Vol. 31 No. 6

DOI: 10. 11721/cqnuj20140630

## The Changjiang, an Appeal for Consistency in Scholarly References\*

## WILLISON J. H. Martin<sup>1</sup>, AI Lijiao<sup>2</sup>, LI Ruoxi<sup>3</sup>

- (1. School for Resource and Environmental Studies, Dalhousie University, Halifax, NS, Canada B3H 4R2;
  - 2. Chongqing Landscape and Gardening Research Institute, Chongqing 401329;
  - 3. Editing and Publishing Center, Chongqing Normal University, Chongqing 400047, China)

Abstract: The Changjiang (长江), China's longest river, is sometimes named Yangtze (Yangtse, Yangzi) in English-language scholarly literature. We examined over 50 recent scholarly articles and found that the river and its basin were named inconsistently and often improperly. We recommend that all authors writing in English adopt the naming convention 'the Changjiang (Yangtze River)' on first reference in any scholarly article, and 'the Changjiang' henceforth in that article. The names Yangtze (Yangzi) and Jinsha may be appropriate in exceptional circumstances provided that the relationship of these parts of the river to the entire river are explained.

Key words: Changjiang; Yangtze river; river naming

中图分类号:Q-1;G232.2

文献标志码:A

文章编号:1672-6693(2014)06-0150-03

China's largest river, the world's third longest, is of scientific interest because of its exceptional characteristics, such as the large sediment loads it carries<sup>[1,2]</sup> and its great variations in volume of flow <sup>[3]</sup>. For social scientists it is one of the cradles of Chinese civilization <sup>[4]</sup>. Construction of the Three Gorges Dam on the river has expanded the range of interests to fields such as ecological restoration<sup>[5]</sup>. The growth of scholarly attention paid to the river highlights a serious problem for scientists, however, that of how to name the river. As was acknowledged long ago by Spencer<sup>[6]</sup>, many mistakes have been made by geographers when naming geographic features of China, and this is a case in point.

In Chinese, the river is called 长江. These two Chinese characters are conventionally romanized as 'chang jiang', meaning 'long river'. The name is applied to the whole river and is universally understood in China. In English, the river is frequently named Yangtze River (扬子江). In modern usage, this name is also commonly applied to the whole river. Unfortunately, in Chinese, the name 扬子, from which the word Yangtze is derived, applies only to the lower reaches of the river and only in the local dialect used in that region. The 'Yang'(扬) part of the name derives from the city of Yangzhou (扬州), Jiangsu province, which was an important port near the mouth of the river when European explorers began to take an interest in China. 扬子江 (Yangtze River) literally means 'raise child river' and, by contrast with the meaningful word Changjiang, is not descriptive of the river as a whole. Essentially, the early European explorers mistook a name given to the river in a local dialect as the name for the entire river. As Tolley explained: "China is a land of great regional independence. Her people, mostly uneducated, developed distinct local habits, customs, and nomenclature. It is not surprising to find informal, unofficial local names, and herein lies the confusion concerning the Yangtze."

There have been several attempts to romanize the Chinese language, of which the best known are Wade-Giles, developed in the late 1800s by British scholars, and *Hanyu pinyin*, officially adopted in China in 1958.

<sup>\*</sup> Received: 01-23-2014 Accepted: 04-21-2014 网络出版时间: 2014-11-19 21:49

The first author biography: Martin WILLISON, male, doctor, professor, research area; biological diversity and ecology, E-mail; willison@dal. ca. Corresponding author; LI Ruoxi, E-mail; lrx@cqnu, edu, cn

Changjiang is the pinyin romanization of  $\not\in X$ . In the older Wade-Giles system  $\not\in X$  was romanized as Chang Chiang. In a yet older form of romanization, Chiang was rendered as Kiang. In early European cartography, the Changjiang was simply named Kiang [8], for this was the name it was often given in olden times in China.

In the *Hanyu pinyin* system, 扬子 is romanized as  $Yang\ Zi$  (or more usually Yangzi). In the Wade-Giles system, it is Yang-Tzu. In the 1700's European cartographers had chosen, however, to use Yang-tse [9]. The name Yangtze was a compromise between Yang-tse and Yang-Tzu and was introduced for international postal purposes [10].

There are other local names for parts of the Changjiang, notably Jinsha River for a segment of the river above Yibin in Sichuan province. An important geological terrane boundary, the Jinsha River Suture, was named after this part of the Changjiang [11]. Use of 'Jinsha River' is appropriate in this circumstance, as is the use of this name in regional ethnography [12].

Given that there are so many different names and spellings, it is interesting to consider usage of names for the river and its basin in recent English-language scientific literature. To achieve this, we entered the various names for the river into the Google Scholar search engine and downloaded an assortment of 50 articles published in refereed scientific journals by non-Chinese publishers in recent years. We used the following search terms independently: Changjiang, Yangtze, Yangtse and Yangzi. The sample cannot be considered random, but to avoid bias we took all those that could be downloaded from the first eight or so pages found by the Google Scholar search engine on the day the search was conducted.

We found little consistency. In about 40% of the sample of articles, Yangtze River was used alone [13-15]. Yangtse was used alone in about 10% [16-17], and we found two examples of the use of Yangzi alone [18-19]. In one case, the author referred to the lower reaches of the river as Yangtze River and the upper reaches as Changjiang [20]. One author used "Changjiang River" [21] and others "the Changjiang" [22]. In about 35% of the sample articles, both of the names Yangtze and Changjiang were used, usually with an explanation for doing so, such as "the Yangtze Kiang (Changjiang or Long River)" [23], "The Yangtze River (*Changjiang* in Chinese)" [3], and "the Changjiang (Yangtze River) basin" [24].

We consider that the name Changjiang is preferable for several reasons. It is the Chinese name for the river, er, its meaning is appropriate for the river, and it is romanized according to the modern widely used  $Hanyu\ pi-nyin$  convention. It is the only name appropriate for reference to the river basin as a whole. By contrast, the word Yangtze is not descriptive of the river, does not properly apply to the whole river, and has been romanized inconsistently.

We strongly recommend, and appeal, to authors writing in the English language to adopt the following convention. On first reference to the river in an article, use 'the Changjiang (Yangtze River)', and thereafter use 'Changjiang' or 'the Changjiang'. Do not use 'Changjiang River' (because *jiang* means river) and do not translate the name as Long River (because there are other rivers named Long and *long*). We recommend the use of 'the Changjiang' which is in concert with a common English practice when naming major rivers (as in the Thames, the Seine and the Rhine). Use of the name Yangzi River may be appropriate under exceptional circumstances, as in the case of Southeast University in Nanjing<sup>[25]</sup> who described the use of mixtures of cement-treated estuarine sand mixed with polystyrene beads as embankment fill in the region of the river's delta. In exceptional cases like this, we recommend that authors use the form 'Yangtze River (Changjiang)'.

## References:

- [1] Lu X X, Higgitt D L. Sediment yield variability in the Upper Yangtze, China [J]. Earth Processes and Landforms, 1999,24:1077-1093.
- [2] Chen X, Yan Y, Fu R, et al. Sediment transport from the Yangtze River, China, into the sea over the post-Three Gorge Dam Period[J]. Quaternary International, 2008, 186: 55-64.
- [3] Jiang T, Kundzewicz Z W, Su B. Changes in monthly precipitation and flood hazard in the Yangtze River Basin, China[J]. International Journal of Climatology, 2008, 28:1471-1481
- [4] Crawford G W. Early rice exploitation in the lower Yangzi valley: what are we missing [J]. The Holocene, 2012, 22 (6):613-621.

- [5] Willison J H M, Li R, Yuan X Z. Conservation and ecofriendly utilization of wetlands associated with the Three Gorges Reservoir [J]. Environmental Science and Pollution Research, 2013, 20:6907-6916.
- [6] Spencer J E. Chinese place names and the appreciation of geographic realities[J]. Geographical Review, 1941, 31(1): 79-94.
- [7] Tolley K. Yangtze Patrol, the U. S. Navy in China[M]. Annapolis: Naval Institute Press, 1971.
- [8] Wikimedia Commons. File: CEM-36-Huguang-2433. jpg [EB/OL]. (11-01-2014) http://commons. wikimedia. org/wiki/File: CEM-36-Huguang-2433. jpg.
- [9] Arrowsmith A. Asia (1801) [EB/OL]. (11-01-2014). http://www. davidrumsey. com/luna/servlet/detail/RUM-SEY  $\sim 8 \sim 1 \sim 233054 \sim 5509637$ ; Asia--To-Major-James-Rennell,-Esq-r.
- [10] Harris L J. A "lasting boon to all" [J]. Twentieth-Century China, 2008, 34(1):96-109.
- [11] Zhao W, Kumar P, Mechie J, et al. Tibetan plate overriding the Asian plate in central and northern Tibet [J]. Nature Geoscience, 2011, 4:870-873.
- [12] Tacon P S C, Li G, Yang D, et al. Naturalism, nature and questions of style in Jinsha River rock art, Northwest Yunnan, China [J]. Cambridge Archaeological Journal, 2010, 20(1):67-86.
- [13] Alberts H C, Alberts R M, Bloom M F, et al. The Three Gorges Dam Project from a systems viewpoint [J]. Systems Research and Behavioral Science, 2004, 21:585-602.
- [14] Chau K W, Wu C L, Li Y S. Comparison of several flood forecasting models in Yangtze River [J]. Journal of Hydrologic Engineering, 2005, 10(6):485-491.
- [15] Hartmann H, Becker S, King L. Predicting summer rainfall in the Yangtze River basin with neural networks [J]. International Journal of Climatology, 2008, 28:925-936.
- [16] Xu S, Jiang X, Dong Y, et al. Polychlorinated organic com-

- pounds in Yangtse River sediments [J]. Chemosphere, 2000, 41:1897-1903.
- [17] Long H, Heilig G K, Li X, et al. Socio-economic development and land-use change[J]. Land Use Policy, 2007, 24: 141-153.
- [18] Liu L, Lee G A, Jiang L, et al. Evidence for the early beginning(c. 9000 cal. BP) of rice domestication in China [J]. The Holocene, 2007, 17(8): 1059-1068.
- [19] Li X, Xu L, Wang H, et al. A differential evolution-based routing algorithm for environmental monitoring wireless sensor networks[J]. Sensors, 2010, 10:5425-5442.
- [20] Lu X X. Vulnerability of water discharge of large Chinese rivers to environmental changes: an overview[J]. Regional Environmental Change, 2004, 4:182-191.
- [21] Liang Y. Preliminary study of the aquatic Oligochaeta of the Changjiang (Yangtze) River[J]. Hydrobiologia, 1987, 155:195-198.
- [22] Wang Y, Liao M, Sun G, et al. Analysis of the water volume, length, total area and inundated area of the Three Gorges Reservoir, China using the SRTM DEM data[J]. International Journal of Remote Sensing, 2005, 26 (18): 4001-4012.
- [23] Xiao Y, Ferreira J G, Bricker S B, et al. Trophic assessment in Chinese coastal systems-review of methods and application to the Changjiang (Yangtze) estuary and Jiaozhou Bay[J]. Estuaries and Coasts, 2007, 30(6):901-918
- [24] Gong L, Xu C Y, Chen D, et al. Sensitivity of the Penman-Monteith reference evapotranspiration to key climatic variables in the Changjiang (Yangtze River) basin[J]. Journal of Hydrology, 2006, 329:620-629.
- [25] Wang F, Miao L. A proposed lightweight fill for embankments using cement-treated Yangzi River sand and expanded polystyrene (EPS) beads[J]. Bulletin of Engineering Geology and the Environment, 2009, 68:517-524.

## 论"长江"名称在英文学术文献中的一致性

WILLISON J. H. Martin<sup>1</sup>, 艾丽皎<sup>2</sup>, 李若溪<sup>3</sup>

- (1. 加拿大达尔豪斯大学 资源环境学院, 哈利法克斯 B3H 4R2, 加拿大;
- 2. 重庆市风景园林科学研究院, 重庆 401329; 3. 重庆师范大学 编辑出版中心, 重庆 400047)

摘要:中国最大的河流长江在英文学术文献中出现了4种名称"Yangtse"、"Yangtze"、"Yangzi"和 "Changjiang"。笔者查阅了50篇以上最近发表的学术文章,发现在长江河流的名称使用上缺乏一致性,并且在描述该河流的不同河段时名称使用更显得混乱。为了避免研究信息的混淆和错误,我们呼吁世界范围内所有作者在文章中使用长江英文名称时,统一采用以下形式:文中第一次出现时用"the Changjiang (Yangtze River)",以后出现则统一用"the Changjiang"。扬子江(Yangtze)和金沙江(Jinsha)作为部分河段的名称,适用于特定情况下描述与长江全河段相关关系时使用。

关键词:长江;扬子江;河流命名