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## 中国古代地图第

### 战国——元

# AN ATLAS OF ANCIENT MAPS IN CHINA—From the Warring States Period to the Yuan Dynasty (476B. C.—A. D. 1368)

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### 中国古代地图集

(战国一元)

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### 序

### 谭其骧

搜集、整理、汇编古文献,虽不是创造性的文化建设工作,但对文化保存、传布所作出的贡献是很大的,可以说不下于,有时甚至有过于创作者。

最显著的例子是:作为中国上古文化的瑰宝《五经》,不论它们与周公、孔子有没有,有多大的关系,总之全是古代相传某一门类文献的汇编或整理本,而不是出于一时一人之手的创作。《易》是古人占卜之辞和解释这些辞的作品。《礼》是古人记载下来的关于礼仪典章的条文和论述。这两种文书都是到西汉时才被汇集写定成书,以后遂传习不绝。春秋时许多国家都有以"春秋"为名的编年史书,周、晋、燕、齐、宋等国的"春秋"都未能传诸后世,惟独鲁国史官所记鲁《春秋》传了下来,这多半是由于经过孔子的笔削整理,因而被后世儒者尊为经典之故。我们更不能设想要是没有人把几十篇商周至春秋战国的文件汇集为一部《书》,没有人把三百零五篇周初至春秋中叶的诗歌汇集为一部《诗》,这些诗、文能以散篇的形式一直流传下来。整理汇编的功绩之巨大,于兹可见。

《汉书·地理志》和《水经注》是两种具有重大价值的中国古代地理名著。中国文化宝库中能拥有这两部名著, 当然得归功于班固和郦道元。但班、郦二人的贡献,主要不在于二人自己的撰述,而在于他们把许多有价值的原 始地理著作搜罗汇编在一起,从而使这些宝贵资料不至于散佚失传,得以传诸后世以至于今。要是没有班、郦, 这么许多价值很高而篇幅短小的原始作品,就不可能流传下来。

《汉书·地理志》卷首主要辑录《尚书·禹贡》、《周礼·职方》两篇;卷末主要辑录成帝时刘向所言"域分"和朱赣所条各地区"风俗";中间正文部分叙述西汉后期郡和县二级政区的建置沿革、户口、山川、关塞、城邑、祠庙、古迹、特产等,则主要依据成帝元延绥和之际(公元前9年左右)和平帝元始二年(公元2年)两份簿籍拼凑而成,可能还采录了一些其他资料。总的说来,全志属于班固自撰性质的章句极少,大致到不了十分之一;这篇重要文献的价值至少可以说什九在于辑录旧文。《禹贡》、《职方》由于早已被收入《尚书》、《周礼》,作为儒家经典的一部分篇幅而一直保存得完整无缺,所以班志卷首辑录这两篇,并不显得是一种大贡献。至于正文所辑两份郡国簿籍和卷末所辑"域分"、"风俗",那就太重要了,内容丰富多采,是全志的精华部分。两份郡国簿籍记录了西汉后期的疆域政区、户口分布、水道源流……等等;"域分"和"风俗"把西汉各地区的经济人文情况铺陈得比《史记·货殖列传》更为详备。我们当然得感谢班固把这些原始资料辑录下来作为《汉书》篇幅的一部分而传诸永久,否则几乎可以肯定早已失传。

古今有许多学者认为,全部《水经注》内容除一些注明引自前人著作的词句外,便都是郦道元根据他自己调查、考察、研究所得写下来的,这是极大的误解。实际郦道元的足迹非但到不了南朝境界,就是在北魏境内,据《魏书》本传所载,也只到过很有限的几处。当然他到过的地方可能会比列传提到的多几处,但他自己在《水经注序》中就说过"少无寻山之趣,长违问津之性",他的治学方法是"默室求深,闭舟问远",可见他决不是一个大旅行家,更不可能是一个从事大范围实地考察的地理工作者。《水经注》这部书是怎样写成的呢?他在自序中也有所交代,那是"窃以多暇,空倾岁月,辄述水经,布广前文","脉其枝流之吐纳,诊其沿路之所缠,访渎搜渠,缉而缀之"。原来他是根据"前文"即前人作品所载水道源流和两岸经历,一读一渠地缉缀下来的。可见郦注和班志一样,主要贡献也是在于郦道元纂集了大量的前人地理著作,而不是根据他自己亲见亲闻所记下来的那一小部分。

有些人可能会说,郦注在引用前人著作时不是都交代清楚了吗?虽然引书多至四百多种,但引文所占全书篇幅并不多,不能因此便认为这部书的性质属于"述而不作"。殊不知古今撰述体制不同。今人著书写论文凡引用前人、他人著作,不论是整节或一句两句,都必须打上引号,注明出处,不这样便公认为是不谨严、不道德的行为。古人可没有这样严格,引用前人著作可以交代出处,也可以不交代,一随行文的方便。《水经注》正是这样做的。郦道元自己在序中说得很清楚,他是在"布广前文",他当然可以大段整节移录"前文",无需一一注明引自某书。例如,《江水注》中描述三峡景象的从"三峡七百里中"至"猿鸣三声泪沾裳"那一段,脍炙人口,向来被人们选为显示郦道元文学造诣的代表作;其实这一段是从盛弘之《荆州记》里抄过来的(见《太平御览》卷53),并不是郦氏自己的创作。但在郦氏则认为可以迳行采用,用不着交代出处。这是当时的习惯,并不可怪。一部《水经注》记载到的地域范围是那么辽阔,每处又都要既写地理情况,又写历史事迹,有些段落又描述得那么细致,这决不是凭个人的经历所写得出来的。所以全书采用前人著作而不注明出处的部分,肯定要比注明出处的那部分多上几倍。这也就是说,郦注基本上是一部地理著作的汇编,并不是个人的创作。

这样说决不是贬低《水经注》的价值,蔑视郦道元的贡献。《水经注》之价值连城,正在于它汇集了郦所见到的数以百计的两汉六朝地理著作中的大量资料。郦道元对中国古代地理学作出了杰出的贡献,正在于由于他的搜罗整理汇编,才使大量久已失传的原始地理著作中的一部分宝贵资料,得以流传下来。

上举这些例子,说明了将零篇短帙古文献汇为一编是何等的重要。文字资料如此,图画资料更是如此。

地理之学,非图不明。地图对表达地理情况所起的作用,往往比地理著作更大。我国具有悠久的制作地图的传统,在西周初期的文献记载和铜器铭文里,已有为营建洛邑而绘制的选定城址图(《尚书·洛诰》),为统治者指示"次序祭之"而绘的山川图(《诗·周颂》),记录重大军事行动的《武王成王伐商》,表示王畿以东诸侯疆界的《东国图》(宜侯矢簋铭)等等,足证在此以前必曾已有一段较长时间的制图技术发展过程。尽管目前还没有在原始社会遗存里发现过地图实物,也没有在甲骨文卜辞里找到有关记载,但我们不能排除我国在原始社会晚期、奴隶社会早期已有地图的可能性。

《周礼》中《天官》、《地官》、《春官》、《夏官》等篇所载地图品种极为繁多,有包括当时所知"天下""九州"的大面积图,有一遂(一万家)乃至一闾一里(二十五家)居住区的小地区图;内容则有山林、川泽、丘陵、坟衍、原隰等地貌,有邦、国、都、鄙、乡、里等政区,有农、牧、矿、动植物等矿产,有交通路线,或民族分布,有可以据以判决闾里争讼的土地图,有贵族和庶民的墓葬图等等。《管子·地图篇》所载地图精确度极高,战争时可据以审知道里远近、地形险要,决定行军路线,举措先后。《周礼》、《管子》所说到的地图有一部分可能出于作者想象,未必实有;有一部分当系二书写成时代即战国时代的实况,也有一部分很可能反映了西周、春秋时的情况。

自秦汉至明清,地图的制作随着时代的进程日益普及、发展。单就唐宋时代而言,当时定制,全国各府州每三年或五年都要绘制一次本州地图,和本州的版籍一起上报尚书省。唐、五代、两宋以六百年、三百州,平均每四年一造送计,即有州图共四万五千。宋咸平后又令诸路十年一上本路图,则两宋又当绘有各路地图数百。尚书省由兵部职方司掌管各地送到的地图,并将各地的图拼合画成一大幅"天下图",唐五代称为"十道图",宋改称"九域图"。除统治所及地域内的政区图外,又画有域外的"四夷图"。域内外合起来则为"华夷图"。除疆域政区图外,又有边防、屯牧、邮驿、河渠水利等特种图。除政府各机构和各级地方政府所绘制者外,又有学者私人所制作的各种地图,包括有突出成就的裴秀《禹贡地域图》、贾耽《海内华夷图》、朱思本《舆地图》等等。总之,在这二千多年中曾经制作出来的地图应以万数计,其中有名目见于各正史艺文志、经籍志、纪、传和唐宋以来类书以及诸家书目、其他记载的,即不下数百种乃至上千种。

中国自古以来重视图不下于书,故图与书合称"图书"或"图籍",用以包括所有传世文献资料。从各历史时期的记载看来,图与书确是长期以来都受到同样的重视。可是,古籍在历经千百年来天灾人祸之余,流传至今的约计达十余万种,论卷数则应达数百万。而古代地图若以一幅图抵一种书,则流传下来的不及古籍百分之一;若以一幅图抵一卷书,则只有古籍的千分万分之一。古地图流传至今的为什么这么少,推原其故,当由于:

- 一、图的摹绘比书的传写要难得多,所以图的摹绘本一般都要比书的传写本少得多,流传到后世的机会也相 应地减少。有些见于记载的图也许本来只有一幅原制品,从没有复制过,这种以孤本形式保藏起来的图,其存在 时期当然不可能很久。
- 二、古代的制图技术还不大可能在等大的缣帛或纸张上,用多种不同比例尺来画出面积大小不同、内容多少不一的地图来,图幅的宽度长度一般都得跟着所画地域范围的大小和内容的多寡而或大或小或长或方。各种地图图幅大小和形状的差别很大,所以只能都以单幅形式收藏,难以装订成册。这就比成册成函的书籍保存起来难得多,一遇事故,更容易损失。有些地图如晋裴秀所见司空所藏"旧天下大图",用缣八十匹;唐贾耽所制《海内华夷图》,广三丈,纵三丈三尺。这么大的图幅,当然极难长期保存下来。
- 三、历代书籍或藏在官府,或散在民间;散在民间的比重大致随时代的推移而逐步增加。因而古书的大部分 虽在多次劫难中被毁灭了,却还能有小部分保存下来。古代地图则几乎全部是收藏在官府里的,民间藏有地图虽 不能说绝无,必然是很少的。因而劫难之来,凡是画在竹、木、纸、帛等材料上的地图,即无一能幸免于难;幸 存下来的,只能是刻在石碑上的,或埋在坟墓里的。

四、还有一点就是古代的零碎文字资料可以被汇编为一部"经"而流传下来,可以被采入一朝的"正史"而流传下来,可以被缉缀成一部书而流传下来,而这几种"可以"对难以摹绘、大小不一的单幅地图而言,却都是不存在的。所以不仅经书里没有图,就是地理专著如《汉书·地理志》、《水经注》里,也都是只有文没有图,尽管班固、郦道元都看到过不少前代和当代的地图。这就注定了古地图能否流传下来的命运,完全取决于原制品和当时少量的复制品能否经历千百年来多次天灾人祸仍然保留下来。而事实上这种可能性是不存在的,除非已刻在石上或埋在地下。

正由于地图的流传要比书籍难得多,因而传世的地图不仅数量很少,年代也较近。近代学人所能看到的最早的地图,原来只有八百多年前宋代人所绘制的几幅。直到1973年在长沙马王堆三号汉墓出土了埋葬于汉文帝十二年(前168年)的画在帛上的地图,才使我们看到的古地图实物,一下提早到二千一百多年前。但比之于三千多年前的见于《诗》、《书》和甲骨钟鼎的商周文字记载,仍然要晚上千把年。并且,自汉文帝至北宋后期之间的一千多年,至今也还找不到一幅符合严格意义的地图。本图集所能搜集到的,只有几幅略具地理意义的建筑图和城市

图。

本图集预定分三册陆续出版。第一册收集了元以前绘制的地图 六 十 种、二百余 幅;第二册将收集明代绘制的地图;第三册将汇集清代前期绘制的地图。原则上凡古人画在帛上、纸上或壁上的,刻在石、砖、崖壁、木板上的,属于文物性质的,全收;原来是一些刻本、影印本书籍中的印刷图则不一定全收,一部书里有几十幅图的,一般选收其中有代表性的几幅。文物性质的图所以要规定全收,当然是由于其价值高,原件难以看到。所以我在此一方面热烈庆祝第一册即将与读者见面,一方面又迫切希望第二、第三册能尽快编定出版,因为我知道第二、三册中必将收集比第一册更多的属于文物性质的绘本地图,这些图原来都是我们极难看到的,深藏在博物馆、档案馆、图书馆里的孤本。

1986年7月3日

### **PREFACE**

### Tan Qixiang

The gathering, sorting and compilation of classic documents, though in itself not a creative work in cultural construction, does contribute a great deal to the preservation and propagation of culture. It may be said its importance even exceeds that of those who actually wrote the documents.

The most prominent example is the Wu Jing (Five Classics), a treasure in ancient Chinese culture. Whether it was related or unrelated with the Duke of Zhou (first ruler of the Zhou Dynasty) and Confucius, the Wu Jing was not the work of any one man or of any particular period. It was entirely the result of compilation and arrangement of a certain category of ancient documents. Yi Jing (Book of Changes) consists of words of divinations and their explanations. Li Jing (Book of Rites) is a record of regulations of and discussions on rites left behind by ancient people. The two books were gathered, arranged and compiled during the Western Han Dynasty, and later handed down from generation to generation. Many feudal states compiled annals using the name Spring and Autumn during the period known by that name. The states of Zhou, Jin, Yan, Qi and Song failed to leave behind their annals. Ony the Spring and Autumn recorded by the official in charge of the history of the State of Lu has passed on to us. This is largely because it was sorted by Confucius and thus revered by later Confucian scholars as a classic. It simply cannot be imagined that scores of documents dating from Shang-Zhou, Spring abnd Autumn down to the Warring States Period could have survived to this day as single works without having been compiled into a book. It is likewise hard to imagine that the 305 poems from the beginning of the Zhou Dynasty to the middle of the Spring and Autumn Period could have survived to this day as single works had they not been compiled into the Book of Poetry. From this one may have an idea of how great is the contribution to culture made by compilation and arrangement of ancient documents.

The Di Li Zhi (Book of Geography) in the Han Shu (History of the Han Dynasty) and Shui Jing Zhu (Commentary on the "Waterways Classic") are two famous books of great value on ancient Chinese geography. The credit of the inclusion of two such works in the cultural treasure of China should certainly be attributed to Ban Gu and Li Daoyuan, whose contribution lies not so much in the collection and compilation of the many firsthand geographical source writings as in the accounts written by themselves. These valuable source writings or maps have been preserved to this day. They could not have survived without the efforts of Ban Gu and Li Baoyuan.

The Di Li Zhi in the Han Shu carries two articles in its beginning: the Yu Gong of the Shang Shu and the Zhi Fang of the Zhou Li. The final pages of the book are chiefly devoted to Liu Xiang's division of regions and to Zhu Gan's enumeration of the customs of the people inhabiting various areas during Emperor Cheng Di's reign. The main body of the book gives an account of the prefectures and counties, such as establishment of administrative units, population, mountains and rivers, cities and towns, ancestral temples and shrines, places of historical interest and special regional products. It is based on two official accounts written between 9 B.C. and A.D. 2 as well as other data. On the whole only a small portion in the entire book (about one tenth of it) was written by Ban Gu. The value of this important document lies in the fact that nine tenth of it was edited and compiled from previously existing works.

Yu Gong and Zhi Fang, as part of Confucian classics, have been preserved in its entirety. Ban Gu did not seem to have made any great contribution in including them at the beginning of his book. However, the official record of prefectures and counties in the body of the book and the division of regions and accounts of the customs of people at its end, rich in content and constituting its essence, are very important indeed. The two official entries have recorded the territory and administrative areas, distribution of population, rivers and their sources, etc. of Western Han in its late period. Their discussion of the economy and humanities of the different regions of Western Han are even in greater detail than the accounts in the Huo Zhi Lie Zhuan (Biographies of Traders) of the Shi Ji (Historical Records). We have much to be thankful to Ban Gu for having compiled these firsthand data as part of the Han shu to be handed down as a permanent

record, for otherwise they would have been lost to us long ago.

Scholars of modern and ancient times are of the opinion that the *Shui Jing Zhu*, apart from few passages referred to as quoted from the works of previous writers, was written by Li Daoyuan on the basis of his own investigation and research. This is an utterly mistaken notion. In point of fact Li Daoyuan could only have set foot on a limited number of places in the territory of the Northern Wei Dynasty, much less in the territory of the Southern, according to the account in the *Wei Shu* (*History of the Wei Dynasty*). Of cource, the number of places he visited could have been somewhat greater than what was mentioned in his biography recorded in the *Wei Shu*. Li Daoyuan in his Preface to the *Shui Jing Zhu* said that he had never been inclined to go for excursions in hills and along streams. The method of his research was to probe into the depth of things in his own room or to find out the conditions in faraway places without the aid of ships. It is thus clear that he was by no means a great traveller, even less was he a geographer engaged in extensive on-the-spot investigation. How then could he have written his book? He made some reference to this in his Preface, saying that

"Having at my disposal plenty of time

Which cannot possibly be wasted,

I wrote the Shui Jing Zhu to propagate

What other writers before me have already put down.

I conducted a research into the outlets and

Sources of rivers, their tributaries and the routes

Of their journey and investigated into irrigation canals

And ditches as well, and recorded them all in this book."

From this it can be seen that he based himself on the accounts given by preceding writers to describe water-ways, their outlets and sources and the conditions along their banks. The same as Ban Gu's annals, Li Baoyuan's annotation makes its main contribution to culture in gathering and compiling previous geographical accounts rather than in giving eye-witness account of things, which constitutes only a small fraction of their works.

Some would probably argue that in his *Shui Jing Zhu* Li always provides the source of anything he quotes. Although he quotes from as many as over 400 places, his quotations do not occupy much space, so we cannot say that he only gives the accounts of others without writing anything himself in his work. But the way of compilation as it is done today is different from that of Li's time. In modern times when one writes an article, he has to use quotation marks for anything quoted, whether it be a sentence or a whole passage. Failing to do this a modern writer would be accused of a breach of ethics. Ancient writers were not so strict about this, however. They were at liberty to give or not give the source of their quotations as they saw fit when they wrote. That was just what Li Daoyuan did in his *Shui Jing Zhu*. He made this quite clear in his Preface. In making use of the writings of previous authors, he could very well have quoted whole passages without giving the source of his quotations from other books. For instance, in the volume on *Jiang Shui Zhu* he gives a description of the Three Gorges of the Changjiang River. What follows is a passage people nowadays quote quite often. It starts by

"Within the seven hundred li of the Three Gorges" and ends with

"Three cries of the ape makes the traveller's garment wet with tears."

This description has long been regarded as Li Daoyuan's representative work, showing his high attainment in literature. In point of fact, however, the passage is a quotation from Sheng Hong's Jingzhou Annals [see Vol. 52 of Tai Ping Yu Lan (Taiping Imperial Encyclopaedia)]. Li did not write the passage himself. He thought he might very well just use it without mentioning its source. This had been the practice with ancient writers, and there is nothing in it to be surprised at. A book like the Shui Jing Zhu could not have been written on the basis of the personal experience of any one man, since it keeps such a detailed account and covers such an extensive scale of territory, geography and history. It is, therefore, certain that passages where sources have not been given outnumber by several times those where sources have been given. This is to say that the book is in the main a compilation of many works rather than the work of an individual.

In so saying I am not derogating the value of the *Shui Jing Zhu* or belittle the contribution of Li Daoyuan. The immense worth of his book lies in the fact that it has compiled a huge amount of data from the hundreds of works on geography of the Western Han, Eastern Han and Six Dynasties which Li had come across. It is his outstanding contribution that he collected a vast amount of precious data from among a vast number of first-hand geographical books long lost to us, and enabled them to be handed down to posterity.

What is stated above shows how important it is to compile short, scattered ancient writings into a book. Such is the case with written material, and even more so with pictorial material.

The science of geography cannot explain itself without the aid of maps. Maps play a far more important role in describing geographical conditions than written geographical accounts. China has a rich tradition in map making. Written documents and inscriptions on bronze vessels reveal that there was a map of the chosen site of a city in the *Luo Gao* of the *Shang Shu (Book of History)*. In the *Zhou Song* of the *Shi Jing (Book of Peotry)* can be found a map of mountains and rivers "in the order" to be visited by rulers "to offer sacrifices". The *Expedition against Shang by Prince Wu and Prince Cheng* records the major operations launched by the two princes. The *Tong Guo Tu* inscribed on a *gui* (a bronze vessel used as a food container) owned by Marquis of Yi indicates the boundaries of principalities east of the imperial domain. These

provide adequate evidence of the existence of a rather long process of map making before maps were actually drawn. In spite of the fact that no material object of a map has hitherto been found among the remains of the primitive Chinese society, neither are there related rocords in divination writings inscribed on tortoise shells, still we cannot rule out the possibility that maps existed in China's late primitive society or in the early period of its slave society.

The articles on Heavenly Official, Earthly Official, Spring Official and Summer Official in the Zhou Li (Rites of the Zhou Dynasty) contain a great variety of maps, such as the big one on the nine zhou under heaven, which is a poetic name for China, maps of the residential districts of ten thousand households, and even maps of the location of every 25 households. In the maps there are topographical accounts of mountains, forests, rivers, streams, grave mounds, plateaus and low-lying areas, the administrative areas of feudal states, nations, capitals, frontier towns, villagers and precincts as well as products of agriculture, animal husbandry, minerals, fauna and flora. Also seen on these maps are transport lines or the distribution of ethnic groups as well as the distribution of land holding, which served as a basis to settle disputes on land possessions. There are besides maps of grave mounds of the nobility and the common people. The Di Tu Pian in the Guan Zi (Book of Master Guan) carries maps drawn with great precision. In time of war these maps provide a good guide to ascertain the distance of towns or villages and to indicate strategical positions, on the basis of which the route where an army was to march or which towns to attack first were decided. One part of the maps in the Zhou Li or in the Di Tu Pian of the Guan Zi might just be works of imagination by their authors, while another part of them reflects actual conditions then prevailing in the Warring States Period. A third part could very well be reflections of situations of the Western Zhou Dynasty and the Spring and Autumn Period.

From the Qin, Han down to the Ming and Qing Dynasties map making in China became more and more popular and developed in the course of time. During the Tang and Song Dynasties each fu or zhou (prefecture) had to draw its own map every three or five years and submit it to the Shang Shu Sheng (Department of State Affairs) together with its census. The three hundred prefectures in the Tang, Five Dynasties, Northern and Southern Song Dynasties — covering a period of 600 years, made maps on an average of every four years. This brought the number of maps with a total of 45,000. In the Xian Ping reign of the Song Dynasty it was decreed by the emperor that each lu (district) must submit a map of its precinct every ten years. In the Northern and Southern Song Dynasties several hundred maps of different districts must have been drawn. The maps were submitted to the Shang Shu Sheng (Department of State Affairs) by the Zhi Fang Si (Bureau of Maps) under the Department of War. From these maps the Shang Shu Sheng drew a general map of China by the name of Shi Dao Tu (map of ten regions) in the Tang and Five Dynasties. The name was changed to Jiu Yu Tu (map of nine regions) in the Song Dynasty. Apart from this map which included territories under the jurisdiction of the central government, there was another map indicating areas beyond the jurisdiction of the central government, known as the Si Yi Tu (map of border tribes). These two maps were put together to become the *Hua Yi Tu* (covering territory under and beyond the jurisdiction of the central government). Besides the above-mentioned maps of China's administrative areas and territories, special maps were drawn to indicate border defence, military farming, postal routes, rivers and irrigation canals. In addition to maps drawn by various government departments and by local governments, there were those drawn privately by scholars, including the outstanding map Yu Gong Di Yu Tu by Pei Xiu, the Hai Nei Hua Yi Tu by Jia Dan and the Yu Di Tu by Zhu Siben. In all, there must have been tens of thosands of maps in the course of over 2,000 years. Several hundred up to one thousand such maps are included in records of literature and art of history books written in biographical style, in records of Confucian classics and classical works, and in biographies as well as encyclopaedias and catalogues of books of various schools from the Tang-Song period onwards. There were also several hundred or even as many as one thousand maps recorded in other works.

Since remote antiquity illustrations have been regarded as important as written accounts in China. The Chinese term tushu (tu meaning illustration, shu meaning book) is coined to denote what is known as book in English. The term tushu or tuji embraces documental material of all sorts handed down from generation to generation. Judging from the records of the different periods in Chinese history, illustrations and written works have always been receiving equal attention. About 100,000 categories or several million copies of ancient books have survived to this day in China's long history marked by constant natural disasters and man-made calamities. Yet ancient maps that have been handed down constituted only one percent of ancient maps, if we take one ancient map for one set of books. Surviving ancient maps constitute only one thousandth or one in ten thousand books, if we regard one ancient map as equal to one book. How then are we to account for the scarcity of surviving ancient maps in China? The reasons for this must be as follows:

- 1. As the drawing of maps is much more difficult than the writing of books, maps that have been handed down are far less than books that have been written. The chances for the survival of maps are correspondingly reduced. Some of the maps referred to in books may only have one original copy, and may never have been reproduced. No doubt such rare books could not have been preserved for a great length of time.
- 2. Ancient map drawing technique could not have resulted in producing maps that show different areas and have different contents with different scales on paper or thin silk of equal size. The width and length of maps must correspond to the size and content of the range of topography to be drawn. These maps might be big or small and oblong or square as the case may be. Their size and shape vary a great deal from map to map. Maps are therefore usually preserved separately and hardly ever bound into volumes. They cause far more difficulty in preservation than books or books in cases whenever calamity

occured. the Jiu Tian Xia Da Tu, an old grand map of China kept by the Si Kong (Minister of Public Works) and once seen by Pei Xiu, made use of 80 bolts of silk. The Hai Nei Hua Yi Tu, drawn by Jia Dan of the Tang Dynasty, measured 3 zhang¹ in width with a length of 3 zhang 3 chi². In view of their size, it was extremely difficult to preserve such maps over a long period of time.

- 3. Books had been preserved in China throughout the ages either by the government or in scattered fashion among the people. Books that came into the hands of the people increased in number as time went by. That was why most books were destroyed during calamities while a small part of them had survived. Ancient maps were almost entirely kept by the overnment. Few if any were kept in the home of private people. In consequence of calamities ancient maps, drawn on amboo, wood, paper or silk, were totally destroyed. The only ones preserved were either found on stone tablets or buried tombs.
- 4. Another point is that fragmentary written accounts from ancient times would be handed down from generation to generation if they were compiled into a *jing* (classic), gathered into a *zhengshi* (history written in biographical style) or edited as part of a book. However, the likelihood of single maps, hard to draw and varied in size, surviving under such circumstances is nil. This is why no map can be found in *jing shu* or Chinese classics. Even monographs on geography like the *Di Li Zhi* (Book of Geography) in the Han Shu (History of the Han Dynasty) and the Shui Jing Zhu contain only written accounts with no maps, despite the fact that their authors Ban Gu (32-97) and Li Daoyuan (466 or 467? 527) must both have seen many maps of former ages or of their own times. Whether or not ancient maps would be handed down from generation to generation rests completely with the preservation of original maps or the few reproductions during repeated calamities in the course of several thousands of years. As a matter of fact, such likelihood simply doesn't exist, except in the case of maps inscribed or engraved on stones or buried underground in tombs.

Due to difficulty in circulation and presservation, maps that have come down to us are not only few but also of comparatively recent times. The several earliest maps seen by modern Chinese scholars are those drawn by Song Dynasty map-makers about 800 years ago. A map dating from 168 B.C. (12th year of the reign of Emperor Wendi of the Han Dynasty) drawn on silk was unearthed in 1973 at No. 3 Tomb of Western Han Dynasty in Mawangdui, Changsha. This is the earliest artifact in the form of a map discovered so far. It brought the date of the earliest existing map to over 2,100 years ago. Yet this map is about 1,000 years later than those mentioned in the *Book of Peotry* and in the *Book of History*, or recorded in the Yin-Shang Period on tortoise shells and bronze bells and bronze cooking vessels with three or four legs. We still have not discovered any map of the period of over 1,000 years between the reign of the Han Emperor Wendi and late Northern Song Dynasty that can be called a map in the strict sense. What have come to hand and are included in this ancient Chinese atlas are some maps of construction sites and of cities, which are of some geographical significance.

The technological limitations imposed on ancient Chinese map-makers, whose only way for the long preservation of maps was to engrave them on stones or burying them underground, have been surmounted by modern technological advances. These limitations once made it impossible to preserve maps for a long time or to compile many single maps into an atlas. At the present time when technological difficulties have long been done away, we certainly should no longer be content with the small number of original ancient maps and the very few of their reproductions in libraries, museums or archieves as rare books or treasures. These maps ought to be circulated. Neither should we allow scattered single maps or pages of maps continue to exist everywhere or as illustrations to rare copies of ancient books. We should compile these maps into atlases, which is a work to be done without delay for the preservation of ancient cultural relics and for the propagation of ancient cultural relics and for the propagation of ancient culture. This work has been undertaken by countries that have a history shorter than China. China itself, with an ancient and long history, is beginning to compile its atlas of ancient maps. Yet such compilation involves difficulty, since the maps are too scattered. In September, 1983 the Institute of Natural Sciences under the Chinese Academy of Sciences called together all organizations related to mapmaking and formed an edtorial board for the compilation of an ancient Chinese atlas. After three years of concerted effort in the spirit of socialist coorperation on a large scale, the final text of its first volume will soon be sent to the press. This is a great event that gives cause for joy and celebration in the academic circles of China. Henceforward existing ancient maps will be preserved and handed down to posterity, and their fate of destruction by accidental factors resulting in maps being lost without even knowing their content will be avoided. Rare and scattered maps, so difficult to see in their entirety, will be ready to hand, if one will only scan the atlas, whose publication will not only preserve China's cultural heritage but also promote further inquiry into the development of ancient geography and map-making technique in China. Consequently, we shall be making a contribution to the development and propagation of traditional Chinese culture. The nature of the contribution may be compared to the compilation of the Di Li Zhi in the Han Shu by Ban Gu, who made use of Western Han geographical data that appeared in the works of Confucian scholars of the Han Dynasty, or to Li Daoyuan's edition of many geographical data of the Han, Wei, Jin and Northern and Southern Dynasties into his Shui Jing Zhi.

The three volumes of An Atlas of Ancient Maps in China be published one after another. Volume I consists of 50 kinds of maps -totalling over 100 maps) drawn prior to the Yuan Dynasty. Volume II consists of maps drawn during the Ming Dynasty. Volume III consists of maps drawn in the early period of the Qing Dynasty. As a matter of principle, we have collected and compiled into these volumes all maps drawn on silk, paper or walls as well as those engraved on stones, bricks, rocks or wood by the ancient Chinese so long as they belong to the realm of cultural relics. We have not compiled all printed

maps from block-printed editions or from photo-offset copies. When scores of maps are found in one book, a few representative maps will be chosen and included in our atlas. Maps that are regarded as cultural relics have to be included on account of their high value and the difficulty of seeing their originals. In celebrating the publication of Volume I of An Atlas of Ancient Maps in China, I earnestly hope that Volume II and Volume III will be published soon, because the latter include even more drawn maps of the nature of cultural relics, which are not open to the public and kept as rare works in museums, archieves and libraries.

- 1. 1 zhang =  $3 \frac{1}{3}$  metres.
- 2. 1 chi = 1/3 metre.

### 前 言

中国是世界文明发达最早的国家之一。中国古代的科学技术,成就卓著。地图的绘制,是其中一个相当重要的方面。

地图是按一定法则,显示地表面自然和社会现象的图,并概括地反映它们的地理分布、相互联系和相互制约的关系。相传中国在夏代(约公元前21世纪~前16世纪)铸过九鼎,鼎上分别绘有不同地区的山川、草木和禽兽图。这虽然是一种传说,但在中国夏代或更早于夏代的时候就绘有表示山川等内容的原始地图,却是可信的。

中国早在西周时候(约公元前11世纪~前771)地图的绘制已渐增多。《尚书·洛浩》记载,周公卜建洛阳城时,曾将地图和占卜的结果,一同献给成王。《周官》虽是托古之作,大约成书于战国,而所述周制,不会没有一定历史根据。书中记有掌管各种地图的职官、一些专用地图的名称及内容。如地官司徒篇记,大司徒是掌管土地之图的职官。从图上可以知道"九州之地域广轮之数,辨其山林、川泽、丘陵、坟衍、原湿之名"和"邦国都鄙之数"。同篇又记:"土训,掌道地图,以诏地事"等等。《管子·地图》虽亦出于战国时人之手,非管仲所作,但也不会没有一定的历史事实作依据。该书中明确指出:作为军事指挥官,必先熟知地图,因为从地图上可以知道"名山、通谷、经川、陵陆、丘阜之所在,苴草、林木、蒲苇之所茂,道路之远近,城郭之大小"等情况。以上说明春秋战国时期(公元前770~前221)的地图,已经具有一定水平了。那时测量的工具,至少有准、绳、规、矩之类。战国时期的著作《尸子》卷下记载:"古者,倕为规、矩、准、绳,使天下仿焉。"倕,传说是皇帝时候或尧时的巧匠。战国时可能已掌握了类似平板测量的方法,这样才能使测量的方位比较准确。

1973年湖南长沙马王堆三号汉墓出土了绘在帛上的地图,具体地表明了西汉(公元前206~8)时候中国地图测绘技术所达到的水平,令人惊叹。

西晋裴秀(公元224~271)把前人的制图经验,加以总结,提出了绘制地图必须遵守的六项原则即"分率"(比例尺)、"准望"(方向)、"道里"(人行路径)、"高下"(高取下)、"方邪"(方取斜)、"迂直"(迂取直)。其中的后三项都是说,绘图时地物之间的距离必须取水平直线距离。这六项原则,奠定了中国传统制图学的理论基础,其影响所及,直到清代。

当然,中国传统地图的绘制,是以大地为一平面,不考虑地面实为一球面,是其缺点。不过,绘制小范围的地图,可以视地面为一平面时,其理论缺点的影响也就无所谓了。值得注意的是,在欧洲中世纪地图出现严重倒退的时期,中国仍在裴秀"制图六体"的指导下,不断绘制新图,并且在技术上有所提高和发展。《旧唐书·贾耽传》记载唐贾耽(公元729~805)编制海内华夷图,"其古郡国题以墨,今州县题以朱"。这种用朱墨分注古今地名的方法,为裴秀所未有,是后世沿革地图以朱墨区分古今地名之滥觞。北宋沈括(公元1031~1095)在《梦溪笔

谈》第575条中记他绘制守令图,所取的距离都是"鸟飞之数",即水平直线距离,并把前人只记"四至八到"(即从一地至其北、东北、东、东南、南、西南、西、西北各地的里数)增为"二十四至"(即二十四个方向所到之处的里数)。他认为有了二十四至的"鸟飞之数",即使以后地图亡佚了,按二十四个方向所到之地的水平直线距离布置郡县,很快就可以绘成精确的郡县分布图。我们如果把流传至今的宋代地图与欧洲中世纪所绘的宗教"寰宇图"(即"轮形地图"或"T—O地图")相比,前者显然出色得多。宋代绘制的地图,如刘豫阜昌七年(公元1136年)上石的禹跡图等,堪称是当时世界上最杰出的地图。

从先秦古籍中有关地图的记载,可以知道中国早期地图的绘制主要是由于政治和军事方面的需要。其后,封建王朝为了加强统治,中央政府常令地方各州郡呈送地图,并根据这些地图综合绘制一统的舆图。唐宋时候更规定各州府定期造送地图。凡既有地图,又有文字记述的,亦称"图经"。及至文字记述部分大量增加,地图居于附庸地位,就成为"方志"了。现在流传下来的图经和方志中的地图,最早是宋代的。

随着封建社会经济和文化的发展,地图的应用更加广泛。中国的士大夫,有重视地图的优良传统。宋元时期,为教学而刻的图碑,宋代学者绘制的历史沿革地图,以及他们为阐述经书、史书乃至佛教经典所绘的地图,现在还可以看到一些。虽然现在见于刻本书中的这些历史沿革地图和研究经书、史书所绘的区域图、山川图等,大都较为简略,但是它们代表着中国传统地图学的一个方面,同时还反映出当时史学家的制图思想,所以这些地图是很宝贵的。

中国传统地图的绘制和发展,富有自己的特色,很值得研究。近半个多世纪以来,中外学者对于中国地图学在历史上的成就及其发展,相当重视。发表的有关论著的数量,在地学史各分支学科中,一直是比较多的。中国古籍中的地图学史料非常丰富,但是流传下来的古代地图,特别是明清以前的地图,数量却很有限。这是因为地图的保存和流传,远较书籍困难得多。为使幸存下来的极为珍贵的中国古代地图,能以摄制、拓制、摹绘、印刷等形式汇集成册,以便更好地流传和供国内外科技史工作者和广大文史学者研究之用,遂组织各有关单位共同协作编辑《中国古代地图集》。希望此图集的出版,对进一步研究中国地图学史、东亚和南亚的地图学史以及世界地图学的发展史有所帮助。

编审组 (曹婉如执笔)

### **FOREWARD**

China has one of the earliest advanced civilizations in the world. Remarkable achievements were accomplished in ancient China in science and technology of which the techniques in map-making composed a vital part.

Maps are drawn on certain principles to represent the natural and social features of the earth's surface and to reflect in general their geographical distribution and relationship of connection and interaction. Tradition has it that the nine cauldrons moulded in the Xia Dynasty (22th-17th century B.C.) had on them designs of rivers, mountains, trees and animals. Legendary though, it seems credible that there might have been such primitive maps in or before the Xia Dynasty.

The number of maps had surged steadily as early as the Western Zhou Dynasty (11th-8th century B.C.). Luo Gao, a chapter of Shang Shu (Book of History), records that before Zhou Gong constructed the ancient Luoyang city, he presented both map and the result of divination to King Cheng. Zhou Guan (Rites of the Zhou Dynasty), though assumed to be an ancient book, was probably written later during the Warring States Period (476-221 B.C.). Its exposition of Zhou Dynasty's official system appears by no means groundless. It gives an account of officials in charge of different kinds of maps, the names of maps for special purposes and their content. For instance, the chapter Di Guan Si Tu records that Senior Si Tu was an official designated specially to take charge of maps, from which "one will be informed of the vastness of China's territory, the speicfic names of the scattering mountains, forests, rivers, hills, grave mounds, plateaus and marshlands" as well as "the precise number of big cities and remote towns of bordering states." The same chapter elaborates that "land officials are liable for administering maps and tackling with land affairs." Although Guan Zi (Book of Master Guan), also came out in the Warring States Period and was not written by Guan Zhong himself, it could have hardly been turned out without reference of certain historical facts. It is clearly stated in the book that military commanders must have a thorough knowledge of maps so that they will know "where famous mountains, valleys, rivers, plateaus and mounds lie, wherer dense grasslands, deep forests and reeds are located, how far the roads are and how big the towns are." All this shows that by the Spring and Autumn and the Warring States period (770-221 B.C.), maps had attained a notably high standard. The means of geodetic survey at that time at least included water-level, rope, compasses and square. Shi Zi, a book written in the Warring States Period, narrates, "Chui, an ancient figure, invented water-level, rope, compasses and square, and made others to follow suit." Chui is in legends a skilful carpenter at the time of Huangdi or Yao's reign. Techniques similar to today's plain table survey might have been grasped during the Warring States Period, thus making bearings on maps more accurate.

The maps drawn on silk, which were unearthed in No.3 Tomb of the Han Dynasty (206 B.C.-A.D. 220) tombs at Mawangdui near Changsha, Hunan Province, manifest in the concrete that the Chinese map-making techniques in the Western Han Dynasty had reached an amazingly high level

Pei Xiu (224-271) of the Western Jin Dynasty (265-316), after epitomizing his predecessors' achievements in map-making, put forward six principles one must abide in drawing maps — fenglu (scale), zhunwang (direction), daoli (path),, gaoxia (rectilinear height), fangxie (measuring the oblique of a square) and yuzhi (taking straight distances while coming across zigzags). Among them, the last three all stress the need to gauge the horizontal rectilinear distance between objects and places while mapping. These principles laid the theoretical foundation for Chinese traditional cartography and had ever since exerted influence in this field till the Qing Dynasty (1644-1911).

Nevertheless, China's traditional map-making had its own defects, because it was based on the belief that the earth's surface was flat, rather than spherical. When people were making maps of limited scopes and the land could be considered as level, the actual effect of its defects, however, seemed almost immaterial. But what merits attention is that when European map-making encountered serious setbacks in the Middle Ages, China continued to produce new maps on Pei Xiu's "six principles" and witnessed a further development in its mapping techniques. Biography of Jia Dan from Jiu Tang Shu (Old History of the Tang Dynasty) records that when Jia Dan (729-805) compiled Hai Nei Hua Yi Tu (map of both Chinese and Barbarian Countries within the seas), "he annotated ancient states and prefectures with black ink while marking the present prefectures and counties with red ink." Sucd a method of distinguishing past and present names of places by means of colour, which had never been adopted by Pei Xiu, set a precedent for later map-makers.

The Northern Song scholar Shen Kuo (1031-1095) in his book Meng Xi Bi Tan (Dream stream Essays) recounts that when he made the prefecture and county distribution map, all the distances between places were measured as "the flights of birds" — the horizonntal rectilinear distances. And he further developed his predecessors' mapping technique of measuring straight distances from one place to other places in four to eight directions (north, northeast, east, southeast, south, southwest, west, and northwest) by adding to them another 16 directions to a total of 24. In this way, he said, even when the distribution map disappeared one day, people could still make precise reproductions, provided that they knew the rectilinear distances from one town to other towns distributed in the 24 directions. If we make a comparison between the maps handed down from the Song Dynasty and the European religious "World Map" (Wheel-shaped or T-O map) in the Middle Ages, the former ones appear obviously superior. Like the Yu Ji Tu (Map of the Tracks of Yu the Great) with the scale of the grid carved on stone in 1136, Song maps might be rated as the then most significant works in the world.

From the accounts of maps in pre-Qin documents, it can be easily seen that the early Chinese maps were mainly produced to serve political and military needs. In order to strengthen their rule, the feudal rulers of later ages frequently ordered the various prefectures to make maps and present them to the imperial court. Then on the basis of these scattered maps, an integrated one of the whole of China was compiled. During the Tang and Song Dynasties the different prefectures were even required to make maps for submission to the central government at regular intervals. Maps with written explanations were also known as "tujing". With the sharp increase of the written part in the course of time, maps became merely attached illustrations in "fangzhi" (local topographies). The oldest maps in tujin and fangzhi now existing date back to the Song Dynasty. The literati of ancient China carried on the tradition of setting a high value on maps. Some of the maps made by scholars of the Song and Yuan Dynasties are still well-preserved today. They include maps engraved on stones for teaching, maps reflecting historical districts and those drawn to illustrate Confucian classics, history books and Buddhist scriptures, most of which featured certain regions, rivers and mountains. Although many of these maps, seen today in block-printed editions, are relatively simple, they represent an aspect of traditional Chinese cartography and reveal the cartographical idea of the then historians, and are therefore quite precious.

The making and development of traditional Chinese maps are full of its own characteristics and worth studying. For the last more than half a century, scholars both in China and in other countries have attached great importance to the accomplishment and development of chinese cartography on history. The number of published treatises on this subject in the different branches of earth science has been great. A wealth of historical materials touching on cartography have been found in ancient books. The number of existing ancient maps, especially those drawn prior to the Ming-Qing period, however, has remained petty. This is because the preservation and spread of maps are far more difficult than in the case of books. In order to compile these rare surviving maps of ancient China into an atlas by means of photography, rubbing, rendering and printing to facilitate their spread and for the convenience of domestic and foreign researchers and scholars in their study of culture and history and the development of science and technology, we organized the institutions concerned to work in collaboration for the compilation and editing of An Atlas of Ancient Maps in Chinese. It is hoped that the publication of this atlas will be helpful to further research into the history of cartography in China, East Asia and South Asia as well as the development of the world cartography as a whole.

Cao Wanru (actual writer)

### 凡例

- 一、《中国古代地图集》按时代分册出版。本册收集了战国至元代绘制的地图;第二册是明代绘制的地图;第三册是清代前叶和中叶绘制的地图。明代以前的地图流传下来的不多,因此本册收集的尺度略宽一些。例如收入某些具有地理意义的建筑图和绘画等。这样做,对于研究中国早期地图学和地理学的发展史,或许是有益的。在刻本地图中,有些是宋元学者为阐述儒家经典或其他史书所绘的地图。虽然这些地图,大都较为简略,但是具有研究价值,所以也选择收入了一部分。
- 二、本册计收入战国至元代绘制的地图六十种,二百零五幅。时代最早的二种十七幅是战国时期(公元前476~前221)绘制的。两汉时期(公元前206~公元220)绘制的,八种十九幅。五代(公元907~960)的一种五幅。两宋(公元960~1279)绘制的最多,计三十五种,百一十五幅。金代(公元1115~1234)的二种六幅。元代(公元1280~1368)绘制的十二种四十三幅。这些地图,有的用金银作线条,镶嵌在青铜版上;有的绘在木板上、帛上、墓壁上、洞窟中;有的刻在石、砖、崖壁或木版上。其中以雕板印刷保存下来的地图最多。现在所能见到最早的印刷地图是宋代的。本册所收宋元时期以印刷形式流传下来的地图一百一十二幅,其中宋元刻本约占半数,与影抄和重刻宋元本地图合计,约占所收刻本地图的三分之二;明清刻本约为所收刻本地图的三分之一。图目的排列,是按时间顺序,并将非刻本排列在刻本地图之前。
  - 三、刻本中的地图,图幅较多者,只收入部分有代表性的图幅。
  - 四、中国早期地图,凡图名为后加者,在图名的右上角作"\*"为记。
  - 五、凡地图的成图年代无确切记载者,则由撰写简要说明的作者根据图的内容研究推定。
  - 六、地图的绘制者, 无考, 则缺。
  - 七、非刻本地图上未注明比例尺者,均据原图计算得出。刻本和影印本书中地图,均不注比例尺。
  - 八、凡缩影本地图均不注图幅大小。
- 九、为使读者更好地研究现在珍藏的中国古代地图,对收入图集中的石刻地图,大部拍摄了原碑的照片。有些碑图、拓片不甚清晰,内容模糊,无法辨认,特根据拓片绘制墨线图,凡遇破损辨认不清之处,空缺不绘。早期地图中的文字不好辨认者,另附墨线图,并用楷书转释原图上的文字。
- 十、中国自古就是一个多民族的国家。由于历史的原因,保存下来的有关少数民族科技的史料却不多;流传下来的地图更少,因而弥足珍贵。十一世纪生于喀什噶尔(今新疆喀什)的著名学者马合木德·喀什噶里编绘了一幅以中亚地区为主的圆形地图。关于此图本册收入有原阿刺伯文抄本、土耳其文刊本中的图和汉文译本三种,以便供更多的读者研究使用。十三世纪末女真族学者都实等人,实地考察了黄河源。图集中收录的《南村辍耕录》