
(last empress)	(famous calligrapher)	(16 th C herbalist, from Qizhou)	

3. Rhymes

A table showing all possible rhymes is given below. It is too long and complicated to be quickly internalized like the chart of initials, but you can practice reading the rows aloud with the help of a teacher or native speaker. You should return to this table frequently. You can also map your progress through it by circling syllables, or adding meaningful examples, as you learn new vocabulary. The table is organized by main vowel (a, e, i, o, u, ü), and then within each vowel, by medial (i, u and ü) and final (i, o/u, n, ng). The penultimate column, marked 'w/o C' (ie 'without initial consonant'), lists syllables that lack an initial consonant (with the rarer ones placed in parentheses) and so begin with a (written) vowel or

medial (the latter always represented with an initial y or w). The final column gives pronunciation hints. Asterisks (*), following certain numbered rows, mark sets that need special attention. Final-r, whose special properties were mentioned earlier, is treated separately.

	<i>Rhymes with (a):</i>							<i>egs</i>	<i>w/o C [hint]</i>
1	a	ta	cha	da	ma	ba	la	a	
2	a-i	tai	chai	dai	mai	chai	zai	ai	
3	a-o	tao	chao	dao	pao	zao	rao	ao	
4	a-n	tan	ran	zhan	can	lan	pan	an	
5	a-ng	dang	sang	zhang	mang	lang	zang	ang	
6	i-a	jia	qia	xia				ya	
7	i-a-o	jiao	qiao	xiao				yao	
8*	i-a-n	jian	qian	xian				yan	[yen]
9	i-a-ng	jiang	qiang	xiang				yang	
10	u-a	hua	gua	zhua	shua			wa	
11	u-a-i	chuai						(wai)	
12	u-a-n	huan	guan	zhuan	shuan	cuan		wan	
13	u-a-ng	huang	guang	zhuang	shuang			wang	[wahng]

Rhymes with (e)

14	e	zhe	che	she	re	le		e	[uh]
15	e-i	zhei	shei	lei	fei	bei		(ei)	[ey]
16	e-n	zhen	shen	fen	cen	men		en	[uhn]
17	e-ng	leng	sheng	ceng	deng	zheng		(eng)	[uhng]
19	i-e	jie	xie	lie	mie			ye	[yeh]
20*	u-e	jue	que	xue	nüe	lüe		yue	[üeh]

Rhymes with (i)**the 'ee' rhymes**

21a	i	li	bi	ti			yi	[ee]
21b		ji	qi	xi			yi	[ee]
22	i-n	jin	qin	xin	lin	bin	yin	[een]
23	i-ng	jing	qing	xing	ling	bing	ying	[eeng]
24*	u-i	dui	gui	shui	rui	chui	<i>wei</i>	[way]

the 'buzzing' i-rhymes

25*	i	zi	ci	si				[dzz, tsz...]
26	i	zhi	chi	shi	ri	--		[jr, chr...]

Rhymes with (o)

27*	o	bo	po	mo	fo			(wo) [aw]
28	u-o	duo	tuo	luo	guo	shuo	zuo	wo [aw]
29*	o-u	zhou	zou	dou	lou	hou	chou	ou [oh]
30	o-ng	zhong	dong	long	zong			
31	i-o-ng	jiong	qiong	xiong				yong

Rhymes with (u)**the 'oo' rhymes**

32	u	shu	lu	zhu	ru	zu	cu	wu	[oo]
33*	u-n	shun	lun	zhun	dun	kun	cun	wen	[oon]
34*	i-u	jiu	qiu	xiu	liu	diu		you	[yeoo]

Rhymes with (ü)**the 'ü' rhymes**

35*	u	ju	qu	xu	lǜ	nǜ		yu	[ü]
36	u-n	jun	qun	xun				yun	[ün]

Notes on the rhymes

The relationship between the i- and u-rhymes and C_i

Recall that in the C_i chart presented earlier, the row-4 C_i (zh, ch, sh, r) are distinguished from the row-5 (j, q, x) by position of the tongue; in English terms, the impression is a ‘j’ with the tongue in the position of ‘dr’ (zh) versus a ‘j’ with the tongue in the position of the ‘y’ of ‘yield’ (ji). But this difference, even if it is appreciated, seems, nonetheless, very slight. And, indeed, it would be much more difficult to perceive if the vowels that followed were identically pronounced. But they never are!

Row-5 C_i (j, q, x) are ONLY followed by the sounds (not the written letters, the sounds!) ‘ee’ and ‘ü’, written i and u, respectively. Here are some examples: ji, jie, jian, qi, qie, qian, xi, xie, xian; ju, jue, jun, qu, que, qun, xu, xue, xun. Row-4 C_i, on the other hand (and the same goes for row-3) are NEVER followed by the sounds ‘ee’ and ‘ü’: zhi, zi, zhu, zu, zhan, zan, chi, ci, chu, cu, chan, chen etc. Because the creators of pinyin let i and u each represent two different sounds, this complementary distribution is obscured: the vowels of ji and zhi look alike, but they do not sound alike; the same for ju and zhu. So if you hear ‘chee’ it must be written qi – ‘ee’ never follows ch; if you hear ‘chang’, it must be written chang – q can only be followed by the sound ‘ee’. And so on.

Exercise 3

The following syllables all contain the written vowels i and u. Practice reading them clearly, on a single tone. As with all the exercises in this lesson, repeat daily until confident.

chi qi xie qu chu chun jia qin cu qu shun
qun shu ju ci xu zi zhu shi xi xia qu

The value of the letter ‘e’

The value of pinyin e also violates the expectations of English speakers – or rather, readers. It is ‘uh’ in all contexts (ze, le, deng, chen) except where it follows written i or u, where it is pronounced ‘eh’ (xie, nie, xue), or when it precedes a written i, where it is pronounced ‘ey’ (lei, bei, zei).

Exercise 4

1) Practice reading the following syllables containing e:

chen wei zhen xie ben ren lei re bei jie e leng zeì che bie

2) Now try pronouncing the following proper names:

[uh]	[uh]	[eh]	[ey]
Zhōu Ēnlái	Máo Zédōng	Jiǎng Jièshí	Běijīng
(premier)	(chairman)	(Chiang Kai-shek)	
Lǐ Dēnghuī	Éméi shān	Lièníng	Sòng Měilíng
(former Tw pres.)	(Omei Mtn.)	(Lenin)	(wife of Chiang)

The ‘o’ rhymes: ou versus uo / o

On early encounters, it is easy to confuse *pinyin* rhymes that are spelled similarly, such as -ou and -uo. This can lead to some pronunciation problems that are very difficult to correct, so you need to make sure you master them early. The rhyme ou, with the ‘O’ leading, is pronounced like the name of the letter ‘O’ (in English) – rhyming with ‘know’. The rhyme, uo, on the other hand, with the ‘O’ trailing, is pronounced like ‘war’ without the final ‘r’. However, as you now know, after the row-1 C_i, uo is spelled o: bo, po, mo, fo rhyme with duo, tuò, nuò and luò.

Exercise 5

1) Here are some more names (mostly), all containing ‘o’:

Bōlán	Sūzhōu	Mòxīgē
(Poland)	(city near Shanghai)	(Mexico)
luòtuò	Zhāng Yímóu	Zhōu Ēnlái
(camel)	(film director)	(premier)

luóbo	Guō Mòruò	Lǐ Bó
(radish)	(20 th C writer)	(Tang poet)

2) And more single syllables:

mou tuo bo fo zhou duo po dou zuo fou luo rou

The ü-rhymes

The first note in this section (top of p. 13) makes the point that many of the ü-rhymes are revealed not in the rhyme portion of the syllable, but in the consonantal initial. Written u after row-5 initials (j, q, x) is always pronounced ü; after any other initial, it is ‘oo’; thus: zhu, ju, chu, qu, shu xu, but pu, fu, du, ku, hu etc. However, the sound ‘ü’ does occur after two initials other than the j, q and x of row-5. It occurs after n and l, as well. In these cases, ü may contrast with u, and the difference is shown on the vowel, not on the initial: lù ‘road’ versus lǜ ‘green’; nǚ ‘a crossbow’ versus nǚ ‘female’. In addition to being a core vowel, the sound ‘ü’ also occurs as a medial. Again, when it follows row-5 initials, it is written as u: jue, que, xue; but following l or n it is written with ü: lüèzì ‘abbreviation’; nüèjì ‘malaria’. In the latter cases, it is redundant, since there is no contrast üe versus ue.

4. Returning to the chart of initials

The conventional chart of initial consonants exhibits a rather restricted and idiosyncratic set of rhymes. But now that we have surveyed the complete set of rhymes and spotlighted some of the problematical cases, we make the initial consonant chart a little more comprehensive by adding one or two lines to each row, as follows:

	(i)	(ii)	(iii)	(iv)	(w or y)
(1)	bo	po	mo	fo	wo
	ban	pan	man	fan	
(2)	de	te	ne	le	
	duo	tuo	nuo	luo	wo
	dai	tai	nai	lai	

- (3) zi ci si
 zao cao sao
- (4) zhi chi shi ri
 zhuo chuo shuo ruo wo
 zhou chou shou rou
- (5) ji qi xi yi
 ju qu xu yu
 jian qian xian yan
- (6) ge ke he
 gan kan han

III. Miscellany

1. Tonal shifts

Before we leave our survey of sounds and notation, we need to return to the subject of tone, and take note of the phenomenon of tonal shifts (called ‘tone sandhi’ by linguists). It turns out that in certain contexts, tones undergo shifts from one to the other. (In Mandarin, the contexts where this occurs are very limited; in regional languages such as Hokkien, such shifts are much more pervasive.) We will mention these shifts here, and then practice producing them more systematically over the course of later lessons.

a) The low tone shift

If two low tones (tone-3s) appear consecutively *in the same phrase*, the first shifts to a rising tone:

$$\begin{array}{rcl} 3 + 3 & > & 2 + 3 \\ \text{low} + \text{low} & > & \text{rising} + \text{low} \end{array}$$

Lǐ + lǎoshī	>	Lí lǎoshī	‘Professor Lee’
hě + hǎo	>	hén hǎo	‘good’
hě + lěng	>	hén lěng	‘cold’

It is, of course, possible to have three or more low tones in a row. But we won’t worry about such cases until we encounter them a few lessons hence.

b) Two single word shifts

Two words also undergo tonal shifts. One is bu, the negative. Bu is falling tone except when followed by another falling, in which case it shifts to rising tone. In the latter case, the result is a trajectory like the sides of a mountain, up, then down, and students in the past have kept track of this shift by calling it the ‘Fuji shift’ - after Mount Fuji (which is, of course, in Japan, not China - but whatever works!) Here is bu in combination with some adjectival verbs (known as Stative Verbs, in Chinese grammatical tradition); these sets (involving stative verbs from the conversational material in lesson 1) should be memorized, and repeated regularly until fully internalized.

bù gāo	‘not tall’
bù máng	‘not busy’
bù hǎo	‘not well’

BUT> bú lèi	‘not tired’	bú è	‘not hungry’
bú rè	‘not hot’	bú cuò	‘not bad’

The word yī ‘one,’ behaves similarly, except that it has one additional complication. In counting, yī is first tone: yī, èr, sān, sì ‘1, 2, 3, 4’. Otherwise, when grammatically linked to a following syllable, it shows the same tonal shift as bu, rising before a falling tone, but falling before any other. Below it is shown with various ‘measure words’ (used as a substitute for certain nouns). Again, the pattern should be practiced regularly; the grammar and meaning of the pattern will come later.

	yì zhāng	‘a [table]’
	yì tiáo	‘a [fish]’
	yì běn	‘a [book]’
<i>but</i>	yí gè	‘an [item]’

Note that the low tone shift (hěn + hǎo > hén hǎo) applies to any word (or syllable) that fits the grammatical condition (of being within a phrase); but the shift from falling to rising affects only two words, bu and yi.

IV. Culminating exercises

But for a minor point still to be mentioned, the survey of Chinese sounds and their pinyin representations is complete. You will need more time and practice to fully internalize the information, but this lesson should have prepared the groundwork needed to proceed to the conversational material of lesson 1. You can now begin to fill in the categories that you have learned with real words in context. Before going on to lesson 1, you should at least be familiar with the structure of the pinyin syllable (I-2), the tone concepts (I-1a-c), the tone table (I-1d), the initial table (II-2), especially the peculiar relationship of rows-3, 4, and 5, and finally, the organization of the table of rhymes (II-3). That should put you in the position to pronounce the names of Chinese people and places considerably better than television and radio newscasters and announcers generally do.

Exercise 6

1) Here, with some repeats, is a set of Chinese personal names for you to pronounce:

Zhōu Ēnlái (premier)	Máo Zédōng (chairman)	Jiǎng Jièshí (Chiang Kai-shek)	Cáo Yú (20 th C playwright)
Lǐ Dēnghuī (former Tw pres.)	Lǐ Xiāngjūn (a patriotic courtesan)	Sòng Měilíng (wife of Chiang)	Wáng Zhìzhì (bb player)

Dèng Xiǎopíng (post Mao leader)	Zhū Róngjī (recent premier)	Lǐ Xiǎolóng (Bruce Lee)	Cáo Cǎo (historical figure)
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And some Chinese cities and provinces:

Běijīng (capital)	Xī'ān (in Shaanxi)	Guǎngzhōu (Canton)	Zhèngzhōu (city in Henan)
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Sìchūān (province)	Jiāngxī (province)	Chóngqìng (city in Sichuan)	Guǎngzhōu (Canton city)
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2) Consonants and vowels:

This exercise focuses on the pinyin initials and vowels. Try reading each row out loud. (The syllables serve our purposes, but they are not all, as it turns out, actual Chinese words – or word parts – on the tone cited; cf. English *grim* and *grin*, *trim* but no *trin*.) In order to minimize the difficulties of pronouncing the syllables with tones, each set of three syllables follows the pattern ‘rising, rising, falling’, like the common list intonation of English ‘1, 2, 3’, or ‘boats, trains, planes’; lá, wéi, jìn!

- | | | | |
|-----|------|-----|-------|
| 1. | lá | wéi | jìn! |
| 2. | láo | tái | dù! |
| 3. | sóu | sí | mìng! |
| 4. | zí | xiá | qìng! |
| 5. | ní | zhí | hòu! |
| 6. | lái | duó | zhèn! |
| 7. | fó | qí | cì! |
| 8. | xíng | cuó | shì! |
| 9. | móu | guó | shòu! |
| 10. | rén | béi | zhà! |

V. The apostrophe

Finally, a feature that is minor, but one which should be mentioned in an overview of pinyin. In certain contexts, an apostrophe appears between the syllables of a compound: hǎi'ōu 'seagull'; chǒng'ài 'dote on'. The apostrophe is used when a syllable beginning with a vowel letter (a, e, o) is preceded (without space) by another syllable; in other words, where the syllable boundary is ambiguous. By convention, the apostrophe is only used when the internal syllable begins with a vowel; a word like yīngān, with two potential syllable divisions, is always to be interpreted as yīn + gān, never yīng + ān (which would be yīng'ān).

VI. Writing connected text in *pinyin*

Unlike earlier systems of Chinese phonetic notation, some of which were intended as fully fledged auxiliary writing systems that could co-exist (or even replace) characters, *pinyin* was intended as an adjunct to characters, used to indicate pronunciation and to provide a means for alphabetical ordering. For this reason, the rules and conventions for writing connected text in *pinyin* were not well defined. However increasing use of computers for the production of text and in everyday communication, as well as the proliferation of contact between China and the rest of the world has put a premium on the use of *pinyin*. Nowadays, in addition to its use in pedagogical materials such as this book, *pinyin* is used for emailing, for input in word processing, for url or email addresses, and to complement characters on advertisements, announcements, and menus--particularly those intended for an international audience in large Chinese cities and abroad.

In 1988, the State Language Commission issued a document with the translated title of “The Basic Rules for Hanyu Pinyin Orthography”, and with a few minor exceptions, this textbook conforms to those proposed rules. [The ABC Chinese-English Dictionary, cited in the background lesson (page r), contains a translation of this document as an appendix.] Only two general points will be mentioned here. First, normal punctuation practices hold. Sentences begin with capital letters, as do proper names; they end with periods, and other punctuation marks are used more or less as in English. Second, spaces go around words, not syllables. Thus ‘teacher’ is written lǎoshī, not lǎo shī; characters, by

contrast, which always represent syllable-length units, are separated by a space regardless of word boundaries. Of course, defining what a word is can be problematical, but pinyin dictionaries or glossaries can be relied upon to make those decisions for us. Other conventions, such as the use of the hyphen, will be noted when needed. So when you write *pinyin*, it should look like this:

Gémìng bú shì qǐngkè chīfàn....

revolution not be invite-guests eat-meal

Revolution isn't [like] inviting guests over to eat a meal....

Mao Zedong

Writing *pinyin* in this way makes readable. And in fact, where emailing in characters is restricted by technical problems, *pinyin* can serve even without tone marks so long as the above orthographical conventions are observed.

Coda

Chinese who studied English in China in the sloganeering days prior to the 80s can often remember their first English sentence, because in those days textbook material was polemical and didactic and lesson content was carefully chosen for content and gravity. So let your first sentence also carry some weight, and be appropriate for the endeavors you are about to begin. Here it is, then:

種瓜得瓜，種豆得豆。

Zhòng guā dé guā, zhòng dòu dé dòu.

plant melon get melon, plant bean get bean

'[You] reap what you sow.'

Cf. xīguā 'water melon'; dòuzi 'beans; peas'.)

Zàijiàn. 'Goodbye. (again-see)'

Míngtiān jiàn. 'See you tomorrow! (tomorrow see)'

