

A Companion to Yi Jing Numerology and Cosmology: Chinese Studies of Images and Numbers from Han (202 BCE – 220 CE) to Song (960 – 1279 CE) by Bent Nielsen. Published by Routledge Curzon, London and New York, 2003.¹

Introduction

In this work Dr Nielsen has brought together a huge amount of information from a traditional thread of the Chinese study of Change that has been largely neglected in Western literature. Specifically, the Image and Number tradition mentioned in the title of Nielsen's volume is concerned with what we might, in contemporary language, call the structural, numerical and formal aspects of the *symbols* of Change, with little or no concern for the *textual content* of the Book of Change. This might seem strange to a readership where the hexagrams are often viewed simply as indexical symbols to access the text. However, the hexagram and trigram symbols are themselves a rich source of meaning and imagery, and the various relationships between these symbols offer important insights into the cosmological thought of Chinese scholars.

After explaining the textual conventions used in the book, Nielsen begins with a brief introduction. This provides an overview of the scholarly approach to the study of the Yijing (易經), describing the rise of contextual study of the book in China, and the eventual impact on this approach on Western scholarship. This gives a contemporary background for the two traditional Chinese modes of study of Change: the *Meaning and Principle* school (*Yili* – 義理), which is rooted in the actual text of the classic; and the *Image and Number* school (*Xiangshu* – 象數), which approaches the study via the images and properties of the symbols themselves. As already noted, prior to Dr Nielsen's work almost all English language scholarship has been in the Meaning and Principle mode, and it is one of the most important contributions of the work under review that it takes steps to address this imbalance.

The bulk of the book (347 pages) makes up the Companion itself. This is an extensive alphabetically organised encyclopaedia of material connected with the Image and Number tradition. The entries in the Companion contain a large number of tables of hexagrams detailing various relationships and, in addition to the textual entries, there are 12 pages of diagrams, which are cross referenced from many of the entries. There is also a bibliography of 18 pages, an index of common English translations of hexagram names covering 6 pages, and finally a 19 page index of Chinese words. The alphabetical arrangement of the main text, and the inclusion of the additional indexes makes the book generally very easy to work with.

The Companion

The entries in the companion are of three basic types (although in the introduction Nielsen himself says there are only two types). The first type of entry contains descriptions of the hexagrams and trigrams themselves; the second type of entry describes technical terms detailing particular concepts, structural properties and

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relationships; and the final type of entry is bibliographic, describing the key contributions of historically significant Chinese scholars of Change. Each entry, regardless of its type, is listed under its pinyin romanization followed by the corresponding Chinese characters. Chinese characters, and hexagram and trigram symbols, are used extensively throughout the text. This also contributes greatly to the ease of use of the book. Many works on Chinese philosophy published in English either skimp on the use of Chinese characters, or gather all the Chinese together into a glossary at the end of the work. By placing the Chinese characters where they are actually needed, in the main body of text, with the English descriptions of the terms, Nielsen immediately removes a major source of potential ambiguity and difficulty. For example, although I do not read Chinese, the inclusion of the characters allows me to see immediately whether a particular use of the term *fu gua* refers to hidden hexagrams (伏卦) or overturned hexagrams (覆卦). In addition, Nielsen frequently includes short passages in Chinese, which would allow those so inclined, to check the details of his translations of some of the key concepts.

Hexagram entries are indexed under their pinyin names, followed by the Chinese characters. I think it is a shame that Nielsen does not give a translation of the name in the entry. However, there is an alphabetically arranged appendix giving a range of translations from other authors for each hexagram. The entry then gives the numerical designations of the hexagram in both the traditional and silk manuscript sequences. Given the nature of the *Companion*, it might also have been useful and interesting to have given the symbol's number in the binary sequence of hexagrams derived from the *Xian Tian Tu* (先天圖). Nielsen then decomposes the symbol; first into its constituent trigrams, then into its interlocking (or nuclear) trigrams, and finally into its containing trigrams. This last, called *bao ti* (包體) in Chinese, is a variation on interlocking trigrams that, as far as I am aware, has not been described in English before. For example, in the hexagram ䷛ we have the lower interlocking trigram, formed from the second, third and fourth lines, as ䷚. After the second, third and fourth lines are discounted, the first, fifth and sixth lines remain. Although these lines are not contiguous, they can be taken to form the “containing” trigram for the lower interlocking symbol. In this case, we the trigram so formed is ䷚. Similarly, the upper interlocking trigram is ䷚, and its containing trigram is ䷚.

Hexagram entries also contain a cross-reference to the lateral linked hexagram (*pang tong gua* – 旁通卦), which is its Boolean opposite – switching yin for yang and yang for yin throughout. However, the entries do not contain references to the two other common forms of opposition, overturned hexagrams (*fu gua* – 覆卦) and exchanged images (*liang xiang yi* – 兩象易). Given that both of these concepts are described in detail in the *Companion* this is a strange oversight, given the otherwise comprehensive nature of the volume. Finally, the hexagram entries also include additional comments relating the symbol to any relevant concepts explored in the *Companion*, such as warp and weft hexagrams, waxing and waning hexagrams and so on.

The entries for trigrams are necessarily shorter. They include the relevant imagery from the *Shuo Gua* (說卦) and a list of hexagrams that contain the trigram as either upper or lower components. However, the entries do not indicate which hexagrams contain the trigram as an interlocking component. Given that the hexagram entries make reference to this property, it is a shame that it is not cross-referenced in the trigram entries themselves. The *Companion* also contains brief separate entries for each of the four images (*si xiang* 四象) and also treats them together in a more extensive single entry, which includes an exploration of other possible meanings of the term.

The technical entries in the *Companion* cover a huge range of material. Some of these explain concepts already known in the English-language literature. However, even when the concept is already familiar, there is usually much to be gained from Nielsen's exposition. For example, I have already mentioned that the concept *hu ti* (互體) described by Wilhelm (1983, p358) as “nuclear” trigrams is translated as “interlocking” trigrams by Nielsen. In addition to the well known analysis of the sixteen possible hexagrams which can be formed from the interlocking trigrams, he goes on to consider alternative terms associated with the idea, various possible historical origins of the term and then concludes with descriptions of the uses to which the concept has been turned. The extra detail that the idea thus acquires contributes to an enrichment of the concept that has previously been denied to the English language community.

There are many entries that describe concepts which, as far as I know, are previously unexplored in English. It is impossible to explore the range of the material in a short review such as this. I have already mentioned the concept *bao ti* (包體), containing trigrams, above, and there are many others. Of particular interest is the inclusion of a small number of well known phrases from the text of the *Changes*, such as *she da chuan* (涉大川) “crossing the great stream”. As with other familiar terms, Nielsen sheds new light on these phrases by tracing the origins of various interpretations to the relevant scholars, as described below. Further, a number of entries describe particular texts connected with the *Yijing*. The *Shi Yi* (十翼), or Ten Wings, is well known in the West forming, as it does, the basis of the commentary material in Wilhelm's wide spread translation (1983, pp256-261). However, Nielsen mentions many others, including such intriguingly titled works as the *Kun Ling Tu* (坤靈圖) – the Spirit Diagram of Kun. The range of such entries makes it clear just how much literature is closed to the scholar of Change who does not speak Chinese, and I hope that the appearance of Nielsen's *Companion* might encourage translations of some of these lesser known works into English.

The final type of entry is biographical. Again, there is a tremendous range of material here. A small number of the scholars discussed by Nielsen are already familiar to me, such as Wang Bi (王弼) whose interpretation is explored in Lynn's CUP edition of the *Changes* (1994), or Shao Yong (邵雍) who is well known in connection with the binary ordering of the hexagrams, and through Birdwhistell's (1989) extensive

exploration of his life and works. That there are so many other scholars who have contributed to the development of the Image and Number tradition is certainly not a surprise, and it is fascinating to follow the threads through the bibliographic entries to see how ideas and influences are transmitted from one generation to another. Once again, there are new insights to be gained. For example, as already noted, Shao Yong (邵雍) (1011-77) is most closely connected with the binary arrangements of trigrams and hexagrams. However, Nielsen notes that Shao studied with Li Zhicai (李之才) (-1045) who in turn had studied with Chen Tuan (陳搏) (-989), who is suggested as the likely source of these diagrams.

Conclusions

Because this book is really the first work in English to deal extensively with the literature of the Image and Number tradition, it lacks any obvious points of comparison. The only likely books that come to mind as possibilities for consideration are Huang's (2000) work *The Numerology of the I Ching* and Hacker's (1993) *I Ching Handbook*. The latter of these two is a substantial work of over 400 pages but, although it discusses binary orders and nuclear hexagrams in some detail, the material covered is not specific to Image and Number. To be fair, Hacker's subtitle for his work is "A Practical Guide to Logical and Personal Perspectives" and this gives the reader a clear idea of his aim. Huang's work should, perhaps, have provided a proper point of comparison with Nielsen's *Companion*. However, Huang lacks the comprehensive references to original Chinese sources that Nielsen provides, and covers only a small fraction of the material. Like Hacker, Huang's work is a very personal perspective on the subject and, as such, does not provide sufficient coverage of the Image and Number tradition to serve as a comparison.

I have been working with Nielsen's book for some time now, using it to seek out traditional antecedents for some of my own discoveries. From the perspective of analysing the structural properties of the symbols of Change through the tools provided by modern algebra, Nielsen's work is invaluable. It provides some of the much needed historical context for contemporary work such as Goldenberg (1975), and myself (Schöter 1998, 1999). It is fascinating to realize that, although they did not have the vocabulary of modern mathematics, the Chinese masters of Change have already explored some of the same landscapes that modern algebra reveals.

In working with the *Companion*, a few minor quibbles come to mind. Some are outlined above, but also an English index would be very useful. I appreciate that this would be a tremendously difficult task, given the multiplicity of possible alternatives for translating the terms. However, a simple index, taking Nielsen's own English translation of each of the technical terms would help. Also, an easier way of finding the entries for the trigram and hexagram symbols would be better. Because everything is arranged alphabetically on the pinyin romanization, it is necessary to know the name of each symbol in pinyin in order to locate it. This is not a major problem, but perhaps giving the symbols their own section in the *Companion*, and arranging them in a suitable order would have been better. Following on from this, I

sometimes wonder if organizing the Companion into separate sections for each of the three types of entry might have been a better strategy. However, on balance, having every entry alphabetically organized in a single section does simplify the process of looking anything up.

Almost all translations of Yi (易) literature in the West, whether populist or academic, focus on the Meaning and Principle school of interpretation at the expense of the Image and Number. Nielsen's work is the first serious attempt to explore Image and Number in English; my criticisms are minor, and the significance of Nielsen's work for the English speaking community of Yi scholars cannot be underestimated.

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