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# 書籍、文房、裝飾用紙考略

### 錢存訓

,国文化研究所 紙之所以可貴,主要是因爲它的價格低廉和質地輕便;因此它可以作爲各種物件的 代用品。許多世紀以來,它不僅代替了某些價值高昂而不可或缺的物品;它的質地更能 提供其他物品所不能供給的各種用途。紙在發明後不久,便用作書寫。經過了一段時期, 紙、墨、筆、硯的結合使用,使書寫逐漸發展成爲一種獨特的藝術,而書法和繪畫終於 在紙張上發揮了最高的藝術表現形式。由於裝飾和其他特殊用途,紙上增添了各種鮮艷 的色彩和精緻的圖案,而造紙術亦因此更見進步而美化。印刷術發明以前和以後,紙張 都是書籍製作的主要材料。由於價廉和輕便,紙亦可以製作各種儀式上所採用貴重物品 的模型,或者用以代替體重而價值昂貴的金屬貨幣。現代紙和紙製品幾乎在全世界的每 個角落裏都可以找到,而在印刷、傳播、商業、工業、以及家庭日常生活中更提供了數 以百計的用途;如果細加考究,其中不少用途都可以溯源至千百年前的中國。紙在古代 就像今天一樣,可以用在各種不同的場合,也替代了各式各樣名貴物語的功能。

中國紙的種類繁多,名稱各異,這正好反映了造紙術的日趨進展。有些紙名代表其 製作的原料,有些源目製作的地區,也有取自設計名家的名號,更有些紙因加工製作, 或以形式、大小、用途等等而得名。以下將綜述文獻紀錄中所載,和現存古代紙品中所 見各種紙張的種類和用途,並追溯其起源和發展;以見紙在中國文化上所產生的推進作 用,和在世界歷史上所應有的地位。

### (一) 書寫、印刷和書畫用紙

紙的發明,最初似乎並非如一般人所想像的是用作書寫。根據現有資料,紙大概在 發明了兩百年以後,才因「縑貴而簡重」而成爲竹帛的代用品。由於現今尚未發現西漢 的紙上有任何文字, 或在紀載上述及西漢時已用紙作書, 我們可以假定紙是在東漢時 才開始作爲書寫和製作書籍之用。 據《後漢書・賈逵傳》所載・建初元年(公元七六 震中国文化

<sup>\*</sup>本文係作者爲李約瑟(Joseph Needham)所編《中國之科學與文明》 Science and Civilization in China 第五冊第一本所撰《造紙與印刷》中之一節,根據馬泰來、陳雄英兩君中譯稿,畧加增刪。 **謹此聲明,並誌謝意。** 

# 後 木伊 訓 《左下傳》

年), 韶達入宮講《左氏傳》, 並選高材者二十人, 「教以左氏, 與簡、紙經傳各一通。」這是文獻上所見以紙作爲書籍材料的最早記載。至於實物上的最早證據, 可能是一九四二年在居延所發現的一張殘紙, 上有隸草文字二十餘, 勞貞一教授定爲公元一一〇年左右之物。如果這一推測正確, 這張紙當產生在蔡倫造紙的時代。一九七四年在甘肅旱灘坡又發現了一些有字的殘紙, 據稱爲公元二世紀後半期之物。1

至於作爲書籍的材料,紙張並未能立即代替了竹帛。大約紙和竹木並存了三百年,和帛書並用至少五百年。到了晉代紙卷才完全取代簡牘,而帛書直至唐代仍在使用。本世紀以來在新疆發現的大批紙張文件,其上載有年代的都始自公元三世紀。東晉初,荀勖(公元二三一年至二八九年)謂汲冢竹書皆用二尺黃紙重新繕寫,藏之中經,副在三閣。最近在新疆出土的晉寫本《三國志》,也是用加工的白麻紙所書。2 從歷代著錄書籍單位所稱的「篇」,「卷」中,亦可看出書籍材料的演進,而紙卷的普遍應用,完全代替了竹木簡牘,當在晉代。3 根據現有的證據,我們可以假定紙是從公元一世紀起,才開始用於書寫,自公元二、三世紀以來,才被大量用於製作書籍和文件。

現存的紙卷書籍,大概以三國魏甘露元年(公元二五六年)用「六合紙」抄寫的《譬喻經》爲最早。4 「六合紙」是大麻、楮皮、破布和魚網等材料所掺合製成。宋代書家米芾(一○五一年至一一○七年)曾述及「六合紙」始自晉代,5 一直沿用至宋代,名稱未改。其它現存古代紙卷書籍,大都是用大麻、苧麻、楮皮等所製成。有時也採用藤、桑等材料;至於竹和禾本植物所造的紙,從宋代以來,才大量採作印書之用。6

從科學分析現存古紙和從文獻中所見,唐代通用的紙都是由麻、楮皮、和桑皮所製成。英國博物館所藏敦煌寫經紙六十多件和北京圖書館所藏二十三件,曾先後用顯微分析法研究鑑定。7據稱這些早期的紙差不多全是經由精心擣拌的纖維體所造成。一般而

<sup>1</sup> 賈逵傳見《後漢書》(藝文本)卷108,葉 5 ;居延紙見錢存訓,《中國古代書史》(香港,1975),頁137—138,183—184;旱灘坡紙見《文物》,一九七七年一期,頁59—63。

<sup>&</sup>lt;sup>2</sup> 《穆天子傳》(《四部叢刊》本),荀勗序,頁3;潘吉星,「新疆出土古紙研究」,《文物》, 一九七三年十期,頁52—60。

<sup>3</sup> 参看 Tsuen-hsuin Tsien, Written on Bamboo and Silk (Chicago, 1962), p.92; 錢存訓, ≪中國古代書史≫, 頁86。

<sup>4</sup> 這是東京書道博物館所藏最早附有年份的寫本之一。

<sup>5 「</sup>評紙帖」,見≪美術叢書≫冊六,頁305。

<sup>6</sup> 關於古代紙卷的成份 , 見 Lionel Giles, Descriptive Catalogue of the Chinese Manuscripts from Tunhuang in the British Museum (London, 1957), xvi ;潘吉星,「敦煌石室寫經紙的研究」,《文物》,一九六六年三期,頁40-41;錢存訓,「中國古代的造紙原料」(馬泰來譯),《香港中文大學中國文化研究所學報》,第7卷第1期(1974),頁27—39;及劉仁慶、胡玉熹,「我國古紙的初歩研究」,《文物》,一九七六年五期,頁74—79。

<sup>7</sup> 見 Robert H. Clapperton, Paper: An Historical Account of Its Making by Hand (Oxford, 1934),pp.22—26;潘吉星,「敦煌石室寫經紙的研究」,《文物》,一九六六年三期,頁39—47。

# 書籍、文房、裝飾用紙者夏

言,這些紙都製作精良,厚度均勻,表面上並無細孔或斑痕,上膠合度,可用現代的鋼 筆和墨水書寫其上,而不漫漶。但公元八世紀中葉以後的紙,一般都質地鬆散,分佈不 均勻,吸墨力亦差。8

唐代以後,用來抄寫佛經和其他書籍的紙主要有二,都是用麻製成。 白色的稱爲「白經牋」,尺寸較小,但由於填料和加工,所以並不輕薄;黃色的名爲「硬黃紙」,用黃蘗汁浸染,紙面光滑、堅靱、緊密而辟蠹。較厚的一種產自四川,較薄的則產自長安、洛陽和安徽。同樣質地的紙在宋代仍繼續生產,以供抄寫佛經之用。最名貴的一種稱爲「金粟牋」,是特別製作爲海鹽廣惠寺抄寫藏經之用。這種紙是宋治平至元祐年間(公元一〇五四年至一〇九四年)產自蘇州,質地堅固結實,內外皆加蠟,表面平滑並具有光澤,而無水綫的痕跡。每張紙上都印有「金粟山藏經紙」的紅色印章。廣惠寺藏經凡萬卷之多,每卷用紙十五張連接而成。「金粟箋」爲收藏家所珍貴,並加做製,稱爲「藏經紙」,迄今仍用於書籍和卷軸的標簽。9

另一種精工製作的紙,是南宋時福建建陽所產的「椒紙」,以花椒種子的汁浸染,可以殺蟲,永不蠹蝕;其質地近似「金粟牋」,但較薄而有光,呈金黃色,頗爲堅靱。據云這種紙上的香氣能歷數百年而不散。此外,宋代尚流行其它用來製書的紙:如「萆鈔紙」是由江西撫州所產的攀藤類植物萆薢所製成,質白而光滑;湖北蒲圻所產的「蒲圻紙」,厚度適中;四川廣都所產的「廣都紙」,爲楮皮所製;浙江嘉興所產的「油拳紙」,是油拳村出產的攀藤所製作;以及高麗所產的「鷄林紙」,質地光滑而厚重,正反皆能書寫。10

自宋代以來,印刷術的普及,促進了造紙術的發展。在開封、成都、宣城、杭州和建陽等地,國子監、地方政府、私家和書坊都大量印製書籍,因此各地成爲製紙和印刷工業的中心。如將現存宋、元、明、清各代用不同紙張製成的印本分析研究,可以見到當時印刷用紙的種類和質地。大致說來,一般抄寫和印書的用紙都是輕薄、柔軟、而精細,主要原料是竹和楮皮,有時並混以稻麥的禾桿或其它材料。在元、明兩代,一種用竹造成幅度特別寬大的「大四連」紙,作爲書寫之用。在一些地區,以精選的竹類製成一種厚重而堅靱的紙,稱爲「公牘紙」,專供公牘文件之用。在用作印書和文房的各種紙張中,品質最好的據稱是江西永豐出產以竹製作的「棉紙」,潔白而堅靱;其次是浙江常山所產的「柬紙」,厚重而柔軟;再其次是福建順昌所產的一種「書紙」,價值便宜;最

<sup>8</sup> 容看Clapperton, pp. 18, 22。

<sup>9</sup> 見海鹽人張燕昌 (1738—1814) 所著《金粟牋說》 (《叢書集成》本)。 張氏是一位金粟牋收藏家; 書中有詳盡的史料,並摹描了牋前後兩面的印鑑。近人仿製金粟牋樣本,見 R.H. Van Gulik, Chinese Pictorial Art as Viewed by the Connoisseur (Rome, 1958), Appendix V no.19。

<sup>10</sup> 有關「椒紙」及其他各種紙張製作的書籍,見葉德輝,≪書林淸話≫(北京,1961),頁163—166。

後 存 訓

次的是福建所產的一種「竹紙」,短狹、色暗、易碎,其質地和價格都很低。<sup>11</sup> 浙江 開化所產的一種「開化紙」,質地特殊,清代的武英殿特別選擇這種紙,作爲印製「殿本」之用。有時舊紙背面亦可再作書寫,稱爲「反故」。或將廢紙洗去朱墨汚穢,浸爛 入槽再造,名曰「還魂紙 | 。<sup>12</sup>

「宣紙」一直是最廣泛用於藝術方面的紙,質地精細、潔白、柔軟,產自宣州(今安徽宣城),一般專供書法和繪畫之用。「宣紙」是以檀樹皮和禾桿混合製成。其質素視乎其原料中檀皮所佔的比例。最上等的「宣紙」,是純以檀皮爲原料,普通的「宣紙」,檀皮約佔十分之七至一半不等。以檀樹皮製紙的方法,相傳是東漢時蔡倫的弟子孔丹在徑縣(隸宣州)於無意中發現浸在溪澗中的檀皮,腐蝕後所成的纖維體,因此用以造紙。「宣紙」一詞最早見於唐代的文獻,當時宣州涇縣以「宣紙」作爲貢品。此後,「宣紙」一直爲藝術家所樂用。13

並非所有產自宣州的紙都質地優良和適合於書畫之用。不少以竹和禾類製成的紙,主要用於包裹,冥器,和其它手工藝如製傘等。祇有由檀皮,或檀皮和禾桿所製的紙適合書法和繪畫之用。這些質地較優的紙如「玉版」紙,是一種潔白而厚重的大型紙;「畫心」紙是藝術家的寵物;「羅紋」紙表面具有近似紡織的細紋。一些藝術工作上的要求和書寫及印刷不同,有時需要面積極大的紙張。「宣紙」就以幅度寬大著稱,有的寬八尺長十二尺,每張厚度可有一層至三層。其中「匹紙」長至五十尺。據說製作時由兩個以上的工匠用紙簾將紙漿從大桶中抄撈取出;製作二層要抄撈二次,三層則需抄撈三次。14這樣製成的紙,質地柔軟,富吸水力、光滑、堅實而有彈性,適用於書籍、文件,信箋、摹拓,並特別適用於書畫。

另一種爲藝術家所推崇的是「澄心堂紙」,那是特別爲南唐後主李煜(公元九三七年至九七八年)所製。這種紙的原料是楮皮,但須經過特別方法浸漂,使其纖維純淨。紙張初步製成後,還需磨光和上臘,使其更加光澤而耐用。明張應文(公元十六世紀)謂:「南唐有澄心堂紙,膚如卵膜,堅潔如玉,細薄光潤,爲一時之甲。」15 另一位明代收藏家屠隆亦謂:「澄心堂紙極佳,宋諸名公寫字及李伯時畫,多用此紙。」16 據說歐陽修編纂《五代史》,就用這種紙抄寫。大抵在澄心堂荒廢後,製造此紙的方法在宋代仍在沿用,並未失傳。

<sup>11 ≪</sup>少室山房筆叢≫(北京・1964)・頁57。

<sup>12</sup> 宋應星,《天工開物》(《國學基本叢書》本),頁218。

<sup>13</sup> 宣紙的原產地是涇縣,胡韞玉在1923年出版的《紙說》(《博學齋叢刊》本),是第一部記述宣紙製作過程的著作。參看陳彭年「關于宣紙問題」,《造紙工業》(1957),二期,頁24—27。

<sup>14</sup> 製作「匹紙」的方法,見《新安縣志》(1888),卷10,頁17。

<sup>15 ≪</sup>淸秘藏≫卷上,見≪美術叢書≫,冊四,頁216。

<sup>16 《</sup>紙墨筆硯箋》,見《美術叢書》,冊十,頁136。



### (二)文房、裝飾和糊牆用紙

許多世紀以來,紙張上常增染彩色或加以圖案,作爲信牋、詩牋和商業契約之用。 這些紙張或是用單色漂染,或是用套色印刷,或是加以浮雕的圖案,或是灑以金銀色的 細粉,使之更爲名貴悅目。製造這類紙張,本身說來就是一種藝術。不少名家對設計和 提倡,都作出了相當的貢獻。據說晉代名書家王羲之(公元三二一年至三七九年)喜用 紫色牋紙。桓玄(公元四○四年卒)作「桃花牋」紙,有縹綠、青、紅等色,是蜀地的 秦中国文队研究 名產。17這些是早期的彩色牋紙。

到了唐代,牋紙的花式更多。謝師厚製作「十色牋」,毎十幅爲一榻,和十色水逐 榻以染。「十色牋」有深紅、粉紅、杏紅、明黃、深靑、淺靑、深綠、淺綠、銅綠、淺 雲等色。18其他尚有各類悅目的牋紙,稱爲松花、金沙、流沙、彩霞、金粉、龍鳳(紅 及金)、和桃花冷金。當時最著名的牋紙大概是四川名校書薛濤所製的一種小型深紅色 **牋紙。她用自製的這種牋紙與當時名詩人元稹、白居易等相唱和。據說這種稱爲「薛濤** 牋」的深紅牋紙,是以芙蓉皮和芙蓉花瓣所製成<sup>19</sup>。自四川傳至別地,數百年間,全國 各地 皆臺 傲製作。

在彩色之外,再加圖案,這類牋紙,大概是在唐宋時期開始發達。上面所說的「十色 牋」,據謂染色後,每幅於方版上砑之,則隱起花、木、麟、鸞,千態萬狀。20五代時, 姚顗(公元九四〇年在世)的子侄善造「五色牋」,據謂:「光緊精華,砑紙版乃沉香 刻,山水、林木、折枝,花果、獅鳳、蟲魚、壽星、八仙、鐘鼎文、幅幅不同,文縷奇 細,號『砑光小本』。」21所謂砑光,當係以凸板壓印而成的一種浮雕圖案。

大約在這時期·「水紋紙」(watermarks)和「雲石紋紙」(marble paper)已在 中國製作和使用。據稱宋李建中(公元九四五年至一○一八年)的《同年帖》爲楮皮紙, 其中呈暗花波浪紋,是早期的「暗花紙」,亦稱「水紋紙」。22至于「雲石紋紙」,據 蘇易簡(公元九五七年至九九五年)謂蜀人造「魚子牋」,以細布用麵漿膠令勁挺,隱 出其紋,又謂之「羅牋」。並說:「亦有作敗麵糊和以五色,以紙曳過令沾濡,流離可 愛,謂之『流沙牋』。亦有煑皂莢子膏,幷巴豆油,傳于水面,能點墨或丹靑于上;以 薑搵之則散,以貍鬚拂頭垢引之則聚。然後畫之爲人物,砑之爲雲霧,及鷙鳥翎羽之

<sup>17 ≪</sup>文房四譜≫(≪叢書集成≫本),卷4,頁49。

<sup>22</sup> 潘吉星,《故宫博物院藏若干古代書法用紙之研究》,《文物》,一九七五年第十期,頁84—85。

狀,繁縟可愛,以紙布其上而受采焉。」<sup>23</sup>這些當**是製**作「雲石紋紙」最早的記載。專 研造紙歷史的亨特(Dard Hunter)謂公元一二八二年,「水紋紙」在歐洲最早應用; 而「雲石紋紙」則是波斯人在公元一五五〇年所發**明。24根據前述資料,則中國製作這** 種藝術性的用紙,最晚亦當在此三百年至五百年以前。

彩色牋紙的印刷技術,到了明代已登峯造極,**使繪**畫和木刻發生了密切的聯系。最 著名的是公元一六四五年前後胡正言所印的≪十竹齋箋譜≫。25胡氏是安徽休寧人,後 定居南京。他的箋譜有花卉、果樹、山水、岩石、人物、古玩、文具的圖畫,用木刻彩 色套印。每色一版,稱爲「套版」。現存最早的一種是南京吳發祥(公元一五七八年出 生)在公元一六二六年印製的《蘿軒變古箋譜》,分上、下二册。26 其中一些圖畫和 ≪十竹齋箋譜≫相仿,但技術多用綫條勾勒,不及十竹齋之用色彩深淺、渲染、烘托等 法為華麗。至於十竹齋的題材、畫詩、以及凸板研印的技術,無疑當受前人的影響。這 種套版印製文房箋紙的方法,一直流傳至今。

有圖案的箋紙,除用於書信和作詩外,亦用於商業契約,一般稱爲「簡帖」。這種 特別設計的牋紙是明清之際徽州的印工所創作。契約可能原先是書寫在普通的箋紙上, 但後來一般爲文人所喜愛的山水圖畫,漸爲民間圖案所替代。27

用作通報拜訪的「名刺」或「拜帖」,起源自漢代,當時用木簡書寫名字,作爲通 候之用。以紙張取代木簡,大約是公元五、六世紀的事情;當時拜訪者的地望和官階亦 常書寫在名刺上。名刺大約濶二、三寸,初時是白色,唐時改用紅色。據說紅紙的價格 因此提高了十倍。同時人們開始在拜訪官邸或私宅時,呈遞一張書寫拜訪來意的便條。 在拜訪者被接見前,通常主人先在名刺後簽署。

在明代中期,名刺的面積擴大。一般平民使用白色的名刺,僅翰林學士使用紅色的 名刺,並以大字將名字書寫在名刺之上。28明宋應星謂:「若鉛山諸邑,所造柬紙則全 用細竹料原質蕩成,以射重價。最上者曰『官柬』,富貴之家通刺用之。其紙敦厚而無 筋膜,染紅為吉柬。則先以白礬染過後上紅花汁云。」29

<sup>23 ≪</sup>文房四譜≫,卷4,頁53。

<sup>24</sup> Dard Hunter, Papermaking: The History and Technique of an Ancient Craft (2nd ed., rev. and enl., New York, 1967), PP. 260, 479.

<sup>25 《</sup>箋譜》叙,署「崇禎甲申(1644)」,但卷2「懸蘭圖」,胡正言題有「乙酉(1645)春日十 竹齋臨周公調先生筆意。」又此書有一九三五年(北平)版畫叢刊會覆刻本。又 Jan Tschichold, Chinese Colour Prints from the Ten Bamboo Studio (London, 1972) 選印初版箋譜二十 四幅,彩色逼真,並有引言,詳述中國木刻及套版技術。

<sup>26</sup> 沈之瑜,「跋《蘿軒變古箋譜》」,《文物》,一九六四年第七期,頁7—10。

<sup>27</sup> 賴少其編《套版簡帖》(上海,1964),收錄簡帖四十款。 附錄契約二紙, 其一署崇禎十三年 . .... (1640) •

<sup>28 《</sup>陔餘叢考》(1750),卷30,頁24。

<sup>29 《</sup>天工開物》,頁218—219。

用紙糊窗,在中國很普遍。在使用玻璃以前,上至宮室,下至農家,窗格都是用白 紙裱糊。中國房屋內的窗戶都有格構,30紙張可以裱糊其上,使柔和的陽光透過。中國 廳堂的門隔,上半通常用格構造成,而下部則多沒有空間。古時糊窗是用羅紗,後來用 薄而堅靱的紙。這種紙通常用楮、樹皮、混以竹或稻莖製成。質地堅靱,難以撕揭或破 裂。品質最佳的一種名爲「櫺窗紙」,專供皇室糊窗之用。明代所通用的糊窗紙,是廣 信(在今江西)所產,每張長七尺,濶四尺,其中有些並染上各種顏色。31

清人建國後不久,≪大清律例≫中就有關於以紙糊窗的詳細記載。其中特別規定每 年都需要以朝鮮貢紙糊飾太和殿、保和殿、中和殿、和文華殿的窗格。此外,每二年需 用黃綾補接縫邊。太常寺負責徵用各壇廟的窗戶及燈籠所需用紙。外藩朝貢各館的用紙, 則由理藩院負責。32據記載,每年春秋二季在中江的市場中交易的朝鮮紙達十萬八千張 之多。33時至今日,中國,日本,和朝鮮的舊式房屋裏,門窗一般仍是用紙裱糊。34

至于「糊牆紙」(wallpaper)或稱「花紙」,西方學者都稱源自中國。十六世紀時 法國傳教士從中國帶到歐洲;後來荷蘭、英國、和法國的商人,亦自廣東將牆紙輸入西 方。到了十七世紀,糊牆紙在歐洲開始做製。35 十七至十九世紀時由中國帶囘手繪花 鳥、山水、或居家生活的牆紙。在歐洲特別風行。在西方有關中國糊牆紙的最早文献記 載是一六九三年關於瑪利皇后的「中國和印度的飾樹、屛風及掛帘」的記述。所謂「掛 帘」(Hangings),相信就是中國的牆紙。大約在一七七二年左右,約翰·麥凱(John Macky)描述文士特(Wanstead)皇宮的裝飾,謂「其中有人物、花鳥等物的中國糊牆 紙,都是前所未見而最生動的作品。這些圖畫,栩栩如生;麥氏以爲下研究中國牆紙, 便可以明瞭中國的文化了。牆紙上所畫的植物、如常見於中國和爪哇的竹,比西方最佳 植物書籍中所繪的插圖還要傳神」。36直至本世紀,中國手繪的各種花紙,仍被視爲最 美麗的牆紙。一位英國名建築師會說:「能夠在一間糊上北京牆紙的臥室中醒來,乃是 一件最寫意無比的事情。」37

A Grammar of Chinese Lattice (2 v., 1937) •

<sup>31 ≪</sup>天工開物≫,頁219。

<sup>32 ≪</sup>大清會典事例≫(1899),卷940,頁5。

<sup>33</sup> 徐珂,《清碑類鈔》(上海,1917),第三册「外藩類」,頁13-14。

<sup>34</sup> 紙窗和紙門照片,見Hunter, p.221, Figs. 193—194。

<sup>35</sup> 關於中國牆紙在歐洲的傳播,見 Phyllis Ackerman, Wall Paper: Its History, Design and Use (New York, 1923), pp.10-20; E. V. Entwisle, The Book of Wallpaper (London, 1954), pp.43-48; Entwisle, A Literary History of Wall Paper (London, 1960), pp. llff; Kate Sanborn, Old Time Wallpaper (New York, 1905), pp. 14-29.

<sup>36</sup> 以上引文俱見 Entwisle, A Literary History of Wall Paper, pp.13, 23, 49。

<sup>37</sup> Sacheverell Sitwell, British Architects and Craftsmen (1945), 見 Entwisle, The Book of Wallpaper pp.17-18,序文所引。

**綾** 存 訓

牆紙在中國的歷史,不像在歐洲和美國那樣記載清楚。所有西方的著作都指出牆紙 起源於中國,但在中國文獻中却很少關於所謂牆紙的記錄。研究牆紙歷史的專家和漢學 家都同意公元一六三〇年法國魯文(Rouen)的一位印刷家和同時期英國人所製作的所 謂「民間花紙」(folk paper) 都是從傳教士帶囘的中國牆紙中得到啓發。38後來歐洲 旅行家的遊記中,亦提及十七世紀以後中國北方牆紙的使用情況。那時的清帝——尤其 是康熙(公元一六六二年至一七二二年在位)對一**般裝**飾藝術甚感興趣。39很多中國牆 紙的圖案和當時運往歐洲的中國瓷器圖案相仿,相信都是由同一羣專營外銷的藝術工匠 安文大學中國文化研》 所製作。

十六及十七世紀時,中國房屋使用糊牆花紙的情形,今日甚少資料可稽。中國大部 份的房屋間隔都是以木板或石灰泥牆分隔。自古以來,彩色圖案通常都是直接繪在牆壁 上。如≪三輔黃圖≫載「以椒塗壁,被之文繡」;≪酉陽雜俎≫謂:「大曆(公元七六 六年至七八○年)末,張璪嘗畫古松於齋壁」;《圖畫見聞志≫亦謂:「名覽壁畫,置 之甘露 J。40較早的一則有關牆紙的記載,也許是明末文震亨 (公元一五八五年至一六 四五年)論室內裝飾一文。他說:「小室忌中隔,若有北牕,則分爲二室。忌紙糊,忌 作雪洞。此與混堂無異,而俗子絕好之。」所謂忌紙糊,似卽指紙糊牆壁。同卷又反對 在牆壁上繪壁畫與題字,謂「俱不如素壁爲佳。」41清初李笠翁(公元一六一一年至一 六八〇年)反對用白紙,而主張以醬色紙糊壁作底,再撕裂豆綠雲母箋貼于其上,以作 點綴。42則當時即使有紙糊牆壁,一般亦爲素紙**或單**色紙而非花紙。

至於以花紙糊牆,最早是何時在中國採用,很難確定。據我的假定,所謂花紙,也 許是中國畫軸的變形。中國人以山水、人物、花鳥等不同題材的繪畫卷軸,懸掛牆壁, 作爲裝飾, 由來已久。也許經傳教士帶囘歐洲的花紙就是這種畫軸。 李漁曾謂懸掛字 畫,「裱軸不如實貼,軸慮風起動搖,損傷名蹟,實貼則無是患。」13歐洲人初期也是 將圖畫裝框,掛在牆上,作爲裝飾。後來則將其直接裱糊在牆上,代替了掛在牆壁上的 昂貴毛織品 。 一項早期文献提及安裝牆紙的方法**說 :** 先用木楔将一木製的邊框釘在牆 上, 然後將一塊帆布安放在邊框內, 最後將牆紙**張貼**在帆布上。由於這樣的處理, 這些 牆紙可以很容易隨時移動。 這種牆紙, 可能就是一些懸掛在中國廳堂內用作裝飾的畫 軸,到歐洲以後的變形吧?

<sup>38</sup> 中國影響見Berthola Laufer, Paper and Painting in Ancient China (Chicago, 1931), pp.19-21 • **計画文化研究所** 

<sup>39</sup> Ackerman, pp.11-20 o

<sup>40</sup> 引文俱見≪古今圖書集成≫(台北·**1964**)·卷**98·頁59**所引。

<sup>41</sup> 此節引用中國科學院考古研究所夏鼐先生1972年7月17日答李約瑟教授函中所述,特此申謝。

<sup>42 ≪</sup>李漁全集≫・(台北・1970)・冊6・頁2403-40。

<sup>43 ≪</sup>李漁全集≫,冊6,頁2398。

Paper for C

## Chinese Paper for Graphic and Decorative Arts

(A Summary)

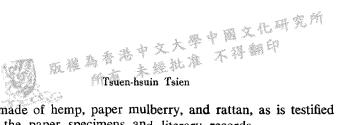
#### Tsuen-hsuin Tsien

Paper has always been a cheap substitute for more expensive materials which were indispensable for other uses. It is sometimes suitable for uses for which other materials will not serve. Paper was apparently not invented for writing. As time went on, writing on paper has developed into a special branch of art, and both calligraphy and painting have found paper the best medium for artistic expression. Papermaking made further progress by adding fancy colours and delicate designs for decorative and other purposes. Being cheap and light, paper was used to make replicas of treasured objects for ceremonial occasions, or as a medium of exchange in place of heavy and valuable metals. Today, paper and paper products have hundreds of uses in graphic communication and in business, industry, and household operations. Many such uses can be traced back to centuries ago when paper was used as extensively and variously in China as it is elsewhere today.

The progress of papermaking is reflected in the increasing varieties and names of paper, which have many different origins. Some of the names denote the raw materials of which paper was made; others refer to places where the paper was manufactured; and still others are the names of designers or of the studios which have made the product famous. Papers are also named for methods of treatment, as sizing, coating, dyeing, or treating with spices; for their appearance or size; and for the use for which a variety is particularly made. This article will trace the origin and development of special kinds of paper used in graphic and decorative art as recorded in literature or found in existing specimens.

Paper was used very early to substitute for bamboo and silk as writing material. No written characters, however, are found on the earliest extant paper specimens and no reference to the use of paper for writing is mentioned in Western Han literature. Paper was certainly used for books and writing from the Later Han. It is recorded that a copy of the Ch'un Ch'iu Tso Chuan written on paper was given to students wno studied the classic at the Han court in A.D. 76. Some two dozen characters are found on a remnant of paper from Chü-yen dated around A.D. 110. Numerous paper documents discovered in Chinese Turkestan bear dates all from the 3rd century onward. It is believed that paper was not extensively used for books and documents, replacing bamboo and wood, until the late 2nd or 3rd century and it co-existed with silk as late as the 5th century.

The earliest example of a complete book on paper is probably the *P'i yü ching* (Parable sutra) written in A.D. 256 on paper of mixed fibres of hemp, paper mulberry, rags, and nets, known as the *liu ho chih* (paper of a combination of six materials). Other early book rolls extant today are generally written on papers of hemp, lime, paper mulberry, ramie, or a mixture of these materials. The commonest papers used in the



T'ang dynasty were made of hemp, paper mulberry, and rattan, as is testified by both the analytical studies of the paper specimens and literary records.

The papers used for copying sutras and other books since the T'ang dynasty were of two kinds made chiefly from hemp. The white one was called pai ching chien (white sutra paper); and the yellow one, called ying-huang chih (stiff yellow paper), was treated with yellow insecticidal liquid with a glossy surface and strong, close texture. The same kind of paper continued to be manufactured in the Sung dynasty, when a kind known as Chin-su chien (paper from the Chin-su Mountain) was specially made for copying the Tripitaka in the Kuang-hui temple in Chekiang. A similar well treated, golden yellow paper, known as chiao chih (pepper paper), was made in Chien-yang, Fukien, in the Southern Sung dynasty. It was dyed in a liquid prepared from the seeds of the pepper tree (Zanthoxylan piperitum), with a strong spicy flavour which is said to last several hundred years. Other papers popular for printing books in the Sung dynasty included pei ch'ao chih, a shining white kind made from the creeping plant pei-chai (Dioscorea quiqueloba) in Fu-chou, Kiangsi; P'u-ch'i chih, a medium heavy paper made in P'u-ch'i, Hupeh; Kuang-tu chih, a product of the paper mulberry from Kuang-tu, Szechuan; Yu-ch'üan chih, a rattan paper made in Chia-hsing, Chekiang; and Chi-lin chih, a very smooth and heavy paper from Korea.

Since the Sung dynasty, printing has become popular and papermaking has made further progress. Generally speaking, the paper used for printing was thin, soft, light, and fine. The raw materials were mostly bamboo and paper mulberry with sometimes a mixture of rice stalks and other materials. In the Yüan and Ming dynasties, a kind of extra wide paper was made of bamboo for writing, known as ta ssu lien (large four-fold). In some districts, fine bamboo was made into a specially heavy and sturdy paper called kung-tu chih (official document paper), primarily used for official documents. Of the paper for bookmaking during the Ming, the best is said to have been the white, sturdy mien chih (cotton paper), which was actually made of bamboo from Yung-feng, Kiangsi; next was the soft, heavy chien chih (stationery paper) from Ch'ang-shan, Chekiang; then the less expensive shu chih (book paper) from Shun-ch'ang, Fukien; and last was the chu chih (bamboo paper) from Fukien, which was short, narrow, dark, and brittle, and the lowest in quality and price. The K'ai-hua chih, a paper of extraordinary quality made in K'ai-hua, Chekiang, was especially selected by the Ch'ing court for the printing at the Wu-ying Tien of the tien-pen, or the Palace editions.

Most popular among the many kinds of paper for artistic uses has been and is still the Hsüan chih, a fine white paper made in Hsüan-chou (modern Hsüan-ch'eng, Anhui) from the bark of the t'an tree, or sandalwood (Dalbergia hupeana), mixed with rice stalks. This paper was first mentioned in the T'ang documents as an article of tribute from Hsüan-chou. These high-grade ones are called yü-pan (jade tablet), a very large sheet of white, heavy paper; hua-hsin (picture heart), one of the artists' treasures; and lo-wen (silk stripes), apparently with textile patterns. The Hsüan chih is especially noted for its large size, normally twelve by eight feet, with one to three layers in one sheet. Some of the sheets, known as p'i chih, were as long as 50 feet. The products are soft, absorbent, smooth, strong, and elastic, suitable for books, documents, stationery, rubbing, and especially for calligraphy and painting.

Another time-honoured paper for artists is the Ch'eng-hsin-t'ang chih (paper from the Pure Heart Hall) especially made in Nanking for the royal poet Li Yü (A.D. 937-978). It was described as fine, thin, glossy, smooth, and absorbent, and was considered the best kind of paper at that time.

Chinese Paper for Graphic and Decorative Arts

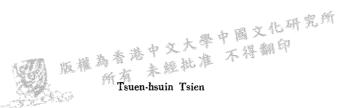
For many centuries in China, paper has been specially designed with a variety of patterns, plain or coloured, for writing letters, poems, and business contracts. These papers were dyed a single colour, printed with multi-coloured paintings, embossed in patterns, or sprinkled with gold or silver dust, in order to make them as elegant and pleasing as possible. The making of such paper was an art in itself, and many artists and poets contributed to the advancement of techniques for such ornamentation. It is generally known that violet note paper was used by the famous calligrapher Wang Hsi-chih (A.D. 321-79), and note papers decorated with a peach blossom pattern in bright green, blue, and red were designed by Huan Hsüan (d. A.D. 404) in Szechuan, which has been especially distinguished for decorative note papers for many centuries.

According to early records, stationery papers in ten different colours were made by a T'ang official, Hsieh Shih-hou of Szechuan. There were also fancy varieties of paper called by such names as pine flower, golden sand, bright sand, rosy clouds, golden powder, dragon and phoenix (red with gold), peach-pink with golden spots. The most famous note paper was probably the small reddish note paper designed by Hsüeh T'ao (A.D. 768-831), a courtesan well versed in poetry who exchanged poems on note paper of her own design with such noted poets as Yüan Chen (A.D. 779-813) and Po Chü-i (A.D. 772-846). It was said that this paper was made of hibiscus skin mixed with powdered hibiscus flower petals to increase its lustre.

The earliest ornamental note paper with pictures in multi-colour was probably developed before the Sung dynasty. It is said that embossed letter papers in such beautiful coloured designs as mountains, rivers, forests, trees, flowers, fruits, lions, phoenixes, insects, fish, old father, eight immortals, and ancient seal characters, were made by the family of Yao Ch'i (fl. 940). Apparently, paper with embossed designs, watermarks, and marbled paper were developed also at this time or earlier. Dard Hunter has set the origin of watermarks in 1282 in Europe and marbled paper in 1550 as "a Persian invention". From the literary records and existing specimens the Chinese certainly made such stationery at least three to five hundred years earlier.

A close relationship between the manufacture of stationery paper and the art of colour prints developed in the late Ming dynasty. The most famous is the ornamental letter papers designed by the Ten Bamboo Studio, known as the Shih-chu-chai chien-p'u, published about 1645 by Hu Cheng-yen (ca. 1582-1672). The manual included such designs as flowers and plants, landscapes, rocks, human figures, antique objects, and furniture of a scholar's studio, all printed in multi-colour from wood blocks. The earliest extant such stationery designs can be seen in the Lo-hsüan pien-ku chien-p'u, published by Wu Fa-hsiang (b. 1578) in 1626. Both techniques and artistic designs make it apparent that Hu Cheng-yen was very much influenced by this work which appeared some 19 years earlier. Ornamental stationery was also used for business contracts, in which case it is commonly known as chien-t'ieh.

The calling card, known as ming-tz'u (name card) or pai t'ien (visiting card), was derived from the use in the Han dynasty of a strip of wood on which the personal name was written. The wood was replaced by paper about 2 to 3 inches wide probably in the 5th or 6th century, when such information as the visitor's name, native town and official title was included. In the Ming dynasty, the name card was enlarged, with the name written in big characters for a Han-lin scholar, who was privileged to use a red card, while the common people used white. The highest grade of paper, known as kuan-chien (official stationery) was used especially for calling cards by the officials and wealthy class.



Chinese living room doors and windows were designed with lattices on which paper was pasted to admit a softened sunlight in lieu of glass. Gauze was used in ancient times and later thin but sturdy paper in large sheets took its place. The highest grade of this paper, used to paper windows in imperial palaces, was called *ling-ch'uang chih* (window-gauze paper), each sheet of which was over seven feet long and more than four feet wide, and some were dyed in various colours. In the Ch'ing dynasty, tributary paper sent from Korea was used for the windows of palaces. Requisitions of paper for the windows and lanterns of the imperial altars, temples, and hostels for foreign visitors were detailed in government administrative codes.

It is generally believed that wallpaper was first brought from China to Europe by French missionaries in the 16th century, and later from Canton by Dutch, English, and French traders, and that it was imitated in Europe in the 17th century. The colourful papers from China with hand-painted designs of flowers and birds, landscapes, and scenes of domestic life were especially fashionable in Europe from the 17th through the 19th centuries. But the history of wallpaper in China is not clear and no evidence of its origin is available earlier than the 17th century. Some accounts mention that the Ch'ing emperors, especially K'ang-hsi (r. 1662-1722), showed a great interest in developing decorative arts, including wallpaper. Since its designs were quite similar to the patterns of the Chinese porcelain that came to Europe, they were apparently made by the same group of artist craftsmen primarily for the foreign trade.

In Chinese interior decoration in the old days, plain white or single-colored walls without fancy designs were preferred. Earlier records indicate that pictures were sometimes painted on the walls and paper coverings on the walls were considered vulgar and not liked by people of good taste. A possible Chinese origin of wallpaper may have been the hanging scrolls of such subjects as landscapes daily life, or flowers and birds, which have been used for decoration of walls in China for many centuries. A Chinese scholar of the 17th century suggested the pasting of such scrolls of calligraphy or painting directly on the walls instead of hanging, in order to prevent damage to the scrolls by blowing in the wind. One early European reference to applying wallpapers also says that the old method was to fasten a wooden framework over the surface of the bare walls; this was fixed to wooden wedges driven into brick or stone work, thus leaving am airspace between. On these frames canvas was stretched, on which the wallpapers were fixed. What was brought to Europe by the early missionaries was perhaps not what we call wallpapers today, but may have been such hanging scrolls of pictures, which were first framed and later pasted instead of being hung on walls.

