

The Dance of Qian and Kun in the *Zhouyi* *

By Denis Mair

The fertility dance between Qian and Kun is an important structuring theme in the *I Ching*. The dance is fertile in that it generates expanding rings of images and concepts during the process of interpretation. It starts with a charged atmosphere of contrast between two primordial aspects of life. It whirls these aspects together, such that each phase of their interchange becomes an archetypal life-situation.

I use the word “dance” because the two figures line up beside each other at the beginning, and judging from the affinity of their corresponding parts, developments will surely ensue. This affinity is neither simple attraction nor simple contrast. The separation between the figures sets up a space of open possibility, and their dynamic attraction reaches across that space. The energies between them are clearly ready to intertwine---what remains undetermined is what form that intertwining will take. And what better way is there to exhibit multifarious modes of intertwining than through the motions of a dance?

Unless we recognize this theme, we miss a great deal of the meanings built into the *I Ching*'s structure. Skeptics have dismissed the symbolism implied by relations among hexagrams, trusting only the lexical definitions of *yaoci* (line statements and judgments). They do not realize that the meaningful units were intentionally placed in a matrix such that each unit's range and depth can be extended through cross-referencing with other units. There are many schemes of cross-referencing among the meaningful units; among such schemes, the most crucial is the dancelike interplay of Qian and Kun, and only through it can the intended meaning of many pivotal line statements emerge. Unless we grasp this scheme, we will mistakenly suppose that the line statements are fragmentary, and that their placement is random with relation to other line statements.

The theme of fertile interplay is hard to miss: we begin with the Qian-dragon mounting by stages to the heavens next to Kun's cluster of earthy images. The “Judgment” of Kun speaks of

the “constancy of a mare”; Kun’s fifth line (in the ruling position) refers to an earth-colored lower garment (the image of *kun* as fabric). Qian and Kun are paired right at the start, but it is a curious pairing. If we read each of their lines in isolation, they seem separate from each other. But if we examine their corresponding lines, we find a clear complementary relation.[1]

II. Recently while giving an introductory talk on the *I Ching*, I discussed the meanings of trigrams and how they are combined to make hexagrams. A member of the audience commented that the first two hexagrams Qian and Kun were clearly being mingled in every possible way to make the other hexagrams. This remark seems straightforward on the surface, but it gets to the heart of Qian and Kun’s special symbolic role. To unpack what really lies behind this remark, one needs to notice analogies between corresponding positions in different hexagrams. One needs to brood over commentaries to build up a whole structure of analogy among lines of equal polarity at corresponding positions. I wondered if it were possible simply to stumble onto such insights, and concluded that it would take quite a bit of beginner’s luck.

Actually, beginner’s luck is the best kind. If we start with the simple intuition that Qian and Kun are mingled in a dance of formal patterns, we can draw out the symbolic analogies later. It was not rare for Ming dynasty commentators to point out such analogies, for example, by saying that the Third Yang in some other hexagram echoes the Third Yang in #1 Qian. In general, they shied away from saying this was a result of Qian and Kun being mingled, perhaps because they were reluctant to literalize Qian and Kun. The theme of a mingling dance was present in their thinking (it influenced their interpretations), but for them it belonged to an implicit level, the level of contemplation or sympathetic participation.

To notice the above-mentioned analogies, we have to get an understanding of what a position means, so we start by reading all the lines in that position. Then we can use our understanding of that position to draw analogies between lines from different hexagrams. We know that the top position is the logical extreme of a situation, which shades into reversal or unraveling (or

transcendence or irrelevance), depending on the situation.

Let us look at Top Yang lines in a number of hexagrams. Top Yang in Qian is the “overreaching dragon that will have cause for regret.” The Top Yang of #23 Peeling Away is the holdout from an *ancien regime* whose support is crumbling from below. The Top Yang of #56 Traveler is the bird that burns up its own nest!

First Yang in #1 Qian is the “hidden dragon”---a dragon that coils in preparation to extend. Now look at First Yang in hexagram #3 (Difficulty at the Beginning). Here it is the initial growth stage of a deeply planted seed; it is something so grounded it can hardly start moving; it is a fief-holder who has been “planted” at a local center of power. This is related to the First Yang in #24 Renewal. In Renewal, First Yang appears within the utter stillness of Kun. This is animation from within a quiescent state, as in the *Daode Jing*: “At the limit of emptiness, being grounded in quietude, the myriad things arise, and I observe their renewal.”

How could the 20th century scholar Gao Heng, who harped on the fragmentary nature of line statements, have failed to see where these analogies among lines are leading? There are echoes among the lines, and they amplify the symbolism of each line in #1 Qian and #2 Kun. That is, the analogous lines converge upon Qian and Kun. Qian and Kun clearly function like templates for each phase of the other situations. Insofar as they are idealized templates, they are like *ein sof* in the Kabala. But they are not above it all like *ein sof*. Qian and Kun are also situations in their own right. At the moment that we meet the pure avatar of something, is that not a human situation as well? When viewed as a situation, Qian itself is like the poem by William Blake---“energy is the dance of eternal delight.” The hidden dragon, viewed against the backdrop of his essential situation, is a latent energy state measuring itself against all other states. It is a hallmark of the *Zhouyi*'s philosophy that its two most basic ideas are not suspended in limbo, nor are they stripped of associations with experience. They are idealized, six-faceted templates for situations that will emerge.

III. A dance is patterned, rhythmic movement. One of the salient patterns we discern among the hexagrams is oscillation. (A dragon moves by oscillation!) First, the whole sequence is made up of contrasting pairs, which reminds us of how a dance often balances movements with counter-movements. The hexagram sequence also shows an oscillation of yin-yang ratios[2], and other rhythms as well (such as in the placement of 3-yin-3-yang figures). [3] (See Fig. 1)

IV. Hexagram #3 is closest in the sequence to our special dance partners, so it is worth looking at closely. It's name is Zhun; "*zhun*," as mentioned above, was originally a pictograph of a seed on the point of breaking through the soil. Could the union of Qian and Kun have planted this seed that is now beginning to grow? What need is there for an ensuing courtship dance if the seed is already planted? Perhaps this is the seed of all further courtship---it will continue to grow, no matter how intermingled Qian and Kun become.

The "Treatise on the Image" for #3 says that this a time of clouds and thunder, when the superior man tries to "weave the fabric of social order." The "Treatise on the Judgment" says "...Movement within danger, and the Great prevails with constancy. Movement of thunder and rain fills the atmosphere. Heaven's creation is unformed and chaotic..." It is no surprise to see chaos ensuing from Qian and Kun's initial collision. Nor is it any surprise to find an image of fabric, when we are so close to nurturant Kun.

In the line statements, the theme of hexagram #3 deals with difficulty of movement at the beginning. Its very first line begins with the words *pan-huan*, which Jiao Hong takes to mean "firmly planted (like a boulder or large tree)," and Zhu Xi takes to mean "moving with difficulty." In any case, the slowness is due to being grounded. Subsequent lines stress halting movement or difficulties with a conveyance. To take slow, difficult steps at the beginning is a dance-like motif.

All through the hexagram sequence, many first lines have to do with placement of the feet or motions made by the feet (#4 and #21 have fetters attached to feet). In fact, bottom lines in 14

out of 64 hexagrams refer to feet or treading. The feet are emphasized more than other body parts. (Only in two hexagrams do top lines mention the word “head.”) This too has dancelike connotations---as long as the feet move, the head will take care of itself.

V. The theme of courtship/mating appears right away, in Second Yin of hexagram #3.

Appearing so soon after the pair Qian and Kun, this line suggests that we are entering into the vicissitudes of courtship and bonding between them. The third line, significantly, is about the possibility of getting lost in a forest. A fleeing deer is a common plausible image for the object of sensual pursuit. But in the dance of courtship, it is easy to lose touch with the other person. In our tangle of motivations, unless we bring along a “guide” (perhaps referring to one’s own foresight and mindfulness), it is easy to stray onto a blind path. There are certain things we would be better off not pursuing.

VI. The hexagram pair #11 & #12 marks a crucial stage in the interplay of Qian and Kun. This is borne out in several ways.

A. Trigram symbolism: Only at #11 & #12 do Qian and Kun come together as upper and lower trigrams *qian* and *kun*.^[4] The Treatise on the Judgment tells us that in #11, “Heaven and Earth are in peaceful interchange,” and in #12, “Heaven and Earth are not in interchange.” Why is it that having *qian* above represents a lack of interchange, while having *kun* above is an ideal interchange? To get an answer we must refer to the concepts of yin and yang, which were teased out of *qian* and *kun* by later philosophers. We know that yin is quiescent and tends to coalesce; yang is active and tends to expand. When yang expands out and away from yin, there is no useful interchange. Only when yang is brought within yin’s coalescence can there be optimal synergy: then yin’s quiescent state is animated from within, and yang’s potentiality finds concrete expression.

The “Judgment” of #11 Peace concludes with the words “prevalence and good fortune.” It is

“the stable interchange of Heaven and Earth” that make it possible for affairs to prevail and attain a good end. In contrast, the “Judgment” of #12 speaks of “the inhuman condition of Stagnation.” (Wilhelm translates *pi zhi fei-ren* as “In a time of Standstill, someone is not as he should be,” and Richard Lynne translates it as “evil persons in a time of Stagnation.”) My translation of *fei-ren* as “inhuman” follows the lead of the Ming commentator Zhang Huang, who believes that the lower *qian* trigram represents the unique endowments of human beings: In his *I Ching* commentary he writes: “In the Pi hexagram, Heaven and Earth are separated and no interchange takes place. The Judgment does not say ‘heaven and earth are in Stagnation,’ but instead lays the blame upon the inhumanness of humans. Why is this? It means that Stagnation is caused by weak and treacherous yin....To embrace yang [within oneself] and bear yin [without] is what makes a person human. [But] this hexagram has yin within and yang without, thus symbolizing inhuman characteristics. ‘Inhumanness’ refers to the three yin lines; the ‘persistence of a superior man’ refers to the three yang lines.”[5] In other words, Zhang Huang interprets the yang in #11 Peace as an animating, spiritualizing principle as opposed to the material characteristics of yin. This fits with Cheng Yi’s characterization of the *qian* trigram as the “heavenly nature” of human beings in his commentary on hexagram #11.

The sequence of hexagrams gives Qian and Kun the place of honor at the beginning, since they are pure, ideal types. Only in #11 & #12 do Qian and Kun combine as the trigrams *qian* and *kun* (where they are still much like themselves). Yin and yang lines mingle elsewhere, and though they continue to show characteristics of Qian and Kun, such characteristics are particularized and position-bound in other hexagrams.

In view of the earlier charged relation between pure Qian and Kun, it stands to reason that their meeting here as upper and lower trigrams would be a pivotal stage in their alchemical marriage. In the hexagram pair of Peace and Stagnation, we see the ideal of their perfect interchange, haunted by the shadow (the counterstep!) of their failure at such an interchange.

B. Verbal Imagery of the *Yaoci*: The line statements and judgments of #11 & #12 highlight the juxtaposition of *qian* and *kun* through a series of gnomic images. Most significantly, the ruling Fifth Yin of #11 refers to a marriage. “Lord Yi gives his daughter in marriage. This brings blessing and supreme good fortune.” Only a few lines in the *I Ching* use the words *qu* “take in marriage” or *gui* “give in marriage,” and they occur at significant places.[6] Here at Fifth Yin the marriage is not just any marriage: this is a diplomatic marriage from the power center to the periphery. This fits with the theme of yang humbling itself to interact with yin.[7] It is also a marriage in which the bride---the daughter of the highest ruler---humbles herself (in her manner of dress) before the bridesmaids (see Fifth Yin of #54, where Lord Yi is also mentioned). This fifth ruling line resonates with Second Yang of #11, which is the central line in the lower trigram. Second Yang speaks of tolerance for those who are uncouth and far away.[8] The wording of these two line statements confirms the yin-yang resonance between Two and Five. There is also a clear resonance in meaning between First Yang and Fourth Yin. First Yang is about everybody being lifted up together; Fourth Yin is about fluttering downward and relinquishing wealth for the sake of one’s neighbors. Resonance also operates between Third Yang and Top Yin: Third Yang receives a proverbial warning that smooth circumstances may give way to reversals; Top Yin, being at the extremity of Peace, seems to meet with reversal (“the city wall falls into the moat”) and finds it double-edged---does this mean an end to fortification building, or a state of vulnerability?

The resonance between lines in #11 is mirrored by a similar relation in #12. Second Yin tells us it is time for a lowly man to tolerate and undertake a burden. This is a counterpart to Fifth Yang’s search for hope and sense of responsibility. If First Yin is to be drawn upward, it will be together with her kind; this contrasts intriguingly with Fourth Yang, in which someone is singled out for blessings (the question of whom is left up in the air). Third Yin, with her tolerance of shame, provides support for Top Yang, in which the stagnation goes to an extreme and starts crumbling (once again ambiguously).

We can best see the crucial role of #11 & 12 if we look at Fifth Yang (at the ruling position) of hexagram #12. "Make the best of Stagnation---this means good fortune for a great man. What if it should all be lost, what if it should be lost! Tie it to a cluster of mulberry saplings."

Who would not want to make the best of standstill? The word *xiu* here is more than just "make the best of," since it can also mean "beautify" or "improve." *Xiu* can also mean "come to an end" or "take a rest from," so Wilhelm erroneously translates this line as "Standstill is giving way. Good fortune for the great man..." But if Standstill were truly nearing its end, why should the great man be alarmed? The crucial thing here is the great man's scope of concern in a difficult situation. He is concerned over loss of continuity, more than any worries over any present discomfort. Hence the repeated phrase: "What if it be lost?" The great man senses that in stagnant times a fragile thread of transmission may be broken; he assumes a position of leadership while showing concern and raising a cry. He actually tries to do something.

In this line he voices a concern, then answers with a note of hope: "Let us tie it to a cluster of mulberry trees." The word "tie" has a metaphorical meaning of "entrust our hopes." Many commentators such as Cheng Yi treat the mulberry trees as something reliable and tenaciously rooted. But what except a donkey can be tethered to a mulberry sapling? Commentators such as Jiao Hong treat the mulberries as something insecure or questionable to which we must tie our hopes.[9]

The image of mulberry saplings carries an added association: our hopes for continuance must be entrusted to the younger generation. Also, Mulberry Terrace was the name of an ancient earth altar mentioned in the *Han shu*. Evidently, earth altars were sometimes situated near groves of mulberry trees. Such earth altars may have been a site of courtship rites and dances. At any rate, it was the site of offerings to agricultural deities.

The significance of mulberry groves for courtship persisted into medieval literature: the mulberry grove was often a place where a strolling young man was smitten by the sight of a maiden picking mulberry leaves. (One rarely reads of a young man being smitten at the sight of

a girl in a rice paddy!) It was also a place to arrange a rendezvous. “Tie it to a cluster of mulberry saplings” is open to many such associations.

The philosophical *Zhouyi* is built upon fertility magic, and this line is a key gnomic utterance alluding to the union of Qian and Kun. In #11 we saw a moment of perfect interchange, highlighted in the marriage at Fifth Yin: the peace of #11 happened because *qian's* animating force was contained within *kun's* earthiness. Of course any good dance has movements and counter-movements, and here #12 makes a counter-movement which negates such a perfect interchange. This gives a special status to Fifth Yang. All the hexagrams from #3 to #64 express Qian and Kun’s fertility, but here in Fifth Yang of #12 we are nearing the extreme of non-interchange. (Top Yang, being at the extreme, must go along with the “toppling of Stagnation” for good or for ill.) In the enactment of this symbol dance, it is natural for concern to be voiced at Fifth Yang: What if the continuity be broken? Could this really be the end! Looking at the whole series of hexagrams, #12 obviously is not the end, but as a situation experienced subjectively, the threat is felt. This is perhaps the only line in the *Zhouyi* that is an emotive interjection, rather than being an objective statement. In other words, there are structural and expressive reasons for "What if it be lost" to occur here. And by the same token, tying hopes to mulberry saplings says something about the compilers' hopes for continuance of what they cared about most. Thus I believe the placement of this line statement gives evidence that sympathetic magic was a principle underlying the *Zhouyi's* compilation.

C. Other Formal Considerations: The hexagram sequence shows many oscillations in yin-yang ratios. All through the sequence, 2-4/ 4-2 oscillations are the rule. Only before and after #11 & #12 do we find a 1-5/ 5-1 alternation. In other words, something exceptional happens in the yin-yang alternation leading up to and following #11 & #12. That is, the wildest fluctuations of yin and yang occur around the point where Qian and Kun have their fateful interchange at #11 & #12. (See Fig.1)

VII. Even the placement of the hexagrams having single yin lines contrasts significantly with those having single yang lines. In the context of Qian and Kun's relationship, we can say that in single-yang hexagrams, Qian begins to get under Kun's skin. In hexagrams having single yin lines, Kun does the same to Qian in various ways. What I mean by this uncouth expression is that in each case the single yin or yang sets the tone or mood for the whole hexagram. For instance, the single yang in #15 (Humility) demonstrates humility in the way it holds its strength beneath the soil, and the single yang in #23 shows a power-holder's tenuous hold over an *ancien regime* that is ready to dissolve. In contrast, the single yin in #14 shows receptivity that allows a generous person to include everything in his vision, and the single yin in #43 holds forth an elusive goal leading toward breakthrough.

The sequential placement of these 5-1 and 1-5 hexagrams is significant for the working out of Qian and Kun's relationship. First of all, #7 & #8, with their single yang line, occur before #9 & #10, which have single yin. This fits with the idea that Qian takes the initiative. All six hexagrams having single yang lines occur at regular intervals: #7 & #8; #15 & #16; and #23 and #24. Because of this regular spacing, we can lay out the whole sequence on an 8 x 8 grid, such that these hexagrams will fall next to each other in the upper left-hand corner. (See Fig. 2) The mini-grid thus formed has seedlike properties in generating all the other hexagram pairs.[10] This regular spacing and numerically seminal nature of the single yang hexagrams does not lack a symbolic dimension. That is, when Qian is moved to impinge upon Kun to make single-yang figures, it conceives of its counterpart *sub specie aeternatis*. In other words, Qian views Kun in her eternal aspects, and begins interaction with her according to an idealizing scheme, from which he conceives that all things are produced. In contrast, most of the single-yin figures (#9 & #10; #13 & #14) occur immediately before and after Peace and Stagnation. This shows that Kun first enters into interaction with Qian when excited by hope for perfect interchange or worried over the possible failure of such interchange. Although #43

& #44 do not appear adjacent to this juncture, they do occur at a spot connected to #11 & #12 by a ripple effect. (We know that #11 & #12 begin the second half-dozen of hexagram figures, and #43 & #44 begin the fifth half-dozen. See Fig. 1.) At this later moment in the time fabric, when the rhythm of half-dozens causes Kun's excitement to flare up again, she relives what she experienced around #11 & #12 in a new way.

VIII. In the combinatorial dance of the hexagram sequence, the formal aspects are like a skeleton, while ethical, social and psychological imagery in the *yaoci* are like flesh. How can we better visualize what that means in the context of Qian mingling with Kun? I believe we should keep in mind that the *Zhouyi* was a work of reflective thought. It gives evidence of focused attention on the philosophical question of how concepts are interrelated.

This window offered by the *Zhouyi* into the thought of the proto-axial age is not isolated. In the visual arts we find themes that confirm what we find in the *Zhouyi*'s conceptual system. For instance, some Shang bronzes are decorated with patterns that mingle the body parts of totem animals. Patterns that mingle body parts of living things, or reassemble them in nearly cubist configurations, can also be found in stone reliefs of Meso-American Indians. The salient feature in these artifacts is that mingled bodily elements have been turned into aesthetic patterns. The same happens in the *Zhouyi*, in conceptual terms, when the mingling of Qian and Kun resolves into a formal pattern.

The proto-axial age was an era of bird-totem symbolism, when horticulture and waterworks grew by leaps and bounds, and shamanism developed into a priesthood that practiced ceremonial dancing and divination. The *Zhouyi* emerged during this wave of cultural change, and it offers us a window into the mental world of that age. Consider the Top Yang line of #53 Gradual Development, in which a bird recedes in the distance, but the feather it leaves behind can be used as a ceremonial ornament ---*yi*2 (again, something used in a dance).

Notes:

[1] Consider the following reading of juxtaposed lines from Qian and Kun: In First Yin, the frost underfoot presages an accumulation of thick ice. We do not see the nurturing side of Kun here, only solidification and quietness. Pure yin is sometimes seen as a chilling influence, a closing off of possibility. But any nurturing base must form within constraints of possibility. This is a time for hibernation, so this line in Kun echoes the 'hidden dragon' in Qian. In fact, all the lines in Kun can be read as a hidden, supportive base for actions by the corresponding lines in Qian.

In Second Yin, Kun's inherent rules (or her virtue of devotion) are applied in a consistent manner that spreads across a wide area---"straight, square, and large." The receptive substrate set up thereby is the yin complement to Second Yang's "appearing in the field" in Hexagram #1.

In Third Yin it is time for Kun to form variegated inner textures; it is also time to be serviceable yet claim no merit for oneself. This line offers a choice between outer and inner development, or perhaps the outer and inner aspects are simultaneous. Thus this line is the yin complement to Third Yang in #1, where the superior man is "creatively active throughout the day" (external), and "keeps vigilance in evening" (internal).

Fourth Yin is the time for containment/incubation of something special, something that needs the best protection Kun can give ("tie it up in a sac"). If this womb of Kun is effective, there will be "no praise no blame." In other words, the new growth cannot be judged by present standards. Thus this line is the complement to Fourth Yang in #1, where Qian makes the great experiment of leaping into the abyss.

Fifth Yin is the ruler who cares for the whole land. Wearing her earth-colored garb, she represents land-based power. To 'trail one's robe along' is an old expression for ruling without interference in people's affairs. This is the complement to Fifth Yang in Hexagram #1, where we see a dragon flying in "heaven." "Heaven" is interpreted in the Ten Wings as the position of the ruler holding a mandate from heaven.

In Sixth Yin, the yin intensifies to become a dragon, ready to confront and protect. When this dragon goes into battle, the blood spilled mingles the *xuan* (dark-sky color) of Heaven and the yellow-brown of Earth. Apparently, yin at her extremity is meeting with the arrogant dragon at the top of Hexagram #1.

In All Sixes, Kun shows a prospect of ongoing life, made possible by constancy. This is supportive of All Nines in Hexagram #1, where the group of dragons is not dominated by any single dragon ("a group of dragons appears with none at the head.").

[2] For instance, #3 & #4 have 2 yang and 4 yin lines; then #5 & #6 have 4 yang and 2 yin. Another example is #27-#30, with four oscillations of the yin-yang ratio.

[3] Counting off from the beginning of the 36-figure sequence, the hexagram figures which have a 3-yin-3-yang ratio always appear at the beginning or end of half-dozen (or quarter-dozen) segments. (See Fig.1) They never appear in the middle of a quarter-dozen segment. Also, all 4 fully resonant hexagram figures occur at the beginning or end of a half-dozen segment. (Fully resonant hexagrams are a subset of 3-yin-3-yang hexagrams having opposite polarity between corresponding lines of their upper and lower trigrams.) These two facts show that 3-yin-3-yang figures are placed rhythmically, not at random.

[4] Trigrams clearly possess built-in importance: out of all 64 hexagram names, only the 8 pure hexagrams (those composed of doubled trigrams) have gnomic, formulaic names. All the other hexagrams have situation names. Skeptical critics claim that trigram symbolism belongs to later layers of interpretation. But here the importance of upper and lower halves can be seen in the hexagram judgments: "the great come and the small depart" in #11; "the small come and the great depart" in #12. That "the small" refers to Kun's broken lines is confirmed by a hexagram name: #62 "Preponderance of

the Small” has a majority of broken (yin) lines. Also, the fact that “the great” refers to unbroken lines is confirmed by two hexagram names: #28 “Preponderance of the Great” and #34 “Great Force” both have a majority of unbroken (yang) lines.

[5] From *Zhouyi xiangyi*, by Zhang Huang. See *Xu xiu si ku quan shu*, Jingbu, Vol 9, p.311. Shanghai gu ji chu ban she. Shanghai, 1991.

[6] Uses of the words *gui* and *qu* occur in rhythmically significant hexagrams. #11 occurs at the beginning of the second half-dozen figures; #31 occurs at the beginning of the fourth half-dozen; #44 occurs at the beginning of the fifth half-dozen; #54 occurs at the end of the fifth half-dozen. Except for #44, all of these hexagrams have a 3-yin-3-yang ratio. See Fig. 1

[7] Jin Jingfang (with support from Cheng Yi) says that several rulers in the Shang were known as Lord Yi (Di Yi), and we cannot know which of them was referred to here. Jin opposes the attempt to identify this Lord Yi with a specific historical figure, saying: “The *Zhouyi* is dealing with ideas here, not with history.” Jin believes that the idea expressed in this line is that “a person of high status humbles himself to form an alliance with someone of lower rank, as Shang rulers did when they married their daughters to lower ruling houses.” Jin Jingfang, *Zhou yi jiang zuo*, p147.. Guangxi shifan daxue chubanshe. Guilin, 2005

[8] The men in #11 Second Yang prove their mettle by fording rivers (in wild country). These are persons bold enough to explore the periphery and to fight a naked battle for survival. See Wang Bi’s explanation of this line.

[9] Jiao Hong quotes a letter from a Han dynasty general who says “our nation’s fate hangs by a slender thread, as if it were tied to a mulberry sapling.” (*Yi quan*, in *Xuxiu siku quanshu*, Jingbu, Vol.5. Shanghai guji chubanshe.) Lai Zhide has the same idea: “One’s heart feels temerity, as if a nation’s future depended on something as weak as a mulberry sapling. One feels insecurity, because of fear it will be lost.”(Quoted in *Shijingfang zhouyi shuotong*, in *Xuxiu siku quanshu*, Jingbu, Vol.12, p.87) The same book quotes Deng Bogao: “The word *bao* refers to mulberries growing in a shrublike cluster. Such mulberry trees are too thin and weak to bear much weight.”

[10] In the 8 x 8 binary number grid of the King Wen sequence (see Fig.2), the first six binary place values are found in the mini-grid of the upper-left-hand corner. Numbers for contrasting hexagram pairs throughout the grid can be produced by performing various symmetrical operations within the mini-grid. For instance, #31 & #32 can be generated by adding up the V-shaped triad 8 + 4 + 2 and then adding up the mirroring V-shaped triad 16 + 8 +4. Nos.29 &30 are generated by adding together a) the top two numbers in the mini-grid, and then b) adding the bottom four numbers in the mini-grid. (Richard Rutt pointed out this rule with respect to number pairs in the two leftmost columns. See the grid of binary number equivalents in Rutt’s *The Zhouyi: A Bronze-Age Text*).