

CHINESE ALCHEMY

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INTRODUCTION

Chinese alchemy has a history of more than 2000 years. It is divided into two main branches, known as Waidan 外丹, or External Alchemy, and Neidan 內丹, or Internal Alchemy. Waidan (lit., “external elixir”) arose by the second century BCE; it is based on compounding elixirs through the manipulation of natural substances—primarily minerals and metals—which release their essences when they are submitted to the action of fire. Neidan (lit., “internal elixir”), documented from the eighth century CE, aims instead to produce the elixir within the person itself, according to two main models of doctrine and practice: by causing the primary components of the cosmos and the human being—essence (*jing* 精), breath (*qi* 氣), and spirit (*shen* 神)—to revert to their original states; or by purifying the mind from defilements and passions, in order to “see one’s Nature” (*jianxing* 見性). Neither alchemy as a whole, nor Waidan or Neidan individually, constitute “schools” of Daoism, with a definite canonical corpus and a single line of transmission. On the contrary, the respective sources display wide differences in both doctrines and practices. However, if one may attempt to formulate a broad statement that encompasses at least a large part of its different forms, Chinese alchemy is characterized by a foundation in doctrinal principles concerning the relation between the Dao 道 (Way) and the world. The cosmos as we know it is deemed to be the last stage in a sequence of “transformations” leading from Non-Being (*wu* 無) to Unity (*yi* 一), duality (Yin and Yang 陰陽), and finally multiplicity (*wanwu* 萬物, “ten thousand things”). Alchemists intend to trace this sequence backwards and return to its inception. In both Waidan and Neidan, the practice is variously said to grant transcendence (a state described by such expressions as “joining with the Dao,” *hedao* 合道), “immortality” (mainly meant as a spiritual condition), longevity, healing (either in a broad sense or with regard to specific illnesses), and—especially in Waidan—communication with the deities of the celestial pantheon and protection from spirits, demons, and other malevolent entities.

GENERAL OVERVIEWS

In addition to the studies cited in the next two subsections, several general works on Daoism published by Chinese scholars contain chapters on Waidan and Neidan. Especially valuable are those found in Qing Xitai 卿希泰, ed., *Zhongguo Daojiao shi* 中国道教史 (4 vols., Chengdu: Sichuan Renmin Chubanshe, 1988-95), and in Ren Jiyu 任继愈, ed., *Zhongguo Daojiao shi* 中国道教史 (Shanghai: Shanghai Renmin Chubanshe, 1990).

General Overviews: Waidan

Waidan, or External Alchemy, is documented from the second century BCE, but virtually nothing is known about its historical origins. The largest number of Waidan extant sources—slightly more than one hundred—neglect to provide details on their provenance or present themselves as delivered by divinities, immortals, or beginners of religious traditions (including Zhang Daoling 張道陵, the originator of the Way of the Celestial Masters, or Tianshi dao 天師道). For this

reason, until the present day a precise reconstruction of the development of Waidan has proved impossible, and scholars have instead focused on the identification and study of cognate groups of texts. The most extended and best-documented works on Waidan as a whole in a Western language are Needham 1974 and Needham 1976, although the author's focus on the history of Chinese science often leads him to neglect the religious context in which alchemy was practiced. The relevant chapter in Ho 1985, written by one of Needham's main collaborators ("co-author" might in this case be a better term), summarizes the main findings and views presented in those works. Another overall view of Waidan is found in Pregadio 2000. In Chinese, two of the main general works are Meng 1993 and Rong 1998. Themes and issues in research on Waidan are the subjects of Sivin 1987 and Sivin 1990, authored by the Western scholar who has given perhaps the most substantial contributions to the understanding of the foundations of this branch of Chinese alchemy.

Ho, Peng Yoke. *Li, Qi and Shu: An Introduction to Science and Civilization in China*. Hong Kong: Hong Kong University Press, 1985.

The chapter entitled "Chinese Alchemy" (pp. 171-217) consists of a summary of different sections of *Science and Civilisation in China*, vols. 5.III and 5.IV, which were first drafted by Ho Peng Yoke. (The original drafts are preserved in the archives of the Needham Research Institute in Cambridge, UK.)

Meng Naichang 孟乃昌. *Daojiao yu Zhongguo liandanshu* (道教与中国炼丹术). Beijing: Yanshan Chubanshe, 1993.

Probably still the most useful general overview of Waidan in Chinese. Contains descriptions of about thirty sources and about a dozen major Waidan methods.

Needham, Joseph. *Science and Civilisation in China*. Vol. 5: *Chemistry and Chemical Technology*, part II: *Spagyric Discovery and Invention: Magisteries of Gold and Immortality*. With the collaboration of Lu Gwei-Djen. Cambridge: Cambridge University Press, 1974.

Includes the following sub-sections of section 33, "Alchemy and Chemistry": (a) "Introduction: The Historical literature"; (b) "Concepts, Terminology and Definitions"; (c) "The Metallurgical-Chemical Background; Identifications of Alchemical Processes"; (d) "The Physiological Background; Verifications of the Efficacy of the Elixirs."

Needham, Joseph. *Science and Civilisation in China*. Vol. 5: *Chemistry and Chemical Technology*, part III: *Spagyric Discovery and Invention: Historical Survey, from Cinnabar Elixirs to Synthetic Insulin*. With the collaboration of Ho Ping-Yü [Ho Peng Yoke] and Lu Gwei-Djen. Cambridge: Cambridge University Press, 1976.

Includes sub-section (e) "The Historical Development of Alchemy and Early Chemistry" of section 33, "Alchemy and Chemistry," with chapters ranging from the origins of alchemy to the rise of modern chemistry. Essay review by Nathan Sivin, "Discovery of Spagyric Invention," *Harvard Journal of Asiatic Studies* 41 (1981): 219-35.

Pregadio, Fabrizio. “The Elixirs of Immortality.” In Livia Kohn, ed., *Daoism Handbook*, 165-95. Leiden: E.J. Brill, 2000.

A survey of Waidan arranged—like almost all other essays in this major reference work on Daoism—into four parts concerned with history, texts, “worldview,” and practices.

Rong Zhiyi 容志毅. *Zhongguo liandanshu kaolie* (中国炼丹术考略). Shanghai: Shanghai Sanlian Shudian, 1998.

Another valuable general overview of Waidan in Chinese. Contains chapters on the history of Waidan and its methods, terminology, and chemical features.

Sivin, Nathan. “Chinese Alchemy.” In Mircea Eliade, ed., *The Encyclopedia of Religion*, 1: 186-90. New York and London: Macmillan, 1987.

An important synthesis of Waidan, centered on its aims and means, major issues in its history, and relation to Daoism and Chinese science. Also published in Lindsay Jones, ed., *The Encyclopedia of Religion*, 1: 237-41 (second ed., New York and London: MacMillan, 2005).

Sivin, Nathan. “Research on the History of Chinese Alchemy.” In Z.R.W.M. von Martels, ed., *Alchemy Revisited: Proceedings of the International Conference on the History of Alchemy at the University of Groningen, 17-19 April 1989*, 3-20. Leiden: E.J. Brill, 1990.

On the main issues and results of research until the time of publication. The survey is focused on Waidan, but also concerns some aspects of Neidan.

General Overviews: Neidan

Neidan, or Internal Alchemy, is documented from the eighth century until the present day. Since its origins, it has been transmitted in a large number of lineages and branches, each of which—as shown by the studies cited in the present section and elsewhere in this bibliography—has had its own views and its own practices. Huo 2015 is one of the clearest and most valuable overviews in Chinese. Hu and Lü 2004 is among several Chinese book-length studies on Daoism that provide relatively short descriptions of the main Neidan lineages. Also worthy of mention is Hao 1994, containing a survey of three different varieties—rather than “lineages” in the strict sense—of Neidan. In works in Western languages, Neidan has often been called or regarded as a “physiological” technique, a definition definitely influenced by Needham 1983. Despite the valuable insights and suggestions found in this work, studies by Chinese, Japanese, and Western scholars published in the last few decades have made it clear that Needham’s definition is reductive, and that Neidan is a much more complex phenomenon than his description might suggest. There are little doubts that the most reliable English-language survey of Neidan and its varieties is at present Yokote 2015. The overview in Pregadio and Skar 2000 is still useful, although the fast pace of Neidan studies, mainly the fruit of research by Chinese and Japanese scholars, would demand some portions of it to be emended. Robinet 1995 and Robinet 1997 present the views of a scholar who has made major contributions to the study of the intellectual foundations of Neidan and its relation to Daoism and other branches of Chinese thought and

religion. Pregadio 2019 contains complete or partial translations of several important sources, with brief introductions on their place in the history of Neidan.

Hao Qin 郝勤. *Longhu dandao daojiao neidanshu* (龙虎丹道道教内丹术). Chengdu: Sichuan Renmin Chubanshe, 1994.

Divided into three main parts concerned with different varieties of Neidan, traditionally known as Pure Cultivation (*qingxiu* 清修), or individual practices; Conjoined Cultivation (*shuangxiu* 雙修), involving sexual conjunction; and Nüdan 女丹, or Internal Alchemy for women. (On Nüdan see also under *Neidan Practices*.)

Hu Fuchen 胡孚琛 and Lü Xichen 吕锡琛. *Daoxue tonglun: Daojia, Daojiao, Dandao* (道学通论 — 道家、道教、丹道). Beijing: Shehui Kexue Wenxuan Chubanshe, 2004

Part 5 (pp. 505-620) of this book contains chapters on about ten of the main lineages of Neidan and the respective doctrines and practices.

Huo Kegong 霍克功. *Daojiao neidanxue* (道教内丹学). Beijing: Zongjiao Wenhua Chubanshe, 2015.

Despite the author’s clear predilection for the system expounded by Lu Xixing 陸西星 (1520-1606), this is one of the best overviews of Neidan in Chinese, clearly arranged and well documented by a large number of quotations from primary sources.

Needham, Joseph. *Science and Civilisation in China*. Vol. 5: *Chemistry and Chemical Technology*, part V: *Spagyric Discovery and Invention: Physiological Alchemy*. With the collaboration of Lu Gwei-Djen. Cambridge: Cambridge University Press, 1983.

Includes sub-section (j) “The Outer and the Inner Macrobiogens; the Elixir and the Enchymoma” of section 33, “Alchemy and Chemistry,” containing a survey of the history and the practices of Neidan. Several parts of this book should be consulted with caution and with comparison to other studies (especially Chinese and Japanese) on the same subjects.

Pregadio, Fabrizio. *Taoist Internal Alchemy: An Anthology of Neidan Texts*. Mountain View, CA: Golden Elixir Press, 2019.

Complete or selected translations of sixteen Neidan works, representative of its main lineages and branches, with introductions and notes.

Pregadio, Fabrizio, and Lowell Skar. “Inner Alchemy.” In Livia Kohn, ed., *Daoism Handbook*, 464-97. Leiden: E.J. Brill, 2000.

A useful but, in some portions, somewhat outdated overview of the history, literature, doctrines, and practices of Neidan.

Robinet, Isabelle. *Introduction à l’alchimie intérieure taoïste: De l’unité et de la multiplicité*. Paris: Les Éditions du Cerf, 1995.

Actually not a general overview, but a collection of essays on several important aspects of Neidan written by one of the main Daoist scholars. Contains an annotated French translation

of one of the main Neidan classics, the *Wuzhen pian* 悟真篇 (Awakening to Reality; see under *The Southern Lineage (Nanzong)*).

Robinet, Isabelle. *Taoism: Growth of a Religion*. Stanford: Stanford University Press, 1997.

The chapter entitled “Under the Song and the Yuan: Interior Alchemy” (pp. 212-56) is concerned with some of the main Neidan lineages and authors.

Yokote Yutaka [横手裕]. “Daoist Internal Alchemy.” Translated by Fabrizio Pregadio. In John Lagerwey and Pierre Marsone, eds., *Modern Chinese Religion*, part 1: *Song-Liao-Jin-Yuan*, 2: 1055-1110. Leiden: E.J. Brill, 2015.

By far the best and most up-to-date overview in a Western language of the history and main doctrines of different Neidan lineages.

REFERENCE WORKS

There is no true general reference work on Chinese alchemy, but several publications provide orientation to Waidan and Neidan literature. The main repository of Chinese alchemical texts is the *Daozang* 道藏, or Daoist Canon, the largest collection of Daoist works. Close to one fifth of its approximately 1,500 texts are related to the Waidan and Neidan traditions that developed until the mid-fifteenth century, when the collection was compiled and printed. The most useful reference works on the *Daozang* include Boltz 1987, Schipper and Verellen 2004, and Ren and Zhong 2005. Virtually all extant Waidan sources are found in the *Daozang*, although other works—especially the *bencao* 本草, or pharmacopoeias—provide important source materials; see Ho Peng Yoke, *Explorations in Daoism*, cited in the note to Ho 1979. The dating of the texts, many of which are anonymous and do not bear indications of provenance, has been one of the main obstacles to the historical study of Waidan. Important indications on this subject are found in Chen 1983 and Ho 1979, but much work remains to be done in order to reconstruct the development of this branch of Chinese alchemy. Neidan sources, instead, are found both within and outside the *Daozang*. Several later works are included in the *Daozang jiyao* 道藏輯要 (Essentials of the Daoist Canon, originally compiled around 1800 and expanded in 1906), and hundreds of others have been published in smaller collections (e.g., the *Daozang xubian* 道藏續編, or *Sequel to the Daoist Canon*, on which see Esposito 2014). On these and other collections see *Daoist Canon[obo-9780199920082-0164]* in the *Oxford Bibliographies in Chinese Studies*.

Boltz, Judith M. *A Survey of Taoist Literature: Tenth to Seventeenth Centuries[http://digitalassets.lib.berkeley.edu/ieas/IEAS_32_0002.pdf]*. Berkeley: Institute of East Asian Studies, University of California, 1987.

An excellent bibliographic survey of the Daoist Canon and its texts. For Neidan, see especially the section entitled “Literary Anthologies and Dialogic Treatises” (pp. 137-202).

Chen Guofu 陈国符. *Daozang yuanliu xukao* (道藏源流續考). Taipei: Mingwen Shuju, 1983.

Published as a sequel to the author’s *Daozang yuanliu kao* 道藏源流考 (Beijing: Zhonghua Shuju, 1963). In addition to a study on the dates of more than fifty sources (pp. 285-382),

contains several other essays on Waidan, including one on its technical terminology. Some portions of this book have been republished in Chen 1997 (cited under *Ingredients, Equipment, and Methods*).

Esposito, Monica. *Facets of Qing Daoism*. Wil and Paris: UniversityMedia, 2014.

Contains (pp. 191-211) bibliographic notes on the twenty-three works included in the *Daozang xubian*, with detailed synopses of their contents. Esposito indicates Min Yide 閔一得 (1748-1836) as compiler of the *Daozang xubian*, but this collection was edited by Ding Fubao 丁福保 (1874-1952) on the basis of Min Yide’s *Gu shuyinlou cangshu* 古書隱樓藏書.

Ho, Peng Yoke. *On the Dating of Taoist Alchemical Texts*. Brisbane: Griffith University, 1979.

Describes methods for dating Waidan sources, with examples of their application. An updated version is found, with several other essays on Waidan, in the author’s *Explorations in Daoism: Medicine and Alchemy in Literature*, 9-32 (London and New York: Routledge, 2007).

Ren Jiyu 任繼愈 and Zhong Zhaopeng 鍾肇鵬, eds. *Daozang tiyao* (道藏提要). Third revised edition. Beijing: Zhongguo Shehui Kexue Chubanshe, 2005.

In addition to descriptive notes on each text in the Daoist Canon, this major work contains several appendixes, including one with short biographical notes on about 500 authors.

Schipper, Kristofer, and Franciscus Verellen, eds. *The Taoist Canon: A Historical Companion to the Daozang*. 3 vols. Chicago: Chicago University Press, 2004.

An indispensable reference work for Daoist studies. Contains entries for each text in the Daoist Canon, arranged first chronologically and then by traditions, with details on date, authorship, transmission, relation to other sources, and contents.

W Aidan Authors and Texts

Works cited in this section are concerned with the origins of Waidan (External Alchemy), with the best-known source on early Waidan (although not itself a Waidan text), and with later works that document the history of this branch of Chinese alchemy until its decline during the Song period (960-1279).

The Taiqing Tradition and Other Early Waidan Texts

Details about the first clearly identifiable tradition of Waidan emerge around the end of the Later Han dynasty (25-220 CE). Named after the Daoist heaven that granted its revelation, the Taiqing 太清, or Great Clarity, tradition developed between the third and the sixth centuries in Jiangnan 江南, the region south of the lower Yangzi River approximately corresponding to present-day Zhejiang and the southern parts of Jiangsu and Anhui. On this tradition, characterized by an emphasis on ritual features and by a set of basic techniques shared by several texts, see Pregadio

2006 and Han 2009. A possibly earlier text, the *Sanshiliu shuifa* 三十六水法 (Methods of the Thirty-six Aqueous Solutions), is studied and translated in Ts’ao, Ho, and Needham 1959. In the late fourth century, works closely related to the Taiqing texts were incorporated in the revealed corpus of the Daoist Shangqing 上清 (Highest Clarity) tradition; see Strickmann 1981; Bokenkamp 1977: 289-95 and 331-39, and Pregadio 2006: 56-59. The most thorough study on Waidan during the Six Dynasties (220-589 CE) is Rong 2006, which examines these and several other sources.

Bokenkamp, Stephen. *Early Daoist Scriptures*. Berkeley: University of California Press, 1997.

This outstanding work on Han and Six Dynasties Daoist texts contains a study and translation of the *Langgan huadan jing* 琅玕華丹經 (Book of the Elixir Flower of Langgan), one of the Waidan texts incorporated in the Shangqing textual corpus.

Han Jishao 韩吉绍. “Lun Huangdi jiuding shendan jingjue” (论「黄帝九鼎神丹经诀」). *Zongjiaoxue yanjiu* 宗教学研究 2009.3, 22-30.

Discusses the date of the commentary to the *Jiudan jing* 九丹經 (Book of the Nine Elixirs) and the main methods described in this important work, which is a veritable *summa* of Waidan in the Tang period.

Pregadio, Fabrizio. *Great Clarity: Daoism and Alchemy in Early Medieval China*. Stanford: Stanford University Press, 2006.

A study of the Taiqing tradition and its relation to Daoism, with emphasis on the ritual aspects of Waidan. Contains translations of the *Jiudan jing* (Book of the Nine Elixirs) and of two other early Waidan texts, one of which is part of the Shangqing corpus. Translated into Chinese by Han Jishao 韩吉绍 as *Taiqing: Zhongguo zhonggu zaoqi de daojiao he liandanshu* 太清 — 中国中古早期的道教和炼丹术 (Jinan: Qi Lu Shushe, 2016).

Rong Zhiyi 容志毅. *Daozang liandan yaoji yanjiu: Nanbei chao juan* (道藏炼丹要籍研究 — 南北朝卷). Jinan: Qi Lu Shushe, 2006.

A survey of Six Dynasties alchemical sources (including the *Zhouyi cantong qi* 周易參同契), giving prominence to their chemical and technical aspects. Apparently entitled as part of a multi-volume work, but no other portions have been published to date.

Strickmann, Michel. “On the Alchemy of T’ao Hung-ching.” In Holmes Welch and Anna Seidel, eds., *Facets of Taoism: Essays in Chinese Religion*, 123-92. New Haven and London: Yale University Press, 1981.

Examines Tao Hongjing’s 陶弘景 (456-536) alchemical practices in the context of his life and times. Includes important discussions of the alchemical texts incorporated in the Shangqing revealed corpus, and of their place within this tradition.

Ts’ao, T’ien-ch’in, Ho Ping-Yü [Ho Peng Yoke], and Joseph Needham. “An Early Mediaeval Chinese Alchemical Text on Aqueous Solutions.” *Ambix* 7 1959: 122-58.

A study and translation—with omission of the final short section on ritual—of the *Sanshiliu shuifa* 三十六水法 (Methods of the Thirty-six Aqueous Solutions). Corresponds in part to section 33(g) “Reactions in aqueous medium” of *Science and Civilisation in China*, vol. 5.IV.

Ge Hong and the *Baopu zi neipian*

Not only in the West, but also in China Waidan has mainly been known through Ge Hong’s 葛洪 (283-343) *Baopu zi neipian* 抱朴子內篇 (Inner Chapters of the The Master Who Embraces Spontaneous Nature, completed in ca. 320). Yet, although Ge Hong has often been called “the greatest Chinese alchemist” or in similar ways, he states twice in his work that he had never compounded an elixir. His figure as an alchemist is largely a creation of Daoist hagiography. Nonetheless, the *Baopu zi* is an essential source for the study of early Waidan, owing to the large number of quotations from original sources (most of which are now lost) and the background information that it provides on alchemy and related subjects. Studies that explore different aspects of Ge Hong’s thought on Daoism, Waidan, and other subjects include Lai 1998, Puett 2007, and the relevant chapter in Robinet 1997. In addition to most general studies on Waidan cited in the present bibliography, on the alchemical methods described in Ge Hong’s work see Kim 2000. Translations of the *Baopu zi* into Western languages are found in Feifel 1941-46, Ware 1966, Pregadio 1987, and Che 1999.

Che, Philippe. *La Voie des Divins Immortels: Les chapitres discursifs du Baopu zi neipian*. Paris: Gallimard, 1999.

French translation of chapters 1-3, 5, 7-10, 12, and 20 of the *Neipian*, superior to any other version into a Western language. In the translator’s definition, the “discursive chapters” are those in which Ge Hong focuses on general subjects, such as the search of “immortality,” instead of alchemy, meditation, and other technical subjects.

Feifel, Eugene. “Pao-p’u tzu nei-p’ien.” *Monumenta Serica* 6 1941: 113-211; 9 1944: 1-33; 11 1946: 1-32.

Annotated translation of chapters 1-4 and 11. Like other translations of the *Neipian*, it not is fully reliable, but this version is philologically better documented than any other.

Kim, Daeyeol. “Symbolisme de la force vitale en Chine ancienne: Modèles et significations dans l’alchimie taoïste opératoire. Études des pratiques alchimiques du *Baopuzi neipian* (4e siècle après J.-C. en Chine).” Thèse de doctorat, Université de Paris-Sorbonne, 2000.

An excellent study of the alchemical chapters of Ge Hong’s work, covering both technical and religious features. See also the author’s “Métallurgie et alchimie en Chine ancienne,” in *La forge et le forgeron*, vol. 2: *Le merveilleux métallurgique*, 155-89 (Paris: L’Harmattan, 2003).

Lai, Chi-Tim. "Ko Hung's Discourse of Hsien Immortality: A Taoist Configuration of an Alternate Ideal Self-Identity." *Numen* 45 1998: 1-38.

An important study that explores several themes beyond the one announced in its title. In particular, shows that Ge Hong was one of the Six Dynasties literati who performed inquiries "into the transcendent and eternal realm beyond the natural world" and "became more conscious of enquiring the ground of one's 'natural' self-identity regardless of the existing 'social' identity."

Pregadio, Fabrizio. *Ko Hung: Le Medicine della Grande Purezza. Dal "Pao-p'u tzu nei-p'ien."* Roma: Edizioni Mediterranee, 1987.

Italian translation of chapters 1, 4, 11, and 16-19 of the *Neipian*, based on the critical edition by Wang Ming, *Baopu zi neipian jiaoshi* 抱朴子內篇校釋 (Beijing: Zhonghua Shuju, 1980).

Puett, Michael. "Humans, Spirits, and Sages in Chinese Late Antiquity: Ge Hong's *Master Who Embraces Simplicity* (Baopuzi)." *Extrême-Orient, Extrême-Occident* 29 2007: 95-119.

On the figure of the sage (*shengren* 聖人) in Ge Hong's thought, here defined as an ordinary human being who, through "clarity" (*ming* 明), is "able to develop artificial techniques that allow humans to transcend the earthly realm" (p. 99).

Robinet, Isabelle. *Taoism: Growth of a Religion*. Stanford: Stanford University Press, 1997.

The chapter entitled "Ge Hong and His Tradition" (pp. 78-113) is concerned with Ge Hong's views of "immortality" and the ways to attain it.

Ware, James. *Alchemy, Medicine and Religion in the China of A.D. 320: The Nei P'ien of Ko Hung (Pao-p'u tzu)*. Cambridge, MA: MIT Press, 1966. Repr. New York: Dover Publications, 1981.

The only integral translation of the *Neipian* into a Western language. A remarkable work, but not entirely reliable in its rendering of alchemical and other Daoist technical terminology. Also contains a translation of Ge Hong's autobiography, found in his *Baopu zi waipian* 抱朴子外篇 (Outer Chapters of the The Master Who Embraces Spontaneous Nature).

Tang and Later Authors and Texts

The majority of extant Waidan texts were written during the Tang dynasty (618-907), a time that has been called its "golden age." The main trends of this period attest to the decline of the Taiqing tradition, paralleled by the growing importance of doctrines and methods related to the work that, from this time onwards, became the main text of Chinese alchemy, namely the *Zhouyi cantong qi* 周易參同契 (Seal of the Unity of the Three, in Accordance with the *Book of Changes*; see under *The *Cantong qi**). But while this work changed forever the history of Chinese alchemy, by no means all Waidan texts written during the Tang and in later times are inspired by its doctrines. One example is the compendium masterfully studied and translated in Sivin 1968. Other scholars have focused their attention on Tang and later sources dealing with the *materia medica*; see in particular Ho 1980, on an annotated catalogue of substances used as elixir ingredients; Chen

1983, on a lexicon of alchemical terminology; and Pregadio 1997, on an inventory of minerals and metals (including some of foreign origin) used in Waidan methods. Despite its later date and its different formal features, the poetical work translated in Ho, Lim, and Morsingh 1973 may also be included in this category. A large number of Waidan texts written during the Tang and the Song dynasties are not extant; one example are the works studied in Ho and Lim 1972. Other studies on Tang-dynasty Waidan are cited under *Waidan Doctrines*.

Chen Guofu 陈国符. "Shiyao eryl bu yu zhu" (「石药尔雅」补与注). In *Daozang yuanliu xukao* (道藏源流續考), 383-442. Taipei: Mingwen Shuju, 1983.

A masterly work, which identifies the possible sources of the terms listed in the *Shiyao eryl* 石藥爾雅 (Synonymic Dictionary of the Mineral Materia Medica, 806 CE) and supplements them with many others found in different Waidan sources. A revised version is found in Chen 1997 (cited under *Ingredients, Equipment, and Methods*).

Ho, Peng Yoke. *Tuku T'ao's Tan-fang chien-yüan: A Tenth-century Alchemical Sourcebook*. Hong Kong: Center of Asian Studies, University of Hong Kong, 1980.

In Chinese, with an introduction in English. Contains a critical edition of Dugu Tao's 獨孤滔 *Danfang jianyuan* 丹方鑑源 (Mirror-Origin of the Alchemical Methods). An English translation of this work is separately published in the author's *Explorations in Daoism: Medicine and Alchemy in Literature*, 33-83 (London and New York: Routledge, 2007).

Ho, Peng Yoke, and Beda Lim. "Ts'ui Fang, a Forgotten 11th-Century Chinese Alchemist." *Japanese Studies in the History of Science* 11 1972: 103-12.

On Cui Fang 崔昉 (eleventh century) and his works, now known only through quotations in later sources.

Ho, Peng Yoke, Beda Lim, and Francis Morsingh. "Elixir Plants: The *Ch'un-yang Lü Chen-jen yao shih chih* (Pharmaceutical Manual of the Adept Lü Ch'un-yang)." In Shigeru Nakayama and Nathan Sivin, eds., *Chinese Science: Explorations of an Ancient Tradition*, 153-202. Cambridge, MA, and London: MIT Press, 1973.

Translation in poetical form of the 59 stanzas of the *Chunyang Lü Zhenren yaoshi zhi* 純陽呂真人藥石製, dated by the authors to ca. 1400.

Pregadio, Fabrizio. "A Work on the Materia Medica in the Taoist Canon: *Instructions on an Inventory of Forty-five Metals and Minerals*." *Asiatica Venetiana* 2 1997: 139-60.

On the *Jinshi bu wujiu shu jue* 金石簿五九數訣, a Tang-dynasty work containing brief notes on substances used in Waidan. The descriptions are similar in style and content to those found in the pharmacopoeias (*bencao* 本草).

Sivin, Nathan. *Chinese Alchemy: Preliminary Studies*. Cambridge, MA: Harvard University Press, 1968.

Contains a biography of Sun Simo 孫思邈 (seventh century) and an exemplary annotated translation of his *Taiqing danjing yaojue* 太清丹經要訣 (Essential Instructions on the Books of the Elixirs of the Great Clarity), with an extensive introduction on Waidan and its study.

Essay review by Mircea Eliade, “Alchemy and Science in China,” *History of Religions* 10: 178-82.

THE CANTONG QI

No text has influenced the development of both Waidan and Neidan more than the *Zhouyi cantong qi* 周易參同契 (Seal of the Unity of the Three, in Accordance with the *Book of Changes*). Traditionally attributed to Wei Boyang 魏伯陽 (an alchemist said to come from the present-day Zhejiang province in southeastern China) and dated to the mid-second century, it did not reach its present form before the mid-fifth century, and possibly one or even two centuries later. In spite of its significance in the Chinese alchemical traditions, clear evidence shows that the text was originally attached to the cosmological traditions centered on the *Yijing* 易經 (Book of Changes).

Studies on the *Cantong qi*

Reflecting its importance, the volume of Chinese bibliography on the *Cantong qi* is massive. The main book-length studies include Meng 1993, Xiao and Guo 2001, and Ma 2013, but despite its early date, at least one article, namely Wang 1984 (first published in 1947), deserves to be mentioned for the influence it has played on later Chinese scholarship on this text. Among other subjects, these and several other studies present different views on two complex subjects closely related to one another, namely, the date of the text and its association with either Waidan or Neidan (on both subjects, the views of Fukui 1974 also deserve consideration). The evident foundations of the *Cantong qi* in the Han-dynasty cosmological tradition, whatever its precise date may be, are examined in several works, among which Suzuki 1963 requires notice. The large textual tradition initiated by the *Cantong qi*, consisting of about three dozen extant commentaries and a much larger number of extant and lost related works, is surveyed in Pregadio 2011. On the relation between its doctrinal foundations and the later alchemical traditions, see Pregadio 2016.

Fukui Kōjun [福井康順]. “A Study of *Chou-i Ts’an-t’ung-ch’i*.” *Acta Asiatica* 27 1974: 19-32.

English translation of “*Shūeki sandōkei kō*” (周易三同契考), in *Tōhō Gakkai sōritsu nijūgo-shūnen tōhō-gaku ronshū* 東方学会創立二十五周年東方学論集, 715-37 (Tokyo: Tōhō Gakkai, 1972). Suggests that a work called *Zhouyi cantong qi* may have existed in Han times, but was not the same as the current text.

Ma Zongjun 马宗军. *Zhouyi cantong qi yanjiu* (「周易參同契」研究). Jinan: Qi Lu Shushe, 2013.

A very well documented study of the traditional views on the date and the contents of the *Cantong qi*.

Meng Naichang 孟乃昌. *Zhouyi cantong qi kaobian* (「周易參同契」考辯). Shanghai: Shanghai Guji Chubanshe, 1993.

Definitely the most important Chinese study of the *Cantong qi*, thanks to the author’s wide knowledge of the Chinese alchemical traditions and his critical approach towards the traditional views on the date and the doctrines of this work. The book also includes a selection of related articles published earlier by the same author.

Pregadio, Fabrizio. *The Seal of the Unity of the Three*. Vol. 2: *Bibliographic Studies on the Cantong qi: Commentaries, Essays, and Related Works*. Mountain View, CA: Golden Elixir Press, 2011.

The first part of this book contains a bibliographic catalogue of about 150 extant and lost commentaries, essays, and other works related to the *Cantong qi*, with details on authors, dates, editions, and reprints. The second part consists of a survey of the textual tradition of the *Cantong qi*, focused on the composition and contents of about forty major works.

Pregadio, Fabrizio. “Creation and its Inversion: Cosmos, Human Being, and Elixir in the *Cantong qi* (The Seal of the Unity of the Three).” In Anna Andreeva and Dominic Steavu, eds., *Transforming the Void: Embryological Discourse and Reproductive Imagery in East Asian Religions*, 186-211. Leiden: E.J. Brill, 2016.

Examines the doctrines of the *Cantong qi* in light of the Daoist views on the generation of the cosmos from the Dao, and the inversion of this process performed in the alchemical practice.

Suzuki Yoshijirō 鈴木由次郎. *Kan Eki kenkyū* (漢易研究). Tokyo: Meitoku Shuppansha, 1963.

A major work on the *Book of Changes*. The chapter entitled “*Shūeki sandōkei no kenkyū*” 「周易參同契」の研究 (pp. 595-656) examines features shared by the *Cantong qi* with the Han-dynasty “*Studies of the Changes*” (*Yixue* 易學).

Wang Ming 王明. “*Zhouyi cantong qi kaozheng*” (「周易參同契」考證). In *Daojia he Daojiao sixiang yanjiu* (道家和道教思想研究), 241-92. Beijing: Zhongguo Shehui Kexue Chubanshe, 1984.

Places the *Cantong qi* in the context of the Han-dynasty intellectual traditions. Despite its early date, still deserves a place among the main studies on this work. Originally published in *Guoli Zhongyang Yanjiuyuan Lishi Yuyan Yanjiusuo jikan* 國立中央研究院歷史語言研究所集刊 19 1947: 325–366.

Xiao Hanming 蕭漢明 and Guo Dongsheng 郭东升. *Zhouyi cantong qi yanjiu* (「周易參同契」研究). Shanghai: Shanghai Wenhua Chubanshe, 2001.

A noteworthy study, although the authors’ attempt to find historical grounds to hagiographic data often leads to questionable evaluations. Contains what it claims to be a reconstruction of the “original” *Cantong qi*, actually based on a version first published in 1704.

Translations of the *Cantong qi*

Published translations of the *Cantong qi* include four into English (Wu and Davis 1932, Zhou 1988, Bertschinger 1994, and Pregadio 2011) and one into Japanese (Suzuki 1977).

Bertschinger, Richard. *The Secret of Everlasting Life: The First Translation of the Ancient Chinese Text of Immortality*. Shaftesbury, Dorset: Element, 1994.

Translation of the so-called *guwen* (“ancient text”) version of the *Cantong qi*, with selections from the commentaries by Zhu Xi 朱熹 (1130-1200), Yu Yan 俞琰 (1258-1314), Chen Zhixu 陳致虛 (1290-ca.1368), and others. Addressed to the general public and not always dependable. The author’s attempt to render the work in verse often leads him to depart from the original text.

Pregadio, Fabrizio. *The Seal of the Unity of the Three: A Study and Translation of the Cantong qi, the Source of the Taoist Way of the Golden Elixir*. Mountain View, CA: Golden Elixir Press, 2011.

Translation based on Chen Zhixu’s recension, with notes on each section and on individual lines. The introduction supersedes earlier publications on the *Cantong qi* by the same author.

Suzuki Yoshijirō 鈴木由次郎. *Shūeki sandōkei* (周易參同契). Tokyo: Meitoku Shuppansha, 1977.

Japanese translation, based on Yu Yan’s recension. Unquestionably one of the most important works on the *Cantong qi*, especially owing to the excellent notes provided by the translator.

Wu, Lu-ch’iang [吴鲁强], and Tenney L. Davis. “An Ancient Chinese Treatise on Alchemy Entitled Ts’an T’ung Ch’i.” *Isis* 18 1932: 210-89.

Translation based on Yu Yan’s recension. A pioneering work, far from being entirely reliable but still interesting as a document of the early stages of Western scholarship on Chinese alchemy. Followed by notes that quote, in the authors’ view, comparable passages in Western alchemical literature.

Zhou, Shiyi [周士一]. *The Kinship of the Three*. Changsha: Hunan Jiaoyu Chubanshe, 1988.

Translation based on Peng Xiao’s recension. In several cases, the author provides lengthy paraphrases of the text instead of translating it. Includes a glossary and an index.

HISTORY OF NEIDAN

Works cited in this section are concerned with lineages, authors, and sources that have shaped the history of Neidan (Internal Alchemy). Significant differences exist among them, owed to resulting from the time in which they came into existence and the varying emphasis they place on the multiple and, often, contrasting features that characterize Neidan as whole.

Origins of Neidan

The origins of Neidan are one of the issues that surround the study of this branch of Chinese alchemy. Scholars mainly concerned with Waidan have suggested that the shift to Neidan occurred primarily as a result of the multiplication of cases of elixir poisoning, which even affected at least two and possibly as many as four Tang emperors. Scholars more familiar with the history of Daoism, instead, have shown that Neidan is rooted in, and evolved from, early Daoist meditation practices, which already incorporated alchemical imagery drawn from Waidan. Studies that have articulated this view include Katō 1996, Pregadio 2006, Sakade 2007, and Steavu 2016. Other major components that have influenced the development of Neidan in different historical periods include early Daoist thought, Buddhism, and certain fundamental Confucian and Neo-Confucian concepts; see Ge 2004, Pregadio 2018, and the works cited under *Neidan, Confucianism, and Buddhism*. The origins and early meanings of the term *neidan* are debated, but it is generally assumed that this term became current in the late Tang period or slightly later, and that originally it did not designate a branch of alchemy distinguished from Waidan: *waidan* and *neidan* (“external” and “internal elixir”) referred instead to two aspects, or stages, of what is nowadays known as Neidan. On this subject, see Baldrian-Hussein 1989-90 and Robinet 2011.

Baldrian-Hussein, Farzeen. **“Inner Alchemy: Notes on the Origin and Use of the Term Neidan”* [https://www.persee.fr/doc/asia_0766-1177_1989_num_5_1_947]*. *Cahiers d’Extrême-Asie* 5 (1989-90): 163-90.

On the date in which the term *neidan* came into use, and its different meanings and equivalents.

Ge Guolong 戈国龙. *Daojiao neidanxue suyuan: Xiudao, fangshu, liandan, Foxue* (道教内丹学溯源 — 修道 · 方术 · 炼丹 · 佛学). Beijing: Zongjiao Wenhua Chubanshe, 2004.

A study of four different corpora of doctrine and practices that contributed to give birth to Neidan, namely early Daoist thought, early self-cultivation practices, Waidan, and Buddhism.

Katō Chie 加藤千惠. “*Rōshi chūkyō to naitan shisō no genryū*” (「老子中經」 と 内丹思想の源流). *Tōhō shūkyō* 東方宗教 87 1996: 21-38.

An important study, which shows that several facets of Neidan practices are anticipated in a text as early as the *Laozi zhongjing* 老子中經 (Central Book of Laozi), originally dating from about 200 CE. Translated into Chinese as “*Laozi zhongjing yu neidan sixiang de qi yuan*” (「老子中经」 与 内丹思想的起源), *Zongjiaoxue yanjiu* 宗教学研究 1997.4: 40-47.

Pregadio, Fabrizio. “Early Daoist Meditation and the Origins of Inner Alchemy.” In Benjamin Penny, ed., *Daoism in History: Essays in Honour of Liu Ts’un-yan*, 121-58. London: Routledge, 2006.

On the practices of visualization of the inner gods described in Daoist texts, their alchemical symbolism, and their influence on the origins and the early development of Neidan.

Pregadio, Fabrizio. “Laozi and Internal Alchemy.” In Iwo Amelung and Joachim Kurtz, eds., *Reading the Signs: Philology, History, Prognostication: Festschrift for Michael Lackner*, 271-301. München: Iudicium, 2018.

A survey focused on the image of Laozi 老子 in Neidan lineages and texts; the commentaries to the *Daode jing* 道德經 (Book of the Way and Its Virtue) written by authors of Neidan works; and the main *Daode jing* themes and terms incorporated in Neidan.

Robinet, Isabelle. “On the Meaning of the Terms *Waidan* and *Neidan*.” Translated by Fabrizio Pregadio. In *The World Upside Down: Essays on Taoist Internal Alchemy*, 75-101. Mountain View, CA: Golden Elixir Press, 2011.

A detailed analysis of the different meanings of these two terms within the context of Neidan, where *waidan* usually does not refer to practices based on the manipulation of natural substances, but to a stage or an aspect of Neidan. Originally published as “Sur le sens des termes *waidan* et *neidan*,” *Taoist Resources* 3.1 1991: 3-40.

Sakade, Yoshinobu [坂出祥伸]. “Methods and Ideas on Increasing Vitality in Ancient China: The Transition from *Neiguan* to *Neidan* in the Sui and Tang Dynasties.” In *Taoism, Medicine, and Qi in China and Japan*, 50-68. Osaka: Kansai University Press, 2007.

On the practice of *neiguan* 內觀 (understood in this study as meditation on the inner gods) and its adoption in Neidan, where it became a method of concentration without visualizations.

Steavu, Dominic. “Cosmos, Body, and Gestation in Taoist Meditation.” In Anna Andreeva and Dominic Steavu, eds., *Transforming the Void: Embryological Discourse and Reproductive Imagery in East Asian Religions*, 111-46. Leiden: E.J. Brill, 2016.

Suggests that meditation methods related to the early Sanhuang 三皇 (Three Sovereigns) corpus of Daoist texts anticipate several aspects of the later Neidan practices.

Three Seminal Texts

In addition to the *Cantong qi*, three works—apparently not associated, at least at their origins, with particular lineages—have played an important role in the early and later history of Neidan. The first is the *Yinfu jing* 陰符經 (Book of the Hidden Agreement), which despite its brevity is one of the most obscure and difficult Daoist works. Its date and provenance are unclear, but it was probably composed between the late sixth and the eighth century. Translations and studies include Cleary 1991, Acker 2006, and Komjathy 2013; another translation, with Yu Yan’s 俞琰 (1258-1314) commentary, is found in Pregadio 2019 (cited under *General Overviews: Neidan*). See also Yamada 2014, concerned with the reception of this work within and outside Daoism during the Song period. The second is the *Qingjing jing* 清靜經 (Book of Clarity and Quiescence), which dates from the Tang period and is ascribed to Laozi 老子 himself. Anticipating some of the main views of the Northern Lineage of Neidan, it states that only by comprehending that mind, forms, and objects are devoid of a substantial nature is it possible to realize their fundamental emptiness and attain the innate “clarity and quiescence” of the mind. Several translations of this work have been published, including Despeux 2010 into French and

Komjathy 2013 into English. For studies on two of the main commentaries, see Yamada 2018 and Gentz 2010 (cited under *Other Song-, Jin-, and Yuan-Dynasty Authors and Texts*). The third main seminal text is the *Ruyao jing* 入藥鏡 (Mirror for Compounding the Medicine), dating from the early tenth century, which describes the alchemical process in short poems made of three-character lines. A complete translation of this work and of one of its commentaries into a Western language is found in Wang 2013.

Acker, Peter. *Liu Chuxuan (1147-1203) and his Commentary on the Daoist Scripture Huangdi yinfu jing*. Wiesbaden: Harrassowitz Verlag, 2006.

A translation of the *Yinfu jing*, with commentary by Liu Chuxuan 劉處玄 (1147-1203). The author of the commentary was one of the masters belonging to the Northern Lineage, i.e., the original core of Quanzhen (see under *The Northern Lineage (Beizong)*).

Cleary, Thomas. *Vitality, Energy, Spirit: A Taoist Sourcebook*. Boston: Shambhala, 1991.

Contains (pp. 220-38) a translation of the *Yinfu jing*, with commentary by Liu Yiming 劉一明 (1734-1821). This and other works by the same translator cited in the present bibliography should be used with caution, with regard to both their introductions and their translations.

Despeux, Catherine. *Lao-tseu: Le guide de l'insondable*. Paris: Éditions Entrelacs, 2010.

Contains a French translation of the *Qingjing jing* (pp. 247-50).

Komjathy, Louis. *The Way of Complete Perfection: A Quanzhen Daoist Anthology*. Albany: State University of New York Press, 2013.

Contains a translation of the *Qingjing jing* with Liu Tongwei's 劉通微 (?-1196) commentary (pp. 176-86), and a translation of the *Yinfu jing* with Liu Chuxian's commentary (pp. 186-208).

Wang, Jie [?-ca. 1380]. *Commentary on the Mirror for Compounding the Medicine: A Fourteenth-Century Work on Taoist Internal Alchemy*. Translated by Fabrizio Pregadio. Mountain View, CA: Golden Elixir Press, 2013.

Annotated translation of the *Ruyao jing*, with the commentary by Wang Jie 王玠. The author was a second-generation disciple of Li Daochun 李道純, on whom see under *Other Song-, Jin-, and Yuan-Dynasty Authors and Texts*.

Yamada Takashi 山田俊. “Sōdai ni okeru *Yinbukyō* no juyō ni tsuite” (宋代に於ける陰符經の受容について). *Tōhō shūkyō* 東方宗教 123 2014: 62-82.

A survey of the reception of the *Yinfu jing* in Daoist and other sources dating from the Song period (960-1279). Also includes an analysis of several passages shared by different commentaries to this work.

Tang Neidan and the Zhong-Lü Lineage

Although the first traces of Neidan in extant sources date from the eighth century (Zhang 2001), the earliest identifiable tradition developed from the ninth or tenth centuries. Named after Zhongli Quan 鍾離權 and Lü Dongbin 呂洞賓, two illustrious Daoist immortals, the Zhong-Lü 鍾呂 lineage is characterized by a focus on physiological practices, closely correlated to cosmological principles (Yuan 2005; despite its rather ambiguous title, Zhang 2009 is also almost entirely concerned with this lineage). Its main doctrinal text is the *Zhong-Lü chuandao ji* 鍾呂傳道集 (Anthology of Zhongli Quan's Transmission of the Dao to Lü Dongbin; trans. Wong 2000, often loose), which is also the earliest important doctrinal treatise of Neidan as a whole. The Zhong-Lü practices are detailed in the *Lingbao bifa* 靈寶畢法 (Complete Methods of the Numinous Treasure); see Baldrian-Hussein 1984, the first major study of a Neidan text in a Western language. Besides these two sources, an influential poem attributed to Lü Dongbin is studied and translated in Baldrian-Hussein 1985, and studies and translations of later works are found in Homann 1976 and Baryosher-Chemouny 1996.

Baldrian-Hussein, Farzeen. *Procédés Secrets du Joyau Magique: Traité d'Alchimie Taoïste du XIe siècle*. Paris: Les Deux Océans, 1984.

A masterful study and annotated translation of the *Lingbao bifa* (Complete Methods of the Numinous Treasure), with an introduction on Neidan and a detailed exposition of the system exposed in this text. Essay review by Isabelle Robinet, *"L'alchimie interne dans le taoïsme"https://www.persee.fr/doc/asie_0766-1177_1989_num_5_1_946]", *Cahiers d'Extrême-Asie* 2 1986: 241-52.

Baldrian-Hussein, Farzeen. "Yüeh-yang and Lü Tung-pin's *Ch'in-yüan ch'un*: A Sung Alchemical Poem." In Gert Naundorf, Karl-Heinz Pohl, and Hans-Herman Schmidt, eds., *Religion und Philosophie in Ostasien: Festschrift für Hans Steininger zum 65. Geburtstag*, 19-31. Würzburg: Königshausen und Neumann, 1985.

A study and translation of the *Qinyuan chun* 沁園春 (Spring at the Qin Garden), an alchemical poem attributed to Lü Dongbin often quoted in later Neidan works.

Baryosher-Chemouny, Muriel. *La quête de l'immortalité en Chine: Alchimie et paysage intérieur sous les Song*. Paris: Éditions Dervy, 1996.

A study and translation of two later Zhong-Lü works, both ascribed to Xiao Daocun 蕭道存 (fl. 1260). Also includes a valuable description of the Zhong-Lü practices (pp. 95-124).

Homann, Rolf. *Pai Wen P'ien or the Hundred Questions: A Dialogue Between Two Taoists on the Macrocosmic and Microcosmic System of Correspondences*. Leiden: E.J. Brill, 1976.

Translation of the *Baiwen pian* 百問篇, a work containing definitions of Zhong-Lü technical terms discussed in an imaginary conversation between Zhongli Quan and Lü Dongbin. While it requires emendations, this study deserves mention as the first Western-language monograph on Neidan published in the early stages of present-day Daoist studies.

Wong, Eva. *The Tao of Health, Longevity, and Immortality: The Teachings of Immortals Chung and Lü*. Boston and London: Shambhala, 2000.

A non-technical and frequently loose translation of the main doctrinal treatise of the Zhong-Lü lineage, the *Zhong-Lü chuandao ji*. This and other translations of Neidan texts by the same author are addressed to the general public and should be consulted with caution.

Yuan Kangjiu [Yuan Hong-chau] 袁康就. *Zhong-Lü neidan daodeguan yanjiu* (鍾呂內丹道德觀研究). Beijing: Zongjiao Wenhua Chubanshe, 2005.

An interesting work, which places the Zhong-Lü doctrines in the context of Chinese thought.

Zhang, Guangbao [张广保]. “History and Early Lineages.” In Livia Kohn and Robin R. Wang, eds., *Internal Alchemy: Self, Society, and the Quest for Immortality*, 53-72. Magdalena, NM: Three Pines Press, 2009.

An overview of Neidan in the Tang period, almost entirely focused on the Zhong-Lü lineage.

Zhang Guangbao 张广保. *Tang Song neidan Daojiao* (唐宋內丹道教). Shanghai: Shanghai Wenhua Chubanshe, 2001.

A major study of Tang and Song Neidan, concerned *inter alia* with the figures of Zhongli Quan and Lü Dongbin; Chen Tuan 陳搏 (ca. 920-89); the Zhong-Lü lineage; and the Southern Lineage (Nanzong 南宗, on which see under *The Southern Lineage (Nanzong)*).

The Southern Lineage (Nanzong)

After the *Cantong qi*, the main Neidan scripture is the *Wuzhen pian* 悟真篇 (Awakening to Reality), composed by Zhang Boduan 張伯端 (987?-1082) in ca. 1075. Azuma 1988 is a clear introduction to the contents and the early textual history of this work. Zhang Boduan is placed at the origins of Nanzong 南宗, the Southern Lineage of Neidan, and his *Wuzhen pian* is the main text of that lineage. It is now understood, however, that the lineage was formally established only at a later time, probably by its fifth “patriarch,” Bai Yuchan 白玉蟾 (1194-1229?), who is one of the greatest figures in the history of Neidan and is also known as a specialist of the Daoist Thunder Rites (*leifa* 雷法; Chao 2009). Nanzong is traditionally known to give initial priority to the cultivation of individual “existence” (or “destiny,” *ming* 命), followed by the cultivation of inner nature (*xing* 性; on these two concepts see under *Main Neidan Doctrines*). The main study of the history, sources, doctrines, and practices of this lineage is unquestionably Gai 2013. Lu 2009 is not entirely reliable. Complete or partial English translations of the *Wuzhen pian* include Cleary 1987 (with commentary by Liu Yiming 劉一明, 1734-1821), Crowe 2000, and Pregadio 2009; a French translation is found in Robinet 1995 (cited under *General Overviews: Neidan*). Zhang Boduan is also ascribed—almost certainly with no historical grounds—with the authorship of another work in poetry, the *Jindan sibai zi* 金丹四百字 (Four Hundred Words on the Golden Elixir), translated in Cleary 1986 (again, with Liu Yiming’s commentary) and in Pregadio 2019 (with Peng Haogu’s 彭好古 commentary, dating from ca. 1600; cited under *General Overviews: Neidan*). On the Southern Lineage see also Zhang 2001 (cited under

Tang Neidan and the Zhong-Lü Lineage), and on its practices see Wang 2011 (cited under *Neidan Practices*).

Azuma Jūji 吾妻重. “*Goshinhen no Naitan shisō*” (「悟真篇」の内丹思想). In Sakade Yoshinobu 坂出祥伸, ed., *Chūgoku kodai yōsei shisō no sōgōteki kenkyū* 中国古代養生思想の総合的研究, 600-27. Tokyo: Hirakawa Shuppansha, 1988.

A detailed analysis of the different versions of the *Wuzhen pian* and the thought of this major Neidan work.

Chao, Shin-yi. “Summoning the Thunder Generals: Internal Alchemy in the Thunder Rites.” In Livia Kohn and Robin R. Wang, eds., *Internal Alchemy: Self, Society, and the Quest for Immortality*, 104-20. Magdalena, NM: Three Pines Press, 2009.

An important contribution to the study of Neidan and the Daoist Thunder Rites. While the primary purpose of these rites was to exorcise harmful spirits, their performance also required inner practices closely related to Neidan.

Cleary, Thomas. *The Inner Teachings of Taoism*. Boston and London: Shambhala, 1986.

Translation of the *Jindan sibaizi*, with commentary by Liu Yiming 劉一明 (1734-1821), and of another work by Liu Yiming, the *Xiangyan poyi* 象言破疑 (Removing Doubts on Symbolic Language).

Cleary, Thomas. *Understanding Reality: A Taoist Alchemical Classic*. Honolulu: University of Hawai'i Press, 1987.

Translation of the *Wuzhen pian*, with commentary by Liu Yiming 劉一明 (1734-1821).

Crowe, Paul. “*Chapters on Awakening to the Real: A Song Dynasty Classic of Inner Alchemy* Attributed to Zhang Boduan (ca. 983-1081).” *British Columbia Asian Review* 12 2000: 1-40.

Annotated translation of the sixteen poems that form the “Lüshi” 律詩 (Regulated Verses) portion of the *Wuzhen pian*, with a historical introduction to the text and its tradition.

Gai Jianmin 盖健民. *Daojiao jindan pai Nanzong kaolun* (道教金丹派南宗考论). 2 vols. Beijing: Shehui Kexue Wenxian Chubanshe, 2013.

A monumental work on the Southern Lineage, containing a detailed and thoroughly documented analysis of its history, texts, doctrines, and practices. Indispensable for any study of this subject.

Lu, Xichen [Lü Xichen 吕锡琛]. “The Southern School: Cultivating Mind and Inner Nature.” In Livia Kohn and Robin R. Wang, eds., *Internal Alchemy: Self, Society, and the Quest for Immortality*, 73-86. Magdalena, NM: Three Pines Press, 2009.

An interesting but perplexing study, which ascribes to the Southern Lineage views ordinarily attributed to the Northern Lineage—in particular, those concerning the priority of inner “nature” (*xing*) over individual “existence” (*ming*) in the Neidan practice. The author correctly states the opposite in a book she co-authored with Hu Fuchen (cited under *General Overviews: Neidan*), p. 553.

Pregadio, Fabrizio. *Awakening to Reality: The “Regulated Verses” of the Wuzhen pian, a Taoist Classic of Internal Alchemy*. Mountain View, CA: Golden Elixir Press, 2009.

Translation of the “Lüshi” 律詩 (Regulated Verses) portion of the *Wuzhen pian*, with a general introduction to Neidan and notes to the poems and their individual lines.

The Northern Lineage (Beizong)

Established by Wang Zhe 王嘉 (Chongyang 重陽, 1113-70) and his seven main disciples during the Jin 金 dynasty (1115-1234), the Northern Lineage, or Beizong 北宗, is the original core of the Quanzhen 全真 (Complete Reality) branch of Daoism. As shown in Eskildsen 2004 and Komjathy 2013, early Quanzhen embraced different forms of practice, from ritual to extreme forms of asceticism. The role of the Northern Lineage within Daoism as a whole, however, should be distinguished from its role in the history of Neidan, which involves aspects not yet fully investigated in Western scholarship. With regard to Neidan, contrary to the Southern Lineage, Beizong is traditionally reputed to give priority to cultivation of inner nature (*xing* 性) by means of “clarity and quiescence” (*qingjing* 清靜), which is said to encompass cultivation of individual existence or destiny (*ming* 命). Yet, the status of Neidan in the early stages of Quanzhen is not entirely clear (compare the all-inclusive views expressed in Komjathy 2007 with the much more cautious and critical approach in Marsone 2010). Attributions of Neidan works to both Wang Zhe and Qiu Chuji 邱處機 (1148-1227, one of his seven disciples) are not reliable; Hachiya 1972 and Ge 2008 show that they can be read as Zhong-Lü texts written or rewritten in the names of Beizong masters, in order to provide Quanzhen with actual Neidan doctrines since its origins. A work translated in Despeux 1981 and Komjathy 2013, and especially the sources on Quanzhen self-cultivation studied in Zhang 1995, appear to be closer to the perspectives of early Quanzhen than any contemporary or later Neidan work in the strict sense. For a Beizong commentary to the *Yinfu jing* 陰符經 (Book of the Hidden Agreement), see Acker 2006 and Komjathy 2013, both cited under *Three Seminal Texts*.

Despeux, Catherine. *Le chemin de l'éveil: Illustré par le dressage du buffle dans le Bouddhisme Chan, le dressage du cheval dans le Taoïsme, le dressage de l'éléphant dans le Bouddhisme tibétain*. Paris: L'Asiathèque, 1981.

A remarkable book, concerned with three sets of illustrations that represent comparable themes in Daoism, Chan Buddhism, and Tibetan Buddhism. Contains an annotated translation of the first chapter of the *Shangcheng xiuzhen sanyao* 上乘修真三要 (The Three Essentials for the Cultivation of Reality According to the Highest Vehicle), probably written by the Quanzhen master Gao Daokuan 高道寬 (1195-1277).

Eskildsen, Stephen E. *The Teachings and Practices of the Early Quanzhen Taoist Masters*. Albany: State University of New York Press, 2004.

An overview of early Quanzhen doctrines on self-cultivation, containing, in particular, a chapter entitled “Cultivating Clarity and Purity.” Best read in conjunction with the critical review by Pierre Marsone in *T'oung Pao* 92 2006: 225-34.

Ge Guolong 戈国龙. “*Dadan zhizhi fei Qiu Chuji zuopin kao*” (「大丹直指」非丘处机作品考). *Shijie zongjiao yanjiu* 世界宗教研究 2008.3: 43-50.

Demonstrates that one of the main treatises usually deemed to be representative of the Northern Lineage of Neidan is actually a Zhong-Lü text written in the name of Qiu Chuji.

Hachiya Kunio 蜂屋邦夫. “*Chōyō shinnin kinkan gyokusa ni tsuite* (「重陽真人金闕玉鎖」について). *Tōyō Bunka Kenkyūjo kiyō* 東洋文化研究所紀要 58 1972: 75-163.

A very technical and thorough analysis of the *Chongyang zhenren jinguan yusuo jue* 重陽真人金闕玉鎖訣 (Instructions on the Gold Barrier and the Jade Lock by the Realized Man Chongyang), which reveals its close relation to the sources of the Zhong-Lü lineage.

Komjathy, Louis. *Cultivating Perfection: Mysticism and Self-Transformation in Quanzhen Daoism*. Leiden: E.J. Brill, 2007.

A translation and study of the *Chongyang zhenren jinguan yusuo jue*. In the present study, the author ascribes this work to Wang Zhe and describes it as a major source of Quanzhen alchemy, only to state, a few years later, that it is one of the Quanzhen texts of “uncertain date and questionable attribution” (Komjathy 2013: 115-16, cited in the next entry).

Komjathy, Louis. *The Way of Complete Perfection: A Quanzhen Daoist Anthology*. Albany: State University of New York Press, 2013.

Contains complete or selected translations of Quanzhen texts, including several concerned with Neidan. Among them is the *Dadan zhizhi* 大丹直指 (Straightforward Pointers to the Great Elixir), on which see also Ge 2008 (cited above in the present section).

Marsone, Pierre. *Wang Chongyang (1113-1170) et la fondation du Quanzhen: Ascètes taoïstes et alchimie intérieure*. Paris: Collège de France, Institut des Hautes Études Chinoises, 2010.

An excellent work on the early history of Quanzhen and the place of Neidan in its doctrines and practices. Acknowledges the indebtedness of Quanzhen to the Zhong-Lü lineage, and appropriately describes Quanzhen alchemy mostly in light of Zhong-Lü sources (pp. 318-56).

Zhang Guangbao 张广保. *Jin Yuan Quanzhen dao neidan xinixingxue* (金元全真道内丹心性学). Beijing: Sanlian Shudian, 1995.

The most important study of self-cultivation in Quanzhen. It examines several lineages—including Longmen 龍門—with special regard to their teachings on the cultivation of mind (*xin* 心) and inner nature (*xing* 性). Also includes comparative studies of Neidan, Buddhist, and Neo-Confucian doctrines on the same subjects.

The Merging of the Northern and Southern Lineages in the Yuan Dynasty

The Yuan dynasty (1279-1368) is an extremely important period in the history of Neidan (for an overview, see Chen 1986). The reunification of the Chinese empire had the indirect consequence of encouraging several attempts to integrate the doctrines and practices of the Northern and Southern lineages, which had independently developed in the previous two or three centuries. Li

Daochun 李道純 (late thirteenth century) is the creator of one of the most remarkable of these attempts; see Yokote 1990, Cen Xiaoqing 2010, and Crowe 2012 (the latter is cited under *Neidan, Confucianism, and Buddhism*). The same is true of Chen Zhixu 陳致虛 (1290-ca.1368); see Matsushita 2009. His views on Neidan are compared to those of Yu Yan 俞琰 (1258-1314, another major Yuan-dynasty author) in Zeng 2001; see also Zhang 2005, cited under *Other Song-, Jin-, and Yuan-Dynasty Authors and Texts*. Li Daochun’s teachings were later transmitted by his second-generation disciple, Wang Jie 王玠 (?-ca. 1380); see Gentz 2010 and Wang 2013 (the latter is cited under *Three Seminal Texts*).

Cen Xiaoqing 岑孝情. *Li Daochun zhonghe sixiang ji qi dandao chanzhen* (李道純中和思想及其丹道闡真). Beijing: Zongjiao Wenhua Chubanshe, 2010.

An in-depth study of Li Daochun’s thought, mainly concerned with his concepts of “centrality” (*zhong* 中) and “harmony” (*he* 和), his adoption of the system of the *Book of Changes*, and his use of charts to summarize and express doctrinal points.

Chen Bing 陈兵. “Yuandai Jiangnan Daojiao” 元代江南道教. *Shijie zongjiao yanjiu* 世界宗教研究 1986.2: 65–80.

Surveys the Daoist schools and lineages of southern China during the Yuan period, with particular concern for the interactions between Neidan and other traditions.

Gentz, Joachim. “Hermeneutics of Multiple Senses: Wang Jie’s ‘Explanations and Commentary with Diagrams to the *Qingjing jing*.’” *Journal of Chinese Philosophy* 37 2010: 346-65.

A study of Wang Jie’s commentary to the *Qingjing jing* 清靜經 (Book of Clarity and Quiescence), mainly concerned with the “text diagrams” that summarize each section into which he subdivides the text.

Matsushita Michinobu 松下道信. “Chō Yūkin, Chin Shōkyo no seimei setsu ni tsuite” (趙友欽・陳致虛の性命説について). In Tanaka Fumio 田中文雄 and Terry Kleeman, eds., *Dōkyō to kyōsei shisō* (道教と共生思想), 155-75. Tokyo: Daiga Shobō, 2009.

An analysis of the thought of Chen Zhixu and of his master, Zhao Youqin 趙友欽 (1271-1368), centered on their views of *xing* 性 (inner nature) and *ming* 命 (existence, or destiny) and related subjects, including the distinction between a “gradual” (*jian* 漸) and an “immediate” (*dun* 頓) way of realization in Neidan.

Yokote Yukata 横手裕. “Zenshin-kyō no henyō” (全真教の変容). *Chūgoku tetsugaku kenkyū* 中国哲学研究 2 1990: 23-93.

An excellent survey of the Yuan-dynasty Neidan traditions associated with Southern Quanzhen, mainly concerned with Li Daochun but also considering other contemporary and later masters. The second part examines several Neidan lineages and sub-lineages created between the late-eleventh and the fourteenth centuries.

Zeng Chuanhui 曾傳輝. *Yuandai Cantong xue: Yi Yu Yan, Chen Zhixu wei li* (元代參同學 — 以俞琰、陳致虛為例). Beijing: Zongjiao Wenhua Chubanshe, 2001.

After an extensive introduction concerned with earlier and later authors, examines Yu Yan’s and Chen Zhixu’s commentaries to the *Cantong qi*, paying attention to their views on key subjects such as the nature of “immortality” (*xian* 仙), the concepts of “following the course” and “inverting the course” (*shunni* 順逆), and the practice of the “fire phases” (*huohou* 火候).

Other Song-, Jin-, and Yuan-Dynasty Authors and Texts

The studies listed in this section are concerned with other works written during the Song, Jin, and Yuan dynasties that cannot be traced to any of the three major Neidan lineages mentioned in the previous sections. Baldrian-Hussein 2004 is concerned with a Neidan commentary to an early Daoist work on the inner gods; Eskildsen 2001 is devoted to a master who devised an apparently unique model of Neidan practice; Juan 2013 examines the views of an author who advocated the free circulation of Neidan texts; Yamada 2018 studies an important author still little-known to Western scholarship; and Zhang 2005 is an analysis of four commentaries to the *Cantong qi* dating from the Song and Yuan periods.

Baldrian-Hussein, Farzeen. “The *Book of the Yellow Court*: A Lost Song Commentary of the 12th Century.” *Cahiers d’Extrême-Asie* 14 2004, 187-226.

A study of an anonymous commentary that interprets the poems of the *Huangting jing* 黃庭經 (Book of the Yellow Court) in light of Neidan, with no concern for practices based on the visualization of the inner gods which are prominent in this work.

Eskildsen, Stephen. “Neidan Master Chen Pu’s Nine Stages of Transformation.” *Monumenta Serica* 49 2001: 1-31.

A guided tour to a work by Chen Pu 陳朴 (probably eleventh century), which describes a particular Neidan regime in nine stages.

Juan, He. “Text and Teacher in the Transmission of Alchemical Knowledge: Wu Wu and His Works.” *East Asian Science, Technology, and Medicine* 38 2013: 55-70.

On Wu Wu 吳悞 (fl. 1163-87) and his discourses on the importance of texts in the transmission of Neidan. The author concludes that, in Wu Wu’s view, texts “should be open to all,” but their understanding requires oral instructions from a master and suitable qualities on behalf of the disciple.

Yamada Takashi 山田俊. “Hou Shanyuan sixiang qianxi” 侯善淵思想淺析. *Zhongguo bentu zongjiao yanjiu* 中国本土宗教研究 1 2018: 50-67.

On Hou Shanyuan 侯善淵 (fl. ca. 1160-1190), a Jin-dynasty master best known for a commentary to the *Yinfu jing* 陰符經 (Book of the Hidden Agreement), but also represented by five other works in the Daoist Canon.

Zhang Weiwen 章伟文. *Song Yuan Daojiao yixue chutan* (宋元道教易学初探). Chengdu: Ba Shu Shushe, 2005.

Contains a chapter on the *Cantong qi* and four chapters on Song- and Yuan-dynasty authors of commentaries to this work: Chen Xianwei 陳顯微 (?-after 1254), Chu Huagu 儲華谷 (fl. ca. 1230), Yu Yan 俞琰 (1258-1314), and Chen Zhixu 陳致虛 (1290-ca.1368).

Ming and Qing Dynasties

The creation of new branches during the Ming and Qing periods (1368–1644 and 1644–1912) resulted in the enumeration of five “schools” of Neidan: the earlier Northern and Southern lineages (Beizong and Nanzong); the Central Branch (Zhongpai 中派), said to have been initiated by Li Daochun but, in the Qing period, mainly represented by Huang Yuanji 黃元吉 (fl. mid-nineteenth century); the Western Branch (Xipai 西派), founded by Li Xiyue 李西月 (1806-56); and the Eastern Branch (Dongpai 東派), created by Lu Xixing 陸西星 (1520-1606). While general studies on Neidan by Chinese scholars (e.g., those cited under *General Overviews: Neidan*) contain details about the last three branches and their representatives, the only one among the last three masters to have been the object of studies in Western languages is Lu Xixing; see in particular Liu 1965 and the translations of one of his works in Wile 1992 and in Pregadio 2019 (cited under *General Overviews: Neidan*). The subdivision into five “schools,” however, does not exhaust the landscape of Neidan during the Ming and Qing periods. Wu Shouyang 伍守陽 (1574–1644) is deemed to be the founder of the Wu-Liu 伍柳 branch with Liu Huayang 柳華陽 (1735–99) who, more than one century after Wu’s death, asserted to be his disciple. This branch is distinguished by the concurrent use of Buddhist and Daoist methods for meditation and physiological practices; see Liu 1984, Ding 2007, and Van Enckevort 2014. A major compendium of Neidan, the *Xingming guizhi* 性命圭旨 (Principles of the Conjoined Cultivation of Nature and Existence), is studied and partially translated into German in Darga 1999. For other Ming and Qing authors and texts see Valussi 2012, Oberfrank 2013, and Wile 1992. On the Longmen 龍門 (Dragon Gate) lineage and some its masters and texts, see under *The Longmen Lineage*. On Zhao Bichen 趙避塵 (1860-?), see under *Neidan Practices*.

Darga, Martina. *Das alchemistische Buch von innerem Wesen und Lebensenergie: Xingming guizhi*. München: Eugen Diederichs Verlag, 1999.

A translation of the thirty-one “Discourses” (“Shuo” 說) found in the first part of the *Xingming guizhi*, with copious annotations and a general introduction to this major work, which is sometimes seen as an early instance the “popularization” of Neidan during the Ming and the Qing periods, but also ranks among its main doctrinal treatises.

Ding Changchun 丁常春. *Wu Shouyang neidan sixiang yanjiu* (伍守阳内丹思想研究). Chengdu: Ba Shu Shushe, 2007.

A survey of the Neidan system created by Wu Shouyang, with emphasis on the associated practices. One chapter examines the work of Liu Huayang and its relation to Wu Shouyang’s teachings.

Mozias, Ilias. 2020. *The Literati Path to Immortality: The Alchemical Teaching of Lu Xixing*. St. Petersburg, FL: Three Pines Press, 2020.

A valuable exploration of Lu Xixing views on Neidan, well documented by quotations from several primary sources. The author suggests that Lu’s Neidan did not involve sexual conjunction, a point that will require more analysis.

Liu, Ts’un-yan. “Wu Shou-yang: The Return to the Pure Essence.” In *New Excursions from the Hall of Harmonious Wind*, 184-208. Leiden: E.J. Brill, 1984.

On the life and teachings of Wu Shouyang, mainly based on his *Tianxian zhengli zhilun* 天仙正理直論 (A Straightforward Discourse on the Correct Principles of Celestial Immortality).

Oberfrank, Elmar. “Secretly Transmitted Direct Pointers to the Great Elixir.” *Journal of Daoist Studies* 6 2013: 58-92.

A study and translation of the *Michuan dadan zhizhi* 秘傳大丹直指, attributed to Qiu Chuji 邱處機 (1148-1227) but probably dating from the Qing period, published in the 1990s by the Daoist master Tian Chengyang 田誠陽 on the basis of an earlier edition by Chen Yingning 陳櫻寧 (1880-1969). Like several other Neidan works, it is divided into sections that briefly describe important concepts, terms, and methods.

Valussi, Elena. “Printing and Religion in the Life of Fu Jinquan: Alchemical Writer, Religious Leader, and Publisher in Sichuan.” *Daoism: Religion, History and Society* 4 2012: 1-51.

Examines the life and work of Fu Jinquan 傅金銓 (1765–1845) and the community of writers and practitioners he established in Sichuan, centered on “spirit-writing” sessions and the use of printing as a means to spread alchemical knowledge.

Van Enkevort, Paul. “The Three Treasures: An Enquiry into the Writings of Wu Shouyang.” *Journal of Daoist Studies* 7 2014: 117-45.

An excellent study of Wu Shouyang’s views on the functions of *jing* (essence), *qi* (breath, or pneuma), and *shen* (spirit) in the Neidan practice. Concluded by a discussion of the so-called Yang Spirit (*yangshen* 陽神), which according to Wu Shouyang and other Neidan masters is the main agent of “immortality.”

Wile, Douglas. *Art of the Bedchamber: The Chinese Sexual Yoga Classics, Including Women’s Solo Meditation Texts*. New York: State University of New York Press, 1992.

Includes complete or partial translations of Neidan texts (here called “sexology classics”), such as Lu Xixing’s *Jindan jiuzheng pian* 金丹就正篇 (Rectifying Errors for the Seekers of the Golden Elixir), Sun Ruzhong’s 孫汝忠 (seventeenth century) *Jindan zhenzhuo* 金丹真傳 (The Authentic Transmission of the Golden Elixir), and four works on *Nüdan* 女丹 (Internal Alchemy for women) dating from the Qing dynasty. The author describes Neidan as focused on the cultivation of sexual energy, a view disputed by a large part of the Neidan tradition.

The Longmen Lineage

Shortly after the Qing dynasty (1644-1912) was established, the Quanzhen monk Wang Changyue 王常月 (1592-1680) gained the support of the court. Since then, his Longmen 龍門 (Dragon Gate) lineage has been the main branch of Quanzhen Daoism. However, the overall image of Longmen—and Quanzhen—during the Qing period and in later times is complex: while Quanzhen is in the first place a monastic order, Longmen includes a number of non-institutional and non-monastic forms, most of which are devoted to different forms of Neidan with little or no connection to the central institution; on this complex issue, see Esposito 2001 and Chen 2012. Two Longmen branches have been the object of several studies. The Jin’gai 金蓋 branch, based in Zhejiang, has had Min Yide 閔一得 (1748-1836) as its main representative; see Esposito 1993. Among its scriptures is the *Secret of the Golden Flower*, so entitled by Richard Wilhelm when he translated it into German in 1929 (the original title is *Taiyi jinhua zongzhi* 太乙金華宗旨, or *Ancestral Teachings on the Golden Flower of Great Unity*), and also made famous in the West by Carl G. Jung’s “psychological commentary” (for the English translation of both works, see Wilhelm and Jung 1962). In Min Yide’s branch, the *Secret*, probably dating from the early 1700s, is deemed to be the main work on the cultivation of inner nature (*xing*). Its earlier origins within the spirit-writing (*fujū* 扶乩) cults of the Qing period are examined in Mori 2002. Min Yide’s views of Neidan are compared to those of two other important masters and authors, Liu Huayang 柳華陽 (1735-99) and Huang Yuanji 黃元吉 (fl. mid-nineteenth century), in Zhang 2017. In 1819, Liu Yiming 劉一明 (1734-1821), a younger contemporary of Min Yide and the beginner of a different Longmen branch in Gansu, published his anthology of Neidan works, entitled *Daoshu shi'er zhong* 道書十二種 (Twelve Books on the Dao; actually containing about twenty works selected from the thirty-five or so written by its author). While Liu Yiming’s views are grounded in some the most deep-rooted aspects of this tradition, they are also adverse to convention and often do not follow accepted standards. His works, nevertheless, represent one of the main instances of an integral exposition of doctrine in the history of Internal Alchemy; see Pregadio 2014 (“Superior Virtue, Inferior Virtue,” cited under *Main Neidan Doctrines*) and Pregadio 2015. One of Liu Yiming’s works is translated in Liu 2013. For other translations and studies, see under *Three Seminal Texts*, *The Southern Lineage (Nanzong)*, and *Alchemy and Chinese Literature*.

Chen, Bing. “The Revival of the Longmen Branch of the Quanzhen School in the Qing Dynasty.” In Mou Zhongjian, ed., *Taoism*, 225-51. Leiden and Boston: E.J. Brill, 2012.

A general introduction to Longmen and its branches, followed by an outline of Wang Changyue’s doctrines. Discusses the social history of this lineage and the close relation between “precepts” (*jie* 戒) and Neidan self-cultivation.

Esposito, Monica. “La Porte du Dragon. L’école Longmen du Mont Jingai et ses pratiques alchimiques d’après le *Daozang xubian* (Suite au Canon Taoïste).” [http://universitymedia.org/Esposito_PhD.html]* Thèse de doctorat, Paris VII, 1993.

A remarkable doctoral dissertation on the history and doctrines of the Jin’gai branch of Longmen. An exemplar containing the author’s (1962-2011) own handwritten corrections and additions is freely available in PDF format.

Esposito, Monica. “Longmen Taoism in Qing China: Doctrinal Ideal and Local Reality.” *Journal of Chinese Religions* 29 2001: 191-231.

A key study to understanding the relation between “official” Longmen and its numerous branches, many of which are unrelated to the monastic institution. Also published in the author’s *Facets of Qing Daoism* (Wil and Paris: UniversityMedia, 2014), 143-90.

Liu, Yiming [劉一明, 1734-1821]. *Cultivating the Tao: Taoism and Internal Alchemy. The Xiuzhen houbian (ca. 1798)*. Translated with introduction and notes by Fabrizio Pregadio. Mountain View, CA: Golden Elixir Press, 2013.

A translation of one of the main doctrinal writings by Liu Yiming, divided in twenty-six short sections that examine different aspects of Neidan.

Mori, Yuria. “Identity and Lineage: The *Taiyi jinhua zongzhi* and the Spirit-Writing Cult to Patriarch Lü in Qing China.” In Livia Kohn and Harold D. Roth, eds., *Daoist Identity: History, Lineage, and Ritual*, 165-84. Honolulu: University of Hawai’i Press, 2002.

A study of the different “spirit-writing” groups related to the composition of the *Secret of the Golden Flower*, and of the circumstances that have led to the existence of several variant versions of this major Neidan text.

Pregadio, Fabrizio. “Discriminations in Cultivating the Tao: Liu Yiming (1734-1821) and his *Xiuzhen houbian*.” *AION (Annali dell’Università degli Studi di Napoli “L’Orientale”)* 37 2015: 77-103.

An overview of Liu Yiming’s teachings on Neidan, mainly based on his *Xiuzhen houbian* 修真後辨 (Further Discriminations on Cultivating the Dao).

Wilhelm, Richard, and Carl Gustav Jung. *The Secret of the Golden Flower: A Chinese Book of Life*. Translated by Cary F. Baynes. London: Routledge and Kegan Paul, 1962; New York: Harcourt, Brace and World, 1962; several later reprints.

Based on the edition of *Die Geheimnis der goldenen Blute: Ein chinesisches Lebensbuch* published in 1957. Includes partial translations of the *Taiyi jinhua zongzhi* and the *Huiming jing* 慧命經 (Book of Wisdom and Life), usually ascribed to Liu Huayang but possibly written by the Longmen adept, Xie Taiyi 謝太易 (?-1683).

Zhang Tao 张涛. *Qingdai qingxiu neidan sixiang bijiao yanjiu: Yi Liu Huayang, Min Yide, Huang Yuanji wei duixiang* (清代清修内丹思想比较研究 — 以柳华阳、闵一得、黄元吉为对象). Chengdu: Ba Shu Shushe, 2017.

A comparative study of three important Qing-dynasty masters, presenting the respective views on the function and features of the main stages of the Neidan practice.

Modern and Contemporary Neidan

The landscape of Neidan from the beginning of the Republican period in 1912 to the present day is extremely complex. In modern times, Neidan is characterized by repeated attempts to provide it

with a foundation in modern science, often mediated through Chinese Traditional Medicine (CTM, resulting in turn from efforts to coordinate classical Chinese medicine and modern Western medicine), and by an indisputable “popularization” of doctrines and self-cultivation methods, resulting in hybridizations with Taijiquan 太極拳, Qigong 氣功, and related modern practices. In parallel to this, Neidan has often been used as an instrument to foster Chinese nationalism and as a phenomenon to be kept, as much as possible, under strict state control—two tendencies not mutually contradictory. The four studies cited in this section examine different aspects of these trends. Liu 2009 is concerned with Chen Yingning 陳撷寧 (1880-1969), one of the main figures in the transition from classical to modern Neidan, who was from 1961 the president of the Chinese Taoist Association (Zhongguo daojiao xiehui 中國道教協會, the organ through which the Chinese government seeks to regulate Daoist cults and practices). Valussi 2017 is a detailed study of the biography of another important representative of Neidan, closely involved in political loyalism. Lee 2012 is exemplary in its presentation of the contemporary panorama of Neidan in Taiwan, obviously conditioned by political issues. Different in its perspectives, but useful for an understanding of several points at issue, Despeux 2016 is a first-hand account of the life, teachings, and views of an important figure in contemporary Neidan.

Despeux, Catherine. “The ‘New Clothes’ of Sainthood in China: The Case of Nan Huaijin.” In David Ownby, Vincent Goossaert, and Ji Zhe, eds. *Making Saints in Modern China*, 349-93. New York: Oxford University Press, 2016.

An admirable testimony of the life and teachings of Nan Huaijin 南懷瑾 (1918-2012), a Chinese master of Neidan and related doctrines and practices, by a major Western scholar who closely followed him and his work until his death.

Lee, Fongmao [李豐楙]. 2012. “Transmission and Innovation: The Modernization of Daoist Inner Alchemy in Postwar Taiwan.” In David A. Palmer and Xun Liu, eds., *Daoism in the Twentieth Century: Between Tradition and Modernity*, 196-225. Berkeley, Los Angeles, and London: University of California Press.

Concerned with five self-cultivation groups in Taiwan, and their adaptation of Neidan to modern social structures and modern values, in particular those introduced by Western science.

Liu, Xun [劉迅]. *Daoist Modern: Innovation, Lay Practice, and the Community of Inner Alchemy in Republican Shanghai*. Cambridge, MA: Harvard University Press, 2009.

A study of the encounter of Neidan with “modernity” in early twentieth-century Shanghai, seen through the activities and works of Chen Yingning, who propounded a version of Neidan influenced by Western science and informed by both nationalism and the religious reform movements of those times.

Valussi, Elena. “War, Nationalism and the Transmission of Daoist Scriptures from China to Taiwan: The Case of Xiao Tianshi.” *Asia Major* 30 2017: 143-89.

An extensive study of the life and work of Xiao Tianshi 蕭天石 (1909-86). A KMT official during the war of resistance against Japan, he later moved to Taiwan and was involved in a

large-scale publishing activity, culminating in one of the main modern collections of Neidan and other Daoist texts, the *Daozang jinghua* 道藏精華 (Essence of the Daoist Canon).

WAIDAN DOCTRINES AND METHODS

Works cited in this section present overviews or detailed explorations of the theoretical foundations and the technical aspects of Waidan (External Alchemy), including the ingredients at the basis of its methods and its laboratory equipment. A final subsection is concerned with studies on the relation between Chinese alchemy and corresponding traditions that have existed in other cultures.

Waidan Doctrines

While the earlier Taiqing tradition was based on ritual, the Tang and later Waidan sources show that the alchemical methods were designed to mirror features of the cosmological system. Sivin 1976 and Sivin 1980 are essential to appreciate these aspects of Waidan. As shown in these studies, several Tang alchemists maintain that their work reproduces in one year, made of 4,320 “double hours,” the process through which nature transmutes minerals and metals into gold within the earth’s womb during a cosmic cycle of 4,320 years. An analogous intent inspires the method for heating the elixir, known as “fire phases” (*huohou* 火候), which is modeled after the description of the yearly cycle of the Sun found in the *Cantong qi*, and was also adopted in Neidan; on this subject, see also Ho 1972. A third new element is the so-called “category theory,” according to which two Yin and Yang substances can be used together only if they belong to the same “category” (*lei* 類); this is the subject of the text studied and translated in Ho and Needham 1959. Other substantial contributions to the study of Waidan doctrines—in particular, the lead-mercury theory, the concept of “reverted elixir” (*huandan* 還丹), and the relation between Waidan and Neidan—were authored by Meng Naichang 孟乃昌. The most convenient way to access his studies on these subjects is through their reprints in Meng 1993 (cited under *Studies on the *Cantong qi**).

Ho, Peng Yoke. “The System of the *Book of Changes* and Chinese Science.” *Japanese Studies in the History of Science* 11 1972: 23-39.

Mainly concerned with the application of the hexagram system of the *Yijing* to alchemy and especially the *Zhouyi cantong qi*.

Ho, Ping-Yü [Ho Peng Yoke], and Joseph Needham. “Theories of Categories in Early Mediaeval Chinese Alchemy.” *Journal of the Warburg and Courtauld Institutes* 22 1959: 173-210.

Corresponds to the final part of section 33(h) “The Theoretical Background of Elixir Alchemy” of *Science and Civilisation in China*, vol. 5.IV, but also includes an annotated translation of the main Waidan source on this subject, the *Cantong qi wu xianglei biyao* 參同契五相類祕要 (Secret Essentials of the Five Categories According to the *Cantong qi*).

Sivin, Nathan. “Chinese Alchemy and the Manipulation of Time.” *Isis* 67 1976: 513-27.

A much shorter version of Sivin 1980 (cited in the next entry), published four years earlier but—owed to the delayed publication of the longer essay—incorporating results of later research. Also published in Nathan Sivin, ed., *Science and Technology in East Asia: Articles from Isis, 1913-1975*, 109-22 (New York: Science History Publications, 1977).

Sivin, Nathan. “The Theoretical Background of Elixir Alchemy.” In Joseph Needham, *Science and Civilisation in China*, vol. 5: *Chemistry and Chemical Technology*, part IV: *Apparatus, Theories and Gifts*, 210-305. Cambridge: Cambridge University Press, 1980.

The most important study of the Waidan traditions based on cosmological thought. Especially concerned with the role of time in the alchemical work and with the cosmic correspondences embodied in the apparatus. Defines the elixirs as “time-controlling substances,” obtained by a compression of cosmic time cycles in the alchemical laboratory.

Ingredients, Equipment, and Methods

The main Western-language studies of the technical aspects of Waidan are Needham 1974 (cited under *General Overviews: Waidan*) and Needham 1980. Zhao and Zhou 1998, which examines alchemy as part of an extended survey of the history of Chinese science and technology, is the closest corresponding work in Chinese. An overview of the ingredients at the basis of the Waidan elixirs is found in Ho 1968, while the nomenclature of minerals, metals, and plants—extremely rich in synonyms and “secret names”—is the object of the repertoires found in Wong 1989 and Chen 1997. The important issue of elixir poisoning—which, especially according to scholars working during an earlier stage of research, resulted in the shift from Waidan to Neidan—is studied in Ho and Needham 1959 (“Elixir Poisoning”). Another contribution published by the same two authors in the same year (“Laboratory Equipment”) is concerned with the operations performed by the alchemists and the tools that made them possible. A wide variety of methods found in sources of different dates are translated and studied in works cited under *General Overviews: Waidan* and *Waidan Authors and Texts*.

Chen Guofu 陈国符. *Zhongguo waidan huangbai fa kao* (中国外丹黄白法考). Shanghai: Shanghai Guji Chubanshe, 1997.

The main work on Waidan technical terminology, containing quotations and analyses of passages drawn from virtually the entire corpus. Also includes a revised version of the author’s study on the *Shiyao erya* (cited under *Tang and Later Authors and Texts*).

Ho, Peng Yoke. “Alchemy on Stones and Minerals in Chinese Pharmacopoeias.” *The Chung Chi Journal* (*Chongji xuebao* 崇基學報) 7 1968: 155-70.

Notes on several substances used in Chinese alchemy, grouped according to the Periodic Table of the elements.

Ho, Ping-Yü [Ho Peng Yoke], and Joseph Needham. “The Laboratory Equipment of the Early Mediaeval Chinese Alchemists.” *Ambix* 7 1959: 57-115.

A preliminary version of section 33(f) “Laboratory Apparatus and Equipment” of *Science and Civilisation in China*, vol. 5.IV, which brings to light the extent and importance of Ho Peng Yoke’s contributions to Joseph Needham’s volumes on alchemy and chemistry.

Ho, Ping-Yü [Ho Peng Yoke], and Joseph Needham. “Elixir Poisoning in Mediaeval China.” *Janus* 48 1959: 221-51.

Suggests that Chinese alchemists either ignored the danger of elixir poisoning, or tried to neutralize the toxicity of the ingredients. The first part deals with cases of poisoning mentioned in the dynastic histories and other sources. Also published in Joseph Needham, *Clerks and Craftsmen in China and the West*, 316-39 (Cambridge: Cambridge University Press, 1970).

Needham, Joseph. *Science and Civilisation in China*. Vol. 5: *Chemistry and Chemical Technology*, part IV: *Spagyric Discovery and Invention: Apparatus, Theories and Gifts*. With the collaboration of Ho Ping-Yü [Ho Peng Yoke] and Lu Gwei-Djen and a contribution by Nathan Sivin. Cambridge: Cambridge University Press, 1980.

Includes two sub-sections of section 33, “Alchemy and Chemistry”: (f) “Laboratory Apparatus and Equipment” and (g) “Reactions in Aqueous Medium.”

Wong Shiu Hon 黃兆漢. *Daozang danyao yiming suoyin* (道藏丹藥異名索引). English title: *Chinese Alchemical Terms: Guide Book to the Daozang Pseudonyms*. Taipei: Taiwan Xuesheng Shuju, 1989.

A useful repertoire of Waidan and pharmacological synonyms and secret names of substances, containing about 3,400 terms with references to sources that mention them and identifications in English and according to modern scientific nomenclature.

Zhao Kuanghua 赵匡华 and Zhou Jiahua 周嘉华. *Zhongguo kexue jishu shi: Huaxue juan* (中国科学技术史 — 化学卷). Beijing: Kexue Chubanshe, 1998.

A major work covering the history of “ancient” (*gudai* 古代) Chinese chemistry. Two chapters, contributed by Zhao Kuanghua 赵匡华 and amounting to almost 250 pages, are primarily concerned with the technical and chemical features of Waidan.

Chinese and Other Alchemical Traditions

The complex subject of the transmission of alchemical knowledge among different cultures has been approached in various studies. Most of them have placed emphasis on the role of the Arabic world as intermediary in the transmission process, but Chinese alchemy may also have benefited from exchanges with other cultures, and may in turn have influenced the development of analogous theories and practices elsewhere; see especially Needham 1980, Meng and Zhang 1995, and Han 2015. The possible origins of the Medieval Latin word *alchimia* (or *alchymia*) from the Chinese term for “Golden Liquor” is investigated in Mahdihassan 1951. Sheppard 1985

proposes a definition of alchemy that may apply to different traditions and is often quoted in general studies on the alchemical arts.

Han Jishao 韩吉绍. *Daojiao liandanshu yu Zhongwai wenhua jiaoliu* (道教练丹术與中外文化交流). Beijing: Zhonghua Shuju, 2015.

Suggests that Waidan is primarily a product of Chinese culture, but its development was strongly influenced by exchanges with India, the Arab world, and Southeast Asia. Particular attention is paid to reciprocal influences between Chinese and Indian alchemy. One section of the book is devoted to imported substances used in China as elixir ingredients.

Mahdi Hassan, S. "The Chinese Origin of Three Cognate Words: Chemistry, Elixir, and Genii." *Journal of the University of Bombay*, n.s., 20 1951: 107-31.

Probably the first of a series of studies in which the author—a professional chemical researcher—suggested the derivation of the word "alchemy" from *kiem-yak*, the approximate Tang-dynasty pronunciation of *jinye* 金液 or "Golden Liquor," with the addition of the Arabic article *al*.

Meng Shaorong 蒙绍荣 and Zhang Xingqiang 张兴强. *Lishi shang de liandanshu* (历史上的炼丹术). Shanghai: Shanghai Keji Jiaoyu Chubanshe, 1995.

Part 3 (pp. 239-88) of this book contains a comparative study of alchemical traditions in China and in other civilizations. Deals exclusively with Waidan.

Needham, Joseph. *Science and Civilisation in China*. Vol. 5: *Chemistry and Chemical Technology*, part IV: *Spagyric Discovery and Invention: Apparatus, Theories and Gifts*. With the collaboration of Ho Ping-Yü [Ho Peng Yoke] and Lu Gwei-Djen and a contribution by Nathan Sivin. Cambridge: Cambridge University Press, 1980.

Includes sub-section 33(i), concerned with alchemy in China, the Hellenistic world, the Arabic world, and the Western world. A summary was published as "Comparative Macrobiotics" in Needham, *Science in Traditional China: A Comparative Perspective* (Hong Kong: The Chinese University Press, 1981), 57-84.

Sheppard, H.J. "Chinese and Western Alchemy: The Link through Definition." *Ambix* 32 1985: 32-37.

Suggests that alchemy may be defined, on the basis of Western and Chinese traditions, as "the art of liberating parts of the cosmos from temporal existence to achieve perfection, which for metals, was gold, and for man, longevity, immortality and, finally, redemption."

NEIDAN DOCTRINES AND PRACTICES

The literature of Neidan (Internal Alchemy) exhibits a striking variety in its doctrinal formulations as well as the related self-cultivation practices. To mention only the most important examples, Neidan masters and authors freely draw teachings from the founding texts of Daoism, cosmological emblems from the *Yijing* (Book of Changes), fragments of methods from early

Daoist meditation, physiological practices (especially breathing) from the disciplines of “Nourishing Life” (*yangsheng* 養生), views of the human body from traditional medicine, alchemical language from Waidan, and doctrinal notions from Confucianism, Neo-Confucianism, and Buddhism. With regard to the practices, a similarly broadly variety has existed, including forms of Neidan exclusively addressed to female adepts.

Main Neidan Doctrines

The concepts of *xing* 性 (human nature) and *ming* 命 (destiny, or existence) have played a major role in the history of Neidan. As mentioned in the introductions to the sections *The Northern Lineage (Beizong)* and *The Southern Lineage (Nanzong)*, *xing* and *ming* are at the basis of the Beizong and the Nanzong models of self-cultivation, respectively, but their “conjoined cultivation” (*xingming shuangxiu* 性命雙修) is a virtually omnipresent subject in Neidan as a whole. In addition to the broad overviews found in Robinet 1986, Ge 2009, Ding 2013, and Pregadio 2014a, attention to these concepts is paid in virtually all Chinese and Japanese works on different Neidan lineages, authors, and texts (unlike many Western-language studies, where they are too often neglected). Two of the main examples are Zhang 1995 (cited under *The Northern Lineage (Beizong)*) and Yokote 1990 (cited under *Other Song-, Jin-, and Yuan-Dynasty Authors and Texts*). A closely related subject, namely the functions of “non-doing” (*wuwei* 無為) and “doing” (*youwei* 有為) in Neidan, is examined in Pregadio 2014b. The main contribution in a Western language on the different views of the alchemical “embryo”—the most widespread image of the Internal Elixir—is Despeux 2016; for the necessary background to understand its origin and development in Neidan see Katō 2000. The nature of the alchemical discourse per se, and the roles that Neidan assigns to language and images, are the subjects of a memorable essay by Isabelle Robinet (Robinet 2011).

Despeux, Catherine. “Symbolic Pregnancy and the Sexual Identity of Taoist Adepts.” In Anna Andreeva and Dominic Steavu, eds., *Transforming the Void: Embryological Discourse and Reproductive Imagery in East Asian Religions*, 147-85. Leiden: E.J. Brill, 2016.

A major study, which examines different aspects of the symbology of the “embryo” in Neidan, including its relation to the Buddhist concept of *tathāgatagarbha* (“matrix of Buddhahood,” in one of the possible translations).

Ding Changchun 丁常春. *Daojiao xingmingxue gailun* (道教性命學概論). Beijing: Shehui Kexue Wenxian Chubanshe, 2013.

Rather than a survey of the concepts of *xing* and *ming* in Neidan, this is an important analysis of the Neidan practices for the cultivation of these principles. Gives emphasis to the writings of Wu Shouyang 伍守陽 (1574-1644) on this subject.

Ge Guolong 戈國龍. **Lun xingming shuangxiu* (論性命雙修)[<http://www.daoist.org/qz/report/8.pdf>]*. Hong Kong: Qingsong Chubanshe, 2009.

One of the most complete and systematic descriptions of the concepts of *xing* and *ming* in *Neidan*, examined with regard to both doctrines and practices.

Katō Chie 加藤千恵. “*Tai no shisō*” (胎の思想). In Miura Kunio 三浦國雄, Horiike Nobuo 堀池信夫, and Ōgata Tōru 大形徹, eds., *Dōkyō no seimeikan toshintairon* (道教の生命観と身体論), 100-19. Tokyo: Yūzankaku Shuppansha, 2000.

A remarkable discussion of the views of the embryo in Daoism, which provides much material to understand their evolution in *Neidan*. See also the author’s *Furō fushi noshintai: Dōkyō to “tai” no shisō* 不老不死の身体 — 道教と「胎」の思想 (Tokyo: Taishūkan shoten, 2002), which is addressed to a wider audience.

Pregadio, Fabrizio. “Destiny, Vital Force, or Existence? On the Meanings of *Ming* in Daoist Internal Alchemy and its Relation to *Xing* or Human Nature.” *Daoism: Religion, History and Society* 6 2014a: 157-218.

Examines terms and concepts concerning the views of *ming* (“existence” or “destiny”) and its relation to *xing* (“nature”) according to some of the main *Neidan* lineages and masters.

Pregadio, Fabrizio. “Superior Virtue, Inferior Virtue: A Doctrinal Theme in the Works of the Daoist Master Liu Yiming (1734-1821).” *T’oung Pao* 100 2014b: 460-98.

A study of two terms—“superior virtue” (*shangde* 上德) and “inferior virtue” (*xiade* 下德)—that define two aspects, or degrees, of *Neidan*, based on the priority given to the cultivation of Nature (*xing*) or Existence (*ming*), respectively. Presents Liu Yiming’s views on this subject and their background.

Robinet, Isabelle. “La notion de *hsing* dans le taoïsme et son rapport avec celle du confucianisme.” *Journal of the American Oriental Society* 106 1986: 183-96.

On *xing* (inner nature) and other fundamental notions of *Neidan*—in particular, *ming* (existence or destiny). An updated version is found in Robinet 1995 (cited under *General Overviews: *Neidan**).

Robinet, Isabelle. “The Alchemical Language, or the Effort to Say the Contradictory.” Translated by Fabrizio Pregadio. In *The World Upside Down: Essays on Taoist Internal Alchemy*, 17-43. Mountain View, CA: Golden Elixir Press, 2011.

A masterful study of the functions of language, images (*xiang* 象), metaphors, and rhetorical artifices in *Neidan*, and of statements found in several works that invite readers to cast them aside. Originally published as “Mystique et rationalité: Le langage dans l’alchimie intérieure ou l’effort pour dire le contradictoire,” *Asiatische Studien / Études Asiatiques* 47 1993: 645-62.

Neidan, Confucianism, and Buddhism

The Neidan gift for synthesis, and the remarkable freedom that it grants in formulating doctrines and framing methods, are among the reasons of its numerous points of contact with early Confucianism, Neo-Confucianism, and Buddhism. In addition to the studies on *xing* and *ming* cited under *Main Neidan Doctrines*, several works by Chinese and Japanese scholars have investigated the relation of Neidan to Confucianism, especially with regard to the respective cosmological foundations, ideals of sagehood, and methods and aims of self-cultivation. One of the main examples is Zhang Guangbao 1995 (cited under *The Northern Lineage (Beizong)*). Crowe 2014 critically examines this subject and the reasons of its neglect in Western scholarship. An example of its relevance not only to Neidan, but also to Neo-Confucian studies, is Zhu Xi’s 朱熹 (1130-1200) commentary to the *Cantong qi*, analyzed in Kim 2007. Berling 1980 examines the work of a Neo-Confucian author who integrated aspects of Neidan (and of Buddhism) into his views. With regard to Buddhism, an overview of its relation to Neidan is found in Ge Guolong 2004 (cited under *Origins of Neidan*). As shown in Robinet 2004, Neidan integrates certain aspects of the Buddhist discourses on the “buddha-nature” (*foxing* 佛性) and embraces the Buddhist idea of “seeing one’s nature” (*jianxing* 見性) as the final purpose of its practices. The closely related concept of *tathāgatagarbha* (“matrix of buddhahood”) may have contributed to the development of the Neidan views of the alchemical “embryo,” which according to some Neidan masters represents one’s true nature (see Despeux 2016, cited under *Main Neidan Doctrines*). The close proximity to Buddhism also gave rise to a debate within Neidan on the respective merits of an “immediate” (*dun* 頓) and a “gradual” (*jian* 漸) way of realization, which parallels—and partly draws from—the analogous and better-known debate within Buddhism. As a whole, repeated statements in a large number of Neidan works show that their authors presented their tradition as the true repository and custodian of the “unity of the Three Teachings” (Confucianism, Daoism, and Buddhism). Robinet 1985 is a valuable introduction to this subject. Ge 2004 examines four concepts at the basis of the asserted “unity” of the three main Chinese traditions, while Crowe 2012 focuses on Li Daochun’s (late thirteenth century) contributions. Once again, Zhang Guangbao 1995 (cited under *The Northern Lineage (Beizong)*) is a major work on this and related issues.

Berling, Judith A. *The Syncretic Religion of Lin Chao-en*. New York: Columbia University Press, 1980.

On the life and teachings of Lin Zhao’en 林兆恩 (1517-98), who expounded a system ultimately based on Neo-Confucianism, but including elements drawn from Neidan and Buddhism. The main points of this book are summarized in the author’s “Paths of Convergence: Interactions of Inner Alchemy, Taoism and Neo-Confucianism,” *Journal of Chinese Philosophy* 6 1979: 123-47.

Crowe, Paul. “Nature, Motion, and Stillness: Li Daochun’s Vision of the Three Teachings.” *Journal of Daoist Studies* 5 2012: 61-88.

An important discussion of Li Daochun’s 李道純 (late thirteenth century) thought on the unity of the Three Teachings, centered on his views of inner nature (*xing* 性) and of “movement and quiescence” (*dongjing* 動靜) in relation to the cultivation of inner nature.

Crowe, Paul. “Dao Learning and the Golden Elixir: Shared Paths to Perfection.” *Journal of Daoist Studies* 7 2014: 88-116.

Suggests that Neidan and Neo-Confucianism share “basic presuppositions” and “consonance of language,” both obscured in Western scholarship by an approach that tacitly validates the usefulness of the categories of religion vs. philosophy.

Ge Guolong 戈国龙. *Daojiao neidanxue tanwei* (道教内丹学探微). Beijing: Zhongyang Bianyi Chubanshe, 2004.

An extensive analysis of the relation of Neidan to Neo-Confucianism and Buddhism. The discussion focuses on four pairs of fundamental Neidan concepts: (1) “Following the course” and “inverting the course” (*shunni* 順逆); (2) Nature and Existence (*xingming* 性命); (3) Yin and Yang; and (4) Being and Non-Being (*youwu* 有無).

Kim, Yung Sik. “The *Ts’an-T’ung-Ch’i K’ao-I* and the Place of Internal Alchemy (Nei-Tan) in Chu Hsi’s Thought.” *Monumenta Serica* 55 2007: 99-131.

A detailed study of Zhu Xi’s commentary to the *Cantong qi*. The portions concerned with his notes on the cosmological and the alchemical layers of the text are especially valuable.

Robinet, Isabelle. “L’unité transcendante des Trois Enseignements selon les taoïstes des Sung et des Yüan.” In Gert Naundorf, Karl-Heinz Pohl, and Hans-Herman Schmidt, eds., *Religion und Philosophie in Ostasien: Festschrift für Hans Steininger zum 65. Geburtstag*, 103-26. Würzburg: Königshausen und Neumann, 1985.

A study of several concepts and terms used by Daoist authors—most of whom were affiliated with Neidan—in their efforts to demonstrate the common origins of Confucianism, Daoism, and Buddhism. Also found, in a slightly revised version, in the author’s *Introduction à l’alchimie intérieure taoïste* (Paris: Les Éditions du Cerf, 1995), 51-74.

Robinet, Isabelle. “De quelques effets du bouddhisme sur la problématique taoïste: Aspects de la confrontation du taoïsme au bouddhisme.” In John Lagerwey, ed., *Religion and Chinese Society*, 1: 411-516. Hong Kong: Chinese University Press and Paris: École Française d’Extrême-Orient, 2004.

A major work on the relation of Daoist thought to Chinese Buddhist thought. In addition to the views of inner nature (*xing* 性, pp. 416-27) and the “heart” (*xin* 心, pp. 427-38), several other subjects examined in this comprehensive study are relevant to Neidan.

Views of the Human Body

As it does in other Daoist traditions, the human body in Neidan supports various sets of metaphors that express the relation of the whole person to the cosmos and the ultimate principle, the Dao. This vast and complex subject is surveyed in virtually all general works on Neidan; among studies in Western languages it is the focus of Despeux 2005, Neswald 2009, and—with regard to the iconography—Huang 2011. Scholarly discussions of the Neidan views of the body have paid attention to two well-known charts. The *Xiuzhen tu* 修真圖 (Chart for the Cultivation

of Reality, or Chart for the Cultivation of Perfection), which exists in several variant exemplars dating from the late eighteenth century onwards, gives emphasis to the correspondences between body and cosmos; see Despeux 2019. The *Neijing tu* 內經圖 (Chart of the Inner Warp), dating from the late nineteenth century, is related to the Daoist theme of the “body as a landscape”; see Wang 1991-92, Sakade 1991, Katō 2008, and Komjathy 2008-9.

Despeux, Catherine. “Métaphores et processus d’intégration: La symbolique du corps dans l’alchimie interne de la Chine des Song (Xe-XIIIe siècles).” In Claire Kappler and Suzanne Thiolier, eds., *Alchimie: Orient-Occident*, 291-314. Paris: Dervy Livres, 2005.

Examines six types of metaphors used in the Neidan discourses on the human body, drawn from different contexts: Waidan, agriculture, cosmology, mythology, human society, and Buddhism.

Despeux, Catherine. *Taoism and Self Knowledge: The Chart for the Cultivation of Perfection (Xiuzhen tu)*. Translated by Jonathan Pettit. Leiden: E.J. Brill, 2019.

A masterful analysis of the *Xiuzhen tu* and of several other pictorial representations of the human body in Neidan, with detailed explanations of their graphic and textual features. First published as *Taoïsme et corps humain: Le Xiuzhentu* (Paris: Guy Trédaniel Editeur, 1994); second revised edition, *Taoïsme et connaissance de soi: La Carte de la culture de la perfection (Xiuzhentu)* (Paris: Guy Trédaniel Editeur, 2012).

Huang, Shih-shan Susan. “Daoist Body and Cosmos.” Part 2: “Body Worms and Internal Alchemy.” *Journal of Daoist Studies* 4 2011: 33-64.

A survey of Neidan graphic depictions of the body in Neidan and other Daoist texts. See also the author’s more detailed study in *Picturing the True Form: Daoist Visual Culture in Traditional China*, 65-81 (Cambridge, MA: Harvard University Press, 2012).

Katō Chie 加藤千恵. “*Naikeizu oboegaki*” (内景圖覺書). In *Chūgoku shisō ni okeru bi, ki, ki, shi* (中国思想における美・氣・忌・死), 75-132. Kyoto: Kyōto Daigaku Daigakuin Bungaku Kenkyūka, 2008.

The most valuable study of the *Neijing tu*. Contains a thorough analysis of its different components, with comparisons to related textual and graphic materials in Daoist sources.

Komjathy, Louis. “Mapping the Daoist Body.” Part 1: “The *Neijing tu* in History.” Part 2: “The Text of the *Neijing tu*.” *Journal of Daoist Studies* 1 2008: 67-92; 2 2009: 63-107.

On the history and content of the *Neijing tu*. Includes translations of the poems and the captions found on the picture.

Neswald, Sara Elaine. “Internal Landscapes.” In Livia Kohn and Robin R. Wang, eds., *Internal Alchemy: Self, Society, and the Quest for Immortality*, 27-52. Magdalena, NM: Three Pines Press, 2009.

A survey of the views of the body in Daoism, followed by sections more focused of the Neidan views.

Sakade Yoshinobu 坂出祥伸. “*Naikeizu to sono enkaku*” (「内景図」とその沿革). In Yamada Keiji 山田慶児 and Tanaka Tan 田中淡, eds., *Chūgoku kodai kagakushi ron* (中國古代科學史論), 2:45-85. 2 vols. Kyoto: Kyōto Daigaku Jinbun Kagaku Kenkyūjo, 1991.

On the origins of the *Neijing tu* and its relation to other charts of the human body found in earlier Daoist texts.

Wang, David Teh-Yu. “Nei Jing Tu, a Daoist Diagram of the Internal Circulation of Man.” *The Journal of the Walters Art Gallery* 49-50 (1991-92): 141-58.

Occasionally less precise than other studies on the *Neijing tu*, but worthy of attention, not least for its references to a much earlier study of this picture by Erwin Rousselle, published in 1933.

Neidan Practices

Neidan practices are as manifold and varied as its doctrinal statements. Li 1988 provides an overview of this subject, as do virtually all Chinese general works on Neidan cited elsewhere in this bibliography. In its most widespread codification, related to the Southern Lineage, the practice consists of a preliminary phase followed by three main three stages. The purpose of the preliminary phase is to replenish the practitioner’s essence (*jing* 精), breath (*qi* 氣), and spirit (*shen* 神), while the three main stages consist in “refining” (*lian* 煉) and reintegrating them with one another in order to restore their original unity. The conclusion of the practice is often called “returning to Emptiness” (*huanxu* 還虛), or to the Dao. On this codification of Neidan see Wang 2011 (see also Robinet 1995: 147-64, cited under *General Overviews: Neidan*.) There are several variants of this basic model, including those described in Lu 1970 and Despeux 1979, as well as remarkably different models; see in particular the analysis of the Zhong-Lü practice in Baldrian-Hussein 1984 (cited under *Tang Neidan and the Zhong-Lü Lineage*). The three main stages are also metaphorized as the conception, gestation, and delivery of an inner “embryo” (for studies on this subject, see under *Main Neidan Doctrines*). Related sets of practices exist for women, in the variety of Neidan known as Nüdan 女丹, lit., “Women’s Elixir”; see Despeux 1990, Valussi 2009, and Esposito 2014.

Despeux, Catherine. *Immortelles de la Chine ancienne: Taoïsme et alchimie féminine*. Puiseaux: Pardès, 1990.

A historical survey of the place and the views of women in Daoism, followed by an introduction to Nüdan and a description of its literature and practices. Partially translated into English in Catherine Despeux and Livia Kohn, *Women in Daoism* (Magdalena, NM: Three Pines Press, 2003).

Despeux, Catherine. *Zhao Bichen: Traité d’Alchimie et de Physiologie taoïste (Weisheng Shenglixue Mingzhi)*. Paris: Les Deux Océans, 1979.

Annotated translation of Zhao Bichen’s 趙避塵 (1860-?) *Weisheng shenglixue mingzhi* 衛生生理學明指 (Clear Explanations on the Cultivation of Life and Physiology), dating from the

early twentieth century, with an introduction on the branches of late-imperial Neidan and on the system described in the text.

Esposito, Monica. “Beheading the Red Dragon: The Heart of Feminine Alchemy.” In *Facets of Qing Daoism*, 223-37. Wil and Paris: UniversityMedia, 2014.

A short but notable study of alchemy for women, especially concerned with the symbolism of blood and its function in the Nüdan practices.

Li Yuanguo 李远国. *Daojiao qigong yangshengxue* (道教气功养生学). Chengdu: Sichuan Sheng Shehui Kexueyuan Chubanshe, 1988.

About two thirds of this book are concerned with Neidan and its practices. The account is arranged historically and includes sections devoted to all main Neidan lineages and masters.

Lu, K’uan-Yü [陸寬昱]. *Taoist Yoga: Alchemy and Immortality*. London: Rider and Co., 1970. Repr. New York: Samuel Weiser, 1977.

Translation of the *Xingming fajue mingzhi* 性命法訣明指 (Model Instructions and Clear Pointers to Nature and Existence), another work by Zhao Bichen. Addressed to the general public.

Valussi, Elena. “Female Alchemy: An Introduction.” In Livia Kohn and Robin R. Wang, eds., *Internal Alchemy: Self, Society, and the Quest for Immortality*, 141-62. Magdalena, NM: Three Pines Press, 2009.

One of the best introductions to Nüdan. For a more detailed study, see the author’s “Blood, Tigers, Dragons: The Physiology of Transcendence for Women,” *Asian Medicine* 4 2009 46–85.

Wang, Mu [王沐]. *Foundations of Internal Alchemy: The Taoist Practice of Neidan*. Translated by Fabrizio Pregadio. Mountain View, CA: Golden Elixir Press, 2011.

A clear description of the Neidan practices, based on the system of the *Wuzhen pian* 悟真篇 (Awakening to Reality; see under *The Southern Lineage (Nanzong)*) but containing about two hundred quotations from alchemical and other Daoist texts. Originally published as “*Wuzhen pian danfa yaozhi*” 「悟真篇」丹法要旨, in *Wuzhen pian qianjie* 「悟真篇」淺解 (Beijing: Zhonghua Shuju, 1990).

ALCHEMY AND CHINESE LITERATURE

The Tang period is known not only as the culminating age of Waidan, but also for the interest that this branch of the Chinese alchemical tradition exerted among literati. To give one example, Bai Juyi 白居易 (772–46) is the author of several poems that contain alchemical imagery; see Ho, Goh, and Parker 1974. This interest continued in later times when the focus shifted to Neidan, many of whose sources are written in poetry. As a whole, however, the work that—despite its evident Buddhist themes—may contain the largest amount of allusions to Neidan is the *Xiyou ji* 西遊記, or *Journey to the West*. Western-language studies that have examined this masterpiece of

Chinese literature in light of its alchemical content include Despeux 1985, Yü 1991, and Oldstone-Moore 1998.

Despeux, Catherine. "Les lectures alchimiques du *Hsi-yu-chi*." In Gert Naundorf, Karl-Heinz Pohl, and Hans-Herman Schmidt, eds., *Religion und Philosophie in Ostasien: Festschrift für Hans Steininger zum 65. Geburtstag*, 61-75. Würzburg: Königshausen und Neumann, 1985.

On the *Xiyou ji* and the interpretations of its narrative as an allegory of the Neidan principles and practice.

Ho, Peng Yoke, Goh Thean Chye, and David Parker. "Po Chü-i's Poems on Immortality." *Harvard Journal of Asiatic Studies* 34 1974: 163-86.

Translation, with short commentaries, of a series of poems by Bai Juyi rich in alchemical allusions.

Oldstone-Moore, Jennifer. "Alchemy and the *Journey to the West*: The Cart-Slow Kingdom Episode." *Journal of Chinese Religions* 26 1998: 51-66.

A study of the "Cart-Slow Kingdom" portion of the *Xiyou ji* (chapters 44-46), which "centers on the allegory of the river cart (*heche* 河車) as a means of refining the body" (p. 53) and contains other alchemical images. (In Neidan, "River Cart" is a synonym of the Lesser Celestial Circuit or *xiao zhoutian* 小周天, one of the main internal alchemical practices.)

Yü, Anthony C. "How to Read *The Original Intent of the Journey to the West*." In David L. Rolston, ed., *How to Read the Chinese Novel*, 299-315. Princeton: Princeton University Press, 1991.

A complete translation, with a brief introduction, of Liu Yiming's introductory essay to his voluminous commentary to the *Xiyou ji*. Anthony C. Yü (1938-2015) was the author of the masterly translation of this novel into English.