

The Human Genetic Code and I Ching's 64 Hexagrams

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Base Sequencing and *Dui Gua* Form

By: Deyi Wang

Summary: The alternation of bases composes the DNA chain. When this chain is deconstructed into units at the triplet level, we can see that this chain is actually connected in the form of *dui gua*, or “opposing hexagrams,” as *dui* means “opposing” and *gua* means “hexagram.” Since the 1980s’ discovery that the 64 hexagrams and the 64 codons correspond perfectly, the *dui gua* form of sequencing in DNA chains once again proves the intimate relationship between DNA and the 64 hexagrams, thereby setting the stage for further analysis of the sequencing of the four bases.

Keywords: *dui gua*, *cuo gua*, *dui gua number*, *dui gong*, DNA chain, genetic code, four bases

The most meaningful part of a DNA molecule is its base. The four bases are: A (adenine), G (guanine), C (cytosine), and T (thymine). The four bases are separated into 2 different systems: purine and pyrimidine. The linking of purine and pyrimidine in DNA forms the axis of the DNA molecule, allowing the molecule to possess biological significance. The alternating sequencing of the four bases AGCT forms a double helix structure, within which the human genetic code resides. Aside from the four bases AGCT, scientists have also identified a type of nucleic acid in cytoplasm called ribonucleic acid, or RNA. Thus, in the pyrimidine system, the base T is replaced by the base U, or uracil. RNA’s chemical composition is similar to DNA; when using hexagrams to represent triplets of genetic code, the *yao xiang* expression of T and U are identical. *Yao* is a horizontal line that is either broken or solid, and *yao xiang* is the diagram that stacked *yaos* form. Six *yaos* stacked form a hexagram. When genetic code (also known as codons) is expressed in the form of the 64 hexagrams, it does not differentiate between RNA and DNA.

The correspondence between the 64 hexagrams and 64 codons was successively demonstrated by Qin Xinhua, Cai Hengxi, and others in the 1980s. The first case of connecting genetics and *yi xue* outside of China was by Martin Scorsese. In his book [The Secret Key to Life](#), Scorsese discusses the genetic laws behind how the 64 hexagrams correspond to the 64 codons. In essence, the three bases in genetic code determine how amino acids are translated and arranged to compose the 64 codons. AGCT(U) expressed in *yao xiang* is the following:

A	☰	A	(少阴)	G	☷	G	(老阴)
C	☱	C	(老阳)	T、U	☴	T、U	(少阳)

Figure 1. The expression of AGCT(U) in *yao xiang*.

Every codon consists of 3 of the above. Different combinations of the 3 results in the 64 codons, or 64 hexagrams. See Figure 2 below:

G A A	T A A	A A A	C A A	G C A	T C A	A C A	C C A
G G C	T G C	A G C	C G C	G T C	T T C	A T C	C T C
G A C	T A C	A A C	C A C	G C C	T C C	A C C	C C C

G G G	T G G	A G G	C G G	G T G	T T G	A T G	C T G
G A G	T A G	A A G	C A G	G C G	T C G	A C G	C C G
G G T	T G T	A G T	C G T	G T T	T T T	A T T	C T T
G A T	T A T	A A T	C A T	G C T	T C T	A C T	C C T
G G A	T G A	A G A	C G A	G T A	T T A	A T A	C T A

G A A	T A A	A A A	C A A	G C A	T C A	A C A	C C A
G G C	T G C	A G C	C G C	G T C	T T C	A T C	C T C
G A C	T A C	A A C	C A C	G C C	T C C	A C C	C C C

Figure 2. The 64 hexagrams.

The arrangement that determines the 4 bases are: A paired with T(U), and C paired with G. By understanding how they alternate in sequencing, we can find the source of different diseases, thereby uncovering all the mysteries of life. Because the four bases have set pairings, that is, that *yin* and *yang yao* exist in opposition, the result of all sequencing must be extended in the form of *dui gua*, until the DNA chain's sequencing is complete. What is *dui gua*? *Dui gua*, translated literally, is "opposing hexagrams." In ancient times, *dui gua* was also known as "*cuo gua*," meaning that two hexagrams have completely opposite *yin* and *yang yao*. The name "*dui gua*" was created by Mr. Zhong Qilu, President of the American Yijing Society. In 1987, he visited and lectured in China, later consolidating his lecture materials into the book "Sixteen Lectures on Yijing." The book contains the "*dui gua* chart," which lists the 64 hexagrams as 32 pairs of opposing hexagrams, or *dui gua*.

Zhong also assigned a numeral to correspond to each hexagram; the numbers are in binary form and are arranged in order of top *yao* down to bottom *yao*. These kinds of numbers are called *dui gua*, and every pair of *dui gua*'s sum is 63. For instance, *qian* and *kun*, as well as *heng* and *yi*, as seen below:

乾	坤	恒	益
1 — 阳爻	0 -- 阴爻	0 -- 阴爻	1 — 阳爻
2 — 阳爻	0 -- 阴爻	0 -- 阴爻	2 — 阳爻
4 — 阳爻	0 -- 阴爻	4 — 阳爻	0 -- 阴爻
8 — 阳爻	0 -- 阴爻	8 — 阳爻	0 -- 阴爻
16 — 阳爻	0 -- 阴爻	16 — 阳爻	0 -- 阴爻
32 — 阳爻	0 -- 阴爻	0 -- 阴爻	32 — 阳爻
63+0=63		28+35=63	

Figure 3. Numbers assigned to *qian*, *kun*, *heng*, and *yi*.

Every *yin yao*, regardless of which *yao* position it possesses, is assigned a 0. Every *yang yao* is assigned a number that corresponds to the number in the *bei yao* position of the *qian gua*. *Qian* and *kun* are a pair of *dui gua*, and all *kun gua* are *yin yao*, and thus their sum is still zero. All *qian gua* are *yang yao*, the sum of which is 63. Thus, the sum of both *gua* is still 63. The two *guas*, *heng* and *yi*, are a pair of *dui gua*, the sum of *heng gua* is 28, and the sum of *yi gua* is 35. Thus, the sum of both *gua* is also 63. Each of the 64 *gua* have a number called the *dui gua* number. Aside from *dui gua*'s appearance in 16 Lectures on Yi Jing, it also appears in Zhou Yi Ben Yi and Yi Jing Ji Zhu. The “Fu Sheng 64 Hexagrams Positioning Diagram” that appears in “Zhou Yi Ben Yi” is consisted of 64 *gua* displayed in a circular fashion, for which any two ends of a diameter of the circle connects 2 *gua*. “Yi Jing Focus Diagram” lists out the 32 pairs of *dui gua*, following the ancient name of *cuo gua*. As seen from these two examples, *cuo gua* prior to the Ming Dynasty did not yet have *dui gua* numbers. It wasn't until after Zhong assigned numerical meanings to *gua*, or hexagrams, were the 64 *gua*'s meanings finalized.

In light of the fact that each *dui gua* is a polar opposing pair of *yin yao* and *yang yao*, the pattern of A(=A) and T, U(=T), as well as C(=c) and G(==G), must extend in the connection pattern of *dui gua*. As DNA chains are extensions of *dui gua*, when a DNA chain is finished forming, *yin yao* and *yang yao* must each compose exactly half of the entire chain. This is the way in which natural science and *dui gua* coincide in DNA.

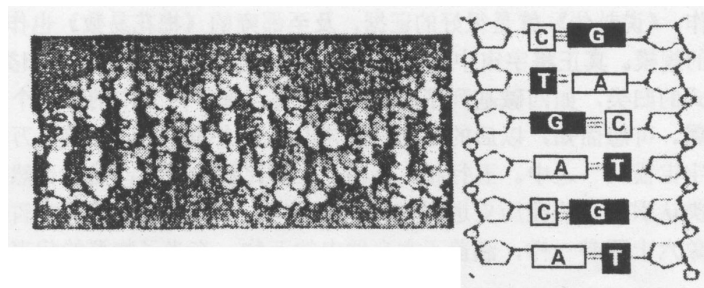


Figure 4. Nucleotide composition in human genome DNA.

Human genome DNA is consisted of the 4 nucleotides A (adenine), C (cytosine), G (guanine), T (thymine) ordered into the shape of a double helix; human genetic code exists in the double-stranded DNA structure. A gene map is essentially permutations of A, C, T, and G. By

translating the base pairs in Figure 4 into hexagrams, the following two pairs of *dui gua* are formed:



Figure 5. Translation of base pairs in Figure 4 into hexagrams.

These two pairs of *dui gua* are *fou gua* opposing *tai gua*, *ge gua* opposing *meng gua*.

Figure 4 informs us that base sequencing is expressed in the form of *dui gua*; from this, we can infer that DNA chains have all characteristics of *dui gua*:

1. Any pair of *dui gua* is a representative codon (triplet) that corresponds to the amino acid that it represents. The sum of all *dui gua* is 63, indicating that every triplet in the DNA chain is identical numerically, thereby maintaining the balance of the entire long chain.
2. Although numerically every triplet in the long chain is 63, every pair of *dui gua*'s "five elements" content is different, indicating that each triplet has a different chemical composition.
3. All opposing triplets in the DNA chain have physical properties that belong to one of the following three relationships: reinforcement, counteraction, identicalness. This can be seen from the five elements in the eight opposing hexagrams below:



Figure 6. Five-elements designation of eight opposing hexagrams.

The eight hexagrams above are the first *gua* of their respective *gong*, called the *chun gua* (as the top and bottom *gua* are the same). Along with the other 7 *guas*, the eight hexagrams constitute a unit called a *gong*. There are 8 *gong* total, divided into *yin* and *yang*. The eight *guas* in one *gong* and the 8 *guas* in another *gong* form a *dui gua*. We thus name these two opposing *gongs* as *dui gong*, as listed above: *qian gong* opposes *kun gong*, *dui gong* opposes *gen gong*, *li gong* opposes *kan fu*, and *zhen gong* opposes *xun gong*. In the DNA double helix chain, on one helix is the *qian gong gua*, and on the other helix must have the corresponding *kun gong gua*. If one helix has a *san shi gua*, the other must also be *san shi gua*. The same is true for all the other *gongs*. *Qian gong* and *kun gong*'s five elements nature is earth reinforcing metal; that of *dui gong* and *gen gong* is the same. The five elements nature of *li gong* opposing *kan gong* is the counteraction of fire by water. Lastly, the five elements natures of *zhen gong* and *xun gong* are identical.

The three relationships of reinforcement, counteraction, and identicalness are three relationships that cannot be avoided by all things in nature; biological DNA is no exception.

The character “xing” in *wu xing*, or “five elements,” means “use;” in other words, the “five elements” are five substances—metal, water, wood, fire, and earth—that are available for use by people. From the relationship between these five substances, our ancestors realized that everything in nature can be classified under the five substances, and the attributes of these five substances determine the interdependent and mutually restricting relationships that exist between these substances. As early as thousands of years ago, the ancient Chinese had already began the work of categorizing everything: Shuo Gua Zhuan is good evidence of this, as is Shao Yong’s Mei Hua Yi Shu. However, both are on a very small scale. To truly classify everything in the universe is a feat beyond human capability. However, the classification of all things is ubiquitously exists in nature, just as the ordering of the 4 bases forms a triplet that belongs to a *gua* in one of the eight *gongs*, and the five elements are thereby naturally classified. As such, we can imagine that the categorization of things in the future will not need to be a human act, but rather that all things will naturally enter the “cosmic mode” of the 64 *guas*. The relationships of reinforcement, counteraction, and identicalness between the five elements are key to the balanced development of nature, as well as the historical development of the nature known to man. The Five Elements theory not only has philosophical implications, but more importantly it possesses significant energy, just like the 64 *guas*, covering everything in nature, acting as a representative of the group as well as between the groups.

The 64 *gua* are a gigantic information model; to use this model, it is different from the natural classification of all things. Rather, it is artificially giving meaning. For example, Jing Fang provided “na jia” and “an liu qin” for the 64 *gua* during the West Han Dynasty, an example of artificially endowing meaning to the 64 *gua*. After “na jia,” each of the 64 *gua* were since then designated with one of the five elements. After “an liu qin,” *yao* positions then were assigned human relationships. Because *yao* positions were personified, the law of ethics applies when *duan gua* occurs. As such, ethics laws such as commoners not defying authority, subjects not defying rulers, fathers being able to control their sons, have all become information in the 64 *gua* information model. Germany’s Lebrez used numbers to interpret *yin* and *yang yao*, giving the 64 *gua* mathematical binary meaning. Now, the 64 codons and the 64 *gua* match perfectly, and thus DNA chains can be seen as sequencings of *dui gua*. At the same time, it can also be interpreted as 20 amino acids. Physically, the 64 *gua* can each be designated with one of the five elements. In terms of chemistry, their *yao* positioning branches have properties of biosynthesis. As all things in nature have chemical and physical roots, its biological significance is naturally included within. This is the reason why the 64 hexagrams can explain natural science.

The Mutual Reinforcement Relationships between the Five Elements in DNA

By: Deyi Wang

Summary: Each *dui gua* in DNA chains can be designated with one of the five elements, and the DNA chain formed by these *dui gua* are not disorganized combinations of the five elements. Instead, the five elements are arranged in an orderly manner, and their adjacent, reinforcement relationships are the driving forces behind the DNA chain.

Keywords: inverted *gua*, *five elements' adjacent reinforcement*, *triplet*, *genetic code*

As seen in “Base Sequencing and Dui Gua Form,” the two pairs of *dui gua* in Figure 5 are:

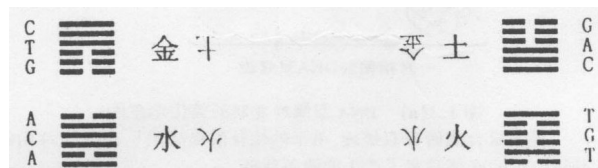
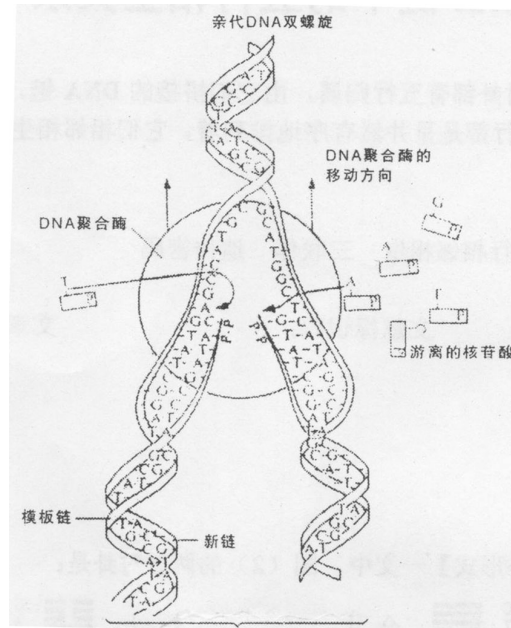


Figure 1. Pairs of *dui gua* in Figure 5 of “Base Sequencing and Dui Gua Form”

The two triplets on the left are *fou* and *ge*, and their designated elements are metal and water. The two triplets on the right are *tai* and *meng*, and their designated elements are earth and fire. The five element relationships between them are metal reinforcing water and fire reinforcing earth. Metal reinforcing water is from top to bottom, and fire reinforcing earth is from bottom to top. By inverting this DNA segment, we can see that the opposing triplets A and T have switched positions, and C and G have remained unchanged. By using these two triplets to analyze the five elements and hexagram form, we can come to the following conclusions:

1. The triplets in a DNA chain have a five-elements reinforcement relationship.
2. A DNA strand does not have a distinctive head or tail, because regardless of which end of the chain you begin at, the chain is still the connection of bases and triplets.
3. The fact that different elements are designated to each triplet in a DNA chain indicates that they differ in their chemical compositions.



Source: [Lifeline – Genetic and Hereditary Engineering](#)

Figure 2. A pair of identical DNA double helices demonstrating DNA double helix duplication

DNA polymerase unwinds the double helix, and the individual nucleotides move to the opposite side of the megabase. The bottom of the figure shows the two new chains that are produced.

The above is a genetic recombination map of *E. coli*. “Genetic recombination” is essentially the transfer, exchange, and recombination of one DNA gene and another DNA gene as a result of enzymatic catalysis, so that the organism can express new structural and functional characteristics. The double helices in the figure both have one old and one new DNA strand; this also known as semi-conservative duplication.

The two double helix strands in the lower part of the polymerase have identical base sequences, except an extra triplet was produced at the bottom of the chain on the left. The direction of movement for the polymerase to unwind the parental DNA double helix is upwards. Therefore, in the figure, we are unable to remove the correct triplet from the enzyme region and above. The new chain at the bottom of the enzyme region can be used as the research target. However, there are two points that need to be explained:

1. We take the new strand on the left and extract the triplet to the edge of the enzyme region. The triplet of the free P-P nucleotide region in the enzyme region will be used as reference in the rest of the study hereafter.
2. The new chain at the bottom is only labeled with the base T, and with no A, at the junction of the second and third rings. It is added during sequencing. The new chain triplet sequence is as follows:

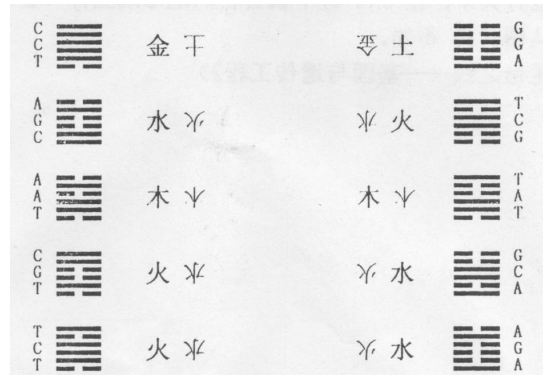


Figure 3. Triplet sequencing E. coli.

1. The reinforcement sequence of the chain on the left, from top to bottom, is: metal reinforcing water, water reinforcing wood, wood reinforcing fire; there is a repetition of the element fire. After this sequencing is reversed, the order becomes the repetition of the element of water, water reinforces wood, wood reinforces fire, fire reinforces earth. This chain contains the four elements of metal, water, wood, and fire; the element earth is missing. This element is still being catalyzed in the enzyme zone.
2. The chain on the right, from bottom to top is: the repetition of water, water reinforcing wood, wood reinforcing fire, and fire reinforcing earth. After inverting, from bottom to top, the order becomes metal reinforces water, water reinforces wood, wood reinforces fire, and the repetition of fire. This chain is lacking the element metal, which is being catalyzed in the enzyme zone.
3. It is believed that the repeated elements are the first of the next five-elements interval.

If Figure 2 in “Base Sequencing and Dui Gua Form” was not sufficient to prove that the relationship between the triplets in a DNA strand have a five-elements mutual reinforcement relationship, then the adjacent mutual reinforcement relationship between the triplets in this chain show that Figure 2 is not merely a coincidence. All the features of this new chain are described in the analysis of Figure 2, so we will not discuss further here.

In order to understand how the triplet of the free (P-P) segment of the enzyme region is related to the new chain, we will now take two triplets in the free segment to see the effect.

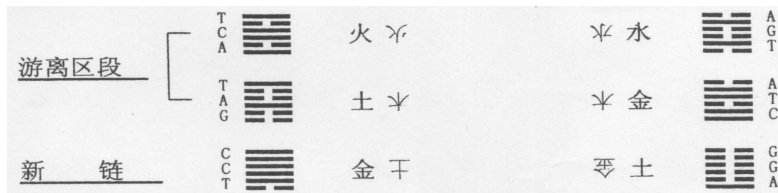


Figure 4. Triplets in free segment.

1. The relationship formed between the triplet of the free left section and the new chain is: from top to bottom, fire reinforces earth, earth reinforces metal. After inverting, this becomes: earth, then wood reinforcing fire. Although in the downwards direction an adjacent mutually reinforcing relationship has already been formed, when inverted a counteraction relationship is formed, indicating that the nucleotides in the free segment

have not fully catalyzed to maturity yet. However, it is undoubted that ultimately both downwards and inverted directions should be mutually reinforcing, as T, A, and G and the new chain have already completed a full five-elements connection in the direct direction, forming a segment completed with all five elements.

2. The triplet on the right and the triplet on the left are largely the same, except that the five elements of the triplets are different.

From Figure 2 in “Base Sequencing and Dui Gua Form” and Figure 1 in this article, we can not only see that every triplet has its own five-elements positioning, but that all adjacent triplets have mutual reinforcing relationships, thereby forming the mutually reinforcing relationship present throughout the DNA chain both directly and after inversion.

What are the functions of these features in the DNA chain? There are several significances:

1. We can go from single pairs of base sequencing to triplets, in order to improve the efficiency of manual sequencing.
2. The mutual reinforcement relationship between the five elements designated to triplets in the DNA chain allow the DNA chain to exhibit a pattern that can be followed. It is easy for wrong links to be mixed in the sequence, even if just an error in a pair of bases, and it would destroy the five-elements mutual reinforcement pattern of the entire chain.
3. The fact that triplets are designated with one of the five elements can allow us to determine a s range to select a *gua* from. For example, if one of the triplets in a DNA chain is of wood element, then its succeeding triplet’s element must be fire. Thus, we can go directly to the *li gong* to select the *gua*. However, *li gong*’s eight *gua* may not all be able to fulfill the necessary five-elements mutual reinforcement relationship after the chain is inverted, and thus the scope of the selection range for the correct *gua* is further narrowed.

The above three points are the significances of the five-elements designation of triplets in the DNA chain.

The theory that DNA chains can have both direct and inverted forms, called “inverted *gua*,” has long existed since ancient China. “Inverted *gua*” is essentially when an upright *gua* becomes another *gua* after becoming inverted, the changed hexagram thereby changing the five-element attribution accordingly. We can see that all the scientific verification of “inverted *gua*” since the establishment of the “inverted *gua*” theory has been fully corroborated by what we found in the DNA chain. The fact that the triplets in DNA chains have five element characteristics is something that we could have expected in advance. However, the way in which the triplets’ elements mutually reinforce so orderly, even forming a mode of operation, was something we had never expected. As such, we have used the 64 *gua* and the five elements principles to further explore DNA, allowing us to see the clear, whole picture of the DNA chain in terms of the hexagrams and their five-elements structures, as well as to derive the basic orientation of triplet sequencing. In the next section, we will continue to use inverted *gua* to explore mystery of triplet sequencing.

The Five-Elements Linkage System in DNA Chains

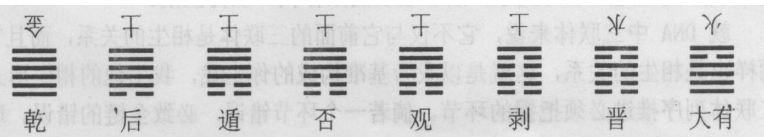
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Summary: Most of the 64 *gua*, with the exception of a few, take on a different hexagram structure and thus different five-elements designation after inversion. These *guas* that possess two different hexagram structures inherently have 2 different five-element designations. It is due to this comprehensive nature that they are able to miraculously and accurately reflect the shape of the DNA strand. The unimpeded mutual reinforcement relationship existing both directly and inversely in the DNA chain is not a result of random linking of triplets. Although there is definitely technically significant, it is not the main problem. The key here is a model that can facilitate linkages; in this case, it is the model that is structured by inverted *guas*.

Keywords: *zong gua, five-elements linkage system*

In “The Mutual Reinforcement Relationships between the Five Elements in DNA,” we discussed inverted hexagrams, and now we will start from inverted *gua* to explore its webs of five-element linkages. Please see Figure 1 below:

Inverted *qian gong* five-element
Qian gong eight trigrams (metal)
 Name of *gua*



Inverted *dui gong* five-element
Dui gong eight trigrams (metal)
 Name of *gua*



Inverted *li gong* five-element
Li gong eight trigrams (fire)
 Name of *gua*



Inverted *zhen gong* five-element
Zhen gong eight trigrams (wood)
 Name of *gua*



Inverted *xun gong* five-element
Xun gong eight trigrams
 Name of *gua*



Inverted *kan gong* five-element
Kan gong eight trigrams
 Name of *gua*



Inverted *gen gong* five-element
Gen gong eight trigrams
 Name of *gua*

Inverted *kun gong* five-element
Kun gong eight trigrams
 Name of *gua*



Figure 1. Inverted *guas* and five-element linkages.

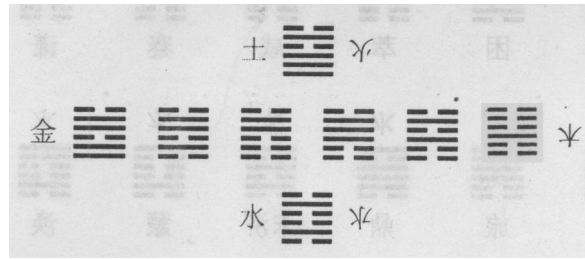
The figure above displays that the eight *guas* of *qian*, *kun*, *kan*, *li*, *yi*, *da guo*, *xiao guo*, and *zhong fu* do not change hexagram structures after inversion. The two *guas* of *gu* and *sui* have different hexagram structures after inversion, but their five-elements designations do not change. For all the other 54 *gua*, both hexagram structure and five-elements designation change after inversion. In ancient times, people named inverted *gua* “*zong gua*,” “inverted *gua*,” “reverse *gua*,” and “flipped *gua*.” “*Zong*” means “*yin* and *yang* are reversed” (*Zhou Yi Ji Zhu*). “*Zong gua*” is divided into “*zheng*,” or “authentic” *zong*, and “*za*,” or “*hybrid*” *zong*. In other words, every *gong*’s seventh *gua* (*you hun gua*) and eighth *gua* (*gui hun gua*) are both considered “*hybrid*” *zong*, while all the others are considered “authentic” *zong*. In the above figure, any *gua* whose hexagram structure and five-elements designation does not change after inversion is considered “*bu xiang zong*.” In modern times, “*zong gua*” is defined as the integration of two *gua* who have different five-elements designations.

In ancient times, why did people divide the 64 *gua* into *yin* and *yang gong*? From the perspective of the five elements, it is because the three elements of metal, wood, and earth each occupy two *gong* in the eight total *gong*. In order to differentiate strength for the same element, *yin* and *yang* are used for identification. In the five elements, water and fire have a hostile counteraction relationship, and so they are also represented by *yin* and *yang* in order to differentiate.

For each triplet in DNA, not only does it have a mutual reinforcement relationship with its preceding triplet, but it also has a mutual reinforcement relationship with its succeeding triplet. This is what constitutes a mutual reinforcement form, with B as center, of A reinforcing B, then B reinforcing C.

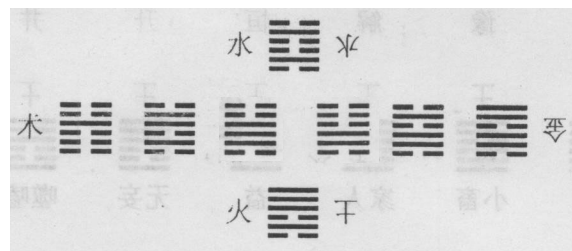
This is the form that is key to grasping how to advance in triplet sequencing. If there is any error in one link, the whole chain will be incorrect. Now, let’s examine the 64 *gua* in Figure 1 and each *gua*’s preceding and succeeding relationships.

1. 6 of the *gua* in *dui gong* have the same five-elements designation after inversion. Thus, the preceding and succeeding *gua*’s five-elements are the same. It is crucial that the *gua* that are used to determine the preceding and succeeding relationships must be able to satisfy the A reinforce B, B reinforce C in both the direct and inverse directions after linkage.



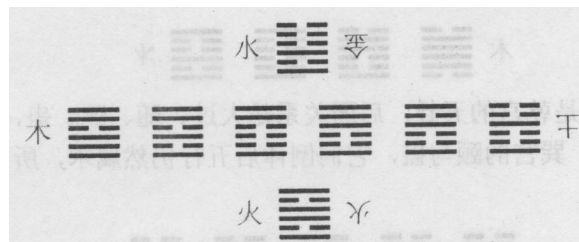
By examining the figure above, we can see that due to identical five-elements relationships between the 6 *gua* in *dui gong*, only the two *gua* of *xu* and *kan* can be used, as they are the only common qualifying (as defined above) preceding and succeeding relationships.

2. *Zhen gong* has 5 *gua* whose five-elements designation after inversion is metal; *xun gong* only has 1 *gua* – *xun gua* – whose five-elements designation after inversion is metal, thus totaling 6 *gua*.



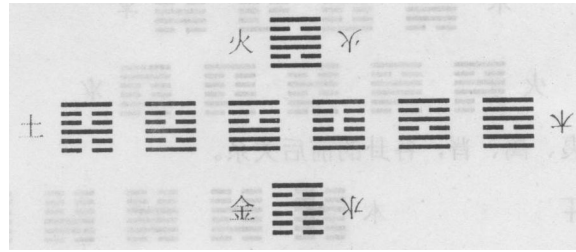
The common qualifying preceding and succeeding relationships for the 6 *gua* are the two *gua* of *kan* and *song*.

3. *Xun gong* has 5 *gua* whose five-elements designation after inversion are earth; *zhen gong* only has 1 *gua* – *zhen gua* – whose five-elements designation after inversion is earth, thus totaling 6 *gua*.



The common qualifying preceding and succeeding relationships for the 6 *gua* are the two *gua* of *ming yi* and *li*.

4. *Gen gong* has 6 *gua* whose five-elements designation after inversion are wood.



The common qualifying preceding and succeeding relationships for the 6 *gua* are the two *gua* of *li* and *jin*.

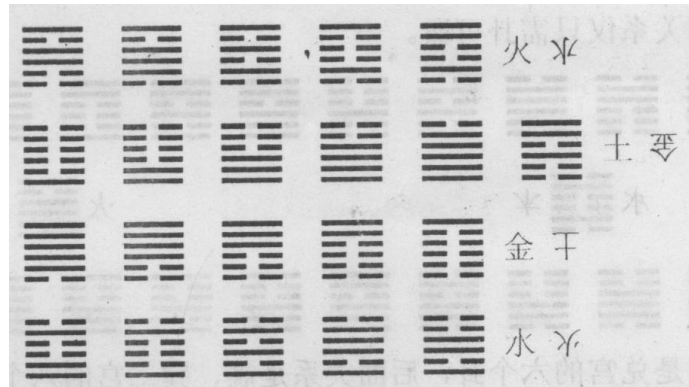
- The 5 *gua* of *qian gong* and the 5 *gua* of *kun gong* constitute a preceding and succeeding relationship, with *kun gong*'s 5 *gua* as the preceding relationship and *qian gong*'s 5 *gua* as the succeeding relationship. Therefore, for *kun gong*'s 5 *gua*, the preceding relationship must be listed out, whiel for *qian gong*'s 5 *gua*, the succeeding relationships must be listed out. *Gen gong*'s *jian gua* has the same five-elements designation as *kun gong*'s 5 *gua* after inversion, and thus it is merged into *kun gong*.

Li gong's 5 *gua*

Kun gong and *gen gong*'s 6 *gua*

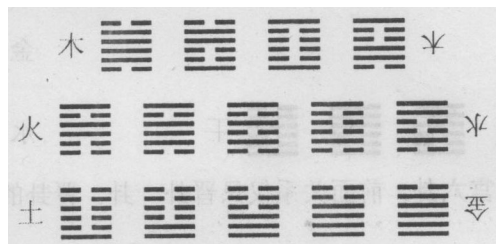
Qian gong's 5 *gua*

Kan gong's 5 *gua*



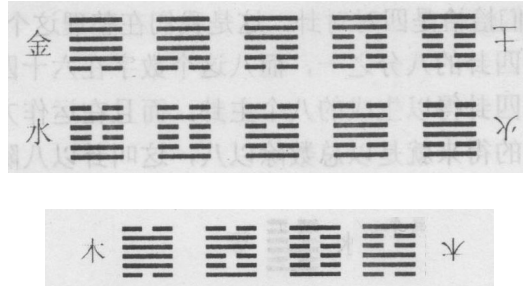
All the *gua* in the above *gua* squadrons all have 5 or 6 types of preceding and succeeding relationships (referring to the *gua* of the two *gong* of *qian* and *kun*). This form is called “a variety of preceding and succeeding relationships.”

- Li gong* has 5 *gua* whose five-elements designation after inversion is water.



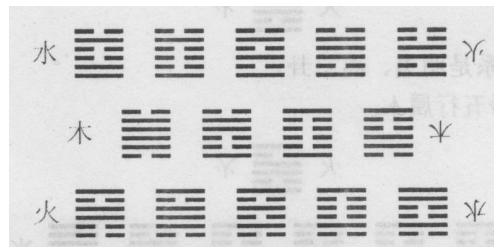
Li gong's 5 gua's preceding relationships are the 4 gua of da guo, sui, yi, gu, divided into the two gong of zhen and xun. Its succeeding relationships are the five gua of kun gong.

7. *Kan gong has 5 gua whose five-elements designation after inversion is fire.*

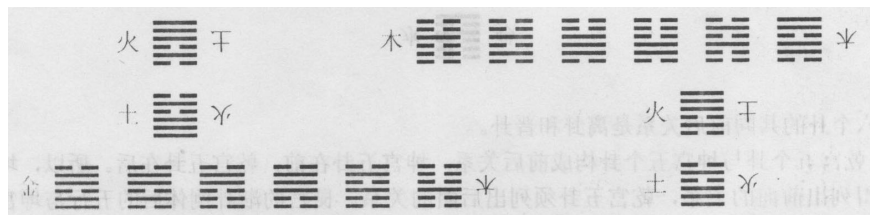


Kan gong's 5 gua's preceding relationships are qian gong's 5 gua, and its succeeding relationships are the 4 gua of da guo, sui, yi, and gu, divided into the two gong of zhen and xun.

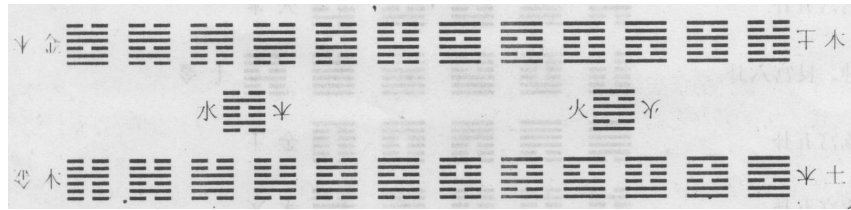
8. *Zhen gong's gua of da guo and sui, as well as xun gong's gua of yi and gu, all retain the same five-elements designation of wood. Therefore, their preceding and succeeding relationships are different from that of other gua in mu gong.*



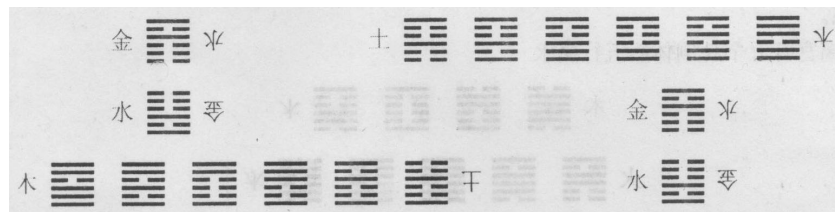
9. Below are the preceding and succeeding relationships of the gua of xu, kan, song, ming yi, li, and jin.



Xu gua's succeeding relationships are the 6 gua of the two gong of zhen and xun; it only has one preceding relationship – song gua. Song gua's preceding relationships are the 6 gua of the two gong of zhen and xun; it only has one succeeding relationship of xu gua.



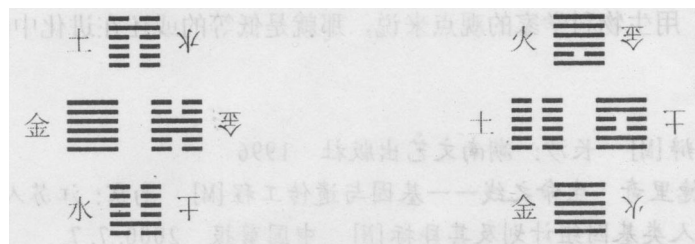
Kan gua's preceding relationships are the 6 gua of dui gong, and its succeeding relationships are the 6 gua of the two gong of zhen and xun. Li gua's preceding relationships are the 6 gua of the two gong of gen and xun, and its succeeding relationship is the 6 gua of gen gong.



Ming yi gua's succeeding relationships are the 6 gua of xun gong, and its preceding relationship is only one – jin gua. Jin gua's preceding relationship is the 6 gua of gen gong, and its succeeding relationship is only ming yi gua.

In order to name the preceding and succeeding relationships of triplets listed out above, we will call it the “five-elements linkage system in DNA chains,” simplified as the “five-elements linkage system.” In this system, there are 56 *gua* that already have their own preceding and succeeding relationships. There are still 8 *gua* that have yet to enter this system – they are the 8 *gua* of *qian*, *kun*, *xiao guo*, *hong hu*, *bi*, *shi*, *tong ren*, and *da you*. These 8 *gua* that have been excluded from the system are not solo *guas*. Instead, they turn out to be exactly 4 pairs of *dui gua* – which is something that we had not expected prior to arranging the system. The number of excluded *gua* was 8, which is one-eighth of the 64 *gua*; the number eight is a significant number in the 64 *gua* system. Not only does it represent the 8 main *gua* that construct the 64 *gua*, but operationally, there are many other aspects that relate to the number eight. For instance, according to the time method of *qi gua*, the derivation method of the *gua* is dividing the total number by eight. This is called “dividing *gua* by eight.”

However, why have they been excluded from the five-elements linkage system? The reason is that they do not have preceding and succeeding linkage ability in the DNA chain. Instead, they can only form a very short DNA chain. Below is their chain formation showing *qian gua* and *xiao guo gua's* preceding and succeeding relationships, as well as *kun gua* and *zhong fu gua's* preceding and succeeding relationships.



Bi gua and *da you gua*'s preceding and succeeding relationships, when seen from the direct direction, have a coherent five-elements mutual reinforcement relationship. However, after inversion, they cannot form a coherent mutual reinforcement relationship. If their preceding or succeeding relationship is removed, then both the direct and inverse directions can have coherent mutual reinforcement relationships. This demonstrates that *bi gua* and *da you gua* only have the ability to link on one end, and *shi gua* and *tong ren gua* only have the ability to link in one direction. However, on the hand, *shi gua* and *xiao guo gua* can be linked, and *tong ren gua* and *kun gua* can be linked. Additionally, *qian gua* can also be listed after *xiang bi gua*, and *kun gua* can also be listed in front of *da you gua*. However, in general, these 8 *gua* are unable to be connected into a coherent chain that encompasses all five elements.

It cannot be said that these 8 *gua* that have been excluded from the five-elements linkage system are completely irrelevant from biological genes. They can also each form other areas of genetic organization. They happen to be four pairs of *dui gua*, and thus if they aren't excluded out in pairs, and instead damage the integrity of the twenty amino acid codes, then we may doubt the reliability of the "cosmic mode" of the 64 *gua*. Because the number of *gua* that are excluded is odd, this would cause an imbalance in the five-elements linkage system. With the loss of 20 amino acids, the protein cannot be completely coded (the amino acids corresponding to the 8 codons that are excluded are all targets of merging, and thus they do not damage the integrity of the 20 amino acids).

In the second section, we used the five-elements method to discover the five-elements representation in the new chain. In this chapter, we built on the above and organized a framework for triplet sequencing. This framework has the following characteristics:

1. We found eight *gua* that do not have linkage ability in the 64 *gua*.
2. In this framework, some triplets have a variety of preceding and succeeding relationships, while some other triplets only have one preceding and one succeeding relationship, creating a narrow bridge across the triplet. This indicates that the number of times the 20 amino acids appear in the DNA strand is not balanced, perhaps because the frequency of sequencing differs, and thus resulting in differences in the genetic natures of different organisms.
3. The reason why the eight excluded *gua* are unable to be have continuous preceding and succeeding relationships is that they lack the element of wood. If we force the use of the *guas* in the two *gongs* of *zhen* and *xun* to use as their preceding and succeeding linkage relationships, in the direct direction the five-elements mutual reinforcement relationship seems to be intact. However, when inverted, the five-elements become disordered and chaotic, the reason being that the two *gongs* *zhen* and *xun*'s *guas* do not have the elements of water and fire after inversion.

The theory of five-elements mutual reinforcement is demonstrated in the human body structure in the fact that the lung reinforces the kidney, the kidney reinforces the liver, the liver reinforces the heart, and the heart reinforces the stomach. In terms of the five elements, this is metal reinforces water, water reinforces wood, wood reinforces fire, fire reinforces earth. As such, the fact that every link in human DNA chains form five-elements reinforcement relationships does not come as a surprise. However, regardless of whether it is humans or other organisms, their own five-elements mechanism cannot become chaotic. If it becomes chaotic, then it indicates that a lesion has occurred. If an organism's five elements are incomplete, then in the perspective of biologists, this means that the creature in question is either a simple organism or an organism that is still evolving.

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Appendix 1: The Genetic Code Breakdown of the Green Fluorescent Protein

绿色荧光蛋白

A	A	G	C	C	A	A	T	A	C
T	C	A	A	G	A	C	G	C	G
G	C	C	C	C	G	C	G	C	C
A	G	C	A	G	C	A	C	T	T
G	G	A	A	T	C	C	A	A	A
C	G	G	G	G	G	C	C	C	C
A	G	C	T	G	A	G	A	G	C
A	A	A	T	G	C	G	C	G	C
G	G	C	C	C	C	C	C	C	C
G	G	G	A	G	C	A	C	G	G
G	T	G	G	A	T	A	T	A	A
C	C	C	C	T	G	G	C	T	C
G	C	C	G	G	A	C	G	G	C
A	C	A	T	C	A	T	T	C	A
G	C	C	G	C	G	G	G	A	C
G	A	G	T	A	T	C	A	G	A
A	T	T	C	C	C	C	C	G	G
G	C	A	C	C	C	C	C	G	G
C	C	A	G	T	A	G	A	C	A
T	T	A	C	A	T	T	C	T	A
G	G	C	C	C	C	G	C	T	A
T	G	G	G	G	T	C	C	C	G
T	G	A	G	G	G	C	A	A	A
C	C	C	G	C	C	C	G	G	G

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湖南省泸溪县武沅开发公司用笺

C==	G==	T==	A==	G==	A==	A==✓	A==
A== 青	A== 吸 亮	T== 映	C== 爽	A== 泰	A== 差	A== 常	A== 常
C==	A== 亮	C==	C==	C==	G==	C==	C==
G==	G==	T==	C==	A==	G==	A==✓	T==
A== 泰	G== 怡	T== 映	G== 学	C== 共	G== 福	T== 免	A== 大 高
C==	C==	C==	C==	C==	C==	C==	C==
T==	T==	A==	G==	C==	A==	C==	A==
T== 映	A== 谷 田	A== 差	C== 大 在	T== 否	T== 免	T== 否	A== 常
C==	G==	G==	C==	G==	C==	G==	C==
T==	G==	G==	G==	G==	G==	G==	A==
T== 映	T== 加 林	A== 泰	A== 决	T== 孩	A== 泰	G== 坤	G== 书✓
C==	C==	C==	G==	C==	C==	G==	C==
A==	C==	G==	G==	A==	T==	C==	C==
A== 差	A== 浙	A== 泰	T== 孩	A== 常	T== 映	A== 十 高	A== 高✓
G==	G==	C==	G==	C==	C==	C==	C==
T==	G==	G==	A==	C==	A==	A==	A==
C== 青	A== 津	C== 怡	A== 差	G== 学	A== 差	A== 差	A== 常✓
G==	G==	C==	G==	C==	G==	G==	C==
G==	C==	A==	T==	A==	G==	C==	G==
C== 在	G== 学	A== 常	T== 映	T== 免	A== 津	T== 否	G== 加 林✓
C==	C==	C==	C==	C==	G==	G==	C==
A==	A==	T==	G==	G==	G==	G==	T==
T== 常	C== 大	A== 大 高	A== 津	A== 决	A== 泰	A== 津	A== 差
G==	C==	C==	G==	G==	C==	G==	T==
C==	A==	A==	G==	C==	G==	T==	A==
C== 乾	T== 免	A== 差	G== 怡	T== 否	G== 怡	A== 谷 田	T== 免
C==	C==	G==	C==	G==	C==	C==	C==

Appendix 1 (cont.): The Genetic Code Breakdown of the Green Fluorescent Protein

湖南省泸溪县武沅开发公司用笈

53	A-- T-- G--	A-- A-- G--	A-- T-- C--	G-- A-- C--	G-- G-- C--	A-- A-- C--	C-- T-- G--	G-- A-- T--
54	G-- C-- C--	G-- T-- G--	G-- A-- G--	C-- A-- C--	G-- A-- C--	C-- A-- C--	A-- G-- C--	AC-- CA-- AC--
	G-- A-- C--	A-- A-- C--	G-- A-- C--	T-- A-- C--	G-- G-- C--	T-- A-- C--	A-- A-- A--	A-- T-- G--
	A-- A-- G--	T-- T-- C--	G-- G-- C--	C-- A-- G--	C-- C-- C--	C-- T-- G--	G-- A-- C--	G-- T-- C--
	C-- A-- G--	A-- A-- E--	A-- G-- C--	C-- A-- G--	G-- T-- G--	A-- G-- C--	C-- C-- G--	C-- T-- G--
	A-- A-- G--	A-- T-- C--	G-- T-- G--	A-- A-- C--	C-- T-- G--	A-- C-- C--	A-- A-- C--	C-- T-- G--
	A-- A-- C--	C-- G-- C--	C-- A-- G--	A-- A-- C--	C-- T-- G--	C-- A-- G--	G-- A-- G--	G-- T-- G--
	G-- G-- C--	C-- A-- C--	C-- T-- C--	C-- C-- C--	T-- C-- C--	A-- A-- G--	A-- C-- G--	AT-- CT-- CC--
	A-- T-- C--	A-- A-- C--	G-- C-- C--	A-- T-- C--	G-- A-- C--	G-- C-- C--	C-- G-- C--	GG-- CT-- CG--
161	170	179	188	197	206	215	224	

Appendix 2: The Genetic Code Breakdown of the Human KRAS Gene

湖南省泸溪县武沅开发公司用筮

1/KRAS基因

A-- T-- G--	G-- T-- T--	A-- G-- T--	C-- A-- G--	G-- A-- T--	A-- G-- G--	G-- A-- A--	G-- A-- C--
A-- C-- T--	G-- G-- A--	G-- C-- C--	A-- A-- T--	C-- C-- A--	A-- A-- G--	A-- C-- C--	A-- C-- A--
G-- A-- A--	G-- C-- T--	T-- T-- G--	C-- A-- T--	A-- C-- A--	C-- A-- A--	T-- G-- T--	G-- C-- A--
T-- A-- T--	T-- G-- T--	A-- C-- G--	T-- T-- T--	A-- T-- A--	G-- T-- A--	C-- T-- C--	G-- G-- T--
A-- A-- A--	G-- G-- C--	A-- T-- A--	G-- T-- G--	G-- A-- G--	G-- T-- A--	T-- T-- G--	C-- A-- A--
C-- T-- T--	G-- T-- A--	C-- A-- G--	G-- A-- C--	G-- A-- T--	A-- T-- T--	G-- A-- T--	G-- A-- G--
G-- T-- G--	G-- G-- C--	C-- T-- A--	G-- A-- A--	T-- C-- C--	G-- A-- T--	A-- T-- T--	G-- A-- G--
G-- T-- A--	A-- A-- G--	A-- T-- T--	T-- A-- T--	T-- A-- C--	G-- G-- A--	C-- T-- C--	T-- A-- C--

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Appendix 2 (cont.): The Genetic Code Breakdown of the Human KRAS Gene

湖南省泸溪县武沅开发公司用笺

A==坎	A==火	G==大	G==升	A==既	C==始	G==升	A==既
G==水	C==过	C==旺	A==升	A==济	C==金	A==木	A==情
T==水	T==木	C==土	T==木	A==水	T==金	T==木	A==水
G==丰	G==冲	A==随	A==	A==水	A==萃	T==晋	C==渐
C==丰	G==冲	T==随	T==	G==	T==萃	T==晋	A==渐
A==水	G==土	A==木	T==	A==水	G==金	G==金	G==土
A==萃	G==沐	A==井	C==小	G==解	G==归	C==始	G==恒
T==萃	A==沐	A==井	A==高	T==解	T==归	C==始	C==
G==金	G==金	T==木	C==木	T==解	C==金	T==金	T==木
A==比	G==怡	A==井	C==壁	A==震	C==无	T==悔	C==渐
G==	G==怡	A==水	A==壁	A==震	T==无	C==悔	A==
G==土	C==土	T==水	T==木	G==金	A==木	C==金	G==土
G==泰	T==精	A==火	T==盐	G==泰	G==震	A==水	G==渐
A==泰	T==精	C==火	A==盐	A==泰	T==震	G==水	A==
C==土	T==火	T==木	T==木	C==土	A==木	A==水	C==土
C==渐	C==读	A==既	A==水	T==坎	G==震	A==萃	T==噬
A==	T==火	A==水	A==水	C==坎	G==土	C==水	T==噬
G==土	T==火	A==水	A==水	T==坎	A==土	A==水	A==木
T==畜	T==震	T==离	G==明	G==映	A==井	G==震	G==丰
A==畜	G==震	C==离	A==明	A==映	A==	T==震	C==丰
C==土	T==火	A==火	A==水	A==水	T==木	A==水	A==水
A==萃	G==震	T==米	C==家	G==升	A==既	G==泰	A==屯
T==萃	T==震	T==米	A==家	A==升	A==济	A==泰	G==
G==金	A==木	T==火	A==木	T==木	A==水	C==土	A==水
A==比	T==耕	G==明	A==困	G==震	T==蒙	A==草	A==坎
G==	T==火	A==水	T==困	T==震	G==	C==草	G==
G==土	T==火	A==水	T==金	A==木	T==火	A==水	T==水

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Appendix 2 (cont.): The Genetic Code Breakdown of the Human KRAS Gene

湖南省泸溪县武沅开发公司用笈

T== 是	G== 丰	G== 大	C== 益	G== 竹	A== 蓬
A==	C==	C==	G==	A==	A==
T== 木	A== 水	C== 土	A== 木	T== 木	G== 金
G== 复	A== 蓬	T== 跌	A== 既	G== 师	A== 草
G==	A== 蓬	T==	A== 济	G==	C==
A== 土	G== 金	C== 土	A== 水	T== 水	A== 水
A== 因	A== 草	T== 益	C== 翠	A== 既	A== 蓬
T==	C==	A==	A==	A==	A==
T== 金	A== 水	T== 木	T== 木	A== 水	G== 金
C== 瓶	A== 屯	A== 草	A== 既	A== 蓬	T== 蒙
C==	G==	C==	A== 济	A==	G==
T== 金	A== 水	A== 水	A== 水	G== 金	T== 火
T== 耕	C== 浙	T== 唾	G== 喷	A== 蓬	G== 象
T==	A==	T== 唾	A==	A== 蓬	T==
T== 火	G== 土	A== 木	A== 水	G== 金	A== 木
A== 因	G== 师	G== 解	A== 蓬	A== 既	A== 因
T==	G==	T==	A==	A== 济	T==
T== 金	T== 水	T== 木	G== 金	A== 水	T== 金
G== 咳	G== 解	C== 益	A== 草	A== 蓬	A== 草
A==	T==	G==	T==	A==	T==
A== 水	T== 木	A== 木	G== 金	G== 金	G== 金
A== 草	G== 竹	G== 吹	A== 书	A== 蓬	T== 贡
C==	A==	A== 贡	G==	A== 蓬	A==
A== 水	T== 木	A== 水	C== 水	G== 金	A== 土
T== 高	G== 竹	A== 因	A== 既	T== 高	
C== 高	A==	T==	A== 济	C==	
A== 水	T== 木	T== 金	A== 水	A== 火	

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53 杆

第 五

第 189 杆

湖南省泸溪县武沅开发公司用筮

第 ䷗ 金木 否 ䷋ 金土 否 ䷋ 金土 夬 ䷪ 土金 需 ䷄ 土火
 同 反 正反反正 好挂
 第 ䷗ 水火 泰 ䷊ 土金 夬 ䷪ 土金 否 ䷋ 金土 兑 ䷹ 金木
 同 正反 否 ䷋ 金土 夬 ䷪ 土金
 相同

第 ䷗ 水火 需 ䷄ 土火 夬 ䷪ 金木 否 ䷋ 金土 否 ䷋
 同 相生 同 相生 林挂 好挂
 第 ䷗ 木土 归 ䷵ 金土 需 ䷄ 土火 节 ䷻ 水火 节 ䷻
 相同

需 ䷄ 土火 共 11 个 基因
 好挂 绿色荧光蛋白
 第 ䷗ 金木

总结

1. 正反相生的卦六个与同一相生的卦三个。
 2. 互卦中的第二卦与上下卦正反相生，共三个。
- 共十一个卦组基因

Appendix 3 (cont.): Author Notes on the Mutually Reinforcing Five Elements Breakdown of the Human KRAS Gene

湖南省泸溪县武沅开发公司用爻

☳ 离 木木	☱ 兑 木土	☶ 艮 土土	☲ 离 金木	☴ 巽 木金	☵ 坎 水火
☳ 离 水火	☱ 兑 水金	☶ 艮 水火	☴ 巽 水火	☵ 坎 水土	☲ 离 金木
正反	正反	同一	同一	同一	同一

☳ 离 金木	☱ 兑 金木
☵ 坎 水火	☲ 离 水火
同一	同一

总结:

1. 正反相生十二个; 同一相生十六个
2. 互卦之中二卦同一相生, 二卦正反相生的一个
3. 互卦朝一个方向同一相生的一个
4. 互卦中一与二同一相生, 二与三同一相生的一个

共计五十二个