

CHAPTER 1

Main-Signs & Basic Rules

We have briefly indicated in the introduction that the codification of characters in the Chang-jie system is based on:

(1) **a set of shapes**, that are like the “building blocks” of characters and that are represented by codes which correspond to the letters of the Roman alphabet on the computer keyboard.

(2) **a set of rules** that define **the number** of codes that must be inputted to get the desired character as well as **the order** to input the codes.

These basic features of the Chang-jie input method apply to traditional characters in Big 5 code environment as well as to the Guobiao character set.

To acquire the **basic skills** we will summarize three steps:

- **The first step** will be to learn to recognize the **main** Chang-jie **shapes**. (SECTION I)
- **The second step** will get us acquainted with some of the **basic** Chang-jie **rules** of code selection. (SECTION II)
- **The third step** will show us the traditional cultural roots on which the Chang-jie system is based. (SECTION III)

SECTION I: THE SHAPES OF THE CHANG-JIE METHOD

The analysis by the inventor of Chang-jie of all the of patterns contained in Chinese characters, led to the conclusion that **111 shapes**¹ could --in conjunction with a proper set of rules-- reproduce all existing Chinese characters in a computer system. We call these 111 shapes: **the signs**² of the Chang-jie input method.

In order to make these **111 Signs** easily accessible from the common **keyboard**, the Chang-Jie method **divides them into 24 groups**, each of which is assigned to one of **24 alphabetical keys** from A to W and Y, on the computer keyboard.

Each of the 24 groups comprises a “**Main-Sign**” and a few other signs which are usually “sub-shapes” of this Main-Sign and that we call **Secondary-Signs**.

All the signs of a group (i.e. the Main-Sign and its Secondary-Signs) are represented by the same alphabetic key (code) allocated to that group.

For example, in the group [手 Q]: [手] is the Main-Sign of the “group Q” which also contains **four Secondary-Signs**: 扌, 丰, 丰, 丰.

All the five signs of the group are represented by the single key “Q”.

The four Secondary-Signs: 扌, 丰, 丰, 丰 are as important as the Main-Sign [手], but, in this chapter, we will present and study **exclusively** the **24 Main-Signs** which are *the primary signs* within each group.

*Note: a)-The Secondary-Signs are presented in **chapter 2**; if you are curious to see all the signs together, please refer to page 38 and 40.*

*b)- The letter X represents fifteen groups of **difficult** shapes. This function is described in Chapter 4, section 4. [In the **Guobiao** environment only, X has an additional function: it differentiates characters which have identical codes (see Chapter 4, section 6)]. The letter Z was originally assigned to retrieve user defined characters and phrases. Unfortunately, this function has not been incorporated in commercial Chinese systems like C-Windows, Twinbridge, Richwin, etc.*

¹ There are 5 more *secondary-signs* used only for input of simplified characters. We will discover them in chapter 2. There are no additional Main-Signs needed to input simplified characters.

² We call these predetermined shapes “**signs**”, because they point the way to produce the Chinese characters we need on our computer screen. We **do not** call them *radicals*. Indeed, this concept belongs to Chinese etymology, which decomposes characters into *radical* and *phonetic* components, where “radical” has already a specific meaning. It is important to avoid confusing these two different concepts. Chang-jie “**signs**” represent character *shapes*; they do not stand *per se* for phonetic or meaning components. However, in many cases, as we will first see in section 3 of this chapter, the Chang-jie signs are full of cultural significance.

1. The 24 Main-Signs

- ◆ The 24 Main-Signs are in fact the “*borrowed shapes*” of 24 very common and very important Chinese characters. As we will see in the third section of this chapter, these 24 characters hold great meaning in terms of Chinese culture.

Since the invention of Chang-jie³, for the last 20 years, all keyboards in Taiwan and Hong Kong are made with the Main-Signs represented next to or under their corresponding letter. (See picture page 26).

- ◆ For the practical purpose of character input, it is important to realize how the Main-Signs fit into your keyboard. Look at the schema below: you can see the Main-Signs printed under the letter that represents them.

Chang-jie Chinese keyboard layout:

Q 手	W 田	E 水	R 口	T 廿	Y 卜	U 山	I 戈	O 人	P 心
A 日	S 尸	D 木	F 火	G 土	H 竹	J 十	K 大	L 中	
	Z	X	C 金	V 女	B 月	N 弓	M 一		

In case your keyboard does not have the Main-Signs already permanently etched into the keys, go to **Appendix V**, pick up the **Main-Signs STICKERS**, and **paste them onto your keyboard**, which should then look like the figure above.

³ The invention of Chang-jie inspired the creation of other input methods (phonetic and graphic) and the corresponding symbols of some of these methods are also represented on most Chinese keyboards in Taiwan. (See picture page 26).

2. The process to obtain characters on your screen

Let us see how, **practically**, we can spot these Main-Signs inside actual characters and how to input the letters which represent them.

● **Illustration 1:**

Imagine you want to input the character: 早 (zǎo, morning)



1	2	3	4	Result
Spot the signs in this character ⇅⇅	Match alphabet keys representing them: ⇅⇅	Type alphabet keys ⇅⇅	PRESS SPACE BAR	on your screen ⇅⇅
<div style="text-align: center;">日</div> <div style="text-align: center;">十</div>	<div style="text-align: center;">A</div> <div style="text-align: center;">J</div>	<div style="text-align: center;">first type : A</div> <div style="text-align: center;">then type: J</div>	⇒	早

Note:

a: the **input order** followed a specific sequence: the sign **on the top** comes **first**; then the sign under it. *The signs' order* goes **from top to bottom**.

b: the **code** for 早 is: **AJ** representing the signs (日 十).

c: in **column 4**, the **command** to get the characters on the screen is: "PRESS SPACE BAR". This is if you were to use the TwinBridge system (Appendix II); other systems may have another command, like "PRESS ENTER", etc.

● **Illustration 2:**

Imagine you want to input the character: 明 (míng, bright)



1	2	3	4	Result
Spot signs in this character ⇅⇅	Match alphabet keys representing them: ⇅⇅	Type alphabet keys ⇅⇅	PRESS SPACE BAR	on your screen ⇅⇅
<div style="text-align: center;">日</div> <div style="text-align: center;">月</div>	<div style="text-align: center;">A</div> <div style="text-align: center;">B</div>	<div style="text-align: center;">first type: A</div> <div style="text-align: center;">then type: B</div>	⇒	明

Note:



a: the **input order** follows a specific sequence: the sign on the left comes **first**; then the sign on the right. *The signs' order* goes: **from left to right**.

b: the **code** for 明 is: **AB** representing the signs (日 and 月).

● **Illustration 3:**

Imagine you want to input the character: 甘 (gān, sweet)

甘

1	2	3	4	Result
Spot signs in this character ⇓⇓	Match alphabet keys representing them: ⇓⇓	Type alphabet keys ⇓⇓	PRESS SPACE BAR	on your screen ⇓⇓
 	T M	first type: T then type: M	⇒	甘

Note:

a: the **input order** followed a specific sequence: the sign **on the outside** comes **first**; then the sign in the inside. *The signs' order goes, in principle: from outside to inside.*

b: the *code* for 甘 is: **TM** representing the signs (甘 and 一).

◆ **CONCLUSIONS** derived from the three examples above:

In the Chang-jie system, we **must**:

- ◆ “dismantle” the shapes of a character to spot the signs which compose it.
- ◆ type in the alphabetical letters --the codes-- which represent such signs.
But we must do so **in the order**, AND **within the numbers** set forth by a set of rules that we will discuss more deeply in chapter 3.

Note that the characters given as examples up to now contained very few signs: all their codes corresponding to the signs had to be inputted. But in many characters the signs are much more numerous. Then, not all of them are inputted: **only a maximum of 4 or 5 signs are inputted depending on the structure of the character, and all the other signs are skipped.**

SECTION II: OVERVIEW OF THE BASIC RULES

Now that we have seen how simple it can be in principle --and practice-- to input some easy characters, we can look more closely at why we were successful in achieving the proper result. To be successful, we must pay attention to the following three rules:

- 1:** spot the signs in their *entirety* (*rule of maximum completeness*);
- 2:** determine their ordinal *position* within the character (*rule of order*);
- 3:** input the correct *number* of codes (*rule of quantity*).

1. Rule of “Maximum” Completeness

For any given character, **you must spot the Signs that cover the largest number of character strokes.**

For example, if a character contains the shape 日 as in 明, the input code is simply A for “日”, **and not : RM** (R for 口 and M for 一).

Here is a table of some possible mistakes with some Main-Signs:

characters shape	proper signs	proper code	wrong codes
日	日	A	口一 RM
土	土	G	十 一 JM
大	大	K	人 一 OM
甘	甘	T	十 十 一 JJM
田	田	W	口 十 RJ
旦	日 一	AM	口 一 一 RMM
甘	甘 一	TM	十 十 一 JJM
果	田 木	WD	口 十 木 RJD

Because the strokes forming characters can be looked at from many different angles, the rule of completeness is absolutely necessary. Without it, the *spotting of signs* will present too many subjective variations. The rule, to be efficient, requires “maximum completeness”: this expression is intentionally redundant in order to bring attention on the necessity of choosing the *biggest signs possible*.

2. Rule of Order

The basic principle is that signs have an *order* that depends on their position within the pattern of the character. This *order* is essential in determining whether the code representing a sign will be inputted or not, and if so, in what sequence.

The *rule of order* can be described as follows:

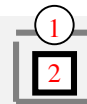
(1) When signs are *horizontally aligned*, those located at the **left** come before those at the **right**;



(2) When signs are *vertically aligned*, those located at the **top** come before those at the **bottom**;



(3) When some signs are *inside other signs*, those located on the **outside** come, in principle, before those **inside**;

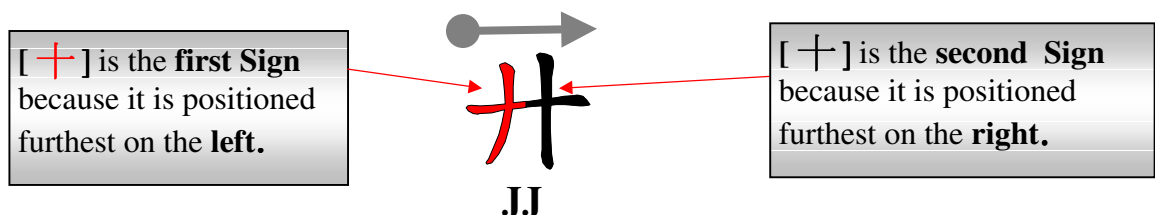


(4) When characters are formed of *two or three separated Units*⁴, then the rules stated in (1), (2), and (3) above **apply to each of the Units** forming the characters. (See example 4: [理] hereafter)

Below, we will illustrate the position and the *order* of signs with four *simple* characters.

1. Characters with HORIZONTALLY aligned signs:

- ◆ When signs are next to each other as in 升⁵ (JJ) , 明 (AB), their order is determined by their position considered **from left to right**:

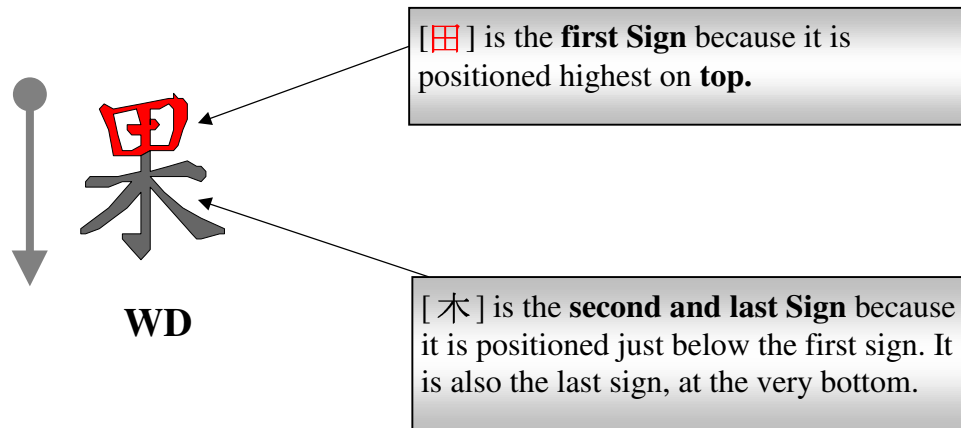


⁴ The definition of “Units” is simple: a Unit is a group of signs presenting an aspect of **togetherness** and, in multi-unit characters, separated from each other by an **interval**. The details of the definition are given in **chapter 3**. No need to jump there now because the characters presented in this **chapter 1** and in **chapter 2** are simple enough to deal with what we have learned so far. You will also see that not all the signs of a character need to have their corresponding codes inputted: many are **skipped**.

⁵ The vertical stroke of the first sign [+] of 升 is slightly curved to the left, differing from the standard shape of the Main-Sign [+] to which it is identified. Indeed, as we will see in more detail later on, signs are not geometrical reproductions of the shapes forming the characters: they are a *model* of these shapes, and some minimum flexibility of mind is needed to match sign shapes and character shapes.

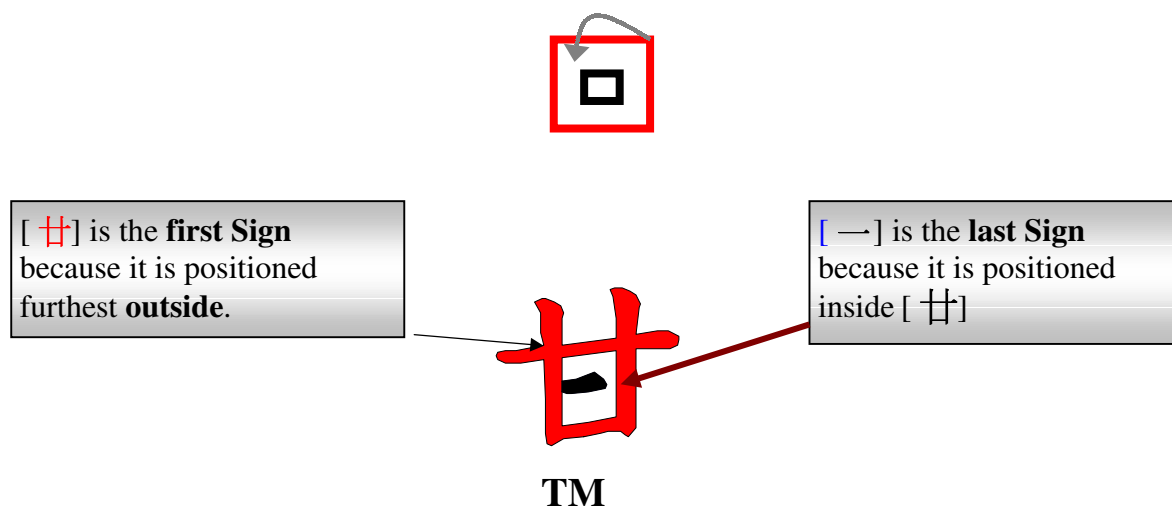
2. Characters with VERTICALLY aligned Signs:

- ◆ When signs are on top of each other, as in 果, 王, 早, their order is determined by their position considered **from top to bottom**:



3. Characters with signs SURROUNDING others signs:

- ◆ When signs are in an inside/outside position as in 甘, 某, their order is determined, in principle, by their position considered **from outside to the inside**:



4. Characters composed of 2 or 3 “Units”:

The detailed presentation on how to deal with characters structured with several “Units” will appear in chapter 3.

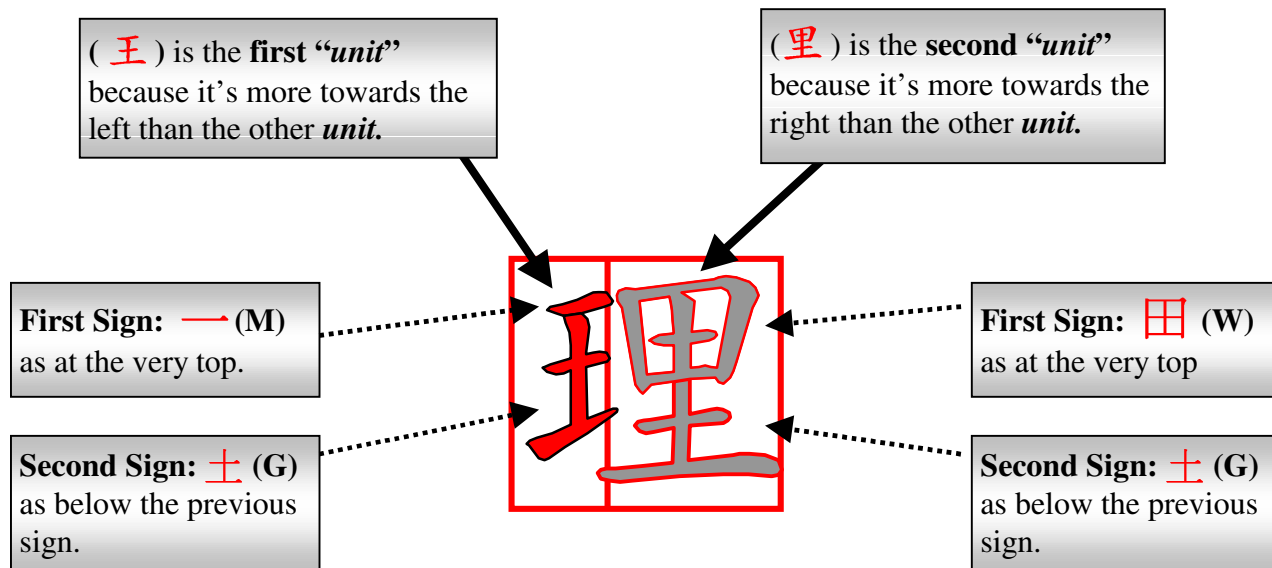
For the time being, we only need to know that in such cases:

- a) the rules indicated above apply **to each of the Units** forming these *multi-unit* characters. In other words, the order of signs is established **within** each “unit”;
- b) the “units” **themselves also have an order** within the character, –which is established according to the same rules as for the order of signs. In short:

the “units” in a position furthest to the left, or more towards the top, or more towards the outside of the character, must be taken into consideration –for the sake of sign spotting– **before** those located less to the left, or less towards the top, or less towards the outside.

◆ **Example:** 理 (一 土 田 土) MG WG (lǐ, logic; to manage)

... the character 理 has 2 “units”: (王 MG) and (里 WG).



In this character the **order** of the signs is established as follows:

the sign 一 **M** is the first of all because it is in the first *unit* and because it is located at the top of a vertical alignment; then follows 土 **G**, as the second and last sign of the first *unit* because it is located at the bottom of the vertical alignment with 一 **M**; then comes the signs of the second *unit*; first 田 **W** and then 土 **G**, according to their position in the *unit*; they follow the sequence top to bottom.

3. Rule of Number of Codes to Input per Character

The **number** of codes which must be inputted to get a character **varies** between a **minimum of one**, and **a maximum of four, or five**, depending on the **structure** of the character. Fortunately, in many characters, **some signs** (quite a few, in fact) **are skipped**, and their corresponding code must not be inputted.

This useful and important “*skipping*” of signs is done according to a few rules (**the rules for the selection of codes**) that we will explain fully in **chapter 3**.

We do not need to learn these rules **now** because the characters that we will use in the exercises of this chapter and in all of chapter 2 need to have **all** their codes inputted --such were also the characters we have used so far: (胃 WB, 明 AB, 早 AJ, 甘 TM, 旦 AM, 果 WD, 某 TMD, 理 MGWG).

With such characters, all we need to do to obtain them on the screen, is to *spot* all their signs and type in their codes, in the sequence following their **position** within the character.

In this way, for now, we do not need to be concerned about the number of signs and whether we have to skip codes or not; we just concentrate on remembering the shape of the signs, their position on the keyboard and how to spot them correctly inside characters; and finally on how to choose them in the correct sequence for input of their corresponding codes.

◆ NOTE ON THE INPUT FOR THE 24 MAIN-SIGNS THEMSELVES

As you well know, the 24 Main-Signs are quite often used as **stand-alone** characters.

To input them, you just need to type their corresponding keyboard letter, followed by the input action required by your system (in our Twinbridge system, you will: PRESS THE SPACE BAR).

For instance, if you need the **character** 田 with its specific meaning, *rice field*, in your text, just type **W** and PRESS THE SPACE BAR: the character 田 will appear by itself, as a stand-alone character.

SECTION III: THE MEANING IN THE 24 MAIN-SIGNS

Surely, it is mainly because of their frequency of appearance in the composition of Chinese characters that those 24 shapes --and not others-- have been chosen by the inventor of Chang-jie to serve as the Main-Signs of the input system.

BUT, there are other reasons why these 24 characters were chosen.

These reasons become quite clear if, instead of looking at the Signs in the order they appear on the keyboard, we present them **in the alphabetical order** of their representative letters. Then we see how **the Main-Signs are linked with Chinese culture and philosophy**, of which they symbolize four important traditional groups of concepts:

- Cosmology
- Writing
- Human nature
- Transformations

Cosmology		Writing strokes		Human Nature		Transformations	
日	A	竹	H	人	O	尸	S
月	B	戈	I	心	P	甘	T
金	C	十	J	手	Q	山	U
木	D	大	K	口	R	女	V
水	E	中	L			田	W
火	F	一	M			卜	Y
土	G	弓	N				

Let us examine, in each of these four groups, the meaning of each character whose shape was “borrowed” to make the Main-Signs. *After such examination, we hope that you won’t be able to forget them!*

1. TRADITIONAL COSMOLOGY, CONDENSED IN 7 SIGNS:



日, 月, and 金, 木, 水, 火, 土.

- ◆ The concept of Dao 道, the Absolute without name, is absent here as it expresses the non-manifested realm and not the already concrete and relative realm of words and characters. But it is from the Dao that emanate the two opposite and complementary forces of *Ying* and *Yang* at play in the manifested universe; they are represented here by two characters:
 - ◆ 日 (rì, the sun, the light, symbol of Yang), and
 - ◆ 月 (yuè, the moon, the substance, symbol of Ying).
- ◆ These cosmological premises are completed by the inclusion of *the doctrine of the Five Elements* (represented by the five *signs* below), which, in combination with the *Ying Yang* doctrine and the teachings of the Yi-Jing-- the Book of Changes, explains most of the creation and mechanisms of the manifested world, according to Chinese traditional thinking.

The *Five Elements* doctrine is represented by the following five Signs:

- ◆ 金 (jīn, metal), is associated with “malleability” by melting, then hardening;
- ◆ 木 (mù, wood), is associated with solidity comprising workability when carved;
- ◆ 水 (shuǐ, water), is associated with descending and dissolving;
- ◆ 火 (huǒ, fire), is associated with ascending and burning;
- ◆ 土 (tǔ, earth): earth is associated with sowing, reaping, growth.

2. THE “CONCEPT OF WRITING”, WITH 7 SIGNS:



竹, 戈, 十, 大, 中, 一, 弓

These 7 signs borrow their shape from seven characters representing seven important strokes used frequently in writing Chinese characters:

- ◆ 竹 (zhú, bamboo), stands for the left side stroke 丿 called “xié” (斜) which is traced twice at the top of the character 竹. Bamboo is also a material important in Chinese daily life and culture;
- ◆ 戈 (gē, halberd), stands for the “dot” stroke [丶] called “diǎn” (點) which is contained at the top of the character 戈. It also represents a common ancient weapon ;
- ◆ 十 (shí, ten), stands for the writing strokes [+] “the cross “ called “jiāo” (交). By pointing to the four cardinal points, it also symbolizes the totality of space;
- ◆ 大 (dà, big), stands for the writing strokes [乂] called “chā” (叉) which represents the junction and interaction of things, and also the multiplicity of possibilities resulting from this interaction;
- ◆ 中 (zhōng, center), stands for the vertical stroke [|] called “zōng” (縱) and it also represents the concept of “middle way”, center;
- ◆ 一 (yī, one), stands for the horizontal writing stroke called “héng” (橫) and also for the unity behind the apparent multiplicity of things;
- ◆ 弓 (gōng, a bow), stands for curved “hook” stroke called “gōu” (鉤) and also represents another famous weapon of ancient times, the bow.

3. THE CONCEPT OF HUMAN NATURE, WITH 4 SIGNS:



人，心，手，口

These four characters remind us the people of China (人) who, with their vision springing from the heart (心), were capable of transmitting (口) to humanity a unique heritage of inventions (手) and wisdom.

- ◆ 人 (rén, people), to be a real “human” ... not an easy achievement;
- ◆ 心 (xīn, heart), heart, and also mind and feelings;
- ◆ 手 (shǒu, hand), representing the capability to concretize all practical activities;
- ◆ 口 (kǒu, the mouth, the opening), the capability to speak, and possibly say some words of wisdom, as we find in the history of China, --and ... savor great oriental cuisine...

4. THE CATEGORY OF “TRANSFORMATIONS”, WITH 6 SIGNS:

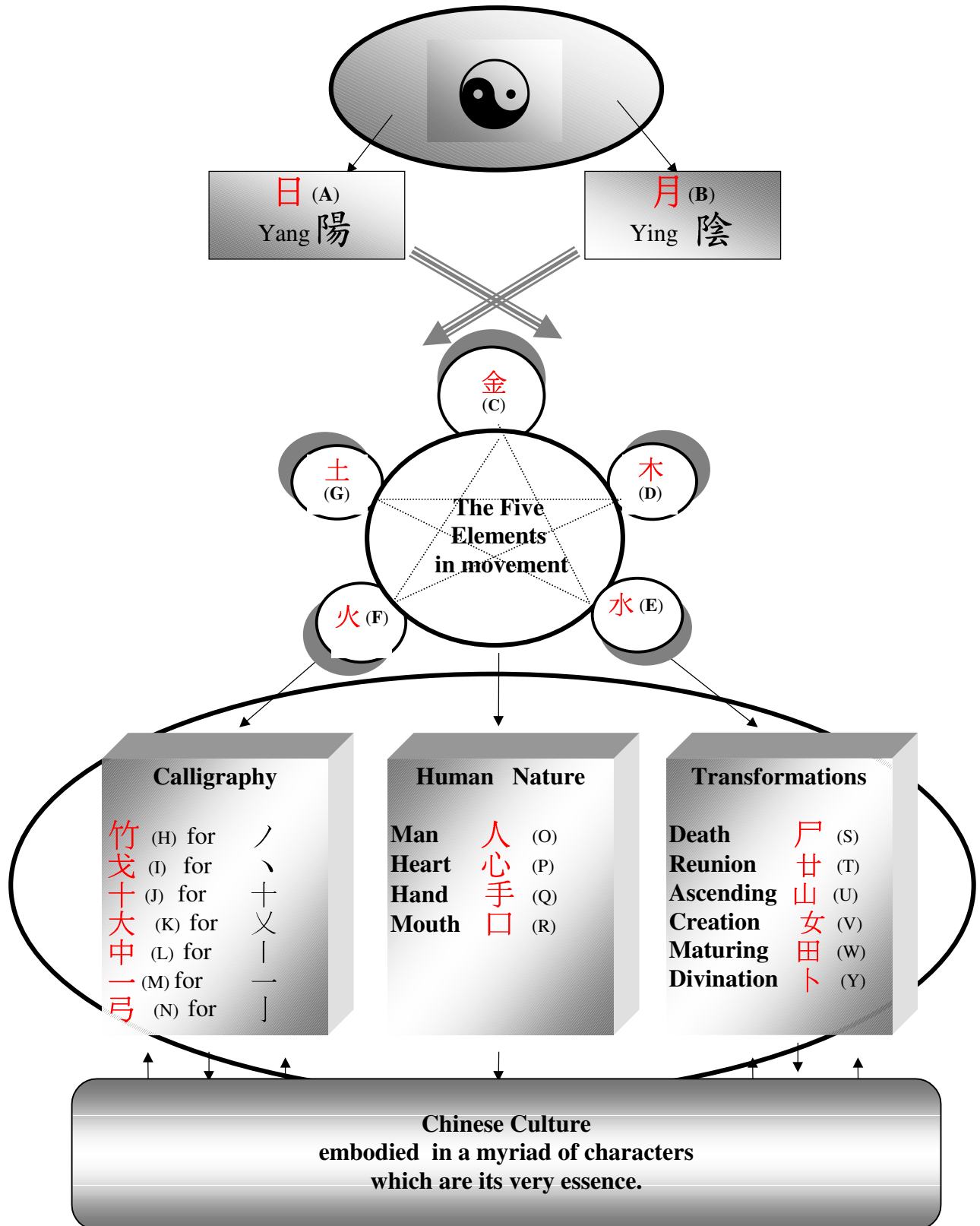


尸，廿，山，女，田，卜

The six characters borrowed to form this category remind us of one of the fundamental ideas of the Yi-Jing: everything is impermanent, everything transforms.

- ◆ 尸 (shī, a corpse) ...a dead man, the ultimate *transformative* situation.
- ◆ 廿 (niàn, twenty), the addition of two tens ([+] [+]) results in reunion, multitude.
- ◆ 山 (shān, mountain), on top of mountains ... transmutations occur.
- ◆ 女 (nǚ, woman), a woman, the matrix of creation.
- ◆ 田 (tián, a field), squares of land, fields, where grain transforms into staples.
- ◆ 卜 (bǔ, prediction), with the art of divination, the future becomes present.

THE 24 MAIN-SIGNS:
 seen as important concepts of traditional Chinese thought,
 derived from the Ying / Yang
 and the Doctrine of the Five Elements:



◆ FINGERS' POSITION ...WHEN KEYING CHANG-JIE:

When keying the code-letters corresponding to the Chang-jie signs, the position of the hands and fingers on the keyboard is **exactly the same as when typing English with an American keyboard**.

The American keyboard is the kind of keyboard used in **Taiwan** and **Hong Kong**, and many other countries where English is a second language. So, it should not be difficult at all to type Chang-jie for anyone accustomed to the American keyboard⁶. In such a case, when typing Chinese characters, the **mental mechanism** that must take place is to create an association between the Chang-jie signs and their corresponding letter on the keyboard. (Or, even better, mentally link the signs DIRECTLY to the key that represents them and to the finger that types them). When this association is done, you can input the codes for Chinese characters **as if you were typing English words**, --or as if you were typing Chinese characters spelled with the 24 Main-Signs!

As typing in English, you can type with all your fingers if you want to be a fast **touch typist** or a **professional typist**. Or, you can type with two fingers, if you are not trained in touch-typing.

For those users who would like to learn to TYPE FAST with their fingers in the correct position, we will refer in our Web site (www.cjmember.com) to various tutoring software that train to become a proper typist of Chinese characters. New software appears often, and we will let you know the best programs.



We strongly recommend to **first assimilate all the essential principles of the Chang-jie system** by reading this book CHAPTER BY CHAPTER before engaging in learning to type fast. Just complete the exercises here in chapter 1, and later those of the following chapters. **In due time**, you will be able to train your keying skills for fast typing.

⁶ In European computer keyboards, even though the keys are not placed at the same location as in the American Q W E R T Y keyboard, the association between an alphabetical key (a code letter) and the corresponding Main-Sign is maintained: so, if you type A on a French keyboard it will correspond to the Main sign 日, etc.

◆ EXERCISE 1: to remember the position of the signs on the keyboard:

1. Write the code-letters representing the Main-Signs below:

手 -Q-	田 ---	水 ---	口 ---	甘 ---	卜 ---	山 ---	戈 ---	人 ---	心 --
日 ---	尸 ---	木 ---	火 ---	土 ---	竹 ---	十 ---	大 ---	中 ---	
	Z	X	金 --	女 ---	月 ---	弓 ---	一 ---		

2. Write the Main-Signs represented by the code letters on the keyboard below:

Q 手	W ---	E ---	R ---	T ---	Y ---	U ---	I ---	O ---	P ---
A ---	S ---	D ---	F ---	G ---	H ---	J ---	K ---	L ---	
			C ---	V ---	B ---	N ---	M ---		

3. Write both Main-Signs and their representative letters on the keyboard below:

Q 手	---	---	---	---	---	---	---	---	---
---	---	---	---	---	---	---	---	---	---
		---	---	---	---	---	---		

- ◆ **EXERCISE 2:** To learn how to spot the Main-Signs and how to input the codes in sequence.
In this exercise, the characters are made of Main-Signs only: no Secondary-signs;
all codes must be inputted according to the position of their respective signs: no skipping of signs/codes.

This exercise is both for writers of **traditional** characters as well as for writers of **simplified** characters. Most of the characters are both present in the Big 5 code and in the Guobiao code set. **Simplified** characters are noted by a star: ★

1. Write Signs & Codes in the third column. Then...
2. HANDS ON: type the codes **in your computer** or **electronic dictionary**, and get the characters on your screen!

		Write Codes & Signs	Pinyin	English	ANSWERS Codes & Signs	
1	日		rì	the sun; the day; day time; daily	A	日
2	曰		yǔe	to say; said or spoken (lit.)	A	曰
3	昌		chāng	shining, glorious	AA	日 日
4	晶		jīng	quartz; rock of crystal; glittering	AAA	日 日 日
5	明		míng	bright, clear, open; to understand	AB	日 月
6	早		zǎo	morning; already; early; before hand	AJ	日 十
7	昧		mèi	be ignorant of; conceal	AJD	日 十 木
8	旦		dàn	dawn; a day (lit.)	AM	日 一
9	旺		wàng	prosperous, vigorous; nice and bright	AMG	日 一 土
10	旱		hàn	drought; dry farm land; dry spell	AMJ	日 一 十
11	量		liàng	measure	AMWG	日 一 田 土
12	朋		péng	friend	BB	月 月
13	肚		dù	stomach, belly, abdomen	BG	月 土
14	肝		gān	liver	BMJ	月 一 十
15	腮		sāi	cheek	BWP	月 田 心

Note: the English meaning presented for the characters in the exercises or examples in this book aims at conveying one or a few of the main meaning of the characters: *we did not intend to make a dictionary.*

		Write Codes & Signs	Pinyin	English	ANSWERS Codes & Signs	
16	錢★		qián	coins, cash, money; a unit of weight	CII	金戈戈
17	針★		zhēn	a needle; something sharp; an injection	CJ	金十
18	鋸★		jù	a saw; to cut with a saw	CSJR	金尸十口
19	查		chá	to check, to examine	DAM	木日一
20	林		lín	a forest, a grove	DD	木木
21	森		sēn	a measure name for forests and woods	DDD	木木木
22	焚		fén	to burn	DDF	木木火
23	婪		lán	greedy; covetous	DDV	木木女
24	杜		dù	lit: to shut out; to stop	DG	木土
25	本		běn	the stems of a plant; the origin; capital	DM	木一
26	杏		xìng	an apricot	DR	木口
27	柑		gān	tangerine	DTM	木甘一
28	淼		miǎo	waste	EEE	水水水
29	焊		hàn	to weld	FAMJ	火日一十
30	炎		yán	inflammation; burning hot	FF	火火
31	圭		guī	an elongated tablet of jade used in ceremonies	GG	土土
32	卦		guà	divinatory symbols	GGY	土土卜
33	竿		gān	a pole	HMJ	竹一十

★ [金 when placed at the left as radical is very often written [钅] in simplified characters.

Because the shape [钅] is also represented by the letter C (see Chapter 2 on Secondary-Signs, page 42), the code corresponding to this shape in the *simplified* character is identical to the code of the traditional character.

★ 錢⇒ 钱 C I J (钅戈十). The code for [戈] (戈十) is explained in chap 2, page 103.

★ 針⇒ 针 C J (钅十)

★ 鋸⇒ 锯 C S J R (钅尸十口)]

		Write Codes & Signs	Pinyin	English	ANSWERS Codes & Signs	
34	或		huò	probably; or (prep.)	IRM	戈口一
35	車★		chē	a vehicle	JWJ	十田十
36	忠		zhōng	loyal	LP	中心
37	王		wáng	king	MG	一土
38	干		gān	(lit.): to offend; to interfere	MJ	一十
39	天		tiān	the sky, heaven; a day; the weather	MK	一大
40	下		xià	below; under; down; nest; to get off	MY	一卜
41	唱		chàng	to sing	RAA	口日曰
42	呆		dāi	slow-witted; wooden expression; to stay	RD	口木
43	喳		chā	to chatter	RDAM	口木日一
44	啖		dàn	to eat; to feed ((lit.).)	RFF	口火火
45	吐		tǔ	to spit; to tell	RG	口土
46	味		wèi	taste, flavor; aroma smell	RJD	口十木
47	咕		gū	gurgle; bubble	RJR	口十口
48	尿		niào	to urinate	SE	尸水
49	居		jū	to live at; to have a residence at	SJR	尸十口
50	屈		qū	to bend; to submit; wronged	SUU	尸山山
51	甘		gān	sweet; good; satisfaction; voluntary	TM	廿一
52	某		mǒu	some; certain	TMD	廿一木
53	出		chū	to exit	UU	山山

★[車 => 车]: The shapes of the two forms of characters are different and correspond to different codes. The shapes of the traditional form 車 correspond to the Main-Signs [十田十] with the code **JWJ**; the shapes of the simplified character 车 correspond to the Secondary-Signs: [𠂇 丰] with the code: **KQ**. We remind that this chapter 1 is devoted chiefly to learning the Main-Signs. All Secondary-Signs will be fully presented in chapter 2.]

		Write Codes & Signs	Pinyin	English	ANSWERS Codes & Signs	
54	娃		wá	baby, child	VGG	女土土
55	姑		gū	an aunt (in father side)	VJR	女十口
56	妹		mèi	younger sister	VJD	女十木
57	奸		jiān	self-service; a traitor	VMJ	女一十
58	如		rú	if; according to; as, like, such as	VR	女口
59	娟		juān	beautiful (lit.)	VRB	女口月
60	媒		méi	intermediary; go-between; match-maker	VTMD	女廿一木
61	胃		wèi	stomach	WB	田月
62	果		guǒ	fruit, consequence	WD	田木
63	畦		qí	a plot of land	WGG	田土土
64	思		sī	to think; to consider; a thought; to long for	WP	田心
65	壘★		lěi	a rampart; to pile up things; a base	WWWG	田田田土

★ [壘 => 垒: as shapes are different, so is its code: (△△△土 I I I G).

As we will see in chapter 2, the shape △ is a Secondary-Sign of the group (I 戈).]

● EXERCISE 3: ✂ Reconstruct the characters using the Signs as building blocks!

Look at the codes and signs in the last column (ANSWERS) of the exercise tables above, and try to remember what character they represent; then, write the character in the margin of the book or on a different sheet of paper.

You should hide the second column.

You can get hints from the pinyin and the English meaning column.

This exercise is highly effective for learning the signs, AND will help increase your Chinese vocabulary.

◆ **EXERCISE 4: on phrases** with characters made of Main-Signs only; all codes must be inputted.

This exercise is both for writers of **traditional** characters and writers of **simplified** characters. Most of the characters are both present in the Big 5 code and in the Guobiao code set. **Simplified** characters are signaled by a star: ★

1. Write Signs & Codes in the third and fourth column. Then...
2. HANDS ON: Type the codes **in your computer** or **electronic dictionary**: get the characters on your screen!

	Phrases	Write Codes & Signs	Pinyin	English	ANSWERS	
1	日本		rì běn	Japan	A 日	DM 木一
2	日出		rì chū	sun rise	A 日	UU 山山
3	明日		míng rì	the near future	AB 日月	A 日
4	明明		míng míng	obviously	AB 日月	AB 日月
5	明天		míng tiān	tomorrow	AB 日月	MK 一大
6	早日		zǎo rì	at an early date	AJ 日十	A 日
7	旺月		wàng yuè	a month with great sales	AMG 日一土	B 月
8	旱田		hàn tián	dry farm land	AMJ 日一十	W 田
9	月中		yuè zhōng	the middle of a month	B 月	L 中
10	肝火		gān huǒ	irascibility	BMJ 月一十	F 火
11	肝炎		gān yán	hepatitis	BMJ 月一十	FF 火火
12	查明		chá míng	proof through; find out	DAM 木日一	AB 日月
13	森林		sēn lín	a forest	DDD 木木木	DD 木木
14	本金		běn jīn	capital; principal	DM 木一	C 金
15	本人		běn rén	myself; I, me	DM 木一	O 人
16	水晶		shuǐ jīng	rock crystal	E 水	AAA 日日日

	Phrases	Write Codes & Signs	Pinyin	English	ANSWERS	
17	水車★		shuǐ chē	water wheel	E 水	JWJ 十田十
18	水田		shuǐ tián	paddy field	E 水	W 田
19	水果		shuǐ guǒ	fruit	E 水	WD 田木
20	火車★		huǒ chē	train	F 火	JWJ 十田十
21	火山		huǒ shān	volcano	F 火	U 山
22	土木		tǔ mù	construction activities	G 土	D 木
23	土人		tǔ rén	natives, aborigines	G 土	O 人
24	十月		shí yuè	October	J 十	B 月
25	古錢★		gǔ qián	ancient coins	JR 十口	CH 金戈戈
26	古人		gǔ rén	the ancients; our forefathers	JR 十口	O 人
27	大量		dà liàng	a large number; a great quantity	K 大	AMWG 日一田土
28	大月		dà yuè	a 31 day month	K 大	B 月
29	大火		dà huǒ	a big fire	K 大	F 火
30	大人		dà rén	adult	K 大	O 人
31	中古		zhōng gǔ	the Middle Ages; a second-hand thing	L 中	JR 十口
32	中心		zhōng xīn	center; heart; core; hub	L 中	P 心
33	忠心		zhōng xīn	loyalty, devotion	LP 中心	P 心
34	一旦		yí dàn	once	M 一	AM 日一
35	一月		yí yuè	January	M 一	B 月



see above

	Phrases	Write Codes & Signs	Pinyin	English	ANSWERS	
36	一串		yí chuàn	a string of things	M 一	LL 中
37	一下		yí xià	one time; in a short while;	M 一	MY 一卜
38	一心		yì xīn	wholeheartedly	M 一	P 心
39	一手		yì shǒu	all by oneself; a skill	M 一	Q 手
40	一口		yì kǒu	a mouthful; with certainty; readily;	M 一	R 口
41	一味		yí wèi	blindly	M 一	RJD 口十木
42	干戈		gān gē	a weapon of war	MJ 一十	I 戈
43	天明		tiān míng	dawn	MK 一大	AB 日月
44	天理		tiān lǐ	justice of Nature, or of the Gods	MK 一大	MGWG 一土田土
45	天干		tiān gān	the 10 Heavenly Stems	MK 一大	MJ 一十
46	天天		tiān tiān	everyday; daily	MK 一大	MK 一大
47	天下		tiān xià	the world	MK 一大	MY 一卜
48	二月		èr yuè	February	MM 一一	B 月
49	下來		xià lái	to come down; below	MY 一卜	DOO 木人人
50	下品		xià pǐn	low grade quality	MY 一卜	RRR 口口口
51	人中		rén zhōng	philtrum (anatomy)	O 人	L 中
52	人心		rén xīn	popular feeling; people's will & heart	O 人	P 心
53	人手		rén shǒu	man power; a hand	O 人	Q 手
54	人口		rén kǒu	population	O 人	R 口
55	人品		rén pǐn	moral standing; character	O 人	RRR 口口口

	Phrases	Write Codes & Signs	Pinyin	English	ANSWERS	
56	心肝		xīn gān	conscience; dearly; darling	P 心	BMJ 月一十
57	心理		xīn lǐ	psychology; mentality	P 心	MGWG 一土田土
58	心口		xīn kǒu	the pit of the stomach	P 心	R 口
59	心田		xīn tián	intention	P 心	W 田
60	心思		xīn sī	thought; state of mind; mood	P 心	WP 田心
61	手鉗★		shǒu qián	hand vice; pliers	Q 手	CTM 金廿一
62	口水		kǒu shuǐ	saliva	R 口	E 水
63	唱針★		chàng zhēn	gramophone needle	RAA 口日日	CJ 金十
64	唱本		chàng běn	libretto of Chinese ballads	RAA 口日日	DM 木一
65	喳喳		chā chā	a whispering sound	RDAM 口木日一	RDAM 口木日一
66	單一		dān yī	a single unit	RRWJ 口口田十	M 一
67	居中		jū zhōng	between two parties;	SJR 尸十口	L 中
68	居心		jū xīn	harbor evil intentions	SJR 尸十口	P 心
69	甘心		gān xīn	willingly; to be resigned to	TM 廿一	P 心
70	某人		mǒu rén	a certain person	TMD 廿一木	O 人
71	某某		mǒu mǒu	so and so	TMD 廿一木	TMD 廿一木
72	出錯★		chū cuò	make mistakes	UU 山山	CTA 金廿日
73	出來		chū lái	come out; emerge	UU 山山	DOO 木人人
74	出土		chū tǔ	to have come out of an excavation	UU 山山	G 土
75	出車★		chū chē	dispatch a vehicle	UU 山山	JWJ 十田十
76	出手		chū shǒu	dispose of ; take a job;	UU 山山	Q 手

★[錯=>错 CTA (金廿日)]

	Phrases	Write Codes & Signs	Pinyin	English	ANSWERS	
77	出口		chū kǒu	export; exit	UU 山山	R 口
78	出品		chū pǐn	produce; make a product	UU 山山	RRR 口口口
79	娃娃		wá wa	baby doll	VGG 女土土	VGG 女土土
80	妹妹		mèi mèi	younger sister	VJD 女十木	VJD 女十木
81	姑姑		gū gū	an aunt (a sister of one's father)	VJR 女十口	VJR 女十口
82	如下		rú xià	as follows	VR 女口	MY 一卜
83	如上		rú shàng	as above	VR 女口	YM 卜一
84	媒人		méi rén	match-maker	VTMD 女廿一木	O 人
85	胃火		wèi huǒ	gastritis	WB 田月	F 火
86	胃口		wèi kǒu	appetite	WB 田月	R 口
87	畦田		qí tián	ridge; bordered plots	WGG 田土土	W 田
88	上天		shàng tiān	Heaven; Providence; God	YM 卜一	MK 一大
89	上品		shàng pǐn	higher quality	YM 卜一	RRR 口口口

◆ EXERCISE 5: Reconstruct the characters using the Signs as building blocks!

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