

CHINESE PRINTING

—A WINDOW TO CHINESE CIVILIZATION AND CULTURE

张舍茹 顾曰国 编著 □

追寻中华文明的诗意印迹

中国印刷



CHINESE PRINTING

—A WINDOW TO CHINESE CIVILIZATION AND CULTURE

张舍茹 顾曰国 编著 □

追寻中华文明的诗意印迹

中国印刷



外语教学与研究出版社

FOREIGN LANGUAGE TEACHING AND RESEARCH PRESS

北京 BEIJING

图书在版编目 (CIP) 数据

中国印刷：追寻中华文明的诗意印迹：英、汉 / 张舍茹，顾曰国编著. —
北京：外语教学与研究出版社，2015.4

(华夏文明之窗)

ISBN 978-7-5135-5994-2

I. ①中… II. ①张… ②顾… III. ①英语—高等学校—教材②印刷史—中国
IV. ①H319.4: TS

中国版本图书馆 CIP 数据核字 (2015) 第 097958 号

出 版 人 蔡剑峰
责任编辑 赵东岳
封面设计 郭 子
版式设计 涂 俐
出版发行 外语教学与研究出版社
社 址 北京市西三环北路 19 号 (100089)
网 址 <http://www.fltrp.com>
印 刷 北京利丰雅高长城印刷有限公司
开 本 787×1092 1/16
印 张 16
版 次 2015 年 4 月第 1 版 2015 年 4 月第 1 次印刷
书 号 ISBN 978-7-5135-5994-2
定 价 59.90 元

购书咨询：(010) 88819929 电子邮箱：club@fltrp.com

外研书店：<http://www.fltrpstore.com>

凡印刷、装订质量问题，请联系我社印制部

联系电话：(010) 61207896 电子邮箱：zhijian@fltrp.com

凡侵权、盗版书籍线索，请联系我社法律事务部

举报电话：(010) 88817519 电子邮箱：banquan@fltrp.com

法律顾问：立方律师事务所 刘旭东律师

中咨律师事务所 殷 斌律师

物料号：259940001

Chinese Printing

Honorary Advisors

刘超美 (Beijing Institute of Graphic Communication)

王关义 (Beijing Institute of Graphic Communication)

张养志 (Beijing Institute of Graphic Communication)

Chief Designer for this series: 顾曰国 (Beijing Institute of Graphic Communication)

Chief Editor for this series: 张舍茹 (Beijing Institute of Graphic Communication)

Board of Advisors (in alphabetic order)

曹晓英 (College English Reform Liaison Office, Ministry of Education, China)

范继忠 (Beijing Institute of Graphic Communication)

郭平剑 (Beijing Institute of Fashion Technology)

贾国栋 (China Renmin University)

贾卫国 (Shandong University)

贾毓玲 (Central Compilation and Translation Bureau)

蒋学清 (Beijing Jiaotong University)

卢志鸿 (Beijing University of Posts and Telecommunications)

施继龙 (Beijing Institute of Graphic Communication)

唐锦兰 (Beijing Foreign Studies University)

田忠利 (Beijing Institute of Graphic Communication)

王海啸 (Nanjing University)

谢福之 (Capital Normal University)

余渭深 (Chongqing University)

沈素萍 (University of International Business and Economics)

张文霞 (Tsinghua University)

周俊英 (Beijing University of Technology)

Board of Editors

Chief Editors: 张舍茹、顾曰国 (Beijing Institute of Graphic Communication)

Deputy Editors: Jason Shaw (美), 施继龙、孙边旗 (Beijing Institute of Graphic Communication)

English Copy Editor: Faulkner Graham Paul (英), 贾毓玲 (Central Compilation and Translation Bureau), Marie-Anne Elf (英)

Vocabulary Appendix: 孙艳、刘典典 (Beijing Institute of Graphic Communication)

Web-based courseware production team:

General Director: 顾曰国 (Beijing Institute of Graphic Communication)

Team Leader: 王德军 (Beijing Foreign Studies University)

Scripts for Filming: 刘育红、齐英吉 (Beijing Foreign Studies University)

Camera Men: 齐英吉、张顺、孙鑫 (Beijing Foreign Studies University)

Make-up: 秦博宇 (Beijing Foreign Studies University)

Cast Affairs Director: 闫朝 (Beijing Institute of Graphic Communication)

Post-editing: 张顺、孙鑫 (Beijing Foreign Studies University)

Presentation team:

Professor Jason: Norman Pritchard (Beijing Foreign Studies University)

Printing Advisor: 顾曰国 (Beijing Institute of Graphic Communication)

Irene: 刘典典 (Beijing Institute of Graphic Communication)

Colette: 周寻 (Beijing Institute of Graphic Communication)

Evan: Evan Kimball (Beijing Institute of Graphic Communication)

《中国印刷》课件制作群

顾 问	顾曰国
文字作者	张舍茹
课程策划	唐锦兰
制作督导	王德军
责任编辑	刘育红
脚本设计	刘育红 齐英吉
导 演	胡 阳
演 员	顾曰国 Norman Pritchard (英) 刘典典 Evan Kimball (美) 周 寻
摄 像	齐英吉 张 顺 孙 鑫
剧 务	闫 朝
视频剪辑	齐英吉 张 顺 孙 鑫
场 记	刘育红
化 妆	秦博宇
录 音	Gregory Schroeder (美) Johanna Hemminger (美) 胡 阳
录音协调	刘育红
声音剪辑	刘育红
美术设计	李双双 朱馨文
课件制作	靳伟锋 邢婷婷
技术支持	曹新龙 王珠泉

Preface

Among human beings language is surely the most important and widely used method of communication. The entire range of human complexity, subtlety, ambiguity, anger, concern, confusion, a list too long to include here, is passed from one human to another through language. We acknowledge and appreciate the other forms of human interaction such as music, art, printing, acting, to name just a few, that are in this category. People who can command language are able to communicate with all other human beings, and we know that when the other forms of communication listed above are combined with human language, for example when we combine an artistic piece with a verbal explanation, the impact of the emotional and intellectual exchange is often especially profound.

Language helps to make more precise the idea being conveyed. We know that words and meanings regularly change within cultures and throughout different historical periods. The same can be true of appreciation for objects of art, the implications of music, the purpose of theatrical acting. As times change and social/cultural values and forms alter through the passage of centuries, language about art or music or theater allows us to record those changes and to reconstruct the values that originally brought forth the art, music, or theater. In those cases written language has the greatest potential to allow us to understand the people of different, earlier times.

Because human beings are so inventive, there are many, many spoken and written languages in the world today, as there have been over past times as well. The Chinese language is surely among these great accomplishments of human beings. Its historical, geographic, and cultural influence has been overwhelming, and continues to be so today. As China's role in the international community continues to expand, the Chinese language will take on even more influence in many corners of the world. All human beings should respect and celebrate the gifts given to mankind by the Chinese language.

The English language has a shorter history as a means of widespread

communication, perhaps only a few hundred years. Its pedigree is longer than that, though because it traces its roots as a Germanic language with many influences from Latin, classical Greek and French, all links that preceded it by hundreds of years. Because of historical circumstances, especially the quest of the British people for exploration and world trade from the 16th century on, and because of the Industrial Revolution of the 18th century, English has come to be the single most widely used language in the world today. Many people who do not use English as their first language find it is convenient to communicate with others through the use of English. Indeed, the person who can communicate in English has instant access to fellow human beings all over the world. As stated in this series, English has become “the matter-of-fact *lingua franca*.”

It is also the case that these days people all over the world have found new ways to communicate through language. This is so because of the blindingly fast advances in technology. We are able to see and hear each other instantaneously regardless of where we are in the geographic world. We can talk and laugh and share ideas quite easily through the Internet. It can store, examine, change and convey amazing amounts of information, all of it created by human beings and intended for other human beings. Through this technology we can speak and revise our statements, we can make friends and inform others, we can express our ideas and learn new information much more quickly and with greater ease than has ever been possible in the past.

Happily, the new technology does not mean we must abandon the human inventions of the past. The new technology employs all of the contributions of our inherited cultures, and provides them to us often in “real time,” meaning we communicate with each other in a matter of seconds, regardless of where our friends are physically. Understanding and respecting our past is now more effortless, and maybe even more important, than it has ever been before. This is so because others around the world also have access to information about our inherited past, and they want to know about our past just as we show interest in their cultural roots.

This new series *Windows to Chinese Civilization and Culture* has been created in a way that maximizes the latest in technology. It is designed for a web-based delivery of courseware and allows for mobile delivery of these materials. Printed materials, which have been so vitally important in the history of mankind are also included. All of this material is organized to fit in perfectly with the latest effective technology-based teaching methods. What are those methods? They ask the learners to be active in designing the questions they ask. They allow all of the learners to communicate with each other through

discussions and a back-and-forth give-and-take of communication so that any of the members pondering a question can contribute to the conversation. When people learn information in this manner, combined with the offerings of the printed texts they truly learn the subject, not in a passive but in an active and an interactive way. Their seminar room is a virtual seminar room because they communicate on-line.

At the same time, the series respects the traditional methods of time-tested education. There is a specialist professor to guide the learners, to offer perspective when it is needed, to keep learners on the right path. The series also continues to respect the use of written textual materials. Of course the subjects it introduces are from the rich, traditional past, as seen for example in the introductions to Chinese painting, printing, ink and paper-making techniques covered as part of this extensive series. The traditional past is used to instruct and encourage the students of the present day.

Moreover, in this series young students who themselves want to learn are ready to welcome new learners into their group. The young students do not pretend to have all of the answers. They don't even pretend to have all of the questions, since they ask their new friends to also provide questions. And they plan their group activities together, just as many students are encouraged to do these days. The series approaches its topics from the learner's point of view. This is an open and easy way to come to enjoy new material.

All of this is accomplished as a way to learn English. The English used in this series is standard, current-day language as it is used by students and professors throughout the world in English-speaking countries. The language level is relaxed, casual and conversational, just as young students would use it. The language spoken by the teachers and professors is more structured and professional, as it would be in real life. But these are modern day instructors, because they are relaxed about welcoming new learners into the discussion. They are the type of professors we always want to meet when we are trying to understand new material.

If you jump in to this material sincerely you will learn about China's past, maybe things you've heard before and maybe something you never fully understood before, and you will learn how to discuss the particular topic of each section. You will learn the necessary vocabulary in English and the sentence patterns that are most useful when talking about these important topics. Your reading comprehension will expand in a way useful to you and you'll find that other English language texts outside of this series will become easier to understand because of what you have learned from these lessons.

There is provision for translation practice, which is a fun way to demonstrate your English comprehension skills to yourself and to others. You will learn about how to attend a lecture in English and how to listen carefully when serious topics are being presented. You will learn how to write up a summary in English of the material that has been examined.

An unusually creative and forward-looking group of individuals has come together at the Beijing Institute of Graphic Communication to devise this series and present it to you. English language experts from the Foreign Language Teaching and Steering Committee of the Ministry of Education have examined portions of these materials and offered their guidance. The series is funded by the Beijing Institute of Graphic Communication (BIGC), and numerous distinguished faculty at the BIGC lent their expertise to the project. A number of native English speakers participated in the project. You will find a list of these scholars and advisors in the Acknowledgements section. Two professors at BIGC took the lead in organizing and producing this series and they deserve special thanks for their work: Sheru Zhang and Yueguo Gu.

It has been my pleasure to visit the BIGC campus on several occasions and to meet a number of the faculty and also some of the capable students there. In the summer of 2014 my university, Suffolk University in Boston, welcomed Professor Zhang and her delegation of faculty and students to our campus, where I was able to discuss this important series with her.

Ronald Suleski, PhD

Professor and Director

Rosenberg Institute for East Asian Studies

Suffolk University, Boston (Current position)

Fairbank Center for Chinese Studies

Harvard University (Former position)

December 2014

Acknowledgements

The present work is part of the *Windows to Chinese Civilization and Culture* series funded by Beijing Institute of Graphic Communication. It has taken three years to complete *Chinese Printing and publishing*. The series would have been impossible without the support both academically and financially from the Committee of Discipline Construction of Beijing Institute of Graphic Communication. Professor and Director ZHANG Yangzhi provided a lot of the cultural background for the subject construction, which served as the guideline, gradually forming the practical and BIGC-characteristic teaching material system. My thanks go to LIU Chaomei and Professor WANG Guanyi who offered great encouragement and help in overcoming many unexpected difficulties.

While researching and writing this series I incurred many debts. First to Professors SHI Jilong, FAN Jizhong and PENG Junling who, as experts in the field of printing and publishing, offered a lot of valuable documents and reference materials, and answered many of my questions at length. My deep gratitude and great appreciation also go to Professor JIA Yuling from Central Compilation and Translation Bureau as well as foreign specialists Graham Paul Faulkner, Marie Anne elf and Jason Shaw who translated, refined and revised the English language to make sure the texts can be authentic, readable and fluent.

I am fortunate to collect many precious suggestions from English language experts from Foreign Language Teaching Steering Committee of China's Ministry of Education. They include WANG Haixiao, ZHANG Wenxia, YU Weishen, JIA Guodong, LU Zhihong, JIANG Xueqing etc. Other professors such as XIE Fuzhi, SHEN Suping, JIA Weiguo also commented on draft chapters or sections.

During the probation period, many readers including my colleagues and students sent their questions or suggestions for improvements. Of these the most assiduous were SUN Yan, SUN Bianqi, LIU Xue, LIU Diandian, ZHOU Xun, LIU Yang and ZHANG Xiao, who over the course of two years sent me a lot of feedback.

My heartfelt thanks were given to Professor GU Yueguo and CAO Xiaoying. Being one of the chief editors, Professor GU designed the structure of the text books and introduced many advanced teaching notions into the text books. Being one of the administrators responsible for College

English Teaching Innovation, CAO presented or made a lot of constructive suggestions from the perspective of macro-language teaching aspects.

Thanks also go to Ronald Suleski, professor and director of Rosenberg Institute for East Asian Studies, who did a lot of proofreading and wrote the preface for this series of text books.

Thanks finally go to the Foreign Language Teaching and Research Press for their patience and advice. At last I am alone responsible for errors that may still remain.

ZHANG Sheru

July 16, 2014

A Note from the Authors

All students, professors, advisors, places, and exhibitions are fictitious. All the figures mentioned in the work are historically real, unless indicated otherwise. What should be especially declared is that some photographed sites are in Chinese Printing Museum, some are in the library of Beijing Institute of Graphic Communication in order to simulate real-life activities.

General Introduction

The Package

Chinese Printing: A Window to Chinese Civilization and Culture is a package consisting of

- Web-based delivery of the courseware bearing the same title;
- Mobile delivery of the same courseware materials;
- Printed materials traditionally known as a textbook.

The Web-based courseware provides you with audio materials which you may listen to, and video-based lectures which you may watch and enjoy. Furthermore, the Web mode enables you to interact with fellow users, teachers and even with the authors via social media tools. The mobile mode is somewhat less empowering than the Web mode due to the limitations of the mobile technology. However, it gives you an easier access while you are on the move. It enables you to make the most of your precious time!

The printed textbook reminds you of the “good old days”, doesn’t it? It never runs out of battery! You may lie snug in the sofa, reading! But unfortunately you cannot listen to, or watch a printed text, or send an instant message around by pressing it!

So the package as a whole has harvested all the advantages from its components while overcoming its separate disadvantages.

Readership

Chinese Printing: A Window to Chinese Civilization and Culture is prepared for students with a higher English level, especially for students who major in Printing and Publishing; for Chinese readers who are keen on talking about Chinese printing in English; and for foreign readers who hope to understand ancient Chinese civilization and culture. China has a glorious ancient history and four great inventions — Printing, Paper-making, Gun-powder and the Compass, among which the evolution of printing, paper-making and media are the focus of this text. The foundation of printing and paper-making together with the origin of printing techniques and their development are worded in English together with Chinese equivalents. It is beneficial for the world to know Chinese culture in English, Since English is an important lingua franca in the world.

In its preparation, *Chinese Printing* has been intentionally aimed at integrating English skills like listening, speaking, reading, writing and translation with professional knowledge so as to train the students' comprehensive ability. The texts don't assume that you are already well versed in English, or well-informed in the subject matter. This series of books has taken on an extra responsibility of upgrading students' or readers' existing English proficiency as well as knowledge of the subject matter. So all the materials have been prepared with these two broad objectives in mind.

Objectives

There are broad and specific objectives. The broad ones are implicated already in the *Readership*.

Here are specific objectives. By working through the *Package*, users should be able to talk as well as write about Chinese printing in the following aspects:

- historical outline, from before the invention to the present-day.
- pre-requisite of printing: media evolution and paper making.
- printing technologies from woodblock, woodcut to the invention of clay movable type, metal movable type and the introduction of lead movable type. Modern digital printing is also involved.
- brief introduction about some masterpieces of each dynasty.
- important figures who contributed a lot to the development of printing.
- clear explanation or description of some key concepts, terminologies etc.

Design

There are two fundamental principles guiding the *Package* design.

The first is the *Principle of 3-M Learning*, that is, the Principle of Learning via Multimodality, Multimedia and Multiple Environments. Natural learning involves multiple sensory organs working seamlessly and harmoniously together. In fact it takes a whole body to learn. This means that traditionally explicit cognitive-oriented learning is inadequate, and that the implicit, sub-conscious learning through immersion experiences must be given due appreciation. Learning via multimodality has become a default mode in the digital Internet Age. The era of orthographic text-based presentation of learning materials has passed. The integration of printed texts, audio and video streams, still images and photographs, hypertext links, etc. has become main trend of the day.

Learning via multiple environments, a long-dreamed goal of education, is now a reality. The boundaries between class and out-of-class, between campus and off-campus, between learning time and work or leisure time, — all these traditional boundaries set up by man according to physical space and time, are rendered immaterial, thanks to the digital technology. Learning anywhere at anytime has become a matter of will — you can do it as you wish! Nothing prevents you from doing so.

The second guiding principle is the *Principle of Learning by Doing*. The importance of this principle cannot be overemphasized. It is meant to counterbalance the habit of passive reading, and mechanical learning by rote. Passive reading can only lead you to shallow learning at best. Learning by doing results in deep learning. The most distinctive feature of our design, as part of putting the Principle of Learning by Doing into practice, is the presentation of the materials from the user's perspective. Traditionally the content is presented to the reader through the silent voice of an expert. Between the textbook and the reader/learner there is a teacher, standing in the classroom, acting like a bridge and guiding the reader/learner to the textbook content. This Sage-on-Stage role of a teacher is no longer existent in our design. The materials are structured in such a way that they flow from learners themselves. There are a group of enthusiasts who are keen on getting Chinese Printing known to the outside world in English. The enthusiasts organize their own learning activities reading groups, seeking advice, doing fieldwork, hands-on practicing, summarizing or commenting, organizing public lectures and forums, etc. The potential users of the *Package* are invited to join them and learn by doing things together with them. It's fun!

Task designs and instructions will convince you that the two guiding principles are fully implemented throughout the *Package*. Your adoption of the two principles as your learning guide will be richly rewarded.

Organization

The Package is organized into 8 units. Each unit consists of 8 tasks. The unit always begins with a warm-up exercise: it prepares everybody for the unit's workload, and also acts as an interface between units.

The first task is generally a *historical note* from the adviser. It is primarily intended for learners to obtain information or advice by listening to the adviser. The transcript is also provided for reading in print or on screen. The questions and answer activities drag-match exercises can be either completed over the

internet or in the printed book.

The second task is the process of collating, comparing and commenting on information so far to prepare the students for the tasks ahead.

Tasks 3-6 center on reading tasks, covering the essential language training skill practice such as reading comprehension, vocabulary learning, translation and challenging discussions in a group. Some excerpts about Chinese printing are taken from works written by native speakers of English. Editorial adaptation has been kept to a minimum. Others are written, re-written, and revised by both Chinese and native specialists. Most of the tasks are hands-on exercises involving exploring and reflecting to achieve progressive learning. In terms of the subject matter, these tasks are designed to promote deep learning about key concepts in Chinese printing. In terms of language skills, they are intended for output training, that involves both oral and writing skills as well as thinking in English.

Task 7 is a public lecture delivered by a professor of printing on a specific topic, which in general is also the theme of a given unit. In terms of content organization, the public lecture serves as a climax: The learners up to this point are guided and gently pushed by the speaker to reflect upon what they have learned, to do a bit of theorizing, as it were.

Task 8, the last one, is a follow-up forum. Learners are urged to organize an online debate discussing problems, issues and questions that have been raised in the public lecture. And finally they should summarize what they have grasped.

How to use the Package

The *Package* is by design self-contained. It is suitable for independent users for self-study. Self-study does not mean studying it in solitude or isolation. On the contrary, independent users are urged to join online study groups, and actively participate in online forums.

It is, of course, suitable for campus learning and credit-bearing programmes. In this case, an integrated approach is recommended. Campus learners are encouraged to be first of all online learners, independently or in groups. All the online learning activities are automatically monitored and recorded for later inspection. Moreover, teachers are also empowered to be able to check learning progress and homework, give and mark assignments — all online, both synchronously and asynchronously. If the timetable permits, teachers are advised to use face-to-face contact hours specifically for reading

tasks and public lectures, since these two could be somewhat demanding to some students.

The website for the Package is: [Http://waiyubu.biggc.edu.cn](http://waiyubu.biggc.edu.cn)

Good luck in your studies!

Pre-Course Activity

Task 1 Organizing the group

Introduction: This textbook is written from the students' perspective rather than from teachers'. A group of 3 students is designed to probe the Chinese printing history and its evolution with two professors as their tutors or advisors. Such design aims at embodying two principles as mentioned in the above. One is the *Principle of 3-M Learning*, and the other is the *Principle of Learning by Doing*. This group will autonomously explore or discover how Chinese printing was invented and how developed in content, meanwhile they learn English by integrating listening, speaking, reading, writing and translating together so that five language skills can facilitate their language acquisition.

This learning group was initiated by 3 students. They are as follows:

- Irene: Hello, I am Irene, a student majoring in Printing and Package Engineering at BIGC (Beijing Institute of Graphic Communication). Although I am qualified with a lot of knowledge concerning printing technology such as prepress processing, printing craft, stencil printing, color disposal and embossing etc., I am more interested in the related culture because printing is one of the four major inventions of ancient China. I am really proud of the wisdom of our ancestors and hope to spread knowledge of our glorious civilization to as many people as possible. I especially want to share knowledge with foreign friends who are also fond of the mystery of the Chinese ancient civilization, such as Evan who is an exchange student from the United States of America.
- Evan: Hi, I am Evan, a zealot in ancient Chinese civilization,