

Educational Implications from the Meng hexagram of Chinese I-Ching

Ching-Chung Guey^{a,*},

^a I-SHOU University, Taiwan.

*Corresponding Author Email: gueyching2002@gmail.com

(Received: 18th October 2018; Revised: 21th December 2018; Accepted: 08th January 2019)

<https://doi.org/10.34256/ajir1911>

Abstract: Most educators, especially those in Chinese speaking regions, have a common observation that most contemporary students have become incapacitated or incompetent in learning given that advanced teaching technologies and skills are furnished in the classroom settings. Meanwhile, teachers unavoidably feel frustrated and helpless in the course of instruction. Such ubiquitous educational scenario can be improved by borrowing wisdom from Chinese I-Ching. This paper seeks to explore educational implications embedded in the Meng hexagram of Chinese I-Ching. The Meng hexagram, one of the 64 hexagrams, has much to do with education, and is believed to be intriguing and inspiring for Chinese educators, just like other hexagrams for other aspects in daily life. This paper tries to answer, through text analyses, two questions: 1) what implications are there in the text of Meng hexagram? and 2) what does the role of teachers play in the context of instructional settings in relation to Vygotsky's social constructivism? By answering these two questions, two translated texts about the Meng hexagram will be analyzed.

Key words:

Meng hexagram, I-Ching, teacher-student dynamics, cooperative teaching, scaffolding.

Introduction

The Book of Changes -- *I Ching* in Chinese -- has, no doubt, caused great impact on Chinese culture in general, and education in specific. I-Ching has been the book of wisdom from which Chinese philosophy, Confucianism and Taoism were rooted (*Wilhelm, 1950*). As the Swiss philosopher and psychologist Jung (1967) put it, I-Ching is the first book of wisdom in the world. Practically, I-Ching has influenced almost every aspect of life for Chinese people, inclusive of politics, economy, ethics, legislature, education, science, statecraft, to name only a few.

The Book of Changes indicates that everything in the universe follows the principle of Yin and Yang [1], including changes of four seasons, and both the tangible world and the invisible world. In other words, Yin and Yang are one of the most important structures and laws of the universe. Specifically, Yin refers to the collection of the energy, while Yang the release of it, with the Yang being large, and the Yin small. Yin and Yang are interdependent, and continuously, mutually converted. However, the Yin and Yang conversion system is an invisible system.

With different combinations of Yin (denoted as broken lines) and Yang (Solid lines), eight basic graphics (trigram) are thus formed. Each type of trigram consists of three yaos (Chinese爻) [2]. A total of eight trigrams are, namely, Heaven (☰), Earth (☷), Thunder (☳), Wind (☴), Water (☵), Fire (☲), Mountain (☶), and Lake (☱). Any two of them can be matched with each other to obtain sixty-four hexagrams (See Appendix 1), which are used to record various natural phenomena and social phenomena, inclusive of the issue of education, the topic of the present paper).

In the following, we will start with the logic/ dynamic of hexagram, followed by the Meng Hexagram and implications, then the decisions and yao texts of the Meng hexagram will be discussed, and lastly the relationships between Meng hexagram and social constructivism will be elaborated before the conclusion.

The Logic/ dynamic of hexagram

When two trigrams are combined, a hexagram is formed, with the upper trigram dominant (counter-event), while the lower trigram is subordinate (an event). The system of I-Ching adheres to the law of equilibrium, rather than conservation (Huang, 2000). It is thus especially useful to interpret the evolution

of an event with qualitative changes, as manifested in various human relationships such as teacher-student interactions.

In a hexagram, different “yao” positions represent things in different states, or different states of the same thing, and can also symbolize different levels of the system or different stages or phases of things. But the premise is that these things can be divided into six equal parts. In a glimpse, from the beginning to the top, it corresponds to the whole process of the production - development - growth - growth - success - decline. For convenience, we are more interested in the six layers of social structure, which can be specified in terms of the six yaos as (from bottom to top):

- The 6th yao: the "institution/retired emperor".
- The 5th yao: the "president/emperor" position;
- The 4th yao: the place of the "premier";
- The 3rd yao: the place of "governor";
- The 2nd yao: the position of the "doctor/teacher";
- The 1st yao: the "people/student" position;

Note that these 6 yaos exist interactive relationships; that is, the 1st yao interacts with the 4th yao; the 2nd with the 5th, and the 3rd with the 6th. , which can be illustrated below (Chart 1)

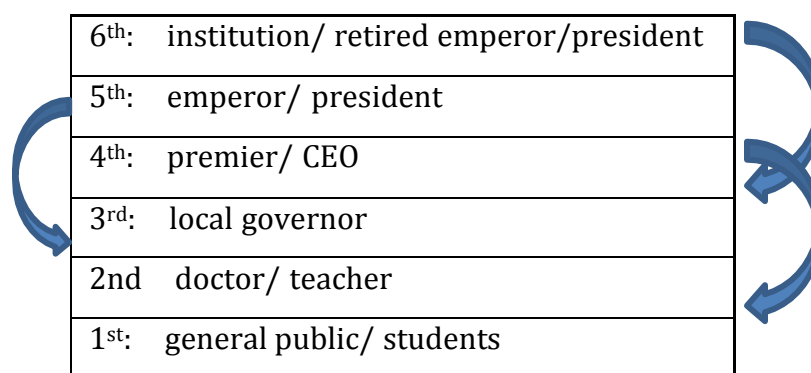


Chart 1. Interactive pairs in the hexagram

According to the law of equilibrium, each corresponding pair of yaos is preferably of different attributes (i.e., one is Yin, while the other Yang, or vice versa). To take the Meng hexagram as an example, pair 3rd-6th is of Yin-Yang, 2nd -5th of Yang-Yin, and 1st-4th of Yin-Yang, respectively.

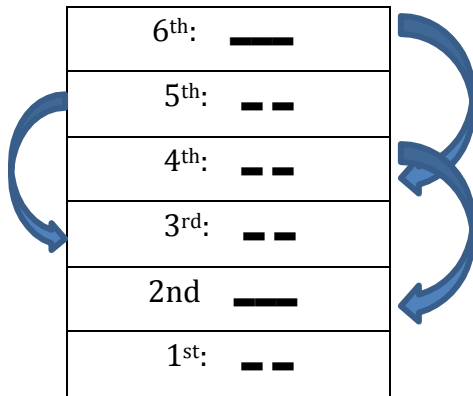


Chart 2. Yin-Yang attributes in each line of the hexagram

The Meng Hexagram and implications

As mentioned previously, each of the 64 hexagrams provides guidelines of problem solving in different aspects of daily life. The Meng hexagram, meaning “Youthful Folly”, is mainly for education. What does Meng hexagram actually suggest? It is worthy of note that each hexagram, as the combination of two trigrams (e.g., Heaven (☰), Earth (☷), Thunder (☳), Wind (☴), Water (☵), Fire (☲), Mountain (☶), and Lake (☱)), it naturally connotes the symbols of each of the two trigrams that form it. Meng hexagram can therefore be figuratively understood by its two composites, Mountain (the upper trigram) and Water (the lower trigram). Figuratively, Mountain (☶) symbolizes hindrance, obstacles, and impediments, whereas Water (☵) embodies hazards, jeopardy, and perils. With Mountain on the top over Water underneath, one must be on guard for the ruthless or unruly attitudes of the ignorant, just as a youth requires education or instruction. Though

Mountain and Water both suggest difficulties in learning, yet according to the texts of the Meng hexagram, learning can be optimized just as a student becomes enlightened if their difficulties are overcome, like a fountain springs from amid Mountain and Water. In the following, the Decision [3] of Meng hexagram along with its texts of each of the 6 yaos will be explored and analyzed.

Decisions and yao texts of the Meng hexagram

In the sixty-four hexagrams, each has a general paragraph indicating the instruction and connotation of the given hexagram. Theoretically, these instructions can be interpreted and understood in various ways. Take the hexagram as an example. From the perspective of divination, this is a description of the good and bad of this singularity as a whole; and from a philosophical point of view, this is a general explanation of the philosophical thoughts contained in this essay.

The same is true of yao. The remarks of “Book of Changes” are generally divided into two parts. Part of it is the analysis of the phenomenon, and according to the meaning of the phenomenon to explain the affair; the other part is the assertion, that is, the conclusion, to manifest fierce, repentance, blasphemy and other words. When in a question, when encountering a certain puzzle, one may first refer to the texts of the paragraph, and then check the judgment result. In the following we will start from the Decision of the Meng hexagram, and then followed by the yao texts.

A. Decision of Meng hexagram (Huang, 2000)

Childhood,

Prosperous and smooth,
 It is not I who seek the ignorant,
 The ignorant seeks me.
 On the first divination, I give light.
 Repeating the same divination is contemptuous.
 Being contemptuous, I give no more instruction,
 Favorable to the steadfast and upright.

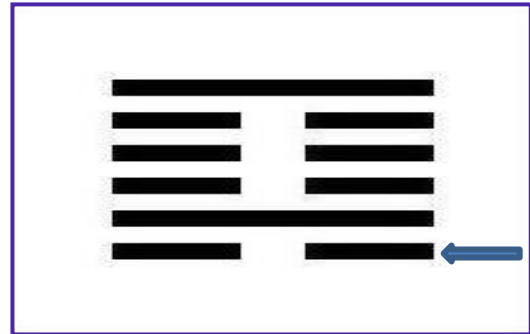
As mentioned earlier, the texts in the general Decision can be interpreted from different perspectives. Initially, the Decision is meant for divination, yet it can also serve to shed lights on relevant aspects of daily life such as learning. In this regard, the obscurity of Decision may suggest that it is not the teacher that goes to learners, but the other way around. Learners can only ask the same question once, and it would be contemptuous to do it more than once. The connotation embedded in the Decision shows that learners should be encouraged to actively involve their learning through Q and A interactions with teachers. Specifically, if learners can pose questions to the teacher for their learning, they can benefit practically from such a teacher-student interaction. Undeniably, learning effects can be optimized if learners play active roles through interactions. Further, learners must be taught how to ask questions based on their careful thought. Chances are that learners tend to ask the same question repeatedly without firstly giving a deep thought about the answers given to their first question. From the text in the Decision, learners may keep asking questions to help them clarify problems if only the questions are not the same.

B. Yao text of Meng hexagram

There are certain structures in the I-Ching scriptures. Each of them has seven paragraphs: the first paragraph is "trigram",

and the last six paragraphs are "derogatory words" written in the order of the 6 yaos. The swearing of the slogan is a good and bad story. The hexagrams record the good and bad of the six hexagrams, as well as the different timings, stages, or relative positions under the shackles. In the next section, text of each yao will be extricated and explored.

The first yao

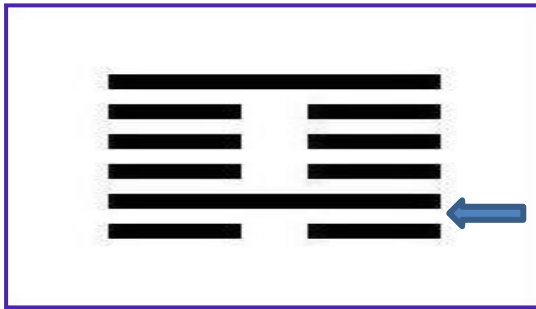


Enlightening an ignorant.
 Favorable to set examples.
 Operating with shackles,
 Going forward: humiliation.

The text of 1st yao (Yin by nature), along with the 3rd, 4th, and 5th yaos, in the Meng hexagram refers to the learners, while the 2nd and the 6th Yang yaos, refer to teachers. Thus the obscurity of the 1st yao suggests that it is good to establish a model to educate learners, so that they cannot go astray or commit crimes. If not given restraints and frames for learners to follow, they will tend to cause humiliation and result in regrets. In other words, learners need to concentrate on being taught in the enlightenment. If eager to advance without completing the enlightenment, they are doomed to suffer and invite repentance. The connotation embedded in the yao text is that learners should be given working examples or models about their learning as they are likely to stumble into error through ignorance and carelessness or playfulness. In this regard, offering learners models help sustain progress and experience less frustrations and

helplessness. Moreover, while certain discipline and restraints are essential to achieve success, it is imperative to allow learners to steer clear of boring routines or excessive regulations that may choke their creativity.

The second yao:



Being magnanimous to an ignorant:

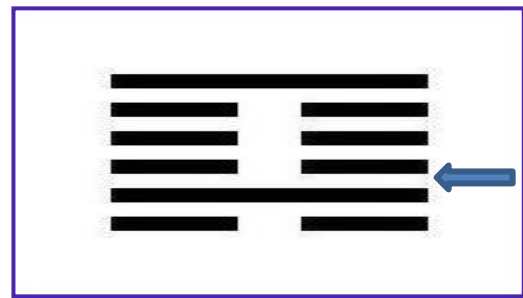
Good fortune.

Taking a maiden as wife:

Good fortune.

The 2nd yao is of Yang attribute, which symbolizes the role of a teacher. Since only the 2nd and the 6th yaos are of Yang nature, these two yaos are the thus dominant ones in this hexagram. These two yaos suggest two different modes of playing the roles of a teacher. According to the text, teachers are supposed to give instructions to all the learners, be they rich, poor, intelligent, foolish, young, old. The connotation underlying the 2nd yao text is that teachers must be tolerant of learners of various backgrounds and personalities, and through giving lessons to the learners of heterogeneity, the teacher along with learners may optimize learning effects in the course of instruction. Besides, the teacher is supposed to collaborate with learners intellectually in knowledge construction, analogous to marrying a maiden and sustaining posterity. In this regard, teaching is not just imparting knowledge, but also creating new knowledge.

The third yao



Do not engage in taking this woman.

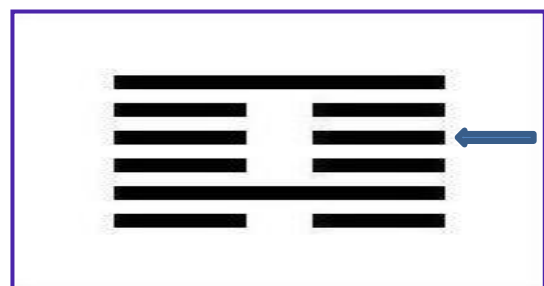
Catching sight of a handsome man,

Losing herself.

Nothing is favorable.

As mentioned earlier, the 3rd yao represents learners since it is of Yin nature. Since this learner, like a prostitute, is promiscuous, unfaithful, and treacherous, he/she is not to be educated through ordinary means or teachers, but to be disciplined by the teacher in the 6th yao, a more strict teacher. The 3rd yao of Yin nature corresponds to the 6th yao of Yang nature. Thus the connotation embedded in the yao text can be that learners of the 3rd yao must be transferred from the teacher of the 2nd yao to the teacher in the 6th yao, which will be elaborated later. What is more, the teacher, though giving instruction without considering their backgrounds, must be vigilant and alert not to devote too much time and energy to the learners of the 3rd yao.

The fourth yao



Confining an ignorant: Humiliation.

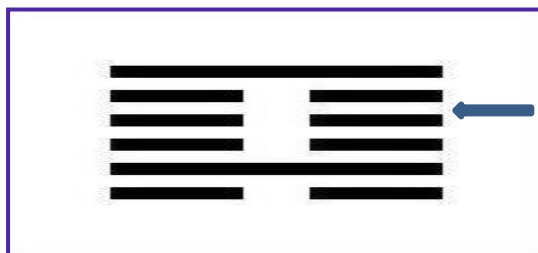
The humiliation of confining an ignorant

Far from the solid.

Among the 6 yaos of the Meng hexagram (or the obscurants) are two types of

individuals, one is the Enlightener (teacher) and the other is the obscurant (learners). The 4th yao is of Yin nature but in the appropriate position, as in the hexagram, it is legitimate and appropriate for odd number yaos to be of Yin nature (called niche) [4]. while even number yaos of Yang nature. Though the 4th yao is basically legitimate and appropriate, yet two of its neighboring yaos (yao 3 and yao 5) are both of Yin nature, and lie far away from the Teacher yaos (the 1st Yao and the 6th yao). In a word, the 4th yao is somehow trapped in the obscurity, and thus learners of this yao suffer from learning difficulties. The 4th yao text implies that learners of the 4th yao must realize that they are confined to a situation where they (as premiers) assume great power (second to the 5th yao as emperor/president), but at the same time teachers lie afar (the 2nd yao and the 6th yao). In addition, learners of the 4th yao must rise from the disadvantageous situation where both the 5th yao and the 3rd yao are of Yin nature, a state of impotence and abandonment, and easy to entangle oneself in magical thinking and fantastic dreams. It is advisable for these learners to contact some strong, enlighteners, successful people, who will be beneficial.

The fifth yao



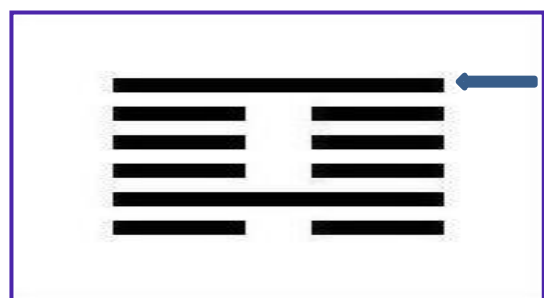
An ignorant is being enlightened.

Good fortune.

"The ignorant child, auspicious", this is because the 5th yao (as an emperor, or president) took a humble attitude towards the teacher, or learning. When learners are humble, the teacher is eager to teach, and the educational results are naturally more

effective, and certainly auspicious. More generally, if you don't understand how to do things when doing them, act like an innocent child, and humbly accept the guidance and advice from others, and then you will be destined to be successful. As the 5th yao of Yin nature corresponds to the 2nd yao, of Yang nature. The interaction between yao 5 and yao 2 will thus result in optimal learning outcome. Further, there is another correspondence between yao 5 (of Yin nature) and yao 6 (of Yang nature). Apparently, yao 5 has two teachers (yao 2 and yao 6). The 5th yao text demands learners of this position (emperor/president) to be modest and humble towards knowledge and learning, be you a vagabond, or an emperor, low ranking employees or CEO. In other words, from the 5th yao of Meng hexagram, the higher one's social position is, the more modest one is toward knowledge acquisition. Moreover, on the basis of the premise of point one, the high ranking learners must be modest enough to consult various teachers (the 2nd and the 6th yaos, of Yang nature) to broaden perspectives and therefore more competent in coping with problems of various kinds.

The sixth yao



Disciplining an ignorant.

Not favorable to treat like a foe.

Favorable to prevent further mischief.

The 6th yao (of Yang nature) symbolizes a teacher whose purpose is to knock out the obscurity. It is not appropriate to use the violent means of thugs, but to adopt a method of preventing thugs. The 6th yao is in the top

position, and the extreme method is used to combat the ignorance. The 6th yao corresponds to the 3rd yao, the defiant, unfaithful, and treacherous learners; that is, the 6th yao can be an effective teacher for yao 3 learners. According to the text, the enlightening teacher used fierce means to provoke the enlightened by the educated, but the means should not be too fierce, and it would be beneficial to use a defensive and powerful approach. This means that the enlightenment needs to be severe but not merciless and violent. The 6th yao text implies that using a strong defense method for recalcitrant learners is beneficial, yet to the extent that such a defense method will not be so harsh as to force learners to go to the other extreme. Besides, both yao 2 and yao 6, as teachers, must coordinate in a way that rebellious learners of yao 3 can benefit most. In a word, be firm, but bear in mind that the goal of effective punishment is the reestablishment of equilibrium, rather than revenge.

Meng hexagram and social constructivism

From the analyses of the yao texts above, there are similar teachings of Meng hexagram and those under the social constructivism [5]. In essence, teachers have to be sensitive to the methods that help learners acquire knowledge and, even more significantly, enable students to learn more effectively. It is of this concern that constructivist teaching and learning theory have much to offer, so are the instructions involved in the Meng hexagram. Constructivist teaching advocates a participatory approach where learners actively join in the learning process. As Ernest von put it, constructivism puts forward the principles that knowledge is not passively obtained but actively constructive by the learners, and cognitive function adapts and organizes the experiential world. To

specify, the learner is an active participant in the learning process while the teacher is to make efforts to promote learning via learners' active participation, one example of which is Q & A interaction. Such a stance is consistent with the connotation embedded in the Decision that learners should be encouraged to actively involve their learning through Q and A interactions with teachers [6].

The connotation behind the 1st yao text can best be stated through scaffolding theory [7]. Scaffolding refers to the preparation of teaching to improve students' learning ability by offering sufficient support when learning a new concept or skill. When students constitute autonomous learning strategies that enhance cognitive, emotional, and motor skills and knowledge, these support sessions gradually take away. These supports include working examples, resources, a task template for stimulating interest, and guidance on cognition and social skills. With scaffolding, teachers or peers may systematically offer guide, learners tend to go beyond the original cognitive level more easily, thus facilitating learning transfer [8]. Again, such a contention clearly reflects the connotation of the 1st ya text in Meng hexagram that learners should be given working examples or models about their learning as learners are supposed to stumble into error through ignorance and carelessness or playfulness. In this regard,

The connotation behind the 2nd yao text of Meng hexagram has much to do with cooperative teaching strategy [9] in social constructivism. Cooperative teaching adopts a heterogeneous grouping method to encourage collective creation, and group competition, so that peers can communicate and dialogue to share learning outcomes. To induce learning effects by cooperative teaching and learning, teachers should, beyond doubt, be tolerant of learners of various backgrounds and personalities, which is exactly what is

suggested in the 2nd yao text of the Meng hexagram. Further, as constructivism suggests one of the most significant objectives of instruction has to do with knowledge construction or creation. Such a purpose precisely fits into the connotation of the 2nd yao text that the teacher must collaborate with learners in knowledge creation, like a marriage couple having offspring.

The connotation based on the 3rd yao is also related to collaborative teaching like the 2nd yao, but the 3rd yao places more emphasis on coordinative teaching where two or more teachers are involved in educating certain learners. As mentioned earlier, the 3rd yao symbolizes recalcitrant, disobedient, and rebellious learners who must be tamed and educated with the joint efforts of the 6th and 2nd yaos, as teachers. The collaborative teachers do appear in the 2nd and the 6th yao, so do learners in the 3rd, the 4th, and the 5th yaos, as these three Yin yaos represents learners of different stages or nature, which can be further explored below.

As learners in the 4th yao (of Yin nature) corresponds with those in the 1st yao (also of Yin nature) and stay far away from both the 2nd and the 6th teacher yao (of Yang nature), these learners are disadvantageous for enlightenment. However, with the experience of 3rd yao as educated by the 6th yao, and with inspiration of the 5th yao (emperor as a learner, who seeks knowledge from both 2nd and 6th yaos), learners of the 4th yao thus more likely to reduce their learning disadvantages. Such a stance may correspond with the ideas of social constructivism that learning among peers can also help construct new knowledge [7,9].

The 5th yao (of Yin nature, as learners) has two teachers, the 2nd and the 6th yaos (of Yang nature), which may reflect two significant meanings. First, the 5th yao symbolizes emperor/king or president as learners, and

they are not above asking questions of the teachers. Second, these learners may also be conceived as superior ones, and still play low profile to seek knowledge from others. Such a disposition manifests the spirit of social constructivism that knowledge and skills are constructed through interactions between the educated and the ignorant. In a word, the educated can also learn from the ignorant.

As to the 6th yao (of yin nature as a teacher), strong defense or strict method must be adopted for the learners of the 3rd yao (of Yin nature) because of their defiance, rebellion, and unfaithfulness. However, there is little correspondence with the teacher role in the social constructivism, which places much emphasis on student-centered approaches.

Conclusion

The Meng hexagram in I-Ching, a combination of Mountain trigram and Water trigram, has shed light on education in general, and on instruction in specific. And the connotation of the Decision and the yao text provide perspectives on looking at roles of learners and the teacher as well as their interactions. Since the hexagram consists of 6 yaos indicating six different stages in hierarchy, so there are interdependent/interactive relationship in between yao 1 and yao 4, yao 2 and yao 5, and yao 3 and yao 6. And also each yao can be of Yin or Yang nature, which make the interactive system both profound and informative. The comparison or contrast between the principles in social constructivism and those in the 6 yaos of the hexagram is to help specify the features of the Meng hexagram. Though the injunctions from the Meng hexagram were made thousands of years ago in China, the connotation and inspiration are still fresh and meaningful.

Appendix 1: Implication/ meaning of the 64 hexagrams

(Note that the number attached on each trigrams the natural development order, for the convenience of reference, each of the eight trigrams is thus grouped together) (26 of 64 are of bad omens marked in red)

01. ☰☰ The creative force;	02. ☷☷ Responsiveness	03. ☶☶ Difficulty in the Beginning ;
04. ☷☶ Inexperience;	05. ☶☰ Waiting;	06. ☶☶ Conflict;
07. ☷☷ The Army (Multitude);	08. ☶☷ Joining the right group;	09. ☶☰ Exercising Restraint;
10. ☶☰ Treading carefully;	11. ☶☰ Overall harmony/ Advance;	12. ☶☶ Stagnation ;
13. ☶☰ Cooperating with others	14. ☶☰ Great fortunes;	15. ☷☷ Modesty;
16. ☷☷ Thinking ahead;	17. ☶☰ Being adaptable;	18. ☷☷ Dealing with decay;
19. ☷☰ Moving toward your goal;	20. ☶☷ Taking an overview;	21. ☶☰ Getting down to essentials;
22. ☷☷ Adornment;	23. ☷☷ Doing away with the old;	24. ☷☷ The turning point;
25. ☶☰ Innocence/ Avoiding Complications;	26. ☶☰ Controlling your resources;	27. ☷☷ Nourishing;
28. ☶☰ Overload;	29. ☶☷ Danger (The Abyss);	30. ☶☰ Shedding lights;
31. ☶☰ Mutual Attraction;	32. ☶☰ Perseverance;	33. ☶☰ Retreating ;
34. ☶☰ Great Power;	35. ☶☷ Progress;	36. ☷☷ Keeping a low profile;
37. ☶☰ The family;	38. ☶☰ Opposition;	39. ☷☷ Facing Obstruction ;
40. ☷☷ Release from Obstruction	41. ☷☰ Decrease ;	42. ☷☰ Increase;
43. ☶☰ Determination;	44. ☶☰ A meeting of Opposites;	45. ☷☷ Gathering together;
46. ☷☷ Pushing Upward;	47. ☶☷ Being restricted;	48. ☶☷ The Wellsprings of Life;
49. ☶☰ Total transformation	50. ☶☰ The Cauldron;	51. ☷☷ Shock;
52. ☷☷ Living in the present;	53. ☶☷ Gradual Development;	54. ☶☰ Planning a Subordinate Role;
55. ☷☰ Abundance;	56. ☶☰ Stranger in a strange	57. ☶☰ Gentle Influence;

	land;	
58. ☵☵ Joy in Communicating;	59. ☵☵ Obstacles fade away;	60. ☵☵ Self-Control;

Notes

[1] In Chinese cosmology, the universe emerges from a primary chaos of material energy, organized into the cycles of Yin and Yang and formed into objects and lives. Yin is the receptive and Yang the active principle, seen in all forms of change and difference such as the yearly cycle (winter and summer).

[2] The long and short crossroads that make up the gossip. The change of trigram depends on the change of yao 爻, so yao爻 indicates the meaning of staggering and change.

[3] Decision mainly refers to the King Wen's interpretation of the meaning of the hexagram. It gives a general statement of the divination or guidelines in coping problems in a given situation.

[4] The position of each of the six yaos is coined as niche. The iconic requirements are recorded from bottom to top, the lowest is called the first, and then the second, the third, the fourth, the fifth and the sixth. The position of the squatting and squatting is low and low, and the highest is respected. According to the theory of Yin and Yang, one to three five is the position of yang, the second and the fourth is the position of yin, the yin is in the position of Yin or Yang, and vice versa.

[5] Social constructivism is a sociological theory of knowledge according to which human

development is socially situated and knowledge is constructed through interaction with others.

[6] Scaffolding theory was first introduced in the late 1950s by Jerome Bruner, a cognitive psychologist. Scaffolding is changing the level of support to match the cognitive potential of the learner. Over the course of a teaching session, one can adjust the amount of guidance to fit the learner's potential level of performance.

[7] Cooperative teaching strategy is an instructional strategy in which small groups of students work together on a common task. This teaching method is an excellent way to allow students to think critically without relying on you for answers.

References

- [1] Ching-Chung Guey, A Study of Instructional Psychology on Grammar-Translation Method from Chinese I-Ching, *Journal of Studies in Social Sciences*, 9 (2014) 22-33.
- [2] Taoist Master Alfred Huang, (2000) The Numerology of the I Ching: A Sourcebook of Symbols, Structures, and Traditional Wisdom, *Inner Traditions; Original ed. edition*
- [3] Traditional Wisdom. Rochester, Vermont: Inner Traditions International.

- [4] Taoist Master Alfred Huang, (2010) *The Complete I Ching – 10th Anniversary Edition: The Definitive Translation by Taoist Master Alfred Huang, Inner Traditions; 2nd Edition, Revised, Revised Two-Color edition.*
- [5] C. G. Jung, (1967) *The I Ching or Book of Changes* by C.F. Baynes; R. Wilhelm; Cary F. Baynes; Richard Wilhelm, Princeton, *Princeton University Press*, New Jersey.
- [6] E. Von Glaserfeld, (1989) *Constructivism in Education*, In T. Husen and T.N. Postlethwaite (eds.), *The International Encyclopedia of Education, Supplement, Pergamon Press*, Oxford/New York.
- [7] J. Lave, (1991) *Situated Learning: Legitimate Peripheral Participation (Learning in Doing: Social, Cognitive and Computational Perspectives)*, *Cambridge University Press*, UK.
- [8] C.A. Meyer, What's the difference between authentic and performance assessment?, *Educational Leadership*, 49 (1992) 39-40.
- [9] M. McMahon, (1997) *Social Constructivism and the World Wide Web -A Paradigm for Learning, Paper presented at the ASCILITE conference, Perth, Australia.*
- [10] L.S. Vygotsky, (1978) *Mind in Society The Development of Higher Psychological Processes*, Knox and Carol, Trans, *Harvard Business School Press*, Cambridge, Massachusetts.
- [11] R. Wilhelm, C. F. Baynes, H. Wilhelm, C. G. Jung (1950) *The I Ching, or, Book of Changes (Bollingen Series XIX) (Bollingen Series (General))*, *Princeton University Press*, New York City.

Funding: No funding was received for conducting this study.

Conflicts of Interest: The Author has no conflicts of interest to declare that they are relevant to the content of this article.

About The License: © The author 2019. The text of this article is open access and licensed under a Creative Commons Attribution 4.0 International License