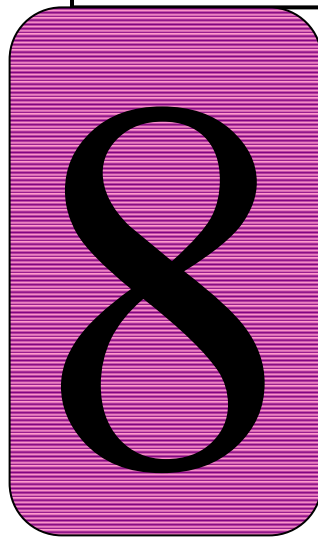# Deriving THE EIGHT 8 CHARACTERS

GEM 1506K: Heavenly Mathematics - Highlights of Cultural Astronomy

Grp : 73

Grp members: Chen Jiahui
Cheong Hui Sian
Koh Chiat Hua Lydia

Content Page

Introduction

The Pillars of Destiny

Introduction

Ba Zi or simply The Eight Characters is one of the way people used, to tell the lives and fortunes of others. It consists of the four pillars, namely, Year, Month, Date and Time pillars. Each pillar is further divided into the two sections called "Ten Heavenly Stems" or "Twelve Earthly Branches".

Ba Zi is used as an indicator for Chinese weddings. It has been used for over 1000 years to assess the compatibility of a couple. The custom, of prospective couples exchanging their Ba Zi written on a red card, is very old and to a certain extent, is still carried out by many, even today.

For example if a man is interested in a particular lady, he will go to the lady's house with all kinds of gifts for her family and present to the lady's father his Ba Zi on a red card. This would express his intention of marrying the lady and provide opportunity for the father to assess whether it would be a good match.

Ba Zi has its use today too. Apart from the telling of people fortunes or used in Chinese weddings, even in Feng Shui (another part of Chinese Astrolgy) deals with the concept of Ba Zi too.

The study of the Ba Zi is more of a metaphysical science, since unlike astrology; it is not based on the position of the planets or stars, but on the interaction of metaphysical elements.

In this project, we will focus on three main parts: The Pillars of Destiny, The Ten Thousand Calendars and Deriving our Eight Characters. We would not be touching on the implications of the derived Eight Characters.

The Ten Heavenly Stems and The Twelve Earthly Branches

A Brief History

In the ancient times, people used the ten heavenly stems and twelve earthly branches to record dates. The days were marked by the Ten Stems while the months were denoted by the Twelve Branches. However this system was rather confusing as there were three *Jia* in every month. Therefore, for ease of differentiating one day from the other, it was decided to combine the Ten Stems and Twelve Branches, to form 60 different combinations to record the time, day, month and year. This use can be traced back to the time of Huang Di, about 4,000 years ago. We will touch on the 60 combinations a while later.

From the earlier part, we know that these two components make up the four pillars. Today, we are more familiar with the twelve earthly branches, also known the Twelve Zodiac signs, than the Ten heavenly Stems. In this section, we will talk more about these two components.

The Ten Heavenly Stems (shi tian gan 十天干)

Some people refer them as "Celestial Stems". Actually even today, people use these Ten Stems equivalent to the numbers 1, 2, 3, …, 10. (For instance 1 is substitute as *Jia* and so on.) Below are the ten different stems in their supposedly order.

1 甲	2 乙	3 丙	4 丁	5 戊	6 己	7 庚	8 辛	9 壬	10 癸
jia	*yi*	*Bing*	*Ding*	*Wu*	*ji*	*geng*	*xin*	*ren*	*Gui*

In pictorial form:

You may ask, what is the relationship between the pictorial form and the one above? Well, the later form is grouped according to Yins and Yangs, and the five elements of the ten stems. This means that the Ten Stems can be grouped into Yin and Yang according to the odd or even sequence they are in:

The Yins and Yangs of the 10 Heavenly Stems:

The Yins (even sequence): Yi, Ding, Ji, Xin, Gui

The Yangs(odd sequence): Jia, Bing, Wu, Geng, Ren

They can also be grouped into the five elements:

The Five Elements (Wu Xing) of the 10 Heavenly Stems

The Wood Element: Jia and Yi   The Fire Element: Bing and Ding

The Earth Element: Wu and Ji   The Metal Element: Geng and Xin

The Water Element: Ren and Gui

Fig 1 The Ten Heavenly Stems with their corresponding elements

Fig 1 shows the Ten Heavenly Stems with their corresponding elements. The outer ring is the ten stems starting from *Jia* and going clockwise direction, ending at *Gui*. The circle is divided into five sections, each one represent an element. The two stem that stay within the circumference of one particular element mean they belong to that element. For example, from fig 2, *Wu* and *Ji* are the Earth Element!

*The Twelve Earthly Branches (*shier dizhi 十二地支*)*

This is more commonly known as the "Twelve Zodiac". Every solar year correspond to an animal in the zodiac. Like the Ten Heavenly Stems, the Twelve Branches also have so ordered sequence. Look at the chart below.

1 子	2 丑	3 寅	4 卯	5 辰	6 巳	7 午	8 未	9 申	10 酉	11 戌	12 亥
Zi	*chou*	*yin*	*mao*	*Chen*	*si*	*wu*	*wei*	*shen*	*you*	*Xu*	*hai*

Again, in pictorial form, we have,

At the corners of the pictures above you can find a tiny blue or red symbol in each animal's frame. They mean the Yin and Yang where the blue symbol represents the Yang and red one, the Yin.

The Yins and Yangs of the 12 Earthly Branches

The Yangs: Zi, Yin, Chen, Wu, Shen and Xu.

The Yins: Wu, Mao, Si, Wei, You and Hai.

The Twelve branches can also be grouped according to the Five Elements.

The 5 Elements (Wu Xing) of the 12 Earthly Branches

The Wood Element: Ying and Mao

The Fire Element: Shen and You

The Metal Element: Shen and You

The Water Element: Hai and Zi

The Earth Element: Chen, Xu, Chou and Wei (also represent the 4 seasons)

<u>Combining the Ten Heavenly Stems and Twelve Earthly Branches</u>

Together with these two components, we actually get the Chinese calendar. We will talk more about this in the next chapter of our project.

Sixty Combinations

We pair each odd- number stem with an odd- number branch and an even- number stem with an even- number branch. Take note, the odd- number stem cannot be matched with an even- number branch and vice versa. Henceforth, instead of 120 combinations, we get 60 different combinations.

An example of the combinations:

 甲 子 (Pronounced as *Jia Zi*) is the first combination

 癸 亥 (Pronounced as *Gui Hai*) is the last combination.

Yin and Yang

The twin concepts of Yin and Yang are peculiar to ancient Chinese cosmology.

Yin and Yang are symbolized by the sun and the moon. They are the two

opposing forces active in the universe.

Yin is said to exist in Yang and Yang exists in Yin. This changing combination of

negative and positive, dark and light, cold and hot which keeps the world

spinning creates Qi or the life giving force of the universe.

Yin (female)

Earth, moon, dark, femine, negative, absorbing, receptive, winter, soft, cold, still

broken & even.

Yang (male)

Heaven, sun, bright, fiery, moving, odd, powerful, masculine, active, summer.

 **How does the Yin Yang Symbol come about?**

Ancient Chinese try to observe the cycle of the sun by using a pole about 8 feet

long. They placed the pole at right angles to the ground and record the position

of the shadow. From this, they found the length of the year to be around 365.25

days. Then they divided the year into 24 segments including the Vernal, Autumnal Equinoxes, as well as Summer, Winter Solstices.

They used six concentric circles, marked 24 segment points, divided the circles into 24 sectors and recorded the length of the shadow everyday. The shortest shadow was found on the day of Summer Solstice and the longest shadow is found in the day of Winter Solstice. The day of Winter Solstice has the least sunshine and each day after, more sunshine is gained till Summer Solstice. That is why some people say that Yang begins right after Winter Solstice and Yin begins right after Summer Solstice in the northern hemisphere. After recording the 24 shadow lines, then comes six concentric circles. The length of each line will subtract the portion of the length of the Summer Solstice shadow line so that Summer Solstice has the maximum yang.
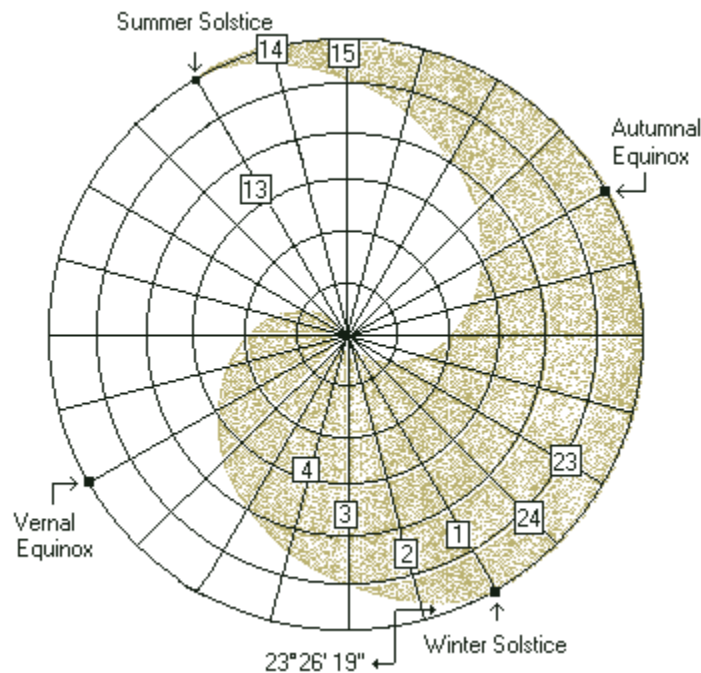
From Winter Solstice to Summer Solstice, the shadow lines are drawn from the center of the circle to the boundary. From Summer Solstice to Winter Solstice, the shadow lines are drawn from circle boundary to the center, because ancient Chinese believed that Chi Energy goes different directions right after Summer Solstice and Winter Solstice.

After connecting each lines and dimming Yin part from Summer Solstice to Winter Solstice, the chart will look like this.
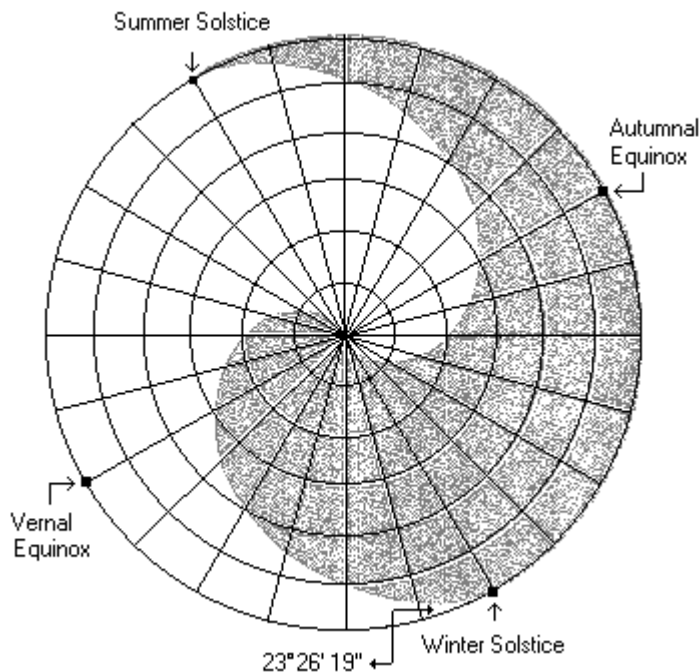
The ecliptic angle 23 26' 19" of the Earth can be seen in this chart.

The light colour which indicates more sunlight is called the Yang, while the dark colour is called the Yin. Yang is like man and Yin is like woman. One could not live without the other. This account for the two tiny circles at the Summer and Winter Solstices.

Thus we get our famous Chinese symbol – The Yin Yang Symbol.

Yin Yang and The Eight Characters

From the earlier section, we know that the Eight Characters consist of two rows, The Ten Stems and Twelve branches. For each character, they are also assigned whether each of them is yang or yin.

If you could remember we have discussed about the 60 combinations of the stems and branches. We said that only certain stems can be matched with certain branches. In precise, only the yang stems can be associated with the yang branches and vice versa.

The Eight characters deals with the concept of yin and yang as well as the 5 elements or Wu Xing which we will take about in the next section.

5 Elements (Wu Xing)

_____●

In the world of metaphysics, the universe is believed to be made up of 5 matters,
namely, Metal, Wood, Water, Fire and Earth. These 5 matters are also referred
to as the 5 elements or in chinese "*Wu Xing*".

These 5 elements can interact with each other and their relationship can be
explained by the two Cycles – Cycle of Birth and Cycle of Destruction.

Cycle of Birth	**Cycle of Destruction**
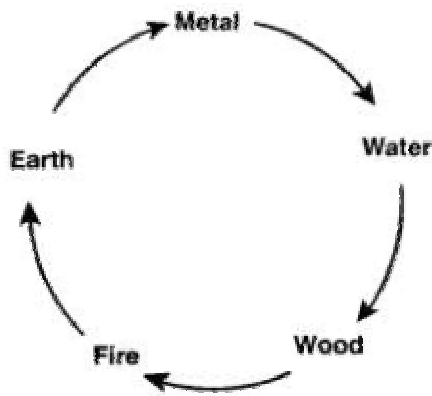
Cycle of Birth

Metal produces Water (when melted).

Water can help tree (Wood) grow.

Wood can help Fire to burn.

Fire can help to produce dust (Earth).

Earth can help mineral (Metal) to form.
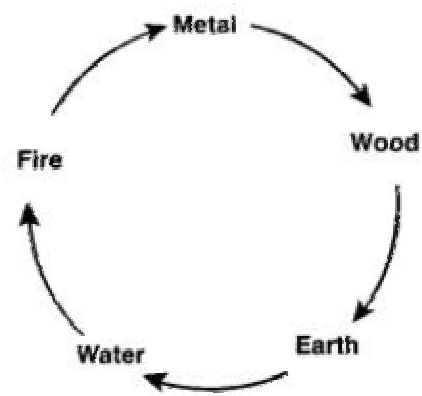
Cycle of Destruction

Metal can cut Wood.

Water can extinguish Fire.

Wood can break the ground.

Fire can melt Metal.

Earth can absorb Water.

The 5 elements is vital in Chinese astrology. Feng shui also makes use of the concept of Wu Xing. Each of these elements are also ruled by different planets. Wood is ruled by Jupiter; Fire by Mars, Earth by Saturn; Metal by Venus; and Water by Mercury. Then they are further divided into yin and yang.

5 elements and The Eight Characters

When someone finishes calculating your Ba Zi, the next thing he will do is to analysis the eight characters in it. They may look meaningless individually but when they are combined, they will reveal a lot about your life. Just like the 5 elements, some of the elements clash with the other while some assist. For example, Metal assists Water, Water assists Wood; Metal clashes with Wood etc. Thus in order to improve your life, usually the people will see which element you lack in and give advises on how you should handle it.

The thousand year calendar

Introducing the Xia Calendar

Having a calendar was a crucial instrument for a ruling dynasty in China. The Xia calendar 夏历 (xia li) existed as early as the xia dynasty (2200 BC). It is a solar calendar, closely related to the movement of the earth around the sun on the imaginary circle called the ecliptic.

The calendar in China is a combination of 2 cycles, the **Ten Celestial Stems**:

甲	乙	丙	丁	戊	己	庚	辛	壬	癸
jia	yi	bing	ding	wu	ji	geng	xin	ren	gui

and the **Twelve Terrestrial Branches**:

子	丑	寅	卯	辰	巳	午	未	申	酉	戌	亥
zi	chou	ying	mao	chen	si	wu	wei	shen	you	xu	hai

The year commences on the first day of spring, which usually falls on the 4th or 5th February in the Western calendar and ends on the last day of winter when the earth completes its cycle. The 12 months of the year are formed by dividing the ecliptic into 12 portions which are named according to the 12 earthly branches. For example, the first day of the first month of the year (also known as the first day of spring 立春 li chun), around 4 February, is expressed by the earthly branch symbolizing the wood element. The original Thousand Year Calendar contains tables with the Lunar Calendar shown against the Western calendar and Xia calendar elements. Because most Chinese follow the Lunar calendar, the point of reference is the Lunar calendar. The Thousand Year Calendar can

therefore be confusing for someone who needs to determine a Xia calendar month. The Lunar calendar also needs some explaining to those not familiar with it. For instance, the start of the Lunar year is the first day of Chinese New Year. There is also an additional month every 2 to 3 years when a Lunar Leap Year (the additional month is needed to keep the shorter lunar calendar in line with the solar calendar) and "blind year" (ie. When the lunar year commences after the first day of spring – after the first day of the Xia calendar) occurs.

The present version of the Thousand Year Calendar covers a period of 120 years from 1912 to 2031. The first year for each 12-year cycle is as follows:

1912	1924	1936	1948	1960
壬	甲	丙	戊	庚
Yang Water	Yang Wood	Yang Fire	Yang Earth	Yang Metal
子	子	子	子	子
Yang Water	Yang Water	Yang Water	Yang Water	Yang Water
1972	1984	1996	2008	2020
壬	甲	丙	戊	庚
Yang Water	Yang Wood	Yang Fire	Yang Earth	Yang Metal
子	子	子	子	子
Yang Water	Yang Water	Yang Water	Yang Water	Yang Water

The sequence for each year of the 12-year period starting 1924 is :

1924	1925	1926	1927	1928	1929
甲	乙	丙	丁	戊	己
Yang Wood	Yin Wood	Yang Fire	Yin Fire	Yang Earth	Yin Earth
子	丑	寅	卯	辰	巳
Yang Water	Yin Earth	Yang Wood	Yin Wood	Yang Earth	Yin Fire
1930	1931	1932	1933	1934	1935
庚	辛	壬	癸	甲	乙
Yang Metal	Yin Metal	Yang Water	Yin Water	Yang Wood	Yin Wood
午	未	申	酉	戌	亥
Yang Fire	Yin Earth	Yang Metal	Yin Metal	Yang Earth	Yin Water

__Possible Combinations__

Because of the numerous possible combinations, it takes 60 years for the same set of year pillars to repeat itself (by comparison, a set of month pillars repeats itself after 5 years). Therefore, if you have a certain day and time, the set of four pillars will repeat itself in 60 years. However, since the same day may not appear in exactly the same month – and even if it is in the same month, the day may not be found in the same half month (whenever the day falls before or after the mid-month will make a difference of the derivation of the House of Life) – it takes 240 years before the identical four pillars appear again.

__Commencement Date & Time of a Xia Month__

How each month is divided in the Xia calendar is determined by the position of the sun on the ecliptic. Therefore the exact time when the sun is located at a certain position can be calculated to the nearest minute. For example, in the year 1995, the year of the pig began at 1524 hours or 24 minutes past 3 in the

afternoon of 4 February 1995 while the second month of 卯 (*yin* wood earthly branch) began at 0934 hours or 34 minutes after nine on the morning of 6 March 1995.

Seasons

The 12 earthly branches also form the various seasons in a year. As nature on earth changes according to the 4 seasons, the prosperity and strength of the elements also change with this natural cycle. The relationship between the xia calendar (the calendar used in the analysis of destiny) and the western calendar is shown below:

Xia Months			Element	Season	Western Months
1	寅	(yín)	*Yang* Wood	Spring	4, 5 Feb – 4, 5 Mar
2	卯	(mǎo)	*Yin* Wood	Spring	5, 6 Mar – 3, 4 Apr
3	辰	(chén)	*Yang* Earth	Spring	4, 5 Apr – 4, 5 May
4	巳	(sì)	*Yin* Fire	Summer	5, 6 May – 4, 5 June
5	午	(wǔ)	*Yang* Fire	Summer	5, 6 June – 6, 7 July
6	未	(wèi)	*Yin* Earth	Summer	7, 8 July – 6, 7 Aug
7	申	(shēn)	*Yang* Metal	Autumn	7, 8 Aug – 6, 7 Sep
8	酉	(yǒu)	*Yin* Metal	Autumn	7, 8 Sep – 7, 8 Oct
9	戌	(xū)	*Yang* Earth	Autumn	8, 9 Oct – 6, 7 Nov
10	亥	(hài)	*Yin* Water	Winter	7, 8 Nov – 6, 7 Dec
11	子	(zǐ)	*Yang* Water	Winter	7, 8 Dec – 4, 5 Jan
12	丑	(chǒu)	*Yin* Earth	Winter	5, 6 Jan – 3, 4 Feb

According to the xia calendar, the year begins with spring, which is the most prosperous season for wood as all plant life thrive in spring. During the summer months if may, june and july, fire, being associated with summer, are when leaves fall (ie the wood element weakens) and metal, which destroys wood, becomes strongest. Finally, during the winter months of November, December and January, with ice and snow reigning, water is the strongest element.

	Metal	Wood	Water	Fire
Spring	die	prosper	weak	born
Summer	born	weak	die	prosper
Autumn	prosper	die	born	weak
Winter	weak	born	prosper	die

The above table shows the strength of the five elements during the various seasons. The 5th element of earth is neutral and it's presence is felt throughout the year. However, earth's influence is felt most strongly during the last month of each season, during the transition into the next season. During spring when wood is strongest, metal cannot "survive" as, according to the cycle of destruction, wood exhausts the conflicting energy of metal. Thus metal characteristics will not be able to manifest themselves during this season. Water influence is weak during spring as water is needed to nourish the abundance of wood, trees and plants while the fire element, which "died" in the winter season of strong water, is rekindled with the help of strong wood.

How hours are counted

Hours are counted in double-hours, beginning at 11:00pm just before midnight. The southern gate of the imperial palace in Peking is called wumen 午門, according to the branch wu 午 corresponding to the south. There are also other animals connected with the 4 cardinal points. The black dragon (xuan wu 玄武) symbolizes the north, the green dragon (qing long 青龍) the east, the red bird (zhu que 朱雀) the south, and the white tiger (bai hu 白虎) the west.

The begin of the year changed during early history from dynasty to dynasty. During the zhou dynasty, the year began with the lunar month that contained water solstice (zi), today the year starts 2 months after the full moon that follows the winter solstice (yin).

Lunar Calendar

In general, a lunar calendar, wherein a month corresponds to the cycle of phases of the moon, makes sense in a society where there is little artificial lighting, and the presence or absence of a bright moon makes a big difference to nocturnal activity. On the other hand, a solar calendar, with the year anchored to the solstices and equinoxes, more realistically reflects our experience with seasons, and facilitates discussing longer-term historical phenomena (like how old people are, or when the mortgage will need to be paid off).

By the middle of the 2nd millennium BC, Chinese observers had concluded that the solar year was pretty nearly 365.25 days long. (The actual length is a hair shorter, which is why in the international Gregorian calendar, although we create a Leap Year by adding February 29 in years equally divisible by 4, we skip Leap Year in centennial years, unless they are equally divisible by 400). Each cycle of the moon is very close to 29.5 days long. To accommodate the half day, some Chinese months are 29 days long and some 30 days long. That part was easy. The hard part came (as in all calendars) in trying to make lunations fit the length of the solar year:

    1 year = 365 days
    12 lunar months = 29.5 x 12 = 354 days (11 days short per year)

In other words, there are (365.25 ÷ 29.5 =) 12.3813559322… lunar months per year. That is not a very felicitous number if you want to make a calendar that fits the movement of both celestial bodies. (In our own calendar we ignore this problem and let the moon go through its phases without regard to the days of our

artificial "months").

Since each solar year is about a third of a lunar month longer than 12 lunar months, one could imagine reducing the error by adding an extra month each third year:

>3 years = 365.25 x 3 days = 1,095.75 days
>37 months = 29.5 x 37 = 1091.5 days
>difference = 4.25 days in three years, 1.4167 days per year)

That is still a relatively large error. The problem was partially solved, probably by about the Spring & Autumn Period (770-476 BC) by using a cycle of 19 years, in seven of which intercalary months were inserted:

>19 years = 365.25 days = 6,939.75 days (6,935 if one ignores the quarter days)
>19 years x 12 months = 228 months, plus 7 intercalary months = 235 months
>235 months x 29.5 days = 6,932.5 days

This still involved an error of 7.25 days in 19 years, or over a third of a day per year.

The Modern Chinese Lunar Calendar

The modern Chinese lunar calendar, which seems to have developed sometime in the third century BC, still designates some months as long (30 days) and some as short (29) days. This it is linked to the Chinese solar calendar, which of course does not correspond to the Gregorian calendar. And this brings us to the Chinese solar calendar.

The Chinese solar calendar is based on the movement of the sun over 24 named points 15 degrees apart on the 360-degree solar ecliptic. (The points are usually called "solar terms" in English. The names of the terms are given at the bottom of this page. Each of them falls within a day or two of the same date in the Gregorian calendar each year) Solar movement over the ecliptic is such that the points are 15.2 days apart (total 364.8 days).

Now here is the ingenious part: It takes the sun (15.2 x 2 =) 30.4 days to move from one solar term, across the next, and land on the one after that. That is slightly longer than a lunar month. Therefore, whereas most lunar months will contain two solar points, a few lunar months will contain only one. This triggers the insertion of an immediate additional, "intercalary" lunar month (rùnyuè 閏月). Lunar months are numbered rather than named. Although the intercalary month receives the same number as the preceding month (preceded by the character rùn 閏), no festivals associated with that month are repeated. Indeed, intercalary months have a reputation for being rather dreary, since there are no festivals at all associated with them, and some people even think of them as being generally

times of bad luck.)

The effect of inserting the intercalary months based on the error between the lunar and the solar cycles is to provide a constant correction for the misfit between the two calendars. This device has kept the lunar calendar reasonably well linked both to the phases of the moon and to the real solar year for something over two millennia. Perhaps because of its associations with the workings of the cosmos, calculation of the calendar was an imperial government prerogative until the XXth century, and working it out for yourself and publishing your own calendar was considered an act of treason.

Table of Solar Terms

Approximate Gregorian Month & Day	English Name	Chinese Name
0205	Spring Begins	lìchūn 立春
0219	Rains	yǔshuǐ 雨水
0305	Insects Awaken	jīngzhé 驚蟄
0320	Vernal Equinox	chūnfēn 春分
0405	Clear and Bright	qīngmíng 清明
0420	Grain Rain	gǔyǔ 穀雨
0505	Summer Begins	lìxià 立夏
0521	Grain Buds	xiǎomǎn 小滿
0606	Grain in Ear	mángzhòng 芒種
0621	Summer Solstice	xiàzhì 夏至
0707	Slight Heat	xiǎoshǔ 小暑
0723	Great Heat	dàshǔ 大暑
0807	Autumn Begins	lìqiū 立秋
0823	Heat Stops	chǔshǔ 處暑
0908	White Dews	báilù 白露
0923	Autumn Equinox	qiūfēn 秋分
1008	Cold Dews	hánlù 寒露
1023	Hoar Frost Falls	shuāngjiàng 霜降
1107	Winter Begins	lìdōng 立冬
1122	Light Snow	xiǎoxuě 小雪
1207	Great Snow	dàxuě 大雪
1221	Winter Solstice	dōngzhì 冬至
0106	Slight Cold	xiǎohán 小寒
0121	Great Cold	dàhán 大寒

Deriving the four pillars of destiny

The four pillars of destiny contains the eight characters and they are namely the hour pillar, the day pillar, the month pillar and the year pillar. As we have mention earlier, the eight characters comprises of the ten heavenly stems and twelve earthly branches. Each heavenly stem is paired with an earthly branch, forming a 'pillar'. They are demonstrated in the chart below.

Hour Pillar	Day Pillar	Month Pillar	Year Pillar
Yin Water (Gui)	**Yin Metal (Xin)**	**Yin Wood (Yi)**	**Yang Wood (Jia)**
癸	辛	乙	甲
Snake **(Yin Fire Si)**	**Pig** **(Yin Water Hai)**	**Sheep** **(Yin Earth Wei)**	**Dragon** **(Yang Earth Chen)**
己	亥	未	辰

The Pillars above represent the Hour of the Yin Water Snake, on the Day of the Yin Metal Pig, during the Month of the Yin Wood Sheep, in the Year of the Yang Wood Dragon. It relates to the 1st of August 1981 1964 between the hours of 9-10 in the morning.

Since we have touched on what the 22 Chinese characters in the stems and branches stands for, we can start learning on how to derive the eight characters, which is also referred to as the four pillars of destiny. The four pillars of destiny can be determined using the system invented by Wade in the 19th century. This system is further simplified by Derek Walters.

Calculating the Year Pillar

First we shall look at how to calculate the year pillar as it is the easiest to be begin with.

Table A

01 Wood Rat	13 Fire Rat	25 Earth Rat	37 Metal Rat	49 Water Rat
02 Wood Ox	14 Fire Ox	26 Earth Ox	38 Metal Ox	50 Water Ox
03 Fire Tiger	15 Earth Tiger	27 Metal Tiger	39 Water Tiger	51 Wood Tiger
04 Fire Rabbit	16 Earth Rabbit	28 Metal Rabbit	40 Water Rabbit	52 Wood Rabbit
05 Earth Dragon	17 Metal Dragon	29 Water Dragon	41 Wood Dragon	53 Fire Dragon
06 Earth Snake	18 Metal Snake	30 Water Snake	42 Wood Snake	54 Fire Snake
07 Metal Horse	19 Water Horse	31 Wood Horse	43 Fire Horse	55 Earth Horse
08 Metal Sheep	20 Water Sheep	32 Wood Sheep	44 Fire Sheep	56 Earth Sheep
09 Water Monkey	21 Wood Monkey	33 Fire Monkey	45 Earth Monkey	57 Metal Monkey
10 Water Rooster	22 Wood Rooster	34 Fire Rooster	46 Earth Rooster	58 Metal Rooster
11 Wood Dog	23 Fire Dog	35 Earth Dog	47 Metal Dog	59 Water Dog
12 Wood Pig	24 Fire Pig	36 Earth Pig	48 Metal Pig	60 Water Pig

Table A- 60 possible combinations of the heavenly stems and the earthly branches (animal signs). Example- For no 1, Wood Rat, wood refers to the stems while rat is one of the branches.

The Yin stems will always pair with the Yin branches and the Yang stem will always pair with the Yang branches,

Yin Branches: Ox (Chou), Rabbit (Mao), Snake (Si), Sheep (Wei), Rooster (You) and Pig (Hai).

Yangs Branches: Rat (Zi), Tiger (Yin), Dragon (Chen), Horse (Wu), Monkey (Shen) and Dog (Xu).

Table B

1900* - 37	1915 - 52	1930* - 07	1945* - 22	1960 - 37	1975* - 52	1990* - 07
1901* - 38	1916 - 53	1931 - 08	1946* - 23	1961* - 38	1976 - 53	1991* - 08
1902 - 39	1917* - 54	1932 - 09	1947* - 24	1962* - 39	1977* - 54	1992* - 09
1903 - 40	1918* - 55	1933* - 10	1948 - 25	1963* - 40	1978* - 55	1993* - 10
1904 - 41	1919 - 56	1934* - 11	1949* - 26	1964 - 41	1979* - 56	1994* - 11
1905* - 42	1920 - 57	1935 - 12	1950* - 27	1965* - 42	1980 - 57	1995* - 12
1906 - 43	1921* - 58	1936 - 13	1951* - 28	1966* - 43	1981* - 58	1996* - 13
1907 - 44	1922* - 59	1937* - 14	1952 - 29	1967* - 44	1982* - 59	1997* - 14
1908 - 45	1923 - 60	1938* - 15	1953* - 30	1968 - 45	1983* - 60	1998* - 15
1909* - 46	1924 - 01	1939 - 16	1954* - 31	1969* - 46	1984* - 01	1999* - 16
1910 - 47	1925* - 02	1940 - 17	1955* - 32	1970* - 47	1985* - 02	2000* - 17
1911 - 48	1926* - 03	1941* - 18	1956 - 33	1971* - 48	1986* - 03	2001* - 18
1912 - 49	1927 - 04	1942* - 19	1957* - 34	1972 - 49	1987* - 04	2002* - 19
1913* - 50	1928 - 05	1943 - 20	1958* - 35	1973* - 50	1988* - 05	2003* - 20
1914* - 51	1929* - 06	1944 - 21	1959* - 36	1974* - 51	1989* - 06	2004* - 21

Table B- provides us with the Stem and the Branch for all the Years that are included and these are represented as before, in numerical terms. The Years that are marked with a Red Asterisk denote that the Li Chun Spring Festival fell on February 4th and those without the Asterisk, are Years where the Li Chun Festival fell on February 5th.

The Li Chun Spring Festival marks the beginning of the year and this is another Solar Calculation, since the Li Chun also relates to one of the 24 Solar Chi. This takes place on either Feb 4th or Feb 5th. **You will need to use the year before, if you are calculating a date in January, or a date that falls before the Li Chun Festival**. We will further illustrated in the examples later.

Steps in determining the Year pillar

- Look up the year in **Table B** and note the number given
- Look up in **Table A** using this number and refer to what the number relates.

Worked Example:

To find the year pillar for 29th July 1983,

- Look at **Table** B and find 1983 as 29th July falls after the Li Chun festival.
- In **Table B**, 1983 ➔60
- Refer to **Table A**, 60 ➔ Water Pig

Since pig is Yin, the year pillar will be Yin Water Pig.

Year
Yin Water (Gui)

癸

Pig (Yin Water Hai)

亥

Worked Example:

To find the year pillar for 26th January 1983,

> ☙ Look at **Table B** and find 1982 as 26th January falls
>
> before the Li Chun festival.
>
> ☙ In **Table B**, 1982 ➜ 59
>
> ☙ Refer to **Table A**, 59 ➜ Water Dog

Since dog is Yang, the year pillar will be Yang Water Dog.

Year
Yang Water (Ren)

壬

Dog (Yang Water Xu)

戌

Calculating the Month Pillar

We need to first determine the Branch to calculate the month pillar. This can
be easily done by using the following table.

Table C

Western Month	Earthly Branch
January 5th/6th	**Ox**
February 4th/5th	**Tiger**
March 5th/6th	**Rabbit**
April 4th/5th	**Dragon**
May 5th/6th	**Snake**
June 5th/6th	**Horse**
July 7th/8th	**Sheep**
August 7th/8th	**Monkey**
September 7th/8th	**Rooster**
October 8th/9th	**Dog**
November 7th/8th	**Pig**
December 7th/8th	**Rat**

Steps in determining the branch of the month pillar

☙Using the birth month, look up the corresponding branch from **Table C**.

☙ Note that the Chinese Solar months do not begin on the 1st day of the month so if the date of the birth of the month is before the date stated in the table. Refer to the earlier month. I.e. if its 2nd of Feb, use January as it is before 5th/6th of Feb.

Since we know the branch for the month pillar now, we can now calculate the stem using the following table. This is commonly referred to as The 5 Tigers Chasing the Month and it is found in every edition of the Ten Thousand Year Calendar. The trick is to use the **Stem of the Year Pillar**, there is a special relationship between the **Year** and the **Month**.

Table D

Month	Year Stem	Year Stem	Year Stem	Year Stem	Year Stem
Branch	Yang Wood	Yin Wood	Yang Fire	Yin Fire	Yang Earth
	Yin Earth	Yang Metal	Yin Metal	Yang Water	Yin Water
	(Earth)	(Metal)	(Water)	(Wood)	(Fire)
Tiger	Yang Fire	Yang Earth	Yang Metal	Yang Water	Yang Wood
Rabbit	Yin Fire	Yin Earth	Yin Metal	Yin Water	Yin Wood
Dragon	Yang Earth	Yang Metal	Yang Water	Yang Wood	Yang Fire
Snake	Yin Earth	Yin Metal	Yin Water	Yin Wood	Yin Fire
Horse	Yang Metal	Yang Water	Yang Wood	Yang Fire	Yang Earth
Sheep	Yin Metal	Yin Water	Yin Wood	Yin Fire	Yin Earth
Monkey	Yang	Yang	Yang Fire	Yang Earth	Yang Metal

	Water	Wood			
Rooster	Yin Water	Yin Wood	Yin Fire	Yin Earth	Yin Metal
Dog	Yang Wood	Yang Fire	Yang Earth	Yang Metal	Yang Water
Pig	Yin Wood	Yin Fire	Yin Earth	Yin Metal	Yin Water
Rat	Yang Fire	Yang Earth	Yang Metal	Yang Water	Yang Wood
Ox	Yin Fire	Yin Earth	Yin Metal	Yin Water	Yin Wood

Steps in determining the stem of the month pillar

- Look up for the animal associated with the branch we have determine in the left hand column of **Table D**
- Look back at the year pillar we have calculated and use the stem of the year pillar in green to locate the stem for the month pillar.

Worked Example:

To find the month pillar for 29th July 1983,

- Look up **Table C**, and find July since it falls after the date stated
- July➜Sheep (Branch)
- Look back at Year stem calculated in the year pillar➜ Yin water.
- Using **Table D**, locate the Sheep Branch in the left hand column and look for the year stem of Yin Water at the top horizontal row.
- From the Table, we know that the month stem is Yin Earth (highlighted in yellow).

Month

Yin Earth (Ji)

己

Sheep (Yin Earth Mao)   P

未

Calculating the Day Pillar

As the stem of the day pillar represents the personal element of the person and the branch represents the marriage palace (House of Spouse), therefore the day pillar is the most important. Among the four pillars, the day pillar is the most complicated and difficult to calculate. We will be using table A and the2 tables below as well.

Table E

1900* - 10	1915 - 29	1930 - 48	1945 - 07	1960* - 25	1975 - 44	1990 - 03
1901 - 16	1916* - 34	1931 - 53	1946 - 12	1961 - 31	1976* - 49	1991 - 08
1902 - 21	1917 - 40	1932* - 58	1947 - 17	1962 - 36	1977 - 55	1992* - 13
1903 - 26	1918 - 45	1933 - 04	1948* - 22	1963 - 41	1978 - 60	1993 - 19
1904* - 31	1919 - 50	1934 - 09	1949 - 28	1964* - 46	1979 - 05	1994 - 24
1905 - 37	1920* - 55	1935 - 14	1950 - 33	1965 - 52	1980* - 10	1995 - 29
1906 - 42	1921 - 01	1936* - 19	1951 - 38	1966 - 57	1981 - 16	1996* - 34
1907 - 47	1922 - 06	1937 - 25	1952* - 43	1967 - 02	1982 - 21	1997 - 40
1908* - 52	1923 - 11	1938 - 30	1953 - 49	1968* - 07	1983 - 26	1998 - 45
1909 - 58	1924* - 16	1939 - 35	1954 - 54	1969 - 13	1984* - 31	1999 - 50
1910 - 03	1925 - 22	1940* - 40	1955 - 59	1970 - 18	1985 - 37	2000* - 55
1911 - 08	1926 - 27	1941 - 46	1956* - 04	1971 - 23	1986 - 42	2001 - 01
1912* - 13	1927 - 32	1942 - 51	1957 - 10	1972* - 28	1987 - 47	2002 - 06
1913 - 19	1928* - 37	1943 - 56	1958 - 15	1973 - 34	1988* - 52	2003 - 11

1914 - **24**	1929 - **43**	1944* - **01**	1959 - **20**	1974 - **39**	1989 - **58**	2004* - **16**

Table E- represents the Day Pillar for January 1st, for every year from 1900 to 2004. This is expressed in numerical terms which relate to Table A. As an example, in **Table E**, 1900 is given the value of 10 and by looking at **Table A**, we can see that 10 relates to the Water Rooster. This means that on January 1st 1900, the Stem and the Branch for the Day, or the Day Pillar was the Water Rooster.

Table F

Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
0	31	59	30	0	31	1	32	3	33	4	34

Table F- represents the Monthly Variable, which is what we have to add on, in order to take the month into account. January is given as zero, simply because we already know what the pillar is for January 1st, so for other dates in January, we simply add on the days. February is given as 31, because when looking at dates in February, we have to first add on the 31 days of January. Since this system is based on sequences of 60, since there are 60 combinations, or Pillars, every time we reach 60, we begin again at 1.The leap years are marked with a star.

When looking at dates in a **Leap Year** we also have to take into account that if the date is February 29th or later, we have to add 1 to our calculations. However, if the date is February 28th or earlier, we do not add 1. It is also important to deduct 1 from the date and this is because we already have the Day

Pillar for January 1st in any year. If we take January 2nd as our date, we only need to add on 1, so if we take the date and subtract 1, this allows for this.

Steps in determining the Day pillar

- ✦ Look up the year of birth in **Table E** and obtain a number

- ✦ Look up the month of birth in **Table F** and obtain a number

- ✦ Take the date of birth and subtract 1

- ✦ If the year is a leap year and after feb28th, add 1, if not add nothing

- ✦ Add the numbers obtained from the above steps together

- ✦ Deduct 60 or 120 to get 60 or less

- ✦ Use **Table A** and see what the final number obtained refer to

Worked Example:

To find the Day pillar for 29th July 1983,

- ✦ Look up 1983 in **Table E**➔ 26

- ✦ Look up July in **Table F**➔ 1

- ✦ Take 29th - 1➔28

- ✦ Leap year and date after 28th Feb? No, add nothing➔0

- ☞ Add above steps together, 26+1+28+0➔55

- ☞ Since the number is already below 60, we do not need to deduct 60 or 120

- ☞ Refer to **Table A**, 55➔Earth Horse

Since horse is Yang, the day pillar will be Yang Earth Horse.

Day
Yang Earth (Wu)

戊

Horse (Yang Fire Wu)

午

Calculating the Hour Pillar

We will be using a similar approach to calculate the hour pillar as we do when calculating the month pillar. Instead of using the year stem, we will be using the day stem to determine the hour stem. We will be using the following tables to calculate the Hour pillar.

Table G

Western Hours	Earthly Branch
11pm - 1am	Rat
1am - 3am	Ox
3am - 5am	Tiger
5am - 7am	Rabbit
7am - 9am	Dragon
9am - 11am	Snake
11am - 1pm	Horse
1pm - 3pm	Sheep
3pm - 5pm	Monkey
5pm - 7pm	Rooster
7pm - 9pm	Dog
9pm - 11pm	Pig

Hour	Day Stem	Day Stem	Day Stem	Day Stem	Day Stem
Branch	**Yang Wood**	**Yin Wood**	**Yang Fire**	**Yin Fire**	**Yang Earth**
	Yin Earth	**Yang Metal**	**Yin Metal**	**Yang Water**	**Yin Water**
	(Earth)	(Metal)	(Water)	(Wood)	(Fire)
Rat	Yang Wood	Yang Fire	Yang Earth	Yang Metal	Yang Water
Ox	Yin Wood	Yin Fire	Yin Earth	Yin Metal	Yin Water
Tiger	Yang Fire	Yang Earth	Yang Metal	Yang Water	Yang Wood
Rabbit	Yin Fire	Yin Earth	Yin Metal	Yin Water	Yin Wood
Dragon	Yang Earth	Yang Metal	Yang Water	Yang Wood	Yang Fire
Snake	Yin Earth	Yin Metal	Yin Water	Yin Wood	Yin Fire
Horse	Yang Metal	Yang Water	Yang Wood	Yang Fire	Yang Earth
Sheep	Yin Metal	Yin Water	Yin Wood	Yin Fire	Yin Earth
Monkey	Yang Water	Yang Wood	Yang Fire	Yang Earth	Yang Metal
Rooster	Yin Water	Yin Wood	Yin Fire	Yin Earth	Yin Metal
Dog	Yang Wood	Yang Fire	Yang Earth	Yang Metal	Yang Water
Pig	Yin Wood	Yin Fire	Yin Earth	Yin Metal	Yin Water
Rat	Yang Water	Yang Wood	Yang Fire	Yang Earth	Yang Metal

Table H- commonly referred to as The 5 Rats Chasing the Clock and like the other table, it is also found in every edition of the Ten Thousand Year Calendar. The trick to this, is to use the **Stem of the Day Pillar** because as you will see from the following table, there is a special relationship between the **Day** and the **Hour.** It starts with the Rat and ends with the Rat and this is because a new day

begins at midnight. The first Rat relates to midnight up to 1 am and the second Rat, relates to 11pm to midnight.

Steps in determining the Hour pillar

- Look up **Table G** using the time of birth to derive the Branch of the Hour pillar

- Look at the vertical left column of **Table H** and locate the Branch determined in step one.

- Look back at the day pillar we have calculated and use the stem of the day pillar in green at the top horizontal row to locate the stem for the month pillar.

Worked Example:

To find the Hour pillar for 11.30 am 29th July 1983,

- Look up **Table G** for 11am-1pm➔Horse

- Look back at Day stem calculated in the Day pillar➔ Yang Earth

- Using **Table H**, locate the Horse Branch in the left hand column and look for the day stem of Yang Earth at the top horizontal row.

- From the Table, we know that the Hour stem is Yang Earth (highlighted in yellow).

Hour
Yin Earth (Wu)

戊

Horse (Yang Fire Wu)

午

Case studies

Since we have learnt how to derive *Ba Zi*, we can now calculate using our own birth data using the steps taught earlier. The first case has already been worked out in the earlier part.

1. Cheong Hui Sian,

🐍 29th July 1983, 11.30am

2. Chen Jia Hui

Hour Pillar	Day Pillar	Month Pillar	Year Pillar
Yin Earth (Wu)	Yang Earth (Wu)	Yin Earth (Ji)	Yin Water (Gui)
戊	戊	己	癸
Horse (Yang Fire Wu)	Horse (Yang Fire Wu)	Sheep (Yin Earth Mao)	Pig (Yin Water Hai)
午	午	未	亥

🐍 5th January 1983, 7.07am

Hour Pillar	Day Pillar	Month Pillar	Year Pillar
Yang Fire (Gui)	Yin Water (Gui)	Yin Water (Gui)	Yang Water (Ren)
丙	癸	癸	壬
Dragon (Yang Earth Chen)	Snake (Yin Fire Si)	Ox (Yin Earth Chou)	Dog (Yang Water Xu)
辰	巳	丑	戊

3. Lydia Koh Chiat Hua

🐍 26th January 1983, 10.15pm

Hour Pillar	Day Pillar	Month Pillar	Year Pillar
Yin Earth (Ji)	Yang Wood (Jia)	Yin Water (Gui)	Yang Water (Ren)
己	甲	癸	壬
Snake (Yin Fire Si)	Tiger (Yang Wood Yin)	Ox (Yin Earth Chou)	Dog (Yang Water Xu)
巳	寅	丑	戌

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