Workshop “Chinese Handicraft Regulations: Theory and Application”

《中國匠作則例: 理論與實用》專題研討會

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Managing Mobility: Popular Technology, Social Visibility and the Regulation of Riverine Transportation in Eighteenth Century China

Grant Alger

Abstract

This paper provides a case study of how local officials during the Qing sought to regulate the usage of privately constructed handicrafts by focusing on the administration of river boats in Fujian province during the eighteenth and early nineteenth centuries. Government officials, I argue, possessed a dual view of river boat operators as both marginal and potentially dangerous social figures and as important economic actors. As a result, officials sought to design regulations that decreased criminality on the rivers and also promoted the convenient flow of goods through the region. This study describes first how during the eighteenth century officials sought to police river boat operators by applying the *baojia* population registration system to the mobile world of the rivers. This policy included ordering that boats be painted, carved or branded with identifying information to lessen the anonymity of boat operators. Due to the state’s inability to execute fully this policy, however, in the early nineteenth century Fujian’s officials ordered instead the implementation of a boat broker system. This system was designed to enmesh all of the participants in the river transport trade, (boatmen, merchants, and brokers) into a relationship of mutual dependency and control as a way to maximize the regulatory impact over the transport trade while minimizing the need for day-to-day government involvement.
Recent years saw the publication of a considerable number of works related to river hydraulics during the Qing dynasty. All of these works offer insights into the administrative aspects of river control during that period. We are now fairly well informed as to how the special administration for the control of the Yellow River and the Grand Canal came into being, how it was expanded and how it was eventually abolished for good. Although recent research could draw on a greatly expanded body of sources and especially use a large number of palace memorials related to river control stored in archives in Taipei and Beijing, our understanding of how the river administration in Henan, Shandong and Jiangnan interacted with central government organs in Beijing is still limited at best. A common assumption holds that the Board of Works (gongbu), which was nominally responsible for the administration did not play any important role in decision-making and the execution of major river control works. In his classical study, Hu Ch’ang-t’u goes to considerable lengths to describe how the board was
bypassed and marginalized, and most researchers – including myself – have hitherto been content with looking into palace memorials in order to get an understanding of the intriguing issues of river control during most of the Qing. While it is certainly true that no major decision on river control was possible without the Emperor’s approval, and thus that palace memorials are of paramount importance for our understanding of many of the conceptional, financial and political aspects, such a focus tends to eclipse the more pedestrian problems of river control, like the planning of a work, procurement of materials, accounting, auditing, etc. However, these political and technical aspects are essential for a full picture of the functioning of the river administration and the evaluation of its efficiency. In this paper, I will try to present a preliminary assessment of the Regulations and Precedents for River Works (Hegong zeli 輯工則) and their value as a source highlighting some of these neglected issues.

At the outset, I will briefly discuss the origins and the evolution of Hegong zeli as a genre and describe the different editions which I could study in preparing this paper. In the main part of my paper, I will analyze the functions of the Hegong zeli within in the river administration and draw attention to the revisions of prices for labor and material which can be observed by comparing Zeli from different periods. I will suggest that a closer look into this problem can help us understand the function of Zeli within the framework of the river administration and that it may offer insights into the crucial, but largely neglected problem of the supply of materials and labor for river works.

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5 We should note here that palace memorials also form the core of the most important collections of sources on Qing river hydraulics, cf. especially Li Shixu, 梁世绪, Pan Xien 潘振益 (comp.) 1970, Xu Xingshui jinjian 漢行水金鑑 (Sequel to the Golden Mirror for Controlling the Waters) (Zhongguo shuili yaoji congbian 2), 10 vols., Taibei: Wenhai (Reprint of the 1833 edition), hereafter quoted as XXSJJ; and Wu Tongju 武同樞 (comp.) 1970, Zaixu xingshui jinjian 再續行水金鑑 (Further Sequel to the Golden Mirror for Controlling the Waters) (Zhongguo shuili yaoji congbian 21), 10 vols., Taibei: Wenhai 1970 [preface 1942], hereafter referred to as ZXXSJJ.
The technology of the vault structure in Chinese architecture: links between the Gongcheng zuofa, 1734, juan 44 and the contemporary building methods of yaodong houses in Shaanxi and Shanxi provinces

Caroline Bodolec

Preliminary abstract: In Chinese architecture, vaults are very scarce. Apart from tombs, bridges and city gates, the brick and stone barrel vault can be found in two types of buildings: the wuliang dian ["beamless hall"] built during the Ming dynasty and the yaodong houses of Yellow earth Tableland. Using the same plan as cave-dwellings, the oldest brick and stone yaodong of Shaanxi and Shanxi provinces were built during the XVIIIth century. Their technics have been maintained until nowadays; in some parts of the two provinces almost 80% of the new yaodong have a vault with abutments. The wuliang dian and the yaodong present some similar technics of construction: front bricks layout and architectural calculations of the span and the rise of the vault. Those technical characterists of the Chinese vault are mentioned in a very little juan of the Gongbu zuofa, publication of the Qing Board of Work in 1734. Some of the calculations can be compared with the contemporary building site of Shaanxi province leading to an hypothesis of transmission from public and written architecture to popular architecture.

Key words: Architecture, Cave dwellings, Transmission of technics, Board of Works, Popular craftsmen, Qing dynasty, Contemporary period

中國建築中的拱頂結構技術：《工部做法》（1734）第 44 卷和現在陝西和山西省的窖洞房屋建築方法的聯繫

初步的摘要

中國的建築中拱頂很少。除了墓、橋和城門外，磚石拱形拱頂存在於兩類建築中：明朝建成的無梁殿和黃土高原的窖洞房屋。使用與穴居同樣的方法，陝西省和山西省最早的磚石窖洞建於 18 世紀。其技術保留至今；在兩省的某些地方近 80% 的新窖洞有拱形的拱頂。無梁殿和窖洞顯示某些相似的結構技術：前面磚的佈局和拱的跨度。高度的建築學計算。中國拱頂的那些技術特點在《工部做法》的很小的一卷中提到，該書在 1734 年由清工部出版。它的某些計算方法可類比於現在陝西省的建築物。這引出這樣一種假設：公開出版的建築技術向民間建築技術的傳播。

關鍵字：建築，穴居，技術傳播，工部，民間工匠，清朝，現在時期
Comments on the Book *Yuan Ming Yuan Nei Gong Ze Li*

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Abstract: Among the extant construction files of the Yuan Ming Yuan, *Yuan Ming Yuan Nei Gong Ze Li* is of great value. It is an important document which emerged during the building process of the Yuan Ming Yuan and is closely linked to the project management code that had to be carried out for imperial construction in the Qing Dynasty. *Yuan Ming Yuan Nei Gong Ze Li* brings us much important information on Yuan Ming Yuan construction nowadays, nearly 150 years since these imperial palace buildings were burned. At same time *Yuan Ming Yuan Nei Gong Ze Li* reflects the developing conditions of Chinese architecture as an official handicraft industry in the Qing Dynasty. Compared with *Ying Zao Fa Shi* of the Song Dynasty, we can see that handicraft industry of the Qing Dynasty had a fine division of labor which greatly enhanced the quality of construction. In the Song Dynasty, “Grade Difference” was applied to count quotas of work while in the Qing Dynasty, “Proportional Compensation Method” was used to make up the balance for the labor. Seen from the point of equal value of labor, the Qing Dynasty method was more precise than that of the Song Dynasty, but in transportation the Song Dynasty was more precise than the Qing Dynasty. As for the varying duration of the work day during the four seasons, the Qing Dynasty didn't consider it in its Ze Li. This shows he different attitude towards labor of the rulers of both dynasties.

### 《圆明园内工则例》评述

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2003年1月7日

提要：《圆明园内工则例》在现存圆明园的建筑档案中具有重要价值，它是圆明园建设过程中所产生的重要文献，它的出现与清代皇家建筑所施行的工程核算制度密切相关。《圆明园内工则例》反映了诸多圆明园建筑的重要信息，在圆明园被毁近一个半世纪的今天，在所存圆明园的资料中具有重要价值。同时《圆明园内工则例》还反映了中国建筑作为“官满工业”在清代的发展状况，将其与宋《营造法式》作一比较，可以看出清代的手工业分工更加细密，这使得建筑的精制度大大提升。计算用工定额宋代采用的是等差数的办法，清代采用的是差额补偿的办法，从等值劳动的角度来看，清代更为精制。但在运输一类的工作中宋代精细清代粗略。对待一年四季工作日长短不同的状况，清代的则例未予考虑，反映了宋、清两代统治者对待工匠的不同态度。

关键词：圆明园则例、圆明园建筑信息、官手工业、等值劳动
Artisans, Guilds and Craft Regulations in European History and Historiography

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Abstract

The paper starts with a definition of guilds and a brief survey of the development of the guild system in European history. The second part of the paper deals with traditional perceptions of and new approaches to guilds in European historiography. Doing so, the paper discusses the historical context of the guild system (medieval or early modern); the relation between economic regulation and competition; the internal differentiation and the hierarchies within guilds; and finally the place of journeymen and women in the world of the guilds. The aim of the paper is to propose a perception of guilds which regards them as integral parts of the European economic and social development towards industrial capitalism.

欧洲历史和编史学中的工匠、行会和手工业制度

该文首先要给欧洲历史上的『行会』加以定义，并简述欧洲行会制度的发展历史，然后论述欧洲编史学对行会的传统看法和新的研究方法。因此，该文要探讨行会制度的历史背景（中世纪或近代初期）、经济规则与竞争之间的关系、行会中的内在区别和等级及工匠和妇女在行会中的地位。本文认为，行会是欧洲经济和社会朝资本主义工业化发展所不可缺少的组成部分。
Abstract
Timeliness and Innovation: The 1845 Revision of the Complete Book on Grain Transport (Caoyun quanshu)

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This study examines the role of the formal revision of administrative codes in the institutionalization of innovative changes in the Qing dynasty’s strategic grain transport system from the late eighteenth century to 1845 when environmental changes in the Grand Canal zone caused the breakdown of canal shipping of grain taxes from the Lower Yangzi valley to the capital, Beijing. It examines the revision of the Board of Revenue code on grain transport: The Complete Book on Grain Transport (Caoyun quanshu; authorized 1829; published 1845) and centers on the treatment of three grain transport experiments made from 1825–1827: relay shipping on the canal (panba jieyun), sea transport (haiyun), and modified canal transport (guantang duyun). The study sheds light on how Qing government accommodated long-term evolutionary changes that bore on its management of food grain supplies, and it argues that periodic revision of the administrative code enabled the Qing regime to respond quickly and flexibly to key governing responsibilities.

概要
适时与变革：漕运全书一八四五年修订本

Jane Kate Leonard
The University of Akron

十八世纪晚期至一八四五年，大运河区的环境变化导致了从长江下游河谷至首都北京段运河漕税运输的瘫痪。此间，在清朝漕运体制中，变革被制度化了。本文论述了行政管理准则的修订在这种制度化过程中所起的作用。本文考察了税务部对漕运准则的修订：漕运全书（著于一八二九元，出版于一八四五年），同时着重讨论一八二五年至一八二七年期间对几种漕运试运办法的处理：盘坝接运，海运，灌塘督运。本文阐明了清朝政府如何应对长期演变以及这种适应对漕税经营产生的影响。本文认为定期的行政准则的修订使清朝政府能够对关键的政府职责做出迅速及灵活的反映和调整。
Maintenance and Renovation of the Metropolitan City God Temple and the Peking City Wall During the Qing Dynasty

Christine Moll-Murata, Eberhard- Karls- Universität Tübingen

In this presentation I will explore the information which handicraft regulations can yield concerning the relationship of the state and the building crafts in the Qing dynasty in two specific cases which are both symbolic for this city. These are its walled enclosures, and the temple for the deity of its walls and moats, the highest ranking city god temple in the Qing empire. For this purpose, I have studied official documents of different levels of administration: First, the “Regulations and Precedents of the Ministry of Public Works” 九定工部則例, second, the “Collected Statutes with Factual Precedents of the Great Qing Dynasty” 欽定大清會典事例, a compendium of regulations and precedents concerning and addressed to all government institutions, and other types of handicraft regulations specifically relevant for both samples. These documents are complemented with other materials from the gazetteer of the capital, 光绪顺天府志, archival, and epigraphical material. My aim in using these samples was to learn about the state and crafts relationship in practice, and to try to find out how work was organized at the construction sites.

论官府与工匠的关系：北京都城隍庙与城垣的维护与整修

都城隍庙与城垣是清代北京城的象征性建筑。本文通过研究清代的官方文件《工部则例》、《大清会典事例》和各种直接相关的匠作则例，并以《光绪顺天府志》与有关档案文件和碑文作补充资料，对清代北京都城隍庙和城垣的日常维护和整修过程做个案研究，探讨官府与建筑业的关系及其在匠作则例中的体现。

本文通过个案研究，意在证实清代官府与手工业的实际关系，了解官府组织和管理现场施工的措施，并根据这些档案文件探讨官府与手工业关系的变化。结论是：中国 18世纪，即雍正、乾隆、嘉庆时代，官府对社会和经济的管理比较严格，但是至 19世纪后期，管理开始松弛，这种变化对官府建筑业也产生了一定的影响。
Organization and Techniques of the Imperial Printery in the Hall of Military Fame Wuyingdian
Liu Qiang

Abstract: Chinese printing reached its highest development during the Qing dynasty. The imperial printings were noted for careful collation as well as the high quality of the raw materials and the good appearance of the end products. These characteristics distinguish them from the printings of the other agencies. During the Qing dynasty, the imperial printing workshop was managed by the Book Office of the “Hall of Military Fame” Wuyingdian. This paper will highlight the manuscripts “Current regulations and precedents of the Imperial Household Department” together with archival documents as primary sources. Regulations and precedents, zeli, are the norms concerning techniques, materials, and funds for the production. It is my objective to establish regulations on printing, another profession with great cultural and considerable economical relevance, to the scope of handicraft regulations. The paper divides into four parts, first, give an brief introduction to the history of the Hall of Military Fame. second, research on the interior organization of Wuyingdian. third, research on economical factors. fourth, research on technical processes.
Provincial Monetary Practice in Eighteenth-Century China: Chen Hongmou in Jiangxi and Shaanxi

William T. Rowe

ABSTRACT

This paper explores the various means used by provincial officials during the early Qianlong reign to regulate regional money supplies, and market exchange rates between silver taels (liang) and copper cash (qianwen). These means included controlling the output of mines, importing monetary metals, minting new cash, and adjusting the copper content of coins in circulation. As the Qing empire’s retail economy continued to commercialize, demand for small denomination copper coins rose accordingly. And as the market price of copper rose, relative to silver, the government struggled to keep copper cash from being withdrawn from the market and melted down, either for non-monetary uses or for re-casting as lower copper-content counterfeit coins. It determined to do so without recourse to imposing fixed exchange rates or prices, a strategy it understood to be counter-productive. Though success was never complete, the paper shows how a knowledgeable and energetic provincial governor could achieve this difficult task relatively well.

中国在 18 世纪的地方货币政策：陈宏谋在江西和陕西的实践

William T. Rowe

本文将探讨乾隆初地方官员为管理地方钱币供应、银两与钱文市场兑换率而采取的各种措施。这些措施包括：控制矿藏的开采量，引进铸钱的金属原料，铸造新的钱币，调整现行钱币的铜含量。随着清代零售业经济不断商业化，对小面值铜钱的需求相应地增加了。而且，当铜矿比银矿涨价时，政府就设法防止从市场上抽走铜钱回炉，或者挪做它用，或者重铸含铜量更低的伪币。但是，政府决定不试图强行规定兑换率或价格，因为这种对策看起来会起反作用。尽管清代的货币政策并不是完全成功的，但是本文证明，一位知识渊博和精力充沛的总督却较好地完成了这个艰难的任务。
The Congruence of Knowledge and Action: The *Tiangong kaiwu* 天工開物
and its Author Song Yingxing 宋應星 (1589-166?)

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For the last hundred years the *Tiangong kaiwu* 天工開物 served as an outstanding Chinese representative for a complex interest in technical crafts and in that respect an intricate theoretical approach to technology. This book, whose title is traditionally captured as “The Exploitations of the Works of Nature” [*Heavens Crafts in the Instigation/Launch of Things*] was originally compiled in 1637 by a minor scholar called Song Yingxing 宋應星 (1589-166?). However, Song also wrote some additional treatises which are available in a reprint since 1976 without gaining any remarkable influence on current interpretations of his major text. These treatises provide the opportunity to clearly divulge the main concerns and ideas of Song Yingxing in his contemporaneous world. They show that Song Yingxing had prevalent ideas about poetry, literature, historical recording, and astronomic, medical or agricultural, botanic or religious - philosophical – themes like many of other late Ming dynasty authors had too.

In this context it might be interpreted as subordinate that just recently presented studies on various technical topics of the *Tiangong kaiwu* clearly reveal the obvious shortcomings and misapprehensions of Song’s both technical documentations and illustrations. But they might also serve as a palpable hint forcing us to analyze in depth the initial purpose of this manuscript. A close investigation of the editorial history and the reception of Song Yingxing’s entire literary outburst in context with each other delineate the existing “incongruity” between original endeavour, current historical necessities and the later reception of Song’s work. Furthermore, it may prepare the ground for the instigation of Song’s *initial idealist* background.
The *Fujian yanhai hangwu dang’an* 福建沿海航務檔案 (Documents on Coastal Shipping Affairs in Fujian) is a handwritten document on and probably of the jiaqing period (1796-1820). It treats the local government politics of Fuzhou and Quanzhou towards shipbuilding, ship trading, and navigation and trade routes affairs. We are, for example, informed about who under which particular conditions is allowed to build ships, which particular materials are required, how long particular ships should be, how many persons should be on board, about particular licenses, controls or even some particular incidents, such as, what specific measures were undertaken, when in such year people from such country were shipwrecked and, eventually, reached the coast of Fujian or were rescued by Chinese ships. And, of course, customs affairs are repeatedly mentioned.

The manuscript is not divided into chapters or systematically arranged according to subjects, but simply consists of a collections of related archival documents, including regulations, instructions, proposals, and records. It contains a few entries concerning shipbuilding and navigation affairs as well as shipwrecked people of the Ryukyu Islands. These records may also be found in the recently published Collection of selected historical documents concerning Chinese-Ryukyu relations during the Qing period (*Qingdai ZhongLiu guanxi dang’an xuanbian* 清代中琉關係檔案選編), edited by the First Historical Archive in Beijing (Diyi lishi dang’an guan 第一歷史檔案館). A thorough comparison of both sources, however, shows, that the former contains some additional passages which are not to be found in the latter. As a whole, the manuscript constitutes a valuable source for a better understanding of the Fujian government’s attitude towards shipbuilding, customs policies, and maritime trade politics in general during the jiaqing period.
An Exploration of the Origins, Characteristics, and Research Situation of Handicraft Regulations

Song Jianze

Qing dynasty handicraft regulations and precedents are materials that concern public construction and the arts and crafts. For a considerable period of time, this type of writings belonged to one great family together with all other kinds of regulations and precedents. In this article, its beginnings and the process of its gradual independence will be traced, its horizontal sources and vertical evolution will be inquired into, its definition, categories, compilation, printing, and main contents will be analyzed and ascertained, representative editions and collections will be introduced, its value will be assessed, the relevant studies in past and present will be described, and an outlook on future research topics will be given.
The Basic Characteristics of the Provincial Regulations and their Application to the Crafts

TANII Yoko

In Qing China, important matters of provincial administration were considered and decided by the provincial authorities. Some of the decisions provided that all of the officials in the province should deal with similar cases in the same way. What thus became the rules of a province were shengli (the provincial regulations). In several provinces, provincial authorities printed shengli and distributed them to their subordinates. The printed shengli formed a special category of rules. But as a whole, the system of shengli was at the stage of trial-and-error in each province. Most of the actual examples were made for peculiar situations. But they did not lack universal validity, for anyone could consult them while taking the peculiar conditions into account. As shengli possessed this new type of function, they had unique significance and utility despite their incomplete nature.

清代省例基本特征和对于工程的适用

谷井阳子

『省例』这个语言，是清代特有的。类似的概念，在清代以前没有出现过。
作为行政单位的「省」，来自元代的「行省（行中书省）」，宋代的「监司」与后世的省大体上管辖同规模的范围内的地方衙门。这些衙门，肯定有过一些先例，作为完成业务的标准。那些先例也有某种程度的拘束力。也有地方的上级官僚制定独自的规则，要求所管辖的地方官遵守。譬如，明代的吕坤（1536－1618），在担任山西按察使和山西巡抚时，制定了有关征收税粮，审判等的标准，通知他的属下。可是，不作为地方上级官僚个人的方针，作为一定领域内的地方衙门应该为持续的遵守的法，制定地方性的规则，在清代未曾出现过。至少，作为一个法的范畴成立，在公牍中频见，无疑地是自清代以后。
清代，一般重视行政上的先例。省例以外，弥补律典的条例和各种的则例等，法令和行政规则大量地也被制定。「省例」这个法的范畴成立，在几个省编辑成书，也能视为同一潮流的一环。
作为行政规则的省例的特质，反映这样的省例成立的过程，受到着成立过程的规定。因此，为了知道省例的性质，需要分析省例成立的原委。本文首先说明清代省例的成立过程（第一章），藉此讨论省例的法的性格（第二章），更加分析对于工程这个特殊的业务适用的省例，论述实际运用的省例的特征（第三章）。

6关于省例，从前研究得不多。专门研究省例的论文，寺田浩明「清代の省例」（滋贺秀三编『中国法制史—基础资料研究—』东京大学出版会，1993 年）大概是最初的。其中概括了到当时为止的研究状况。以后，拙文「清代则例省例考」（『东洋学报』第 67 册，1995 年）。除了上述以外，没有关于省例问题的专门研究。
7吕坤『实政录』卷二务治、卷六风宪约。
On Acquisition and Maintenance of Military Equipment as reflected in Handicraft Regulations

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Abstract Jun Qi Ze Li were the regulations concerning the production, repair and replacement of military equipment during Qing dynasty (1644-1911), and Qin Ding Gong Bu Jun Qi Ze Li was the important component of the handicraft regulations during Qing dynasty. The Qing authorities, Bing Bu (Military Ministry) and Gong Bu (Industry Ministry), issued Jun Qi Ze Li to the central and provincial offices in order to have a unified system in the acquisition and maintenance of military equipment, prevent wasting and corruption, ensure the availability of military equipment and increase the effective strength of the armed forces.

This paper will deal with the procedures of drafting out the Jun Qi Ze Li during Qing Dynasty by investigating their four copies, which were edited by Bing Bu and Gong Bu during the Qianlong and Jia Qing reigns. When Bing Bu and Gong Bu planned to revise Jun Qi Ze Li, they had to be authorized by the emperor. Before Jun Qi Ze Li was published and issued, it also had to be examined and approved by the emperor to ensure its authority. Moreover, the main editors were professional officials and firsthand information was provided by the provincial Governor-generals and lower-rank officers to guarantee the veracity and feasibility of Jun Qi Ze Li.

In addition, the differences between Qin Ding Gong Bu and Bing Bu Jun Qi Ze Li and their impact on the development of military technology during Qing Dynasty will be discussed in this paper. For example, Gong Bu placed emphasis on the shape and size of military equipment and the amount of material, workers and money, which would be used and spent in the production of the equipment. However, the names and sorts of military equipment and the detailed time of production, repair and replacement were clearly listed in Qin Ding Bing Bu Jun Qi Ze Li. It will be argued that to some extent, Jun Qi Ze Li hindered the development and invention of military technology during Qing dynasty because they always stressed that the standard had to be unified and the expenses had to be cut down.