

How to memorize Chinese characters

Learning Chinese characters is easier than you think. The method you will learn here is used by students of Chinese at Uppsala University in Sweden, where it has also been tested and evaluated. With this method, you can easily double the number of characters that you learn in any given time. This includes learning the graphical composition, the meaning and the pinyin transcription, complete with the tone.

Magic? Too good to be true? No, just a systemized learning strategy instead of the brute-force rote learning that too many students are stuck with.

The following description might require some familiarity with memory techniques, mnemonics. And the system itself will take some getting used to, but it will very soon pay off. Big time.

The basic principle is this: For each character, create a little mental image or a story-like scene incorporating all the elements that make up the character, its meaning and its pronunciation.

These images or stories are much easier to remember than the strokes themselves, let alone the pinyin pronunciation. You will be using a different type of memory when learning the characters, the episodic memory that remembers real life events, or fantasy events, as opposed to the semantic memory that stores words and symbols. This episodic memory is much stronger and powerful than the semantic memory, and can store much more data with much less effort.

Now, every time you repeat the characters, they will gradually move from your fantasy memory into your language memory, the semantic memory. Thus they eventually become "real" knowledge, indistinguishable from characters you had learnt "the hard way." Only you could learn so many more in the same time, with the same effort, because you used your memory in a much smarter way.

We need two components: The People-Placing Mnemonic (PPM) tells us how each image will be set up in our minds. The Spaced Repetition System (SRS) shows when it is time to test ourselves on a particular character. Combined, PPM and SRS creates unbelievable results.

The People-Placing Mnemonic

For each character, we create a little scene, like an image or a story, that contains certain elements. The objects in the scene correspond to the graphics of the character. In each scene there is a person too, giving us a hint about pronunciation. The pinyin of the character starts with (roughly) the same letter as the name of the person. Finally, **where** does the scene take place? The location of the scene tells us what the final (vowel) sound of the character is. The tone tells us what **part** of the place that we are looking at. What direction. Each place has four directions, or parts. First, straight ahead, or the main view that comes first to mind when you think of a place. Second, the view you get if you turn right ninety degrees. Third, if you turn right again, ninety degrees, the opposite view of the first one. Fourth, if you turn right yet another ninety degrees, which of course is the same view as if you had turned ninety degrees left from the first, main view. For each place, there is now a distinct view for each of the four tones in Mandarin Chinese.

Example: Dàn – dawn 旦

The graph is simple. It is a sun rising over the horizon. Pretty much the meaning of *dawn*. Easy to remember. What about pronunciation? Dàn = D + àn. D stands for your personally chosen "D-person". It could be Donald Duck, Dolly Parton, Davy Crocket, you name it. We also a specific place corresponding to the AN final. Each of the different Chinese final sounds have a corresponding unique place. Since there are not many different finals, we will only need a short list of places. Let's say that AN corresponds to your nearest shopping mall, wherever that may be. What about the tone? Dàn has the fourth tone, the falling tone. That is the view you get when you're in the shopping mall, looking in the left direction.

So: Donald Duck is riding a sun that rises above the horizon in the shopping mall. The person in combination with the place gives the Pinyin sound, dàn. The action, that which takes place (a sun rising above the horizon) gives the meaning. Easy.

Example: Mǐ – rice 米

The character itself is a stylized picture of a rice plant, right? The "mǐ" sound we interpret as the M-person at the I-place, in the opposite view. For example, if your I-place is the central square of the town you live in, ĭ (third tone) is the view you get if you look towards the "main viewpoint", "the entrance" etc. So, Madonna, Mickey Mouse, Mozart or whoever you chose, is gorging themselves with white, sticky rice at the town square, in the backwards or opposite view.

Example: Māo – cat 猫

The graphics are more complex here. The leftmost element is the radical, in this case the "dog"-radical that is used for many animals. That is combined with two other elements, one meaning "grass" and the other "field". What animal runs through the grassy fields? Cats of course, miaowing their distress to the whole world. Pronunciation: Māo is the M-person (Mozart? Mickey?) in the AO-place, seen from the main viewpoint. How do you combine the sound-elements (Mozart in the AO-place, for example a park nearby) with the meaning? Imagine that you're standing in the park, or whatever place you chose for the AO final sound. Look in the right direction (straight ahead from the main entrance) and there you see a grassy field with Mozart in a huge whig chasing a hundred cats running around. It's as if you would superimpose your silly picture on top of your memory image of the park.

For the PPM to work, you need a list of people and a list of places that all are well known to you. You need to have visited the places several times, so that you have a clear picture in your head of them. Since most people have literally hundreds if not thousands of places in their memories, this is not very difficult. As for the list of people, they should be as diverse as possible. Feel free to mix cartoon characters with historical figures, movie stars and politicians.

You need 24 people, one for each of the possible initial sounds. A list of suggestions is provided here. Make your own selections, and if you don't like one, just come up with a different name and select that one instead.

You also need 35 places, that should all be situated far enough from each other that you can't see from one place to another. A generic list of possible places is provided here.

Finally, you need a way to transform every little graphical element (radical or non-radical) into something concrete, a noun, a thing. There is help to get from radical lists such as this one, but with time, you will learn to come up with ideas as you go. Learning Chinese characters is a skill, and using a master mnemonic such as the PPM is like using a tool: even with a great tool, there is still plenty of room to develop skill in applying it.

One funny thing when learning characters this way is that the parts that are usually considered difficult become easy, and the things that are considered easy instead take up relatively speaking more time. For example, remembering the pronunciation and tone of a character is no longer a problem at all.

The Spaced Repetition System

Spaced repetition is extremely powerful. If you test yourself on a memory just before you forget it, just before it sinks below that invisible border beyond which you can no longer reach it with mere willpower - then the repetition will do the most work. The memory (of a character, a word, a name etc) will now be multiplied in strength, and it will last longer in your memory. How much longer? Typically between two and four times longer than the time since the previous repetition. The number depends on factors such as individual memory capacity, the effort spent when creating the memory in the first place and possibly several other factors too, that science would do well to explore.

To use spaced repetition, all you need is either specialized software such as ankisrs.com or memrize.com, or just a simple journal if you prefer to go analog. SRS software are essentially just electronic flash cards that use the SRS algorithm to select which flash card to test you on every day. If you use a journal, you instead just use a pen, and possibly few colored paper clips.

Every day that you learn something, write down what you learn, in this case Chinese characters. Then test yourself on the characters you learnt one (1) day before, three (3) days before, nine (9) days, 27 days etc. This way, the waiting time until the next repetition is always about three times longer than the previous waiting time. I say "about", because you are likely to skip a day here and there, and I would also recommend it. Pauses now and then are good for the brain.

Ideally, a repetition should have just below 100% accuracy. If we remember everything perfectly each time, it means we have not waited long enough. If we don't remember enough, less than 80% for example, it means we waited too long. Or that our mnemonic images were not crafted well enough. There is a trade off between the time between repetitions and the efforts we spend in crafting mnemonic clues.

The Ten Minute Rule

The best way to use the time when memorizing characters is 20:10:5. Spend twenty minutes memorizing characters using the PPM system. Then take a ten minute break. Then spend five minutes testing yourself, that you still remember the characters. The "Ten Minute Rule" refers to the ten minute break that is absolutely essential for learning. Skip the ten minute break, and you will be

wasting your time. During the break, you must not think of what you just learned. Do something else, drink water, check facebook, play a game, whatever.

Ten minutes, it turns out, is just what is needed for the memories just formed to start to sink down and reach that special point where they are just about to be forgotten. Where they might still be in your mind, but out of reach. Wait too long, and you won't be able to recall the characters, at least not all of them. You will fail to recall too many - but they are still there in your mind, in your "passive memory". When you look at the answer, you will go "Oh, yes, right!" This only proves that they are still there, but no longer as active memories.

Memory Duration vs Memory Latency

The duration or strength of a memory is measured in how many days it can last in our minds when we don't think about it. A strong memory is not necessarily a memory that we recall quickly. Rather, it is something that we discover that we still remember, even though we thought we would have forgotten it by now. For example, people we met many years ago and have not thought of since, and when we meet them again, all sorts of memories come back. These memories were strong, durable, but not quick or easily accessed.

The latency of a memory is rarely measured in anything longer than seconds. This is the time it takes for us to recall a particular thing, to answer a question or to remember how a certain Chinese character is pronounced or what it means.

The reason we must distinguish between the strength or duration of a memory on the one hand, and the latency or speed of a memory on the other, is that there are two very different processes involved when we want to build strength and when we want to speed up memories. Wasting time on trying to respond quickly to test questions when we review characters is useless, since it won't matter if we still are going to forget them the day after. What matters is building up strength. We want to remember the characters for a long time. Only when we have built up strength, when the characters sit firmly in our memories, is it meaningful to practice speed.

Speeding up memories is important though. Just not as the first thing, nor even the second. But once a certain character has successfully passed through the first couple of months or so of spaced repetitions, it should now enter a different stage. This is when we go from using our mnemonic clues to remember, to finally discard all those images and ultimately put the characters in our semantic memory once and for all. From then on, when we see the characters, we simply "know" how they are pronounced and what they mean. We "hear" it in our minds, without need of any artificial reminders such as people or places.

When memorizing characters, it is perfectly acceptable if it takes a little while, a few seconds, to recall a character when testing ourselves. We take it easy. Relax. If you see a symbol you don't immediately recall, no problem. Count to three and see if it doesn't pop up inside your head. Then move on to the next one. That is how you test yourself.

How to select places

We need 35 different places. In the best of worlds, there would already be 35 familiar places in all of our lives, that started with ai, an, ang, ong, uai etc. If you happen to live someplace where this is the case - please write to me. Mostly though, it will not be obvious why a particular place, such as your grocery store for example, should represent a particular sound, such as "ai" or "eng".

In fact, these 35 places will have to be memorized. Fortunately, there are easy ways to do that. The best way is to take five different geographical regions that you are well familiar with. Then assign each of these five regions a vowel: A, E, I, O, U. Start by learning which region has which vowel, for example, the center of your home town can be "I", (because that's where *I* live). Two suburbs or parts of the same city could be E and O, another town U and a town you often visit can be A.

When you have five regions, you can now go through these, one at a time, and select concrete places and assign a final sound to each. This way, all finals starting with A will all be found in that "town you often visit": a, ai, an, ang, ao. The same with e, ei, en, eng, er: they are all located close to one another, but not too close. Remember that you should ideally not be able to see from one place to another, to minimize risk of confusion.

Write down a list of all the finals, and the sounds, and keep that list handy as you memorize characters. After a week or two, you will no longer need it. The places will over time become strongly associated with the sounds. Each time you see a character, you will immediately become aware of the place where you "saw" it, where you put in using your imagination. And just as quickly, you will be aware how it is pronounced. Over time, with repetition, the places will gradually fade. Eventually, the characters will be stored in your semantic memory, where the sound is linked directly to the graphics, without any need of extra clues such as places.

If setting up a list of our own chosen places sounds like too much work, here is a more generic list we could use. Example: I = Forest. We must not dream up some imaginary forest; no - we should recall a forest that we are familiar with, some part of it that we have visited often enough for it to be well known to us. Example: en = classroom. Select one classroom from your memory, a *real* classroom, that is. Work only with real places. Not fake ones. If the pre-selected places are not good enough, choose another. To make them easy to remember, they are grouped in broad categories.

Finals starting with A - shops or places you go to buy stuff.

Finals starting with E - typical work or study places.

Finals starting with I - places in nature settings.

Finals starting with O - restaurants.

Finals starting with U - city landmarks or major places.

Final	Place	Final	Place
a	supermarket	o	hamburger place
ai	flower shop	ong	pizza place
an	book store	ou	fancy restaurant
ang	IKEA	u	bridge
ao	boutique, clothes shop	ua	fountain
e	hospital	uai	pedestrian street
ei	kindergarten	uan	harbor
en	class room	uang	sky scraper

eng	office	ue	square
er	laboratory	ui	tunnel
i	park	un	shopping mall
ia	mountain/rock	uo	castle
ian	lake	ü	statue
iang	forest	üe	theater
iao	beach	ün	library
ie	view point		
in	river		
ing	slope		

If you don't like some of these, here are some other possible places you could use instead.

cinema	ware house	skating rink	airport
bowling alley	canteen	horse stables	parking lot
coffee shop	school yard	football field	subway station
dance place	lecture hall	gym	train station
cemetery	running track	friend's home	motor way
concert hall	dressing room	cellar	hardware store
church	swimming pool	hotel	electronics shop
museum	ski resort	bar	construction site

Make sure that you know all places you use well enough to be able to clearly visualize what they look like from four different directions. Each place will have a "main view", corresponding to the first tone, the flat tone. If it isn't obvious from the layout of the place what that main view is, you're just going to have to choose one view to be the main one. If you know which way is north, that could be your main view. Do it any way you like, as long as you have a clear idea of the four directions.

How to select people

We need 24 different people. One for each of the 23 initial consonant sounds, and one more for those characters that begin with a vowel, i.e. those that have no consonant.

The 24 persons should be as diverse as possible, so that we will not mix them up in our minds. Keep in mind that as we repeat the signs, the mnemonic pictures will gradually fade, just as the signs themselves grow stronger in our minds. Two persons such as Al Pacino and Robert De Niro might seem different enough at first glance - but after a couple of weeks, you might not be able to recall which male gangster actor that you used in that particular scene. Similarly, avoid using both Gandalf and Dumbledore, Janet Jackson and Rihanna, Frodo and Bilbo.

Usually, what happens is that the memory of the person fades quite quickly - and this is not a bad thing. We want the mnemonic images to fade, gracefully. Their purpose is after all only to help us plant the memory of how to pronounce the Chinese characters in our heads. After a while, when you recall a sign, you will no longer really see the person in your head ... you will only be vaguely aware that such-and-such a person was there. The same thing goes with the place. You will "know" that a sign belongs to a certain place (and therefore is pronounced a certain way), but you might not

really see that place very clearly. You will just know it, just as you right now, in this very moment, know that you are in a particular place reading this, even if you don't pay much attention to that place.

The only problem is that since the mnemonic helpers fade, the people and the places of our memory scenes, they should be different enough so that we can tell them apart even after time has passed. It is good if every person of the 24 you will chose have a distinct voice, a typical attribute and a characteristic way of doing things. It is not necessary, but it will help. For example, if you use Abraham Lincoln to represent the initial sound "L", as in "Làn", use a memory you have of an actor portraying him in a movie, such as Daniel Day-Lewis in Spielberg's film with the same name. His attribute could be the big cylinder hat he wears, or his dark suit.

Once we get practice using the people in our mnemonic images, we will use less and less of them. Lincoln might get reduced to a tall character in a big hat, we still know it's him. Frodo will be reduced to "that hobbit". Madonna will be "that blonde female singer." And so on.

Here is a selection of people sorted by initial and "type": Actors (male and female), fictional, cartoons and historical characters. Select one from each row, one of the five that is the most familiar to you. Make sure that your selection of 24 people will be balanced and feature both males and females, old and young, real and fictional, big and small, friendly and dangerous etc.

	Male celebrity	Female celebrity	Fictional	Cartoon	Historical
...	Alan Alda	Alanis Morissette	Aragorn	Aladdin	Amelia Earhart
B	Bruce Lee	Britney Spears	Black Adder	Baloo	Buffalo Bill
C	Clint Eastwood	Claire Danes	Cersei	Cinderella	Caesar
CH	Chuck Norris	Cher	Chewbacca	Charlie Brown	Churchill
D	Dustin Hoffman	Dolly Parton	Data	Donald Duck	Darwin
F	Freddie Mercury	Fran Drescher	Frankenstein	Frosty the snowman	FDR
G	Gandolfini	Gwyneth Paltrow	Galadriel	Goofy	Galileo
H	Hugo Weaving	Halle Berry	Han Solo	Homer Simpson	Hitler
J	Jack Nicholson	Julia Roberts	Jar-Jar Binks	Jiminy Cricket	JFK
K	Keanu Reeves	Kate Beckinsale	Kramer	King Louie	Kublai Khan
L	Liam Neeson	Lisa Kudrow	Loki	Little Mermaid	Lincoln
M	Michael J Fox	Madonna	Mad Max	Mickey Mouse	Mozart
N	Nicholas Cage	Natalie Portman	Neo	Nemo (fish)	Napoleon
P	Paul McCartney	Paula Abdul	Picard	Pink panther	Pythagoras
Q	Quaid	Queen Latifah	Q (Star Trek)	Qaa (Jungle book)	Queen Elizabeth
R	Robin Williams	Rihanna	Rambo	Remy (Ratatouille)	Robespierre
S	Steve Carell	Sandra Bullock	Spock	Smurfette	Socrates
SH	Sheen	Shania Twain	Sherlock	Shrek	Shakespeare
T	Tom Cruise	Tina Turner	Terminator	Tintin	Tesla
ZH	Zheorge Lucas	Zhilda Radner	Zhisele (Enchanted)	Zhenie (Aladdin)	Zheronimo
W	Will Smith	Winona Ryder	Wolverine	Winnie the Pooh	Washington
X	Axl Rose	Xenia Kriisin	Xena	X-men	Xerxes
Y	Yo-Yo Ma	Yeoh, Michelle	Yoda	Yogi Bear	Yamamoto
Z	Zappa	Zeta-Jones	Zorro	Zoidberg	Zapata

People with names starting with A are suggested for the empty initial in signs like "Ài". For the ZH sound, people with names starting with the soft G-sound is used, "George", "Giselle" etc. Also note that not all names are pronounced the Chinese way. The Q-sound in Queen Elizabeth is not remotely like the Q-sound in "Qiu" in Chinese. This is not a problem in any way. Many Chinese phonemes sound very similar in the ears of native speakers of European languages. By using colorful people and familiar places, it will be much easier to differentiate between them. To instead try to remember the sounds just as they are without help is more difficult.

If you are unfamiliar with the people above, google them. If you don't like these proposals, use others. You can find pictures and often videos of them (or actors portraying them) online. For best

© Björn Liljeqvist, 2014

effect, make sure to have people that seem like real people (even if they are cartoons) ... they should have a voice and a character, and be more than just a picture you have seen once.