

Fingerprints in Ancient China — A Mini-Review

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ABSTRACT: Fingerprints are well-known and reliable means of identification in forensic sciences and security technology. Literature that covers the history of fingerprints often refers to ancient Chinese knowledge on this topic. The earliest use of fingerprints, indeed, can be traced back to the Zhou dynasty (周朝, 1046–256 BCE), and the first documented use of crime scene fingermarks dates back to the Qin dynasty (秦朝, 221–206 BCE). During the Tang dynasty (唐朝, 619–907 CE) and Song dynasty (宋朝, 906–1279 CE), fingerprints were widely used on contracts, divorce papers, and other legal documents. However, many of the literature references are inaccurate or obsolete, so this paper reviews some of the original sources from the Tang and Song periods that are now publicly available, thus attempting to investigate the Chinese use of fingerprints.

KEYWORDS: Fingerprints, Jia Gongyan (贾公彦), palm, Song, Tang, Zhou.

INTRODUCTION

Fingerprints are scientifically based and reliable means for personal identification. They have been used for one hundred and thirty years in forensic science [1], and in recent decades by security technology. Sources dealing with the history of biometrics often claim that in ancient China, fingerprints were already being used for document authentication and personal identification. However, some of these statements may be inaccurate, inconsistent, or erroneous. Probably the information that became public knowledge a hundred years ago still circulates today, and some contemporary Chinese authors also use this information. Sources are citing misinformation and being cited later. Nowadays, however, it is possible to study and compare some original Chinese sources. As far as I know, international literature has not processed the original sources available from the Tang (唐, 619–907 CE) dynasty until now. This paper attempts to review Chinese sources regarding ancient Chinese fingerprints.

later be matched, thus proving them genuine; the significance of the notches was the same as that of the fingerprints of the present time” [1].

Since the name “Kia Kung-Yen” seems not to be romanized properly, rather by the standardized pinyin (拼音), it is more likely that the source is from the first half of the twentieth century or even earlier. Originally the name was “贾公彦”, romanized in pinyin as Jia Gongyan. According to modern Chinese sources [5], this data was originally published in Robert Heindl’s 1922 book *System und Praxis der Daktyloskopie* [12], with Jia Gongyan being the first to mention fingerprints — but this seems to be inaccurate in this form.

Jia Gongyan held the position of “Taichang boshi” (太常博士, doctor of the Taichang Temple) during the Tang dynasty, in the seventh century CE [5,6]. His position was not exactly “a historian”, but rather a scholar studying the “Five Classics” (五经), compiling the rituals, and deciding posthumous names for emperors and ministers. His relevant activity was writing the *Zhou Lishu* (周礼疏, *Ceremonies of Zhou*), and participating in the compilation of *Li Ji Zhengyi* (礼记正义, *Book of Rites and Justice*). His book, *Zhou Lishu*, is based on *Zhouli Yishu* (周礼义疏), a book from the Northern Zhou dynasty (北周, 557–581 CE) age, and *Zhou Li* (周礼) itself, which is part of the classic Confucian “Three Rites” (三礼), allegedly written during the Western Zhou dynasty (西周, 1046–771 BCE) before the Warring States period (战国时代, 475/403–221 BCE).

I. FINGERPRINTS IN ANCIENT CHINA — INFORMATION FROM RECENT AND EARLIER LITERATURE

A. Information from Recent Sources — Kia Kung-Yen/Jia Gongyan (贾公彦)

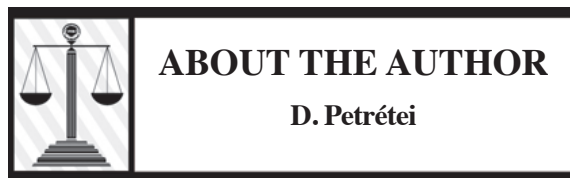
Several sources [1,2,11] claim that in 650 CE, the “Chinese historian Kia Kung-Yen” described a previously used means of identification, writing:

“Wooden tablets were inscribed with the terms of the contract and notches were cut into the sides at the identical places so that the tablets could

B. Information from Earlier Sources

In writing this paper, I have relied on *Zhouli Zhushu* (周礼注疏), which contains both the annotations by Zheng Xuan (郑玄), a famous scholar from the Han

20. Tang Codex (唐律疏議); <https://kuscholarworks.ku.edu/bitstream/handle/1808/3636/tangcode00.pdf> (Accessed Dec. 6, 2024).
21. Tang YY (Ed, 唐云云): 唐代离婚协议浪漫感人 夫妻双方需按手印脚印(图) (Romantic Divorce Certificate in the Tang Dynasty: The Couple's Fingerprints and Footprints Are Required); 江南时报 (*Jiangnan Times*) April 9, 2015; <https://www.chinanews.com.cn/cul/2015/04-09/7195504.shtml> (Accessed Dec. 6, 2024).
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Mr. Petrétéi has 18 years of professional experience in crime scene investigation, latent print visualization, and ridgeology. He has published over 30 (Hungarian) research papers on various forensic topics, and a Hungarian handbook for disaster victim identification. He has been a member of the IAI (International Association for Identification) since 2012, and is a founding member of the EU IAI (European Division of the International Association for Identification). He is active in several professional organizations, including serving as the chairperson of the ENFSI (European Network of Forensic Science Institutes) Scene of Crime Expert Working Group since 2022.