中國營造學社彙刊

婉猗 圖

第一卷 第一册 中華民國十九年七月

插畫
宋李明仲先生像
專著
中國營造學社緣起
中國營造學社開會演詞 附英譯
李明仲八百二十週忌之紀念
書評
英葉慈博士營造法式之評論 附漢譯
英葉慈博士論中國建築內有涉及營造法式之批評 附漢譯
校勘
仿宋重刊營造法式校記
徵求
徵求營造佚存圖籍啟事
介紹
營造法式印行消息
社訊
社事紀要

社址
北平東城寶珠胡同七號
電話東局九五九

宋李明仲先生像

先生爲鄭州名族藏書滿家年二十餘以門蔭官縣尉有能名中年累鳩僝功仕途平進博學多能上邀睿賞頴敏過人述作繁富享年雖不可考約計享大四十六七父享年與兄同在朝列夫人偕老子女咸備中華民國十九年三月廿一日生八百二十週忌爲先謹依相法追以墓誌景仰

武進陶洙

中國營造學社緣起

中國之營造學。在歷史上。在美術上。皆有歷劫不磨之價值。啟鈐自刋行宋李明仲營造法式。而海內同志。始有致力之塗轍。年來東西學者。項背相望。發皇國粹。靡然從風。方今世界大同。物質演進。茲事體大。非依科學的之眼光。作有系統之研究。不能與世界學術名家。公開討論。啟鈐無似。年事日增。深懼文物淪胥。傳述漸替。爰發起中國營造學社。糾合同志若干人。相與商略義例。分別部居。庶幾絕學大昌。羣材致用。

工藝經訣之書。非涉俚鄙。卽苦艱深。良由學力不同。遂滋隔閡。李明仲以淹雅之材。身任將作。乃與造作工匠。詳悉講究。勒爲法式。一洗道器分塗。重士輕工之錮習。今宜將李書讀法用法。先事研窮。務使學者。融會貫通。再博采圖籍。編成工科實用之書。

營造所用名詞術語。或一物數名。或名隨時異。亟應逐一整比。附以圖釋。纂成營造辭彙。旣宜導源訓詁。又期不悖於禮制。古人宮室制度之見於經史百家者。皆宜取證。并應注重實物。凡建築所用。一甓一椽。乃至塚墓遺文。伽藍舊蹟。經考古家。美術家。收藏家。所保存所記錄者。尤當徵作資料。希其援助。至古人界畫粉本一實寫眞形

。近代圖樣模型影片。皆擬設法訪求。以供參證。

李書於制度功限料例。固已示營造之津梁。而北宋迄今。又逾千載。世運推遷。質文遞嬗。遼金元明之遺物。塔寺宮殿。碩果尚存。明清會典。及則例做法。令甲具在。由此推求。可明制度之因革。曩年於李書圖樣付印之際。就現存宮闕之間架結構。附撰今樣。一併印行。已見一斑。功限料例。爲民生物力。隆替所關。於時代性尤易表著。清代雍乾年間。工部物料價值。以及各省工料價值諸書。與內庭圓明園等工料則例。皆屬官書。居今稽古。不難推知傭值之高下。物力之變遷。蓋工部所營。如壇廟宮殿城垣及廨舍倉庫。崇庫有度。經制悉準典章。其內庭及圓明園所營。苑囿寺觀。及裝修陳設。穹奇侈巧。結構恢詭。然匠心所運。不踰規距。歷史象徵。固班班可考者也。

輓近以來。兵戈不戢。遺物摧毀。匠師篤老。薪火不傳。吾人析疑問奇。已感竭蹶。若再濡滯。不逮數年。闕失彌甚。曩因會典及工部工程做法。有法無圖。鳩集師匠。效梓人傳之畫堵。積成卷軸。正擬增輯圖史。廣徵文獻。又與二三同志。閉門冥索。致力雖劬。程功尚尠。刼運無常。吾爲此懼。亟欲喚起並世賢哲。共同討究。或以智識。相爲灌輸。或以財物。資其發展。就此巍然獨存之文物。作精確之標本。又不難推陳出新。衍繹成書。以貢獻於世界。

學社使命。不一而足。事屬草創。亦無先例之可循。顧所以自勵。及覬望於社會衆者。厥有數端。誠知罣漏。姑舉一隅。

一　屬於溝通儒匠。濬發智巧者。

講求李書讀法用法。加以演繹。節併章句。釐定表例。廣羅各種營造專書。舉其正例變例。以爲李書之羽翼。

纂輯營造辭彙。於諸書所載。及口耳相傳。一切名詞術語。逐一求其理解。製圖攝影。以歸納方法。整理成書。期與世界各種科學辭典。有同一之效用。

輯錄古今中外營造圖譜。方式變化。具有時代性及地域關係。中外互通。東西文化匯合之源流。極有研究之價值。此種圖譜。一經考證。即爲文化重要之史料。

編譯古今東西營造論著。及其軼聞。以科學方法整理文字。匯通東西學說。藉增世人營造之智源。

訪問大木匠師。各作名工。及工部老吏樣房算房專家。明清大工。畫圖估算。出於樣房算房。本爲世守之工。號稱專家。至今猶有存者。其餘北京四大廠商。所蓄匠師。系出冀州。諸作皆備。術語名詞。實物構造。非親與其人講習。不能剖晰。製作模型。燙樣傳彩。亦有專長。至廠商老吏。經驗宏富者。工料事例。可備諮詢。

二　屬於資料之徵集者。

實物。古今器物及遺物之全體。或抽象。凡有資於證明者。

圖樣。古今實寫及界畫粉本。式樣模型。

撮影。實物遺物之不易移動或剖析。及不能圖釋者。

金石拓本及紀載圖志。金石之有彫鐫花紋。及方志等書。紀載建築實事者。

遠征搜集。遠方異域。有可供參考之實物。委託專家。馳赴調查。用撮影及其他諸法。

採集報告。以充資料。

古籍。考工記爾雅以降。經史百家。及域外佚存。舶來秘本。凡涉及營造事實。及可供參證者。

於前項工作。具有眉目時。即可以一部分之成績品。提供於世界。此爲本學社最後一步之工作。姑就鄙人現有之資料。預擬總目如下。

甲部　釋名

辭彙

乙部　論著

制度沿革。各書舉證。各式舉證。收藏品之全景。遺物之標本。軼聞。

丙部　法式

大木作。斗科附。小木作。內外裝修附。雕作。旋作鋸作附。石作。瓦作。土作。油作。彩畫作。漆作。塑作。釋道相裝鑾附。磚作。坎鑿附。琉璃窯作。搭材作。銅作。鐵作。裱作。工料分析。物料價值攷。

丁部　諸例

內庭工程做法。圓明園內工諸作則例。萬壽山內工諸作則例。製造庫諸作則例。城垣工程。陵寢工程。河渠工程。河工。海塘。漕河。江防。橋梁。溝渠。

三　編輯進行之程序

成書假定以五年爲期。

第一年工作。搜集資料。整理故籍。商榷義例。擬定表式

第二年工作。審訂已有圖釋之名詞。先製卡片。以備社員之討論。逐漸引伸。

第三年工作。綜合資料。製圖撰說。審核體例。

第四年工作。分科編纂。訂正圖表。

第五年工作。撰擬總釋。序例。成爲有系統之學說。準備出版。

以上五期之中。或印行定期及單行之出版物。或彙集每期徵集之資料。公開展覽。

其辦法及程度。均依本社經濟之能力及社員公意行之。

通藝之事。既重專攻。又貴在集思廣益。北平爲文化中心。亦即營造學歷史美術之寶庫。自宜暫以北平爲社址。如能與中外專家。交換學識。尤所忻盼。所冀大雅閎達。不我遐棄。切磋孟晉。何幸如之。

中華民國十八年三月二十四日。

紫江朱啟鈐

中國營造學社開會演詞

今日本社。假初春勝日。與同志諸君。一相晤聚。荷蒙聯袂偕臨。寵幸何極。溯本社成立以及經過情形。與今後從事旨趣。有應舉爲諸君告者。請得以自由之形式。略抒胸次所懷。惟諸君察焉。

啟鈐個人。問學無成。年事又衰。曷敢以專門之學相標尚。顧一生經歷。所以引起營造研究之興會。而居然忝竊識途老馬之虛名者。度亦諸君所欣然願聞者也。溯前清光緒末葉。創辦京師警察。於宮殿苑囿城闕衙署。一切有形無形之故蹟。一一周覽而謹識之。於時學術風氣未開。學士大夫所競競注意者。不過如目下舊聞攷。春明夢餘錄之所舉。流連景物而已。啟鈐則以司隸之官。兼將作之役。所與往還者。頗有坊巷編氓。匠師耆宿。聆其所說。實有學士大夫所不屑聞。古今載籍所不經覩。而此輩口耳相傳。轉更足珍者。於是蓄志旁搜。零聞片語。殘鱗斷爪。皆寶若拱璧。卽見於文字而不甚爲時所重者。如工程則例之類。亦無不紬讀而審詳之。啟鈐之學。不足以橫覽古今。然心知故書所存。尚有零墜晦蝕。待吾人之梳剔者。實自此始矣。民國以後。濫竽內部。兼督市政。稍稍有所憑借。則志欲舉歷朝建置。宏偉精麗之觀。恢張而顯示之。先後從事於殿壇

之開放。古物陳列所之布置。正陽門及其他市街之改造。此時耳目所觸。愈有欲舉吾國營造之瑰寶。公之世界之意。然興一工舉一事。輒感載籍之闕缺。咨訪之無從。以是蓄意。再求故書。博徵名匠。民國七年。過南京。入圖書館。瀏覽所及。得覩宋本營造法式一書。於是始知吾國營造名家。尚有李誡其人者。留書以諗世。顧其書若存若佚。將及千年。迄無人爲之表彰。遂使欲研究吾國建築美術者。莫知問津。啟鈐受而讀之。心欽其述作傳世之功。然亦未嘗不於書中生僻之名詞。訛奪之句讀。興望洋之歎也。於是一面集貲刊布。一面悉心校讀。幾經寒暑。至今所未能疏證者。猶有十之一二。然其大體。已可句讀。且觸類旁通。可與它書相印證者。往往而有。自得李氏此書。而啟鈐治營造學之趣味乃愈增。希望乃愈大。發見亦漸多。

向者已云營造學之精要。幾有不能求之書册。而必須求之口耳相傳之技術者。然以歷來文學。與技術相離之遼遠。此兩界殆終不能相接觸。於是得其術者。不得其原。知其文字者。不知其形象。自李氏書出。吾人然後知尚有居乎兩端之中。爲之溝通媒介者在。然後知吾人平日。所得於工師。視爲若可解若不可解者。固猶有書册可證。吾人幸獲有此憑藉。則宜舉今日口耳相傳。不可長恃者。一一勒之於書。使如留聲攝影之機。存其眞狀。以待後人之研索。非然者。今日靈光僅存之工師。類已躑躅窮途。沈淪暮景。人

既不存。業將終墜。豈尙有公於世之一日哉

雖然猶有進者。李氏生當北宋。去有唐之遺風未遠。其所甄錄。固粗可代表唐代之藝術。由此以上溯秦漢。由此以下視近代。若者爲進化。若者爲退步。若者爲固有。若者爲輸入。此皆可以慧眼觀測而得者也。然史迹之層累。若挾多方之勢力。積多種之原因而成。李氏書其鍵鑰也。恃此鍵鑰。可以啓無數之寶庫。然若抱此一書。而沾沾自足。則去吾曹所擬之正鵠猶遠也。故因李氏書。而發生尋求全部營造史之塗徑。因全部營造史之尋求。而益感於全部文化史之必須作一鳥瞰也。

夫所以爲研求營造學者。豈徒爲材木之輪奐。足以炫耀耳目而已哉。吾民族之文化進展。其一部分寄之於建築。建築於吾人生活最密切。自有建築。而後有社會組織。而後有聲名文物。其相輔以彰者。在在可以覘其時代。由此而文化進展之痕迹顯焉。晚近王國維先生。著古宮室考。於中霤一名辨其所在。爲禮記國主社稷而家主中霤一句。獲一確切不移之解。知中霤爲四宮之中央。則知明堂。爲古代建築通式。宜乎爲一切號令政教所從出也。知中霤爲一家之中心。則知五祀之所以爲民間普通信仰。而數千年來盤踞民衆心理者。其來有自也。循此以讀群書。將於古代政教風俗。社會信仰。社會組織。左右逢原。豁然貫通。無不如示諸掌。豈惟古代。數千年來之政教風俗。社會信仰。社會

組織。亦奚不由此。以得其源流。以明其變遷推移之故。凡此種陳義。固今世治史學諸公所共喻。無俟繁徵曲譬。假若引其端而申論之。將窮日夜而不能罄。今茲立談之頃。更不暇多所引述。總之研求營造學。非通全部文化史不可。而欲通文化史。非研求實質之營造不可。啓鈐十年來粗知注意者。如此而已。

言及文化之進展。則知國家界限之觀念。不能亘置胸中。豈惟國家。卽民族界限之觀念。固亦早不能存在。吾中華民族者。具博大襟懷之民族。蓋自太古以來。早吸收外來民族之文化結晶。直至近代而未已也。凡建築本身。及其附麗之物。殆無一處不足見多數殊源之風格。混融變幻以構成之也。遠古不敢遽談。試觀漢以後之來自匈奴西域者。魏晉以後之來自佛教者。唐以後之來自波斯大食者。元明以後之來自南洋者。明季以後之來自遠西者。其風範格律。顯然可尋者。因不俟吾人之贅詞。至於來源隱伏。軼出史乘以外者。猶待疏通證明。使從其朔。然後不獨吾中國也。世界文化遷移分合之迹。皆將由此以彰。此則眞吾人今日所有事也。啓鈐於民國十年。歷游歐美。凡所目覩。足以證東西文化。交互往來之故者。實難盡記。往往因爲所見。而觸及平日熟誦之故書。頓覺有息息相通之意。一人之智識有限。未啓之閟奧實多。非合中外人士之有志者。及今舊迹未盡淪滅。奮力爲之不爲功。然須先爲中國營造史。闢一較可循尋之塗徑。使漫無歸

東之零星材料。得一整比之方。否則終無下手處也。

啓鈐之有志鳩合同志。從事整理。蓋始於此矣。近數年來。披閱群書。分類鈔撮。其於營造有關之問題。若漆若絲若女紅、若歷代名工匠之事蹟。略已纂輯成稿。又訪購圖畫。摹製模型。亦頗有難得之品。曾於十七年春間。假中央公園陳列一次。嗣是以來。承中華文化基金委員會之贊助。撥給專欵。俾得立社北平。粗成一私人研究機關。草創之際。端緒甚紛。布置經月。始有眉目。今茲所擬剋期成功。首先奉獻於學術界者。是曰營造辭彙。是書之作。即以關於營造之名詞。或源流甚遠。或訓釋甚艱。不有詞典以御其繁。則徵書固難。考工亦不易。故擬廣據羣籍。兼訪工師。定其音訓。考其源流。圖畫以彰形式。繙譯以便援用。立例之初。所採頗廣。一年後當可具一長編。以奉敎於當世專門學者。

然逆料是書之成。亦非易易。何也。古代名詞。經先儒之聚訟。久難論定。以同人之學識。卽僅徵而不斷。固已舛漏堪虞。一也。專門術語。未必能一一傳之文字。文字所傳。亦未必盡與工師之解釋相符。二也。歷代文人用語。往往使實質與詞藻不分。辨其程限。殊難確鑿。三也。時代背景。有與工事有關。不能不亦加詮列者。然去取之間。難免疏略。四也。

顧啓鈐以爲不有椎輪。曷觀大輅。是書姑爲營造學索引而已。有此一編。不獨讀者。可以觸類旁通。即同人編纂此書。亦於整比之餘。得以濬發新知。平日所視爲無足經意者。兩相比附。而一綫光明。突然呈露矣。同人今日原不能於此學。遽有貢獻。然甚望因此引起未來之貢獻也。

類乎此者之整比工作。則有各種工程則例之編訂。蓋攷工之書。人患難讀者。其字句無意義可尋也。平時連列盈架。展卷一視。則滿眼數字。讀之輒苦無味。檢之則又費時。此非就其原料。重加排比不可也。試以表格之式編之。則向之臭腐。悉化爲神奇矣。豈惟有助於所謂名詞之訓釋而已。凡工費之繁省。物價之盈縮。質料之種類來源。構造之形式方法。胥於此見之。由此而社會經濟之狀況。文化升降之比較。隨仁者智者所見之不同。盡有可研索者在也。

雖然平面之觀察未盡也。啓鈐所有志者。更爲一縱剖之工作。自有史以來。關於營造之史跡是也。初民生活之演進。在在與建築有關。試觀其移步換形。而一切躍然可見矣。周之明堂。爲其立國精神之所寄。託其始於何時邪。其創邪其因邪。孟子記齊宣王有毀明堂之議。其遺留迄於何時而後毀邪。後之繼起者。其規模有以異於其初邪。秦始皇併六國。然後有阿房宮之建。其以何因緣而成邪。出自何人之力邪。其創邪其因邪。其受

影響何自邪。其遺留迄於何時。而後盡毀邪。其後有效之而繼起者邪。其規模有尙存於後代者邪。

凡此皆史乘上絕巨問題。卽其一而研究之。足以使吾人認識吾民族之文化。更深一層。是宜有一自上而下之表格。以顯明建築興廢之迹。

匪獨此也。一種工事之盛於某時代。某地域。其背景蓋無窮也。齊之絲業發達。自其始封時而已然。有周一代。惟齊衣被天下。齊之在周。正如曼徹司特之在今日。漢初猶有三服官。其後遂漸無聞。漢初繡業。盛於襄邑。而季漢以來。織錦盛於巴蜀。巴蜀之富。半亦以此。歷唐迄宋。莫不皆然。此後亦復無聞。近年樂浪漢墓中。掘出之髹器銘文。多云蜀西工及廣漢工官。始知漢之漆工。集中巴蜀。與金銀釦器。同一地域。（見漢書貢禹傳）而唐代漆器出產地。則移於襄州。試思此於社會經濟勢力之推遷關係爲何等邪。

更不獨此也。凡工匠之產生。亦與時代有關。名工師之生。有薈集於一時者。有亘數百年而闃然無聞者。契丹入晉。虜其工匠北遷。以達其北朝藝術。蒙古立國。亦屢徵天下名工。集之定州。其南方之工藝。則靖康南渡。名工集於吳下。洪武營南京。悉爲吳匠。吳匠聚於蘇州之香山。永樂營北京。復用北匠。聚於冀州。此其故皆不可不深察也。

故工匠之分配。亦縱斷之觀察。所不可不及也。

縱斷既竟。請言橫斷。吾國太古之文明。實與西方之交通。息息相關。近來治西北史地者。致力於是。已不少創獲之新解矣。凡一種文化。決非突然崛起。而爲一民族所私有。其左右前後。有相依倚者。有相因襲者。有相假貸者。有相緣飾者。縱橫重疊。莫可窮詰。爰以演成繁複奇幻之觀。學者循其委以竟其原。執其簡以御其變。而人類全體活動之痕迹。顯然可尋。此近代治民俗學者所有事。而亦治營造學者。所同當致力者也。

有史以來。中外交通史迹之最顯著者。若穆天子傳爲一期。漢通西域爲一期。法顯爲一期。蒙古帝國爲一期。鄭和下南洋爲一期。耶穌會教士東來爲一期。試就循其往來之迹。此橫斷之法也。

有縱斷之法。以究時代之升降。有橫斷之法。以究地域之交通。綜斯二者以觀。而其全庶乎可窺矣。

綜以上諸說。本社胎孕之由。與今後進行之準則。差具梗概。抑有進者。縱有一知半解。不爲當世賢達所鄙棄。亦豈能以桑榆之景。肩此重任。所以造端不憚宏大者。私願以識途老馬。作先驅之役。以待當世賢達之聞風興起耳。本社命名之初。本擬爲中國建築學社。顧以建築本身。雖爲吾人所欲研究者。最重要之一端。然若專限於建

築本身。則其於全部文化之關係。仍不能彰顯。故打破此範圍。而名以營造學社。則凡屬實質的藝術。無不包括。由是以言。凡彩繪、彫塑、染織、髹漆、鑄冶、搏埴、一切攷工之事。皆本社所有之事。推而極之。凡信仰傳說儀文樂歌。一切無形之思想背景。屬於民俗學家之事。亦皆本社所應旁搜遠紹者。今日在座諸君。學有專長。興有獨寄。或精神上。得互助之益。或物質上。假參考之便。無論直接間接。皆本社最親切之友朋。卽今日未惠臨。而多少與本社之事業有同情者。亦無不求其繼續贊助。且也學術愈進步。則大同觀念愈深。民族觀念愈淡。今更重言以申明之。曰中國營造學社者。全人類之學術。非吾一民族所私有。吾東鄰之友。幸爲我保存古代文物。并與吾人工作方向相同。吾西鄰之友。貽我以科學方法。且時以其新解。予我以策勵。此皆吾人所銘佩不忘。且日祝其先我而成功者也。且東方人士。近多致力於南部諸國之考索者。西方人士。多致力於中亞細亞之考索者。吾人試由中國本部。同時努力前進。三面會合。而後豁然貫通。其結果或有不負所期者。啓鈐向固言之。學問固無止境。如此造端宏大之學術工作。更不知何日觀成。啓鈐終身不獲見焉。固其所矣。即諸君窮日孳孳。亦未敢即保其收穫。至何程度。然費一分氣力。卽深一層發現。但務耕耘。不計收穫。願以此與同人互勉焉耳。

中國營造學社開會演詞

中華民國十九年二月十六日

INAUAGRAL ADDRESS

THE SOCIETY FOR THE RESEACH IN CHINESE ARCHITECTURE

February 16, 1930

This is the first meeting of the Socie ty for the Research in Chinese Architecture. We are thankful that you have been able to come and we consider your presence as indication of your desire to help and as an expression of interest in our work. Although this is on formal meeting, it may be of interest to you to hear how the Society came into existence and what are the things it intends to accomplish at least in the near future.

The serious study of so immense a subject as Chinese architecture is beyond my ability, for various reasons, of which not the least is my age and the incompleteness of my general knowledge. However, most of my life has been spen t in architectural pursuits and this gives me hope that I may be employed by my younger contemporaries as the old horse-known in the proverbs of the East and the West-who can find its way home when its master is lost.

Any study of Chinese building leads quickly to fascinating problems in the history of Chinese culture. A house is a living symbol; it is the focus of the aspirations-social and spiritual-of the people who made it. It shelters the family and it is here in courts of prescribed proportions, shaded by walls of prescribed heights, in its chambers for social intercourse in

its chambers for religious meditation and ceremony and in its private chambers that occurs the slow elaboration of thought and ritual-social as well as religious—which constitutes the lore of the folk and gives a race the stability which is necessary if it is to maintain itself in competition with others. It was by a wise instinct that our forefathers deified the five parts of the house and called them sacred and offered to them daily worship. It is at these five places, the gate, the well, the central court, for example, that the struggle between the old and the new reaches intensity. Not only are house symbols of the stability of a race, but they also recored the struggles of a race. The procession of architectural styles, the fashions of ornaments which preserving the general design yet change with changing ages are records of the cultural ebb and flow. Thus it may be seen why the Society for Research in Chiness Architecture is led into the study o Chinese culture. Buildings are physical symbols; folklore is the spiritual foundation. The two must combine if either is to progress.

Some years ago, at a time when students of the hisory of Peking were still forced to draw their conclusions from literary sourcees, it was my duty—and at the same time my opportunity—to inspect the palaces, temples, walls, and other national buildings which were stlil not open to the public. I also came into contact with old residents and native artisans from whose llps I gained precious information unavaliable from other sources. These with official records and technical instructions whetted my appetite for more information.

While minister of the Interior and Director of the first Metropolitan Municipal Bureau, I formulated several schemes which looked toward reconstructing the old buildings and displaying the ancient relics. Some of these were not successful, but a few, fortunately are being carried out to the present day. I have been constantly engaged in the work of opening the Three Palaces, Central Park, the Museum of Wu Yin, the reconstruction of Chen Yang Men, and the public roads. This work has increased my interest in our present project which is the careful investigation of the whole problem of Chinese technique, particularly in its historical development.

In 1918 I happened to read a Sung book, the "Ying Tsao Fa Shih (Methods of Arcnitecture)" of which rare copy was in the Nanking Provincial Library. It was written on Imperial order by Li Chieh. The author was an officer of the Imperial Board of Works but his biography is not recorded by the officicial historians. The book, though inbluded in the "Ssu Ku Chuan Shu," has been almost forgotten by the reading public for a thousand years. It is substantial and laborious an erudite book, and a great contribution to knowledge. At the same time that I recognised this, I was placed in difficulties by the numerous technical namer, the frequent misprintings of characters and the confused order of the sentences. Several colleagues helped me to study, it, checked it up with the Ssu Ku edition and enabled me to prepare a text which could be reprinted in better order and with colored illustrations of great precision. This work occupied several years, and even then

ten to twenty per cent of the technical terms remain undecipherable; but apart from these passages, the work is now in fairly good shape and offers frequent suggestions on many problems of Chinese architecture.

The student of Chinese architecture, however, may not confine himself solely to the study of the texts. Man aspects of this art can be studied only from the old artisan. The distance between written sources and practical knowlege is so great that the extremities can hardly touch. Those who know the technique probably do not know its origins, those who know the words, probably do not recognise the thing described. Since Li's book has been made readable we are beginning to see that there is a middle road which links the extremes, that the information given by artisans supplements and is supplemented by written sources. Our grest task to-day is to make a record of the various kinds of information handed from master to apprentice from generation to generation and we must do it before the company of aged, poverty-stricken workmen dies out entirely. We shall be fortunate if we capture snatches of information from these men and record them for the use of future students who will be able to use them.

Li lived in the Northern Sung dynasty, he died at 1110. At this time the traditions of the Tang dynasty—the Golden Age of Chinese culture were still alive. The architectural art which Li discusses may be considered as having been drawn from a period only a little earlier than his. This may be taken as a starting point and from Chinese architecture may be traced backwards to the Han dynasty and forwards to our own

times. With eyes fixed on this book we may see which art has been progressive and which has been reprogressive ; which is ours and which has come from outside. History is made by forces which come from all directions. Li's book may be made to serve as a key which opens a part of the secret of history, and particularly the history of Chinese architecture ; and as that history discloses itself, we feel the need, even more than before, of getting a view of the history of Chinese culture in general.

But the beauty of Chinese architecture is not our only reason for studying it. Architecture manifests the cultural evolution of the people. The late Professor Wang Kuo Wei's important thesis on the "Chung Liu" in which he proves that the "Chung Liu" is a central court rather than an opening in the roof of a mud hut, no noly offers a new interpretation to a passage in the Li Chi (i. e. the sovereign of the country is the She and Chi while the sovereign of the house is the "Chung Liu") but it also throws important light on the early history and culture of the Chinese people, and the traditions and beliefs behind this culture, and from the earliest times of the present we feel the need of examining the customs, traditions, institutions—political and social—as they can be traced and explained in our buildings. The study of these problems is being carried on splendidly but I wish to emphasize here the importance of research into our material culture.

When we speak of the study of cultural evolution there is no place for nationalistic distinctions. The Chinese people has absorbed richly the achievements of other races, and one

can see various foreign influences in all of our artistic "genres. The influence of the Huns and the Western countries since Han, of Buddhism since Wei and Tsin, of Persia and Arabia since Tang, of the Southern Seas since Ming and of the Far West since Chin is too obvious to need comment. But the work has just begun and there are still many sources of influence which the historians have overlooked.

When I visited many countries during my trip to Europe and America, though I did not understand western languages, I saw many things which suggested passages from our classical literature read in childhood; but the secret was so deeply hidden that it needed the combined efforts of the scholars of all nations if it is to be discovered. Then I felt more strongly than ever before the need of the classification and systematisation of vagrant data in the study of Chinese Architeture as the first step in any investigation.

The materials I have collected and arranged with the help of my colleagues during the last years fall generally under four chief groups: (1) Laquer, (2) Silk, (3) Women's Work, (4) The Lives of Famous Workmen.

Rough notes on some of these have been published; some are still in process of being collected. In addition there are various incomplete collections of paintings, photographs, models, and the like. A private exhibition was held in 1927 in the Central Park of Peking. Recently the China Foundation for the Promotion of Culture and Education has been very kind in lending finacial assistance for further research.

At present we are beginning to work on an Encyclopedia of Chinese Architecture. We shall collect and explain architectual terms by literary and pictorial illustration and we hope to publish in Chiness and English. The encyclopedia will not be confined strictly to architecture but will contain also the names and description of costumes, vehicles, instruments, snort biographies of famous workmen and bibliugraphies of books touching on these subjects.

There are many difficulties in this work. First, many Chinese names have been the subjects of discussion for thousands of years and we can not hope at this date to reach in these cases satisfactory solutions to the problems. Second, we will probably not find exact interpretation in literature of the more technical terms. Third, Chinese literary men have used words loosely and it is frequently difficult to distinguish technical term from a literary metaphor. Finally, names of institution and beliefs, particularly religious names and phrases may be very important in architectural studies. To include those which are necessary and reject those which are useless is difficult.

A parallel work is the recomplation of official regulations, prescriptions, and reports left by former dynasties. In their present form those records seen to be nothing but figures and names. When recompiled they will appear as graphs and tables and will be of value in the explanation not only of terms, but also of instrnctions for work, prices and wages, and sources of building materials.

A vertical and a cross section study of our entire culturel history seems to me essential. The Ming Tang is an

example. We all know that the Ming Tang is the crystalization of the political and philosophical ideas of the Chou dynasty. Is it created by the Chou peoples, or did it, as some believe, exist long before the Chou's came into existence? The book of Mencious makes incidental mention of a porposal to destroy the Ming Tang. When did complete destruction take palce? Is the Ming Tang of later ages still the same as the Ming Tang of the Chou dynasty?

Another good example is the Oh Fang palace of the Tsin period of which we are able to show a reproduction this afternoon. Was it the creation of a Tsin Emperor? It is the most magnificent building of bistory. When did the complete destruction take place? How did it influence other buildings? These are very big problems which await careful investigation. Therefore I intend to compile a chronological table of the constructions and destructions of various kinds of buildings.

Moreover, we must collect facts to show why certain works should have developed in certain regions at certain periods. For instance, the silk industry of Chi began at a very early date, Sze-ma Chien says that Chi furnished the Empire with clothes. Thus Chi of the Chou dpnasty is like the Manchester of today. The silk embroidery of the Han period was made in Shiang-Yi (Honan). In the later Han the brockade and laquer ware of Szechuan were highly desired. These facts are found in the official histories and the last is interestingly confirmed by insciptions recently taken from a Han tomb in Korea. Chronological and geographical tables of the distributions of different works are therefore earnestly desired.

In the past, the Chinese workmen were trained like an army and were kept stationed at given places for generations. The Chitai and Mongolian dynasties summoned expert workmen from all parts of the Empire and stationed them in the vicinity of Tin Chow (Hopei). During the first part of the Ming dynasty, workmen employed in public works came chiefly from Soochow and during the latter part of the dynasty, the emperors employed northern workmen who are even now to be found at Chi Chow in Hopei. Tables and graphs of the distributien of workmen are needed.

If we pass from the vertical to the horizontal, we observe that the culture of a people does not rise abruptly but is formed by many overlapping and complicated influences, Recent folklorists have proved this. We must join hands with them. Excluding the most ancient periods, we must note the influence of other peoples roughly in the periods of 1. the Mo Tien Tze Chuan, 2. Chang Chien, 3. Fa Hsien, 4. Huen Tsang, 5. The Mongolian Empire, 6. Cheng Ho, 7. The Jesuits. These have been studied and are still being studied. The folkorists, geologists, geographers and historians have opened for us a vast field of investigation.

In conclusion a few words must be said abut the name of our society. The Chinese name is 中國營造學社 and does not contain the term "architecture". The reason for this, is though Chinese architecture is our chief interest, we feared that if we called ourselves a Society for the study of Architecture we would too strictly limit the scope of our work and thus be unable to carry on the investigations we plan into related fields. Moreover, the

name we have chosen will keep before us the work of our venerable predecessor and master Li Chien whose book is entitled "Methods of Yin Tsao". Thus we include within our range material arts : painting, sculpture—as used in cecoration—, silk, lacquer, metal work, earthen wares ; and when necessary in order to find explanations for our central problems, we will include the non-material culture : traditions, beliefs, rituals, music and dance.

The further we proceed, the more we feel that the study of Chinese architecture is not the private property of our own people. Our eastern neighbors have helped us in the preservation of old genres and in a strenuous rsearch along the same lines ; our western friends have helped us by offering the scientific method and discoveries in our own field.

To the scholers of all nationalties and all aims we express our sincere thanks and look foward in earnest hope for futue contributions.

李明仲八百二十週忌之紀念

故書雅記所傳。其人能濬發巧思。以其飭材庀事前民利用之方。詔迪後世者。蓋不鮮矣。然工倕之輩。能制作而未嘗著書。張衡杜預之徒。能著書。而亦未嘗著專於工事之書。其究也。傳其人而不傳其學。傳其人之學而不能傳其所處時代之學。周禮攷工記。爲先秦古籍。殆無可疑。有此一篇。吾曹乃得稍稍窺見古人制作之精宏。與先哲立言之懿美。斯固弁冕羣籍。凌轢百家。言營造學者。所奉爲日星河嶽者也。亦越千有餘載。嗣響寂寥。然後得有宋李明仲先生。茂挺異才。紹揚絕緒。本其天授之魁奇。益以畢生之研討。上導源於舊籍之遺文。下折衷於目驗之時制。巋然成一家之言。裒然立一朝之典。蓋猶尼山六藝。待鄭君而訓故始定。待朱子而義理始明。不因遺緒之荒墜。不見掇拾董理之功。不有中天一柱之崔巍。亦不見洪河九曲之浩渺。先生實我營造學中之鄭君朱子矣。

顧修宋史者。不爲先生立傳。修四庫全書者。雖知先生有營造法式一書。而未能曲盡表章之力。於是先生之書。幾於佚而僅存。先生之事實。竟荒埋而不獲襮白。近十年間。同輩相將。刊布原書於前。搜獲先生墓志稿於後。雖遺蘊尚多。而大體已立。國中好古

之士。以逮城外羣英。漸無不知有先生者。緬惟先生之沒。實當有宋大觀四年二月二十九日壬申。(一一一〇年三月二十一日)其旣於今。則八百二十年矣。中國營造學社。恭承先生之嘉惠。幸獲有所藉手。爰始爰謀。是則是傚。實惟先生之遺風。有以起導而振厲之。所願式憑靈爽。克濬新知。先生未竟之業。克光大於無垠。先生不朽之稱。益昭垂於來許。敢因此日。略次先生行誼。與先生之所以巍然天壤者。用諗當世。兼誌景行。

明仲之時代

我國文化。至唐而如日中天。迨至昭宗徙東都。梁晉兩朝復徙汴京。盜賊干戈。迄無寧歲。聲明文物。埽地盡矣。宋氏興於倉卒。其君相安於苟簡。其人民習於夸毗。無可大復措意。自其開國。凡五傳而得神宗。以桓桓之英辟。遇名世之賢輔。王荆公安石。實能貫穴今古。斟酌時宜。振舉國垂暮之精神。謀百度一新之制作。不幸朝野沓泄之風。積重難返。憚於興革。怨讟緐興。神宗甫沒。而元祐之治。復從其朔。然熙寧元豐之變法。成效固在。不能以黨見盡掩其功。於是又有紹聖崇寧兩朝之紹述。故有宋當十一二世紀之間。實爲急進保守兩黨。迭爲消長之會。其一種勢力。謀向上與對外之發展。以

立長久之基。其他一種。則謀現狀之維持。而幸偸安之可恃。卒之崇寧以後。前者旣不能貫澈初衷。以精心達其蘄向。後者亦誤於恣意牽掣。以私見壞大局。中華大國之風。洎南渡以來。幾乎泯矣。

明仲先生之少也。及見熙豐之盛。其入仕之始。雖當元祐初元。而營造法式之成書。實萌芽於元豐。而成熟於元符。先生之躬典大役。又皆在元符崇寧之世。綜觀前後。先生之思想。必於熙豐爲近。而事業之成就。必受熙豐變法之影響。決無可疑。顧盛名所以雖美弗彰。則亦宋以來排抵熙豐變法。積非勝是之故也。熟知先生之時代背景。而先生之志事所以足重者可以了然矣。

明仲之家世及經歷

先生爲鄭州管城人。（今河南鄭縣）據墓誌。（見程俱北山小集中）其曾祖惟寅。故尙書虞部員外郎。祖惇裕。尙書祠部員外郎。父南公。生於眞宗之末。（據宋史三五五本傳。卒年八十三。又據墓誌。明仲以大觀初丁父憂。知當生於是時。）進士及第。歷浦陽令。提舉京西常平。提點京西河北刑獄。京西轉運副使。入爲屯田員外郎。再爲河北轉運副使。加直秘閣。知延安府。進直龍圖閣。擢寶文閣待制。知瀛州。拜戶部吏部侍郎。戶部尙書。歷知永興軍。成都眞定河南府。鄭州。擢龍圖閣直學士。

南公有子。知名者二人。長曰譙。附見南公傳中。亦第進士。知章邱縣。遷河東陝西轉運判官。建永泰陵。起復母喪。使京西。（建永泰陵是元符三年事。明仲是時。三十餘矣。）後命終制。以直龍圖閣。知熙州。後爲陝西轉運使。顯謨閣待制。歷數郡卒。

次卽明仲先生也。名不見於宋史列傳。據四庫總目。陸友仁研北新志云。誠。字明仲。而書其名作誠字。然范氏天一閣影鈔本。及宋史藝文志。文獻通攷。俱作誠字。旣見程俱北山小集。有爲傅冲益作先生墓志。確爲誠字。

先生少年時事。不可考矣。據墓志。元豐八年。哲宗登大位。以父爲河北轉運副使。奉表致方物恩補郊社齋郎。按宋史職官志選舉志。大臣子弟廕官。初試郊祀齋郎。年逾二十。始補官。準此言之。先生奉表入京。年在二十以外。由是調曹州濟陰縣尉。遷承務郎。元祐七年。以承奉郎爲將作監主簿。紹聖三年。以承事郎爲將作監丞。元符中。遷宣義郎。崇寧元年。以宣德郎爲將作少監。二年冬。以通直郎爲京西轉運判官。不數月。召入爲將作少監。辟雍成。遷將作監。再入將作。又五年。遷奉議郎。再遷承議郎。三遷朝奉郎。賜五品服。四遷朝奉大夫。五遷朝散大夫。六遷右朝議大夫。賜三品服。七遷中散大夫。大觀元年丁父憂。服除。知虢州。未幾疾作。遂不起。時大觀四年二月壬申也。

(註一)按陳垣中西回史日曆。甲子表第十八。大觀四年二月壬申，爲二月二十九日。當西歷一千一百年三月二十一日。

明仲之建設

觀此上所述。則知先生畢生精力。萃於將作之工。試取汴京建置之沿革而攷之。向者已言朱梁石晉兩度遷汴。然當四郊多壘之際。其規模之急就。必遠遜唐代東西二京。固不待言。宋祖肇王。志在苟安。不遑遠略。觀其營築汴城。僅爲防限敵騎巷戰之計。卽知其無瞻言百里之概。(註二)故其宮室庫陋。雕飾簡略。宋人奉使入金。輒驚怪於其國宮闕臺殿之壯麗。歷來記乘。此類多矣。(註二)吾曹追較唐宋兩朝建築知識之程度。宜知盛唐之風。逮宋而絕。下及靖康降北。則累代僅存之法物重寶。名工世匠。一舉而移隷女眞。中國文化重心。久已不在南而在北矣。(註三)故論先生之身世。當知北宋汴京之建置制度。正當萎落之期。先生者。蓋天毓其人於不絕如縷之際。付以補苴張皇。守先待後之任者也。過此以往。亦非先生所及知。吾人固不敢謂先生所代表者。卽吾國文化之精萃也。

(注二)程史。『開寶戊辰。藝祖初修汴京。大其城址。曲而宛如蚓詘焉。耆老相傳。謂趙中令鳩工奏圖。初取方直。四面皆有門。坊市經緯其間。井井繩列。上覽而怒。自取筆塗之。命以幅紙作大圈。紆曲縱斜。旁注云。依此修築。故城卽當時遺蹟也。時人咸罔測。多病不宜於觀美。熙寧乙卯。神宗在位。遂欲改作。覽

苑中牧豚。及內作坊之事。卒不敢更。第增陴而已。及政和間。蔡京擅國。亟奏廣其規。以便宮室苑囿之奉。命宦侍董其役。凡周旋數十里。一撤而方之如矩。墉堞樓櫓。雖甚藻飾。而蕩然無曩時之堅樸矣。一時迄功。第賞侈其事。至以表記兩命詞科之題。概可想見其張皇也。靖康戎馬南牧。粘罕斡离不。楊鞭城下。有得色。曰是易攻下。令砲四隅。隨方而擊之。城既引直。一砲所望。一辟皆不可立。竟以此失守。藝祖沉幾遠睹。至是始驗。』

(注三)攬轡錄。『循東西御廊北行。廊幾二百間。廊分三節。每節一門。將至宮城。廊卽東轉。又百許間。其西亦然。亦有三門。出門中馳道甚闊。兩旁有溝。上植柳。廊脊皆以青琉璃瓦覆。宮闕門皆用之。遙望前後大殿屋嵽起處甚多。制度不經。工巧無遺力。』

北行日錄。『又過龍津橋。二橋皆以石欄。分爲三道。中道限以護穽。國主所行也。龍津雄壯特甚。中道及扶欄四行。華表柱皆以燕石爲之。其色正白。而鐫鏤精巧。如圖畫然。』

海陵集。『燕京城內地。大半入宮禁。百姓絕少。其宮闕壯麗。延亘阡陌。上切霄漢。雖秦阿房漢建章。不過如是。』

又按日下舊聞考。引金圖經。『亮欲都燕。遣畫工寫京師宮室制度。闊狹修短。盡以授之左相張浩。』又攬轡錄『金朝北京營制宮殿。其屏扆牕牖。皆破汴都輦致於此。汴中宮匠。有名燕用者。制作精巧。凡所造。下刻其名。及用之於燕。而名已先兆。』是汴京制度。仍有存於金源者。

雖然。熙寧以還。視北宋初年。蓋差有進步矣。此蓋緣承平日久。物力亨豫。故一時風尙。漸趨於黼黻彫繢。歷史進化之自然。固應爾爾。昔之論史者。競蔽罪於徽宗。謂其

縱奢靡以致亡國。非探本之論也。營造法式之奉敕編修。以及其他興築之漸繁。其見端矣。綜先生一生所任之工役。條舉如次。繫以攷證。可覽觀焉。

(一)五王邸。

據墓誌云。元符中。建五王邸成。遷宣義郎。又云。其遷承議郎。以龍德宮棣華宅。

按棣華宅。爲哲宗諸弟而立。神宗十四子。弟六爲哲宗。以下价倜倜偉佶侯似偲。雖有八人。而有早卒者。蓋元符中現存者。幷徽宗共有五人。故曰五王。墓誌所謂棣華宅。及五王邸。及元符三年法式結銜所謂管修蓋皇弟外第者。皆是一事。特名稱不同耳。

(二)辟雍

據墓誌。辟雍成。遷將作監。

按宋東京考。『崇寧元年。命將作少監李誠。卽宮城南門外。營建外學。賜名辟雍。外圓內方。爲屋千八百七十二楹。』

(三)尙書省。

據墓志。其遷奉議郎。以尙書省。

按可談云。『元豐間移尙書省於大內西坊。近西角樓。人呼爲新省。崇寧間。又移於

大內西南。』

又湧幢小品云。『靖康元年。尙書省火。延及各署。折省中石碑。擲火中。遂息。』

(四)龍德宮。

據墓誌。其遷承議郎。以龍德宮。

按楓窗小牘。『景龍江北。有龍德宮。初元符三年。以懿親宅潛邸爲之。及作景龍江夾岸。皆植奇花珍木。殿宇比比對峙。中途曰壺春堂。絕岸至龍德宮。歲時次第展拓。後盡都城一隅焉。名曰擷芳園。山水美秀。林麓暢茂。樓觀參差。猶艮嶽延福也。』

又按王氏畫苑。(宋東京考引。)『徽宗建龍德宮成。命待詔圖畫宮中屏壁。皆極一時之選。上來幸。一無稱。獨顧壺中殿前柱廊拱眼。斜技月季花。問畫者爲誰。實少年新進。上喜賜徘。褒錫甚寵。皆莫測其故。近侍嘗請於上。上曰。月季鮮有能畫者。蓋四時朝暮。花蕊葉皆不同。此作時日中者。無豪髮差。故厚賞之。』

龍德宮蓋創始於哲宗元符三年。故列在棣華宅之前。至徽宗畫月季一事。則在展拓以後。

(五)朱雀門。

據墓誌。其遷朝奉郎賜五品服。以朱雀門。

按宋史地理志『朱雀門宋東京舊城南面之中門也。太平興國四年。始改今名。』

又按墓誌嘗蹇重修朱雀門記以篆書丹以進。有旨勒石朱雀門。

(六)景龍門九成殿

據墓誌。其遷朝奉大夫。以景龍門。九成殿。

按宋史地理志。『延福宮。東景龍門橋。西天波門橋。二橋之下。疊石爲固。引舟相通。而橋上人物。外自通行不覺也。名曰景龍江』。又按地理志。『政和五年。作上清寶籙宮。在景龍門東。對景輝門。又開景龍門城上。作複道。通寶籙宮。以便齋醮之路。徽宗數從複道上往來。是年十二月。始張燈於景龍門上下。』

以上所記。雖係李氏物故後之事。但由此可知景龍門工作。重要而繁複。

又按宋東京考。『九成殿。崇寧元年。方士魏漢津。請備百物之像。鑄九鼎。四年三月。九鼎成。詔於中太一宮南爲殿。以奉安九鼎。』此殿復拓爲宮。通鑑有帝幸九成宮。行酌獻禮之語。蓋初建時祇名爲殿。先生爲初建時工官也。

(七)開封府廨

據墓誌。其遷朝散大夫。以開封府廨。

按宋東京考。引秘笈新書。『崇寧三年。蔡京乞罷權知府。置牧尹各一員。專總府事

。牧以皇子領。尹以文臣充。』意此時官制新改。故府廨有新建之事也。

東京考又云。『開封府治。在京城內浚儀街西北。卽唐舊汴州也。

又按圖書集成開封府部彙考元祐六年冬十二月開封府火。據此則崇寧之修廨亦以此也。

(八)太廟

據墓誌。其遷右朝議大夫。賜三品服。以修奉太廟。

按宋史一〇六禮志。『崇寧三年。禮部尚書徐鐸言。唐之獻祖中宗代宗。與本朝僖祖。皆嘗祧而復。今存宣祖於當祧之際。復翼祖於已祧之後。以備九廟。禮無不稱。乃命鐸爲修奉使。增太廟殿爲十室。四年十二月。復翼祖宣祖廟。行奉安禮。』

(九)欽慈太后佛寺。

據墓誌。其遷中散大夫。以欽慈太后佛寺。

按宋史后妃列傳。欽慈陳皇后。乃徽宗生母。卒年三十二。時徽宗尚未登極。其皇太后。乃徽宗初卽位。建中靖國元年所追册。時徽宗方二十歲。此佛寺蓋追慕所作。

(十)營房。

據營造法式結銜。有專一提舉修蓋班直諸軍營房等一語。知先生實總此役。

按宋史兵志。『禁兵者。天子之衛兵也。殿前侍衛。二司總之。其最親近扈從者。號

諸班直。』此班直之由來也。

（十一）明堂

據楊仲良續資治通鑑長編紀事本末。『崇寧四年。七月二十七日。宰相蔡京等。進呈庫部員外郎姚舜仁。請即國丙巳之地。建明堂。繪圖以獻上。上曰。先帝嘗欲爲之。有圖見在禁中。然攷究未甚詳。仍令將作監李誠姚舜仁進明堂圖。』又據宋史一〇六禮志。『議上。詔依所定營建。明年以慧星出東方罷』是明堂之議。先生亦與聞之也。

營造法式之成書與其價值

據影宋本營造法式卷首。有先生請鏤版劄子一通云。『契勘熙寧中。敕令將作監。編修營造法式。至元祐六年方成書。準紹聖年十一月二日敕。以元祐營造法式。祇是料狀。別無變造用材制度。其間工料太寬。關防無術。三省同奉聖旨。著行重別編修。』詳究此段。知營造法式之奉敕編修。實在熙寧之歲。神宗臨御之初。臨川當國。百度維新。整飭庶官。修明大法。其注意考工。不遺一物如此。信非令主賢佐之遇合。有時。不能有此。哲宗紹聖中。主張紹述。一反元祐之政。故不滿於元祐成書。而必令先生重修。攷先生入仕將作。在元祐七年。固知第一次營造法式之成。先生絕未與聞。而今本之成。

實全出先生之手也。

再觀筍子。奉勅重修。是紹聖四年事。其下繼云。『臣考究經史羣書。并勒人匠。逐一講說。編修海行營造法式。元符三年內成書。送所屬看詳。別無未盡。』是費時三年有奇。其博綜羣書。折衷時制。討論綴拾之勤。實事求是之意。概可見也。先生撰書旨趣體例。見於看詳之末。其略曰。

『看詳先準朝旨。以營造法式舊文。祇是一定之法。及有營造位置。略皆不同。臨時不可攷據。徒爲空文。難以行用。先次更不施行。委臣重別編修。今編修到海行營造法式。總釋并總例。共二卷。制度一十五卷。功限一十卷。科例并工作等第共三卷。圖樣六卷。日錄一卷。總三十六卷。計三百五十七篇。共三千五百五十五條。內四十九篇。二百八十三條。係於經史等羣書中。檢尋攷究。至或制度與經傳相合。或一物而數名各異。已於前項逐門看詳立文外。其三百八篇。三千二百七十二條。係自來工作相傳。並是經久可以行用之法。與諸作諳會經歷。造作工匠。詳悉講究。規矩比較。諸作利害。隨物之大小。有增減之法。各於逐限制度。功限料例內。掛行修立。並不曾參用舊文。卽別無開具看詳。因依其逐作造作名件內。或有須於畫圖內。可見規矩者。皆別立圖樣。以明制度。』

又據進書表云。『臣攷閱舊章。稽參衆智。功分三等。第爲精粗之差。役辦四時。用度長短之晷。以至木議剛柔而理無不順。土評遠邇而力易以供。類例相從。條章具在。研精覃思。顧述者之非工。按牒披圖。或將來之有補。』

又據墓誌。『時公在將作且八年。其考工庀事。必究利害。堅窳之制。堂構之方。與繩墨之運。皆已了然於心。遂被旨著營造法式。書成。凡二十四卷。詔頒之天下。』

茲更舉逐卷所載。大致說明。

第一二卷。爲總釋。凡建築上之通名。羣書所恒用者。薈集而詮釋之。以求其正確。附總例。則以說明算術定例。及當時功限格令等。第三卷。爲壕寨及石作制度。第四五卷爲大木作制度。第六七八九十十一諸卷。爲小木作制度。凡屋宇之結構屬之大木作。凡門窗欄檻裝飾器用屬之小木作。第十二卷。爲彫作旋作鋸作竹作制度。第十三卷。爲瓦作泥作制度。第十四卷。爲彩畫作制度。第十五卷。爲塼作窰作制度。第十六至二十五卷。爲諸功限。第二十六至二十八卷。爲諸作料例。第二十九至三十四卷。爲諸作圖樣。

更總攝其大綱。則其第一步爲名例。第二步爲制度。第三步爲功限。第四步爲圖樣。程次井然。苟舉無賸。約舉其善。蓋有四焉。疏舉故書義訓。通以今釋。由名物之演嬗。

得古今之會通。一也。北宋故書。多有不傳於今者。本編所引。頗有佚文異說足資攷据。注四二也。凡一物之制作。必究宣其形式。尺度程序。咸使可尋。由此得與今制相較，而得其同異。三也。所用工材。雖無由得其價值。而良窳貴賤。固可約略而得。四也。程功之限。雇役之制。般運之價。兼得當時社會經濟狀況。五也。華紋形體若拂菻師子頻伽化生之類。得睹當時外族文化影響。六也。

(注四)張金吾影宋寫本營造法式聞爭道人跋。『右李誡營造法式三十四卷。看詳一卷。目錄一卷。小瑯環福地影宋寫本小瑯環主人之所藏也。周官攷工遺意具見於此。其中援引典籍。至爲賅博。頗足以資攷訂。即如看詳卷內引通俗文云屋上平曰陾必孤切。按臧鏞堂刊輯本通俗文。止舉御覽所引屋加椽曰橑一條。廣韻所引屋平曰廡廡一條。今當以屋上平曰陾一條增入。又看詳卷內引尚書大傳注云賁大也。言大牆正道直也。今本尚書大傳注云賁大也。廡謂之廡。大廡正直之廡。其文微異。當兩存之。又看詳卷內。引周髀算經云。矩出於九九八十一。萬物周事而圜方用焉。大匠造制而規矩設焉。或毀方而爲圜。或破圜而爲方。方中爲圜者。謂之圜方。圜中爲方者。謂之方圜也。今本周髀算經。九矩矩出於九九八十一之下無萬物周事至謂之方圜也四十九字。是則可補今本周髀之脫佚者矣。以上數端。若無李誡斯編。安所據以證明之。宜小瑯環主人之珍祕之也。』

不惟此也。吾曹讀營造法式。而知北宋建築之風格。有以異於其他時代也。第一。知北宋疆土削蹙。鮮域外之交，不能廣取瓌材。以成傑構。燕雲既不隸版圖。褒斜巴蜀之木。又罄於漢唐累代之擷取。海南異植。復艱於運致。材木之窘乏。殆無逾此時。觀法式

卷四云。凡構屋之制。皆以材爲祖。材有八等。度屋之大小。因而用之。其第一等。不過廣九寸厚六寸。殿身九間至十一間。則用之。以此推之。其局促可想。不似有明能取海南之香木。有清能取遼東之黃松。地不愛寶。以成其鉅麗也。注五 第二。知宋代黃金竭乏。素有銷金之禁。故彩畫制度中。絕少金飾。觀法式全書。止於第十四卷中襯地之法。有貼眞金地一條。至裝金鏤錯乃絕未之及。至於珠璣瓊玉之飾。更無論矣。班孟堅賦。所謂雕玉瑱以居楹。裁金璧以飾璫。此風至宋而不復覩。卽金元以來。金碧瑩煌之象。彼時亦未之能及也。注六

(注五)容齋三筆。『眞宗以符瑞大興土木之役。—所用有秦隴岐同之松。嵐石汾陰之柏。潭衡道永鼎吉之楠柟欒。溫台衢吉之檮。永澧處之櫬樟。潭柳明越之杉』。觀此則知其取材之廣。不過於此矣。

(注六)宋史神宗紀。『熙寧元年。禁銷金銀飾。』又孝宗紀。『隆興元年。申嚴鋪翠銷金之禁』燕翼貽謀錄『八年(大中祥符)三月庚子又詔。自中宮以下衣服並不得以金爲飾。應銷金貼金縷金鬧金戧金圈金解金剔金撚金陷金明金泥金榜金背金影金闌金盤金織金金線皆不許造。然上之所好。終不可得而絕也。』

第三。知徽宗之崇尙花石。以園林山野之景。見其別裁雅調。亦爲吾國建築風格一大變革。法式成書。雖在大觀以前。然第二十七卷。已有壘石山泥假山盆山諸法。又觀彩畫圖樣。以淡雅爲宗。知風氣之有開必先也。注七

（注七）宋東京攷引宋史筆斷『既而作萬歲山。運四方花竹奇石。積累二十餘年。山林高深。千巖萬壑。麋鹿成群。樓觀臺殿。不可勝紀。又令苑囿爲白屋。不施五采。多爲村居野店之景。』

自攷工記以後。未見工書。更未見專言建築之工書。晁公武郡齋讀書志云。『世謂喻皓木經。極爲精詳。此書蓋過之。』（四庫總目誤引爲陳振孫書錄解題。）木經既已久佚。（注八）則此書尤爲星鳳之僅存。當時宋氏君臣。固尙知愛護。據進書箚子稱『竊緣上件法式。係營造制度工限等。關防功料。最爲要切。內外皆合通行。臣今欲乞用小字鏤版。依海行勅令。頒降取進止。正月十八日。三省同奉聖旨依奏。』是爲崇寧刊本之由來。又據影寫本跋語云。平江府。今得紹聖營造法式舊本。并目錄看詳。共十四册。紹興十五年五月十一日校勘重刊。是爲紹興重刊本之由來。崇寧本必毀於靖康之亂。而紹興本。殆亦於宋元間散失殆盡。據焦竑經籍志。箸錄此書。知明萬歷間。明內府尙有現存之本。今之殘葉。似卽此本所出。四庫全書。據范氏天一閣藏本。著錄於政書類。復檢永樂大典。補其錯漏。稍成完璧。顧書藏天府。人間末由流布。道光辛巳。張蓉鏡有手鈔一本。其跋云。營造法式。自宋槧既佚。世間傳本絕稀。相傳錢氏述古堂。有影宋鈔本。求之不得。庚辰歲。家月霄得影寫述古本。於郡城陶氏五柳居。假歸手自影寫云云。於是有淸末季。江蘇圖書館。有張氏影宋本。其眞爲原影本與否。不可知。而今日尙能

公諸人間者。惟此與四庫本而已。

（注八）按喻皓事。歷見歸田錄。楊文公談苑。玉壺清話。後山叢談。夢谿筆談。佛祖統紀。等書。其名或作預皓。或作喻浩。或作喻皓。故事流傳。頗雜神話。歸田錄載其有木經三卷。行於世。今無傳本。

然此兩本。終未爲世人所屬目也。民國八年。啟鈐在南京圖書館。瞥見此書。驚異寶愛。亟以付之影印。傳播始漸廣。然奪誤頗甚。理董維艱。心知發揚之有待也。更越六年。爰又屬陶君湘。取文淵文溯文津三本。暨吳興蔣氏密韻樓藏舊本互勘。缺者補之。誤者正之。明知其誤。而無可依據者。則仍之。於是漸可繹讀。遂仿崇寧殘本板式精繕鋟木。復以大木作制度。最爲結構之主要。爰覓舊京承辦官工之耆匠賀新賡等。按原書第卅三十一兩卷。大木作制度名目。繪今制圖樣。俾得對勘之便。又原書第三十三。三十四兩卷。爲彩畫作制度。僅注色名。無由張顯。亦爲按圖傳彩。以傳其疊暈相宣之制。全工既蔵。更益以歷來書目之攷證。與夫先生之墓誌。俾讀者怡然展卷。而先生之平生志事。著書旨趣。與是書之所以足重者。豁然心目。蓋自先生削稿之日。凡閱八百年。而其書累版風行。徧於大地。著作傳世之不易。顯晦之有時。於此誠足動人深長思矣。

先生其他著作。不專屬於營造者。據墓誌。有續山海經十卷。續同姓名錄二卷。琵琶錄三卷。馬經三卷。六博經三卷。古篆說文十卷。（錢遵王讀書敏求記。陸友仁研北雜志

同）則今皆無復傳本矣。

營造法式成書以後宋代官私營建蓋卽依爲準則。此觀周必大思陵錄所載脩奉及交割公文而可知也。然類此之書繼起者無聞焉。惟明焦竑經籍志。有營造正式六卷。梓人遺制八卷。列在李書之前。四庫存目中。有元內府宮殿制作一卷。是永樂大典本。提要詆其鄙俚。爲官府授受之書。然使得此一卷。以較量宋元建築之異同。寧非至可珍視之事。惜乎今不可復見矣。明清兩代會典。統攝諸工程營造則例。其詳過於李書。時代逾近。流傳逾多。乾隆以後。工部內府苑囿陵墓。工程做法則例之書。盈架累帙。散落人間。比於會典。倍爲周悉。故居今之世。雖工師耆宿。日見凋零。魯殿靈光。漸亡矩矱。猶能按其所載。想像存之。此又營造法式成書以後。之進化情形也。

自法式印行以後不及十年。中外學者不獨頓增研究營造之興趣。且多引用此書。以解決向來之疑問。如大村西厓氏之塑壁殘影以之研究冉直保聖寺。濱田耕作氏之研究日本法隆寺。以及伊東忠太伊東淸造中村達太郎諸氏。莫不轉相援引。奉爲準繩。歐美學者則如德密那維爾氏 M.P. Demieville 有評營造法式一篇。載於法國遠東學院雜誌 Bull de l'Ecole FIrancaise d,Extrême-orlent XXV(1925)又如葉慈氏有論關於中國建築之書籍一篇。載於美國白林登雜誌，The Burlington Magazine March 1927 此又先生之書及於國外之影響也。

明仲之人格

先生席祖父之餘蔭。累代通顯。當少年時。殆全致力於學問。其博貫古今。亦固其所。若其專長藝事。剖析精微。蓋非天授專門之能。不辨也。法式看詳。列舉周髀九章。爲方圜經圍之準。則先生深於算法者也。測景望星。以正四方。則先生深於天文者也。書中圖樣。固非善畫者不能指導。據墓誌稱善畫。得古人筆法。上聞之。遣中貴人諭旨。公以五馬圖進。睿鑒稱善。則先生深於圖繪者也。墓誌又稱家藏書數萬卷。其手鈔者數千卷。工篆籀草隸。皆入能名。嘗纂重修朱雀門記。以小篆書丹以進。有旨勒石朱雀門下。則先生深於書法者也。墓誌又稱所著書。有琵琶錄。馬經。博經。則先生深於音樂藝事者也。墓誌又稱調曹州濟陰縣尉。濟陰故盜區。公至。則練卒除器。明購罰廣方略。得劇賊數十人。縣以清淨。又知虢州。獄有留繫彌年者。公以立談判。則先生深於吏事者也。墓誌又稱初正議疾病。公賜告歸。又許挾國醫以行。至是上特賜錢百萬。公曰敦匠事。治具穿。力足以自竭。然上賜不敢辭。則以與浮屠氏。爲其所謂釋迦佛像者。則先生深於佛法者也。墓誌。又稱公資孝友。樂善赴義。喜周人之急。則先生深於情感者也。注九

(注九)先生墓誌。爲程俱代傳冲益所作。誌稱傳初爲鄭圃治中。始從公游。及代還京師。久困不得官。遇公

爲大匠。遂見取爲屬云云。墓志紀載翔實。其感德酬恩。溢於言外。則先生之深於情感可知。

至代作墓誌之程俱。北宋之末。曾官將作監丞。傳冲益亦久官將作。殆以同僚之雅。而丐之誌墓之文。程所著有麟台故事。北山小集諸書。此墓誌即載北山小集中。宋史稱其文典雅閎奥。爲世所稱。殆非溢美。

。式觀遺載追想先生爲人。則必聰明早達。好學篤古。以其餘暇。游於藝林。坦蕩恢宏。而不礙器局之凝鍊。溫恭孝友。而不墮動止之迂疏。異代蕭條。風徽未沫。興言先正。心嚮往之。

紀念之意義

先生之書。重刋廣布。亦越十年。而中國營造學社。始克成立。社中同人。類皆於先生之書。治之勤而嗜之篤。慨念先生。篳路藍縷。以啟山林。雖類列未宏。而端緒已具。本社之職思。庶幾能探賾索隱。窮神知化。以益張我先哲之精神。故特取營造二字。爲本社之稱號。以志不忘導夫先路之人。奉茲典型。傳於勿替。

惟是先生遺著。既別無傳本。手蹟書畫。亦均未見。殊不足以遂展慕之忱。所願海內宏達。同情本社之志業者。羣策羣力。搜採表揚。實不任翹企欣慕之至。

中華民國十九年三月二十一日

李明仲畫像之意匠

先生一生經歷。略具程氏所撰墓誌中。然遺像不傳。本社陶君洙夙精相術。兼工寫眞。爰囑其隱括先生平生性行。參稽相書。追摹大概。庶幾心存目想。奕奕長存。雖無老成人。尙有典型。用慰景行之忱云爾。

陶洙按先生累代通顯。故擬爲頂平額闊。（相書云頂平額闊。必是世家。又云。額方而闊。初主榮華。）

年二十餘。卽廕官。有能名。故擬爲天庭高聳。（相書云。天庭高聳。少年富貴可期。）

元祐七年。遷將作監主簿。由是累遷。仕途平進。是年先生約二十八歲。故擬爲印堂平滿。（相書云。二十八遇印堂平。少年得意發功名。）

博學多藝。上結主知。故擬爲疏眉秀目。（相書云。眉如初月。聰明超越。又云。眉秀高直。身當淸職。又云。目秀神淸。爲聰穎之士。洞中經云。眼睛大而端。黑白分明者。多攻藝業。異於衆人。

元祐中。丁母憂。是時年約三十五六。是以知爲眼角低陷。（按三十五行太陽部。三十六行太陰部。卽左右眼角。相書云。眼角低陷。主多淚。多淚者。謂有刑尅也。）崇寧元年。約三十八。爲將作少監。二年。約三十九。外轉。三年再入將作。又五年。此數年皆在眼運中。故擬爲睛黑尾長。必近君王。）（相書云。睛黑尾長。必近君王。）四年。約四十一。行山根運。以印堂證之。故擬爲端直。（相書云。山根不斷無偏欹。富貴榮華應壯期。按鼻梁上端。爲山根。）

大觀元年。約四十三。行光殿部。丁父喪。故擬爲低陷。（相書云。四十二歲行精舍部。四十三歲行光殿部。此兩部低陷。妨父母。云云。此兩部在山根之旁。緊連眼角之太陽太陰部。以行太陰部時。丁母憂。今行光殿部時。丁父喪。可證先生於此兩部位。低陷無疑也。

三年服除。知虢州。約四十五。行鼻部之壽上位。是以擬爲端直無節。（相書云。鼻爲財星。管中年之造化。又云鼻梁端直。上接山根。下連年壽。高隆不宜起節。）

四年卒於官。約四十六。正行兩顴運。大概先生中峯高聳。而左右兩顴不起。所謂三峯不齊。故擬爲兩顴有骨而無氣。以示終於位也。（相書云。兩顴無氣主凶咎。）

綜觀先生一生。衣祿無虧。可知三停平等。一生衣祿無虧。）富

於思想。才藝過人。故擬爲額大鼻高。（相書云。聰明之士。額必大。有專門之藝者。額必高。）

孝友樂善。喜周人之急。是有忠厚篤實之風。儒雅端凝之度。鬚朗以示好學。口端以表淑性。夫人偕老。故魚尾無紋。子女皆全。故淚堂平滿也。（相書云。奸門魚尾紋多。一妻難偕老。又云。淚堂平滿子息多。）

上述相書係根據神相全編。圖書集成本柳莊相法。麻衣相法。相理衡眞諸書。

附錄二

祭文

惟中華民國十有九年三月二十一日後學朱啟鈐等謹以清酌庶羞之儀致祭於有宋明仲李先生之靈曰。於戲。先生華胄之光。天挺畸哲。般倕可方。窮神知化。出言有章。導源考工。剖析微茫。領官將作。垂制裔皇。赫赫有宋。濬哲維商。運集熙豐。百度更張。崇構奕奕。大風泱泱。椅桐梓漆。居楔栱宗。創制顯庸。率秉有常。閱祀八百。積久彌昌。風徽長往。槃矱不忘。庶竭駑鈍。差遂扢揚。尙想神靈。下乎大荒。敢陳薄薦。式格馨香。尙饗。

附錄三

徵求宋李明仲逸書遺蹟啓事

宋李誠。字明仲。所著營造法式。業經本社刊行。攷李明仲。歿於宋大觀四年二月壬申。卽西歷一千一百一十年。三月二十一日。今年恰値八百二十週忌。本社同人發起。卽以是日爲李明仲紀念會。亟思蒐集李氏遺文。闡繹表章。以志景仰。惟宋史藝文志。著錄李誠新集木書一卷。程俱所撰李誠墓志。又稱李氏所著。尙有續山海經十卷。續同姓名錄二卷。琵琶錄三卷。馬經二卷。六博經二卷。古篆說文十卷諸書。又篆書勒石重修朱雀門記。均無傳本。海內外收藏家。如能以上述圖籍。及李氏所作書畫。墨蹟見示者。極所欣幸。如可割愛。不吝重酬。大雅閎達。庶幾鑒之。

李明仲先生墓誌銘

宋故中散大夫知虢州軍州管句學事兼管內勸農使賜紫金魚袋李公墓誌銘 爲傅沖益作

大觀四年二月丁丑。今龍圖閣直學士李公諶。對垂拱。上問弟誠所在。龍圖言方以中散大夫知虢州。有旨趨召。後十日。龍圖復奏事殿中。既以虢州不祿聞。上嗟惜久之。詔別官其一子。公之卒二月壬申也。越四月丙子。其孤葬公鄭州管城縣之梅山。從先尚書之塋。公諱誠字明仲。鄭州管城縣人。曾祖諱惟寅。故尚書虞部員外郎。贈金紫光祿大夫。祖諱惇裕。故尚書禮部員外郎。祕閣校理。贈司徒。父諱南公。故龍圖閣直學士。大中大夫。贈左正議大夫。元豐八年。哲宗登大位。正議時爲河北轉運副使。以公奉表致方物。恩補郊社齋郎。調曹州濟陰縣尉。濟陰、故盜區。公至。則練卒除器。明購罰、廣方略。得劇賊數十人。縣以清淨。遷承務郎。元祐七年。以承奉郎、爲將作監主簿。紹聖三年。以承事郎、爲將作監丞。元符中建五王邸成。遷宣義郎。時公在將作且八年。其考工庀事。必究利害堅窳之制。堂構之方。與繩墨之運。皆已了然於心。遂被旨著營造法式。書成、凡三十四卷。詔頒之天下。已而丁母安康郡夫人某氏喪。崇寧元年。以宣德郎、爲將作少監。二年冬、請外以便養。以通直郎、爲京西轉運判官。不數月。復召入將作爲少監。辟雍成。遷將作監。再入將作又五年。其遷奉議郎、以尚書省。其

遷承議郎、以龍德宮、棣華宅。其遷朝奉郎、賜五品服。以朱雀門。其遷朝奉大夫。以景龍門、九成殿。其遷朝散大夫、以開封府廨。其遷右朝議大夫、賜三品服。以修奉太廟。其遷中散大夫。以欽慈太后佛寺成。大抵自承務郎、至中散大夫。凡十六等。其以吏部年格遷者。七官而已。大觀某年。丁正議公喪。初正議疾病。公賜告歸。又許挾國醫以行。至是上特賜錢百萬。公曰、敦匠事、治穿具。力足以自竭。然上賜不敢辭。則以與浮屠氏。爲其所謂釋迦佛像者。以侈上恩而報罔極云。服除、知虢州。獄有留繫彌年者　公以立談判。未幾疾作、遂不起。吏民懷之。如久被其澤者。蓋享年若干。公資性孝友。樂善赴義。喜周人之急。又博學多藝能。家藏書數萬卷。其手鈔者數千卷。工篆籀草隸。皆入能品。嘗纂重修朱雀門記。以小篆書丹以進。有旨勒石朱雀門下。善畫、得古人筆法。上聞之。遣中貴人諭旨。公以五馬圖進。睿鑒稱善。公喜著書。有續山海經十卷。續同姓名錄二卷。琵琶錄三卷。馬經三卷。六博經三卷。古篆說文十卷。公配王氏。封奉國郡君。子男若干人。女若干人云云。沖益觀虞舜命九官。而垂共工居其一。曁咨而後命之。蓋其愼且重如此。誠以授法庶工。使棟宇器用。不離於軌物。此豈小夫之所能知哉。及觀周之小雅斯干之詩。其言考室之盛。至如庭戶之端。楹椽之美。且又嗟詠騫揚。奐散之狀。而實本宣王之德政。魯僖公能復周公之宇。作爲寢廟。是斷是

度。是尋是尺。而奚斯實授法於庶工。方紹聖崇寧中。聖天子在上。政之流行。德之高遠。巍然沛然。與山川侔其大也。而後以先王之制。施之寢廟官寺棟宇之間。當是時、地不愛材。工獻其巧。而公獨膺垂奚斯之任者、十有三年。以結睿知。致顯位。所謂君子攸寧、孔曼且碩者。視宣王僖公之世爲甚陋。而公實尸其勞。可謂盛矣。沖益初爲鄭圃治中。始從公游。及代還京師。久困不得官。遇公領大匠。遂見取爲屬。寖以微勞竊資秩。繄公德是賴。既日夕後先。熟公治身臨政之美。泣而爲銘。銘曰。維仕慕君。不有其躬。何適非安。唯命之從。譬之庀材。唯匠之爲。爾極而極。爾棫而棫。亦譬在鎔。不謁而擇。爲利則斷。爲堅則擊。垂在九官。世載厥賢。曰汝共工。沒齒不遷。匪食之志。繄職則然。公爲一尉。羣盜斯得。公在將作。寢廟奕奕。爲垂奚斯。以爰帝績。仕無大小。必見其賢。無不自盡。以虔所天。帝以爲能。世以爲才。勞能實多。福祿具來。有生會終。公有貽憲。繄辭貞珉。盡力之勸。

右誌銘在程俱北山小集中。注稱爲傅沖益作。傳乃誡之屬吏。篇中於誡之諱字及傳自述稱名處、均書某。茲皆塡注。以便覽者。惟北山小集。宋刻以後。傳本絕希。此據歸安姚氏咫進齋所藏鈔本錄入。簽注影宋。訛字未敢臆改。惟紹聖誤寫紹興。學事誤寫學士。三十四卷誤寫二十四卷則改正焉。

李明仲先生補傳

李誠、字明仲。鄭州管城縣人。曾祖惟寅。尚書虞部員外郎。贈金紫光祿大夫。祖惇裕。尚書祠部員外郎。贈司徒。父南公。傳沖益李誠墓誌銘 字楚老。進士及第。神宗時、累官戶部尚書。歷知永興軍成都眞定河南府鄭州。擢龍圖閣直學士。爲吏六十年。幹局明銳。宋史李南公傳 大觀口年。疾病。賜子誠告歸。許挾國醫以行。及卒、贈左正議大夫。兄慮。墓誌銘 字智甫。紹聖間、知章邱縣。累任鄜延帥。徙永興。宋史李南公傳 大觀四年二月。官龍圖閣直學士。對乘拱。墓誌銘 後歷數郡卒。宋史李南公傳 元豐八年。哲宗登大位。父南公、時爲河北轉運副使。遣誠奉表。致方物。恩補郊祀齋郎。墓誌銘 宋史職官志及選舉志。大臣子弟。蔭官。初試郊祀齋郎年逾二十始補官。調曹州濟陰縣尉。濟陰故盜區。誠至則練卒除器。明賞罰。廣方略。得劇賊數十人。縣以清淨。遷承務郎。元祐七年。以承奉郎、爲將作監主簿。紹聖三年。以承事郎爲將作監丞。元符中、建五王邸成。遷宣義郎。於是官將作者且八年。崇寧元年。以宣德郎爲將作少監。二年冬、請外、以便養。以通直郎、爲京西轉運判官。不數月、復召入將作。爲少監。辟雍成。遷將作監。再入將作者。又五年。其遷奉議郎、以尚書省。其遷承議郎、以龍德宮、棣華宅。其遷朝奉郎賜五品服。以朱雀門。其遷朝奉大夫。以景龍門、九成殿。其遷朝散大夫。以開封府廨。其遷右朝議大夫。賜三品服。以修奉太

廟。其遷中散大夫。以欽慈太后佛寺成。大抵自承務郎。至中散大夫。凡十六等。其以吏部年格遷者。七官而已。元符中、官將作。建五王邸成。其考工庀事。必究利害堅窳之制。堂構之方。與繩墨之運。皆已了然於心。遂被旨著營造法式。書成、詔頒之天下。墓誌銘 營造法式看詳。紹聖四年十一月二日。奉敕以元祐營造法式。祇是料狀。別無變造用材制度。其間工料太寬。關防無術。敕誠重別編修。誠乃考究羣書。并與人匠講說。分明類例。崇寧四年七月二十七日。宰相蔡京等進呈。庫部員外郎姚舜以元符三年成書奏上。仁。請即國丙己之地建明堂。繪圖獻上。上曰、先帝常欲爲之。有圖見在禁中。然考究未甚詳。仍令將作監李誠。同舜仁上殿。八月十六日、誠與姚舜仁進明堂圖。楊仲良續資治通鑑長編紀事本末。誠性孝友。樂善赴義。喜周人之急。丁父喪。上賜錢百萬。誠曰、敦匠事治穿具。力足以自竭。然上賜不敢辭。則以與浮屠氏。爲其所謂釋迦佛像者。以修上恩而報罔極。服除、以中散大夫知虢州。獄有留繫彌年者。誠以立談判。大觀四年二月壬申卒。吏民懷之。如久被其澤者。時方有旨趨召。其兄諶以上聞。徽宗嗟惜久之。詔別官其一子。葬於鄭州管城縣之梅山。誠博學多藝能。家藏書數萬卷。其手鈔者數千卷。工篆籀草隸。皆入能品。嘗纂重修朱雀門記。以小篆書丹以進。有旨勒石朱雀門下。善畫、得古人筆法。上聞之、遣中貴人諭旨。誠以五馬圖進。睿鑒稱善。喜箸書。有續山海經十卷。續同姓名錄二卷。琵琶錄三卷。馬經三卷。六博經三卷。古篆說文十卷。墓誌銘

案李明仲起家門廕。官將作者十餘年。身立紹聖元符文物全盛之朝。營國建國。職思其憂。奉敕重修營造法式。鏤版海行。而絕學之延。遂能繼往開來。爲不朽之盛業。自餘所著。如續山海經等書。雖已亡佚。而覃精研思。亦可概見。夫薄技片長。一經衍繹。靡不有薪盡火傳之義。況審曲面埶。智創巧述。皆聖人之作士大夫之事乎。明仲遷官。悉以資勞年格。蓋一心營職。不屑詭隨。以希榮利。宋史囿於義例。斤斤於道器之分。不爲立傳。亦何所譏。彼梁師成朱勔之徒。長惡逢君。列名佞幸。更不可同年而語矣。方今科學昌明。各有條貫。明仲此書。類例相從。條章具在。官司用爲科律。匠作奉爲準繩。其事其人。皆有裨於考鏡。故刺取羣書所紀事蹟。彙而書之。論世知人。固不止懷鉛握槧者。心嚮往之也。乙丑十月。合肥闞鐸。

A Chinese Treatise on Architecture

BY

W. PERCEVAL YETTS

[*From the* BULLETIN OF THE SCHOOL OF ORIENTAL STUDIES, LONDON INSTITUTION, *Vol. IV, Part III, 1927.*]

[Reprinted from the BULLETIN OF THE SCHOOL OF ORIENTAL STUDIES, LONDON INSTITUTION, Vol. IV, Part III.]

A CHINESE TREATISE ON ARCHITECTURE

By W. PERCEVAL YETTS

THE Chinese have held to the architectural standards of the past no less tenaciously than to other traditions of their ancient civilization. Buildings standing at the present day testify to this fact, and innumerable written records indicate a continuity of architectural practice lasting more than 2,000 years. The probability is that foreign importation has affected Chinese architecture least of all the arts. Buddhism introduced certain Indian forms: the cenotaph or reliquary, the pyramidal monastery, and perhaps the curved roof later. Numerous decorative motives from many parts of Eurasia have been turned to good account by Chinese interpreters. But the borrowings from abroad have done little more than to modify superficially, here and there, native methods of construction.

Written evidence shows that the erection of palaces and public buildings has always been a care of the State. Unfortunately, extant remains of governmental codes regulating architecture are much scantier than those concerned with other departments of the administration. Moreover, the art of building has not called forth scholarly treatises to the same extent as art expressed in portable objects which appeal to collectors, for instance: paintings, bronzes, and jades. And technical methods have been an oral tradition handed down through generations of practising craftsmen who are the real architects of China. Thus the literature of architecture is small; in fact, so small that the book which is the subject of this article is the sole surviving work of importance.

About A.D. 1070 the Emperor of the Northern Sung dynasty, reigning at K'ai-fêng, ordered the Inspector of the Board of Works to compile a treatise on architectural methods based on ancient tradition and information preserved in the official archives. The resultant work was finished in 1091, and it bore the title of *Ying tsao fa shih* 營造法式, that is, *Method of Architecture*. Six years later, Li Chieh 李誡, an Assistant 丞 of the Board, received the imperial command to revise the book. In 1100 the amended version under the same title was finished and presented to the throne. In 1103 it was printed, and copies were distributed among the Government offices in the capital.[1] The likelihood is that the blocks and many copies

[1] For sake of brevity, Li Chieh's treatise will be indicated thus: *YTFS*

were destroyed during the troubles of the ensuing years. In 1126, when K'ai-fêng was taken and pillaged by the Nü-chên Tartars, all the official buildings and their contents were destroyed. The reigning family fled to the south, and eventually established the court at Hang-chou. The Emperor Kao-tsung (1127–62) built a library, and offered rewards for contributions of books. An "old copy" of *YTFS* came into the hands of the officials at Su-chou, and from it in 1145 they had blocks cut and a new edition printed Manuscript copies of this 1145 edition are all that are known to survive at the present day of the *YTFS*, except one folio and a half, presumed to be relics of the first edition, as will be described later.

In 1919, a manuscript copy, kept in the Chiang-nan Library at Nanking, was examined by Mr. Chu Ch'i-ch'ien 朱啟鈐, who had been Minister of the Interior under the presidency of Yüan Shih-k'ai, and is now Director-General of the Chung-hsin Mining Company. After consulting Mr. Ch'i Yao-lin 齊耀琳, the Civil Governor of the province, Mr. Chu decided to publish it, and accordingly an edition was printed by photo-lithography. This was smaller in size than the manuscript; but afterwards, in 1920, a photo-lithographed facsimile of the manuscript was published by the Commercial Press at Shanghai. Not long before that, the Curator of Peking Metropolitan Library had found the two fragments which are presumed to have come from the first (1103) edition of *YTFS*. Recognizing the imperfections of the manuscript reproduced by photo-lithography, Mr. Chu conceived the project of reconstructing the first edition in the form indicated by the fragments. The work was entrusted to Mr. T'ao Hsiang 陶湘. It was published during 1925 in eight magnificent volumes which are triumphs of book-production.

The photo-lithographed edition, *YTFS* (1920), is the subject of an admirable review [1] by M. P. Demiéville, which is the most scholarly contribution yet made by a Western writer to the study of Chinese architecture.[2] M. Demiéville gives a summary of the text of *YTFS* as well as bibliographical data. The present article deals mainly with the history of the 1925 edition as set forth at the end of the last volume in an appendix and in an account written by Mr. T'ao Hsiang.

[1] *BEFEO*, xxv (1925), pp. 213–64. A much shorter review by Professor Naitō Torajiro 內藤虎次郎 appeared in *Shina-gaku* 支那學, i (1921), pp. 797–9. With the help of Professor Itō Chūta 伊藤忠太 the writer had in 1905 copied the MS. copy of *YTFS* in the *Ssŭ k'u* set at Moukden (*v. inf.*, pp. 480, 485, 488–9).

[2] An article by the present writer on literature relating to Chinese architecture appeared in the *Burlington Magazine* of March last.

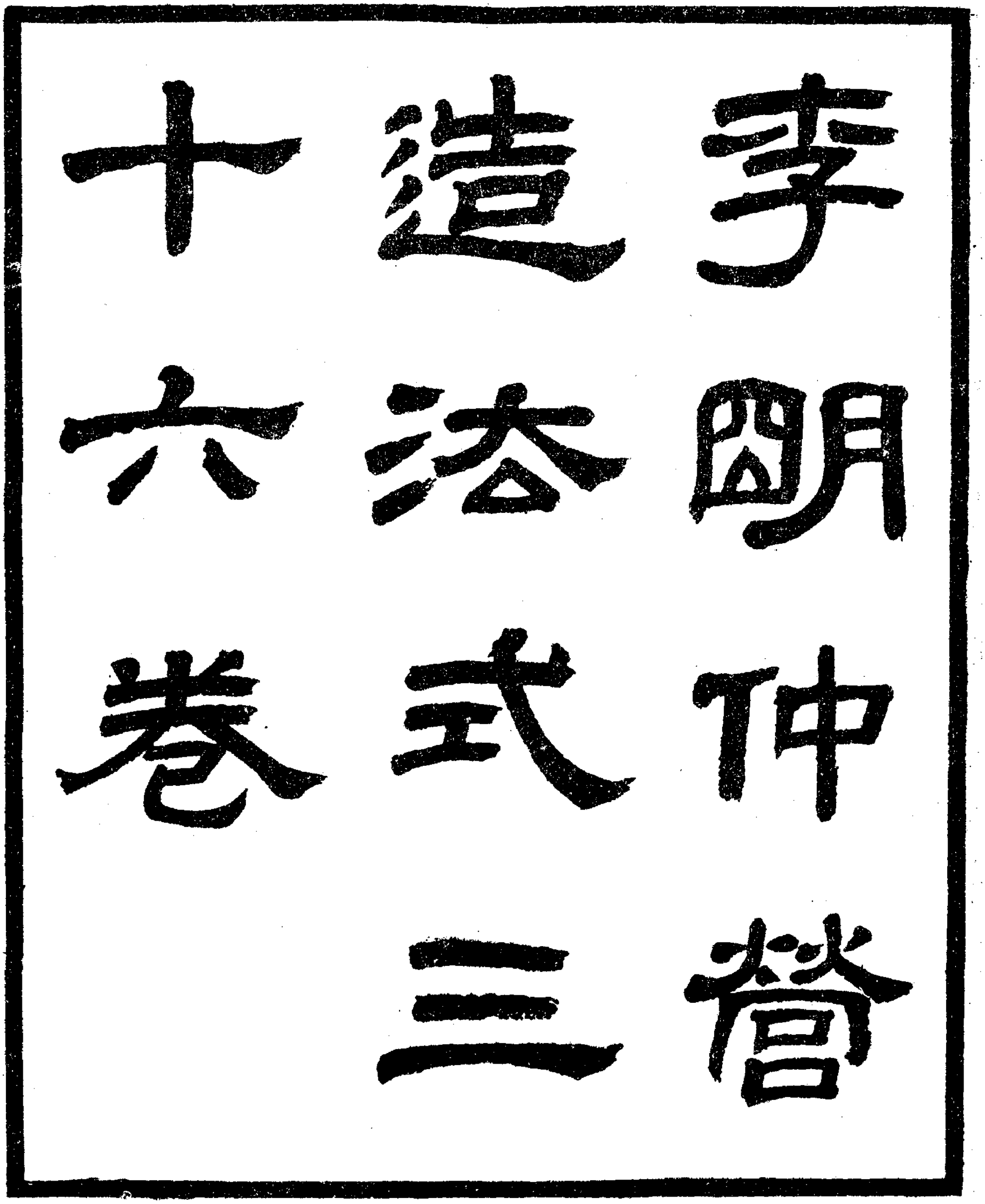


FIG. 1.—Title-page, written by Mr. Lo Chên-yü, of *YTFS* (1925).
(Size of whole page is $13\frac{2}{5} \times 9\frac{2}{5}$ inches.)

It is a complicated narrative, which includes the bibliographical vicissitudes of *YTFS* from its earliest beginnings, and it fills twenty-four and a half folios. Too long for literal translation here, I give it in outline.

Note should be made that this 1925 edition opens with title-page (Fig. 1) and foreword written by Mr. Lo Chên-yü 羅振玉, and a preface by Mr. Chu Ch'i-ch'ien.

The appendix comprises the following :—

1. Biography of the author (*v. inf.*).

2. A photo-lithographed reproduction of the front page of the first folio of chapter eight of a *YTFS* believed to have been the first (1103) edition.[1]

3. A photo-lithographed reproduction of a traced facsimile of the colophon-page of *YTFS* (1145).[2] A copy of this page appears as the first colophon to *YTFS* (1920). The edition is here stated to have been based on "an old copy of the *shao-shêng YTFS*", which probably means the 1103 printed edition. The fact that the 1103 edition had been compiled during the *shao-shêng* period (1094–8) doubtless led to its being known as the "*shao-shêng YTFS*" to distinguish it from the *yüan-yu* 元祐 (1091) compilation (*v. inf.*, p. 482). The 1145 edition was published under the supervision of Wang Huan, Prefect of P'ing-chiang Fu (Su-chou).

4. Twenty-two colophons containing bibliographical matter. An account of these follows later (pp. 478–82), where the colophons are labelled A to V.

BIOGRAPHY OF THE MASTER LI WHO HELD THE DECORATION OF THE RED-GOLD FISH-CASE[3] 賜紫金魚袋李公墓誌銘.

Li Chieh (*T.* Ming-chung 明仲) was a native of Kuan-ch'êng 管城縣 near the Sung capital of K'ai-fêng. The year of his birth is

[1] It is reproduced here as Fig. 3. Alongside it for comparison the corresponding page of *YTFS* (1925) is reproduced in Fig. 4.

[2] See Fig. 2.

[3] This biography, by the Sung writer Ch'êng Chü 程俱, is preserved in his collected works, entitled 北山小集, of which a manuscript copy, formerly belonging to the Yao 姚 family, is now in the Peking Metropolitan Library. Ch'êng Chü (*T.* 致道) was a native of K'ai-hua 開化, and he held the doctor's degree. From time to time he occupied various official posts at the capital. One of them 祕書少監 was that of Assistant Inspector in the Department of Seals and Records. He was a contemporary of Li Chieh, though younger than he. Presumably he knew him personally, and may have served under him. Accordingly this biography is likely to be trustworthy. A short account of Ch'êng Chü appears in 中國人名大辭典, p. 1186.

unknown. In 1085 he exercised the subordinate function of 郊社齋郎, an official concerned with the sacrificial ceremonies to Heaven and Earth. He was transferred from that to a post in the prefecture of Ts'ao-chou 曹州 in Shantung. In 1092 with the rank of 承奉郎 he became an archivist in the Board of Works 將作監主簿. Four years later he was promoted to the rank of 承事郎 and the post of Assistant 丞 at the Board of Works. About 1099 he supervised the building of the palace of the Emperor's brother, and when it was finished he received promotion to 宣義郎. Between 1097 and 1100 he wrote the treatise *YTFS*, but not till 1102 was he appointed an Assistant Inspector of the Board of Works with the rank of 宣德郎. At the end of 1103, in response to his petition for a post outside the capital, so that he might be near his father, he was appointed to duties connected with the transport of tribute, 京西轉運判官; but next year he was recalled to his former functions as Assistant Inspector of the Board of Works, where he remained for five years. When the building of the National Academy 辟雍 was finished, he was promoted to the post of Inspector.[1].

Before Li Chieh reached his highest rank of 中散大夫 (fifth grade of the first class) he had received sixteen steps in promotion, and of these nine were given in recognition of his work in supervising the construction of public buildings. The buildings which chiefly brought him distinction were :—

The offices of the administrative department 尚書省.

The apartments 棣華宅 of 龍德宮.

The 朱雀 Gate.

The hall 九成殿 of the 景龍 Gate.

The administrative offices 廨 of the metropolitan prefecture.

The ancestral temple 太廟 of the reigning dynasty.

A Buddhist temple built at the command of the Empress Dowager.

In 1108 Li Chieh retired on account of his father's death. During the latter's illness the Emperor granted him leave of absence, and showed a signal mark of favour by allowing the imperial physician to attend the sick man. The Emperor moreover contributed a sum of 1,000,000 cash for the funeral expenses. This Li Chieh accepted, but expended on Buddhist temples, since he was able himself to pay the cost of the funeral.

In 1110, while Li Chieh held the post of magistrate of Kuo Chou

[1] Thus M. Demiéville's surmise that Li Chieh never attained the post of Inspector (*loc. cit.*, p. 228) lacks support.

虢州 in Honan, the Emperor decided to recall him to the capital. He died, however, in the second month of that year, before the Emperor's summons reached him.

Li Chieh's character is described as generous and magnanimous. He was learned and skilled in many of the fine arts. His library contained several myriads of books, of which thousands were manuscript copies done with his own hand. He was noted as a caligraphist in all manner of script, and also as an artist. Indeed, the Emperor once asked him to paint a Picture of Five Horses. In addition to *YTFS* he was author of the following works :—

續山海經 in ten chapters.
續同姓各錄 in two chapters.
琵琶錄 in three chapters.
馬經 in three chapters.
六博經 in three chapters.
古篆說文 in ten chapters.

The twenty-two colophons are as follows :—

A. Extracts from 宋史.

"*Memoir concerning Officials* 職官志. The establishment of the Board of Works 將作監 included one Inspector 監 and one Assistant Inspector 少監. The Inspector supervised affairs connected with the construction of buildings, ramparts, bridges, shipping, and vehicles. The Assistant Inspector aided him in this work. . . . An imperial decree in 1092 caused to be distributed the *Ying tsao fa shih* which had been compiled by the Board of Works."

"*Memoir concerning Bibliography* 藝文志 (Category of ceremonial usages in the historical section 史部儀注類): 250 volumes 册 of a *Ying tsao fa shih*, compiled during the 元祐 period (1086–94) are mentioned, but the number of chapters is not specified. (Category of arts and crafts in the philosophical section 子部藝術類): A *New Book on Wood* [*Construction*] 新集木書 in one chapter by Li Chieh 李誡 is mentioned."

B. 續談助 by 晁載之.

This book[1] contains passages of *YTFS* which is here stated to have been finished in the first month of 1103. The author's name is given as Li Ch'êng[2] 李誠, and his official status as Assistant Inspector of

[1] A collection, dated 1106, of extracts from a number of books, many of which are now lost ; *v.* Pelliot, *BEFEO*, ix (1909), pp. 236–45.

[2] This error in his name is discussed later, *v. inf.*, p. 488.

the Board of Works (*v.* A) with the rank 通直郎 (fourth class of the sixth grade). Note is made that, though the author puts the number of chapters at thirty-six, the *YTFS* has actually only thirty-four.

C. 郡齋讀書誌 by 晁公武.

This book dates from the middle of the twelfth century. It states that "Li Chieh received the imperial command to revise a *Ying tsao fa shih* which the Board of Works had in the 熙寧 period (1068–77) been ordered by the Emperor to compile. He considered the book imperfect; so he searched the classical canons and dynastic annals, and also made inquiry among craftsmen and artisans in order to render it complete. His amended version was authorized to be distributed in the Government offices of the capital. The saying was current that the *Treatise on Wood [Construction]* 木經 by Yü Hao 喻皓 excelled most highly in detail, but this book [by Li Chieh] surpasses it"

D. 書錄解題 by 陳振孫.

A classified and annotated catalogue of books belonging to the 陳 family. It dates from the Sung period. The passage quoted here describes *YTFS* in thirty-four chapters, and a general summary 看詳 by Li Ch'êng, an Assistant Inspector of the Board of Works, who received the imperial command in 1097 to carry out a revision of the earlier work (*v.* C). His new version was finished in 1100, and the printing of it was authorized in 1103.

E. 研北雜誌 by 陸友仁.

Written in the first half of the fourteenth century. The passage quoted gives a list of seven works by Li Ch'êng, and among them the *YTFS* in thirty-four chapters. Except for a small discrepancy in the title 續同姓錄, these are the same as those specified in the Biography (*v. sup.*, p. 478).

F. 稗編 by 唐順之.

A collection of extracts from books of all periods and on various subjects. The author lived in the sixteenth century.

A section of the general summary of *YTFS* is here quoted. It is entitled *Counting Rooms by the Number of Pillars* 屋楹數. This section is absent from the extant text of *YTFS* (*v. inf.*, p. 484).

G. 讀書敏求記 by 錢曾.

The passage here quoted is the afterword written by the author Ch'ien Ts'êng to the manuscript copy of *YTFS* acquired by him in

1649. From this copy was copied the manuscript reproduced by photo-lithography in 1919–20 (*v.* J and pp. 484–5). A facsimile of the original afterword appears as the second colophon to *YTFS* (1920). Ch'ien Ts'êng mentions the destruction of the family library in 1650, when a printed copy of *YTFS* (? 1145) perished.

H. 四庫全書總目.

This is the great catalogue of the imperial library under the late Manchu dynasty. Eighteen years were spent in compiling it, and it was finished in 1790. At the time when the catalogue was being compiled, rare books were submitted from all parts of the empire, and certain were copied in their entirety and the copies added to the imperial collection (*v. inf.*, p. 488). One of these was a MS. copy of *YTFS* (1145), lent from the library 天一閣 of the Fan 范 family at Ning-po. It lacked the thirty-first chapter; therefore, when the copy was made for the imperial library, the great encyclopædia[1] 永樂大典 was drawn upon for the missing chapter, which consists mainly of illustrations.

I. 四庫全書簡明目錄.

This abridged version of the foregoing catalogue (H) contains a brief notice of *YTFS*.

J. 張蓉鏡跋.

This colophon, dated 1821, appears third in the last volume of *YTFS* (1920). The writer, Chang Yung-ching, at the age of 20, copied a manuscript *YTFS* as a memorial to his grandfather, who for twenty years had sought in vain to get a copy. The manuscript had been preserved by the Ch'ien 錢 family in their library 述古堂 at Ch'ang-shu 常熟 in Kiangsu. In 1820 the writer's kinsman Yüeh-hsiao 月霄 (Chang Chin-wu, *v.* K) bought the Ch'ien manuscript from a book-seller named T'ao 陶 at the Sign of the Five Willows[2] 五柳居 in Su-chou. The copying of the illustrations was done by the artist Wang Chün-mou 王君某, one of the best pupils of the painter Pi Chung-k'ai 畢仲愷.

[1] For notes on this vast collection *v.* Mayers, *China Rev.*, vi (1877–8), pp. 215–18; *BEFEO*, ix (1909), pp. 828–9; Aurousseau, *BEFEO*, xii (1912), No. 9, pp. 79–87. Originally there were more than 10,000 volumes of manuscript. The printing of it was attempted towards the end of the Ming period, but was soon abandoned. Some volumes had been lost before the burning by the Boxers in 1900. Several hundred volumes are now known to have survived the fire. Professor Hu Shih informs me that the rumours of a second manuscript copy are false.

[2] Reminiscent of his famous namesake T'ao Yüan-ming, near whose house stood five willow-trees. Hence the sobriquet 五柳先生 assumed by the poet.

K. 張金吾跋.

This is the eighth colophon to *YTFS* (1920). It is dated 1827. The writer is the kinsman of Yung-ching mentioned in J.

L. 孫原湘跋.

This colophon, dated 1820, is the fifth to *YTFS* (1920).

M. 黃丕烈跋.

This colophon, dated 1821, is the sixth to *YTFS* (1920).

N. 陳鑾跋.

This colophon, dated 1830, is the seventh to *YTFS* (1920).

O. 聞箏道人跋.

This colophon, dated 1826, is the eleventh to *YTFS* (1920).

P. 褚逢椿跋.

This colophon, dated 1828, is the fourth to *YTFS* (1920).

Q. 邵淵耀跋.

This colophon, dated 1828, is the ninth to *YTFS* (1920).

R. 錢泳跋.

This colophon, not dated, is the thirteenth to *YTFS* (1920)

S. 鐵琴銅劍樓書目 by 瞿鏞.

This is the catalogue of the Ch'ü 瞿 family library at Ch'ang-shu 常熟 (Kiangsu). It was compiled about the middle of the last century by Ch'ü Yung, but not published till many years later.[1]

Note is made that the manuscript copy of *YTFS* in this library was ultimately derived from *YTFS* (1145), but through several successive copies. It contains the colophon-page (Fig. 2). Internal evidence indicates that neither of the MSS. described in J was used in the making of it.

T. 藏書志 by 丁丙.

The full title of this library catalogue, dated 1901, is 善本書室藏書志. The entry here quoted refers to a *YTFS* in thirty-six chapters, which was acquired from the library of one 李伯雨, and is, in fact, the same MS. that appears in *YTFS* (1919–20): *v.* J, K, and p. 485 below.

U. Preface by 齊耀琳 to the photo-lithographed 1920 edition, entitled 石印營造法式.

Dated 1919, it appears as the second preface to *YTFS* (1920). The writer, Mr. Ch'i Yao-lin, was Civil Governor of Kiangsu the year

[1] *v.* Pelliot, *BEFEO*, ix (1909), pp. 212, 468, 813, and Aurousseau, *BEFEO*, xii (1912), No. 9, p. 64.

that Mr. Chu Ch'i-ch'ien came to Nanking as chief of the Peace Delegation from North China. Together they visited the public library for which some ten years previously the Ting collection (*v.* T) had been bought by the viceroy Tuan-fang 端方 (*v. inf.*, p. 485). They saw there Chang Yung-ching's transcript (*v.* J), and the decision was made to publish it.

V. Preface by 朱啟鈐.

This is a copy of the first preface, undated, to *YTFS* (1920).

After the appendix comes an account 識語, nine pages long, by Mr. T'ao Hsiang, who signs it in the intercalary fourth month (22nd May to 20th June) of 1925. The writer is a native of Wu-chin 武進 (formerly 常州) in Kiangsu. He outlines the bibliographical history of *YTFS* derived from criteria assembled in the foregoing appendix, and to this he adds information concerning the production of the 1925 edition. In the following abridged translation the various items of the appendix are indicated by the letters of the alphabet used above to label them :

The *YTFS* in thirty-six chapters by Li Chieh, an Assistant Inspector [1] of the Board of Works under the Sung, is a revised version of an earlier work compiled during the *hsi-ning* period (1068–77), and finished in 1091 (*v.* A, B, C, and D). The second version was undertaken in 1097, and it was finished in 1100. Authorization was given in 1103 for it to be cut and published. This is the *ch'ung-ning* (1102–6) edition. In 1145 Wang Huan 王晚, an official of P'ing-chiang Fu, obtained an "old copy of the *shao-chêng* period" (*v.* p. 476 and Fig. 2), and had it recut. This is the *shao-hsing* (1131–62) edition. B and Chuang Chi-yü 莊季裕 in his 雞肋編, dated 1106 and 1133 respectively, each refers to a copy of *YTFS*. The fact that these writers copied a number of passages from *YTFS* is evidence that the work was highly valued at the time. D mentions Li Chieh's [2] revised version of *YTFS* in thirty-four chapters, and one chapter containing the general summary, but omits to notice the table of contents. C puts the number of chapters at thirty-four without either table of contents or general summary. T'ao Tsung-i 陶宗儀 in his *Shuo fu* 說郛 refers to a *Method* with general summary and various sections, but he

[1] Strictly speaking, the author had not yet attained the post of Assistant Inspector when he wrote the treatise, since his promotion did not occur till 1102. See his Biography, p. 477.

[2] Actually D writes "Ch'êng" instead of "Chieh", as also do B and E. On this error, *v. inf.*, p. 488.

宋紹興刊本題名

法式附録 一

平江府今得
紹聖營造法式舊本并目録看詳共一十四冊
紹興十五年五月十一日校勘重刊
左文林郎平江府觀察推官陳綱校勘
寶文閣直學士右通奉大夫知平江軍府事提舉
勸農使開國子食邑五百戶王晥重刊

FIG. 2.—Traced facsimile of the colophon-page of *YTFS* (1145), reproduced by photo-lithography in *YTFS* (1925).

calls it a *Treatise on Wood [Construction]* 木經 by Li Chieh.[1] F describes an edition of which the table of sections in the general summary has a section on *Counting Rooms by the Number of Pillars* 屋樓數 which is missing from the extant book. Is it possible that the copy he saw was the first (1103) edition ?

The *YTFS* in the library of the Ch'ien family (*v.* J) had twenty-eight chapters, six of illustrations, one of general summary, and one of table of contents—thirty-six chapters in all. It opened with Li Chieh's memorial of presentation, his preface and the imperial rescript which authorized the printing of the work. It ended with the colophon-page giving particulars of the 1145 edition (Fig. 2). There were twenty columns on each folio, and twenty-two characters to each column. In this copy the characters 桓 and 構 (names respectively of the two emperors who reigned from 1126 to 1162) were tabooed, an indication that it was derived from the 1145 edition.

The colophon by Ch'ien Ts'êng (*v.* G) states that the *YTFS* in the Ch'ien family library was the copy which his senior relative Ch'ien Ch'ien-i 錢謙益 obtained from a member of the Chao 趙 family, and sold to him in the spring of 1649. Ch'ien Ch'ien-i possessed a printed copy, which had come from an old family of Liang-ch'i 梁谿, but it perished in the fire which destroyed his library in 1650. The aforesaid copy was handed down from generation to generation. According to L the catalogue of the library 述古堂 (i.e. of Ch'ien Ts'êng) states that Chao Yüan-tu 趙元度 acquired an incomplete copy of *YTFS* lacking more than ten chapters. For over twenty years he wore himself out seeking to borrow a copy. Finally, at a cost of 50,000 cash, he made the book complete with illustrations, plans, and designs.

In 1821, Mr. Chang Yung-ching in the colophon (*v.* J) to his manuscript copy says : " Copies of *YTFS* which have survived the downfall of the Sung dynasty and have been handed down are exceedingly rare. The Ch'ien family library 述古堂 contained a copy of a Sung edition of the book, which I tried to get but failed. In the year 1820 my kinsman Yüeh-hsiao 月嘯 (Chang Chün-wu ; *v.* K) acquired a manuscript copy

[1] Doubt exists whether Li Chieh ever wrote a book entitled *Mu ching*. M. Demiéville discusses this subject fully, *loc. cit.*, pp 220–2. The title, *New Book on Wood [Construction]*, of the only work attributed to Li Chieh in the *Sung History* (*v.* A), presupposes an earlier treatise of the kind. Perhaps it was the *Mu ching* of the famous architect, Yü Hao (*v.* C). M. Demiéville identifies all the alleged extracts from a *Mu ching* of Li Chieh, as quoted in *Shuo fu*, with passages in *YTFS*. Perhaps these extracts were in fact derived from the *New Book on Wood [Construction]* which Li Chieh may have drawn upon when writing *YTFS*.

of this Ch'ien copy from a bookseller named T'ao at the Sign of the Five Willows in Su-chou (*v.* J). I borrowed it and copied the text, while Wang Chün-mou, pupil of Pi Chung-k'ai, copied the illustrations, plans, and designs."

Between 1907 and 1908 when Tuan-fang (*H.* T'ao-chai 匋齋), viceroy of Liang Chiang, founded the library [at Nanking], he acquired for it the library 嘉惠堂 which had belonged to the Ting family of Ch'ien-t'ang 錢唐 (Hang-chou). Among the Ting books was the transcript of *YTFS* made by Chang Yung-ching (*v.* T).

In 1919, Mr. Chu Ch'i-ch'ien (*H.* Kuei-hsin 桂辛), a native of 紫江 (formerly 開州) in Kueichou, came south and saw this book (*v.* U). He had it reproduced in a smaller size [by photo-lithography]. This was so favourably received that the Commercial Press of Shanghai followed it up with a facsimile reproduction of the original MS. According to evidence afforded by colophons L and M, we know that the Ting MS. was the one which Chang Yung-ching transcribed from the copy in the possession of Chang Chin-wu. It contains numerous errors of transcription.

The library 密韻樓 belonging to Mr Chiang Ju-tsao 蔣汝藻, a native of Wu-hsing 吳興 (formerly 湖州) in Chehkiang, contains a manuscript *YTFS* of which the text and illustrations are well executed and complete. By comparing the Ting MS. with it, dozens of errors in the former may be corrected. But it was not the MS. from which Chang Yung-ching's copy was made.

The library 鐵琴銅劍樓 of the Ch'ü family at Ch'ang-shu (*v.* S) has an old copy which also is based on *YTFS* (1145).

The *YTFS* contained in the collection of the Ch'ien-lung *Four Libraries* was transcribed from the copy which belonged to the T'ien-i Ko of the Fan family in Chehkiang. This copy lacked the thirty-first chapter, and the defect was made good from the *Yung-lo ta tien* (*v.* H).

According to 文淵閣書目 the imperial library under the Ming contained five sets of *YTFS*, but the catalogue omits bibliographical particulars. The catalogue of the imperial library under the Manchu dynasty, entitled 內閣書目, mentions two incomplete sets of *YTFS*, one with two and the other with five volumes. It notes that the book was compiled by Li Chieh at imperial command during the *ch'ung-ning* period, but that of its thirty-four chapters twelve were missing. Towards the close of the late dynasty the imperial library was moved from the Palace to the National Academy 國子監南學 [in the north of Peking]. During the first years of the

宋崇寧刻本殘葉

營造法式卷第八

通直郎將作監主簿臣李誠奉

聖旨編修

小木作制度三

平棊　闘八藻井

小闘八藻井　拒馬叉子

叉子　鉤闌 重臺鉤闌 單鉤闌

棵籠子　井亭子

牌

平棊 其名有三一曰平機二曰平撩三曰平棊俗謂之平起其以方椽施素版者謂之平闘

造殿內平棊之制於背版之上四邊用桯桯內用貼貼內

Fig. 3.—Front page of the first folio of chapter eight of a *YTFS* believed to have been the first (1103) edition. Reproduced by photo-lithography in *YTFS* (1925).

營造法式卷第八

通直郎管修蓋皇弟外第專提舉修蓋班直諸軍營房等臣李誡奉

聖旨編修

小木作制度三

平棊　鬬八藻井

小鬬八藻井　拒馬叉子

叉子　鉤闌 重臺鉤闌 單鉤闌

棵籠子　井亭子

牌

平棊 其名有三一曰平機二曰平橑三曰平棊俗謂之平起其以方椽施素版者謂之平闇

造殿內平棊之制於背版之上四邊用棍棍內用貼貼內

FIG. 4.—The page represented in Fig. 3 as re-cut for *YTFS* (1925).

Republic it was moved from there and housed in a part of the Wu Gate of the Palace 午門樓. Thence it was taken to the Metropolitan Library 京師圖書館 which now is installed in the former National Academy. In the course of these moves the seven volumes of the two incomplete sets were lost owing to carelessness.

The Curator of the Metropolitan Library, Mr. Fu Tsêng-hsiang 傅增湘 (*H*. Yüan-shu 沅叔) of Chiang-an 江安, was sorting out a pile of waste papers when he came upon two fragments of *YTFS*. One was the front page of the first folio of the eighth chapter (*v*. Fig. 3) [1]; the other was a complete fifth folio from the same chapter. They were printed from wood-blocks during the Sung period. Each folio had twenty-two columns with twenty-two characters in each, and double columns of small characters. Probably they are to be identified as coming from the 1103 edition.

Mr. Chu Ch'i-ch'ien considered unsatisfactory the Ting MS. which he had previously reproduced, so he requested me to consult all existing copies of *YTFS*, and, after comparing the texts in detail, to print a new edition.

In my opinion, the *Ssŭ k'u ch'üan shu* copies of *YTFS* seem to be the most reliable, for they were made from the Fan library copy which had been transcribed about the middle of the Ming period from a Sung wood-block edition, and therefore is earlier than the Ch'ien copy [2] preserved in the 述古 library (*v*. G). Moreover, they have the advantage of corrections and additions carried out by the editors of the *Ssŭ k'u* who compared the Fan copy with the *Yung-lo ta tien* (*v*. H).

Now, the *Ssŭ k'u ch'üan shu* copies [3] were distributed for preservation in the following seven repositories :—

Wên yüan Ko 文源閣 [at the Summer Palace of Yüan ming Yüan near Peking]

[1] Note by Mr. T'ao Hsiang : " Here we find the author's name clearly written ' Chieh ', which is proof enough that the version ' Ch'êng ' is erroneous." Cf. B, D, and E. *v*. Pelliot, *BEFEO*, ix (1909), pp. 244–5.

[2] Professor Naitō notes the superiority of the illustrations in the copy belonging to the *Ssŭ k'u* set at Moukden in 1905 as compared with those in *YTFS* (1920); *v. sup.*, p. 474.

[3] When the great catalogue of the imperial library under the late Manchu dynasty (*v*. H) was in preparation, certain books among those sent to the capital by collectors throughout the empire were temporarily retained for investigation. These were divided into two categories: (1) Works sufficiently rare for complete copies to be made and added to the imperial library. One of these was the Fan copy of *YTFS*. Bibliographical particulars of books in this category were entered in the catalogue. (2) Works not copied, but of which bibliographical particulars were entered in the catalogue. *v*. Pelliot, *BEFEO*, vi (1906), pp. 435–16, and ix (1909), pp. 211–12.

Wên tsung Ko 文宗閣 [at Golden Island, Chinkiang].
Wên hui Ko 文匯閣 [at Yang-chou 揚州].
Wên lan Ko 文瀾閣 [at the Western Lake, Hang-chou].
Wên yüan Ko 文淵閣 [in the Palace at Peking].
Wên shuo Ko 文溯閣 [in the Palace at Moukden].
Wên chin Ko 文津閣 [in the Palace at Jehol].

The first three sets have suffered destruction from the ravages and burnings of war.[1] Also, half of the Hang-chou set was destroyed.[2] The Peking Palace set is still there; the Moukden set is stored in the Hall of Assured Peace 保和殿 [in the Peking Palace]; and the Jehol set is in the Metropolitan Library.

These three are all that are now preserved intact. I have compared the texts of *YTFS* contained in all three, and also the extracts quoted by B, Chuang Chu yü, T'ao Tsung-i and F. The old manuscript copy in the library of Mr. Chiang Ju-tsao has been examined besides.

After carefully comparing all these texts, the shortcomings of the Ting MS. have been made good; missing characters have been restored and errors of transcription corrected. Possibly some mistakes remain; but there is little probability that any passage is omitted. Several parts of the text are hard to understand; yet, when all texts agree as to the reading, I did not venture to alter them.

The *format* of this edition and the style of characters cut for it are made to imitate those of *YTFS* (1103) as represented by the two fragments recently discovered. The illustrations are based on those of *YTFS* (1145), and such that cannot be followed as to detail without difficulty have been redrawn twice the original size and afterwards reduced by photography to the scale of the originals.

One source of perplexity is the lack of originals wherewith to compare these much-copied illustrations. Decorative designs of stone carvings and the smaller wooden objects may likely have undergone minor modifications from time to time in accordance with current fashion. On the other hand, strict precision must have been maintained in plans for large wooden structures, because upon them depend all measurements and proportions, and even slight deviations from the originals would have resulted in loss of architectural integrity.

[1] The Yüan ming Yüan was destroyed by the Allied Army in 1860. The sets at Golden Island and Yang-chou were burnt by the T'ai-p'ing Rebels a few years earlier.

[2] Also by the T'ai-p'ing Rebels. Professor Hu Shih informs me that the loss has been repaired owing to the generosity of Mr. Ting Pang 丁丙 (v. T) and to the recent efforts of Mr. Cheng Tsong-hsiang 張 [illegible], formerly Commissioner of Education in Chehkiang.

To solve these problems we have had recourse to existing buildings and living architects. The present Palace at Peking, though actually built in the *yung-lo* period (1403–24), was designed in conformity with Sung standards which were an architectural heritage handed down for 800 years. Technical terms have varied with the times yet continuity of form may be traced by reference to the *Institutes of Government Administration* 會典 and the archives of the Board of Works 工部. Plans from the latter source have to some extent been lost, therefore we have asked the old master-builder Ho·Hsin-kêng 賀新賡 and others, who for many years have been in charge of imperial and public works in Peking, to draw detailed illustrations on modern lines in accordance with data provided in the thirtieth and thirty-first chapters of *YTFS*, and to add to them modern terms. These additional illustrations [1] thus provide material for comparison with the originals, and the student is enabled to recognize differences, similarities, and correlations, and to obtain models for imitation as well as evidence concerning the evolution of nomenclature.

Chapters 33 and 34 contain coloured illustrations. Former editions of *YTFS* had the colours only indicated with labels giving the names and shades, and they had notes to show which was the front and which the back. Such methods of presentment gave but imperfect notions of the true colouration, so we have employed the services of the Kuo 郭 family of Ting-hsing 定興 which for five generations has been engaged in artistic colour-printing.[2] As many as four to ten printings have been necessary for some of the illustrations.[3]

The production of this book—textual criticism, redrawing of illustrations, making of modern designs for comparison, and colour-printing—has taken seven years, and the text has been revised ten times. The cutting of the blocks was started in 1919 and finished in 1925.

Though the foregoing account by Mr. T'ao Hsiang is as lucid

[1] They appear in two supplements: one of twenty-six folios at the end of chapter 30, and the other of twenty-four folios at the end of chapter 31. The new technical terms and explanatory notes are printed there in red ink.

[2] This craft has much advanced in recent years. Formerly foreign paper was used for lithographs done in China, but here in *YTFS* (1925) coloured prints for the first time have been made on Chinese paper. The paper comes from the province of Fuhkien.

[3] Several are reproduced in colour on Plate I of my article in the *Burlington Magazine* of March, 1927.

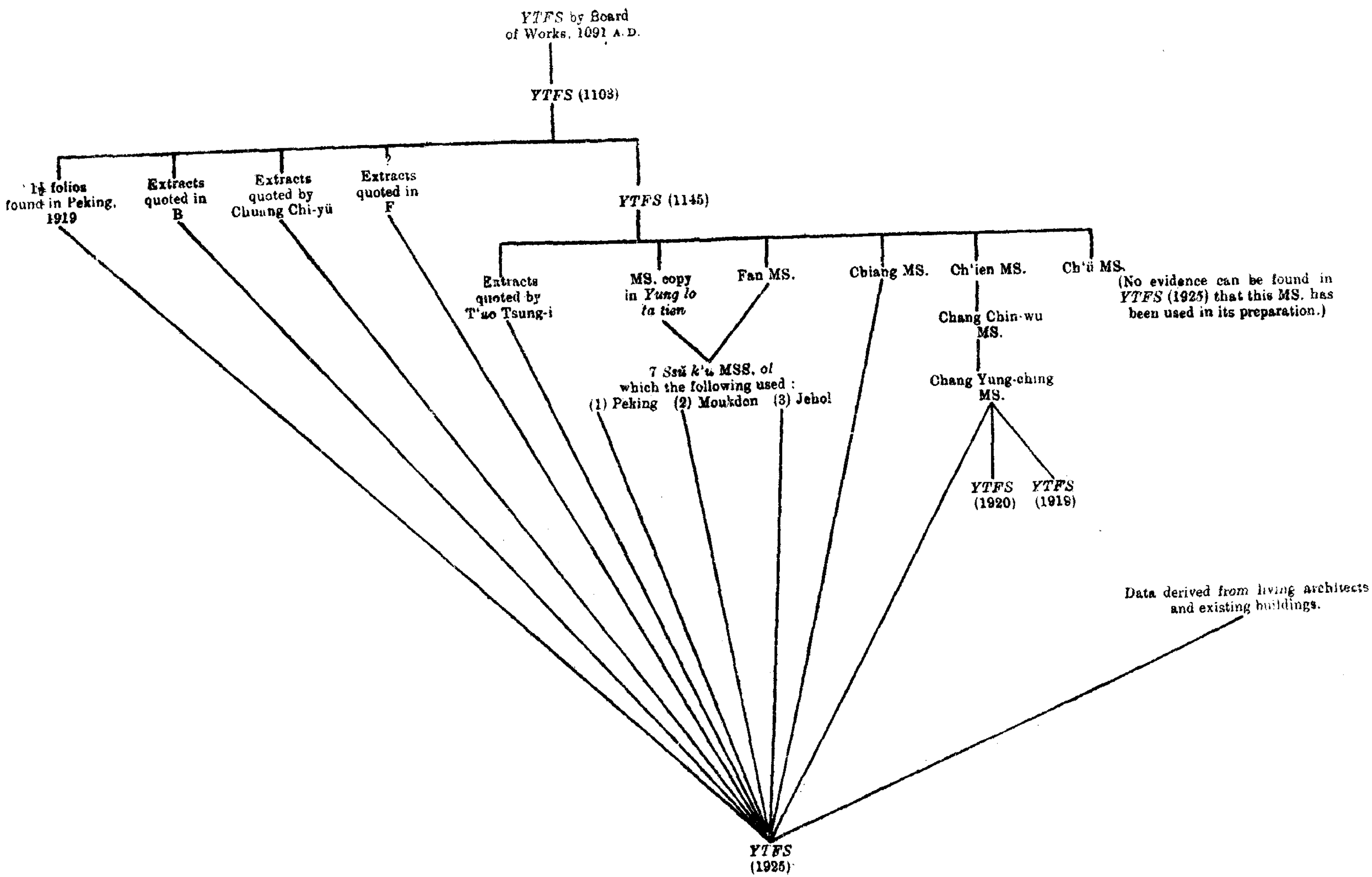


FIG. 5.—Plan to show the sources of *YTFS* (1925)

as may be, the sources from which the magnificent last edition of this architectural classic has been compiled are too many and varied to be kept in mind easily. In order to show them at a glance I have drawn out a plan (Fig. 5).

I gratefully acknowledge indebtedness to Professor Hu Shih 胡適 both for his good offices in aiding me to obtain a copy of *YTFS* (1925) and for invaluable help generously given in the writing of this study.

Stephen Austin and Sons, Ltd., Printers, Hertford.

英葉慈博士營造法式之評論

在古代文化中，中國人對於建築之制度，亦有深刻之研究。試觀今日存在之建築物，即可證明。並有若干書籍將兩千年來建築之歷史，紀述無遺。但受外國之影響甚少，殊不若他種藝術也。由佛教引入中國之印度建築形式，爲墓碑金字塔形之廟宇，及曲形屋頂等。又華人頗能將許多歐亞交界各處之建築原理，運用於本國建築之上，但亦不過影響本地建築之外表形式而已

據書籍所載中國向來注重宮殿或其他公共建築。惟今日存在之國家所定關於建築本體之則例，反較與建築有關係之其他規則爲少；且建築之術，又不若油漆，古銅，玉石，各種活動物品代表之藝術，可以使人視爲有文學上之價值。不止此也，各種專門手藝，惟賴歷代匠人之口傳，而匠人亦即當時之建築師也。夫如是，則關於建築學之文字又焉能多。故本書所論之營造法式乃惟一之重要書籍

約西歷一〇七〇年北宋神宗皇帝敕令將作監，根據案卷中所記載之傳說，編纂營造法式一書。成於一〇九一年。踰六年，將作少監李誡奉敕修訂。一一〇〇年，修訂完畢，並經御覽，於一一〇三年(崇寧二年)付印。於是京外各官署中，均有此書。不幸一一二六年，開封爲女眞韃靼所佔據。官署旣焚，書亦隨之而盡。迨宋室南遷，建都杭州，

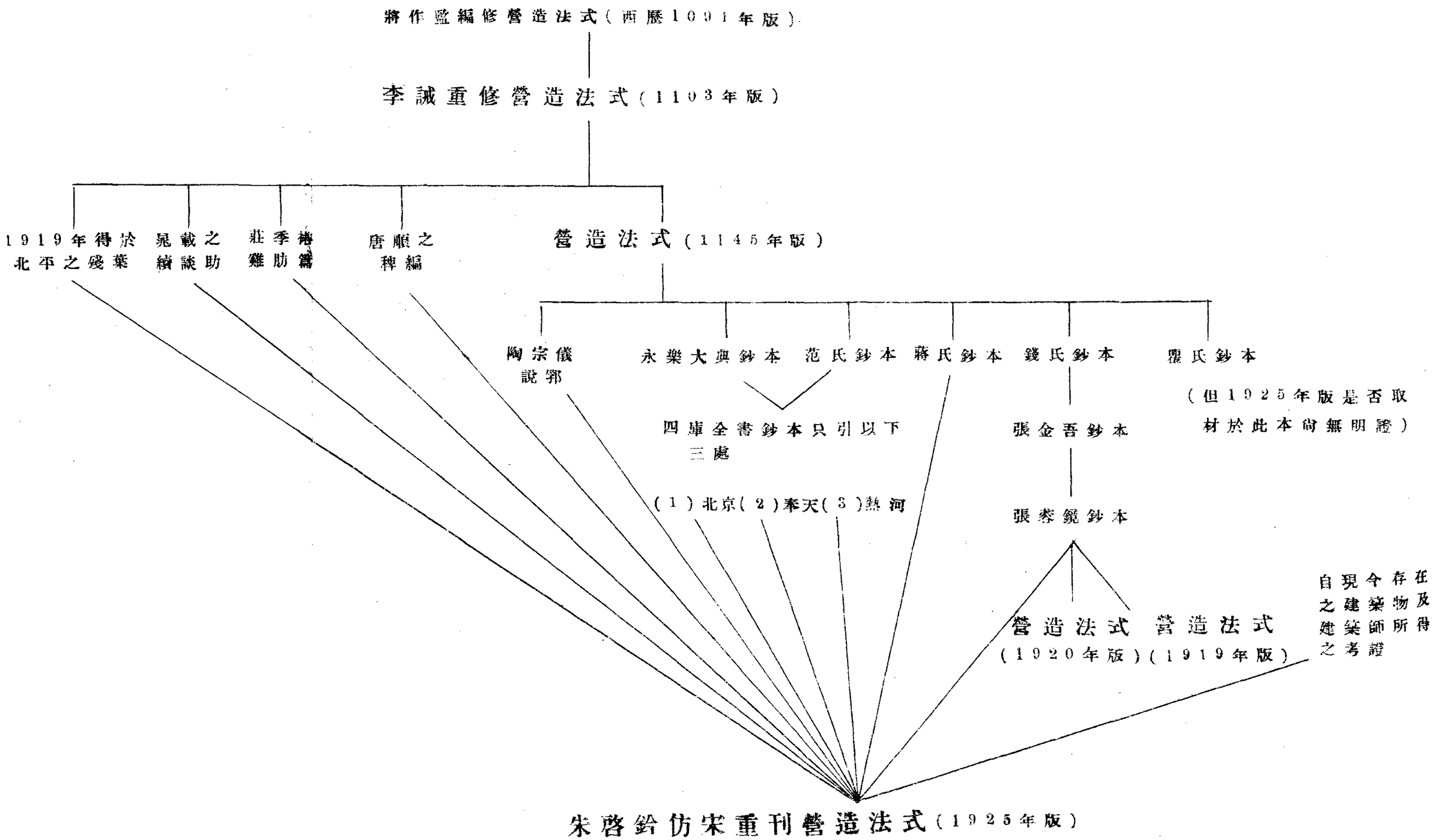
高宗（一一二七至一一六二年）乃創立書庫，并搜羅佳本。後知平江軍府事王晚得一營造法式刊本，即於一一四五年就該本刻本版翻印新書。此手寫本，除有頁半可斷其爲初版之殘餘外，其餘部份，與現在之營造法式相同，此節以後當再述之

一九一九年，前內務總長現任中興煤礦公司總理朱啟鈐氏，得將江南圖書館所藏之鈔本，詳細察閱。朱君更與江蘇省長齊耀琳君商議，遂決定石印出版。所出版之書，惟面積稍小，其餘均畢肖。後商務印書館於一九二〇年亦依照鈔本重付石印。在此以前，北京圖書館館長曾覓得殘葉兩片，云係初版。朱君既知鈔本之不完善，乃根據殘葉重新校定，並委托陶湘君負責司其事。於一九二五年出版，名曰仿宋重刊李明仲營造法式計分八册，可稱佳構

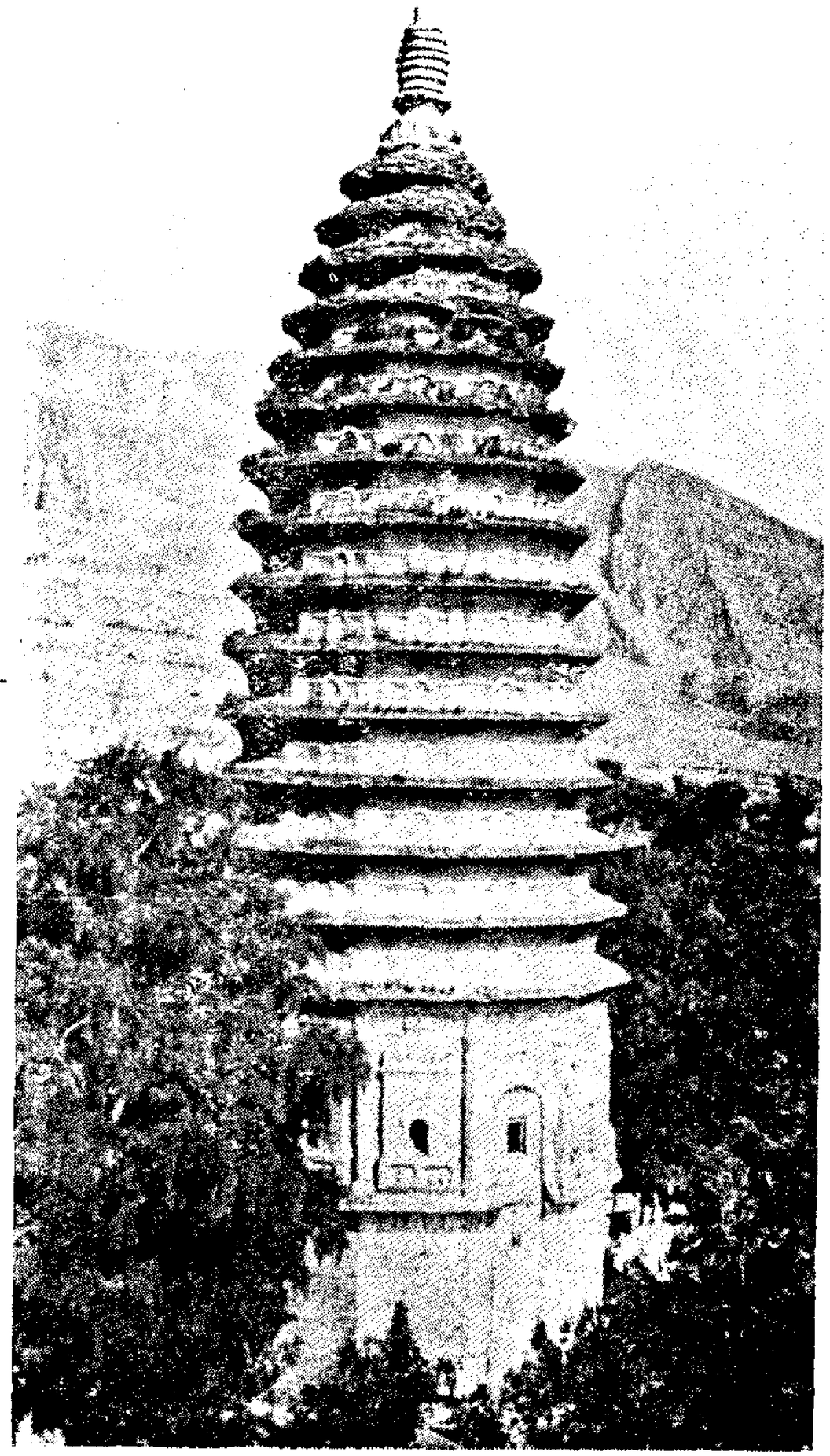
德國德米維尼君 M.P. Demieville 所寫之評論，即係以此石印本爲背景。該項評論，可謂西方著作家對於中國建築學惟一有文學上價值之貢獻，因其所作之營造法式概論實能與文學史書並駕齊驅也。茲欲論者，乃根據一九二五年版之卷末附錄及淘湘君所題識語而研究該書之史蹟。因附錄及識語係述營造法式自始至今之變遷沿革甚爲繁雜，不得不由廿四頁半中取其要點分別譯述之

（附錄及識語原書具在茲從略不譯）

一九二五年版營造法式材料之來源及所引證之書籍圖表



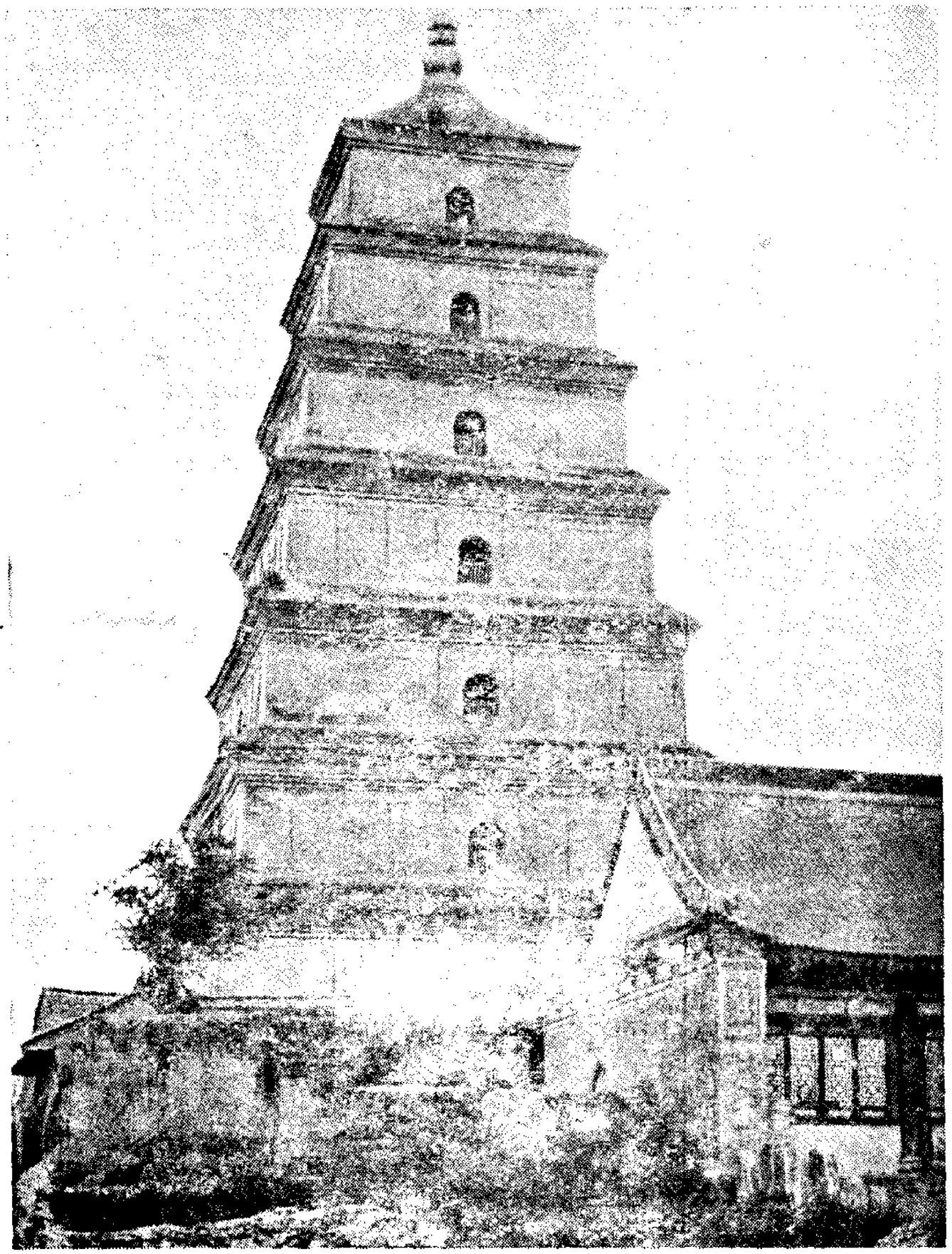
A—

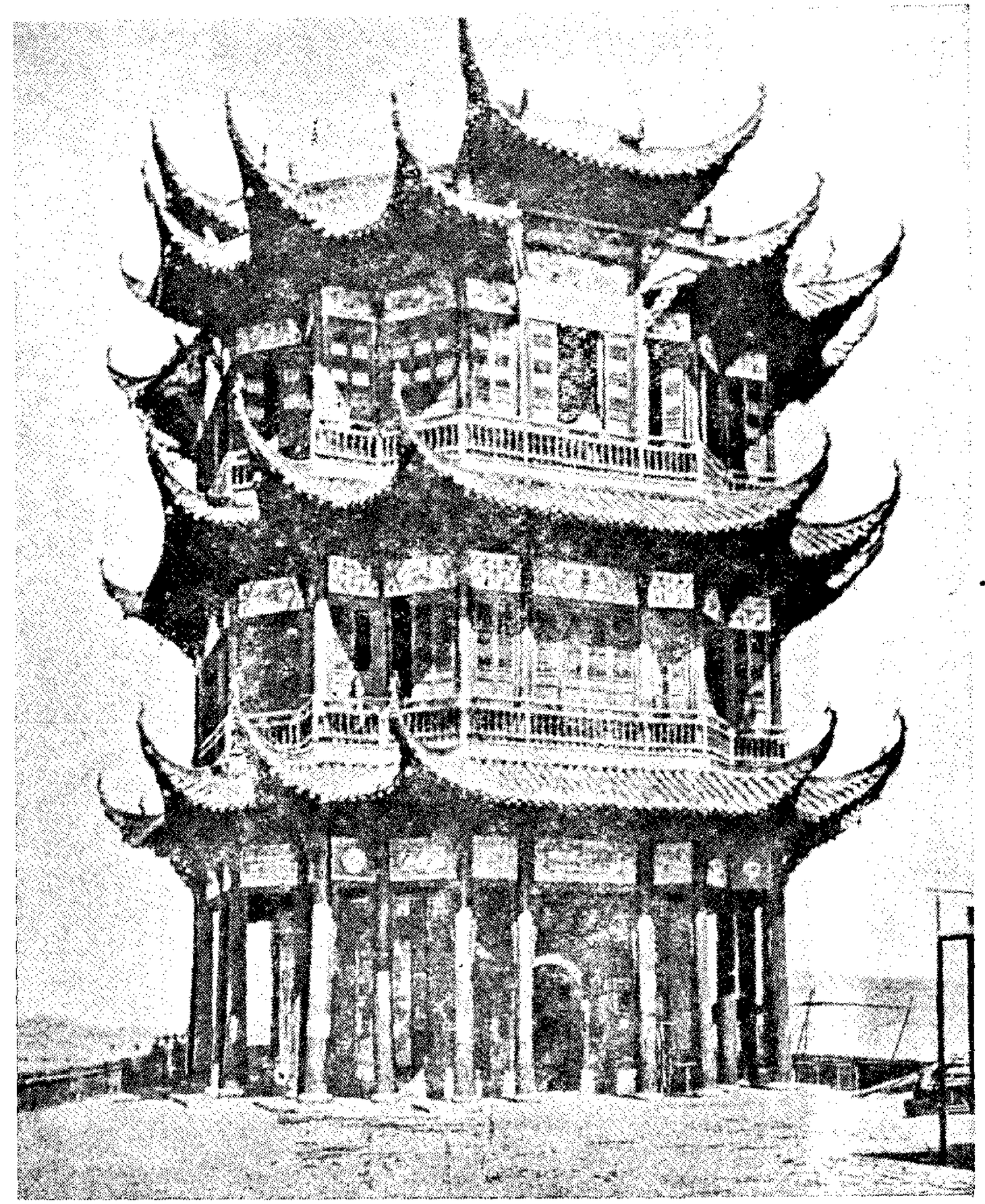


—B

A—Octagonal Pogoda at Sung Shan (Honan). Brick. Built A. D. 523, and restored. From photograph by Prof. T. Sekino in Prof. Sirén's *Chinese Sculture*, pl. 187. B—Octagonal Reliquary at Shê Shan (Kiang su) in pagoda form. White stone. Height about 40 ft. Attributed to about A. D. 600. From photograph by Mr. Perceval Yetts

C—





—D

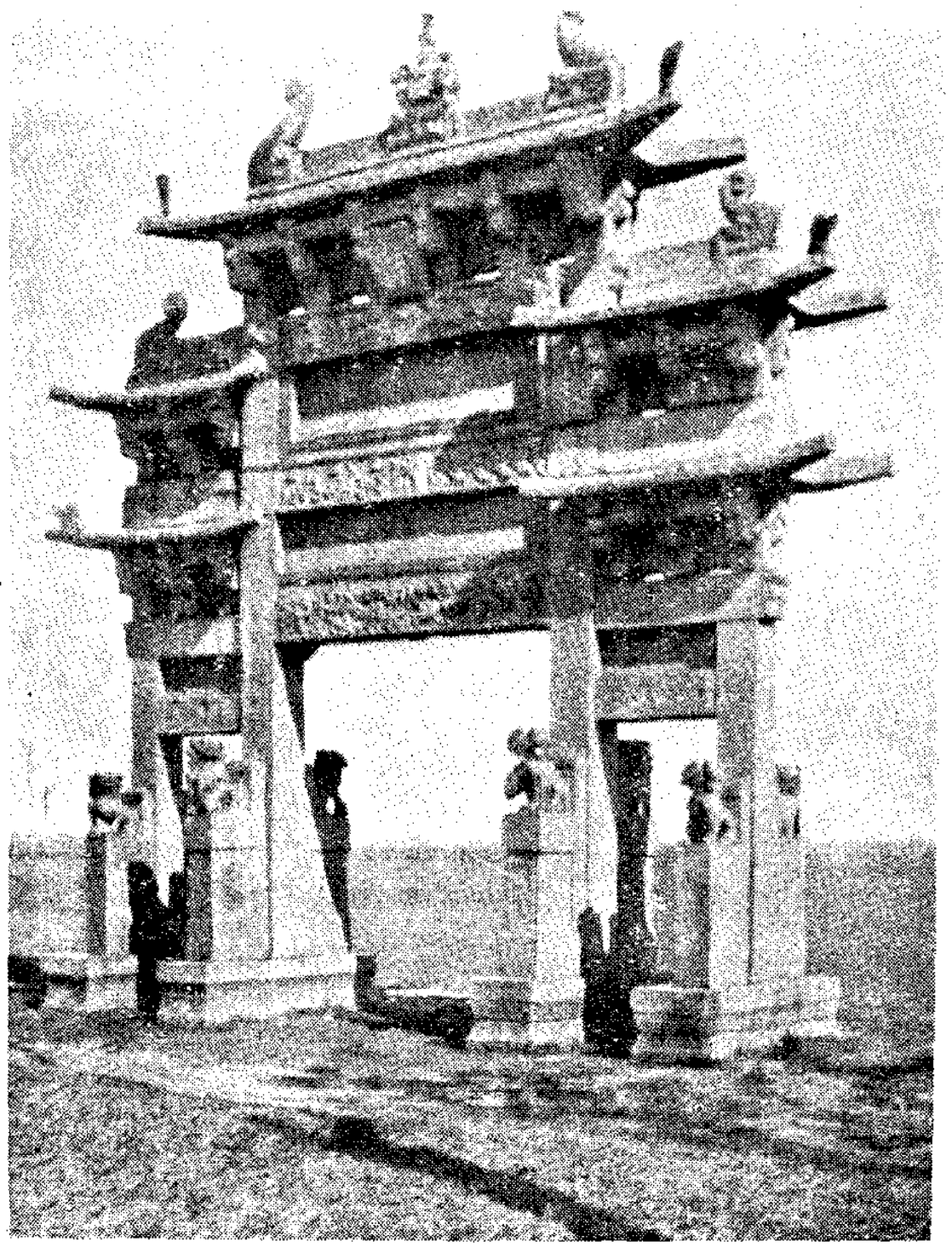
C—Wild-Goose Pagoda at Hsi-an (Shensi) Four-sided and sveen-storeyed. Brick. Built A. D. 625, but since restored and altered. From *Chinesische Architektur*, pl.309. D—Yellow Crane Tower formerly at Wu-ch'ang (Hupeh). Roofs of green-glazed tiles; body of painted woodwork. Built about 1870; burnt down 1884. From *Chinesische Architektur* pl.60

A—

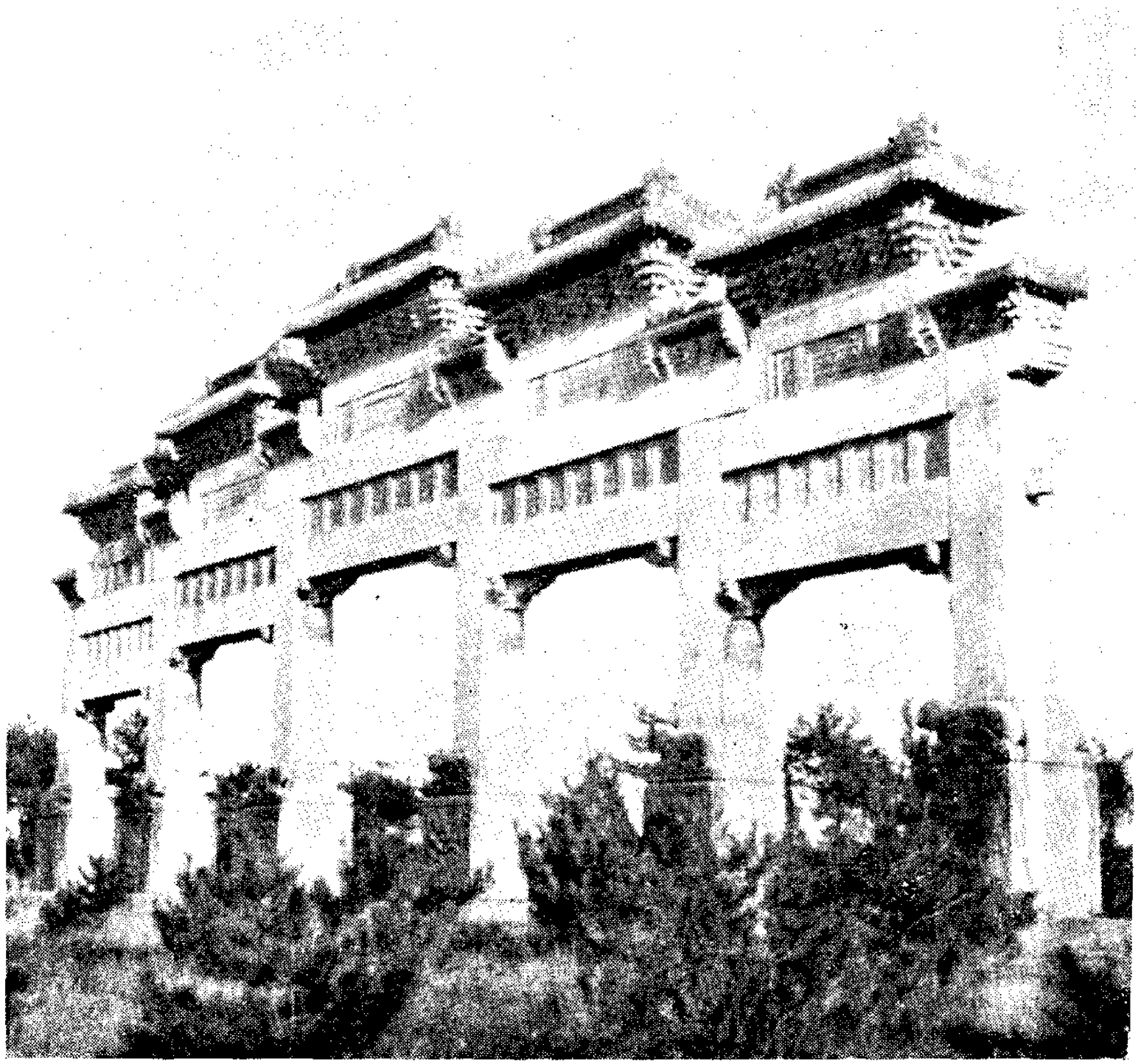
—B

Memorial arches (*p'ai-lou*) from *Chinesische Architektur* A—Near T'ai-an (Shantung) • B—In a street of Kao-mi (Shantung) • The inscription may be translated: "Her fame is recorded in the annals of wifely devotion."

C—



—D



C—At Ning-yang (Shantung). D—At entrance to tombs of the early emperors of the Manchu dynasty, 80 miles east of Peking. White marble. Built 1650

WRITINGS ON CHINESE ARCHITECTURE

W. PERCEVAL YETTS

Reprinted from THE BURLINGTON MAGAZINE, *March*, 1927

Reprinted from THE BURLINGTON MAGAZINE, *March*, 1927.

WRITINGS ON CHINESE ARCHITECTURE BY W. PERCEVAL YETTS

ABSENCE of old buildings may seem strange in a land where an advanced civilization has flourished continuously for 3,000 years and more. The explanation is that Chinese architects have followed the practice of depending on wood for structural integrity, in much the same way that we at the present day frame buildings in iron or steel. And this explains not only the ephemeral life of Chinese buildings, but other of their features to be discussed later. Their lack of durability is testified by the fact that few now standing go back earlier than the beginning of the last dynasty—three centuries ago, and very few earlier than the Ming who established themselves on the throne in A.D. 1368. Excepted from this generalization are, of course, walls and other structures built without wood, such as the rare "beamless" buildings and certain pagodas and bridges. Thus only comparatively modern examples persist of the more ambitious architectural enterprises, and for study of the art through the long ages of its practice we must turn to documents of various kinds. Those at present known are not numerous. They are tomb monuments in the provinces of Shan-tung, Ho-nan and Ssŭ-ch'uan dating from the Later Han (A.D. 25 to 221); models in pottery dug up from burial grounds of the Han and following periods; certain paintings and sculptures of the fifth to the tenth centuries (mostly belonging to Buddhist shrines); old Japanese buildings in the Chinese style; and, lastly, native books.

Objective and written evidence available from these sources supports belief that the conservative Chinese adhered as closely to their forefathers' notions of building as to other established traditions. Again and again the national annals and local chronicles detail the scrupulous care taken to conform to old standards when a capital was rebuilt or moved to another site, or when a newly-established dynasty laid one out afresh. The many foreign rulers of China seem to have observed this ideal no less attentively than native dynasties. For instance, when about the middle of the twelfth century the Nü-chên Tartars made Peking their central capital, they copied in detail the palace of K'ai-féng, left by the retreated Sung, which originally had been modelled on that of the T'ang dynasty at Lo-yang. They even went so far as to dismantle much of the Sung woodwork and embody it in the new buildings at Peking. Such instances indicate architectural continuity lasting for six hundred years; indeed, till a century before the rise of the Ming—in other words, up to the period from which date all but a few of the oldest wood-built buildings now standing in China. History of continuity may be traced back for eight centuries and a half beyond the T'ang to about 220 B.C. when the first Emperor of the Ch'in dynasty rebuilt his capital at Hsien-yang (Shensi) on such a vast and splendid scale that (if the historians lie not) it must have surpassed Nineveh at the height of its glory.

It is said to have extended east and west, on either side of the River Wei, for a hardly believable distance, and north and south of it for many miles.[1] The richest families throughout the empire, to the number of 120,000, were ordered to build mansions in the capital and dwell there with their belongings. Whenever the Emperor conquered a principality, he erected in his capital a replica of the royal palace destroyed, and adorned it with the captured treasures. Palaces and pavilions thus reproduced numbered 145; and 10,000 women, chosen for their beauty from all parts of the land, were distributed among them. Each palace, fully staffed and provisioned, was kept ready for the Emperor, should the whim take him to occupy it. Besides these, there was the chief imperial palace, most magnificent of all, on the north side of the river. Covered corridors, hung with silken fabrics, ran for miles connecting the various palaces; and bridging the river was a roofed structure of wood 280 yards long and 12 wide, with 68 bays, 850 columns, 212 cross-beams and a stone platform at either end. Not content, the Emperor built south of the river another palace in which to hold audiences. This stupendous structure, famed in history under the name O-p'ang Kung, had a hall measuring 500 yards from east to west and 100 yards in width. Its upper floor was large enough to seat 10,000 men, and the ceiling of the ground floor was high enough "to allow banners 10 yards tall to be held upright." More than 700,000 convicts, who had suffered the punishment of

[1] Details of these architectural enterprises are given by Tschepe, *Histoire du Royaume de Ts'in*, (Shanghai, 1909) pp. 291-298. I quote above some of his figures with reservation. He appears to have combined particulars taken from original texts and from later commentaries without distinguishing between them. For instance, he cites 800 *li* as the distance which the city extended east and west on either side of the Wei. At the lowest estimate this is equivalent to 280 miles. As the Rev. A. C. Moule has kindly pointed out to me, this "800 *li*" is doubtless derived from the commentary (dated A.D. 736) to *Shih chi*. The historian Sŭ-ma Ch'ien himself does not mention the figure. v. Chavannes, *Mém. hist.*, II (Paris, 1897), pp. 137-8.

castration, were employed to construct the new palace and a gigantic tomb for the Emperor.

The vast city of Hsien-yang was sacked and burned soon after the Emperor died. No remnant of it is now visible, unless perhaps some stone pedestals for pillars of the great audience hall. Excavation might disclose foundations, figured bricks and tiles, and sculptured stone fragments; but little of architectural moment is likely to have survived the destruction of buildings framed in wood. On the other hand, the written records do provide important information, even allowing for probable exaggeration, and three highly significant facts emerge: one that the first Ch'in Emperor, notorious as breaker of ancient tradition, did not attempt a revolution in architecture; another that any variant styles which may have existed in different localities were brought together at the capital; and another that the art had reached a high level of achievement by the third century B.C.

This Chinese Napoleon abolished feudalism while uniting the countless petty states into a huge homogeneous empire, and the surmise seems justified that his building megalomania unified the architectural standards of the country.

Chinese literature is peculiarly rich in poetry and local topographies. Many poems, notably the early *fu*, exalt in grandiloquent terms the splendours of palaces and temples; and the topographies contain information of a more precise sort. Here may be mentioned a book which scarcely comes within the latter category. As its title (*Lo-yang ch'ieh lan shi*) denotes, it is concerned with the monasteries at Lo-yang. It sets forth with wealth of detail the glories of Buddhist buildings which pious rulers of the Northern Wei dynasty had multiplied in their capital. In 547 a certain Yang Hsüan-chih revisited Lo-yang whence the Wei Court had been driven by rebels thirteen years earlier. Of its former 1,367 religious houses only 421 had survived the ruin, and, fearing lest their departed greatness might be lost to memory, he wrote a description of them. Among these Buddhist edifices was the great pagoda which I shall discuss later.

But books such as these lack the exact data sought by a student of architecture. Moreover, extant technical treatises on the subject are few and rare; therefore the recent reproductions of the *Method of Architecture* (*Ying tsao fa shih*) are specially welcome. This work was written and eventually printed about 1103, in compliance with imperial command, to supersede a handbook, under the same title, compiled by the Board of Works some seven years earlier. Its author is Li Chieh, an erudite and versatile official, who was a calligraphist and a writer of several works, including one on horses and another on music. The functions he exercised at the capital of the Northern Sung dynasty appear to have been chiefly architectural. In 1126, when K'ai-fêng was taken and pillaged by the Nü-chên Tartars, the official buildings and their contents were destroyed. Doubtless the blocks and nearly all copies of the *Method* perished with them. After the Sung court had been re-established at Hang-chou, great efforts were made again to get together an imperial library. A second edition of the *Method*, based on the first, was cut and printed at Su-chou in 1145. At the present time no copy of either edition is known to exist, but there are some six transcripts of the 1145 reprint. The text of one was in 1821 recopied by a youth of twenty, named Chang Yung-ching, and the illustrations by the artist Wang Chün-mou. This manuscript is now in the public library at Nanking. In 1919 Mr. Chu Ch'i-ch'ien, who had been Minister of the Interior under the presidency of Yüan Shih-k'ai, reproduced it by photo-lithography on a smaller scale than the original, and in the following year the Commercial Press at Shanghai published a photo-lithographed facsimile. Printed copies of the *Method* are known to have survived in the imperial libraries at Peking under the Ming and the Manchu dynasties. Unfortunately these were lost through carelessness during the several recent occasions when the library was moved; but about 1918 the Curator of the Peking Metropolitan Library, while sorting some waste papers, came upon a folio and a half of what is presumed to have been the 1103 edition. With these fragments as a basis, a reconstruction of the original treatise was carried out with infinite care under the supervision of Mr. T'ao Hsiang and at the initiative of Mr. Chu Ch'i-ch'ien. Existing manuscripts were compared in order to get the text free from error, and the illustrations were redrawn with the help of architectural experts. There were added two supplements containing modern versions of the drawings, elucidated with present-day terms, and also coloured versions of the decorative designs which originally had been represented in line with labels denoting the colourings. The resultant eight magnificent volumes, published in 1925, are triumphs of book-production.[2] They would be a credit to any press in respect of textual criticism, typo-

[2] The foregoing is but an incomplete summary of an extremely complex bibliographical history as set forth in the appendix to this edition. A full account by the present writer will appear in the forthcoming issue of the *Bull. of the School of Oriental Studies*.

graphic beauty and technical achievement in colour-printing.[3]

This production in China during the recent years of turmoil is significant. Apart from that, it has the outstanding importance of providing an exposition, intelligible to modern architects, of a treatise which sets forth technical data concerning Sung contemporary terms, methods of construction and use of materials. Many of these data doubtless perpetuate official standards handed down from ancient times for the guidance of those controlling the architecture of public buildings. Above all, the work has the merit, so rare in Chinese treatises, of being based on practical experience. The illustrations reproduced here [PLATE I, A and B] from the 1925 edition are chosen not merely as specimens of the admirable colour-printing but because polychrome decoration is and always has been an essential and prominent feature of Chinese architecture, which in this respect has points in common with ancient Greek usage.

M. P. Demiéville wrote a long detailed review[4] of the *Method of Architecture* as reproduced by photo-lithography in 1920. This review is the most scholarly of contributions yet made by Western writers to the study of Chinese architecture. Until recent years these contributions have been surprisingly meagre and uninformative when compared with our voluminous literature concerning other departments of Chinese culture. One of the earliest is a set of copper-plates issued in 1750-2 by the architects, William Halfpenny and his son. It is entitled *New Designs for Chinese Temples, Triumphal Arches, Garden Seats, Palings, etc.*, and it well exemplifies the travesties of things Chinese which were in vogue during the eighteenth century. The Halfpennys had the honesty to claim for their designs no more than that they were "in Chinese taste"; but in 1757 there appeared a pretentious folio which purported to give an authentic account of Chinese architecture illustrated with twenty-one engraved plates "by the Best Hands, from the Originals drawn in China by Mr. Chambers, Architect." It was "published for the Author, and sold by him next Door to Tom's coffee-house, Russel-street, Covent-Garden." Little can be said in praise of it except that it is less misleading than the earlier publication, notwithstanding that its aim, as avowed in the preface, was to put "a stop to the extravagances that daily appear under the name of Chinese, though most of them are mere inventions, the rest copies from the lame representations found on porcelain and paper hangings."

At the age of sixteen, William Chambers became a supercargo of the Swedish East India Company, and in that service made at least one voyage to Canton, where he collected the material for his book. Between 1757 and 1762 he erected in what we now know as Kew Gardens several exotic buildings including the pagoda which remains the most imposing relic in this country of the then-prevailing craze for *chinoiseries*. The chief work by which he is remembered is Somerset House. In 1771 the King of Sweden created him Knight of the Polar Star, and he was allowed by George III to assume in this country the style of "Sir William." He died in 1796, full of riches and honour, and was buried in the Poets' Corner of the Abbey.

For a hundred years after the appearance of Chambers' folio no Western writer attempted to discuss Chinese architecture seriously. Then in the *Transactions of the Royal Institute of British Architects* of 1866-7 an army surgeon, named Lamprey, published a paper on the subject, and he was followed in 1873 by W. Simpson and in 1894 by F. M. Grattan. The least unsatisfactory of these papers is by Simpson, who had travelled far and wide in China, visiting both Peking and Nanking. He was, at any rate, a trained architect, although he lacked an understanding of Chinese culture possessed by Joseph Edkins, the versatile sinologist, who wrote a diffuse and uninspired essay sixteen years later.[5] Another general survey of the subject is Prof. Itō's article in the *Encyclopædia of Religion and Ethics*,[6] and less thorough accounts are contained in the well-known handbooks of Chinese art by Paléologue, Bushell and Münsterberg. Noteworthy also are the sections devoted to China by A. Choisy[7] and F. Benoit.[8] Both contain errors, but the latter has the merits of a wide outlook and a dependence on the writings of specialists, such as Chavannes' great archæological survey to which I refer later (p. 7, n. 28). The continued publication of uninformative or actually misleading notices in cyclopædic works indicates our prevailing neglect of the subject. An example is to be found in Sir Banister Fletcher's *History of Architecture*.[9] Few of the illustrations represent typical Chinese buildings, and at least one

[3] *Note should be made that* the text is printed from wood-blocks cut with distinguished dexterity in the Sung style. The colour-printing is done by lithography on native paper by the Kuo family, of Ting-hsing, which for five generations has specialized in the craft.

[4] *Bull. de l'Ecole Française d'Extrême-orient*, XXV (1925) pp. 213-264.

[5] *Jour. China Branch Roy. Asiatic Soc.*, XXIV (1889-90), pp. 253-288.

[6] Vol. I (Edinburgh, 1908), 693-696.

[7] *Histoire de l'Architecture*, I (Paris, 1899) pp. 179-197.

[8] *L'Architecture l'Orient medieval et moderne* (Paris, 1912) pp. 334-360.

[9] 7th ed. (London, 1924) pp. 806-817.

appears to be the invention of an European artist. The scanty bibliography includes Allom's and Wright's compilation, entitled *China, its Scenery, Architecture, Social Habits, etc.* (*c.* 1843), which has had a large share in spreading erroneous notions, especially in respect of Chinese architecture.[10]

Concerning certain buildings and groups or types of buildings in China innumerable accounts have been published: some as separate works, some as articles in periodicals and some as passages in books of travel. To give a bare list of them here is out of the question, but mention must be made of the first attempt to treat the matter technically from the standpoint of a Western architect. So far as it goes, it is a thorough and well illustrated description of a famous Buddhist temple near Peking.[11] Its account of constructional detail, however, ignores native nomenclature and craft-lore; and, indeed, these aspects of Chinese architecture have not yet been studied by any Western writer except M. Demiéville while reviewing Li Chieh's treatise.

Many have written about the capital, and probably Simpson is alone in his estimate that "Peking is only an extended village of dirty streets and crumbling walls." The truth is that Peking represents more fully than any other city at the present day the heritage of Chinese architectural achievement. Stress was laid early in this article on the care consistently taken to preserve tradition unchanged when capitals have been rebuilt or moved to fresh sites; and the belief seems justified that Peking is the direct descendant of a long succession of capitals stretching back to the earliest historical times. Indeed, the Peking of to-day probably has features resembling those of the Chou capital which are alleged to have called forth the words of admiration attributed to Confucius. And probably features most distinctive of a Chinese metropolis are to be found within the vast enclosures consecrated to the Son of Heaven, because among the palace buildings are the greatest architectural enterprises. That is why the book[12] by Prof. Sirén, now being published, is as important a contribution to the study of the subject as his recent *Walls and Gates of Peking* (London, 1924), of which this is the fitting complement. Besides providing permanent pictorial records of buildings which may soon be swept away, it contains an historical outline and also technical criteria of value to architects. Professor Sirén's photographs are distinguished by his happy sense of composition, and in range and comprehensiveness they are approached only by Japanese publications,[13] most of which are now hardly procurable. The rural environment of many of the palace buildings is admirably represented, and effort has been successfully made to record the interior decoration manifesting an architectural tradition of extreme antiquity. The labels in Chinese characters written on the plates are welcome additions. Many of the historical data have been translated by Miss A. G. Bowden-Smith from local chronicles, while others are derived from the report published in 1903 by the College of Engineering of Tōkyō Imperial University. From the latter source are taken ten of the architectural plans; three have been drawn by the Swedish architect, Mr. J. Albin Stark; and one is a German Army Map made in 1900-1.

The first important attempt to deal with this subject as a whole is by Dr. Ernst Boerschmann.[14] In 1906 Dr. Boerschmann was commissioned by the German Government to make "an investigation of Chinese architecture and its relation to Chinese culture," and for nearly three years he travelled through China, visiting fourteen of the eighteen provinces. Results of his explorations have appeared in several publications, of which the two-volume work, devoted to temple buildings, is the most notable.[15] The title *Chinesische Architektur*, given to the large book under review, is at first somewhat misleading, since it suggests a comprehensiveness which is lacking. But in

[10] This and other publications giving currency to fictitious presentments of Chinese life were discussed by the present writer in THE BURLINGTON MAGAZINE of March, 1926, p. 122.

[11] H. Hildebrand, *Der Temple Ta-chüeh-sy*. Berlin; 1897.

[12] *The Imperial Palaces of Peking*. Vol. I, pp. 75 + 72 plates + 14 plans. Vol. II, 104 plates. Vol. III, 98 plates + plan. Paris and Brussels (Van Oest). £8 8s.

[13] After the Boxer Outbreak, when Peking was occupied by the allied forces, an architectural commission was sent by Tōkyō Imperial University and the Imperial Museum of Tōkyō to study the palace buildings. It included Assistant Professor C. Itō, Mr. J. Tsuchija, Mr. T. Okuyama and the photographer, Mr. K. Ogawa. No. 4 of the *Scientific Reports* of the University College of Engineering contains the report by Professor Itō entitled *Shinkoku Peking Shikin-jō demmon no kenchiku* and the report by Mr. Tsuchija entitled *Shinkoku Peking Shikin-jō kenchiku chōsa hōkoku*, both in Japanese. In 1906 Mr. Ogawa published, under the auspices of the Imperial Museum, two large portfolios containing 172 plates of collotype reproductions of photographs and a book of explanatory notes by Professor Itō in Japanese, English and Chinese. This work, limited to 500 copies, is entitled *Photographs of Palace Buildings of Peking*. The same year there appeared as No. 7 of the *Scientific Reports* a portfolio containing notes and 80 plates of drawings, some of which are coloured, by Mr. Okuyama. It is entitled *Decoration of Palace Buildings of Peking*. Under the title *Shina Peking-jō kenchiku* a handier portfolio was published at Tōkyō in 1925, containing 102 plates, selected from the three huge portfolios published in 1906, with brief descriptions in Japanese by Professor Itō.

[14] *Chinesische Architektur*. 2 vols. 162 pp. + 346 pl. (6 coloured) + 39 illustrations and plans in text. Berlin (E. Wasmuth). £8.

[15] *Die Baukunst und religiöse Kultur der Chinesen*. Vol. I: *P'u t'o Shan*. Vol. II: *Gedächtnistempel*. Berlin: 1911 and 1914 respectively.

his preface the author corrects misconceptions which might be so caused, and announces that the scope does not include more than cursory references to history and evolution, methods of construction and effects of foreign influences. His main purpose is to provide pictures of representative buildings standing in China at the present day, and the comparatively scanty text is concerned mainly with grouping these under twenty categories according to style. He achieves his aim admirably with 591 excellent photographs and numerous architectural drawings. Permanent preservation of such graphic documents is of the highest value, especially now that civil war and the progress of Westernization are bringing destruction to relics of old China. Nevertheless, students cannot but regret that Dr. Boerschmann did not plan his book on more ambitious and comprehensive lines, and utilize his extensive knowledge and abundant material to give within the covers of one work a digest of all he had to say on the subject. Thus he would have provided a much-needed repertory of Chinese architecture. The text as it stands gives the impression of being a somewhat perfunctory accompaniment to the plates, and the reader's search for information on certain important topics has to be satisfied with references by the author to separate writings which he has published or is preparing to publish.

One of these topics is the pagoda. Many writings[16] have been devoted to these structures, of which some 2,000 still exist. The oldest now standing[17] is that at the foot of the T'ai-shih Hill on its western side.[18] The Hill belongs to the famous mountain group of Sung Shan in Honan, the central one of the Five Sacred Mountains which figure prominently in the most ancient religion of China—that of nature worship. This pagoda is part of the Sung-yüeh Ssŭ, a foundation dating back to a Wei dynasty palace built at the beginning of the sixth century. In 523 the palace was turned into a Buddhist temple, and then was built the present brick pagoda which, apart from evidence afforded by written records, exhibits characteristic Northern Wei design proclaiming its antiquity.

The pagoda is so signal a feature of Chinese landscapes that its form passes in the West as a sort of symbol for China. For many years before its destruction in the middle of the last century, the so-called Porcelain Pagoda[19] at Nanking was rated as one of the Wonders of the World, and the fact encouraged our popular acceptance of this style of structure as typical of Chinese architecture. Yet writers generally agree in tracing its origin solely to India, while crediting to Chinese invention minor modifications in its evolution. Dr. Boerschmann adopts the customary theory without advancing evidence to support it. The fact is that existing literature on the subject fails to convince one that the importation theory is wholly true. Our information concerning Buddhist beginnings in China is scanty and somewhat obscured with legendary accretions. We know that in 2 B.C. an Indoscythian envoy, or perhaps a Chinese returned from a mission to the Indoscyths, carried news of the religion to the Han capital. The traditional embassy sent by the Emperor Ming brought back in A.D. 67 two priests from the same country; and other missionaries of Buddhism followed during the second and third centuries. The Indoscyths were ardent Buddhists, and to Kanishka, their most famous king, who is now believed to have lived during the first century, is attributed the building of the magnificent stūpa at Peshawar.

Data concerning the sacred buildings in India were probably brought to China by many of the emissaries of Buddhism along with religious books and images. According to the legend,[20] he was a foreign monk who about the middle of the third century persuaded the reigning emperor to build a pagoda on the site, at Nanking, later occupied by the famous Porcelain Pagoda. Of fuller historical authenticity is the account of the monk Hui-shêng, who accompanied the mission sent to India in 518 by the pious Empress Dowager Hu of the Wei dynasty. He is said to have caused a native artist to fashion models in bronze (or

[16] The most important are: W. C. Milne, *Pagodas in China*, in *Trans. China Br. Roy. Asiatic Soc.*, Pt. V. (1855), pp. 17-63; Anon., *Chinese Pagodas*, in *Jour. N. China Br. Roy. Asiatic Soc.*, XLVI (1915), pp. 45-57; J. J. M. De Groot, *Der Thūpa*, No. 11 (1919) of *Abh. der Preuss. Akad. der Wissenschaften*; E. Boerschmann, *Eisen- und Bronzepagoden in China*, in *Jahrbuch der As. Kunst* (Leipzig, 1924) pp. 223-235 and *Pagoden der Sui- und frühen T'angzeit in Ostas. Zeitschrift* (1924), pp. 195-221; and D. Tokiwa and T. Sekino, *Shina bukkyō schiseki* (*Buddhist Monuments in China*), 5 vols. of plates and 5 vols. of text. Tōkyō, 1925-7. The last work contains numerous fine photographs of pagodas. Many historical data cited in this article are derived from the valuable text.

[17] Dr. Boerschmann is mistaken in attributing (II, pp. 43 and 46) this distinction and the date, A.D. 500, to a pagoda (pl. 319) situate some 120 yards south-east of the White Horse Temple in Ho-nan Fu (Lo-yang). The first pagoda on this site was probably built more than four centuries later. It was a nine-storeyed tower of wood, and it suffered destruction in 1126. Fifty years after that the present brick pagoda of thirteen storeys was put up. Professor Itō also erroneously assigns priority to a pagoda of much later date than that of the Sung-yüeh Ssŭ. He describes the Wild-Goose Pagoda at Hsi-an (Ch'ang-an) as "the oldest now in existence." (*Enc. of Rel. and Ethics*, I, p. 695), although it was first built in 652, and it has been altered many times since (*v. inf.* p 7, and Plate II, c).

[18] *v.* Tokiwa and Sekino, *op. cit.*, II pl. 140-1 and O. Sirén, *Chinese Sculpture* (London, 1925), II, pls. 187, 188, A.

[19] Described in *Chinese Repository*, I (1832-3) pp. 257-8, XIII (1844) pp. 261-5.

[20] *v.* Milne, *loc. cit.*, pp. 56-7.

brass) of Kanishka's stūpa and of four other great stūpas in Northern India. Furthermore, surviving fragments of a journal written about the middle of the fifth century by the Chinese pilgrim Tao-yo during his travels in India show that he recorded the exact dimensions of the stūpa at Peshawar. The foregoing are cited as indications that architectural notions came to China from the cradle of Buddhism early in our era. The incidents connected with Kanishka's stūpa appear in the book on the Lo-yang monasteries mentioned above (p. 2). Its last chapter is almost entirely occupied with the narrative[21] of the Empress' mission led by Sung Yün, and it contains a description of Kanishka's stūpa. There are other descriptions[22] by Chinese pilgrims, but unfortunately none informs us as to the shape of this most famous and resplendent of ancient Buddhist buildings in India. Probably it followed the lines proper to the cenotaph or reliquary stūpa, which was ultimately derived from the funeral monument.[23] Professor P. Pelliot cites[24] the brief account of a Buddhist temple erected in China as early as the second century. The builder "piled up metal discs at the top, and multiplied the storeys below. In addition, the buildings constructed all around could hold 3,000 persons. . ." The tower, surrounded with accessory temple halls, may have been based on an Indian model, or it may have been of the Chinese pagoda type, which I shall define later. The passage clearly proves, as Professor Pelliot remarks, that there were actual Buddhist temples in China under the Han, and that devotees of the new religion were not always content with buildings formerly used for secular purposes.

The book on the monasteries of Lo-yang (*Lo-yang ch'ieh lan chi*) contains in its first chapter an account[25] of a magnificent wooden pagoda of nine storeys built in 516 by the Empress Hu. Judged by the prominence and detailed notice given to it by the author, the building must have been deemed one of the chief glories of the capital. Its total height is said to have been 1,000 feet, and it could be seen from a distance of about thirty miles. At the top was a mast of 100 feet carrying thirty superimposed gilt bowl-shaped discs below its finial in the form of a gilt flask (*kalasa*). The discs, the iron chains which tied the mast to the four corners of the tower, and other parts of the building were hung with gilt bells to the number of more than 5,000. When the pagoda was burnt down in 534, great were the lamentations of the populace, and three monks were moved to throw themselves into the flames. The fire was still burning three months later and the foundations continued to smoulder for a year. Even allowing for much exaggeration, the account seems to indicate that pagoda building had advanced far at the beginning of the sixth century, and nothing in the description seems inconsistent with a type generally looked upon as distinctively Chinese. This is the tower of several storeys, each being only slightly smaller than the one below and having an encircling pent roof or a projecting cornice which looks almost like a roof. Sometimes there is a balcony round the base of each storey. Whether built with bricks or stone, it has features pointing to a wooden prototype. Probably the most ancient notable example of this style is the handsome, though dilapidated, stone monument [PLATE II, B] at the foot of Shê Shan (commonly called Ch'i-hsia Shan) near the station of Ku-shu Ts'un on the Nanking-Shanghai railway, some fifteen miles north-east of Nanking. Tradition assigns it to the beginning of the seventh century as one of eighty-three Buddhist reliquaries built in various parts of the country by Emperor Wên (589-604) of the Sui dynasty.[26]

The question is whether towers of this type ever existed in India. Available evidence seems to indicate that they did not, though a surmise has been made that the wooden pagodas of Nepal are direct descendants of an ancient and now forgotten Indian structure which disappeared early in our era.[27] More plausible is the tracing of what I would venture to term the Chinese type (as exhibited on

[21] The last and best translation is by Chavannes in *Bull. de l'Ecole Française d'Extrême-orient*, III (1903) pp. 388-429.

[22] These are assembled by Chavannes as notes to the same article, *loc. cit.*, pp. 420-427.

[23] See A. Foucher, *L'Art Gréco-bouddhique du Gandhāra* I (Paris, 1905), pp. 45-98.

[24] *Bull. de l'Ecole Française d'Extrême-orient*, VI (1906), p. 393.

[25] Passages are translated by De Groot, *op. cit.*, pp. 14-16.

[26] A passage to this effect occurs in *T'ung chih Shang Chiang liang hsien chih*, III, 27. In 1909 I spent several days at Shê Shan examining the Buddhist remains which include rock-sculptures said to date from the first half of the sixth century. To aid my search for written records, Mrs. Ayscough was good enough in 1911 to get into touch with the learned Father Mathias Tchang, S.J., who was known to have made a study of the locality. Father Tchang most courteously caused an extract to be made from the rare topography quoted above, and I have also his letter in which he subscribes to the date there assigned to the stone pagoda. Excellent photographs, showing the sculptured designs adorning the plinth and lowest of the five storeys, are published by Professor Sirén, *Chinese Sculpture*, IV, pls. 593-9. A modelled reconstruction of this important monument appears as an illustration to Dr. Boerschmann's previously-mentioned article in *Ostasiatische Zeitschrift* (1924), pl. 18, fig. 10, and on p. 211 Father Beck, S.J., is quoted to state that the monument was erected in A.D. 617, by the Emperor who succeeded Wên Ti. About the middle of the eighteenth century a copy was erected on a hill near the Summer Palace at Peking. It is represented on pl. 316 of *Chinesische Architektur*.

[27] S. Lévi, *Le Népal*, II (Paris, 1905), pp. 10-12. See also pictures of these structures in G. Le Bon, *Les Civilisations de l'Inde* (Paris, 1887), figs. 12, 282, 284, 296 and pl. facing p. 626.

PLATE II, B) to native sources, though upholders of the indigenous theory must admit the possibility of ultimate Mesopotamian origin. Chinese classical accounts of storeyed and terraced towers, classed as *t'ai*, are numerous. Some *t'ai* are said to have been as high as 300 feet, and the extravagant wealth lavished on them by emperors often aroused popular resentment. Another ancient category of storeyed towers is the *lou*. Apart from written records, the only reliable clues to the structures of these towers in early times are Han pottery models and sculptured tomb monuments of the same period.[28] Essential elements of construction, as there exhibited, have persisted during the last 2,000 years and are manifest in many remaining pagodas as also in other Far Eastern buildings.[29] Of the *lou* no more picturesque example could be found than the Yellow Crane Tower which formerly stood[30] at Wu-ch'ang [PLATE II, D]. Many poets and artists have made it their theme, and many times has the Yellow Crane Tower been renewed[31] since the first was built at the beginning of the sixth century on the bluff overlooking the Yangtse. It derives its name from the legend of a Taoist adept who from this height soared to heaven on the back of a yellow crane.

The foregoing is a very superficial attempt to account for the varied forms of pagodas in China by tracing some to the Indian stūpa type, which was essentially a cenotaph or reliquary, and some to the ancient native tradition of tower-building. There still remain many which are hardly explainable under either heading. They may be classed generally as pyramidal, and thus they follow the lines of the most primitive kind of tower built by man. Perhaps they owe their origin partly to the *t'ai* and *lou*; but the likelihood is that they are a direct outcome of foreign importation. Their immediate prototypes may be the ancient Indian Vishnu shrine and the pyramidal many-storeyed monastery, and so they may share with the *t'ai* a remote Mesopotamian ancestry. The best extant example of ancient Indian pyramidal structures is the famous temple of Bodh-Gayā, which may be hundreds of years older than the sixth-century date assigned to it by Fergusson.[32] Hsüan Tsang, the great Chinese pilgrim, visited Bodh-Gayā and wrote a description of the temple.[33] On his return, he wished that a stone pagoda, 300 feet high, should be built at Ch'ang-an as a repository for the sūtras and other sacred things which he had brought back. The Emperor agreed in 652 to erect a square five-storeyed brick tower 180 feet high, each side of the lowest storey to be 140 feet long. The account expressly states that it was designed on foreign lines, not in accordance with ancient Chinese standards (*Tz'ŭ-ên ch'uan*, VII). Many restorations and alterations have from time to time been carried out, but there seems no reason to doubt that the present seven-storeyed structure [PLATE II, C] is substantially the same as the one which Hsüan Tsang helped to build with his own hands. Hint of an Indian model is conveyed by its name, the Wild-Goose Pagoda[34]; and perhaps its actual prototype was the nine-storeyed temple at Bodh-Gayā which excited the pilgrim's admiration. It has a more broken and angular contour, but the main construction may be recognized as a simplified version of the pyramidal mass of Bodh-Gayā.

[28] This is too big a topic to be considered here beyond giving references to the following works: B. Laufer, *Chinese Pottery of the Han Dyn.* (Leiden, 1909), pp. 51 *seq. et passim*; R. L. Hobson, *Geo. Eumorfopoulos Coll. Cat.*, I (London, 1925), pls. 5, 7 and 18; E. Chavannes, *Miss. arch. dans la Chine sept.* (Paris, 1909), pls. 1-199, etc.; V. Segalen, G. de Voisins and J. Lartigue, *Miss. arch. en Chine*, Atlas I (Paris, 1923), pls. 14-49.

[29] In *Shinagaku ronso* (Tōkyō, 1926), published in honour of Professor Naito's sixtieth birthday, is an article (pp. 93-116) by Professor K. Hamada in which he compares Chinese architecture under the Han and Six Dynasties with that of Hōryū-ji, the oldest temple in Japan, dating from the beginning of the eighth century or earlier. He finds parallels among the Han relics, fifth and sixth century sculptures at Yün Kang and wall-paintings and pillars in Corean tombs, and sixth and seventh century sculptures at T'ien-lung Shan. On Pl. 7 fig. 1 is reproduced from the Freer Collection a Han pottery "fowling tower" which has marked points of resemblance to the Chinese type of pagoda.

[30] Dr. Boerschmann calls it (I, p. 46) "a landmark visible for miles," as if it still existed. It was, however, burnt down in September of 1884, a little less than 20 years after it was built. The present Yellow Crane Tower preserves the ancient tradition unworthily; for it is an ugly brick structure in Western style, looking like a badly designed church. It certainly is a landmark, and an unpleasing one. In his recent article *K'ueising-Türme u. Fengshui-Säulen* in *Asia Major*, II (1925) pp. 503-530 Dr. Boerschmann notes the fact that the Tower of Plate II, D no longer exists. He is mistaken (p. 524) in associating the legend of the yellow crane with Lü Tsu, a Taoist adept who is supposed to have lived no earlier than the T'ang period. According to the topography *Hu Kuang t'ung chih*, the immortal who rode the crane was either Tou Tzŭ-an or Fei Wên-wei.

[31] In the middle of the last century the then-existing Yellow Crane Tower was demolished by the T'ai-p'ing Rebels, and I cannot say how closely the Tower of Plate II resembled it. An album, published in 1922 at Shanghai, contains collotype reproductions of paintings, and opens with a Yellow Crane Tower of a different style. The album's title, *T'ien-lai ko chiu ts'ang Sung jên hua ts'ê*, claims the pictures therein as the work of Sung artists. Possibly the first does truly represent the Yellow Crane Tower of that period, and it together with other pictures of buildings in the album might be accepted as valuable architectural documents, if one could be sure first that they were painted under the Sung, and secondly that the artists made faithful drawings of actual buildings. Experience discourages belief in either premise.

[32] *History of Indian and Eastern Architecture* (London, 1876) p. 70. On this subject *v.* E. B. Havell, *Ancient and Medieval Architecture of India* (London, 1915) pp. 94-100.

[33] S. Julien, *Mém. sur les Contrées oc.*, I (Paris, 1857), pp. 464-470.

[34] For an explanation of this name *v.* T. Watters, *On Yuan Chwang's Travels in India* II (London, 1905), pp 173-5.

The Chinese roof, because of the upward curve at the eaves and the lavish decoration, impresses foreigners next after the pagoda as something strange and fantastic. The curve has called forth many speculations, generally ill-founded. The least plausible is one that has been most often repeated, and it survives in spite of obvious absurdity. It explains the curve as a memento of a supposed far-off period when the Chinese were nomads and abode in tents. Evidence is lacking that the early forefathers of the race were nomads, nor is there likelihood that their tents would have been shaped like ours, had they used tents. Moreover, the curved roof did not appear in China till comparatively late—probably about the middle of the first millennium after Christ. Almost as fanciful is the theory advanced by Surgeon Lamprey (*loc. cit.*, p. 164). He suggests "some connexion with that graceful curve we notice in the branches of fir trees, and the little dog-like figures sitting on the upper margin may be intended to represent squirrels running along or sitting on the branch." Dr. Boerschmann seems to hold somewhat similar views; for he says (I, p. 74): "The impulse which drove the Chinese to use these curving forms came from their desire to express the movement of life." And again (II, p. 49): "By the curving of the roof, buildings are made to approach as nearly as possible the forms of nature—the varied outlines of rocks, trees, etc." Other theories give the prosaic explanation that climatic conditions demanded a high-pitched roof with projecting eaves both to carry off heavy rains and to afford protection from the sun. There is also the reasonable supposition that changes in the technique of roof construction led to development of the curve. In short, this problem of the Chinese roof has not yet been solved. We do not even know the actual period when the curve first appeared in China. Without citing evidence, Dr. Boerschmann declares not till the T'ang dynasty; but that covers a long stretch of three centuries, starting from A.D. 618. At the present state of our knowledge we must fall back on the theory of an Indian origin as the most acceptable. So far as I know, Edkins was the first to hint at this hypothesis (*loc. cit.*, p. 259). Certainly curved roofs existed in India at an early date[35]; they appear, for instance, in the bas-reliefs at Sāñchī[36] and in the Ajantā wall-paintings.[37]

The inventive ingenuity expended on roof ornamentation, which to a large extent is occasioned by the Chinese instinct for symbolic expression, cannot be discussed here. Dr. Boerschmann gives many excellent illustrations. This and the history of tiles are subjects not yet fully explored.[38] The *Ying tsao fa shih* devotes much space to roofs, and, incidentally, specifies the ingredients of a green glaze for tiles.

Other than the types represented on PLATE II, there is none more characteristic of Chinese architecture than the memorial arch, called *p'ai-lou* or *p'ai-fang*. Space does not admit here a consideration of the evolution and significance of this structure, which is part of the social fabric of the nation. Pictures on PLATE III must suffice to show some stages of its development, and the reader is referred to the chapter on the subject in the second volume of Dr. Boerschmann's work (pp. 30-42) and the numerous accompanying plates.[39]

In this land of rivers and canals the bridge is a frequent feature, and often it is beautiful and accomplished. Chinese bridges may not now arouse the admiration of Western travellers to the same degree as they did Marco Polo six centuries and a half ago, yet the subject is worthy of study, and surprise is occasioned that Dr. Boerschmann ignores it in a general work such as *Chinesische Architektur*.

---

[35] *v.* L. de Beylié, *L'Architecture hindoue en Extrême-orient* (Paris, 1907), pp. 38-49.

[36] *v.* F. C. Maisey, *Sánchi and its Remains* (London, 1892), pls. V, VIII, IX and XX.

[37] *v.* J. Griffiths, *The Paintings in the Buddhist Cave-Temples of Ajantā* (London, 1896), pls. 11, 13, 16, 27, 28, 46, 58, 60, 67 and 86.

[38] A poor attempt, full of errors, to give an account of glazed roof tiles dating from the fifteenth to eighteenth centuries is that by E. Fuchs, entitled *Dachreiter* (Munich, 1924).

[39] *v.* also J. J. M. De Groot, *Rel. Sys. of China*, II (Leyden, 1894), pp. 769-794 and A. Volpert, *Die Ehrenpforten in China* in *Or. Archiv*, I (1910-11), pp. 140-8, 190-5.

英葉慈博士論中國建築

內有涉及營造法式之批評

有三千年文化歷史之中國。而無古建築物。豈非奇事。蓋中國昔日之建築師。以木爲惟一材料。非若吾人今日之用鋼鐵可比。故所造屋宇不能久存也。茲欲論者，除中國建築本身。有不能耐久原因外。其他有關係之點。亦將依次述之。試觀當今存在之建築有三百年歷史者甚尠。明代以前尤屬罕見。（明洪武初年爲西歷一三六八年）其不能經久，卽此足以證明矣。至於無木料之建築，如牆壁橋塔之類，則不在此例。夫年代旣久，吾人欲深加研究，必須參考古時紀載方爲可靠。然此種紀載，爲數不多。可考者惟山東河南四川之後漢墓碑。漢及後漢之自墓地掘出之陶器模型。自五世紀至十世紀之油漆暨雕刻記載。（多屬於佛龕之類）中國式之日本古建築圖形及各省志書而已。

由以上所述物體及文字之證明，可見中國人守舊心理之一斑。其對於建築一事必根據祖先方法，正如他事之遵守遺訓也。國家史籍並各地方志。關於都城之改造遷移。或朝代更替時。京城之重建。均極力摹仿古時之制度方法。言之甚詳。在華之外人亦頗關心此事。例如十二世紀中葉。女眞韃靼建都於北京。宮殿式樣。悉取諸開封宋代宮殿。

而宋宮殿。又係仿傚洛陽唐朝宮殿者也。韃靼非特仿宋宮殿之形式。且將宮中之木料。運至北京。而以之建造新殿宇焉。綜觀前例。可知中國之建築。在六百年以內者尚可考。（卽明朝前一百年）換言之，六百年前之木料建築。今日猶存在者。實屬罕覯。若專研究建築之歷史。則可上推至唐朝前八百五十年。是時秦始皇正建都咸陽。其規模之宏大壯麗。實遠勝於巴比倫之尼尼微城。

據歷史云，咸陽引伸至渭水東西若干里。其南北面積亦頗廣闊。全國富戶有十二萬家。均須造宅邸於城內。而携其所有財物以居焉。當君王克復一地也。乃將所毀宮殿之形式。重新建築一宮於京城。更以所獲財寶置於宮內。此類建築。計有一百四十五處。妃嬪萬人。卽分散住之。每宮均隨時準備。以冀帝駕臨幸也。此外尚有一最大皇宮。在河之北。莊嚴宏大。爲各宮冠。宮中廊廡。滿懸絲製織物。蔓延若干里，與各殿銜接。橋樑之形式。類似屋頂，係用木造成。長爲二八〇碼，寬爲一二碼，有六十八堡。八五〇柱。二一二橫樑。及兩頭石臺各一。雖然，如此尚不足以愜始皇之意。故於河之南又建一宮。此宮工程之偉大。久已盛傳於歷史。卽阿房宮是也。中有一殿。東西五百碼。寬百碼。上層能容萬人。下層由地至頂之高。足可將十碼長之旗竿直舉。其大可想而知矣。有七十餘萬罪人應定死罪者。均罰之建此新宮。及皇帝之陵寢焉。

夫咸陽城可謂極宏大繁華矣。然轉瞬之間，竟成焦土。除少數石柱外，均付之一炬，毫無存者。縱使掘地，亦只可覓得帶文字花紋之磚瓦石片等物。木料建築。終不可考。是故文字記載。雖有時不免過甚其詞。關於各種要點。或不致與事實相差太遠。吾人讀秦朝歷史。有三種事實。最爲明顯。一，秦始皇爲燒詩書之人。而未嘗改革固有之建築法式。二，各種宮殿形式。均搜羅建築於都城。三，紀元前三百年時。中國藝術。已達到最高程度。

秦始皇可稱中國拿破崙。廢除封建制度。而併吞各小國。成一大帝國。因其事業之偉大。世人遂公認統一中國建築制度。爲秦始皇之功也。

中國文學。惟詩賦與地志。材料最爲豐富。多數韻文。如古時之賦。用誇張名詞。華麗字句。以描寫宮殿或廟宇。至於志書。則係記載某地之重要事實。殊爲可信。茲欲研究之書。爲「洛陽伽藍記」。此類之書。在今日異常稀少。觀其題目。卽知與洛陽之寺院有關。此書推行極廣，因書中詳述關於佛教建築之光華。在北魏時。該項建築。已增加不少於京都。五四七年。(西魏大統十三年梁太清元年)有名楊衒之者。重詣洛陽。是時距魏朝被叛逆逐出洛陽已十三載矣。以前共有一三六七佛殿，而存者不過四二一。因恐日久湮沒無存，渠乃手寫誌記。以待後人觀感。在諸佛教建築之中，更有一巨塔，

余以後將細述之。

此種誌記之缺點。卽無正確之年代。且無專門之條款。故現今翻印之「營造法」式一書。極爲研究建築學者所珍貴。該書於一一〇三年發表。然在前七年。將作監已奉敕將書之材料搜集編訂。蓋後來所發表者。卽代此而起者也。原書著者爲宋李誠。一博學多才之官吏。旣精書法。著述亦豐。（如論音樂論馬等書）在北宋時。其所司職務。多關係於建築者。一一二六年。女眞韃靼佔領開封。官署悉被焚毀。而各種建築圖案。亦隨之變成灰燼無疑矣。迨宋朝改都杭州。遂又苦心搜羅。成一皇家圖書館。更根據原來定則重新翻印於蘇州。（蘇州在宋爲平江府）時爲一一四五年。（紹興十五年）但在今日一無存者。惟餘一一四五年本之鈔寫本六册而已。其中一部爲一廿歲少年名張蓉鏡於一八二一年，（道光元年）手錄，並附藝術家王君謨之手繪。該册現置於南京國立圖書館，在一九一九年（民國八年）前內務總長朱啓鈐君用石印將其印出。惟面積較原來者稍小耳。次年商務印書館又用石印照原本尺寸將其翻印。據聞宋刋印本。尙存於北京皇宮。不幸此等貴重書册。當圖書館遷移時。竟致遺失。但一九一八年。北京圖書館館長，傅增湘又得殘缺不全之頁。據云，卽一一〇三年之本。以此項殘缺書頁爲根據。乃得將原來體例。依次查出。重新編校。此事係由朱啓鈐君總其成。陶湘君司其事。煞費苦心。乃底於

成。殊非容易。此書與鈔本曾經對照。尙無錯誤。內中說明。亦經建築專家改正。書後並有附錄兩種。一爲近代圖畫之說明。一爲彩畫之解述。此八卷巨册。印於一九二五年，（民國十四年）爲著書之集大成者。此書因印刷之精。製訂之美。及批評之佳。故得風行一時也。

在中國近年紛擾之中。有此成就。良可注意。而所以有此成就。蓋因研究建築學者。鑒於該書。關於宋代名詞。及當時建造之方法。材料之採用。記載甚詳。但必須加以註釋。現代建築家。方能切實明瞭故也。書中所論。除普通建築外。官舍亦包括在內。是以有許多制度。係以歷朝傳下之官訂標準爲原則。雖然，其能根據事實。不涉虛張。在中國古書中。已屬可貴者矣。本篇所列之第一圖。（A與B）（從略）係自第一九二五年版翻印者。著者之用意。非欲顯示顏料之精采。乃因此種五色花紋。在中國建築中。佔重要部份。且與古時希臘建築相似。故選此圖而加以註解焉。

法國之德米維尼君 M. P. Demieville 曾著營造法式評論一書，該書可謂爲歐美著作家。對於中國建築學。最有價值之貢獻。然直到今日。此種關於建築之著述。較之關於他種中國學術者。量質均遠不能及。出版最早爲一七五〇至一七五二年（乾隆十五年至十七年）建築家哈佛片尼 Willam Halfpenny 父子所集之雕刻銅版圖册。名曰中國廟宇等

新圖樣。版權卽爲該氏所有。至一七五七年，（乾隆二十二年）又有建築家常博思 Mr. Chambers 著，關於中國建築一書。並附雕刻版圖畫廿一頁以資說明。圖畫乃中國畫師對原形繪出者。該書之優點甚多。最顯者爲較他書少有錯誤是也。

常博思君。十六歲時卽在東印度瑞典公司任押貨員。遂得機會常到廣東。其著作之材料。多係於是時搜集者。當一七五七至一七六二年（乾隆二十二至二十七年），渠在丘氏園中 Kew Yardens。創造中國式建築數處。如寶塔等。至今猶遺有威嚴景象也。最大之工程爲 Somerset House。而常君之名亦與之永垂不朽。至一七七一年（乾隆三十六年）瑞典王任渠爲武士。佐治第三 George III。更錫以爵位。令人稱之曰威廉爵士。卒於一七九六年（乾隆六十年。嘉慶元年之間）

常君旣歿百年之內。西人竟無繼續研究建築學者。直至一八六六年（同治五年）始有一軍醫官。名蘭勃銳 Lamprey 者。在英國建築學社論文中。有關於此題之一文發表。繼之者，一八七三年（同治十二年）有辛博森，W. Simpson。一八九四年（光緒二十年）有顧銳坦。F. M. Grattan。其中以辛博森之論著。最令人滿意。蓋因彼曾遍遊中國故也。又伊東 Ptoto 教授。在宗教與倫理學叢書 Encyclojsadia of Aelifion and Ethics 中。亦有相似之論文。此外伯利羅哥 Paleologue。布施 Burhall。滿斯特白格 Munsterberg。三人合

編之『中國藝術。』及屈愛西 A. Choiry 畢羅艾 F. Benoit 所著藝術史等書中。亦涉及此題也。雖兩書均不免有舛誤之處，但後者係參考專門家之著作。（例如夏萬尼 Chavannes 所著藝術考。余將詳論於後）寫成。立論之眼光較遠。至後來出版物。如福來止爵士 Sir Bunister Fletcher 著之藝術史。則錯謬更多。所舉圖例。皆係揣度之形。而不能代表中國建築之式樣。

關於中國之建築。或建築形式之出版物甚多。或爲專著。或爲雜誌。或爲遊記。若一一列舉。不勝其繁。亦出乎本題範圍之外。但可注意者，卽吾人必須用西方建築學家之眼光。以研究此種專門學問。故欲明瞭中國之建築。莫善於參考德國赫德博琅 H. Hildbrand 所著。「北京大覺寺構造說明」。因該書所載。既無本地土語。亦少有匠人之行話故也。按余所知中國建築學。除德米維尼 M. Demieville 在讀李誡所著營造法式時。稍有所得外。其他西方著作家。尙無研究者。

多數西方著者。對於中國都城。（北京）均有批評。獨辛博森君謂『北京不過一墻垣殘缺。街道汚穢之鄉鎭耳。』此種論調。不免過偏。其實北京乃保存古代建築最多之城也。雖經過改造遷都等變遷。各種古蹟。尙能保全。且吾人亦相信北京。自古卽爲建都之地。今日之形狀。更與周之都城相同。考孔子之言。卽可證明矣。因宮中建築之大

。冠於全國。故每論及京城。卽在天子範圍之內。是與他國不同之點。席倫教授 Prof. Siren。所著「北京宮殿考」The Imperial Palaces of Peking。與彼近著之「北京城垣城門考」Walls and Gates of Peking。同等重要。亦此故也。該書不但能將建築圖型。留之永遠。且有歷史背景。而所載營造制度。對於建築學家。價值尤大。席君手攝影片。在其書中。分晰頗詳。在日人所著「北京皇城」。暨「北京宮殿建築修飾」等書中。則將其總括論之。但此等書多已無存者。至於郊外之行宮。書中極爲稱讚。關於古時對宮內裝飾之傳說。引證更詳。然極費苦心矣。

能將本題提綱挈領。總括評論。首推德國之白希曼博士。Dr Ernst Boerschmann。一九〇六年(光緒三十二年)白君奉德政府命。來華考察建築事業。及中國建築與文化之關係。在華三年(光緒三十四年宣統元年之間)。遊遍十四省。結果將其所得著書數册。貢獻國人。論中國廟宇建築者。計有兩卷。名「中國之建築。」Chinesche Architeltur 初稿不免稍有錯誤，但著者在序文中。已一一更正。並聲明所引證關於建造方法。歷史變遷各點。多從簡略。因編是册之目的。祇在將今日中國之建築。用圖畫表彰而已。是以册中。依建築之形式。分爲二十類。共有極精美之照片五百九十一種。尙有許多圖畫。未計在內。今日中國內有戰爭之摧殘。外受西方文明之影響。古蹟日漸淪亡。此册誠有永

久保藏之價值。且此册雖文字材料不甚豐富。讀者不可以爲白君未多致力。蓋渠關於建築之著作。不止於此也。渠更積極編著「中國建築學文庫」。包羅甚廣。類別亦多。有已出版者。有未印就者。苟學者研究某種重要問題。參考此書。必能十分滿意也。

建築學文庫中之一種。專論古塔。(其他西人論塔之著作。亦不少。)總計古塔之數。約有二千。現今存在者。以太室山之塔爲最古。太室山者。嵩山之分脈也。該塔屬嵩嶽寺範圍以內，建於六百年前。原址爲魏代之宮殿。在五二三年時被焚。該塔係同時建成者。

寶塔，在中國爲點綴風景之物。而西方則用爲紀念中國之象徵。在十九世紀中年。南京瓷塔未破壞以前。該塔列爲世界奇蹟之一。此吾人承認最足代表中國建築者。然而著作家。多半以爲其源起於印度。而中國之發明。不過在其進化中。佔小部份而已。白氏採納此種理論。而未嘗提出證據。以證明之。其實按之事實。則現今所存之文字。不足以證明此說。爲全可信也。吾人所得關於佛教在中國初期之歷史。殊屬稀少。而往往爲神話奇說所隱晦。吾人知紀元前二年。有天竺使者。或中國人自天竺歸者。始携佛教而入漢京。據傳說，明帝使者。於西曆六十七年。偕兩胡僧自該國同來。其他佛教徒。在第二三世紀之間。相繼而至。天竺人爲最熱烈之佛信徒。其名王干尼希卡 Kaniahka

。蓋生於第一世紀。其藏骨之所。卽爲比斯哈哇 Beshauar 之宏大寶塔也。

關於印度聖殿之記載。係佛教使者。連同佛經佛像帶到中國。據佛教之傳記云。在三世紀中葉。有一外國僧人。勸當時皇帝。建一寶塔於南京。後人就其原址。改建瓷塔。較爲可靠之歷史記載乃北魏惠生所寫。因五一八年（魏神龜元年梁天監十七年）時。彼曾被胡太后派遣。携帶信徒。前往印度實地考察之故。或云，渠更令印度匠人。將干尼希卡。以及印度北部之大塔。用銅鑄成模型。又在五世紀時。有一中國信徒。名道岳者。往印度遊歷。在其遊記中。將比斯哈哇寶塔之面積，丈尺。記述甚詳。但此遊記。雖然存在。殊殘缺不全耳。以上所述。係表明佛教最初傳入中國時之建築思想。同時該書所記干尼希卡寶塔。又與本書討論之「洛陽伽藍記」。（見前）互有關係也。書之末章。除干尼希卡塔之解釋外。皆係述宋雲所領太后遣派之使者之傳記。此外中國信徒之著述亦不少。惟皆未能將印度建築之形式。指示吾人。斯爲可惜。法國裴利阿 Professor J. Jelliot 教授。曾寫一短篇記載中國二世紀時。所建之佛廟。據云，頂上以圓形之金屬堆成。下層用塼砌成若干級。內中能容三千人。四圍環以廟宇。此種制度。或爲根據印度之風俗。或卽爲中國寶塔之形式。余將解述於後焉。裴君又引證在漢時中國有眞正之佛廟。而此項廟宇表明虔誠之信仰，並非常存於建築之中也。

「洛陽伽藍記」第一章。係述一木質寶塔。共有九級。五一六年時熙平元年。胡后勅建者。據著者之描寫此塔。必係都城內最精華之建築。高達一千尺。可於三十里外望見之。塔上有一百尺高之桅檣(原文作金剎)上挂三十碗形之金質圓物。最高之處。則爲罇形金頂。桅檣與塔之四角。以鐵練繫之。更以五千四百鍍金鈴鐺。懸滿全塔。當五三四年(永熙三年)此塔被焚時。人民歎息。自不待言。且有三僧以身殉難。三月之後。火猶未息。塔基餘燼延燒一年。工程之浩大。可想見矣。此塔雖係建於六世紀以前。但構造形式。與今日之塔。無甚差異。

塔階面積。愈上愈小。每階之邊。環以欄杆。或綴以飛簷，視之頗似屋頂。有時階上亦繞以較矮欄杆。不論是磚或石造成。其模型固與木塔無異。例如最古最華麗之攝山石塔。(在滬寧路某站。距南京約十五里。)是也。(參考第二圖)據傳說，此塔爲十七世紀初年。隋文帝在國中所建，八十三塔之一。

今欲討論之問題。卽爲印度之塔究屬何種。係木質。抑係塼石造成。雖有人謂尼波nepal木塔之構造。係自古時傳下者。但印度之建築旣無存者。又無記載。故難證明。不如旁證中國之塔。較爲可信。余欲詳解中國之塔形。乃不得不搜集各處材料。及賴本地人之幫助。中國之塔。共爲兩種。一種稱「臺」。此種塔爲數最多。高約三百尺。國君

往往浪費金錢以爲塔之裝飾。人民不免報怨也。另一種爲「樓」。除書籍記述外。可考者爲漢代之瓦塔。二千年來建築之原則。在古塔及東方古建築中。可以顯示吾人。樓塔之例。如武昌之黃鶴樓。許多詩人。及美術家。以此爲題目。而且自六世紀初年。此樓初建於揚子磯頭之後。屢經修建。其命名之意義。乃由道教之傳說。謂曾有仙人跨鶴飛昇也。

由此言之。塔之起源。蓋爲墓碑。或盛骨之匣。抑或爲中國固有之樓觀建築。仍有以上兩種解說。不能包括者。或可列爲金字塔一類。是爲人類所築最粗陋之一種。其源皆有一部份。出於臺或樓，但容亦爲外國所輸入。其表範蓋爲印度之 Vishnu Shrine。及多級金塔字之寺院。故與臺同爲含有米索波利亞之遺傳性者也。古代印度金字塔式之建築存於現在者，莫如著名之佛陀伽耶根本大塔 Bodh-yaya 寺。據福開森君之說。爲六世紀之物。或更早數百年。中國大旅行家玄奘。曾謁此寺，并爲之記述。及其歸國。乃發願建三百尺高之石塔於長安。以貯藏其所携歸之經典及聖物。在六五二年（永徽三年）皇帝允許建一四方五層之塼塔。高一八〇尺。而每方最低之一級。長一四〇尺。書中特述其爲依外國風範而築。非依中國舊標準也。（慈恩傳卷七）此項建築，歷來經過許多修善。但今日所存之七層建築。爲當日玄奘親手所成。蓋無疑也。卽以雁塔之名而思之。

必爲出於印度。其實在之表範。殆爲佛陀伽耶 Bodh-yaya 九級之廟。雁塔之外形。頗有參差不齊之處。但其主要部份。仍可視爲佛陀伽耶 Bodh-yaya 之風範。

次於塔者，則中式之屋頂也。其飛簷之曲折。其豐富之裝飾。予外人以奇異之感想。由此而得甚多之解說。多半毫無根據。就中如謂『源於中國之遊牧先民所用之帳幕』。然中國之先民。可謂遊牧民族乎。縱使如此。其所用之帳幕。卽爲吾人所見者乎。不獨此也。飛簷式，直至紀元後五百年，始出現也。尤以藍樸雷 Surgeon Komprey 氏所說爲最可笑。其意曰：『飛簷似松樹之虬枝。而簷端之走獸。似松鼠也。』白希曼博士 Dr Boeschmann 則曰。『華人之用飛簷。蓋欲表示人生之動作。且以象種種巖巒樹木之形。』更有人謂：『由於特殊之氣候情形。不得不用高凸之屋頂。以洩霖雨蔽烈日也。』總之，此問題尙未得相當解決。亦不知飛簷究起於何時。據白氏之說，非起於唐。然唐代包括三百年之久。其說亦殊模稜也。

因吾人現在對建築學之知識有限。故不得不根據古代印度之一說。但對此最有研究者。惟愛迪京君 Edkins 一人而已。古時印度之曲形屋頂。於 Sanchi 之雕刻。及 Ajanta 之牆壁油漆。均可見其大概也。

屋頂之裝飾。在中國更形複雜。蓋均有用意。此處姑略之不細述。白希曼君舉例雖

多。而於塼瓦及屋頂之裝飾瓦。則不甚詳。惟營造法式。論屋頂之處頗多。尤注重有綠釉之瓦。

除本書第二圖之寶塔外。能表現中國建築藝術者。則爲第三圖之牌樓或牌坊。雖未能將其意義與構造。一一解述。但觀第三圖之四種形式。亦可知其進步之程序矣。讀者如能參閱白氏之著作。當不無補益。

中國河流既多。橋樑自亦不少。且橋之形式。亦殊美觀。惟較六百五十年前之馬哥孛羅 Marco Polo 橋。(盧溝橋)則相差遠甚。故不能引起西人之注意。雖然，此種建築。實有研究之價值。白氏在其「中國建築學」書中。竟致忽略。人皆異之也。

仿宋重刊營造法式校記

民國乙丑　重刊營造法式　曾由武進陶君湘　以石印丁氏鈔本　與文淵文溯文津三本互勘　復以晁莊陶唐摘刊本　蔣氏密韻樓鈔本對校　補缺正誤　其各本相同者　明知爲誤　不敢臆改　疑以傳疑　誠哉愼之又愼　頃承　紫江朱先生之命　講求李書讀法　乃以仿宋刊本　與四庫校本及丁本重校一過　斧落徽引　爬羅剔抉　於當日檢校疏漏者　一一標出　引用之書　證以原本　本書前後互見者　參酌訂正　間有疑義　折衷圖算　其字體不同　如閒之爲間　叚之爲段　徧之爲遍之類　人所習知　一目瞭然者　仍不列舉　又陶君附錄　於焦竑經籍志周亮工書影二事　未及采錄　今爲補述　宋史藝文志著錄　李氏新集木經　曾以本書互校　茲幷附錄於後　民國十九年四月合肥闞鐸

甲　校記

筍子　第一頁第八行第三格　着當作差

依四庫本丁本改

看詳　第一頁第十行第十七格　垂當作懸

立者中垂　考工記垂作懸　此是避宋始祖玄朗之諱　見紹興禮部韻略　所載紹興重修

文書式　此字之譌　蓋自紹興始　亦足證丁本之根據紹興本也　其桓構等字　原本皆缺文　內塡淵聖御名等字者　今俱已改正　下條皆同

又　第十三行第二十一二格　第十四行第一字　衡以水　三字衍

所引墨子　爲法儀篇文　直以繩之下　無衡以水三字　今據刪

又　第十四行第四格　垂當作懸

又　第二十一行第一格　韓下奪非字

又　第十四五格　班亦當作王爾

所引韓子　爲韓非子卷四姦刼弑臣第十四文　原文雖王爾不能以成方圓　丁本皆誤作班亦　今據改　蓋迻寫時　因班字從王　爾之古文爲尒　省作尒　與行書亦字相似　以此致誤

又　第二頁第二行小注　隋當作墮

依四庫本改

又　第三頁第十七行第一格考上奪周官二字

又　第七格　垂當作懸

又　第四頁第二行第一格　刊當作匡

又　第三格　證當作正

匡謬正俗　唐顏師古撰　四庫總目　稱宋人諸家書目　多作刋謬正俗或作糾謬正俗

蓋避太祖之諱　證乃正之誤　下文舉折條　總釋取正條　皆已改

又　第五頁第五行第十三格　垂當作懸

又　第六行第三格　垂當作懸

又　第五頁第十六行第六格　禮當作官

又　第八頁第四行第一格　刋當作匡

又　第十一頁第二行小注　撑當作樘

又　第十七行小注　落當作絡

後文法式六　露籬小注　落　四庫本作絡　今據改

法式目　第六頁第八行第二格　瓦作當作宐作

又　第九行第四格　結瓦當作結宐

四庫本丁本　瓦作　結瓦　用瓦　厦瓦　瓦畢　施瓦之瓦　皆作辰　玉篇　宐　五化切　泥瓦屋也　按辰爲宐之俗字　李書瓦作結瓦　施瓦　瓦畢　皆應依四庫及丁本作宐　餘仍作瓦　下同

又　第十一頁第五行第三格　瓦作當作宐作

又　第十一行第十三格　瓦作當作宐作

法式一　第一頁第十七行　標目奪總釋上三字

又　第一頁第二十一行第一二格　禮下奪記字　儒下奪行儒有三字

所引爲禮記儒行之文　依他條之例　應據改

又　第二頁第四行第九格　名當作民

又　第五行第十一格　爲下奪宮室爲三字

又　第十七格　宮字衍

又　第六行第二格　旁當作邊

所引墨子　爲辭過第六之文　而與原文小異　原文爲古之民未知爲宮　時就陵阜而居穴而處　下潤濕傷民　故聖王作爲宮室　爲宮室之法　曰高足以辟潤濕　邊足以圉風寒　上足以待霜雪雨露　宮牆之高　足以別男女之禮　丁本及四庫本民誤作名

作爲宮室爲宮室之法　奪宮室爲三字　曰宮之宮字衍　邊誤旁

又　第二十一行第二格　官當作禮

又　第二十二行　禮天子諸侯臺門天子外闕兩觀諸侯內闕一觀

所引爲公羊昭二十五年傳何休解詁文　禮記禮器　有天子諸侯臺門　無下二句

又　第三頁第十四行小注　卩當作曰

木板字畫脫落

又　第十五行第十九格　商當作殷

殷改爲商　係避宋太祖父弘殷之諱　下同　今改正

又　第四頁第十三行第八格　亭當作停

又　第五頁第十一行第一格　禮字衍

又　第十三行第六格　越字衍

依四庫本改

又　第七頁第五行第四格　准當作準

又　第十行第七格　垂當作懸

又　第十五行第一格　刊當作匡

又　第二十行小注　椽當作掾

又

所引漢書爲百官公卿表文　將作少府　景帝中六年　更名將作大匠　屬官有石庫東園主章　左右前後中校七令丞　如淳曰　章謂大材也　舊將作大匠主材吏　名章曹掾

師古曰　今所謂木鍾者　蓋章聲之轉耳　東園主章　掌大材以供東園大匠也　又主章長丞　師古曰掌凡大木也　武帝太初元年　更名東園主章爲木工　章曹掾之掾　四庫本亦不從木　今據改

又　第八頁第一行小注　三當作至

木板點畫脫落

又　第十五行第四格　角落當作各落

文選原文　及下文鋪作條引　角俱作各　今據改

又　第九頁第一行第一格　語上奪論字

又　第四行第三格　盧當作櫨

又　第二十二格　上下奪員字

據釋名改

又　第七行第八九格　礫㔷

宋淳熙本文選　礫㔷作礫垝　按礫礫同字　㔷訓重累　又訓支柱　上林賦連卷欐㔷

垝訓毀　垣墉圮壞曰垝　詩衞風　乘彼垝垣　又訓坫　爾雅釋宮　垝謂之坫　似與賦意不合　仍以作㔷爲是　意李氏當日所見之本　或是如此　今仍之

又　第九頁第十行第九格　榱當作枅
又　第十二行第十二格　矯當作蟜

據文選原文改

又　第十八行第四格　都當作京
又　第十頁第二行第十一格　之當作以
又　第三行第二格　都當作京
又　第五行第一二格　何晏二字當刪

總釋引書之書名　多先詳後略　如班固西都賦　王延壽魯靈光殿賦等第二次　即不書人名　皆其例　何晏字　再見　應刪　下同

又　第十八行第一二格　何晏二字當刪
又　第六格　商當作殷
小注　柱當作注
又　第十一頁第一行第一二格　何晏二字當刪
又　第二行第九格　以當作而
又　第六行第一格　語上奪論字

又　第七行第八格　梲當作棳

據爾雅原文改

又　第九行第四字第六格　棳字也字衍

據釋名釋宮室第十七原文改

又　第十三行第九格　撐當作樘

撐　文選作撐　注字林曰　撐　柱也　樘　唐韻　集韻　韻會　同樘　徐鍇曰　俗作撐非　樘　音瞠　樘之言定也　無從手樘字　四庫本作　撐非　丁本引長門賦　說文魯靈光殿賦　及注　皆從木　不誤

又　第十五行第十一格　牾當作牾

丁本　梧　牾　皆作迕　釋名　兩字皆作牾　按上一字　當作梧　下一字　當作牾

漢書王莽傳　亡所牾意　後漢書　桓典傳　牾宦官　皆作牾　俗刻作牾非　今據改

法式二　第二頁第一行小注　庋當作庪

所引儀禮爲鄉射禮文鄭注　庋作庪　文淵閣本亦同　今據改

又　第六行第九格　桶當作桶

又　第九行小注　榜當作榜

依四庫本　及本書諸作異名改

又　第十一行小注　相正當當作正相當

小注所引　係爾雅郭注原文，相正當作正相當　四庫本亦同　今據改

又　第十五行第四格　干當作于

干　丁本及四庫本皆作干　所引爲儀禮士冠禮原文　亦作于　今據改

又　第三頁第二十行第一格　禮下奪記明堂位四字

又　第三頁第二十行第三格　廇當作廟

據禮記原文改

又　第五頁第十七行第五格　也下奪在外二字

又　第六格　爲下奪人所二字

又　第八格　幕當作摸也

釋名釋宮室第十七　門捫也在外爲人所捫摸也　障衛也　此條引作捫幕障衛　誤

依原文改　今

又　第六頁第一行第六格　搏當作塼

依四庫本改

又　第十三行第十二格　如下奪和字

第十四格　人字衍

又　所引爲漢書尹賞傳注文　今據改

又　第二十一行小注　者云當作也

又　第二十二行第七格　披當作邳

據文選改

又　第八頁第十行小注　邸後版也謂後版屏風與染羽象鳳凰羽色以爲之

小注所引爲周禮天官掌次職設皇邸鄭司農注原文　而四庫本作邸後版也其屏風邸染羽象鳳凰以爲飾　丁本與鄭注合　今仍之

又　第十四行第四格　屏下奪言字

又　第六格　以下奪屏字

釋名釋牀帳第十八　屏風言可以屏障風也　今據改

又　第九頁第十七行第二格　官當作禮

五代會要　乾祐元年閏五月　國子監奏雕印四經　內有周禮　又宋人所記五代監本及北宋監本目亦同　本書它處亦作禮　今據改

又　第十頁第四行小注　乎當作胡

又　第十四格　㥄當作懷

又　第十七格　灌當作淮

又　第六行第十一格　灌當作淮

依四庫本改

又　第八行第二格　官當作禮

又　第十一行第二格　都當作京

又　第十一頁第一行第三格　堦當作階

又　第十二頁第三行第十格　一當作二

依看詳取徑圍　及四庫本改

法式三　第三頁第十八行第十一格　躡當作躡

木板點畫脫落下四條同

又　第七頁第十行小注　丁當作下

又　第十八行小注　空當作空

又　第二十二行小注　杜當作杜

法式四　第二頁第十三行第六格　五當作四

又　第四頁第八行第二格　慢當作慢

木板點畫脫落

又　小注　面當作兩

又　第六頁第十八行第十四格　梁下奪小注其騎科棋與六鋪作同九字

依四庫本補

又　第七頁第九行小注　蜉當作蜉

又　第八頁第四行小注　訛角科　角下奪箱字

據大木作圖樣絞割鋪作棋昂科等所用卯口第五圖注增

又　第十一頁第四行小注　邊字衍

法式五　第二頁第十八行第二十一格　背上當作上背

依四庫本及前條乙轉

法式六　第四頁第十四行小注　扇當作版

依四庫本及總目改

又　第九頁第十二行小注　落當作落

依四庫本改　落訓籬落

法式七　第一頁第十二行小注　眼格當作格眼

依四庫本及總目與下文他作乙轉

又　第二頁第十行小注　量攤擘扇數宜隨宜加減當作量攤擘數扇隨宜加減

上宜字衍

依四庫本及次頁樽柱頰條小注改

又　第十一頁第一行第十一格　者字衍

法式九　第一頁第十三行第十一格　下當作上

丁本四庫本皆作脚上　蓋佛道帳之名件　從最下之龜脚爲始　前條有自坐下龜脚至鴟尾　共高二丈九尺云云　卽自下而上之證

又　第四頁第一行第七格　幌當作榥

又　第五頁第八行第七格　結瓦當作結宐

又　第七頁第四行第二十格　結瓦當作結宐

又　第十五行小注　結瓦當作結宐

法式十　第五頁第八行第九格　結瓦當作結宐

又　第七頁第二十二行第十一格　結瓦當作結宐
法式十一　第十二頁第三行第二十一格　結瓦當作結宐
法式十三　第一頁第十三行第二格　瓦作當作宐作
又　第十四行第五格　結瓦當作結宐
又　第十五行第二格　結瓦當作結宐
又　第十六行第十八格　結瓦當作結宐
此條本文結瓦字　丁本多不作瓦　與標題不同　似爲筆誤　今依他條之例改正下
同
又　第二頁第一行小注　結瓦當作結宐
又　第一行第十九格　瓦畢當作宐畢
又　第三行第十九格　結瓦當作結宐
又　第七行第三格　結瓦當作結宐
又　第三頁第七行小注　結瓦當作結宐
又　第十三行第十三格　施瓦當作施宐
又　小注　結瓦當作結宐

又　第十四行小注　施瓦當作施宐

又　小注前行　結瓦當作結宐

又　後行　結瓦當作結宐

又　第四頁第十五行第一格　結瓦當作結宐

又　第八頁第十六行第九格　之字衍

又　第十頁第十四行　隨宜減之卷殺瓣柱當作隨宜減之卷殺蒜瓣柱

四庫本　卷殺瓣柱　作殺蒜瓣柱　玉篇　蒜　俗蒜字　此文當是蒜瓣柱而俗寫作蒜

應改爲隨宜減之　卷殺蒜瓣柱

又　第十七行小注　獅當作猊

依四庫本改　他處師子　亦不作獅

又　第六頁第七行第三四格　間當作閣　至字衍

殿閣廳堂亭榭　見下塼作制度用塼條　今據改

又　第七頁第八行第八格　間當作閣

依四庫本改

又　第十頁第二十行第五格　頂當作項

依四庫本及前條改

又　第十二頁第一行第十九至二十二格　以青石灰四字衍

又　第二行第六格　青下奪石字

法式十四　第一頁第十九行小注　狗當作狼　研當作研

又　第二頁第一行小注　茶當作茶

又　第五頁第十行第十二格　羿當作羚

又　第十二行小注　羿當作羚

又　第六頁第十八行第二十二格　一當作或

又　第七頁第二十行小注　王當作玉

木板點畫脫落

又　第九頁第三行第十一格　用當作刷

依四庫本改

法式十五　第六頁第十一行小注　甍當作甓

甍　四庫本作甍　與看詳諸作異名同　玉篇甓　坯也　廣韻集韻訓瓦器　其與瓦異

名　蓋一爲成品　一爲坯材　至雲則訓瓦棟　左傳襄二十八年　猶援廟桷動於雲　而釋名訓爲瓦脊　在上覆蒙屋也　殆指以瓦結成之屋脊而言　與雲不同　今據改

又　第六頁第十六行第十三格　八當作六

依四庫本改

又　第九頁第六行小注　露當作窰

依四庫本及下文改

又　第八行第十一十二格　火候當作候火

依四庫本改

法式十六　第二頁第十三行第一格　工當作上

依四庫本改

又　第三頁第四行第二十二格　每一當作每二

依四庫本改

又　第六頁第十三行標題　彫鐫功下奪小注其彫鐫功並於素盆所得功上加之十五字

依四庫本改

又

第九頁第二十一行第二十二格　櫻當作瓔

依四庫本改

法式十七　第七頁第二十行小注　一鋪作當作六鋪作

依四庫本改

法式二十　第九頁第十七行小注　槫當作槏

依四庫本及下條改

法式二十二　第二頁第十六行第三格　裹當作裏

依四庫本改

又

第十一頁第三行第十七格　幌當作榥

依四庫本改

法式二十三　第十頁第十九行　并行廊屋當作并挾屋行廊

丁本四庫本　殿身條行廊下　均有屋字　角樓條行廊下　無屋字有等字　按之小木作制度及功限所列　此條應作并挾屋行廊　與前兩條一律

法式二十五　第三頁第二十一行小注　縛當作縛

依四庫本改

法式二十七　第八頁第十八行第五格　十當作百

依下條瓦一百口例改

又　第二十行第六格　丈當作尺

依塼作諸條改

法式二十八　第一頁第十八行小注　欒當作襻

依四庫本改

又　第六頁第六行小注　一尺當作一尺

依四庫本改

又　第八頁第九行第二格　應下奪使字

又　第十二頁第四行第十格　蜒當作蜒

依四庫本改

法式三十　第五頁　大角梁下小注　辦當作瓣

又　鷹觜駝峯三辨　兩辨駝峯　辨均當作瓣

又　第六頁　杪均當作抄

法式三十一　第一頁第五行第十三格　第一之一當作十

依目錄改

又　第五頁　殿堂下奪等字

依目錄增

又　第六頁小注　八鋪作當作六鋪作

法式三十二　第十頁　第三之三當作二

依目錄改

法式三十三　第四頁　團科寶照團科柿蔕　科當作科　附彩圖同

又　第十二頁　狩當作羚　附彩圖同

又　第十六頁　科當作科　附彩圖同

依丁本改

又　第二十一頁　團科　科皆當作科　附彩圖同

法式附錄　墓誌銘第一頁第一行第十六格　士當作事

又　第十八行第十七格　二當作三

法式後序　第一頁第十四行第十三格　姓當作名

補遺

法式三　第十二頁　第六行　第十四格　壘澁當作疊澁

壘澁　丁本四庫本同　惟法式十六笏頭碣功限　及本卷角柱殿階基　皆作疊澁　今據改

乙　補諸書記載二事

明焦竑經籍志　史官記注篇職官類之末　有營造法式三十四卷　小注曰宋李誡　其序文言以當代之書　統於四部　又言宣德以來　世際昇平　篤意文雅　廣寒清暑二殿　及東西瓊島　遊觀所至　悉置墳典云云

按明史藝文志　謂宣宗嘗臨視文淵閣　親披閱經史　是時祕閣貯書　約二萬餘部　近百萬卷　刻本十三　鈔本十七　正統間楊士奇等言　以文淵閣書籍　向貯左順門北廊者　今移於文淵閣東閣　臣等逐一點勘　編成書目云云　焦氏據歷代現存之書　編爲志目　蓋卽此類　可爲李書宋刋原本　至明萬歷間尙存之證　此較明文淵閣書目之箸錄而未詳卷數　內閣書目箸錄而明言不全者　更爲可貴

周亮工書影卷一　近人著述　凡博古賞鑒飲食器具之類　皆有成書　獨無言及營造者

宋人李誡之　有營造法式三十卷　皆徽廟宮室制度　如艮岳華陽諸宮法式也　聞海虞毛子晉家有此書　凡六册　皆有圖　欵識高妙　界畫精工　竟有劉松年等筆法　字畫亦得

歐虞之體　紙板黑白之分明　近世所不能及　子晉翻刻宋人秘本甚多　惜不使此書一流布也

按周氏所紀　似指宋刊本　其言界畫　與讀書敏求記合　但書影賴古堂原刻本　李誠作李誠之　三十四卷作三十卷　又與四庫提要所稱研北雜志所誤相似　實爲傳寫之訛至謂有艮嶽法式云云　望文生義　殆亦聞所聞而來者

丙　以宋李誠木經與營造法式互校

宋史藝文志雜藝類著錄　李誠新集木書一卷　近代未見傳本　每疑木書卽木經　已包含於營造法式之內　古今圖書集成經濟彙編考工典　第十一卷規矩準繩部彙考　第三十五卷宮室總部彙考　兩引木經　而卷數在後之宮室總部彙考　且標題曰宋李誠木經　然則編圖書集成之當日　猶及見木經傳本耶　惟考工典第七卷木工部彙考　又引宋李誠營造法式　諸條之中　有定平擧折兩條　與所引木經之文　全然相同　特法式係屬看詳　援引經訓　益加詳晰耳　法式晚出　木經被其包含　於此益信　今以圖書集成考工典　所引木經　以同典所引之法式　與之對較　欵式如舊　上下互列　異同瞭然　再以重刊本法式　爲之勘正如左

木經　定平　定平之制　既正四方　據其位置於四角各立一表　當心安水平　其水平長二尺四寸　廣二寸五分　高二寸　下施立椿長四尺　注安鑿在內此四字法式重刊本作小注同上面橫坐水平　兩頭各開池　方一寸七分　深一寸三分　注或中心更開池者方深同此十字法式重刊本作小注同身內開槽子　廣深各五分　令水通過於兩頭　池子內各用水浮子一枚　注用三池者　水浮子或亦用三枚此十二字法式重刊本作小注同方一寸五分　高一寸二分　刻上頭令側薄　其厚一分　浮於池內　望兩頭水浮椿子之首　遙對立表處　於表身內畫記即知地之高下　注若槽內如有不可用

宋李誡營造法式又木工部引

定平之制　既正四方　據其位置於四角各立一表　當心安水平　其水平長二尺四寸　廣二寸五分　高二寸　下施立椿長四尺　安鑿在內　兩頭各開池　方一寸七分　深一寸三分　或中心更開池者　方深同身內開槽子　廣深各五分　令水通過於兩頭　池子內各用水浮子一枚　用三池者　水浮子或亦用三枚方一寸五分　高一寸二分　刻上頭令側薄　其厚一分　浮於池內　望兩頭水浮子之首　遙對立表處　於表身內畫記即知地之高下

水處即於樁子當心施墨線一道　上垂繩墜下　令繩對墨線心　則上槽自平　與用水同　其槽底與墨線兩邊　用曲尺較令方正　此五十六字法式重刊本作小注又水浮樁子樁字衍

凡定柱礎取平　須更用貞尺較之　其貞尺　長一丈八尺　廣四寸　厚二寸五分　當心上立表　高四尺　注廣厚同上

此四字法式重刊本作小注同又貞尺作眞尺

於立表當心　自上至下　施墨線一道　垂繩墜下　令繩對墨線心　則其地面自平　注其眞尺身上平處　與立表上墨線兩邊　亦用曲尺較令方正　此二十三字木工部引無此文法式重刊本作小注又木工部引地面自平上多一下字　圖書集成考工典宮室總部引

宋李誡木經舉折　圖書集成考工典宮室總部引

舉折之制　先以尺爲丈　以寸爲尺　以

凡定柱礎取平　須更用貞尺較之　其貞尺長一丈八尺　廣四寸　厚二寸五分　當心上立表　高四尺　廣厚同上　於立表當心　自上至下　施墨線一道　垂繩墜下　令繩對墨線心　則其下地面自平　舉折之制　先以尺爲丈　以寸爲尺　以

分爲寸　以釐爲分　以毫爲釐　側畫所建之屋　於平正壁上　定其舉之峻慢折之圜和　然後可見屋內梁柱之高下卯眼之遠近　注今俗謂之定側樣　亦曰點草架此十二字木工部引無此文法式重刊本作小注又峻慢作峭慢舉屋之法　如殿閣樓臺　先量前後檐檐方心　相去遠近　分爲三分　注若餘屋柱柱頭作　或不出跳者　則用前後檐檐心此十八字法式重刊本作小注同從檐方脊至脊槫背　舉起一分　注如屋深三尺　卽舉起一丈之類此十二字木工部引無此文法式重刊本作小注同又方脊作方背如作若如甋瓦廳堂　卽四分中舉起一分　又通以四分得丈尺　每一尺加八分　若甋瓦廊屋　及瓪瓦廳堂　每一尺加五分　或

分爲寸　以釐爲分　以毫爲釐　側畫所建之屋　於平正壁上　定其舉之峻慢折之圜和　然後可見屋內梁柱之高下卯眼之遠近　法式重刊本峭慢作峻慢正與木經合然庸峭亦作庸峻此二字本相通舉屋之法　如殿閣樓臺　先量前後檐檐方心　相去遠近　分爲三分　若餘屋柱頭作　或不出跳者　則用前後檐柱心從檐方背　至脊槫背舉起一分如甋瓦廳堂　卽四分中舉起一分　又通以四分所得丈尺　每一尺加八分　若甋瓦廊屋　及甋瓦廳堂　每一尺加五分

瓦廊屋之數　每一尺加三分注若兩椽屋不加　其副階或纏腰　並二分中舉一分此十九字法式重刊本作小注同

折屋

折屋之法　以舉高尺丈　每尺折一寸　每架自上遞減半爲法　如舉高二丈　卽先從脊槫背上取平　下至檐方背　其上第一縫折二尺　又從上第一縫槫背取平　下至檐方背　於第二縫折一尺若椽數多　卽逐縫取平　皆下至檐方背　每縫並減上縫之半　注如第一縫二尺　第二縫一尺　第三縫五寸　第四縫二寸五分之類此二十五字木工部引無此文法式重刊本作小注同

簇角梁

簇角梁之法　用三折　先從大角背自檐

瓦廊屋之數　每一尺加三分　若兩椽屋不加　其副階或纏腰　並二分中舉一分

折屋之法　以舉高尺丈　每尺折一寸　每架自上遞減半爲法　如舉高二丈　卽先從脊槫背上取平　下至檐方背　其上第一縫折二尺　又從上第一縫槫背取平　下至檐方背　於第二縫折一尺若椽數多　卽逐縫取平　皆下至檐方背　每縫並減上縫之半

簇角梁之法　用三折　先從大角背自檐

檐方心　量向上　至帳桿卯心　取大角梁背一半　並上折簇梁　斜向帳桿舉分盡處　注其簇角梁上下　並出卯中下折簇梁同此十五字法式重刊本作小注同

次從上折簇梁盡處　量至橑檐方心　取大角梁背　一半立中折簇梁斜向上　折簇梁當心之下　又次從橑檐方心　下立折簇梁　斜向中折簇梁　當心近下　注令中折簇角梁上一半　與上折簇梁一半之長同此十九字法式重刊本作小注同

其折分並同折屋之制　注唯量折　以曲尺於弦上取方量之　用瓪瓦者同此十八字法式重刊本作小注同

檐方心　量向上　至帳桿卯心　取大角梁背一半　並上折簇梁　斜向帳桿舉分盡處　其簇角梁上下　並出卯中下折簇梁同

次從上折簇梁盡處　量至橑檐方心　取大角梁背　一半立中折簇梁斜向上　折簇梁當心之下　又次從橑檐方心　立下折簇梁　斜向中折簇梁　當心近下　令中折簇角梁上一半　與上折簇角梁一半之長同

其折分並同折屋之制　唯量折　以曲尺於弦上取方量之　用瓪瓦者同

按宋世木經　有預浩李誠二種　宋史藝文志稱李撰爲新集木經　殆示與預撰並存之意　預撰三卷　自宋初相傳　至治平四年歐陽修撰歸田錄時　猶有今行於世者是也

之語　想已親見其書　沈括夢溪筆談所引　營舍之法　謂之木經云云　疑卽預經之文

沈氏之生　後於歐陽氏二十三年　而熙寧中法式之敕編　元祐中法式之成書　皆在

紹聖元年沈氏卒以前　且法式敕刋海行　沈氏不應未見　如營舍法　出自李撰木經

或見諸法式舊本　以沈氏之淹貫　何至仍疑爲預撰　況遍檢法式　並無營舍三分之語

而圖書集成所引李經　又適與法式看詳相合　於是預經與李經之不同　益有明徵

惟歐沈相距　僅二十年　又俱在太平之世　歐陽氏所見之書　沈氏竟不敢定爲誰氏所

撰　殊爲可異　至說郛刺取法式看詳　刋作木經　而妄以筆談論預經一段　刋作跋語

蓋不知木經有預李之分　强並爲一　遂滋紕繆耳

徵求營造佚存圖籍啓事

本社前經徵求李明仲先生著述已佚諸書。諒蒙　鑒及。現因研究營造考古學。如海內外收藏家。藏有後列各種書籍。或有類此之孤本。不論書籍圖樣。鈔本刻本。均祈逕函敝社。商榷辦法。謀其流通。如可割愛。不吝重酬。倘荷賜教。不勝厚幸。

營造正式六卷　焦竑經籍志職官著錄

梓人遺制八卷　焦竑經籍志職官著錄

按以上二種。焦志列於李氏營造法式之前。又焦志自序。有以當代現存之目。統於四部之語。則此書在明萬歷間。尚存。

元內府宮殿制作一卷　永樂大典本　四庫存目著錄

按四庫總目八十四。史部政書類存目二。元內府宮殿制作一卷。永樂大典本。不著撰人名氏。所記元代門廊宮殿制作甚詳。而其辭鄙俚冗贅。不類文士之所爲。疑當時營繕曹司。私相傳授之本也。

造磚圖說一卷　明張問之撰　四庫存目著錄

按四庫總目八十四。史部政書類存目二。浙江巡撫採進本。明張問之撰。問之、慶雲人

。嘉靖癸未進士。官至工部郎中。自明永樂中。始造甎於蘇州。責其役於長洲窯戶六十三家。甎長二尺二寸。徑一尺七寸。其土必取城東北陸墓所產。乾黃作金銀色者。掘而運。運而晒。晒而椎。椎而舂。舂而磨。磨而篩。凡七轉而後得土。復澄以三級之池。濾以三重之羅。築地以晾之。布瓦以晞之。勒以鐵弦。踏以人足。凡六轉而後成泥。揉以手。承以托版。研以石輪。椎以木掌。避風避日。置之陰室。而日日輕築之。閱八月而後成坯。其入窯也。防驟火激烈。先以糠草薰一月。乃以片柴燒一月。又以柴棵燒一月。又以松枝柴燒四十日。凡百三十日。而後窨水出窯。或三五而選一。或數十而選一。必面背四旁。色盡純白。無燥紋無墜角。叩之聲震而清者。乃爲入格。其費不貲。嘉靖中。營建宮殿。問之往督其役。凡需甎五萬。而造製三年有餘。乃成。窯戶有不勝其累而自殺者。乃以採煉燒造之艱。每事繪圖貼說。進之於朝。冀以感悟。亦鄭俠繪流民意也。其書成於嘉靖甲午。而明之弊政。已至於此。蓋其法度陵夷。民生塗炭。不待至萬歷之末矣。

西槎彙草一卷

明龔輝撰　四庫存目著錄

按四庫總目八十四。史部政書類存目二。西槎彙草一卷。浙江范懋柱家天一閣藏本。明龔輝撰。輝有全陝政要略。已著錄。嘉靖時。營仁壽宮。輝以營繕司主事。奉使督木四

川。得大木五千餘株。版枋如之。部箚欲再倍其數。公私俱困。民情洶洶。輝乃繪山川險惡。轉運艱苦等狀。爲十五圖。前後各作圖說。具奏。竟得旨停止。後列箚子三篇。又附載詩文數首。其曰西槎彙草者。輝嘗使浙東。故此名西槎。以別之也。其圖說箚子。皆剴切酸楚。使人感動。與張問之造甎圖說相等。自當以採木圖說爲名。不當更贅附詩文。名以彙草。其編次殊無體例。且詩文寥寥數首。又皆不工。益爲無謂矣。今仍著錄政書中。從所重也。

南船紀四卷 明沈啓撰 四庫存目著錄

按四庫總目八十四。史部政書類存目二。南船紀四卷。江蘇巡撫採進本。明沈啓撰。啓有吳江水利考。已著錄。是編乃啓嘉靖中。以南工部營繕司主事。監督龍江提舉司時所撰。案明史兵志。太祖於新江口。設船四百。永樂初。又命鎭江各府衛。造海風船。皆江船也。又職官志所載各船。有黃船。遮洋船。淺船。馬船。風快船。備倭戰船諸名。內惟遮洋備倭二種。爲海中所用。故啓不之及。其餘各船圖形工料數目。暨因革典司諸例。無不詳悉備載。國朝江甯府。設同知一員。專管督造戰船。今昔宜異。其制已不盡合。然參考推益。未始非船政之權輿也。

水部備考十卷 明周夢暘撰 四庫存目著錄

按四庫總目八十四。史部政書類存目二。水部備考十卷。浙江巡撫採進本。明周夢暘撰。夢暘、字啟明。南漳人。萬歷甲戌進士。官至工部都水司郎中。以工曹職掌冗雜。又前後多所更革。雜於稽考。因檢校案牘。以類編次。各立綱目。分爲職官、河渠、橋道、舟車、織造、器用、權量、徵輸、供億、叢事、凡十考。末附吏典承行事件。書成於萬歷丁亥。

營造法式印行消息

本社創立以來中外同志紛紛以購求營造法式相屬苦無以應頃者上海商務印書館發表廣告並印行營造法式緣起及發售簡章附印樣本茲特轉錄如左

甲　印行緣起

營造法式三十六卷宋將作少監李誡奉勅編書分總釋總例制度功限料例等第並圖樣等總三十六卷計三百五十七篇內四十九篇誠從經史羣書中檢尋考究其三百八篇根據歷來工師相傳法式及在官經歷詳悉講究而成在崇寧二年奏請鏤板者爲崇寧本南渡後知平江府事王㬎重刊者爲紹興本皆官爲刋傳民間流播絕鮮前明中葉傳世已無完帙以范氏天一閣蓄聚之富搜訪影摹猶有殘闕今四庫影宋補配大典本卽從此出近世故家抄藏大都傳自愛日精廬爲錢氏述古堂影宋再傳本輾轉影寫頗多譌脫而錢張兩本世亦不傳良以吾國積習輕藝士夫弗講遂使專門絕學不顯於世此本廣徵諸家藏本借勘三閣官書俟崇寧本行字校寫鋟木準紹興本注色圖樣摹繪十五色套彩石板以實測科學方法校訂翻傳繩墨規矩絲毫不爽較宋槧尤爲精善其校字圖繪製板並出中外學者之手歷時七載而后觀成蓋於存古之中並寓闡明吾國古代建築學之意原爲武進陶氏家刋民國十四年書成曾一度印行流布有限歐美學者嘗加以詳密研究著爲評論引起世界工學家注意李氏生於八百年前而編纂此書類例清晰舉凡壕寨石作

大小木作雕旋鋸竹瓦泥采畫塼窰刷飾諸匠作名詞完備具有今世科學條理吾國數千年來工師不傳之祕鑰藉此以存與一般諸子百家詳於理論略於實質者不同板權今歸本館茲照原板印行以廣流傳誠營造家至有價值之圖籍也

乙　發售簡章

(一)　全書六百十五葉（內單色圖一百二十七葉雙色圖四十六葉彩色圖四十五葉）分訂八册合裝一函用上等瑜版紙木版石版精印

(二)　每部定價七十六元

(三)　每部郵費包紮費如下

各行省一元二角　日本一元五角　新疆蒙古郵會各國四元

(四)　書價及郵費包紮費等均照上海通用現大洋計算

(五)　欲索閱樣本者函示即寄但須附郵票四分

社事紀要

民國十八年春。中美文化方面。時以完成中國營造學之研究。來相勸勉。爾時爲環境所限。恐未能專心致力。卻不敢承。顧以平生志學所存。內外知交屬望之切。亟應及時組織團體。自勵互助。乃發表中國營造學社緣起一通。并於三月下旬。在北平中山公園董事會。展覽圖籍。及營造學之參考品。固應同志之要求。亦以頻年以來。編摩及採集所得之成品。及其資料。堆積緘縢。不得不加整理。且一經披露。中外朋好。聲應氣求。更各出所藏。或以所知所見相助。裨益亦多。六月初。始以繼續研究中國營造學計畫之大概。提出於中華教育文化基金董事會。至六月之杪。經該會第五次年會議決補助費用。併訂明將來研究所得結果。及編繪成式之一切書籍圖畫。應與所收之材料。一併交北海圖書館。七月五日具函見告。適因旅遊遼寧。未克卽時到平。迭次函商。迄於年歲杪。始租定北平寶珠子胡同七號一屋。由津移住。於十九年一月一日。開始工作。所有與中美文化關繫之經過。今節錄往還書牘如左。

(1)十八年六月三日致中華教育文化基金董事會函

敬啟者夙聞　貴會對於科學文化極力提倡甚深佩仰鄙人研究中國營造學已二十餘年近因環境關係無力完成尙擬繼續進行甚願　貴會格外設法予以協助茲特以研究計畫之大

概送請　察及如荷　同意不勝感幸(下略)

附計畫大概一通。圖樣目錄參考書目錄各一册(略)圖樣樣本紙(略)

繼續研究中國營造學計畫之大概

中國之營造學在歷史上在美術上皆有歷却不磨之價值鄙人自刊行宋李明仲營造法式而海內同志始有致力之塗轍年來東西學者項背相望發皇國粹靡然從風方今世界大同物質演進茲事體大非依科學的之眼光作有系統之研究不能與世界學術名家公開討論鄙人無似年事日增深懼文物淪胥傳述漸替糾合同志及助手匠師相與商略義例分別部居庶絕學大昌群材致用

李書於制度功限料例固已示營造之津梁而北宋迄今又逾千載世運推遷質文遞嬗遼金元明之遺物塔寺宮殿碩果尚存明清會典及則例做法令甲具在由此推求可明制度之因革曩年於李書圖樣付印之際就現存宮闕之間架結構附撰今樣一併印行已見一班

輓近以來兵戈不戢遺物摧毀匠師篤老薪火不傳吾人析疑問奇已感竭蹶若再濡滯不逮數年闕失彌甚曩因會典及工部工程做法有法無圖鳩集師匠效梓人傳之畫堵積成卷軸(目錄如別册)

過去二十餘年中余爲個人趣味所驅使稍有暇晷輙從事於此又得同志數人及美術師匠之

助年來所成就者蓋亦不尠近歲以還環境更變此項工作幾將中輟一簣未成可勝扼腕而同志及從事諸君多勸余以此舉商之中華教育文化基金董事會爲科學文化研究之協助者蓋營造學實包括美述科學及文化三者而文化委員會實負有扶持發育之使命鄙人昌明絕學闡揚國光慨念世界之大同重違同仁之公意用特具函貴會商請協助預計完成中國營造學之專門箸述期以五年此五年中其前三年經費年約需萬八千元後二年或須稍增如荷贊同擬照下列各條爲工作進行之程序

一屬於溝通儒匠　濬發智巧者

講求李書讀法用法　加以演繹

纂輯營造辭彙

輯錄古今中外營造圖譜

編譯古今東西營造論箸　及其軼聞

訪問大木匠師　各作名工　及工部老吏樣房算房專家

二屬於資料之徵集者

實物　圖樣　撮影　金石拓本及紀載圖志　遠征搜集　古籍

於前項工作具有眉目時卽可以一部分之成績品提供於世界姑就鄙人現有之資料預擬

總目如下

甲部　釋名
辭彙
乙部　論著
制度沿革　各書舉證　各式舉證　收藏品之全景　遺物之標本
丙部　法式
本石　油漆　彩畫　琉璃窯　銅　鐵　裱　搭材及諸作
工料分析　物料價值考
丁部　諸例
內庭工程做法　圓明園內工諸作則例　製造庫諸作則例　城垣工程　陵寢工程
河渠工程　河工　海塘　漕河　江防　橋梁　溝渠

三編輯進行之程序　成書假定以五年爲期

第一年工作　整理故籍　擬定表式

第二年工作　審訂已有圖釋之名詞

第三年工作　製圖撰說

第四年工作　分科編纂

第五年工作　編成正式全稿

此項工作係屬團體事業鄙人自揣若僅以個人心力或恐未必能勝鉅任但以平昔篤好與歷年研究所得更參以知好之輔助暨現存實物及文獻之參考自信當能使前此所苦心探索之各種材料終成爲一有統系之著述承先啓後可以公諸世界矣唯上述之應用經費實已不能再減至於鄙人前後所完成之作品皆願貢獻社會爲學術界研究之資倘得署名書尾爲幸多矣

（2）同年七月五日中華教育文化基金董事會覆函

桂莘先生台鑒逕啓者敝會於六月三十日在津舉行第五次年會議決補助台端研究中國營造學費用每年最多壹萬伍仟元暫以三年爲限至將來研究所得結果及編繪成式之一切書籍圖畫應與所收集之材料一併交北海圖書館收存等因相應函達即希查照迅將預算暨計畫書檢寄過會以憑審核發款爲荷（下略）

（3）同年八月九日致中華教育文化基金董事會函

敬啓者接奉七月五日大函祗悉對於鄙人提出研究中國營造學聲請書得荷貴會議決每年補助費用壹萬五千元暫以三年爲限并以將來研究所得結果及編繪成式之一切書籍圖畫暨其他材料一併交北海圖書館收存等因鄙人蓄志所存今幸貴會熱心贊助無任欣感

自應依照　貴會議案積極進行鄙人現因私務旅遊遼甯一俟摒擋就緒卽行回平着手組織繼續工作先此覆布敬祈查照(下略)

(4)同年十月三十一日中華教育文化基金董事會來函

逕啓者查關於敝會議決補助　執事研究中國營造學費用一事前於七月五日函達請將預算暨計畫書送會審核嗣准八月九日　台函對於敝會議案表示同意並稱願依照該案積極進行惟因事須旅游遼寧事竣卽回平工作各等因聆悉之餘良用欣慰惟接奉此函以後瞬已多時本年度各受補助機關補助費均已先後發出兩期而　尊處預算暨計畫書迄未寄來以致應發之補助費久懸未決實切系念現在本年度已逾四月此款實有從速處理之必要用特專函奉達務請　迅予見復以資辦理至爲企盼(下略)

(5)同年十一月十日致中華教育文化基金董事會函

敬啓者頃奉十月三十一日　台緘敬承一是鄙人研究中國營造學費用擬自十九年一月起照所編預算按季支用茲將預算單隨函附上以備　審核至所有計畫仍照本年六月間所提出之計畫大概內容辦理應請查照(下略)

敬再啟者鄙人研究營造學爲平生志願所存重以　貴會扶持之雅年事日增期成尤切但數月以來遠遊遼瀋原擬摒擋私計早日就緒卽當排除俗累移居來平安定身心集合同志專致

力於工作乃以時局影響家計謀畫多沮未能如願遷延日久此爲總因然個人旅行中之踏查遼金遺物及同志分担之採集資料於事實上精神上之進行固未嘗或輟至提出預算一事初擬在北平覓屋須近故宮三海且與相類之文化機關往還便利而設備較省租價較廉爲宜迭經託人尋覓久未合式而住居未定一切組織皆難著手鄙人久厲津門圖籍器物一旦移平勞費甚鉅願得永久之住居爲安全之處置經費有限尤不得不愼重出之現正積極覓屋移居在此期內必要用費爲事實上所不可少所有本年度之補助費可否提出一部份作爲另單之臨時支出以便早爲設備著手工作并祈審核見復爲幸(下略)

(6)同年十一月十九日中華教育文化基金董事會覆函

逕復者准十一月十日　台函稱擬自十九年一月起開始研究中國營造學同時依照所編預算按季支用補助費擬請准由本年度補助費內開支移居及設備等項費用並附修正預算及臨時開支預算各一份等因俱經領悉查研究處所及設備爲從事研究所必須　執事於工作之進行款項之支配籌畫周詳實深佩慰所有請將臨時開支由本年度補助費內支付一節敝會可表贊同惟開辦各費仍希撙節支用將來如有餘額仍須移入經常費內開支以符原案除俟動用臨時欵項再行發放外茲先將補助費登記及稽核辦法一本隨函附奉用備查參統希鑒察爲荷(下略)

工作開始。中國營造學社同時成立。藉羣力之助。攻他山之錯。所謂是斷是度。是尋是尺。如切如磋。如琢如磨也。乃延訂左列諸君。爲本社常務。及名譽各職。

（1）常務

編纂兼日文譯述國鐸　編纂兼英文譯述瞿兌之　編纂兼測繪工程司劉南策　編纂兼庶務陶洙　收掌兼會計朱湘鈞　測繪助理員宋麟徵

（2）名譽

評議華南圭　周詒春　郭葆昌　關冕鈞　孟錫珏　徐世章　吳延清　張文孚　馬世杰　張萬祿　林行規　溫德　翟孟生　李慶芳

校理陳垣　袁同禮　葉瀚　胡玉縉　馬衡　任鳳苞　葉恭綽　江紹杰　盧毅　荒木清三　陶湘　孫壯

參校梁思成　林徽音　陳植　松崎鶴雄　橋川時雄

BULLETIN OF THE SOCIETY FOR THE RESEARCH IN CHINESE ARCHITECTURE

NO. 1 JULY, 1930. VOL. 1

Frontispiece: A Portrait of Li Chieh— Author of "Y in Tsao Fah Shih".

Articles:

1. The Founding of the Society.
2. Opening Speech by Chu Chi Chien, President of the Society.
3. The 280 th Anniversary of Li Chieh.
4. Writings on Chinese Architecture by W. Perceval Yetts (with translation in Chinese).
5. A Chinese Treatise on Architecture by W. Perceval Yetts (with translation in Chinese).
6. A Record of the Errata Found in the 1925 Edition of "Yin Tsao Fah Shih"
7. A Request for the Finding of Valuable Writings and other Records on Chinese Architecture.
8. A Revised Publication of the 1925 Edition of "Yin Tsao Fah Shih" by the Commercial Press, Shanghai.

News Column

The Address of the Society:

7 Pao Chu Tse Hutung, East of Wai Chiao Pu Street, Peiping, China.

[General Information]
书名 = 中国营造学社汇刊　第1卷第1期
作者 = 中国营造学社
页数 = １５１
出版社 = 中国营造学社
出版日期 = 民国１９年7月（１９３０年7月）第1版
收藏 = 南京大学图书馆

書名
插畫
中國營造學社緣起
中國營造學社開會演詞
李明仲八百二十週忌之紀念
英葉慈博士營造法式之評論
英葉慈博士論中國建築內有涉及營造仿宋重刊營造法式校記
徵求營造佚存圖籍啟事
營造法式印行消息
社事紀要
英文目錄