

# THE VOICE OF HAN

## 漢之聲

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**National stadium in Beijing**

北京國家體育場

**George Washington, a Great Exemplar for Chinese**

喬治華盛頓是台灣海峽兩岸  
中國政府與人民的偉大典範

**A Model for a “Declaration of China’s Peaceful Democratic Re-unification”**

「中國和平民主統一宣言」模式

**Chinese and US Cooperation on Freezing North Korea’s Nuclear Programs**

中國與美國凍結北韓核武的合作

**2008 Olympiad XXIX to be held in Beijing, China**

2008 年第 29 屆奧林匹克運動會于中國北京舉行



**George Washington (1732 – 1799) was the first President of the United States. He led America's Continental Army to victory over Britain in the Revolutionary War.**

美國第一任總統喬治華盛頓先生

[http://en.wikipedia.org/wiki/George\\_Washington](http://en.wikipedia.org/wiki/George_Washington)



**Sun Ye-Sen led a successful Xin-Hai Revolution and founded the Republic of China in 1911.**

孫中山先生於1911年領導辛亥革命成功並締造民國

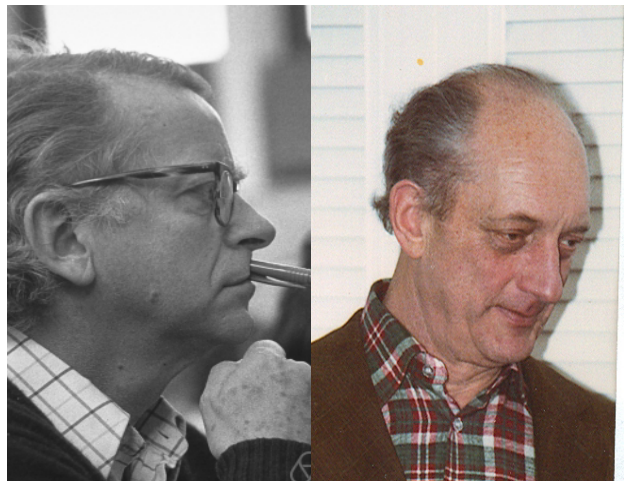
<http://zh.wikipedia.org>



**Mohammad Yunus was the 2006 Nobel Peace Prize recipient.**

穆罕默德·尤努斯是2006年的諾貝爾和平獎得主

<http://kbyutv.org/smallfortune/images/luminaries/yunus.jpg>



**Professors James Eells (left) and Joseph H. Sampson (right) were two pioneers of Harmonic Maps.**

伊爾教授與森普孫教授是調合映射的二位先驅大師

[http://owpodb.mfo.de/person\\_detail?id=944](http://owpodb.mfo.de/person_detail?id=944)

## Editor's Remarks

## 編者的話

On April 16, 2007, a massacre involving two separate attacks about two hours apart occurred on the Virginia Tech campus in Blacksburg, Virginia, United States. Seung-Hui Cho, a South Korean and senior English major at Virginia Tech, killed 32 people and wounded many more, before committing suicide, making it the most deadly school shooting in U.S. history. We express our deepest condolences and sympathy to their families and friends. Most countries in Asia have gun control laws which make school shootings less likely to happen on campus.

2007 年 4 月 16 日美國維吉尼亞州理工學院發生屠殺案，在兩個小時牽連兩個槍擊案。本校大四英語系南韓學生趙承熙用槍殺死 32 人(5 位教授與 27 學生)並殺傷許多人，然後自殺，造成美國有史以來校園屠殺最大的慘案。我們對所有死傷家屬及朋友們致最誠摯的憐憫與哀悼之意。在亞洲大部分國家有控制槍枝買賣的法律，其讓校園槍殺事件較少發生。

Queen Elizabeth II visited the United States on May 3, 2007, for the commemoration of Jamestown's 400<sup>th</sup> anniversary and praised the cultural changes that have occurred since she last visited American's first permanent English settlement 50 years ago. The queen also met some of the wounded and relatives of the victims 32 slain. Afterwards, President George W. Bush hosted the first ever white-tie state dinner to honor America's closest ally at the White House and made the Queen feel welcome.

伊莉莎白皇后於 2007 年 5 月 3 日訪問美國紀念維吉尼亞州吉米城 400 週年及贊歎自她 50 年前訪問美國第一永久英國殖民地的文化變遷。她也會見一些 32 死者家屬及受傷人員。隨後布希總統於白宮設白領帶國家晚宴款待美國最親密的盟國，使皇后感覺很受歡迎。

Former French President Jacques Chirac (1995-2007) made a five-day visit to China in October 2004, and reaffirmed the one-China policy. The efforts to promote bilateral ties between the two countries have resulted in cooperation that has reached its best in history in the fields of economy, education, culture, science, and technology. French and Chinese scientists and researchers have brought over 700 joint projects together. Nicolas Sarkozy is the new President of France, elected on May 6, 2007, after defeating Socialist Party contender Segolene Royal during the second round of the 2007 election. We wish him the best luck and success to lead the French people during his presidency.

前法國總統傑克席拉克於 2004 年 10 月訪問中國五天，他重申「一個中國」政策。中法共同努力提昇雙方結合達到有史以來於經濟、教育、文化、科學、技術方面的最佳合作。法國與中國科學家與研究人員合作 700 多項研究計畫。尼科拉斯撒科熱在 2007 年 5 月 6 日於第二回合選舉擊敗社會黨斯勾累尼柔西任法國新總統，我們致以最佳祝福並預祝他在總統任內成功的領導法國人民們。

In the world community, we are all in the same family occupying the same boat, this planet earth; therefore, we feel the deepest sympathy to Virginia Tech, and the high praise for Queen Elizabeth's visit. We also pay high respect to former President Chirac and congratulate President Sarkozy. The 2008 Olympiad will be held in Beijing, China. All the Chinese people are looking forward to and graciously welcome all the people throughout the world to participate this spectacular sports event. Let's wish them the best luck, success, security, and performance to the 2008 Olympiad in Beijing.

四海之內皆兄弟也。我們向維州理工學院致無比的哀悼及稱讚伊莉莎白皇后訪美。我們也向法國前總統傑克席拉克致崇高敬意及恭喜撒科熱任新總統。2008 年奧林匹克運動會將在中國北京舉行，所有中國人民期待及歡迎全世界人民參加這一盛大運動會，我們向 2008 年北京奧林匹克運動會致以最佳祝福、安全、表現並預祝大會圓滿成功。



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「漢之聲」是一份致力於中國研究與國際關係的教育雜誌，由海鴻基金會出版。海鴻基金會是一非營利組織，於 2000 年成立於美國維吉尼亞州。其目標一：美國維吉尼亞州及中國廣東省大學清寒獎學金；目標二：出版「漢之聲」。

**Submissions:** *The Voice of Han* (bilingual, English and Chinese) welcomes the submissions of articles from experts and scholars in Politics, Economics, Science, Engineering, Education, Literature, Philosophy, History, Culture, Religion, etc. Although we are more interested in Chinese studies and international relations, an excellent article in any area involving any country will be published. One volume of the journal is published each or the other fall. Articles should normally not exceed 15 pages (including English and Chinese). Please send your articles or letters to: [voiceofhan@aol.com](mailto:voiceofhan@aol.com). If you can write your article in only one language, the editorial board will translate it for you into the other language.

**投稿:**「漢之聲」(英文與中文雙語雜誌)歡迎專家學者投稿於政治、經濟、科學、工程、文學、哲學、歷史、文化、宗教等。雖然我們對中國研究與國際關係較感興趣，但若一篇關於任何課題涉及任一國家的佳作將會被出版。這雜誌每年或隔年秋季出版一冊，一篇文章最長 15 頁(包括英文及中文)。請將您的文章或信寄至: [voiceofhan@aol.com](mailto:voiceofhan@aol.com)，您若只能用一種語言撰寫文章，編輯委員會將幫助您翻譯成另一語言。

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## President George Washington, a Great Exemplar for Chinese Governments and People across the Taiwan Strait

Shao Long

## 喬治華盛頓總統是中國大陸與台灣政府及人民們的偉大典範

紹隆

George Washington (1732-1799) led the American Continental Army to great victory over Great Britain in the American Revolutionary War (1775-1783). He was elected the first president of the United States and served for two terms (1789-1797) under the U. S. Constitution. George Washington is referred to as “The Founding Father of the United States,” due to his central and critical role in the founding of the United States. His devotion to the American people and great virtues made him an exemplary figure for all the American politicians and people. He was also a great exemplar for all the Chinese and Taiwanese governments and people across the Taiwan Strait. When we investigate the current political situations across the Taiwan strait, we observed that Mainland Chinese government is dominated by Communism and Taiwanese government is dominated by a democratic progressive party in chaos. Compared to the United States, the first democratic country in the world established in 1776, China’s political progress is at least 230 years behind. This article contains three parts: I. biographical sketch of George Washington, II. briefs of current Chinese and Taiwanese governments and their ideology and III. President George Washington, a great exemplar for Chinese governments and people across the Taiwan Strait.

喬治華盛頓(1732-1799)於美國獨立革命戰爭(1775-1783)領導美國大陸軍隊對抗大英帝國贏得偉大勝利。他在美國憲法下被美國人民們選為第一與二任(1789-1797)總統。由於他在創建美國的過程中擔任領導與重要的角色，因此他被尊稱為「美國國父」。他對美國人民們的奉獻精神及其德行操守使他成為所有美國政治家們與人民們的偉大典範。他也是台灣海峽兩岸中國大陸與台灣政府與人民們的偉大典範。當我們觀察目前台灣海峽兩岸的政治情況，中國大陸被共產黨控制，台灣政府被民進黨胡亂控制，比較起建國於1776年世界第一民主國家的美國，中國的政治至少落後230年。這篇文章包括三部分：(I) 喬治華盛頓總統簡介；(II) 目前中國大陸及台灣政府其意識形態簡介；(III) 喬治華盛頓總統是台灣海峽兩岸中國大陸與台灣政府與人民們的偉大典範。

### I. Biographical sketch of George Washington      喬治華盛頓總統簡介

*The good opinion of honest men, friends to freedom and well-wishers to mankind, where ever they may happen to be born or reside, is the only kind of reputation a wise man would ever desire.* —George Washington, June 20, 1788.

一位智慧的人所祈求的名譽是誠實的信念，追求人類予生俱有自由與祈福的朋友。——喬治華盛頓於1788年6月20日。

*A gentleman whose skill and experience as an officer, whose independent fortune, great talent and excellent universal character would command the approbation of all America and unite the cordial exertions of all the Colonies better than any other person in the union.* —John Adams (the 2<sup>nd</sup> president of U. S. A.), in proposing Washington as commander in

chief of the Continental army, 1775.

喬治華盛頓以其才能與經驗擔當政府官員，他的財富，偉大天賦，及高尚道德可統治全美國及聯合所有殖民地甚於聯邦的任何其他人。——約翰亞當斯(美國第二位總統)於 1775 年推薦喬治華盛頓擔任美國大陸軍隊統帥。

George Washington was born on February 22, 1732 (Old Style February 11), the first son of Augustine Washington (1694-1743) and his second wife, Mary Ball Washington (1709-1789) in Westmoreland County, Virginia. Augustine was a planter who spent much of his time acquiring and overseeing about 10,000 acres of land in the Potomac region in Virginia, running an iron foundry, and tending to business affairs in England. He passed away when George was 11 years old. Because he was away from home so much for business, George remembered him only vaguely as a tall, fair and kind man. The legendary cherry tree incident and his honesty of telling the truth to his father are well-known to the people all over the world and are a great lesson for all young children.

喬治華盛頓於 1732 年 2 月 22 日出生於維吉尼亞州威斯模蘭縣，是奧格斯丁華盛頓與第二任妻子瑪莉華盛頓的第一個兒子。奧格斯丁是一個莊稼漢，他花了很多時間在維吉尼亞州波多馬克河邊經營約 1,000 畝的土地，開鐵工廠，經常到英格蘭作生意。當喬治華盛頓 11 歲時，他父親便過世了。因為他父親經常離家作生意，喬治華盛頓只模糊記得他是個子高，公平且仁慈的人。有關傳說喬治華盛頓誠實告訴其父親砍櫻桃的故事，全世界的人們都家喻戶曉，且可給所有年輕人們上一大課。

A great influence on young George was his half brother Lawrence, 14 years his senior. George looked upon Lawrence as a surrogate father and sought to emulate him. Lawrence thought a career at sea might suit his brother George, who loved the sea. Lawrence arranged an appointment for him as midshipman in the British navy, but his mother Mary opposed it. To respect his mother's wishes, George turned down the appointment. In Chinese vernacular, George was very filial to his mother, based on his rejecting the appointment.

對喬治華盛頓影響很大的是他的從兄勞倫斯，比他年長 14 歲，喬治把他看作代理父親，想跟他學習。喬治喜歡海，勞倫斯認為從事海的生涯對他是合適的。於是勞倫斯安排他在英國海軍當船員的約定，但他母親反對；因此為了順從母親，他拒絕了約定。套用中國話來說，他是很孝順的。

His mother Mary did not send George to school in England, as her late husband had done for his older brothers, but instead exposed him to the irregular education common in colonial Virginia. By age 11, George had picked up basic reading, writing and mathematical skills. Mathematics was his best subject. Unlike many of the founding fathers, George never found time to learn other languages, and did not attend college or university. Even though he did not have a college education, he had a brilliant mind. He applied his mathematical skills to surveying, an occupation much in demand in colonial Virginia, where men's fortunes were reckoned in acres of tobacco rather than pounds of gold.

他的母親瑪莉並沒有送華盛頓如同她前夫送他的兄弟到英格蘭唸書，她讓華盛頓在維吉尼亞受非正式教育。華盛頓 11 歲時學會了基本的讀、寫及數學技巧，數學是他最好的學科。不像其他的開國元勳，華盛頓從來未學習其他語言，也沒上大學，他雖未上大學，但他內心是聰慧的。他利用數學技巧去從事測量，這職業當時在維吉尼亞州是很需要，在那裡人們的財富被幾畝煙草的召喚甚於幾磅的黃金。

At age 26, George Washington married a widow, Martha Dandridge Custis, 27 and adopted



her two children from a previous marriage, John Parke Custis and Maththa Parke Custis. John's granddaughter Mary Curtis married Robert E. Lee. He rarely referred to God or Jesus in his writings but rather to Providence (just like Chinese). He fashioned a moral code based on his own sense of right and wrong and adhered to it rigidly. He strongly believed in fate, a force so powerful, he maintained, as "Not to be resisted by the strongest efforts of human nature."

喬治華盛頓 26 歲時娶了 27 歲有二個孩子的寡婦瑪莎科思提斯，他沒有孩子，收養其妻子的二個孩子，約翰科思提斯及蔑思沙科思提斯，約翰科思提斯的孫女嫁給南北戰爭南方勞伯李將軍。喬治華盛頓相信天道(如同中國人)甚於上帝及耶穌。他用自己的是非對錯設定道德標準然後堅守它。他很相信命運，遵守「不違背人道天理」。

In 1752 Washington received his first military appointment as a major in the Virginia militia. On a mission for Governor Robert Dinwiddie during October 1753-January 1754, he delivered an ultimatum to the French at Fort Le Boeuf, demanding their withdrawal from territory claimed by Britain. The French refused. The French and the Ohio Company, anxious to acquire western lands, were competing for the control of what is now Pittsburgh. The French drove the Ohio Company from the area and at the confluence of the Allegheny and Monongahela rivers constructed Fort Duquesne. Promoted to lieutenant colonel in March 1754, Washington oversaw the construction of Fort Necessity in what is now Fayette County, Pennsylvania. However, he was forced to surrender that place to the French and Indian in July 1754, a humiliating defeat that temporarily gave France control of the entire region. Washington gained command experience during the French and Indian War (1754-1763). Due to this experience, his military bearing, his enormous charisma, and his political base in the largest colony, the second Continental Congress chose him as commander-in-chief of the American army in 1775. From 1759-1774 he was a member of House of Burgesses. He was a delegate to the Continental Congress, from 1774-1775.

華盛頓於 1752 年在維吉尼亞軍隊接受第一軍事合同擔任少校。1753 年 10 月至 1754 年 1 月在勞伯丁維弟州長的一個任務，華盛頓攜帶最後通牒給法國人于勒玻福堡，經由英國要求需要他們從領土撤退，但法國人拒絕。法國人及俄亥歐公司急於獲得西面土地，爭著控制匹茲堡，法國人把俄亥歐公司搬到阿勒尼河及摩耨歌賀拉河建立都昆斯堡。華盛頓於 1754 年 3 月晉升上校，他督導內斯斯提堡即現在賓州費業縣，但同年七月他被迫投降於法國人及印地安人於此地，一個恥辱的戰敗，暫時讓法國控制這整個區域。華盛頓於 1754-1763 年在法國人及印地安人戰役中獲得統帥經驗。因為他的經驗、軍權、使人信服的領袖氣質，在最大殖民地的政治基地，第二大陸國會於 1775 年選舉他為美國國軍最高統帥。1759-1774 年他是美國獨立前維吉尼亞州與馬里蘭州兩州的眾議院議員。1774-75 年他是大陸國會代表。

He was a commander in chief of Continental Army during Revolution 1775-1783. With poorly trained, undisciplined force comprised of short-term militia, General Washington took to the field against crack British regulars and Hessians mercenaries. In March 1776 he thrilled New Englanders by flushing the redcoats from Boston, but his loss of New York City and other setbacks later that year dispelled any hope of a quick American victory. Sagging American morale got a boost when Washington slipped across the Delaware River to New Jersey and defeated superior enemy forces at Trenton (December 1776) and Princeton (January 1777). However, humiliating defeats at Brandywine (September 1777) and Germantown (October 1777) and the subsequent loss of Philadelphia undermined Washington's prestige in Congress. Some people conspired to remove Washington and replace him with General Horatio, who had defeated General John Burgoyne at the battle of Saratoga (October 1777). Washington's congressional supporters rallied to quash the so-called Conway Cabal. Prospects for victory

seemed bleak as Washington settled his men into winter quarters at Valley Forge, Pennsylvania December 1777. “No pay! no clothes! no provisions! no rum!” some people chanted. But remarkably there was no mass desertion, no mutiny. Patriotism, to be sure, sustained many people, but no more so than did confidence in Washington’s ability to see them through safely. With snow-clogged roads impassible to supply wagons, the men stayed alive on such fare as pepper pot soup, a thin tripe broth flavored with a handful of peppercorns. Many died that winter. Those that survived drew fresh hope with the greening of spring and the news, announced to them by General Washington in May 1778, that France had recognized the independence of America. Also encouraging was the arrival of Baron Friedrich von Steuben, who, at Washington’s direction, drilled the debilitated Valley Forge survivors into crack troops.

1775-1783 年華盛頓將軍是美國獨立戰爭的大陸軍隊的最高統帥，他用訓練不足的短期軍隊對抗英國正規軍隊。1776 年 3 月他用波斯頓紅衣軍振興新英格蘭人們，但他失去紐約市及其他失敗，使他排除美國獨立軍隊迅速勝利的任何希望。當華盛頓越過達拉威河到新澤西，在 1776 年 12 月於泉騰及 1777 年 1 月於普林斯頓打敗勝氣凌人的敵軍，受挫的美軍得到振奮。但 1777 年 9 月於布蘭地灣及 10 月於街門鎮屈辱的戰敗，接著費城的失守，瓦解了華盛頓在國會的名譽。一些人們曾想暗中替換華盛頓將軍為河若休薇將軍，他在 1777 年 10 月打敗玻勾尼將軍於撒若投夾戰役，華盛頓在國會的支持者繼續支持他。1777 年 12 月華盛頓於賓州維利佛基穩住軍心，勝利呼聲似乎才到來。一些人們說：「沒有薪水，沒有衣服，沒有條件，沒有結局。」但大部分人們沒有掉以輕心；愛國心繫著大部分人們，他們對華盛頓能安全渡過難關的領導力深具信心。大雪鋪蓋路面馬車難以通行，人們以胡椒熱湯及包穀湯維持生命，那些存活的人們充滿著新春綠意的希望。華盛頓將軍於 1778 年 5 月對他們宣佈法國承認美國的獨立。巴朗富瑞德弟敘也在華盛頓領導下欣然來歸，並解放佛格河谷的存活者加入正規軍隊。

General Washington imposed strict, but not punitive, surrender terms: All weapons and military supplies must be given up; all booty must be returned, but the enemy soldiers could keep their personal effects and the officers could retain their sidearms. British doctors were allowed to tend to their own sick and wounded. Cornwallis accepted, but instead of personally leading his troops to the mutually agreed-upon point of surrender on October 19, 1781, he sent his deputy Brigadier Charles O’Hara. Unwilling to deal with a man of lesser rank, Washington directed O’Hara to submit the sword of capitulation to his aide General Benjamin Lincoln. In his victory dispatch to Congress, Washington wrote with pride, “Sir, I have the Honor to inform Congress, that a Reduction of the British Army under the Command of Lord Cornwallis, is most happily effected. The unremitting Ardor which actuated every officer and soldier in the combined Army in this occasion, has principally led to this important event, at an earlier period than my most sanguine hopes had induced me to expect.” In November 1783, two months after the formal peace treaty was signed, Washington resigned his commission and returned home to the neglected fields of Mount Vernon.

華盛頓將軍雖執法嚴厲，但仍是寬大的；投降條件：敵軍所有武器及軍事補助品必須放棄，所有戰利品必須還回，但敵軍可以保持他們個人的所有物及長官們可以保持他們的武器。英國醫生們被允許看護病患者及傷患者。康偉力斯統帥接受，但與其個人領導他的軍隊去同意投降條件，他寧願派代表陸軍准將察理歐哈若，華盛頓不願與低階軍官談話，他引導歐哈若呈交投降條件的兵權給班哲名林肯將軍。在給國會的勝利電報，華盛頓驕傲的寫著：「先生：我非常高興地榮幸通知國會關於康偉力斯統帥之下英國裁軍的消息，在這重要場合，不間斷的熱衷激起聯合軍每一長官及兵士行動已經是我所預料到的。」二個月後正

式和約被簽訂，1783 年 11 月華盛頓辭退他的職務而回到他維吉尼亞州家漫特維農。

George Washington, a Virginia delegate, was unanimously elected President of the Constitutional Convention in 1787. He was among those favoring a federal government. Washington, a Federalist, was elected as President (first term) of the United States with great victory in 1789. A proven leader whose popularity transcended the conflict between Federists and those opposed to a central government, the man most responsible for winning independence. Despite the growing strength of Democratic-Republicans, Washington continued to enjoy virtually universal support. He was reelected as President (second term) of the U.S. in 1792. Please read III about his first and second inaugural addresses. President Washington announced his retirement in his celebrated Farewell Address in 1796. He passed away on December 14, 1799 after 10 p.m. at Mount Vernon, Virginia.

1787 年喬治華盛頓以維吉尼亞州代表被全體一致選為憲法代表大會會長。他是贊成聯邦政府的人們之一，1789 年他獲得大勝，被選為美國第一任總統。他是一位被證明的領導者，他的聲望平服聯邦政府支持者及反對中央政府者，他是對美國獲得獨立的重大貢獻者。儘管民主共和黨的勢力漸增，華盛頓於 1792 年再次幾乎獲得全體支持，被選為第二任總統。請閱讀第三部分有關他的第一任與第二任總統就職宣示演講詞。1796 年華盛頓於他的再會致別詞公佈他的退休。他於 1799 年 12 月 14 日晚間 10 點以後去世于維吉尼亞州家漫特維農。

## II. Briefs of current Chinese governments and their ideologies across the Taiwan Strait

### 1. Briefs of current Mainland China's government and their ideology

Since Mo Zedong (1893-1976) established the People's Republic of China in 1949, he enforced Marxist ideology and his own thought to the Chinese people. "The thunder of artillery of the revolution of October sends us Marxist and Lenin's principles," said Mao. Since Sun Yat-sen ever suggested that "adopt Russian as our teacher", using Russia's "party over the nation", non-separation of party and politics, and party substituted as nation, the party-nation politics was gradually established through the Kuo-Ming Party (The Nationalist Party) and Communism Party. Chinese communism originated from the Bolshevik Party which was controlled by Russia. Mao Ze-Dong resorted to arms to deal with politics, and used deception and violence to establish the People's Republic of China in 1949. Marxist and Lenin's principles were practiced by all the Mainland Chinese. Mainland China followed Russia's political system as well as economic system. Mo Ze-Dong's thought is the mixture of Marxist and Lenin's principles and Chinese practices. In the Cultural Revolution in 1966-1976, Mo Ze-Dong completely criticized about capitalism, and his ideology was worshiped by Chinese as a religion. After the Gang of four: Jiang Qing, Zhang Chunqiao, Yao Wenyuan, Wang Hongwen were torn down, Hu Yaobang, the former chairman of communism party described the past ideology was "false, big, and non-sense."

自 1949 年中華人民共和國由毛澤東(1893-1976)建立以來，中國共產黨實行馬列主義、毛澤東思想。毛澤東說：「十月革命一聲炮響給我們送來了馬克斯列寧主義。」從孫中山先生提出「以俄為師」開始，蘇聯的「黨在國上」，黨政不分，以黨代政的「黨國」政體，經由國民黨與共產黨兩黨在中國逐漸形成。中國共產黨是徹底的布爾什維克黨，曾

## II. 目前中國大陸及台灣政府及其意識形態簡介

### 1. 目前中國大陸政府及其意識形態簡介



受蘇聯控制，1949 年毛澤東以槍桿子出政權，用謀詐與暴力手段推翻國民黨建立紅色共和國。馬列主義於是成為全中國人民必須頂禮膜拜的意識形態，不但政治體制參照蘇聯，經濟體制也參照蘇聯搞計劃經濟。毛澤東思想則成為馬列主義與中國實踐結合的產物。到文化大革命(1966-1976)時毛澤東提出的在意識形態領域對資產階級實行全面專政，此時的意識形態已驅宗教化。在粉碎極左的四人幫：江青、張春橋、姚文元、王洪文之後，新任總書記胡耀邦把過去那一套教條僵化的意識形態批之為“假、大、空”。

In 1979, Deng Xiaoping (1904-1997) initiated the economic reform which looked like the counter attack of communism. But, he changed the chaos of poor situations into order in Mainland China. Deng Xiaoping and Hu Yaoban made a lot of efforts trying to turn Mao Zedong's ideology away from Chinese daily practice. Therefore, Mainland China's reform started from weakening Marxist and Lenin's principles and Mao Zedong's thought for Chinese people. When Jiang Zeming took the office in 1988, he applied the new scholar, Wang Funing's (of Fudan University) proposal of "three delegates", which was different than the communist party representing the laborers. Some people criticize it was as unreasonable, but it fits the situations at that time well since more people could join together to reform China.

1978 年鄧小平(1904-1997)改革開放政策可說是文革極左浩劫的反彈，似是撥亂反正，其首先遭遇是意識形態障礙，鄧小平、胡耀邦等費力開展關於實踐是檢驗真理唯一標準的討論，才突破從毛澤東的個人迷信中解放思想，開啟了改革。中國的改革可以說是從淡化馬列主義、毛澤東思想的意識形態開始的。1988 年江澤民(1926-)執政後，從上海帶來復旦大學新權威主義者王淦寧，提出“三個代表”，理論上突破馬列所限定的共產黨只代表先進工人階級利益的局限。一些人批評不合馬列主義，但卻符合中國當今現況，擴大了共產黨的社會基礎並進一步淡化階級鬥爭，可以團結更多的人們來搞現代化。

*Ru* (Confucius's school) proposed the doctrine of the mean, the unifying of Providence's law and humanity, and dealing politics with virtues. The former President Jiang Jeming (1926-) also suggested "managing politics with morals". Therefore, Mainland China adopted the deceased Professor Zhang Dai's (of Beijing University) "Unifying theory", which intended to combine new *Ru* philosophy into Marxist ideology. After the new millennium, the government of the China's fourth generation took power from the third generation, Hu Jintao (1942-) and Wen Jiabo were confronted with the new difficulty of marketing economics making the rich people richer and the poor people poorer. The marketing economics of capitalism made China's GDP increase rapidly. In the mean time, people are losing jobs, and the gap of the earnings between rich people and poor people are increasing, and the satisfactions of people are decreasing. According to [5], although Hu Jintao proposed "eight honors and eight shames" and *Ru*'s "managing politics peacefully" in 2005, he apparently pinned down the ideology of freedom of people even worse at the same time. He secretly implemented many policies to control people's ideology, and sentenced some political dissentients to prison, which caused over a million Chinese to withdraw from the Communist Party. In this new era of computer technology, the effect of his control of people's ideology is negative. From Chiang Kai-shek's propaganda to people with the thought of "Ku-Ming party" to Mao Zedong's "Cultural Civilization", both failed eventually.

儒家提倡中庸之道，天人合一，為政以德；江澤民也提出“以德治國”，中共還運用已故北京大學教授張岱適時提出的“綜合創新論”要把新儒學馬克斯主義化。新千年後中國經濟迅速成長，中共於 2002 年完成了鄧後“第三代”核心，向“第四代”核心的權力交接，但胡錦濤(1942-)、溫家寶又面臨完善市場經濟新秩序實現均富的新難題，資本主義式

的市場經濟，在推動中國全民逐漸拉動人民所得大幅上升的同時，也使社會出現貧富懸殊、失業遽增、分配兩極化等不和諧現象，人們滿意度下降。根據[5]的報導，2005年胡錦濤雖表面上提出“八榮八恥”與儒家的“和諧治理”觀，但他上臺後明顯的加強人民意識形態的控制，暗中推行了許多控制言論鉗制思想的措施，補捉民主異議人士下獄，導致上百萬人民退出共產黨。他控制言論鉗制思想的措施，在高科技電腦聯網日益發達的今天，產生出負面的效果。在中國近現代以來，加強意識形態的控制，從蔣介石的“國民黨黨化”教育到毛澤東的“文化革命”運動，最後都以失敗收場。

The newspaper of the Chinese army reported an article of “preserving the history of the Chinese peoples’ military” which exalted the Chinese military to resist military nationalization on June, 18, 2007. The nationalization of military is the regulation that most of civilized countries obey. Communist China resists military nationalization which violates the trend, consciousness, Chinese constitution, and world’s military regulation. The defense of Taiwan abolished “principle and leader” of “five faiths of a soldier”, and changed into “three faiths: country, obligation, and honor” since July 2007, following USA’s three faiths. This fits the goals and objectives of military nationalization in the world. The five faiths of a soldier were announced by Chiang Kai-Shek in 1953 at the chief army school in Taiwan, in which he put principle and leader over the nation. It reflected that the military of Taiwan was controlled by Kuo-Ming party and Chiang Kai-Shek at that time. According to the World Journal and [4], since Hu Jintou took the presidency of China in 2002, he promoted ten people into generals immediately. Afterwards, many generals proposed articles to emphasize that “Chinese military obey the leader”, and announced that they resisted military nationalization.

2007年6月18日<<解放軍報>>發表了<<保持人民軍隊不變質的歷史啟迪>>文章，號召解放軍“堅決抵制軍隊國家化”，遭致許多中國與外國人們的異議。軍隊國家化是全世界文明國家普遍奉行的規則，中共要堅決抵制軍隊國家化是違背歷史潮流，違背良心，違背中國的憲法，與違背世界軍事革命的趨勢。2007年7月起台灣國防部廢除“軍人五大信念”中的“主義、領袖”改為“國家、責任、榮譽”，據稱此乃比照美國的“國家、責任、榮譽”三大信念，符合軍隊國家化的目標。“軍人五大信念”是1953年蔣介石於陸軍參謀指揮學校宣布的，即“主義、領袖、國家、責任、榮譽”，把主義、領袖置於國家之上，反映了當時臺灣軍隊的黨軍化與蔣軍化的情結。根據世界日報及[4]的報導，中國大陸自胡錦濤於2002年上臺後，他馬上晉升十位將領，促使許多高級將領撰文強調“堅決軍隊的絕對的領導”，並聲稱要“堅決抵制軍隊國家化”。

## 2. Briefs of current Taiwan’s government and their ideology

## 2. 目前台灣政府及其意識形態簡介

Taiwan is a part of China’s territory. In the Sino-Japanese War, China had a naval defeat, and ceded Taiwan to Japan for 50 years in the treaty of Ma-Guan in 1895. Since the defeat and surrender of Japan at the end of the Second World War, the sovereignty of Taiwan was returned to China in 1945. After Chiang Kai-Shek, the former president of the Republic of China and chairman of Kuo-Ming Party lost his power to Mao Ze-Dong in Mainland China in 1949, he led his party to evacuate to Taiwan. He repented and introspected very much, and therefore, he rebuilt Taiwan in a great endeavor. When he passed away in 1975, his son Chiang Jin-Kuo succeeded him to take the presidency. He carried out ten great projects from 1975 to 1988 such that Taiwan became one of the four best small countries with rapid economic growth in Asia.

Before he passed away in 1988, he lifted martial law and the ban on new political parties. All the Taiwanese ancestors originally came from Mainland China. However, since Lee Teng-Hui (1988-2000) and Chen Sui-Bian (2000-2008) taking the presidency about 20 years, they have tried to make Taiwanese forget their roots in China in order to weaken their relations with Chinese. "Remove binding with China" is always their policy. They disregard the happiness and future of about 23,000,000 Taiwanese. The administration of Chen Sui-Bian recently secretly reformed the textbooks of domestic history, "the history of our country", "Mainland China", "our country" etc., all changed into "China". In other words, Taiwanese look at China as a foreign country.

台灣是中國領土的一部，繼中日甲午戰爭馬關條約後，台灣主權於 1945 年歸還中國。1949 年前中華民國總統與國民黨主席蔣介石於大陸失去其政權於毛澤東，他帶領國民黨退守台灣反省檢討，痛定思痛，努力建設台灣。蔣介石於 1975 年去世後，他的兒子蔣經國繼任，於 1975-88 年間，蔣經國在台灣推行十大建設成功，使台灣經濟蓬勃起飛，成為亞洲四小龍之一，他於 1988 年去世之前，解除台灣戒嚴法及開放黨禁。所有約二千三百萬台灣人們的祖先們都來自中國大陸，李登輝(1988-2000)與陳水扁(2000-2008)執政約 20 年，「去中國化」一直是他們當權後的意識形態及推行政策，孤注一擲地犧牲掉台灣人們的認祖歸宗及未來幸福。陳水扁政府不久前還悄悄的修改歷史、地理教科書，將「本國」、「大陸」、「我國」等名詞一律改稱「中國」，其言下之意，那是「外國」的史地名稱(台灣並不包括在內)，台灣是從局外看「外國」史地。這樣做法無疑地又是一樁「台灣文化大革命」…。

According [6,a], he played the card of the interpretation of the constitution that he only can be investigated and interrogated at the end of his presidency, after Chen Sui-Bian was dismissed twice by the Senate (votes were over one half, but a little less than two thirds) for his presidency in 2006. His wife Wu Shu-Jen was under investigation for embezzling lots of government's money who was under investigation. He also insisted that his wife is sick and she is not able to go to the court. Apparently, he wants to postpone his and his wife's indictments untill he finishes his presidency. Therefore, his crisis of corruption can be diminished. It is very possible that he will promote Taiwan for independence in 2007. Chen said that the time for new constitution of Taiwan has matured, and he refused to accept the one China policy. He wants to use the name of Taiwan to enter the United Nations, etc.

根據[6, a]，繼陳水扁於 2006 年先後兩次被立法院彈劾下台後，他打出釋憲牌 - 根據憲法他有刑事豁免權直到其卸任及藉詞其妻吳淑珍有病無法出庭應訊，使法院無法審判其貪瀆案，陳水扁暗中透過政治手段使大法官釋憲延後，以便拖到任期屆滿，他可逃避一審有罪就下台的策略已明顯，因此扁在國務機要費案中的危機意已暫時穩住。2007 年可能成為他推動台獨的關鍵年。陳水扁最近言論包括催生新憲時機已成熟，並自認堅拒一個中國，以臺灣名義加入聯合國…等。

According to [6, b], Chen Sui-Bian has intention to take advantage of Taiwan's independence to clean up his reputation. If he can put any policy into action such that he gains international attention, he can take advantage of it to cover up his corruption. He can make the case that he was dismissed by millions of people in red uniforms as rebellion of politics. I visited Taiwan from June to July in 2007 and met a bus driver. "In the past, the officials of Kuo-Ming Party corrupted money by **small spoons**. In the present time, the officials of Democratic Progressive Party corrupted money by **robot's hands**," said the driver. "Economic growth in Taiwan is weakening each year such that many people can not make living and commit suicide.



Nowadays, **the business of coffin** is booming in Taiwan.” According to the World Journal, Chen Sui-Bian plans to spend about 4.5 billion USD to purchase eight navy ships (six first, and two later). This is the largest expense of his defense before he finishes his second turn in 2008. He ignores Taiwanese living problems and happiness, but tries to do something to flatter U. S. in order to help him more visible internationally.

根據[6, b], 陳水扁企圖想藉有台獨意涵的行動, 洗刷貪瀆案留下的歷史汙名, 只要行動能引發國際糾紛, 即使只有絲毫動靜, 他就可藉此轉移涉嫌貪瀆及百萬紅衫軍倒扁醜化為政敵的攻訐。筆者 2007 年暑假走訪台灣, 巧遇一公共汽車司機用流利的台灣話告訴我說:「過去國民黨執政, 大官們用**湯匙**貪污; 如今民進黨執政, 大官們用**怪手**貪污。最近 10 年來台灣經濟成長倒退, 很多人們自殺, 現在台灣**棺材業**最賺錢。」根據世界日報報導, 陳水扁將在其 2008 年卸任前運用台灣人民們的民脂民膏, 向美國購買美神盾戰系軍艦採購, 即先六後加二艘神盾戰系軍艦, 總價達新台幣 1500 億(約 45 億美元)。他不管台灣人民們的生計問題與利益福祉, 一意孤行, 妄作非為, 將遺臭萬年。

According to [6, b], Ma Yin-Jo of Kuo-Ming Party and Hsieh Chang-Tin of Democracy Progressive Party are campaigning in the presidential races in 2008. Due to Chen Sui-Bian's stirring, the DDP tried to put “support Taiwan into the United Nations” in the 2008 election ballot and hope to win the election by the ideology of independence. KMP also agrees with supporting Taiwan's inclusion into the United Nations. Both sides play the games of elections. When Hsieh Chang-Tin visited America, USA refused to let Chen Sui-Bin stay, which implied that US opposed “support of Taiwan into the United Nations”. Due to the 2008 presidential election, the US stops to sell F-16 airplanes to Taiwan to prevent them from expanding their military. If DDP wins the election in 2008, it will tense the situation between US and China. Therefore, US opposes any election ballot which leads to independence since it violets the Sino-US Commuques. In December 2007, Yasuo Fukuda, the new Prime Minister of Japan, visited China, he strongly supported “One-China Policy”, opposed “One China and One Taiwan” and “Taiwan returning to the United Nations.” The 7<sup>th</sup> election of senators took placed in Taiwan on January 12, 2008. 81 senators were elected in Kuo-Ming Party, which defeated 13 senators in Democratic Progressive Party with a large margin. Predicting the outcome of the 2008 election is difficult. The result of the presidency could affect Taiwanese near future tremendously.

根據[6, b], 謝長廷與馬英九將角逐 2008 年台灣總統大選, 由於陳水扁鼓動台灣綠營, 主張公投入聯合國, 企圖駕馭本土意識爭取大選勝利, 無可避免形成挾民意以反制美國; 藍營也被綠營挾持倡議公投入聯合國, 雙方都在玩弄選舉。謝長廷訪美之際, 美國拒絕陳水扁過境本土, 以表示反對公投入聯合國, 對謝長廷的面試, 在考驗其對「憲法一中, 和解共生」如何解釋。馬英九與謝長廷前後訪美, 美國傳達反對公投入聯態度, 是暗示臺灣收手。美中台關係因 2008 年台灣總統大選面臨定位互調時期, 美國暫停批售台灣 F-16 戰機, 阻止台灣發展攻擊型武器; 若台獨派掌權使台灣兩岸關係更緊張, 所以美國約束任何台獨涵義的公投, 因為它妨害美中共同戰略利益。2007 年 12 月日本新首相福田訪問中國大陸聲稱支持「一個中國」政策, 反對「一中一台」及「台灣加入聯合國」。2008 年 1 月 12 日第七屆立法委員選舉, 國民黨以 81 席大敗民進黨 13 席。謝長廷與馬英九選情複雜多變, 難以推測, 他們到底鹿死誰手? 臺灣何去何從? 我們且拭目以待…。

III. President George Washington, a great exemplar  
for Chinese governments and people across the

III. 華盛頓總統是台灣海峽兩岸  
中國大陸與台灣政府與人民們

## Taiwan Strait

## 的偉大典範

George Washington, a trained surveyor, mastered topography and applied his superior knowledge of battlegrounds to maximum effect. Despite his flaws (he lost a few battles), he was a remarkable leader who possessed a strategic, national, and continental vision and who inspired loyalty in his fellow revolutionaries and officers. The United States could never have won democracy, freedom, and equality without him. Washington's great achievement was in his completeness, in how he united the military, political, and personal skills necessary to lead a nation in war and peace. His great vision for strategy, nation, and continent was a great exemplar for all the Chinese governments and military people across the Taiwan Strait.

喬治華盛頓是一個有訓練的測量家，精通於地形學，且運用他優良的戰場知識至最大的成效。儘管他的小瑕疵（他失敗於戰場數次），他仍然是一位偉大的領袖；且具有對戰略、國家與大陸的高瞻遠矚，鼓舞激勵他的革命戰爭夥伴們與將官們的愛國心。沒有華盛頓美國不可能獲得民主、自由與平等。他的偉大功勳在於成功的完成美國八年的獨立革命及如何聯合軍事、政治及個人技巧去領導美國經歷戰爭與和平。華盛頓對戰略、國家與大陸的偉大的高瞻遠矚——是台灣海峽兩岸中國與臺灣政府及軍事官員們的偉大典範。

Su Shi, a great writer in the Sung Dynasty in China described: "Liu Bon, the founding father of the Han Dynasty defeated the frequently winning General Xiang Yu due to his persistence and patience. He tolerated poor conditions and prepared his military well in order to defeat Xiang Yu by listening to his chief strategist's (Zhang Liang's) advice. Therefore, he succeeded, and won a great victory." General Washington (like Liu Bon) used poorly trained, undisciplined forces comprised of short-term militia against strong British regulars (like Chan Yu and his troops). Though he lost a few battles, he was patient and persistent. Eventually, George Washington led the American Continental Army to great victory over Great Britain in the American Revolutionary War. Afterwards, he helped American people to win freedom, democracy, and equality, and **only served two terms** for his presidency. Ironically, in Chinese history of 5000 years, all the emperors ascended their thrones and **served until they passed away** (except Emperor Shun-Zi who renounced his throne and became a monk in the Qing Dynasty). President George Washington was a great exemplar for all the Chinese emperors and people for 5,000 years. His patience and persistence on the battlegrounds set a great model for Chinese governments and military people across the Taiwan Strait.

宋朝蘇軾留侯論曾云：「觀夫高祖之所以勝，而項籍之所以敗者，在能忍與不能忍之間而已矣。項籍唯不能忍，是以百戰百勝而輕其鋒；高祖忍之，養其全鋒而待其弊，此子房（其軍師張良）之教也。」華盛頓（如劉邦）利用訓練不足的短期軍隊對抗強盛大英帝國正規軍（如項羽及其軍隊），曾經屢次失敗，但他以艱忍不拔的精神，終於渡過難關；經過八年艱苦奮戰，最後於 1783 年取得美國獨立戰爭光榮勝利。華盛頓總統為美國人民們打下天下，被美國國民選上**兩任後拱手退讓**。反觀中國五千年歷史，所有皇帝們一登基**直做到駕崩**（除了清順治皇帝出家為比丘），華盛頓總統是中華民族五千年所有皇帝們與人民們的偉大模範；其艱忍不拔的統帥精神為台灣海峽兩岸中國與臺灣政府們與軍事家們的偉大典範。

Part of George Washington first inaugural address in New York, April 30, 1789 was: "... **When I was first honored with a call into the service of my country, then on the eve of an arduous struggle for its liberties, the light in which I contemplated my duty required that I should renounce every pecuniary compensation. From this resolution I have in no instance departed; and being still under the impressions which produced it, I must decline as**

**inapplicable to myself any share in the provision for the executive department, and must accordingly pray that the pecuniary estimates for the station in which I am placed may during my continuance in it be limited to such actual expenditures as the public good may be thought to require ...**" George Washington was a national servant for American people without salary. All his expenses were for the good of American people, but not for himself. This is exactly the *Ru*'s philosophy: **"In order to carry out the Great Way, all the people need to work for the people"**. "There are three characters of a gentleman: A human man is not worried. A wise man is not puzzled. A courageous man is not afraid," said Confucius. "If a president manages politics with virtue, he looks like a great star, and all officials look like small stars around him and serving him." President George Washington managed military and politics with his integrity, he looked like a great star. All the officers were around him and served him and looked like small stars. He also was a man of humanity, wisdom, and courage. His devotion to American people and great virtues made him an exemplary figure for all American politicians and people. He was also a great exemplar for all the Chinese and Taiwanese governments and people across the Taiwan Strait, and all the governments and people all over the world.

喬治華盛頓於 1789 年 4 月 30 日的第一任總統就職宣示的部分演講詞如下:「**…當我第一次榮幸的被召喚為我的國家服務,在為自由困難奮鬥的前夕,我深思我必須放棄每一個金錢的補償。從這個決定,我從來沒有情況不遵守並深植在印象中,我必須拒絕不運用到我自己任何份內執行部門的供應品,必須禱告我所連續放在部門金錢的補償,它是侷限於對公共大眾好處所需要的真正開支。…**」其意為華盛頓是不收薪水的美國公僕,他的一切開支是為全美國人民們的利益著想,與中國儒家「**天下為公**」的精神,不謀而合。子曰:「**為政以德。譬如北辰,居其所,而眾星拱之。**」又曰:「**君子道者有三,仁者不憂,智者不惑,勇者不懼。**」華盛頓為政以德,故他如北極星,所有美國政府官員們如同眾星圍繞他且聽從他的指揮;他也是智、仁、勇三者兼備的君子,他的奉獻精神,德行操守與智仁勇,不僅是所有美國政治家們與人民們的偉大典範,中國大陸與台灣政府們與人民們的偉大典範,也是全世界政府們與人民們的偉大典範。

When we read the modern Chinese history, we find that Mo Zedong took the power from Chiang Kai-Shek and used deception and violence to establish the People's of Republic of China in 1949. He applied the Marxist ideology, and enforced the bureaucratic system of Communist party. There were land reforms and extremely political movements followed by the Great Leap and culminating with Cultural Revolution from 1966 to 76. When De Xiaoping served as the chair of Chinese communist military from 1981 to 1990, he was in charged of Chinese politics and military. He had some merits about initiating Chinese economic reforms in 1978 which made Chinese economics improve remarkably. However, according to the news report, he was the dictator to order the Chinese army to open fire on Chinese students and people, killing more than three thousand people at the Tiananmen Square in Beijing on June 4, 1989. When Jiang Zeming served as the president of PRC and the chair of Chinese communist party from 1993-2003, he continued Chinese economic reforms. But, he insisted on obeying the rules and regulations of the Chinese communist party. According [4, 5], when Fu Jintao took the presidency of PRC and chair of Chinese communist party since December 2002, he manipulated Chinese ideology secretly and opposed Chinese military nationalization. He hopes that he can lead the Chinese military himself instead of Chinese military nationalization. All the leaders of first, second, third, and fourth generations of the People's of Republic of China, Chiang Kai-Shek and his successors, Li Teng-hui, and Chen Sui-Ben should feel shamed when they read the biographical sketch of George Washington. They all should use Washington as a great exemplar to deal with politics.



He helped Americans to win freedom, democracy, and equality, and only served two terms for his presidency instead of staying in power until he passed away.

近觀中國，1949 年毛澤東用欺騙與暴力手段在大陸推翻國民黨，建立共產黨紅色共和國。1950 年後他實施文化改革、土地改革、三反五反、三面紅旗、大躍進、人民公社、階級鬥爭、十年文革…等運動；是非顛倒、批孔揚秦、胡作非為、倒行逆施…等直至 1976 年逝世。鄧小平於 1981-1990 年擔任中國中央軍事委員會主席，他於 1978 年雖實施經濟改革，使中國經濟突飛猛進，但他攬中國的軍權與政權於一身，於 1989 年 6 月 4 日天安門事件，根據報章雜誌報導，他主導中國坦克車、解放軍濫殺無辜青年學生與百姓們數千人，舉世震驚，全球哀悼。江澤民於 1993-2003 年任中國國家主席，繼續中國經濟改革開放，但仍堅決奉行共產主義。根據[4, 5]，胡錦濤於 2002 年 12 月上臺後加強人民意識形態的控制，他暗中推行控制言論鉗制思想的措施，並堅決抵制軍隊國家化，希望堅持軍隊絕對的領導。所有中國共產黨第一、二、三、四代接班人，台灣蔣介石及其接班人李登輝、陳水扁，角逐 2008 年台灣總統候選人(馬英九與謝長廷)，讀了喬治華盛頓總統簡介，應該感慨良深並能以華盛頓總統為借鏡。華盛頓總統為全美國人民們流血汗爭取了民主、自由、平等，被美國民選兩任後拱手退讓。其不玩弄政權的淡泊精神與民主禪讓的高風亮節，是台灣海峽兩岸中國與臺灣政府與人們的偉大模範。

George Washington's second inaugural address in Philadelphia, March 4, 1793 (this was the shortest inaugural address, just 135 words) was: **"Fellow Citizens: I am again called upon by the voice of my country to execute the functions of the Chief Magistrate. When the occasion proper for it shall arrive, I shall endeavor to express the high sense I entertain of this distinguished honor, and of the confidence which has been reposed in me by the people of united America. 'Previous to the execution of any official act of the President the Constitution requires an oath of office. This oath I am now about to take, and in your presence: That if it shall be found during my administration of the Government I have in any instance violated willingly or knowingly the injunction thereof, I may (besides incurring constitutional punishment) be subject to the upbraidings of all who are now witness of the present ceremony.'**" Ironically, Chen Sui-Ben was dismissed twice by the senate in Taiwan in 2006 with votes over half, less than two thirds in the senate. But, he played the card of the interpretation of the constitution that he only can be investigated and interrogated at the end of his presidency. Apparently, he wants to postpone his and his wife's corruptions until he finishes his presidency. He should study George Washington's first and second inaugural addresses and let himself and his wife go to the court to face their crimes in order to avoid his name being reviled down in Taiwan's history. All the Chinese and Taiwanese governments should study George Washington's first and second inaugural addresses and adopted them as their maxims.

喬治華盛頓於 1793 年 3 月 4 日的第二任總統就職宣示演講詞如下(這是最短的總統就職宣示詞，僅 135 字):「各位同胞們：我再被我的國家聲音召喚執行總統元首的職務。當這適當的場合到來時，為了這殊榮及全美國人民們對我的信心，我將努力盡心為國家服務。“總統執行以前，憲法規定須要宣誓，這宣誓必須在你們前面：若我在我的執政期間被發現我有意或明知故犯違反法令，我將(除了憲法責罰外)被現在觀看就職典禮的你們前面遭受懲罰。」根據[6, b]，反觀台灣陳水扁於 2006 年先後兩次被彈劾下台未成後，他寡廉鮮恥的打出釋憲牌和藉詞其妻有病無法出庭應訊，使法院無法審判貪瀆案，以便苟到任期屆滿。陳水扁應該努力研讀華盛頓此演講詞，以他為借鑒，深自反省；並讓其妻吳淑珍

與自己出庭應訊貪瀆案，面對法律公平判決，以免自誤誤人。中國大陸與台灣政府們應該努力研讀華盛頓第一任與第二任就職演講詞，以作為擔任政府官員們的座右銘。

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- [1] [http://en.wikipedia.org/wiki/George\\_Washington](http://en.wikipedia.org/wiki/George_Washington)
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#### Corrections of the hard copy of the 2<sup>nd</sup> volume of *The Voice of Han*

#### 「漢之聲」印刷本第二冊教正

- On page 1: 最後一段第四行，“倪海勝”應該是“聶海勝”。
- On page 9: in the 1<sup>st</sup> and 2<sup>nd</sup> lines of the 1<sup>st</sup> paragraph, “...from Great Britain for eight years (1770-78)” should be (1775-1783). The same is for Chinese translation.
- On page 16: in the 2<sup>nd</sup> line of the 3<sup>rd</sup> paragraph, “all the American people have equality” should be “**had** equality”.
- On page 21: in the last line, “That which is hard is brittle” should be “hard **to** brittle”.
- On page 22: 第二段第八行 “ 管不少阻力” 應該是 “**儘**管不少阻力” .
- On page 99: 第四段第五行 “廣州語把明天叫今日” 應該是 “**今**天叫今日”.

## A Model of a “Declaration of China’s Peaceful Democratic Re-unification”

## 「中國和平民主統一宣言」之模式

Rui How

瑞毫

President Franklin D. Roosevelt addressed to Congress on January 6, 1941: “In the future days, which we seek to make secure, we look forward to a world founded upon four essential human freedoms. The first is freedom of speech and expression —everywhere in the world. The second is freedom of every person to worship God in his own way— everywhere in the world. The third is freedom from want... The fourth is freedom from fear.” We sincerely hope that China will be a country founded upon these four human freedoms: freedom of speech and expression, freedom of religion, freedom from deficiency and poverty, and freedom from fear in the near future. We further hope that China will join the United States and the European Union to expand these four human freedoms to the entire the world, especially in Africa. In this article we study and explore a model of a “Declaration of China’s Peaceful Democratic Re-unification.” This article is divided into three parts: 1) the brief history of China’s unification, 2) a model of a “Declaration of China’s Peaceful Democratic Re-unification” and 3) how to draft a “Declaration of China’s Peaceful Democratic Re-unification.”

羅斯福總統曾於 1941 年 1 月 6 日在美國國會演講：「在未來的日子我們尋求保證，我們期望一世界建立四個重要的人權自由：第一自由是全世界每一地方有言論與表達自由；第二自由是全世界每一個人有自由用自己的方式敬拜上帝；第三自由是擺脫匱乏與貧窮；第四自由是擺脫恐懼。」我們竭誠希望中國在不久的未來將建立起這四個重要的人權自由：言論與表達自由，宗教自由，擺脫匱乏與貧窮的自由，擺脫恐懼的自由。我們更希望中國將來與美國與歐盟聯合在一起將此四個人權自由擴展至全世界，尤其是非洲。這篇文章我們研究及探討「中國和平民主統一宣言」之模式，這文章分三部分：（1）中國統一簡史；（2）「中國和平民主統一宣言」之模式；（3）如何擬定「中國和平民主統一宣言」。

### 1. The brief history of China’s unification

### 1. 中國統一簡史

China’s five thousand years of history are like an epic of striving for China’s unification. According the legend of the Han Dynasty, the first ancestor of China was Pangu and then there were three emperors: Fushi, Shennun, Syuiren. Afterwards, there were five emperors: Emperor Huang, Duan Shun, Di Gu, Yao, Shun. Emperor Huang was the founding father of China. During his time, Chinese fought with Chi Yao in the south and Huang Zhou in the north. In the Shia Dynasty (432 years or 471 years), Shan Mio and Jio Li were constantly in revolt, Emperors Duan Shun, Di Gu, Yao and Shun waged wars against them continuously and eventually pacified them. Later, the Emperor Great Yu assisted people to deal with floods successfully and accomplished very much. In the Shang Dynasty (640 years, 1751 B.C. - 1111 B. C.), the Chinese fought with the wild people for a while. The great Emperor Tom managed the country well and worked for the people. In the Chow Dynasty (West Chow for 351 years and East Chow for 515 years), the Emperors Wen and Wu destroyed the tyrannical Emperor Zhou of the Shang Dynasty. Chow Gong, the brother of Emperor Wu was intelligent and well-known for his filiality. After Wu died, he assisted the Emperor Chen, Wu’s son, to perform politics successfully. In the West Chow Dynasty, the Chinese fought with Shan Zon in the east, Ouei Yi

and Su Yi in the west, Yan Yun in the north, and Jin Man in the south. At the end of the Chow Dynasty, Shi Zon's people killed Emperor Yio and then they escaped to the east. During the Epoch of the Spring and Autumn (770-476 B.C.), Confucius was born in Lu. He visited all over the countries and wrote the book, *Chun Qiu* (Spring and Autumn). During the Warring States (475-221 B.C.), there were more chaos in China and then the Founding Emperor of Qin unified China (221 B. C.), and established the Qin Dynasty.

中國五千年悠久歷史猶如一部中華民族統一奮鬥史。據漢朝的傳說，中國大陸的開天闢地祖先是盤古氏；以後有三皇：伏羲氏、神農氏、燧人氏；然後出現五帝：黃帝、顓頊、帝嚳、堯、舜。黃帝是中華民族建國始祖，他南伐蚩尤，北逐葷粥。隨後三苗、九黎時起作亂，顓頊、帝嚳、堯、舜，均不斷征伐，夏代始以平服，其後大禹治水有功。繼之殷商伐鬼方，商湯行仁道。而後周文王、武王滅紂，武王弟弟周公旦，年少以仁孝知名，為人精勤刻苦，謹慎有才，輔助武王滅紂，武王逝世，其子成王年幼，周公旦攝政有功；周西征犬戎，東平淮夷、徐夷，北伐玁狁，南討荊蠻。西周末世，西戎竟殺幽王，迫使王世室東遷。春秋時代，四夷交侵，孔子誕生魯國，周遊列國，作春秋。戰國晚年，外患更烈，及至秦始皇統一天下。

In the Han Dynasty, during the time of the Emperor Wu (140-86 B.C.), he was very strong in politics and military. He promoted the philosophy of Confucius and *Ru* when he dealt with politics. In military, many large scale campaigns against the Huns were carried out and lead by outstanding commanders. The combined size of these armies usually exceeded 300,000 soldiers and mounted warriors. At the beginning, both side had some significant victories and defeats but the struggle came to a culminating climax when the Huns lost over 100,000 men in a single battle. After that disastrous defeat, the strength and morale of the Huns were completely sapped and were never to recover. In the Jin Dynasty, part of China was controlled by the Fu's people, and then was unified in the Syui Dynasty. In the Tang Dynasty, Emperor Tai was ambitious and strong. He emphasized education and used Confucius scholars as officers, and China was prosperous and peaceful. In the Tang Dynasty, Chinese defeated Tu Jei, Fei Ha, Tu Fan and Nan Chau. There were 20 emperors and Tang was strong for 290 years. In the time of five generations and Sung Dynasty, Chi Dan and Nu Jin invaded the north. Afterwards, China was unified in the Yuan Dynasty and Mongolia was part of China's territory. Later, the Founding Emperor of the Ming Dynasty overthrew the Yuan Dynasty. There were 16 emperors total in the Ming Dynasty which lasted 277 years. Afterwards, the Qing Dynasty took over and Emperor Kuan-Shi conquered three regional kings. Emperors Kuan-Shi, Yun-Zhen, and Shen-Lon were the three best and strongest emperors in the Qing Dynasty. There were 13 emperors total in the Qing Dynasty which lasted for 268 years.

漢朝期間，武帝的文治武功頂盛，他罷黜百家獨尊儒術、征服南匈奴、驅逐北匈奴、開河西四郡、通西域、敗韓於樂浪等四郡、滅南越及閩越。西漢與東漢時期，中國國力強盛，對內統一，對外擴展，西通西域，使節達亞洲西部，歐亞交通也始於漢朝。漢末三國時代外患漸張。兩晉南北朝，天下大半淪於胡人。隋、唐統一中國，重振雄風。唐太宗天縱聖武，雄才大略，綏服戎狄；他重視文教，廣設學校，聘名儒為學官；其時，天下安寧，外戶不閉，路不拾遺，對外恩威於四夷，史家譽為「貞觀之治」(627-649)。唐朝先後擊敗突厥、回紇、吐蕃、南詔先後之入寇，確保唐人的統治權，唐朝凡20皇帝，共290年。五代至宋，契丹、女真掘起，侵入北方。後來蒙元統一中國，但反抗蒙古之舉未停，明太祖終於光復華夏，明朝凡16皇帝，共277年。接著清人繼興，清聖祖康熙，平定三藩，他與雍正、

乾隆合稱大清太平三盛世，清朝歷經13皇帝，延續268年。

Through the long history of five thousand years, China has always maintained its unification. Though part of China may be separated from China from time to time, overall, the time of unification is longer than separation. From the Qin Dynasty to now, there are about 2,200 years, China was totally unified for more than 1,600 years and part of it was separated for a little more than 500 years. We can summarize the following four factors for China's unification: (1) The reliance and cooperation of all the races; (2) promote economic growth and prosperity of all the regions and races; (3) safeguard China's territorial integrity; (4) enhance Chinese confidence and propagate Chinese culture.

中國五千年歷史雖經起伏變化，但永遠確保其統一性。政治形態，雖然有分有合，仍以合之時期為長。秦之統一國家出現，為歷史上的大轉變，從秦起迄今約二千二百年，其中統一時間約一千六百多年，以仁政王道治國的統一時間最久；分裂的時間共約五百多年，包括東晉、南北朝、五代、南宋。確保中國統一的結果大致可歸納四點：(1) 各族間相互依存和團結的加強；(2) 促進中國各地經濟繁榮，加強各地經濟生活依存關係；(3) 保持中國領土完整，鞏固國防建設；(4) 擴大中華民族自信，發揚中華民族文化傳統精神。

## 2. A model of a "Declaration of China's Peaceful Democratic Re-unification"

## 2. 「中國和平民主統一宣言」之模式

After ten failed uprisings, Sun Sat-Sen (1865-1925) led a successful revolution which overthrew the Qing Dynasty and established the Republic of China in 1911. Sun Sat-Sen is referred to as "The Founding Father of the Republic of China." However, he devoted 40 years to the Republic of China for democracy with partial success and was not as fortunate as George Washington. He left an unfinished task before he passed away in 1925. When Dr. Sun passed away, he left a will as follows: "I devoted to China's revolution for 40 years for China's freedom and equality. From my experience of 40 years, we must unify with all the Chinese people and cooperate with all the countries in the world who treat China equally. We must work hard for striving for China's democracy. Now, the revolution has not been accomplished yet. All our people must follow what I wrote: *The Strategic plan for the establishment of China, The principals of the establishment of China, Three Principles: the government of China, of the people, by the people, and for the people*, and the declaration of the first national meeting, and continue to work hard in order to carry out our goals and objectives. Recently, we plan to organize a national meeting to nullify the unjust treaties. I hope that it will be completed in a short period of time." "**Strive and Save China peacefully!**" were his last few words. The sovereignty of Taiwan was returned to China on October 25, 1945. From 1911 to 1949, China had civil war and foreign war with Japan. In 1957, China suffered the rebellion of the conservatives and 1966-76 culture revolution.

孫中山(1865-1925)十次革命失敗後，於1911年第十一次武昌起義，10月10日辛亥革命成功，推翻滿清，締造民國，被尊稱為「民國國父」。他致力於國民革命40年，不如喬治華盛頓幸運，僅為中國民主取得了部分成功。他於1925年逝世時，遺留下來未完成的救國大業與遺囑：「余致力國民革命凡四十年，其目的在求中國之自由、平等。積四十年之經驗，深知欲達此目的，必須喚起民眾及聯合世界上以平等帶我之民族，共同奮鬥。現在革命尚未成功，凡我同志務須依照余所著<<建國方略>>、<<建國大綱>>、<<三民主義>>，

及第一次全國代表大會宣言，繼續努力，以求貫徹。最近主張召開國民會議及廢除不平等條約，由須於最短時間，促其實現。是所至囑。」其臨終遺言：「**和平、奮鬥、救中國！**」從 1911 年至 1949 年約四十年間，中國又逢內憂外患，北伐、八年對日抗戰。八年對日抗戰勝利，台灣主權於 1945 年 10 月 25 日回歸中國。之後爆發國、共內戰，1949 年國民黨主席蔣介石於中國大陸失去政治權位，退守台灣；共產黨贏得勝利，於是共產黨主席毛澤東成立中華人民共和國，一連串的政治運動：1957 年反右、1966-76 年的十年文化大革命…等，批孔揚秦，清算鬥爭，濫殺無辜，中國大陸人民死傷無數，怨聲載道，民不聊生。

Due to the inequality of about 0.9 billions farmers and laborers in the rural areas, there are many incidents for rural people fighting for equality. For instances, in late 2005, the communist officials sent policemen to suppress the residents of Tai-Shi village fighting for their rights. In December of 2005, about 3,000 policemen and soldiers in Dong-Zhou, San Wei City, Guandong Province killed about 30 residents. In October, 2006, thousands of policemen in Jiangxi Province to prevent tens of thousands of students from parading on the street. At the same time, rural people in the Han Yuan County, Sishan Province had a resistance movement on a large scale. More than 2,500 people of the Nanguan Company in Chendu, Sishan Province fought for their rights for a year. About 13,002 farmers in the Jiguan City, Sishan Province fought to protect their lands. There were many laborers who went to parade on a large scale to protect their rights in Yeigang, Shanxi Province in April, 2007. There were also many demonstrations to oppose their deprived rights. Since the presidential election in Taiwan in 2004, many people have lost jobs and the economy has been deteriorating. Many high officials are corrupted including Taiwanese president, Chen Sui-Bian's son in law and his wife. Chen was dismissed by the senate about his presidency twice. The Taiwanese are losing hope. Since the first Opium War in the early 1840s, China has been in turmoil for more than 160 years. Though Taiwan is a part of China's territory, China and Taiwan have managed their politics separately since 1949. We sincerely hope that all the Chinese people across the Taiwan Strait join together to study and explore how Chinese can reunify for democracy peacefully?

自 1949 年至今，由於中國大陸約 9 億農民、工人、農民工與城市人民的不平等，中國民間維權運動風起雲湧。例如：2005 年末當局出動軍警鎮壓番禺太石村村民維權；2005 年末廣東汕尾市東洲村維權村民遭武警開槍鎮壓，約 30 村民喪生；2006 年 10 月江西當局部署數千名警察阻止萬名學生上街遊行；2006 年 10 月四川漢源縣爆發大規模民眾集體抗爭運動；四川省成都南光有限公司 2500 餘名老軍持續維權已近一年；四川省自貢劉正有等 13,002 多農民，多年來堅持保衛土地使用權，2007 年 4 月中旬陝西略鋼爆發大規模工人群體事件，2007 年 5 月 1 日期間廣東汕頭穀饒鎮爆發大規模維權抗議行動…等。台灣自 2004 年總統大選以來，失業人口遽增，經濟蕭條，以導致犯罪人數及自殺人數迅速上升；加上政府官員們貪污及陳水扁女婿趙建銘貪污數千萬，其妻吳淑珍也大貪瀆，陳水扁二次被立法院罷免超過半數…臺灣人心惶惶，無去無從。中國自 1840 年中英第一次鴉片戰爭以來，中國動盪不安已經超過 160 年。自 1949 年以來暫時分治，如今中國正面臨非統一不可的局面，我們竭誠希望台灣海峽兩岸的全體中國同胞們，共同一起來研究中國如何民主和平統一？

"In order to carry out the Great Way, all the people need to work for the people," said Confucius. "We praise the Emperors Yau and Shun since they worked for the people," he also said. In an ideal world, emperors should serve and work for the people. Although Yau and Shun were emperors, they worked for the people instead of themselves. "Providence sees what people see and hear what people hear," was described in an ancient Chinese book. "People are the most



important, the country comes next and the emperor comes the last,” said Mencius. “I heard a person killed the tyrannical Emperor Shou of the Shung Dynasty, but I did not hear that any people killed good emperors,” he also said. Such teachings placed the importance on people about two thousand years ago, but it does not address the modern concept of democracy.

孔子說：「大道之行也，天下為公。」是主張民本的大同世界。又說「言必稱堯舜」，聖君堯、舜的政治，名義上是行君權，事實上不是家天下，而是行仁道民主。泰誓云：「天視自我民視，天聽自我民聽。」孟子說：「民為貴，社稷次之，君為輕。」又說：「聞誅一夫紂矣，未聞弑君也。」早在二千多年前，中國人已有民本思想，但未達到民主的程度。

The first democratic revolution happened in Great Britain in 1649. The leader of the revolutionary party was Mr. Gromwell who killed the Emperor Charles I. He did not assassinate him secretly, but he took the Emperor to the court for a trial in public. He announced that the Emperor was not loyal to the people, and interrogated many counts of his guilt, and then executed him. It is hard to imagine that the British were used to the imperial system, and they restored the throne with the Emperor Charles II. During that time, China was in the beginning of the Qing Dynasty. There was a democratic movement, but it disappeared in Great Britain. After eight years of revolution, American people declared their independence from Great Britain in 1776, and established the United States of America. U. S. was the first country in the world to exercise the democratic system. In 1789, there was a French revolution. King Louis XIV was a tyrannical emperor who persecuted and ruined people. His son and grandson succeeded the thrones, and they were even worse. French people reached the limit of their tolerance, which led to a revolution, killing Louis XVI. Similar to Charles I, French people took him to the court, announced his crimes and disloyalty to the people, and executed him. After the French people killed Louis XVI, there was a war in Europe which last for more than 10 years. After that revolution, the imperial system restored again. But the concept of democracy was much deeper and widespread. Japan had a “Ming-Zhi Renaissance” in 1869 which made its country stronger. Recently, the Berlin Wall was torn down in 1989, and West and East Germany were reunited. Afterwards, the communist system was collapsed in Russia. All these historical events demonstrated that the democracy is the trend of the current time. China is the last largest country in the world without democracy. Through a long series of turmoils such as a closed-door policy in the Ming Dynasty, two opium wars, the alliance of eight countries invasion, many wars with foreign countries, and ten years of Cultural Revolution, etc., China already fell behind a few hundreds years. We sincerely hope that we can catch up in our generation. We shall take over the unfinished wills and tasks of previous generations and strive for a new unified democratic China across the Taiwan Strait which shall have a new birth of freedom and the government of the people, by the people, for the people, shall not perish from the earth.

近代事實上的民主革命首先發生在英國。1649年明末清初，當時革命黨的首領格林威爾(Gromwell)，把英國皇帝查理士一世給殺了。他不是暗殺皇帝，而是把查理一世帶到法庭公開審判，宣佈他不忠於國家與人民的罪狀，所以把他殺了。豈料英國人民仍是習慣君主，不到十年，英國便發生復辟事件，又把查理士二世迎回做皇帝；此時中國正處滿清入關，英國發生過一次民主運動不久就消滅。1775年美國經過八年的革命，宣佈「獨立宣言」，脫離英國獨立，成立聯邦政府，美國是現在世界上第一個實行民主的國家。美國建立共和的十三年後，1789年法國發生大革命，法國當時路易十四總攬政權，厲行專制，欺壓百姓，他的子孫繼位更是暴虐無道，人民忍無可忍，於是發生大革命，把路易十六殺了；法國人民殺路易十六如同英國人把查理一世帶到法庭公開審判，宣佈他不忠於國家與人民的罪狀，所以把他殺了。路易十六被殺之後，歐洲大戰十餘年，那次法國革命仍是失敗，帝制

又恢復過來，但法國的民主思想更趨發達了。爾後一八六九年日本有「明治維新」…至最近一九八九年柏林牆倒塌，東西德合併及蘇俄共產政體的瓦解等。足以證明「民主」是世界大勢所趨，而中國是全世界最後一個共產專政仍未實行「民主」的大國。中國自明、清閉關門戶、1840 年中英第一次鴉片戰爭及中國大陸的十年文革，中國已經落後數百年。我們這一代要急起直追，迎頭趕上，繼承中國先賢未完成的遺志，致力於中國臺灣海峽兩岸的和平民主統一，並創建一個民有、民治、民享的新中國憲政政府。

Concerning the history of democracy, Mr. Russell, a well-known French scholar had a book *The theory of people's rights* published a few hundred years ago. The main concepts are: all people are created equal, and have the rights God entitled: freedom, democracy, and equality. His democratic thoughts started a revolutionary war in France. Russell's great work and thoughts continued to have a successful impact on the independence of the United States and French Revolution. When Chinese politics are dominated by one big party and are dictated by a few government heads, denying the Chinese people their Freedom, Democracy, Equality, and the Pursuit of Happiness, 1.3 billion Chinese people have the rights God entitled them to issue a declaration to secure their rights and to form a new government. We can use America's Declaration of Independence as a model. In China, we can elect three representatives in each province, region, and city, for a total of 93 representatives (China has 22 providences including Taiwan, 5 autonomous regions, and 4 municipal cities, 31 total. U.S. has 100 senators, two for each state.) to form the delegation of declaration. Then, select five representatives from amongst them to form a committee to draft "The Declaration of Chinese Peaceful Democratic Re-unification".

講到民主史，法國著名學者盧梭，主張民主，著「民約論」，其中立論的根據是人民的權利生而自由平等，各人都有天賦的權利，故民權是天生的。因為他的民主思想，便發生法國大革命。盧梭主張民主提倡民權的始意是政治上千古的大功勞，無論美國的獨立宣言及法國大革命的人權宣言都談及自由平等是天賦人類的特權，是他人所不能侵奪的。當中國政府為一黨專政，而由少數頭目獨攬政權時，不為中國人民的自由、民主、平等及追求幸福著想時，中國十三億人民具有「天賦人權」的權利，可義不容辭發表一宣言及組織新的政府管理政治。我們可以「美國獨立宣言」為模式。全中國二十二省(包括台灣省)，五自治區及四直轄市，每一省、區或市可由全省、區或市人民選舉三位代表共九十三代表們(美國共五十州共一百位參議員)組成「中國和平民主統一宣言代表委員會」，再由全國代表委員會，推舉五名委員組成「中國和平民主統一宣言草擬委員會」，擬定「中國和平民主統一宣言」。

### **A Model of a Declaration of China's Peaceful Democratic Re-unification**

#### **「中國和平民主統一宣言」之模式**

A Declaration of China's Peaceful Democratic Re-unification including 22 provinces  
five autonomous regions, and four municipal cities

中國和平民主統一宣言包括二十二省五自治區及四直轄市

The procedures of a "Declartion of China's Peaceful Democratic Re-unification":

- I. 1.3 billion Chinese people across the Taiwan Strait deal with everything peacefully with mutual respect and cooperation including politics, economics, military, education,

transportation, science, academia, culture, etc.

- II. China belongs to all of the 1.3 billion Chinese people, and is not owned by any party. The Chinese people on both sides work hard and establish “a democratic system” together.
- III. All the Chinese across the Taiwan Strait try to unify together peacefully under a democratic system. Establish a new “Chinese Constitution” under a democratic system. China will be a democratic nation of the people, by the people, and for the people as described in the President Lincoln’s address. In order to restore and inherit Chinese five thousand years of history and culture and to communicate easier between Mainland China and Taiwan, Chinese characters will be reverted back from “Simplified Characters” into “Traditional Characters”.
- IV. All the Chinese across the Taiwan Strait obey the new Chinese Constitution under a democratic system. All the Chinese people are equal according to the constitution such as all the races of Han, Manchuria, Mongolia, Muslim, Tibet, etc. are equal; city people and rural people (farmers and laborers) are equal, Mainland Chinese and Taiwanese are equal, usual Taiwanese and rural Taiwanese in the mountains are equal, etc.
- V. All the 1.3 billion people across the Taiwan Strait has President Roosevelt’s four human freedoms: freedom of speech and expression, freedom of religion, freedom from deficiency and poverty, and freedom from fear. Finally, China will negotiate with Mongolia to return to their motherland, in order to preserve the integrity of the territory inherited from the Qing Dynasty. World peace is China’s ultimate goal and objective.

「中國和平民主統一宣言」大綱及步驟：

- 壹. 台灣海峽兩岸中國全體十三億同胞們將團結在一起互助互信，以和平方式處理一切事務包括政治、經濟、軍事、教育、交通、科學、學術、文化…等。
- 貳. 中國乃台灣海峽兩岸全體中國十三億同胞們所有，而非屬於任一政黨，台灣海峽兩岸全體同胞們達成民主共識，努力建立「民主制度」。
- 參. 台灣海峽兩岸全體中國十三億同胞們在「民主制度」下，以和平方式達成統一，將擬訂「中國憲法」，使中國成為林肯總統所謂的「民有、民治、民享」的民主新中國。為了繼承中國五千年優良歷史文化傳統及便利於大陸與台灣人民們的文化交流，中國大陸文字將由「簡體字」恢復為「繁體字」。
- 肆. 台灣海峽兩岸中國全體十三億同胞們在「民主制度」下，遵循「中國憲法」，實行中國民主憲政，中國人民在憲法下人人平等，其中包括：漢族、滿族、蒙族、回族、藏族…等各族一律平等；中國大陸城市人民與農村的農民、工人及農民工一律平等；大陸人民與台灣人民一律平等；台灣的平地人民與高山族一律平等；…等。
- 伍. 台灣海峽兩岸中國全體十三億同胞們將具有羅斯福總統提出四個重要的人權自由：言論自由，宗教自由，擺脫匱乏與貧窮的自由，擺脫恐懼的自由。最後與「外蒙古」談判回歸中國，還我河山，恢復清朝先民們所遺留下來中國完整領土——一片完整無缺的秋海棠。我們全中國同胞們最終的政治理想是「世界大同」。

China, from Emperor Huang, Yao, Shun, Yu, Tang, Wen, Wu, Chow Gong, Confucius, down through to the Han, Tang, Song, Yuan, Ming, and Qing Dynasties, up to the present, has about five thousand years of long history. We will inherit and restore the philosophy of Chinese sages, “In order to carry out a great way, we have to work for the people”. We will establish a suitable system which will combine the European and American democratic systems and match

Chinese history and culture.

中國上承黃帝、堯、舜、禹、湯、文、武、周公、孔子，下繼漢、唐、宋、元、明、清至今約五千年悠久歷史。中國將繼承先聖先賢們「大道之行也，天下為公。」、「天視自我民視，天聽自我民聽。」…等民本思想；進而配合中國國情，擷取歐洲、美國的民主制度。

All the 1.3 billion Chinese people across the Taiwan Strait cooperate together to recover the transportation, mailing, and trading directly as soon as possible. It will strengthen and consolidate the communications of all the Chinese across the strait. We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty, and the pursuit of Happiness - That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed, - That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles, and organizing its powers in such form, as to them shall seem most likely to effect their safety and happiness.

台灣海峽兩岸全體中國十三億同胞們將儘快恢復台灣海峽兩岸三通，直接通航、通商、通郵，以加強台灣海峽兩岸全體中國同胞們的溝通，維護中國全體同胞們的利益。中國乃屬於全中國十三億人民，而非屬於台灣海峽兩岸的任一政黨，我們將秉持明顯的事實是所有的人們生而平等，我們俱有由創造者給予不可剝奪的人權，在這些人權中有生命、自由和追求幸福 - 為了要保全這些權利，政府由全體人民中選舉形成，從被管理的人民的許可衍生他們的公正權力，每當政府的形式變成迫害中國人民生命、自由和追求幸福權利時，人民有權力去改變或取消它，而形成新的政府，在這種情況下，大有可能讓全體中國人民的安全和幸福作出成效。

The founding general Chen Ji Si Han lead the first western campaign in 1218. Afterwards, he conducted the second western campaign and Mongolia became a part of China's territory about 700 years ever since. Then General Shu Lei Wu had the third western campaign, and the Emperor Hu Bi Lei (1260-1294) established the Yuan Dynasty. Unfortunately, Mongolia declared independence under the instigation of the Russians in 1924. In fact, Outer Mongolia and Inner Mongolia, just like West Germany and East Germany, are a family which can not be separated. We hope that we will negotiate with Outer Mongolia to unify with China together to safeguard the territorial integrity which were inherited from the Qing Dynasty.

自成吉思汗第一次西征(1218年)及第二次西征，統一大漠南北起，外蒙古即為中國領土的一部分(約700年)，旭烈兀第三次西征，至忽必烈建元中統，是為元世祖(1260-1294)。外蒙古在蘇俄慫恿之下趁中國軍閥割據內戰之際於1924年獨立。我們希望最後與「外蒙古」談判回中國，外蒙與內蒙血脈相聯如同東德與西德，乃中國一大家族。還我外蒙古河山，恢復清朝先民們所遺留下來中國完整領土。

For the support of this declaration, we firmly self-guard China's territory integrity, keep the superior Chinese civilization, with a firm reliance on the protection of divine Providence, we mutually pledge to each other our lives, our fortunes, and our sacred honor. We will inherit the political goals and objectives of ancient Confucius and recent Dr. Sun Yat-Sen as our final goals: "To carry out the great way, all the people work for the people. Elect capable, wise and talented men and women to be our officials. People get along and are trusted. Sons and daughters are filial to their parents, and then extended to other parents. Parents take care of their children, and then extend to other children. The old people have good endings. The young people devote their

lives to society. The children are growing well and have good education. The widows, widowers, bachelors, handicapped people have good care. Men and women have good marriages. Don't throw away goods which are not necessarily possessed by one-self. Work for people and not be selfish. Therefore, there will be no crimes and evil acts. We don't need to close the door to sleep. This is so called 'World Peace'. World peace is China's ultimate goal and objective.

為了支持「中國和平民主統一宣言」，我們用堅決保持中國領土完整，擴大中華民族自信，發揚中華民族五千年優良文化傳統精神的信心，我們用我們的生命、財富及榮耀互相發誓。我們將繼承上自至聖先師孔子，下至締造民國的孫中山先生的政治理想，即禮記禮運大同篇：「大道之行也，天下為公。選賢與能，講信修睦。故人不獨親其親，不獨子其子，使老有所終，壯有所用，幼有所長，矜寡孤獨者皆有所養，男有分、女有歸。貨惡其棄於地也不必藏於己，力惡其不出於身也不必為己，是故謀閉而不興，盜竊亂賊而不作，故外戶而不閉，是謂大同。」世界大同為我們台灣海兩岸中國全體十三億同胞們最終的政治理想。

### 3. How to draft a "Declaration of China's Peaceful Democratic Re-unification"      3. 如何擬訂「中國和平民主統一宣言」

The drafting of a declaration of China's peaceful democratic re-unification can be sponsored by the delegates of Mainland China and Taiwan. The delegates of Mainland China are formed by the governors of 21 provinces, mayors of four municipal cities, and the heads of five autonomous regions. The delegates of Taiwan are formed by the chairs of Kuo-Ming Party and Democratic Progressive Party. The delegates on both sides will hold meetings consecutively at two largest cities in Mainland China and Taiwan: Beijing, Taipei, Shanghai, Kuoshion. Mainland China's government assists the delegates of China, and Taiwan's government assists Taiwan's delegates. Each governor/mayor/head of each province/municipal city/autonomous region informs all the people in each region to hold national election of the delegates of the declaration of Chinese peacefully democratic re-unification at the same time on the same day across the Taiwan Strait. People in each province/municipal city/autonomous region elect three representatives, 93 total. Then 93 representatives elect five members to draft a "Declaration of Chinese Peaceful Democratic Re-unification". There are two options of three elective representatives: 1. Each governor/mayor/head could be one of three representatives of each province/municipal city/autonomous region. Since they participate in the initiative meetings, they understand the situations better. The other two are elected by people in each region. In Taiwan, the chairs of KMP and DDP could be two of three representatives, the other one is elected by people. 2. All three representatives are elected by the people in each province/municipal city/autonomous region.

「中國和平民主統一宣言」的擬訂，可由中國大陸代表會與台灣代表會聯合主辦。中國大陸代表會包括二十一省長、四直轄市市長、五自治區區長共 30 人，與台灣代表會包括國民黨主席、民進黨主席共 2 人，總共 32 人；進行擬訂「中國和平民主統一宣言」的步驟與程序，在中國大陸及台灣的二大城市北京、台北、上海、高雄交替籌開大會討論。中國政府協助中國大陸代表會，台灣政府協助台灣代表會。由大陸代表會二十一省長，四直轄市長及五自治區區長與台灣代表會通知各省、市、區內的縣、鎮、鄉、村民們在同年同月同時，台灣海峽兩岸中國全體十三億人民共同進行「中國和平民主統一宣言代表委員會」選舉大會。全中國二十二省(包括台灣省)，五自治區及四直轄市，每一省、區、市可由全省、

區、市人民選舉三位代表，總共 93 代表們組成「中國和平民主統一宣言代表委員會」，再由全國和平民主統一代表委員會 93 代表們，推舉五名委員組成「中國和平民主統一宣言草擬委員會」，擬訂「中國和平民主統一宣言」。每一省、區、市可由全省、區、市人民選舉三位代表，總共 93 代表們可由兩個方案產生：1. 二十一省長、四直轄市市長、五自治區區長可成為各省、市、區內三代表之一，因為他們參與大陸代表會與台灣代表會對發展情勢了解較深，另二代表由各省、市、區內的人民們直接選舉。台灣國民黨主席、民進黨主席共 2 代表，1 人民選。2. 二十二省(包括台灣省)四直轄市、五自治區，每一省、市、區三位代表全部由各省、市、區內的人民們直接選舉。我們可選擇其一方案。

The committee will study and investigate all the details and procedures, and draft a “Declaration of Chinese Peaceful Democratic Re-unification”. After the declaration is drafted, the delegation will hold a few meetings to discuss and edit it according to the people’s opinions, and finally, it will be passed by the delegation. When the Declaration of Chinese peaceful democratic re-unification passes, we can form “The Drafting Committee of a new Constitution”, to create a new constitution. The constitution is the most important foundation of a country, which is different from the Declaration of Peaceful Democratic Re-unification, could be finished in a short period of time. It should be thought over for a long period of time (a few years). The United States of America was established in 1776, but the Constitution was completed in 1787.

「中國和平民主統一宣言草擬委員會」可根據「中國和平民主統一宣言」之模式，修改增減，再努力伸入探討中國和平民主統一的詳細步驟及內容，擬訂正式「中國和平民主統一宣言」，待「中國和平民主統一宣言」擬定後，再由「中國和平民主統一宣言代表委員會」籌開大會討論，根據全中國十三億人民意願修改，最後由「中國和平民主統一宣言代表委員會」大會投票正式通過。當「中國和平民主統一宣言」正式通過後，其次全中國人民可根據此宣言組織新政府管理中國政治，首先形成「中國憲法草擬委員會」，重新制訂「中國新憲法」，憲法乃是治國的根本大法，不同於「和平民主統一宣言」可短期幾月完成，必需經過長時間（幾年）的功夫，努力推敲琢磨，考慮長治久安的中國和平民主統一大計。美國憲法自 1776 立國至 1787 年憲法才擬訂完成。

China belongs to all the 1.3 billion Chinese people, and is not owned by any party. Chinese people on both sides work hard together and establish “a democratic system”. “Politics” is the people’s business, “Administration” is to administrate the people’s affairs, “Politics and Administration” is to administrate and manage people’s business. “Power” is the strength of exercising laws and convincing people. There are two kinds of power, one is administrative power, the other one is managing power. People have four kinds of managing power: elective, dismissed, establishing, and abolishing. Government has three kinds of administrative power: executive, legislative, and judiciary. People use four managing powers to balance the government’s three administrative powers. We hope that people have the power to manage the government and the government has the capability to serve people. Government has federal government and local government. Federal government can be elected by the people directly or indirectly (elected by people’s representatives), and local government can be elected by people directly. China has had a “Provincial System” for over two thousand years since the Qin and Han Dynasties. China is suitable for a “Provincial System”, but not for the American “United States System”. A President exercises the “Executive” power, Congress exercises the “Legislative” power, and the Supreme Court exercises “Judiciary” power. The President is elected by the people directly or indirectly. Congress has a “Senate” and a “House”. Senators (two or three) are elected by the people in each province, region, or city, and house representatives are elected

according to the population (for instance, one representative for every 3 million people). Judges are nominated by the President, and passed by the Congress. Similarly, each province has a governor, congress and supreme court. All the officials are elected by the people in each province. In each province, there are counties, districts, and villages. Similarly, in each county, there are county heads, county senates, and county houses, etc. We will continue to investigate and explore the related documents and materials in the next volume.

台海兩岸全體中國同胞們達成「民主」共識，努力形成「民主制度」。政是眾人之事，治是管理，管理眾人之事便是「政治」。「權」是有行使命令與制服群倫的力量。權分「政權」與「治權」。人民有四個政權：選舉權，罷免權，創制權，複決權。人民可用四個政權來管理政府的三個治權。政府可分「中央政府」與「地方政府」，「中央政府」可由人民直接或間接(即人民代表選舉)選舉產生，「地方政府」由人民直接選舉產生。中央政府具「行政、立法、司法」三權分立。中國國情和美國不同，自秦漢以來，中國地方實行郡縣制度已二千餘年，根深蒂固，故中國地方適合「行省制」，而不適合美國「聯邦制」。總統執行「行政」，國會執行「立法」，最高法院執行「司法」。總統由人民直接或間接選舉。國會分立法院與人民大會代表院，立法院相當於參議院，人民大會代表院相當於眾議院，立法委員由每省、市、區人民選舉二或三名，人大代表根據每省、市、區人數比例產生(例如每三百萬人民產生一人大代表)。最高法院法官，由總統提名，國會通過。類似的地方政府有省(市、區)長、省(市、區)立法院、省(市、區)議會、省(市、區)司法院，由各省(市、區)人民直接選舉。每省(市、區)以下設置縣、鎮、鄉、村，類似有縣長，縣議會及縣民代表等。我們將在下冊繼續探討有關檔案及內容。

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## Chinese and US Cooperation on Freezing North Korea's Nuclear Programs

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## 中國與美國在凍結北韓 核武器的合作

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### Abstract

In February 2007, North Korea agreed to freeze the reprocessing of plutonium from spent fuel at the Yongbyon graphite nuclear reactor. North Korea's agreement was the product of six-party talks among North Korea, China, the United States, South Korea, Japan and Russia. Pressure from China was particularly instrumental in moving North Korea toward the freeze. This article examines China's efforts to seek a non-nuclear Korean Peninsula.

2007 年 2 月，北韓同意在寧邊石墨核反應堆停止核燃料鈾製造。北韓，中國，美國，韓國，日本和俄羅斯的六方會談，尤其是來自中國的壓力，導致北韓的本次行動。這篇文章探討了中國在尋求朝鮮半島無核化的努力。

### 摘要

## North Korea's Nuclear Program

North Korea has had a nuclear energy program since the early 1960s. In 1993, however, the US accused North Korea of building a nuclear weapons program in violation of the nuclear nonproliferation treaty (NPT). The crisis was diffused in 1994 when North Korea and the United States signed the Agreed Framework. Under the Agreed Framework, North Korea agreed to freeze its graphite (plutonium) reactors and return to full inspections under the NPT. In exchange, a consortium of nations composed of the US, Japan and South Korea would supply light water reactors to help North Korea solve its energy problems. Until the LWR came on line, the US would supply heating oil to North Korea, and would begin upgrading diplomatic relations.

北韓的核能源計劃源自 60 年代初。然而，在 1993 年，美國指責北韓建立核武器計劃，違反了不擴散核武器條約（不擴散條約）。當北韓與美國於 1994 年簽署框架協議時，危機彌漫。根據框架協議，北韓同意停止其石墨（鈾）反應堆的製造，並根據不擴散核武器條約重新全面檢查。作為交換條件，由美國，日本和南韓組成的財團國家，將對北韓提供輕水反應堆，以幫助北韓解決能源問題。在實現輕水堆線之前，美國將供應原油給北韓，並開始提升外交關係。

A second nuclear crisis erupted in 2002, however. In December 2002, North Korea expelled inspectors following revelations that it was purchasing a nuclear weapons program based on enriched uranium in violation of the 1994 agreed framework. North Korea also withdrew from

## 北韓的核計劃

the NPT. In mid-2003, North Korea reactivated the Yongbyon facility and announced that it had nukes that it might test or sell. To head off the crisis, the US, China, North Korea, South Korea, Japan and Russia agreed to participate in multinational talks, commonly referred to as the six-party talks. The goal of the talks is verifiable denuclearization of the Korean Peninsula in a peaceful manner. In September 2005, however, North Korea boycotted the talks following a US threat of financial sanctions on banks that launder North Korean money.

然而，第二次核危机爆发于 2002 年。2002 年 12 月，北韓驱逐对其基于浓缩铀购买核武器计划是违反 1994 年框架协议进行检查的督察官员。北韓同时退出不扩散条约。2003 年中期，北韓重新启动宁边设施，并宣布，其拥有核武器，并可能进行测试或转让。为解决危机，美国、中国、朝鲜、韩国，日本和俄罗斯同意参加多国会谈，俗称为六方会谈。会谈目标是在朝鲜半岛以和平方式验证无核化。然而，继 2005 年 9 月美国威胁对洗黑钱（北韓货币）银行进行经济制裁之后，北韓抵制会谈。

Following the breakdown of the six-party talks, North Korea in October 2006 tested a nuclear bomb. In response, the UN Security Council (UNSC) unanimously adopted a resolution, UNSC Res. 1718, which called for imposing weapon and financial sanctions on North Korea, and requested that countries freeze funds related to North Korea's non-conventional weapons programs. It also called on North Korea to refrain from conducting additional nuclear or ballistic missile tests, rejoin the NPT, suspend its ballistic missile program and abandon its nuclear weapons.

六方会谈破裂后，北韓在 2006 年 10 月试射一枚核炸弹。对此，联合国安全理事会（安理会）一致通过了安理会 1718 决议。该决议要求对北韓实行武器和金融制裁，并要求各国冻结有关北韓的非传统武器计划资金。该决议同时呼吁北韓不要进行额外核武弹道导弹试验，重返不扩散核武器条约，停止其弹道飞弹计划，并放弃其核武器。

The UN actions brought North Korea back to the six-party talks, which resumed in Beijing in summer 2005. All parties reaffirmed the goal of verifiable denuclearization of the Korean Peninsula in a peaceful manner, and North Korea agreed to abandon its nuclear weapons programs and return to the NPT. The US also agreed to take steps to normalize relations with North Korea. The promise of establishing diplomatic relations appears to have been the key element for North Korean.<sup>1</sup>

联合国行动导致北韓回到 2005 年夏季在北京举行的六方会谈。各方重申在朝鲜半岛和平地进行无核化验证的目标，北韓同意放弃其核武器项目，并重返不扩散条约。美国还同意采取步骤与北韓实现关系正常化。承诺建立外交关系似乎已成为北韓的主要考虑因素。

## China's Influence on North Korea

## 中国对北韓的影响力

China's response to the October 2006 missile test reflected its frustration with North Korea. China was likely angered by North Korea's repayment of energy and food aid with missile launches and nuclear tests. North Korea openly defied China by going ahead with the July 2006 missile launches and the October test. These actions alarmed Japan and provided it with justification for bolstering its own missile defenses, spy satellite launches, and the strengthening

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<sup>1</sup> Emma Chanlett-Avery and Sharon Squassoni, "North Korea's Nuclear Test: Motivations, Implications, and U.S. Options," CRS Report for Congress, October 24, 2006, p. CRS-6.

the US-Japan security alliance, developments that China would rather not have taken place. These things had an important impact on China's North Korea policy. China had for some time resisted US calls for exerting greater pressure on North Korea, including significant cut offs of oil and food supplies. China did not comply for fear of regime collapse in North Korea and a huge migration problem.

中国对 2006 年 10 月北韩导弹试射的反应，反映了其对北韩的沮丧。中国很可能因为北韩以导弹发射和核试验作为中国对其能源和食品援助的报答行动而触怒。北韩全力进行 2006 年 7 月的导弹发射和 10 月的导弹测试，是公然藐视中国的行为。这些行动震惊日本，给日本提供了诸如加强自己的导弹防御系统和间谍卫星的发射，加强美日安全联盟的发展，以及其它中国不可能发生的发展等理由。所有这些对中国的北韩政策产生了重要的影响。中国已有一段时间抵制美国关于对北韩施加更大压力的呼吁，这些呼吁包括大幅削减石油和食品供应。因为害怕北韩政权瓦解和庞大移民问题，中国没有遵守该呼吁。

Publicly, China's response to the October 2006 test was more muted than that of the US. In action, however, China appears prepared to have dealt harshly with North Korea. In orchestrating a response, China needed to consider that harsh measures might lead to regime collapse in North Korea, resulting in a massive migration problem. Beijing also wanted to keep North Korea as a buffer between China and the US-backed South Korea, with US troops stationed in the south. In this context, China wished to balance the need to send a stern message to Pyongyang with its determination to avoid sparking a destabilizing military conflict. Rather than punish North Korea, China wanted the UNSC resolution to "create conditions conducive to the peaceful resolution of this issue through dialogue and negotiation."<sup>2</sup> With these goals in mind, China insisted that the final draft of Res. 1718 request, but not require, that countries rule out the use of military force. A more robust military embargo was scaled back to include only heavy military equipment such as tanks and missiles.

中国对 2006 年 10 月核测试的公开反应比美国更平淡。但是在行动上，中国似乎愿意严肃处理北韩。在精心策划回应上，中国需要考虑到严厉措施可能导致北韩政权崩溃，并因此造成了大量移民问题。北京还希望保持北韩作为缓冲间，以缓解中国和美国支持并驻扎军队在南部的南韩之间的矛盾。一方面，中国需要派遣一个严峻的讯息前往平壤表示避免引发不稳定的军事冲突的决心。另一方面，中国希望联合国安理会决议“创造有利条件，通过对话和谈判，以和平方式解决这一问题”，而非惩罚北韩。与这些目标出发，中国坚持认为，1718 年决议最后草案请求，而非要求，国家排除使用武力。一个更强有力的军事禁运缩减到只包括重型军用装备，如坦克和导弹。

China's support for enforcement of sanctions is crucial. In accordance with the resolution, Chinese banks stopped remittances of foreign currency to North Korea. However, China refused to take part in inspections that entail military forces boarding ships carrying Korean cargo, calling them provocative. China did, however, begin inspecting trucks bound for North Korea more closely.<sup>3</sup> China also sent a high level envoy to Pyongyang on October 18, 2006 to deliver a very strong message to North Korean leader Kim Jong-il. Regardless of the sanctions, the only truly effective punishment on North Korea would be the suspension of energy aid from China. North Korea depends of China for up to 90 percent of its oil, much of which is sold on credit or

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<sup>2</sup> "U.S. Pressures China on North Korean Arms Traffic," *Los Angeles Times*, October 16, 2006.

<sup>3</sup> "China Reverses Its Refusal to Search N. Korean Cargo," *Los Angeles Times*, October 17, 2006.

for bartered goods. In September 2006, China cut off oil exports to North Korea amid tensions over North Korea's nuclear and missile programs.<sup>4</sup> China's oil exports to North Korea had been averaging about 50,000 metric tons a month. It appears that China was miffed that North Korea fired ballistic missiles in July 2006, despite China's pleas for restraint.

中国对执行制裁的支持是关键。按照该决议，中国的银行对北韩停止外币汇款。但是，中国拒绝参加涉及运载货物前往北韩军队寄宿船舶的检查，并称该检查为挑衅行为。然而，中国开始对运往北韩卡车进行更加密切检查。中国于 2006 年 10 月 18 日派出高级别特使前往平壤向北韩领导人金正日发表了非常强烈的讯息。如果不论制裁，唯一真正有效的惩罚将是中国对北韩停止能源援助。北韩依赖从中国进口的石油多达 90%，其中大部分是以信用出售或交换货物作为支付条件。2006 年 9 月，在北韩的核武器和导弹计划的紧张氛围中，中国切断出口至北韩的石油。中国的石油出口到北韩已平均约为 50,000 吨不等。看来，中国对北韩不管中国的克制请求，仍然于 2006 年 7 月发射弹道导弹之行为实在是恼火。

The reduction in oil might have been the leverage necessary to pressure North Korea to resume participation in the six-party talks. China appears to have been successful in persuading North Korea to return to talks with the US. In late October, a US diplomat sat down with a North Korean official in Beijing in a meeting arranged under Chinese auspices. The bilateral meeting indicates some flexibility on the part of the US. President Bush had rejected for months North Korea's demand for direct talks. The US-North Korean meeting appears to have been a compromise. It was a forum somewhere between the insistent North Korean demand to have strictly bilateral talks with the US, and the US demand that it meet North Korea only in the six-party forums. In effect, the US, North Korea and China had a three-party forum.<sup>5</sup>

减少石油可能已杠杆要压北韩恢复参加六方会谈。中国似乎已成功说服北韩重返同美国会谈。10 月下旬，在中国的赞助下，一名美国外交官与北韩官员在北京会晤。双边会晤显示了美国方面的一些灵活性。布什总统一直以来否决北韩直接会谈的要求，美朝本次会晤似乎已经妥协。这个论坛是介于北韩与美国有严格的双边会谈的倔强要求，与美国对北韩参加六方论坛的需求。实际上，美国、朝鲜和中国进行了三党论坛。

As North Korea's neighbor and closest ally, China has unique leverage over Pyongyang. Chinese pressure that has been key in bringing North Korea to the table. China had very heavy involvement in talks that took place in Beijing, and appears to have exerted more direct pressure on North Korea to come back to the six-party talks. According to Paul Pillar, a former senior US intelligence officer stated that, "clearly if you had to identify any one country that was key to this North Korean problem, it's China".<sup>6</sup>

作为北韩的邻居和最亲密的盟友，中国对平壤具有独特的杠杆。中国施加的压力已经在关键使北韩返回谈判桌旁。中国已十分繁重参与发生在北京的会谈，对北韩回到六方会谈似乎产生更直接的压力。据保罗辟拉，一名前美国高级情报官员表示，"很显然，如果你不得不找出一个对北韩核问题起关键作用的国家，那就是中国"。

It is not is not publicly known what pressure China put on North Korea or what

<sup>4</sup> Joseph Kahn, "China Cut Off Exports of Oil to North Korea," *International Herald Tribune*, October 31, 2006. [www.ihl.com](http://www.ihl.com).

<sup>5</sup> Thomas, "Chinese Seen as Key," *VOANews.com*.

<sup>6</sup> Gary Thomas, "Chinese Seen As Key to North Korean Nuclear Reversal," *VOA News*, 1 November 2006.

message China's high level envoy conveyed to Kim Jong-il on October 18, 2006. Most likely, the threat to withhold oil and food aid was enough to return North Korea to the table. It is vital that China continues to influence Pyongyang to honor its agreements. China has been particularly helpful in breaking the deadlock over frozen North Korean-linked funds at Banco Delta Asia. The bank, based in China's Special Administrative Region of Macao, has been dealing with North Korean finances for more than 20 years. In 2005, the US government charged Banco Delta Asia under Section 311 of the USA Patriot Act, which allows the secretary of the treasury to rule that foreign banks are of "primary money laundering concern" and require American financial institutions to take protective measures, including cutting ties with these entities. North Korea boycotted the six-party talks after the charge. In March 2007, China helped break the impasse by agreeing to help transfer \$25 million from Banco Delta Asia to a North Korean account at the Bank of China in Beijing. Unfortunately, the transfer was not completed due to "technical difficulties," causing a recess in the March 2007 six-party talks in Beijing.

中国对北韩施加了何等压力，或是中国的高级特使于 2006 年 10 月 18 日向金正日转达了什么信息，均不为公众皆知。扣压石油和粮食援助最可能威胁北韩返回谈判桌旁。中国继续对平壤履行协定施加压力是极为重要的。中国一直特别有助于打破僵局冻结北韩资金挂在汇业银行。该银行总部设在中国的特别行政区澳门。20 多年以来，该银行一直在处理北韩的财政预算。美国国务卿根据美国爱国者法案第 311 条裁定：外国银行属于 "主要洗黑钱关注类"，并要求美国金融机构采取保护措施，包括切断与这些外国银行的联系。2005 年，美国政府根据该法案指控汇业银行。继该指控后，北韩抵制六方会谈。2007 年 3 月，中国打破僵局，同意帮助北韩从汇业银行转移 2500 万美元到北韩在北京中国银行的帐户上。不幸的是，由于 "技术上的困难"，该转移汇款没有完成，造成 2007 年 3 月在北京举行的六方会谈休会。

China's efforts to bring North Korea back to the six-party talks probably have improved China-US relations. Beijing's diplomatic coup has allegedly won kudos from Washington. President Bush thanked China for encouraging Pyongyang back to the talks. Assistant Secretary of State Christopher Hill observed that "what we are doing with China today with respect to a neighbor of China is unprecedented. So perhaps in the history books Kim Jong-il will get a lot of credit for bringing the US and China closer together."<sup>7</sup> Despite their differences over a range of issues, both the US and China share a common interest in making the Korean Peninsula nuclear-free. However, the two countries' visions of the endgames for North Korea are different. For China, the best outcome is a non-nuclear (or denuclearized) peninsula, but with the existing North Korean regime intact. For the US, nuclear disarmament is the fundamental issue, even if it means regime change.

中国促使朝鲜回到六方会谈的努力有可能改善了中美关系。北京的外交家据称赢得的声誉来自华盛顿。美国总统布什感谢中国鼓励北韩重返会谈。助理国务卿希尔指出："我们今天与中国正在做的关于中国近邻(北韩)方面的事情，是史无前例的。因此，或许在史书上，金正日会由于促使美国和中国紧密地联系在一起而得到很多信益。" 尽管他们在一系列问题方面存在分歧，无论是美国，还是中国，都有着共同的利益，那就是使朝鲜半岛无核化。不过，这两个国家的对北韩远景是不同的。对中国来说，最好的结果是一个非

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<sup>7</sup> Jing-dong Yuan, "China's New North Korea Diplomacy," *Asia Times Online*, November 2006, [www.atimes.com](http://www.atimes.com).

核（或无核）半岛，并保存现有的北韩政权完好无损。对于美国来说，核裁军是最基本的问题，即使这意味着政权更替。

At times, China has been frustrated with US inflexibility and suspicious of its real intentions regarding the resolution of the Korean nuclear crisis. One widely cited example is the US imposition of financial sanctions on North Korea soon after the September 2005 Joint Statement was adopted. Chinese analysts suggest that the US is using the crisis to advance its own strategic interests in the region, including bringing Japan and South Korea in a strong bond under its alliance systems, justifying enhanced military presence and force deployments in the region, forcing china to make the difficult choices and creating unstable regional security environments to disrupt and delay China's economic progress.

有时，中国一直为美国的真实意图解决北韩核危机的僵硬和可疑的动机而困扰。一个广为引用的例子是 2005 年 9 月共同声明获得通过后不久，美国对北韩实行的金融制裁。中国分析家认为，美国正在利用这次危机推动自己的战略利益，包括巩固日本和南韩的联盟体系，在该地区有理由加强军事存在和部队部署，迫使中国作出困难的选择和创造不稳定区域安全环境，破坏和拖延中国的经济进步。

## Conclusion

## 结论

In the end, North Korea's October 2006 nuclear test was more than China could accept. Immediately after the test, China sought closer consultation with other powers and sent a special envoy to deliver a stern message to Kim Jong-il. While continuing to emphasize diplomacy, China tightened its border controls and instructed banks to halt financial dealing with North Korea, in addition to reported suspension of oil exports. In spring 2005, China like the US froze North Korean assets connected to money laundering. Chinese officials never announced that they had done so, which suggests that China is willing to take tough actions quietly. All of these actions demonstrate efforts on China's part in seeking a solution to the North Korean nuclear issue. Diplomacy has played a useful role in establishing and facilitating multilateral talks over the past three years, but sometimes actions need to back up words. Now that North Korea has crossed the red line, China is reassessing its policies and weighing alternative options.

总之，北韩于 2006 年 10 月进行核试验是中国无法接受的。紧继该核试验后，中国寻求与其他权力更密切的协商，并派遣一名特使前往北韩向金正日发表严正讯息。在继续强调外交的同时，中国收紧了它的边界管制，指示银行停止与北韩进行金融交易，并暂停石油出口。2005 年春季，中国采取类似美国的行动，冻结涉嫌洗黑钱北韩资产。中国官员从未宣布中国已经这样做，这表明中国愿意悄悄采取强硬行动。所有这些行动表明中国在寻求解决朝鲜核问题方面的努力。过去三年，在建立和促进多边会谈方面，外交发挥了有益的作用。然而，有时行动需要语言作为后盾。现在北韩已越过红线，中国正在重新评估其政策，并权衡选择。

## A Brief History on the Development of Fighter Aircraft of the Chinese People's Liberation Army Air Force (PLAAF)

## 中國人民解放軍空軍 戰鬥機發展簡史

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**Introduction** It is rather difficult to write a comprehensive history of an armed service of any country, because there exists so little information in the opened literature as most of the technical data are classified. Another difficulty arises from the fact that a modern air force consists of organizational structure, logistics, training, maintenance, avionic and weapon systems, aircraft research and development etc. This paper will concentrate on a very narrow pursue, tracing the development of fighter and attack aircraft of the Chinese People's Liberation Army Air Force (PLAAF) from 1949 to 2007.

**序言：**試圖寫一篇比較廣泛的軍事歷史，不管是哪個國家，都是一個艱巨的任務。因為關於各種武器的資料和數據多半是屬於秘密文件，在公開的刊物是尋找不到的。再者，軍事歷史範圍很廣，包含組織、訓練、意識形態、後勤、武器系統和科技發展…等。在這篇文章裡，我們只描述中華人民共和國人民解放軍空軍五十多年來（1949-2007），對在於軍用飛機發展方面的過程。

**The Early Years** The People's Republic of China came into power in 1949 after battling the Chinese Nationalist Army from 1927 to 1949 off and on and fought the Japanese invading army from the early 1930s to 1945. Through those difficult years of armed struggle, the Chinese Communist leadership came into power without an air corps. It is really hard to imagine just how difficult it would be to develop a viable air force without the experience, tradition and an industrial complex to support an aircraft industry.

The air force branch of the People's Liberation Army (PLAAF) was officially formed on November 11, 1949, a month and ten days after Mao Ze-Dong declared on Tian-En Men the establishment of the People's Republic of China. At that time, the so-called People's Liberation Army Air Force (PLAAF) consisted of about 150 hotchpotch aircraft more suitable for aerospace museums than for air combat.

**前期歷史** 經過數十年的內戰（1927-1949）和八年的抗日戰爭，中國共產黨政權終於在北京成立。在那些艱鉅的武裝鬥爭的過程中，中國共產黨領導人並沒有依靠一個空軍的力量來取得政權。缺乏經驗和傳統及一個完善的工業聯合體，要建起一個現代的空軍，其難度實是難以想像的。

中國人民解放軍空軍建於1949年十一月十一日。這個日子離毛澤東在天安門宣布中華人民共和國成立的日期只有一個月零十天。在那個時候，有名無實的《中國人民解放軍空軍》只有一百五十架來自各國的各式各樣的飛機，這些陳年的古董，只適應作為博物館的陳列品，而不能上陣對敵作戰戰鬥機。

**The Arrival of the Jet Age** Although Germany had developed and fielded jet propelled fighter aircraft near the end of the Second World War to intercept American heavy bombers, Flying



Fortress B-17, air warfare involving jet fighters actually began in the Korean War from 1950 to 1953. Initially it was the Mikoyan Mig-15 of the former Soviet Union versus the F-80 (Shooting Star) of the United States Air Force. The F-80 was quickly replaced by the F-84 (Thunderjet), but neither of these two American aircraft was able to match the Mig-15 in speed, maneuverability and fire power. The U.S. Air Force did not regain air superiority until the F-86 (Saberjet) came out.

**噴射機時代的降臨** 雖然德國在第二次世界大戰末期已經派出噴射戰鬥機來抵抗美國的重型轟炸機（飛行堡壘 B-17），但實際上噴射機空戰是始於韓戰期間（1950-1953）。韓戰初期時的兩個主角是前蘇聯的（米格-15）對美國的（流星 F-80）。不久後美國的（雷噴射 F-84）也加入這個戰役。由於（米格-15）的動力靈巧，速度快，火力猛，所以這兩架美國的前期飛機都不是（米格 15）的對手。直至（軍刀式噴射機 F-86）上陣後，美國空軍才挽回在朝鮮半島上空的控空權。

**The J-5 [Note 1]** By the end of the Korean War, the world was deep into the Cold War and the Soviet Union began to send all types of technical assistance to China. The first jet fighter produced in China, designated as the J-5 by the Chinese, was the Mikoyan Mig-17, Fig. 1. Initially these planes were assembled in China from kits imported from the Soviet Union and later they were manufactured under license in China by the Shenyang Aircraft Corporation. The J-5 project began in October 1954 and the first flight took place in July 1956. Mass production began two months later and by May 1959 when the assembly line ceased production, a total of 767 J-5 were produced.

**殲-5**（注一）韓戰結束時這個世界已經進入了冷戰時代。蘇聯已經開始給中國各種科技的援助。在中國出產的第一架戰機是（殲-5），也即是蘇聯的（米格 17），圖一。首先是把從蘇聯運來的配套元件裝配成飛機，後來則由蘇聯授權沈陽飛機公司生產。殲-5 計劃從一九五四年十一月開始，一九五六年七月試飛。兩個月後開始大量生產。直到一九五九年五月裝配線停產，中國一共出產了七百六十七架（殲-5）。

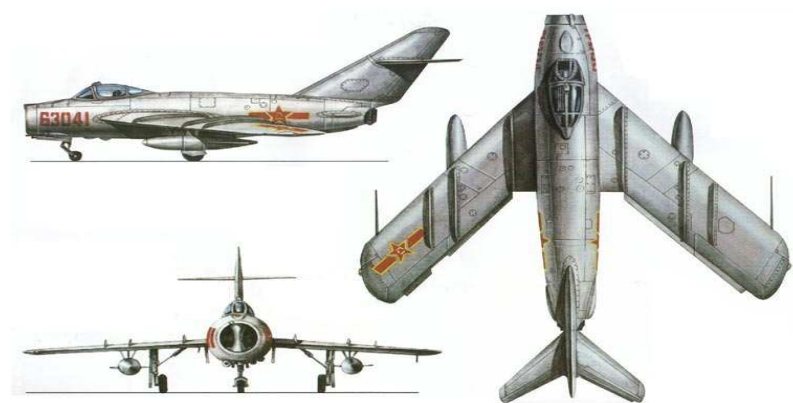


Fig. 1. J-5 (three different views)

圖一 殲-5，三個角度

Note 1: The nomenclature used by the PLAAF is as follows: J is short for **jian ji ji** or fighter. Q is short for **qian ji ji** or attack aircraft. H stands for **hong zha ji** or bomber. Y stands for **yun shu ji** or transporter.

注一：中國空軍軍機名稱是以 J 為殲擊機 (jian ji ji)，Q 為強擊機 (qiang ji ji)，H 為轟炸機 (hong zha ji), Y 為運輸機(yun shu ji)。

**J-5 Characteristics** The J-5 is a single-seat single engine jet fighter designed as an interceptor with a ground attack capability. Its physical characteristics are summarized in Table 1.

**殲-5 的特性** 殲-5 是一架單坐單發動機用來攔截入侵敵機的殲擊機。同時，它也可以用來攻擊地面上的目標。它的性能與各種數據，請見表一。

**Table 1: J-5 Physical and Performance Characteristics    表一：殲-5 的性能與數據**

Dimensions 尺度 (公尺)	Length (M) 機長	11.36
	Height 機高	3.80
	Wing Span 翼展	9.60
	Wing surface area (M <sup>2</sup> ) 翼面積	25
	Wing swept angle (degrees) 掠角	45
Weights 重量 (公斤)	Max. take off weight (KGm) 最大起飛重量	6,000
	Normal take-off weight (KGm) 通常起飛重量	5340
Fuel Capacity 油量(公斤)		
	Internal (KGm) 內燃油量	1170
	With external fuel tanks (KGm) 副油箱	1834
Maximum load (KGm)	最大攜帶重量 (公斤)	2130
Performance characteristics	操作特性	
最高速度 (公里/小時)	Maximum speed (at 3,000M) Km/Hr	1145
平飛速度	Cruising speed (Km/Hr)	800
最大爬升率 (公尺/秒)	Max. climbing rate (M/sec)	75.8
實用升限 (公尺)	Practical ceiling	16,000
最大航程 (無副油箱) (副油箱) - (公里)	Max. range-with no ext. fuel tanks (Km) with external fuel tanks (Km)	1020 1560

**J-5 Armaments** Before the era of air-to-air missiles, fighters in the US Air Force generally rely on heavy fire power for dogfights by equipping fighters with four to six 50-caliber heavy machine guns. The J-5, being Soviet in origin, adapts a different approach; it relies on large caliber guns for fire power. The J-5 is equipped with two 23 mm canons on the right side of the nose and one 37 mm canon on the left side. It turned out that the combination of two different caliber guns was a bad idea as one can not use a single gun sight for guns with different trajectories. There are two pylons under the wings to carry two (2) 250 KGm bombs. Later models of the J-5 were equipped with radar to make it into a night fighter as well as an all-weather interceptor.

**殲-5 武器裝備** 空對空導彈還未問世的時期，在短距離空戰的環境下，美國的戰鬥機的火力是依靠六挺 .50 口徑的重機關槍。由於殲-5 是蘇聯的產品，他們利用不同的方法來達到高火力的要求。殲-5 的機身右邊裝上兩門 23 毫厘火炮，機身左邊則裝上一門 37 毫厘火炮。後來才發現，裝上兩門不同口徑的火炮是很大的錯誤。因為兩門不同口徑的火炮不能用同一個瞄準器。殲-5 機翼的底下有兩個武器掛點，可以攜帶兩枚 250 公斤炸彈。後來的

型號還裝上雷達，使殲-5 成為全氣候和夜戰殲擊機。

**The J-6:** The J-6, Fig. 2, was produced by the Shenyang Aircraft Corporation based on the Soviet Mig-19. It was first flown in September 1959, but the aircraft was not mass produced until 1962 due to the negative impact of the Great Leap Forward, a very disruptive political/economic movement which took place in the late '50s. The successful mass production of the J-6 was important to China for many reasons: (1) the J-6 became the main fighter aircraft for the PLAAF for the next 40 years, (2) it ushered in the supersonic age, (3) close to 4,000 aircraft were produced, including exports to a half-dozen foreign countries (See Table 2b). This aircraft was so successful that a number of variants, Table 2a, were designed and produced to satisfy various functions:

**殲-6:**(殲-6)，圖二，是根據蘇聯出產的（米格-19）殲擊機仿制的。廠商是沈陽飛機公司。這種飛機一九五九年九月第一次試飛，但直到一九六二年才開始大量生產。無可否認，這無理的耽誤，是受了（大躍進）的負面影響。能夠大量生產（殲-6），對中國國防來說，這是個很重要的里程碑。那是因為：（1）通過（殲-6），中國空軍跨入超音速飛行時代。（2）從六十年代開始，直到這世紀末，四十年來（殲-6）成為中國空軍的主力。中國生產了大約四千架各類的（殲-6），表二 A，三千五百架在國內服務，五百架出口到六個國家。

**Table 2a. Principal J-6 variants      表二 a**

J-6A 殲-6A	All-weather radar-equipped interceptor with two 30mm cannons. 全氣候攔截機，雷達，兩門 30 毫米火炮。
J-6B 殲-6B	Interceptor with two PL-1 air-to-air missiles. (PL stands for (pi-li, thunderbolt, in chinese) 攔截機，攜帶兩枚《霹靂-1》空對空導彈。
J-6C 殲-6C	Day fighter version with three 30mm cannon & braking parachute at the base of the rudder 白天殲擊機，三門 30 毫米火炮，裝有降落傘機閘，適應從短跑道降落。
J-6 Xin 殲-6Xin	Advanced version of the J-6A with radome for Chinese-made radar. 殲-6A 的先進型，裝有新的天線罩和國產雷達。
J-6III 殲-6III	Single-seat day-fighter prototype. 單座白天殲擊機的雛形。
JJ-6 殲-6J	Two-seat trainer 雙座教練機。
JZ-6 殲-6Z	Dedicated reconnaissance version 偵察機。
Nanchang Q-5 南昌 Q-5	Extensively redesigned attack aircraft based on J-6. 根據（殲-6）而設計，南昌飛機公司出產的強擊機。



Fig.2. J-6 formation on Tarmac 圖二：平台上的（殲-6）機群

Table 2b. J-6 Physical and Performance Characteristics

表二 b: （殲-6）的物體和操作性能

Builder 廠商	Shenang Aircraft Co. 沈陽飛機公司
Crew 飛行員	one 單座
Role 用途	interceptor 攔截機 capable of attacking ground targets 攻擊陸上目標
Length 機長度	42 ft, 11 in (13.1 m)
Span 機翼展	29 ft, 6 in (9 m)
Height 高度	12 ft. 0 in.
Weight 重量（包括負荷）	9,040kg (loaded)
Engine 發動機	Two Tumansky RD-9 turbojets with 7,165 lbs. thrust ea. (with afterburner)
Maximum speed 最高速度	900 mph / 1,450 km/h/ Mach 1.35
Cruising speed 平飛速度	590 mph /950 km/h / Mach 0.9
Ceiling 升限	17900 meters
Range 來回航程	425 mi / 685 km radius hi-lo-hi w/ drop tanks
Internal Fuel 內燃油	1732 kg
Drop Tanks 外挂油箱	800 L drop tank with 639kg of fuel for 138nm range 1140 L drop tank with 911kg of fuel for 197nm range
Armament 武器裝備	2 or 3 NR-30mm Cannon 火炮 2 Type 1 250 kg bombs or 炸彈 8x57 rocket pod and 2 800 L drop tanks (923nm) 火箭 2 PL-2 AAM and 2 1140 L drop tanks (1029nm) 空對空導彈 2 ARS 212 rockets and 2 800 L drop tanks (923 nm)
Sensor 傳感器	Izmrud radar, RWR, Basic bombsight 雷達，投彈瞄準器
User Countries 擁有（殲-6）的國家	Albania (J-6) 阿爾巴尼亞 Bangladesh (J-6) 孟加拉國 Burma (J-6) 緬甸 Cambodia (F-6) 柬埔寨

North Korea (J-6) 朝鮮  
Pakistan (J-6) 巴基斯坦

**The J-7:** In 1964, China received from the former Soviet Union license to manufacture the Mikoyan Mig-21, which China had designated as the J-7, Fig. 3. In principle, this aircraft has numerous advantageous characteristics such as a light airframe to enable high speed and maneuverability, simplicity in design for low cost production and maintenance. But in reality, the proto-type Mig-21 contained some major design shortcomings which proved to be a long-term financial and technical liability for the PLAAF. The Mig-21 was originally designed as a high altitude and high speed interceptor, but its limited capability to carry heavy loads of armament



Fig. 3. J-7 Formation of Tamarc 圖三：平台上的（殲-7）機群

and fuel, plus its notorious unreliability severely limited its combat performance.

Initially, Shenyang Aircraft Corporation was responsible for the production of the J-7, but eventually as the requirement of aircraft increased, both the Chengdu Aircraft Corporation and the Guizhou Aircraft Corporation were engaged in the production of the J-7. By the late '60s or early '70s, the Shenyang Aircraft Corporation delivered the first batch of 27 aircraft to the PLAAF but was rejected by the military due to the poor quality of these aircraft. Such a miserable performance of the J-7 project had a number of causes. The utmost culprit was incomplete technical information from the former Soviet Union as the political alliance between the two countries has ceased to exist and all technical assistants were withdrawn from China. Most likely, much of the developmental work on the J-7 had to rely on the difficult process of reverse-engineering. To make an already difficult situation even more unmanageable, the tragic so-called Cultural Revolution broke out in 1966. The hostile political undercurrent plus the lack of resources, both financial and advanced machine tools almost doomed the effort of manufacturing the Mig-21 in China. It was not until a full ten years later, 1980-1982, the J-7 finally met the military's qualification requirements and a total of 187 J-7 went into service. The performance characteristics of a latter variant, the J-7E, is shown in Table 3.

**殲-7:**一九六四年中國和蘇聯簽了一項合同，目的是引進生產（米格-21）殲擊機的技術。這一種新機種，中國命名為（殲-7），圖三。理論上（米格-21）是一種非常先進而優良的殲擊機。它的體質輕，使它的速度快，飛行動作靈活。它的結構設計簡單，所以造價低，維修容易。但實際上，（米格-21）的設計包含著很多的缺點。它的高空操作性能還可以，但中低空作戰的性能很差。它的輕小機身不能攜帶大量的燃油和沉重的武器系統。這樣，（殲-7）便成為中國空軍長期的負擔。

前期是沈陽飛機公司負責出產（殲-7），但由於空軍需要大量的戰機，後來成都飛機公司和貴州飛機公司也參加生產工作。到了六十年代末，或七十年代初，（沈陽飛機公司）交給空軍第一批一共二十七架（殲-7）。但遭到空軍拒絕接收，因為飛機的質量實在太差。這種糟糕的表現，我們可以歸結為以下原因。最大的罪魁是中國的技術人員根本沒有得到一套完整的資料。到了六十年中葉，中國和蘇聯的聯盟已經公開分裂。蘇聯把派往中國的專家及所有的藍圖都撤離回國。跟著就是（文化大革命）的沖擊。再加上資金和先進儀器的奇缺。在這絕對惡劣的環境下，科技及管理人員刻苦奮鬥了數十年，他們唯一一個願望，是趕上西方的戰機的設計和技術。但結果是越追越落後。一直到了一九八零年軍方才接收了一百八十七架合格的（殲-7）。以（殲-7E）為代表的操作性能，見于表三。

**Table 3. J-7E Physical and Performance Characteristics 表三：《殲-6》的物體和操作性能**

<b>General characteristics 普通性能</b>	
Crew 飛行員	1 單座
Length 機長度	14.88 m 公尺
Wingspan 機翼展	8.32 m 公尺
Height 高度	4.10m 公尺
Wing area 翼面積	23 m <sup>2</sup> 公方尺
Empty Weight 重量（無負荷）	5,292 kg 公斤
Loaded weight 重量（包括負荷）	7,540 kg 公斤
Max takeoff weight 最大起飛重量	9,100 kg 公斤
Engine 發動機	
Afterburning turbojet 補燃器	One Liyang Wopen 13F 一個《渦噴-13F》發動機
Dry thrust 淨推力	4.1 kN 千牛頓
Thrust with afterburner 補燃推力	66.7 kN 千牛頓
<b>Performance 性能</b>	
Max speed 最高速度	2,175 km/h （公里/小時）
Combat range 戰鬥航程	850 km （公里）
Ferry range 值飛航程	2,200 km （公里）
Service ceiling 實用升限	18,800 m （公尺）
Rate of climb 最大爬升率	11,700 m/min （公尺/分鐘）
<b>Armament 武器裝備</b>	
* 二挺 30 毫厘火炮 * 四個翼底掛吊點（每個 500 公斤） * 中間懸掛外油箱（公升） * 霹靂型號短程空對空導彈 * 12x55 和 7x90 毫厘火箭 發射管	* 2 30mm guns * 4 under-wing hard-point (500 kg load each) * Centerline station (720 liter drop tank) * PL-2, PL-5, PL-7, PL-9 short-range AAM * 12x55mm rocket pod, 7x90mm rocket pod
<b>Avionics 航空電子</b> 《226 式》脈沖活動目標顯示雷達	* Type 226 PD rader



By the early '80s, it seemed that the harder they worked to catch up, the further they were left behind as the fourth generation (1970-1990) of jet fighters such as the F-14, F-15, F-16 and F/A-18 in the USA and the Su-27, Mig-29, and Mig-31 in the former Soviet Union, entered into service. Nevertheless, engineering and development efforts for the different types of J-7 continued unabated until 2004 resulting in no fewer than two (2) dozen variants. Instead of producing thousands of aircraft like the successful J-6, it is believed that only about 1,000 J-7 were produced, including the exported models and about 500 aircraft in the PLAFAF. So, it is perhaps appropriate to say that, in spite of their valiant effort, all-in-all, the J-7 project represents a quixotic victory which in the end, wasted their precious time and resources in the last two decades of the millennium.

到了八十年代初期，眼見他們越追越落後。因為蘇聯和西方國家第三和第四代的軍機相繼面世，如美國的 F-14、F-15、F-16、F-18 和蘇聯的 SU-27、MIG-29 等。即使如此，中國並沒有放棄發展（殲-7）的計劃。直到二零零四年為止，中國一共發展了二十多個分類的（殲-7）。不過，從數目來說，這機種沒有像（殲-6）那麼成功。前後只出產了一千架。大約五百架在國內服務，餘下的都出口到國外。科技人員在最困難的政治和經濟環境下奮鬥了數十年。花了大量的人力，財力和物力。但總而言之，中國發展（殲-7）是一個沉痛的教訓。

**The J-8:** Some publications claim that the J-8 fighter aircraft is a derivative of the Mikoyan-Gurevich Ye-152A prototype; but in reality, the J-8 is actually the first indigenously designed and manufactured fighter/bomber in China albeit the basic design maybe based on the experience they obtained from the J-7 (Mig-21) as the prototype of the J-8 looked like an enlarged J-7 (Mig-21). It is apparent that aviation and military experts in China foresaw the basic limitations of the J-7 (Mig-21) due to its light weight (limiting ordinance and fuel loads for longer range), they recognized the need for a multi-role fighter which can carry out not only high altitude intercepts but also a fighter for mid and low altitude combat with ground attack capability. Thus, a project to develop a twin-engine multi-role fighter heavier than the J-7 was initiated as early as 1964 (conception formulation) and engineering development started in 1965. Again, like the J-7 effort, the J-8 project did not progress smoothly as it was buffeted by the political turmoil of the Cultural Revolution and hobbled by the anemic economy of the era. The serious problems they encountered in this project is readily reveal by the fact that the J-8I and J-8II (first flew in June 1984) and follow-on models were drastically different. It appears as though they had totally abandoned the J-8I and started all over and re-designed the J-8II and other follow-on models.

**殲-8:** 有些專家們認為（殲-8）的設計是根據蘇聯的（米高嚴）YE-152A 雛形機。但實際上（殲-8）是第一架中國自行設計和發展的戰機。不過，這機型的設計和發展，多半是根據他們從發展（殲-7），即（米格-21）得來的經驗而形成的。前期（殲-8）的外形，看來很像擴大的（米格-21）。很明顯，中國的技術人員和軍隊領導人早就體會到（殲-7）的缺點，如機體太小太輕，不能攜帶大量的武器和燃料。他們需要一架戰機能夠高空攔截，中低空近距離空戰，地面攻擊等的多用途戰機。

The most noticeable difference between the J-8I and the J-8II is the nose area of the two aircraft (Figs. 4a and 4b). The nose air inlet of the J-8I is replaced by a solid nose cone in the J-8II to accommodate the radar antenna. The air inlets for the J-8-II have been moved to the sides



of the fuselage. Another indication that they were encountering serious technical development problems with the J-8 was that the Chinese Government signed a memorandum of understanding with the American aircraft company Grumman Aircraft Engineering Corporation to upgrade 50 J-8II in the '80s. This usual military cooperation was possible in the early '80s because the United States wanted an ally which can contain the expanding power of the former Soviet Union in the Far East. However, such a deal was never consummated due to a number of reasons. The Chinese government deemed the cost of upgrading 50 planes at a cost of \$500M US dollars too high; and a more likely determining factor was that by the late 80s, the Soviet Union was unraveling fast and the United States no longer need any security partners and therefore selling advanced military equipment to China was no longer considered a prudent thing to do.

(殲-8I) 與 (殲-8II) 最大的區別是這兩架機的機首 (見圖-4A 和 4B)。(殲-8I) 的進氣洞是位於機首，而《殲-8II》的進氣洞是在機身的兩旁，機首則裝上雷達的天線罩。還有一個事件表露出他們發展 (殲-8) 遇到極大的困難。在八十年代中葉，中國跟美國的飛機公司 (格魯門航空公司) 簽了一項備忘錄，打算幫中國提升五十架 (殲-8) 的性能。這個非尋常的中美軍事科技合作的誕生，歸功於美國急速需要一個伙伴在遠東牽制蘇聯的勢力擴張。但這個合同沒有實現。一說是為了中國嫌造價五億美元太貴。也有人說到了八十年代末，蘇聯已近體解，美國已不需要任何伙伴。在那個時候，對美國來說，替中國空軍提高戰斗力，是一項不智的交易。



Fig. 4a J-8I

圖 4a: 殲-8I



Fig. 4b J-8II

圖 4b: 殲-8II

### Variants of the J-8 Series (殲-8I) 系列

J-8 《殲-8》1969 年第一次試飛。外形很象擴大的《殲-7》(Mig-21)。

First flew on [July 5, 1969](#). Initial day fighter variant, resembles an enlarged MiG-21. Equipped with 2 x WP-7A turbojet engines

J-8I 《殲-8I》1981 年第一次試飛。改良的全氣候戰機。

First flew in [April 24, 1981](#). Improved all-weather version.

J-8E 《殲-8E》是《殲-8I》的《中年》改進型。

Mid-life upgrade for J-8I.

JZ-8 (J-8R) 《殲-8R》偵察機。

Reconnaissance version of J-8.

J-8ACT 《殲-8ACT》1990 年試飛。是一架實驗機，用來研究用軟體控制飛行系統。

First flew on [June 24, 1990](#), fly-by-wire testbed aircraft.

### J-8II Series (殲-8II) 系列

J-8II (殲-8II) 1984 年試飛。(殲-8I) 改良型。  
 First flew on [June 12, 1984](#). Improved J-8I prototype with redesigned nose/front section and fuselage.  
 Replaced nose air inlet with solid nose .

J-8II Batch 02 (J-8IIB) 1989 年試飛。《殲-8II》改進型。  
 First flew in Nov 1989, improved J-8II

Peace Pearl J-8 (J-8II) (殲-8II) 和平珍珠計劃。美國航空公司進行改良 50 加(殲-8II)，但後來計劃備取消。  
 During the Sino-US cooperation era, up to 50 J-8IIs was to be delivered to the US for upgrades and installation of AN/APG-66(v) radar and fire control system for US\$500 million, under the Peace Pearl program. However the project was cancelled and only about 24 J-8II was produced.

J-8IIACT (殲-8IIACT) 1988 年試飛。軟體控制實驗機。  
 First flew in 1988, fly-by-wire testbed and technology demonstrator.

J-8IID (殲-8IID) 1990 年試飛。裝上空中加油傳送器。  
 First flew on [November 21, 1990](#), modified J-8B with fixed refuelling probe and updated avionics.

J-8IIM (F-8IIM) (殲-8IIM) 1996 年在珠海國際航空展覽亮相。裝上俄羅斯電子和武器系統。  
 這戰機是出口型號，但沒有得到訂單。  
 Unveiled in Zhuhai Air Show 1996, export version of J-8B with Russian Phazotron Zhuk-8II PD radar (70 km range), R-27R1 (AA-10) AAM and Kh-31A (AS-17) anti-ship missile. Failed to attract any export customers and no domestic orders

J-8IIM (2006) (殲-8IIM) 第二次在珠海展出。  
 At Zhuhai Air Show 2006, a newer version of the J-8IIM was put on display with upgraded systems.

J-8IIF (J-8F) (殲-8IIF) 2000 年第一次試飛。裝上新的渦噴(WP-13BII)發動機及空中加油器。  
 First flew in 2000, J-8H with WP-13BII powerplant, in-flight refueling probe.

**Table 4. Statistics below represent the model of the Shenyang J-8 / J-8 II series of aircraft.**

**表四：沈陽《殲 8/殲-8II》系列戰機各種數據**

Basic Information:	基本資料
<b>Series Designation:</b> Shengyang J-8 / J-8II	<b>系列名稱:</b> 沈陽《殲-8 / 殲-8II》
<b>Classification Type:</b> Multirole Aircraft	<b>型號:</b> 多功能戰機
<b>Contractor:</b> Shenyang Aircraft Company	<b>廠商:</b> 沈陽飛機公司
<b>Initial Year of Service:</b> 1985	<b>最初操作年:</b> 1985 年
<b>Crew:</b> 1	<b>操作人數:</b> 1
<b>Performance</b>	<b>性能</b>
<b>Powerplant:</b> 2xLiyang (Guizhou) WP-13AII Turbojets with afterburner with 14,815 lbs of thrust.	<b>發動機:</b> 兩個渦噴 WP-13AII (貴州) 推動力: 14,815 斤
<b>Maximum Speed:</b> 1,452 mph (2,338 km/h)	<b>最高速度:</b> 1,452 英里 / 小時 (2,338 公里 / 小時)
<b>Maximum Range:</b> 1,367 miles (2,200 km)	<b>最大航程:</b> 1,367 英里 (2,200 公里)
<b>Service Ceiling:</b> 66,27 ft (20,200 m)	<b>實用升限:</b> 65,650 英尺 (20,200 公尺)
<b>Initial Rate of Climb:</b> 39,370 ft/min (11,999 m/min)	<b>爬升率:</b> 39,370 英尺 分鐘 (11,999 公尺 分鐘)
<b>Dimensions</b>	<b>尺度</b>
<b>Length:</b> 70.8 ft (21.59 m)	<b>機長:</b> 70.8 英尺 (21.59 公尺)
<b>Wingspan:</b> 30.64 ft (9.34 m)	<b>翼闊:</b> 30.64 英尺 (9.34 公尺)
<b>Height:</b> 17.75 ft (5.41 m)	<b>機高:</b> 17.75 英尺 (5.41 公尺)
<b>Empty weight:</b> 21,649 lbs (9,820 kg)	<b>淨重:</b> 21,649 斤 (9,820 公斤)
<b>Max. take-off weight:</b> 39,242 lbs (17,800 kg)	<b>最大起飛重:</b> 39,242 斤 (17,800 公斤)
<b>Armament</b>	<b>武器配備</b>
<b>Hardpoints:</b> 7	<b>四個翼底掛吊點:</b> 7
<b>Various weapons:</b> 1 23mm cannon Air-to-air infrared mid-range missiles Air-to-ground rockets	<b>各種武器:</b> 23 毫厘火炮一挺

gravity bombs	空對空紅外線導彈 空對地火箭 傳統式炸彈
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**J-10:** The J-10 (Figs. 5a and 5b), designed by the Cheng Aircraft Design Bureau and manufactured by the Cheng Aircraft Industry Company, represents an important milestone in Chinese military aircraft development for the following reasons:

(1) This is the first aircraft where the intellectual properties involving all mechanical parts, software and hardware subsystems are indigenous. It is rumor out side of China that the early batch of the J-10 will be powered by a Russian engine, the AL-31FN and later models will be powered by a Chinese engine, the “Tai-Hang” WS-10A (WoShan) .

(2) Modern technology such as digital systems, fly-by-wire control, navigation system, weapon systems control, etc. are widely used.

(3) The J-10 is truly a multi-role fighter with the capability of carrying a large variety of ordnance (Fig. 5c). Its aerodynamic performance and war fighting capability are approaching or exceed those of the 3<sup>rd</sup> generation aircraft in the West such as the F-16.

(4) The J-10 engineering development effort was initiated in the late ‘80s and after more than a decade of hard work, they were rewarded with an excellent product which they can be proud of. Unlike the disappointing experiences with the J-7 and J-8, the technical and management teams gain invaluable experience and, even more important, self-confidence from the J-10 development effort.

**殲-10：**（殲10）（見圖 5A 和 5B）是由成都飛機設計局設計，後由成都飛機公司發展和製造。（殲-10）的誕生，對中國的軍事航空工業來說，是一個很重要的里程碑。其理由有四：

- （一）這架戰機，從設計到生產，全部的軟硬體，零件，和低層系統的知識產權都是屬於國產。不過，前期出產的一批戰機，裝上的發動機是從俄國進口的 AL-31FN，後來才換上國產的（太行 WS-10A 渦扇）。
- （二）先進的科技，如數字化系統，電腦控制飛行，導航系統，武器控制系統等，都廣泛使用。
- （三）（殲-10）是名附其實的多用途的戰機。它能攜帶各種的先進武器（見圖 5C）。不論在飛行性能或戰鬥力方面，都已經趕上或超過西方的第三代戰機，如：美國的 F-16。
- （四）（殲-10）的技術發展是始於八十年代末。經過十多年的奮鬥，他們終於為完成了一個優秀的產品而自豪。與（殲-7，殲-8）的糟透的經歷相比，（殲-10）的成就給技術和管理人員帶來了鼓舞和自信。這些寶貴的經驗，是金錢買不到的。



Fig. 5a. J-10 taking off  
圖五 A: (殲 10) 在起飛



Fig. 5b. Operational J-10s on the tarmac.  
圖五 B: 在服役的 (殲-10)

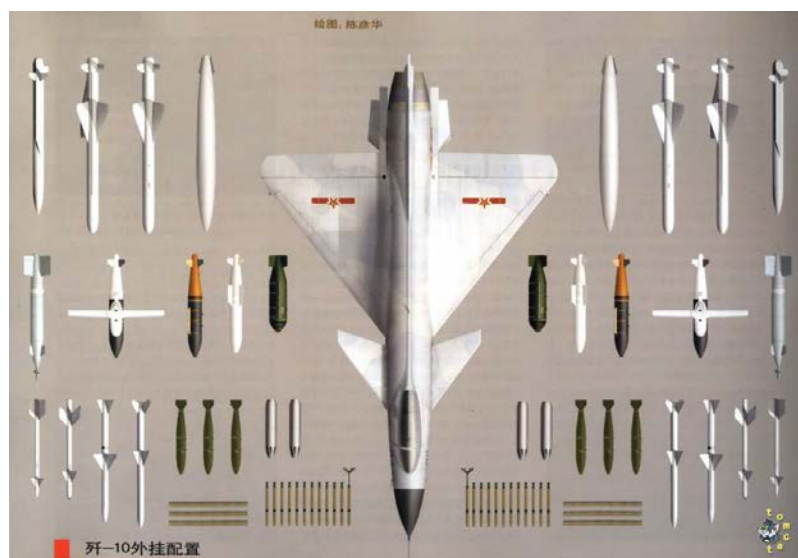


Fig. 5c. J-10 armaments  
圖五 C: (殲-10) 的各種武器系統

### Estimated specifications of the J-10 (殲 10) 規格估計

**General characteristics** (due to the highly classified nature of this aircraft, the following data are only estimates at best.)

**普通特徵** (基于這戰機的資料是屬於秘密文件，以下的數據盡其量也不過是一個推測。)

- \* **Crew (人員):** 1 (basic), 2 (trainer variant)      單座，教練機-雙座
- \* **Length(機長度):** 16.5 m (54 ft)
- \* **Wingspan(機翼展):** 11.3 m
- \* **Height(機高度):** 6.0 m
- \* **Wing area(機翼面積):** 45.5 m<sup>2</sup>
- \* **Empty weight(淨重):** 8,000 – 9730 kg

- \* **Useful Load(可載重量):** 5,5000 kg
- \* **Max. takeoff weight(最大起飛重):** 19,277 kg
- \* **Power Plant(發動機):** 1 AL-31FN or Woshan WS-10A “Taihang” turbofan  
(俄製)AL-31FN 或 國產 渦扇 WS-10A 太行渦噴  
Dry thrust(淨推力): 89.43 kN(千牛頓) (20,052 lbf 磅)  
Thrust with afterburner(補燃推力): 129.4 kN(千牛頓) (29,101 lbf 磅)

## Performance 操作性能

- \* **Maximum speed(最高速度):** Mach 2.0 at altitude; Mach 1.2 at sea level
- \* **Combat radius(戰鬥範圍):** 750+ km
- \* **Maximum range(最大航程):** 2,940 km
- \* **Service ceiling(升限):** 20,000 m
- \* **Thrust/weight ratio 推力/重量比率(with afterburner):** 8.9

## Armament 武器系統

- \* **guns:** 2 x 23 mm internal cannon 火炮:23 毫米 2 挺
- \* **Hardpoints:** 11 機底掛吊點: 11 個
- \* **Missiles and bombs:** 導彈, 炸彈, 火箭。
  - \*\* **Air-to-air:** PL-8, PL-9, PL-11, PL-12 空對空火箭:《霹靂-8, 9, 11, 12》
  - \*\* **Air-to-surface:** PJ-9, YJ-9K, 90 mm unguided rocket launcher pods 空對地導彈和火箭。
  - \*\* **Bombs:** Laser guided bombs (Lt-2), glide bombs (LS-6), unguided bombs  
雷射引導炸彈, 滑翔炸彈, 傳統炸彈。

## FC-1 (Fierce Dragon) / JF-17 (Thunder)

The FC-1/JF-17 is being developed by the Chengdu Aircraft Industry Corporation (CAC) in partnership with Pakistan Aeronautical Complex (PAC). The Chinese designated this new aircraft FC-1 (China Fighter 1) and dubbed it “Fierce Dragon”. It is entirely possible that it will be re-designated as J-9 when it enters operational service in the PLAAF. The Pakistanis on the other hand, designated it as JF-17 (Joint Fighter 17) and dubbed it “Thunder”, see Figures 6a and 6b.

## FC-1 (梟龍) / JF-17 (雷聲)

FC-1/JF-17 是(成都飛機公司)和(巴基斯坦)合資研發的。中國的英文代號是(中國戰機一號)而綽號則是(梟龍)。(巴基斯坦)用的英文代號是(聯合戰機 17), 而綽號則是(雷聲)見圖-6A 和 B。

This project is expected to cost about US\$ 500 million, with the amount equally divided between

China and Pakistan. The cost per aircraft is expected to in the neighborhood of US\$ 15-20 million. Pakistan has announced that it intends to procure 150 JF-17, but this number may easily go up to 300. The JF-17 will replace Pakistan's F-7 (J-7) and the French-made Mirage III/V currently in service. Potential countries which may procure the JF-17 include Azerbaijan, Egypt, Malaysia, Bangladesh, Nigeria, Burma, Zimbabwe, Morocco and Algeria.

這個計劃可能耗資五億美元，這個數目由兩個國家各付一半。每架機型的售價大約為一千五百萬至二千萬左右。(巴基斯坦)已經宣布他們將購進 150 架，但這個數目很可能增加到 300 架。JF-17 將替代陳舊的，但仍在服役的(沈陽 殲-7)和法國制造的(幻影 III/V)。其它對 F-17 有興趣的國家包括：阿斯拜占、埃及、馬來西亞、孟加拉、尼日利亞、緬甸、津巴布韋、摩洛哥和阿爾及利亞。

### Specifications (FC-1/Jf-17) (梟龍)的系統規格

#### General Characteristics 普通特徵

- \* **Crew:** 1 pilot 人員：單座
- \* **Length:** 14.97 m (49 ft 1 in) 機長度
- \* **Wingspan:** 9.46 m (31 ft 0 in) 機翼展
- \* **Height:** 4.77 m (15 ft 8 in) 機高
- \* **Empty weight:** 6,450 kg (14,220 lb) 淨重
- \* **Loaded weight:** 9,100 kg (20,062 lb) 負荷重
- \* **Max takeoff weight:** 12,400 kg (27,337 lb) 最大起飛重量
- \* **Powerplant:** 1 Russian-made RD-93 turbofan 發動機：俄制 D-93

#### Performance 操作性能

- \* **Max speed:** Mach 1.8 (1,120 mph) at high altitude 最高速度：馬赫數=1.8
- \* **Ferry range:** 3,000 km (1,864 mi) 單程航程
- \* **Service ceiling:** 16,700 m (54,790 ft) 升限

#### Armament 武器裝備

- \* One twin-barrel 23 mm cannon 一挺雙管 23 毫米火炮
- \* Short range PL-9 air-to-air missiles 短程空對空(霹靂-9)導彈
- \* Bombs: Laser guided bombs and gravity bombs 雷射引導炸彈，傳統式炸彈

#### Avionics 航空電子系統

- \* Chinese produced radar 中國出產雷達
- \* Global Positioning System 全球定位系統
- \* Head-up display, infra-red search and track system, night-vision goggle capability 抬頭顯示器，紅外線搜索和追蹤系統，夜光鏡設備





**Fig.6a.** FC-1/JF-17 fighter in Chinese/Pakistani marking  
**圖-6A:** FC-1/JF-17 印有中/巴國徽



**Fig. 6b.** FC-1/JF-17 in Pakistani marking  
**圖-6B:** JF-17 印有巴基斯坦國徽

### J-11/SU-27/Su-30

In the late '80s, Chinese military authorities saw clearly that in spite of their intense efforts in developing a modern jet fighter, there is nothing in their inventory, including their most current model the J-8II, can match American aircraft such as the F-14, F-15, F-16 and F-18. They needed to arm their air force as quickly as possible with more modern equipment. Toward this end, high-level negotiations between China and the former Soviet Union over a possible fighter deal began in 1990. By 1992, Russia delivered 26 aircraft to China, including 20 single-seat Sukhoi Su-27SK and 6 two-seat Su-27UBK, which the PLAAF designated as the J-11, (Figs. 7a, 7b).

### 殲-11/Su-27/Su30

即使經過數十年的努力發展一架新進的戰機，但到了八十年末，中國軍方已經發現他們擁有的戰機，包括他們最新的(殲8II)，沒有一架能夠與西方國的戰機，如美國的F-14、F-15、F-16等，爭雄的。他們需要急速地把機種現代化。所以在1990年中國高層開始和前蘇聯對於購買先進戰機的計劃進行談判。到了1992年，中國從蘇聯購進了二十六架第一線的戰機，包括二十架單座(蘇愷-27SK)和六架雙座(蘇愷-27UBK)。這機種在中國空軍的番號是(殲-11)。(圖七a，七b)

The Sukhoi Su-27 is the twin-engine front-line fighter aircraft designed by the Russian Sukhoi Design Bureau in the late 1970s as a counter to the U.S. third-generation air-superiority fighters such as F-14 and F-15. Originally kits were delivered to Shenyang Aircraft Corporation for assembly, but over time there were to be increasing Chinese components in the aircraft, with up to 70% of all Su-27 in the PLAAF to be Chinese-made. It has been rumored that China has received authorization from the Sukhoi Design Bureau to make re-designed upgrades of the aircraft on their own.

(蘇愷-27)是前蘇聯(蘇愷飛機設計局)設計的裝有雙發動機第一線戰機。目的是用來對付美國的第三代戰機，如：F-14、F-15、F16。前期的一批戰機是從蘇聯進口配套元件，再由沈陽飛機公司安裝。但後期出產的飛機零件，中國出產的占了七成。還有傳說，(蘇愷設計局)已經授權(沈陽飛機設計局)發展提升這機種的性能。

The limitations of the Su-27, however, soon became apparent to the PLAAF. As a



Fig. 7A J-11 landing on runway(圖-7A 殲-11 在降落)

Fig. 7B J-11 flying in formation(圖-7B 殲-11 列隊飛行)

single mission air superiority fighter, it could only perform secondary attack missions, and lack the capability to carry modern attack weapons such as laser guided bombs, air-launched cruise missiles and long range air-to-air missiles. By 2004 Chinese authorities had informed the Sukhoi Design Bureau that the basic Su-27 can no longer satisfy the Chinese Air Force's requirement. For this reason only a limited number of this basic model was produced. This led to the decision to purchase the multirole Su-30MKK, and the Su-30MKK2; the later is capable of carrying cruise missiles.

不幸的是，中國空軍很快就發現（Su-27）的缺點。這種戰機的主要任務是攔截入侵的敵機。但缺乏攜帶現代武器的性能，例如：雷射引導炸彈、空中發射巡航導彈和遠程空對空導彈等攻擊性武器。2004 年中國已經通知（蘇愷設計局），（Su-27）已經不能滿足中國空軍的要求；為了這個原因，沈陽飛機公司只生產了一百架基本型的（殲-11）。所以中國空軍決定購進多性能的（Su-30MKK）和（Su-30MKK2），後者是裝上巡航導彈系統的。

### Possible Directions for Future Developments, J-XX, J-12 and J-13 預期的發展方向，（殲-XX），（殲-12）和（殲-13）

Any information concerning research and development efforts in the Chinese military is highly classified, so any reports in the open literature in the area are sheer speculations at best. According to foreign observers, China has already launched its next generation aircraft program and Shenyang Aircraft Corporation has been selected to head research and development of the next generation fighter, tentatively designated as the J-XX, for the PLAAF. There is also speculation that the J-XX project is actually two independent development efforts being carried out by the Shenyang Aircraft Corporation and the Chengdu Aircraft Corporation which eventually may be designated as the J-12 and J-13. Regardless what the actual plans are, some of the most critical goals these development efforts must accomplish would include at least following:

關於中國軍事科技的研發，這都是屬於秘密資料。在公開報刊找到的一些報告，最多不過是一些推測。根據外國專家觀察，中國早已開始研發下一代的戰機；沈陽飛機公司是



承擔這個計劃的集團，這個計劃可能暫時命名為（殲-XX）。還有另外一個推測，有些傳家們認為（殲-XX）其實是兩個獨立的方案；一個方案是由沈陽飛機公司承擔，而另一個方案則由成都飛機公司來完成。這兩個機種將來可能命名為（殲-12）和（殲-13）。不管真實的方案是怎樣，他們研發的最終目標必定包括以下的成果：

1. **Airframe design:** The highest priority is to build an aircraft with these characteristics.

(a) To achieve a stealthy characteristic by reducing the over-all radar cross-section of the aircraft. This is important because the pilot will be able to detect the enemy and launch missiles at the enemy aircraft even before his own presence is known to the enemy.

(b) To reduce aircraft radar-cross-section, body weight and to strengthen airframe structure by replacing aluminum and titanium with composite material like carbon fibers.

（一）**機體設計：**居首位重要性的，是研發有以下特性的戰機。

（A）盡量降低機體的雷達橫截面，達到一架隱形機的要求。這個特性的重要性是不能低估的。隱形機的飛行員能先發現敵機，而出手先發制人。

（B）利用混合物來替代金屬，如鋁和鈦。來降低機體重量但提高結構力。

2. **Engine design.** Jet engine design and development are most likely the weakest links in the Chinese military aircraft industry as evidenced by the fact that even the latest aircraft, the J-10, uses a Russian engine, at least for the early production models. To develop a world class military jet engine, they must accomplish at least the following tasks:

（A）Thrust-to-weight ratio. The thrust-to-weight ratio must reach the level somewhere between 9 and 10. That is to say, if the engine produces 10,000 pounds of thrust, its weight should not be much more than 1,000 pounds.

（B）Thrust vectoring. Instead of simply producing thrust power straight back, the pilot can control and direct the thrust at some limited angle to the side in order to improve aircraft maneuverability.

（C）Supersonic cruising speed. The engine must be able to provide supersonic cruising speed without the use of after-burner so that the aircraft can have a large operating range.

（D）Reliability & Maintainability. The engine must be able to operate reliably 3,000-4,000 hours before requiring a major over-haul.

（E）Producibility. The engine must be fairly simple in design so that it can be affordably produced by the thousands.

（二）**發動機設計** 發動機的研發可能將成為最軟弱的一環。這個觀點是基于他們的最新型的戰機（殲-10）的發動機，最限度是前一批的，還是依靠俄國進口。研發出一個國際級的噴射發動機，必須具備以下的條件：

（A）推動力與重量比率：發動機的推動力與重量比率必定要在九至十之間。那就是說：如果發動機的噴射力是一萬磅，則其重量不能超過一千磅。

（B）推動矢量：發動機的推動方向不只限於向後，還可以向上下左右移動來增加飛機的機動性能。

（C）超音速平飛：戰機能夠不需要後燃器來達到超音速飛行。這樣可以省下燃

料，戰機就能到遠距離作戰。

(D) 可靠性和可維修性：發動機要能夠操作 3,000 至 4,000 小時才需要大幅的維修工作。

(E) 容易生產：發動機的設計要簡單，容易大量生產。

**3. Unmanned Aerial Vehicles (UAV)** Currently unmanned aerial vehicles are the hottest items in the research laboratories and in the international arms market. The advantages of an UAV over a piloted aircraft in a combat environment are rather obvious. It turns out that the more maneuverable an aircraft is, the more unstable it becomes. Since even the best pilots can send out about three responses per second to control the aircraft, as aircraft become more and more maneuverable, humans will not be able to control it at all. On the other hand, a computer can respond with 10-15 signals per second to control the aircraft. Then there is the total removal of risking a human life in extremely dangerous missions. Secondary advantages are the weight reduction from the pilot's body mass and the subsystems to support the pilot.

**(三) 無人飛機** 年來無人飛機無論在研究室或是國際軍火市場上，都是一個很熱門的主題。無人機的有利條件是不勝枚舉的。其一是，機動性越高，穩定性越低。所以機動性最高的戰機，即使最優秀的飛行員也控制不了。所以需要電腦來控制。沒有駕駛員，餘下的重量就可以用來安裝武器和燃料。沒有駕駛員，最危險的任務都沒有性命的憂慮。

**Fighter Aircraft Inventory of the PLAAF** The following table shows the estimated fighter aircraft that are operational in the PLAAF: 中國人民解放軍空軍現在服役的機種和數量如下列圖表：

Designation 名稱	Variants 分類	Manufacturer 廠商	Quantity 數量	Type 機種
<b>4th Generation</b>				
J-13? 殲-13		Chengdu 成都	In development	Multirole stealth fighter 多性能隱形機
J-12? 殲-12		Shenyang 沈陽	In development	Multirole stealth fighter 多性能隱形機
<b>3rd Generation</b>				
J-10 殲 10	<ul style="list-style-type: none"> <li>J-10</li> <li>J-10S</li> </ul>	Chengdu 成都	50~70	Multirole fighter 多性能戰機
FC-1 (JF-17) 梟龍		Chengdu	4 (prototypes)	Lightweight multirole fighter 多性能慶幸戰機
Su-33		KnAAPO	(2)	Carrier-based naval fighter
Su-30MK	<ul style="list-style-type: none"> <li>Su-30MKK</li> <li>Su-30MKK2</li> </ul>	KnAAPO	100	Multirole fighter-bomber
Su-27	<ul style="list-style-type: none"> <li>Su-27SK</li> </ul>	KnAAPO IAPO	36 40	Air-superiority fighter

	<ul style="list-style-type: none"> <li>• Su-27UBK</li> <li>• J-11</li> </ul>	Shenyang	96	
<b>Generation 2.5</b>				
J-8II 殲-8II	<ul style="list-style-type: none"> <li>• F-8IIM</li> <li>• J-8C</li> <li>• J-8D</li> <li>• J-8F</li> <li>• J-8H</li> </ul>	Shenyang	~250	Interceptor fighter
<b>2nd Generation</b>				
J-8 殲-8	<ul style="list-style-type: none"> <li>• J-8 'Day Fighter'</li> <li>• J-8I (J-8A)</li> <li>• J-8E</li> </ul>	Shenyang	~50	Interceptor fighter
J-7 殲-7	<ul style="list-style-type: none"> <li>• J-7I (F-7A)</li> <li>• J-7II (F-7B/M/P)</li> <li>• J-7C/D</li> <li>• J-7E/G (F-7MG)</li> </ul>	Chengdu	500+	Interceptor fighter
<b>1st Generation</b>				
J-6 殲-6		Shenyang	Retired 已退役	Interceptor fighter
J-5 殲-5		Shenyang	Retired 已退役	Interceptor fighter
MiG-15			Retired 已退役	Interceptor fighter

**In Memory of Professors James Eells (1926-2007) 紀念二位調和映射先驅  
and Joseph H. Sampson (1926-2003) 大師伊爾斯教授(1926-2007)  
Two Pioneers of Harmonic Maps 與森普孫教授(1926-2003)**

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**Introduction.** Professor James Eells was born in Cleveland, Ohio, 1926 and passed away in Cambridge in February, 2007. He received his Ph.D. at Harvard University under the topologist and analyst Hassler Whitney in 1954. He started at the Institute for Advanced Study at Princeton, went on to the University of California at Berkeley, returned to the East Coast for a position at Columbia University. He also taught Churchill College, Cambridge and Cornell University. Later, he was excited by the freedom and potential of the new University of Warwick, joined the mathematics department there and became a professor of analysis and differential geometry in 1969. He organized the highly successful, year long Warwick symposia "Global Analysis" in 1971-72 and "Geometry of the Laplace Operator" in 1976-77. He was the first director of the International Centre for Theoretical Physics at Trieste from 1986 to 1992. He was a prominent professor and innovative mathematician and his mathematical influence on harmonic maps was wide-spread internationally. He advised at least 38 graduate students, most of whom became academics, e.g., Drs. Luc Lemaire, R. T. Smith, John. C. Wood, F. Grazebrook, Andrea Ratto, etc. There are many more throughout the world who owe their careers to him. He retired in 1992, moved to Cambridge and continued to work on harmonic maps until he passed away. On July 20, 1992, I received a letter from Eells about a joint paper with Andrea Ratto, *Harmonic Maps on Spaces with Conical Singularities* [10] published in the *Bulletin of French Mathematical Society*, which was dedicated to Professors James Eells and Joseph H. Sampson: *Dear Dr. Chiang, I have just received my copy of Bull SMF 120 - and was most surprised and pleased to read a dedication by you and our excellent friend Andrea. What a nice idea! Thank you very much - and all best wishes. Yours cordially, James Eells.*

**介紹：**吉米思伊爾斯教授於1926年出生於美國俄亥俄州克利夫蘭，於2007年2月去世於英國劍橋。他於1954年於哈佛大學在拓樸與分析數學家惠特尼教授指導下取得數學博士。他最先開始於普林斯頓高等數學研究所作研究，隨後到加州伯克利大學，然後到東部哥倫比亞大學。他曾任教於劍橋邱吉爾學院及康乃爾大學。後來他被英國新成立的窪位克大學的自由及潛力感到興奮而吸引，便於1969年加入其校數學系成為分析及微分幾何教授。他在窪位克大學先後於1971-72年非常成功的主辦了「整體分析」研討會及1976-77年「來普拉斯運算幾何」研討會。他於1986-1992年於催斯弟擔任第一任國際理論物理中心所長。他是舉世聞名教授及創新數學家，他對調和映照具有國際的影響力。他指導最少38位研究生，大部分從事學術生涯，其中包括來每亞博士、史密斯博士、戈德博士、格瑞日布魯克博士、安督若投博士…等。世界上還有很多數學家虧欠他學術生涯。1992年6月20日我接獲他的一封來信有關我與他的學生若投博士合寫一篇數學論文刊登於法國數學學會公報[10]，此論文呈獻給伊爾斯教授及森普孫教授：「親愛的江博士：我剛收到法國數學學會120期公報，我非常驚訝及高興閱讀到你與安督若投的共同致獻論文。多麼美好的想法！非常感謝你及致最佳的祝福！你誠摯的朋友，吉米思伊爾斯」

Professor Joseph H. Sampson was born in Philadelphia in 1926 and passed away in Paris, France in August, 2003. He received his Ph.D. from Princeton University under Professor S. Bochner in 1951. He worked as a Moore Instructor at M.I.T. afterwards. He was appointed as Visiting Assistant Professor at the Johns Hopkins University in 1955-58, appointed as Assistant Professor in 1958-63, promoted to Associate Professor in 1963-65 and promoted to Full Professor in 1965. Sampson was my adviser at the John Hopkins University where I received my Ph.D. in 1989 and the major part of my dissertation was published in [9, 11]. Eells and Sampson were good friends for over 40 years. Sampson ever invited Eells to speak on harmonic maps at a colloquium of the Mathematics Department at the Johns Hopkins University in 1985. They both were brilliant mathematicians and professors. Sampson was an editor of the *American Journal of Mathematics* in 1978-1992 and the chair of the Mathematics Department of the Johns Hopkins University in 1969-1979. He retired from the Johns Hopkins University in 1990.

約瑟夫森普孫教授於 1926 年出生于美國費城, 於 2003 年 8 月去世于法國巴黎。他於 1951 年于普林斯頓大學在伯克那教授指導下取得數學博士。然後他于麻省理工學院擔任莫爾講師。隨後他於 1955-58 年在約翰霍普金斯大學被指定為訪問助理教授, 1958-63 年晉升為副教授, 1963-65 年晉升為正教授。森普孫教授是我在約翰霍普金斯大學的博士指導教授, 我於 1989 年取得數學博士學位, 我博士論文的主要部分被出版於[9, 11]。伊爾斯與森普孫教授是交好 40 年餘年的老朋友, 森普孫曾於 1985 年邀伊爾斯到約翰霍普金斯大學數學系演講調合映射, 他們二位都是非常聰慧的數學家及教授。森普孫教授 1978-1992 年擔任美國數學學刊總編輯, 1969-1979 年擔任約翰霍普金斯大學數學系主任, 他於 1990 年退休。

Harmonic maps were introduced by Sampson in 1952 in the hope of obtaining a homotopy version of the highly successful Hodge theory of cohomology. Not long after that his then colleague, John Nash (one of three Nobel laureates in Economics in 1994) - both of them were Moore Instructors at M.I.T. at the time, proposed a quite different but equivalent definition. F. B. Fuller also came upon harmonic maps [29] in 1954. The definition, whether in terms of the energy functional or the Euler-Lagrange equations, seems very natural to us today, but it was not so obvious fifty years ago.

調合映射由森普孫教授於 1952 年公諸於世, 因為他希望藉此獲得成功哈基理論類同的同倫形式。不久他在麻省理工學院的同事約翰那敘(1994 年三位諾貝爾經濟獎得主之一), 提出不同但等價的定義。傅勒於 1954 年也提出調合映射[29]。這定義無論由能量函數或歐勒勒格變基等式推導, 今天似乎對我們很自然, 但 50 年前它並不那麼顯然。

**Eells's and Sampson's Collaborative Work.** In 1963-1964, Eells and Sampson did the first collaborative paper *Harmonic Mappings of Riemannian Manifolds* [26] (52 pages long) in the *American Journal of Mathematics*, at the Institute for Advanced Study at Princeton. This paper is usually considered as the pioneer work in harmonic maps. They also did the second joint paper *Energie et Deformations en Geometrie Differentielle* [27] and the third joint paper *Variational Theory in Fibre Bundles* [28]. The main results of Eells-Sampson [26] are: (The following text is technical, we describe it as easy as possible and don't translate it into Chinese. 以下屬專業恕不翻譯)

**THEOREM 1.** Let  $N^n$  be a Riemannian manifold of non-positive Riemannian curvature and let  $f_t: M^m \rightarrow N^n$  be a bounded solution of  $\tau(f_t) = \partial f_t / \partial t$ ,  $0 < t < \infty$  ( $\tau(f) = \text{Trace } Ddf$ ). Then there is a

sequence  $t_1, t_2, t_3, \dots$  of  $t$ -values such that the maps  $f_{t_i}$  converge uniformly, along with their first order spaces derivatives, to a harmonic map  $f$ .

**COROLLARY 2.** Let  $N$  have non-positive Riemannian curvature and let  $f: M^m \rightarrow N^n$  be a continuously differentiable map. Let  $f_t$  be the solution of  $\tau(f_t) = -\partial f_t / \partial t$ , which reduces to  $f$  at  $t=0$ . If  $f_t$  is bounded as  $t \rightarrow \infty$ , then  $f$  is homotopic to a harmonic map  $f'$  for which  $E(f') \leq E(f)$ . In particular, if  $N$  is compact, then every continuous map  $M \rightarrow N$  is homotopic to a harmonic map.

By Sacks-Uhlenback [38], if  $m=2$  and  $\pi_2(N)=0$ , given a map  $f_0: M^m \rightarrow N^n$  there is a harmonic map  $f$  homotopic to  $f_0$ . The above Eells-Sampson's result was extended to harmonic maps with boundary by Hamilton [31]. The condition  $R^N \leq 0$  can be replaced by the condition that the image of  $f_0 = f$  supports a uniformly strictly convex function; see Jost [37] and Wahl [45]. Schoen and Uhlenbeck [39] showed that a bounded energy minimizing map  $f: M \rightarrow N$  of two Riemannian manifolds is regular except for a closed singular  $S$  set of Hausdorff dimension at most  $n-3$ . This can be checked in some interesting cases, for instances, if  $N$  has non-positive curvature or if the image of the map lies in a convex ball of  $N$ , we have  $S = \emptyset$  and any minimizing harmonic maps into such manifolds are smooth, which are exactly the cases of Eells-Sampson [26] or Hildebrandt-Kaul-Widman [33].

**Eells's Contributions on Harmonic Maps.** Eells had many publications in harmonic maps. He co-authored quite a few papers [13-19] with L. Lemaire including three most well-known reports: 1. *A Report on Harmonic Maps* [13], 2. *Another Report on Harmonic Maps* [17], 3. *Selected Topics in Harmonic Maps* [18]. Afterwards, there were two books on harmonic maps, loop groups, and integrable systems by Martin Guest [30] in 1997 and by Frederic Helein [32] in 2001. Eells also introduced Exponential Harmonic Maps [19] with Lemaire in 1990. He wrote a few joint papers with J. C. Wood [22-25] to construct harmonic maps from Riemann surfaces to projective spaces and complex grassmannians from 1970s to 1980s and the main results were:

**THEOREM 3.** There is a bijective correspondence between full isotropic harmonic maps  $f: M \rightarrow P_n \mathbb{C}$  and pairs  $(\Phi, k)$ ,  $\Phi: M \rightarrow P_n \mathbb{C}$  full holomorphic map,  $k = D''$  order of  $f$  ( $D' = D_{\partial/\partial z}$ ,  $D'' = D_{\partial/\partial \bar{z}}$  denote the (1,0), (0,1) parts of the connection on  $f^{-1} TP_n \mathbb{C}$ ) given as follows:

- (a)  $\Phi(z) = (\underline{f}''_{k-1}(z) \oplus \underline{f}''_1(z))^{\perp} = \underline{f}''_{k-1}(z)^{\perp} \cap \underline{f}''_k(z)$ ,  $l = n-k$ ,  $0 \leq k \leq n$ , where  $\underline{f}'': M \rightarrow G_{k+1}(\mathbb{C}^{n+1})$  is the  $k$ -th  $D''$ - associated curve of  $f$  (resp.  $\underline{f}_l: M \rightarrow G_{l+1}(\mathbb{C}^{n+1})$  is the  $l$ -th  $D'$ - associated curve). Conversely,
- (b)  $f(z) = (\Phi_{k-1}(z) \oplus \Psi_{l-1}(z))^{\perp} = \Phi_{k-1}(z)^{\perp} \cap \Phi_k(z)$ , where  $\Phi_k(z): M \rightarrow G_{k+1}(\mathbb{C}^{n+1})$  is the  $k$ -th associated curve of  $\Phi$  and  $\Psi$  is the polar curve of  $\Phi$  (the polar curve  $\Psi: M \rightarrow P_n \mathbb{C}$  of  $\Phi$  is defined as the antiholomorphic map  $\Psi = \Phi_{n-1}^{\perp}: M \rightarrow P_n \mathbb{C} \rightarrow G_l(\mathbb{C}^{n+1})$ ).

He also wrote a joint paper with P. Baird [1] and obtained the following result:

**THEOREM 4.** For a map  $f: (M, g) \rightarrow (N, h)$  between two Riemannian manifolds, the *stress-energy tensor* is defined by  $S_f = e_f g - f^* h$ , where  $e_f = 1/2 |df|^2$ . We have  $\text{divergence}(S_f) = -(\tau f, df)$ . (a) If  $f$  is harmonic, then  $S_f$  is conservative (i.e.,  $\text{div } S_f = 0$ ). (b) If  $f$  is a map which is a differentiable submersion almost everywhere on  $M$  and if  $\text{div } S_f = 0$ , then  $f$  is harmonic.

He co-authored a joint paper with A. Ratto in harmonic maps between spheres and ellipsoids [21] and a book entitled, *Harmonic Maps and Minimal Immersions with Symmetries*, [20] published by Princeton University Press in 1993. His final monograph, *Harmonic Maps between Riemannian Polyhedra*, co-authored with the Danish mathematician B. Fuglede, was published in 2001.

**Sampson's Contributions on Harmonic Maps of Kahler Manifolds.** In the 1980s, Sampson made great breakthrough and contributions on harmonic maps of Kähler manifolds in his publications [40-43]. He used his elegant tensor techniques to show that: a complex Kähler manifold of dimension  $>1$  cannot be minimally immersed in a space of constant negative curvature. He also obtained the following results:

**THEOREM 5.** If  $f$  is a harmonic map from a compact Kähler manifold  $(M, g)$  into a Kähler manifold  $(N, h)$  of strongly semi-negative curvature, then the  $(2,0)$ -part of the full back  $\Phi = f^*(ds_2^2 N)$  is holomorphic and  $R^N = 0$ .

**THEOREM 6.** (a) If  $f$  is a harmonic map of a compact Kähler manifold into a Riemannian manifold of hermitian negative curvature, then  $\Phi$  is holomorphic, and we have  $f^{\alpha}_{ij} = 0$ ;  $R^N = 0$ . (b) Under the conditions of (a), if  $R^N = 0$ , then  $d^*f$  maps  $T_p(M)$  onto an abelian algebra  $\underline{a} \subset \underline{P}^C$ , where  $\underline{P}$  is identified with  $T_{f(p)}f(P)\}(N)$ .  $\Phi = f^*(ds_2^2 N)$  is holomorphic, if  $f$  is harmonic and  $M$  is compact.

**THEOREM 7.** (1) Let  $N$  be a Riemannian locally symmetric space whose irreducible local factors are all of non-compact or Euclidean type. Then  $N$  has hermitian negative curvature. (2)(a) The natural embedding of  $Sp_n R/U_n$  in  $SL_{2n} R/SO_{2n}$  is totally geodesic. (b) A harmonic map of a compact Kähler manifold into a local symmetric space of type  $BD I(p, q)$  has rank  $\leq 2$  if  $p=1$ , and  $\leq 2q$  if  $p=2, q \geq 2$ .

**Biharmonic Maps.** Biharmonic maps were introduced by Guoying Jiang [35, 36] in 1986. Biharmonic maps are the extensions of harmonic maps and they satisfy the fourth order non-linear partial differential equations. On March 18, 1994, I received a letter from Eells: *Dear Prof. Chiang, Greetings from Cambridge! I have seen your reviews of H-A Sun's paper on 2-harmonic maps (J. Math. PRC. Exp 12(1992)) and reference to another paper and would seek your help: Does 2-harmonic means critical map of  $1/2 \int_M |\tau(f)|^2$ ? If so, would you be so kind as to state for me the precise conditions and formula for compositions proved by Sun and any significant example. I am sorry to bother you, but I can't a) read Chinese, even in summary! b) find either of Sun's paper. Many thanks, Yours cordially, James Eells.* I translated the major part of Sun's paper into English and sent it to him immediately. I received a thank you letter with a beautiful card about Autumn, King's College, Cambridge on April 4, 1994: *Dear Prof. Chiang, Thank you very much for the information on biharmonic maps. There is a future in that subject, without doubt, All best wishes, Yours cordially, James Eells.* Afterwards, I started to study biharmonic maps.

We [6] can apply Sampson's tensor techniques to compute the first variation of a biharmonic map

which is much easier than Jiang's original computation. A biharmonic map  $f: M \rightarrow N$  between Riemannian manifolds  $M$  and  $N$  is a critical point of the bi-energy functional

$$E_2(f) = 1/2 \int_M \|d + d^*\}f\|^2 dv = 1/2 \int_M \|\tau(f)\|^2 dv \quad (1)$$

In order to compute the Euler-Lagrange equation of the bi-energy functional, we consider a one-parameter family of maps  $\{f_t\} \in C^\infty(M \times I, N)$  from a compact manifold  $M$  (without boundary) into a Riemannian manifold  $N$  such that  $f_t(x)$  is the endpoint of a segment starting at  $f(x) (= f_0(x))$  determined in length and direction by the vector field  $\dot{f}(x)$  along  $f(x)$ . For a non-closed manifold  $M$  we assume that the compact support of  $\dot{f}(x)$  is contained in the interior of  $N$ . Then we have:

$$\frac{d}{dt} E_2(f_t)_{t=0} = \int_M (D_t \tau f, \tau f)_{t=0} dv \quad (2)$$

The Euler-Lagrange equation describing (2):  $f$  is a biharmonic map iff the bi-tension field  $\tau_2(f) = J_f(\tau f) = \Delta \tau(f) + R^N(df, df) \tau(f) = 0$ , i.e., the tension field  $\tau(f)$  is a Jacobi field.

In this decade there have been growing interests and progresses in biharmonic maps by R. Caddeo, S. Montaldo, E. Loubeau, C. Oniciuc, P. Piu, S.-Y. Alice Chang, L. Wang, P. C. Yang [2, 3], C. Wang [28, 29, 30], etc. Y. J. Chiang, Robert Wolak and Honan Sun also studied biharmonic maps in [4, 6, 7, 8].

**Wave Maps.** Wave maps are harmonic maps on Minkowski spaces. In this decade, there are many new developments in wave maps achieved by S. Klainerman, M. Machedon [46, 47], J. Shatah, M. Struwe [49, 50], D. Tararu [44] T. Tao [51, 52], A. Nahmod, A. Stefanov, and K. Uhlenbeck [48], etc. After Eells and Lemaire introduced exponential harmonic maps in 1990, J.-Q. Hong and Yihu Yang [34] studied exponential harmonic maps and obtained some results in 1993. Recently, I co-authored a paper *Exponential Wave Maps* [5] with Yihu Yang, which studied the relationships between wave maps and exponential wave maps, and the applications of exponential wave maps in relativity. Currently, I am studying "Transversal Wave Maps."

**Final Notes.** As a reviewer of *Mathematical Reviews* (published monthly by American Mathematical Society) since 1991, I wrote a review for Eells's publication entitled, "On the mathematical contributions of Giorgio Valli" [12]. I wrote an e-mail to him, and received an e-mail back from his wife on June 12, 2004: *Dear Yuan-Jen Chiang, I am sorry that Jim is not very well at the moment and cannot reply to your e-mail. I'm sure he will write you when he is feeling better. Sincerely, Nan Eells.* Professor R. Hamilton of Columbia University was the originator using Ricci flow to attack the Poincare and Thurston Conjectures about 30 years ago. At the 2006 International Congress of Mathematicians in Madrid, he said that his initial inspiration came about 40 years ago, when he attended the seminars of James Eells and Joseph H. Sampson on Harmonic Maps, who suggested that one might be able to use evolution to attack the Poincare Conjecture. About ten years later, Hamilton began to think seriously about the possibility and hit upon the idea of using evolution equation called the Ricci flow. Hamilton investigated the Poincare problem over 25 years and developed the theory of [the Ricci flow] and laid the foundation for Gregori Perelman's work for solving the Poincare Conjecture. **Professors James Eells and Joseph H. Sampson, the names of these two pioneers will be engraved on**



**all the mathematicians' minds throughout the world, who work on harmonic and wave maps for their great and imperishable contributions on harmonic maps forever.**

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**MUHAMMAD YUNUS:  
BANKER TO THE POOR**

**穆罕默德·尤努斯：穷人的银行家  
2006 年诺贝尔和平奖得主**

**2006 Nobel Peace Prize Recipient**



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All it took was a loan of US\$27 to 42 Bangladeshi women who made bamboo furniture to begin the journey toward the development of the Grameen Bank. In 1976, Dr. Muhammad Yunus was an economics professor at Chittagong University near the village of Jobra. The women from Jobra had to borrow five taka (nine cents) to produce each stool they made, and had to repay the moneylender seven cents, making only a two-cent profit. Dr. Yunus was successful at securing loans from other banks and re-lending the monies to the poor. He developed a unique payment method where “solidarity groups” were formed. In essence, two of the five people in the each group had to repay their loans before the other three people could get loans. This informal lending “institution” soon became a recognized bank and was named Grameen, meaning village. The Grameen Bank shared the 2006 Nobel Peace Prize with its founder, Dr. Muhammad Yunus, an economist. A transcript of his Nobel lecture is available online at [http://nobelprize.org/nobel\\_prizes/peace/laureates/2006/yunus-lecture-en.html](http://nobelprize.org/nobel_prizes/peace/laureates/2006/yunus-lecture-en.html).

格莱明银行的发展历程开始于尤努斯博士向 42 名制做竹器家具的孟加拉妇女贷款 27 美元。1976 年，穆罕默德·尤努斯博士是乔布拉村附近的吉大港大学的经济学教授。乔布拉村的妇女每做一个竹凳可卖 5 塔卡（9 美分），归还借贷人 7 美分后，每只凳子只赚 2 美分利润。尤努斯博士成功地从其他银行获得贷款，再转贷给贫穷的村民。他建立了一种独特的贷款方式，即通过“互助小组”贷款。每五人组成一个贷款小组，小组中两人归还了贷款之后，其余三人才可继续借贷。这种非正式的借贷“机构”很快发展成为一个国家认可的银行：格莱明银行，意思是乡村银行。格莱明银行和它的倡办人经济学家穆罕默德·

尤努斯博士分享了 2006 年的诺贝尔和平奖。尤努斯博士的诺贝尔演讲词可在这个网站看到。[http://nobelprize.org/nobel\\_prizes/peace/laureates/2006/yunus-lecture-en.html](http://nobelprize.org/nobel_prizes/peace/laureates/2006/yunus-lecture-en.html)

The Norwegian Nobel committee jointly awarded the prize because Dr. Yunus and Grameen Bank created economic and social development from below. In other words, loaning money to start-up businesses was a “grass-roots” effort; a person-to-person endeavor. To date, the Grameen Bank has loaned more than US\$6 billion to 7 million borrowers over the last 30 years. In addition, the bank has expanded its offerings to housing and educational loans, venture capital, and savings accounts. Grameen Bank does not require any credit checks or prior history of its applicants. It solely judges applicants on what they want to do with the loan to make their future better. This “microcredit” Grameen concept quickly grew into “microfinancing.” On its web site, the bank boasts of reaching over 3 million families in 22 countries with a payback rate of 99% ([www.grameenfoundation.org](http://www.grameenfoundation.org)).

挪威诺贝尔委员会之所以授之于诺贝尔和平奖是由于尤努斯博士和格莱明银行建立了从社会基层推动经济和社会发展的模式。换言之，为创办企业而进行贷款是一种底层贫穷者的努力，是基于人与人之间的信任。迄今，格莱明银行在过去的 30 年中，已经向 7 百万人发放了 60 亿美元的贷款。此外，银行还将业务扩展到住房和教育贷款，风险投资，以及储蓄业务。银行不需要检查申请人的贷款信誉和历史，它仅仅审查申请人获得贷款后能否生活更美好。格莱明银行这种“小额信誉”迅速转化为“小额信贷”。在其网页，格莱明银行称，它已经为 22 个国家的 3 百万家庭提供贷款，贷款回收率达 99%。  
([www.grameenfoundation.org](http://www.grameenfoundation.org))

On May 10, 2007, Dr. Yunus' remarks at Senior Class Day at Vanderbilt University were broadcast live on television. In his remarks, Dr. Yunus, with pride in his voice, told graduating students how much Vanderbilt University guided him in his career when he was a graduate student in economics and later when he returned for his Ph.D. The following statements are excerpts from his talk, which is available as a transcript on <http://sitemason.vanderbilt.edu/newspub/>.

2007 年 5 月 10 日，电视台播放了尤努斯博士在其母校范德比尔特大学高级研究班的演讲。在演讲中，尤努斯博士用自豪的口吻告诉在座的研究生，当他还是经济学系的研究生时，母校如何引导了他的职业生涯。他后来在该校获得博士学位。在下面这个网页，可以看到他演讲的节选。（<http://sitemason.vanderbilt.edu/newspub/>）

“People don't have to read everything in textbooks. A textbook is a help; a textbook is not an answer book for every question,” clarifies Dr. Yunus in how he was able to help reduce poverty. He and his students discovered that poverty is not created by poor people, but by institutions. Dr. Yunus further proclaimed his faith in people by stating that human beings are full of potential, energy and creativity. And, in closing his address, Dr. Yunus challenged students to try to change the concept of business because it limits human beings' abilities. He suggests that they consider social business practices because they embrace the good in people to solve social problems and not for profiting or personal gain.

在阐明他怎样帮助人们摆脱贫困时，尤努斯博士说，“人们不必读课本中的每一章节。课本只是一种帮助，它不可能为任何问题提供答案。他和他的学生发现，贫穷并非是由穷人制造的，而是由制度造成的。尤努斯博士进一步阐明他对人类的信任，人类充满潜力，能量和创造性。在演讲结束时，尤努斯博士鼓励学生应努力改变现有商业概念，因为它会制约人类的潜力。他还建议学生考虑社会实践，这会唤起人们的良知去解决社会问题，而非仅仅攫取利润和个人所得。

## Early Years

## 早期发展

In his book, *Banker to the Poor* (1999), Dr. Yunus talks about his contented childhood as one of 14 children although five died in early childhood. His mother always had money to give poor relatives who visited them from the country. Dr. Yunus believes that his mother's example made him concerned about the poor. Although his mother had psychological problems after her last few births, she was not institutionalized. His father, a jewelry storeowner, took care of his wife for the last 33 years of their 53-year marriage when therapy did not help her.

在他的“穷人的银行家”一书中，尤努斯谈到他的童年。他家共有 14 个孩子，其中 5 个夭折。他母亲总是给那些来访的乡下贫穷亲戚一些钱花。尤努斯博士相信他母亲的榜样使他能关心贫苦穷人。虽然他母亲在最后几次生育中患上心理疾病，她没有去专门机构治疗。他父亲是一个珠宝商。当医药无法医治他母亲的疾病时，他父亲在他们 53 年婚姻中照料了他母亲最后的 33 年。

The war years had an impact on the family when a Japanese bomb fell on their home. No one was injured, but this incident led his father to move his family to the safety of his parent's home in the country. When Dr. Yunus was seven years old, he vividly remembers the liberation celebration in his village. Britain dominated India for almost two centuries. In 1947, his part of India declared its allegiance as the free state of Pakistan. It would take another war of liberation 24 years later before this part of Pakistan became the country of Bangladesh (Yunus, 1999).

当日本轰炸他们家时，战争为整个家庭带来影响。虽然家里无人伤亡，但战争迫使父亲决定举家迁往其祖父居住的乡下。他还清楚地记得当他 7 岁时，他们村子庆祝解放的情景。英国殖民统治印度近二个世纪。1947 年，他们所在的印度部分宣告独立为巴基斯坦国。其后，又过了 24 年，他所在的巴基斯坦的这一部分，独立成为孟加拉国。

## Bengalis in America Unite

## 美国的孟加拉人联盟

Amazingly, it took only six Bengalis living in the greater Nashville, Tennessee area, and their collective \$6,000 to form the forerunner of the Bangladesh League of America. Dr. Yunus and five other professionals met and laid plans to contact the media to draw attention to the plight of the Bengalis who were being murdered by the Pakistani army. Their efforts resulted in a large Bengali demonstration on the steps of Capitol Hill. Besides national media coverage, the demonstration drew the interest of several legislators who sent their aides to get more in-depth information. The League lobbied in congress and Dr. Yunus' apartment became the League's information center. When the war of independence was won, Dr. Yunus returned to his homeland to help establish its political and economic systems (Yunus, 1999).

在美国田纳西州大纳什维尔地区的六个孟加拉人募集\$6000 美元，就成立了美国孟加拉人联盟。尤努斯博士与其他五个孟加拉人相聚并制定计划，他们通过媒体让世人知道正被巴基斯坦人屠杀的孟加拉人的困境。他们的努力促成了在美国国会山莊浩大的孟加拉人集会游行。除了美国国家媒体的报道之外，集会引起了美国会议员们的注意，并派人获取更多的信息。孟加拉人联盟去美国国会游说，尤努斯博士家成为联盟的信息中心。孟加拉

独立战争胜利后，尤努斯回到他的祖国孟加拉，并帮助国家建立政治和经济体系。

## Going Home

## 回国

Although Dr. Yunus was appointed to the new government's planning commission, he was not actively involved in doing anything and so he resigned to become the Chair of the Economics Department at Chittagong University. While traveling to and from the university to his home, he could hardly ignore the abject poverty about him. A year of war and destruction led to famine and thousands of deaths from starvation. Instead of teaching abstract theories about economics, Dr. Yunus wondered why he couldn't have hands-on projects for students that would help break the cycle of generational poverty.

尤努斯博士虽然就职于新政府的计划委员会，但他并无兴趣在政府中做事。于是，他辞去公职成为吉大港大学的经济系主任。在从家中去大学的路上，他无法忽视它周围的贫穷。一年的战争和破坏，导致成千上万的人死于饥荒。尤努斯博士不再讲授抽象的经济学理论，他想为什莫不能给学生一些实际课题，以帮助摆脱几代人的贫困循环？

With permission from his university, he was able to use the university's barren land as a project where people from the locale could plant winter rice by irrigating the land. Dr. Yunus began to research rice grain and, with his students, convinced farmers to plant high-yielding rice from Japan. With this success, Dr. Yunus began other projects with the help of his students, including laying the groundwork for the micro-lending bank. Originally, Dr. Yunus co-signed for every loan and did not charge any interest. At that time nearly, seventy-five percent of Bengalis were illiterate so students filled in applications for those who could not. Dr. Yunus developed a simple payback system whereby each applicant must borrow 365 takas (\$25) and pay back one taka (about two cents) per day from profits. Thus, the burden of payback was lessened and problems could be solved immediately (Yunus, 1999).

征得学校的同意，尤努斯博士可以使用学校的贫瘠土地作研究试验。附近的人们可以灌溉土地种植水稻。尤努斯开始研究水稻，他与其学生一起劝说农民种植日本的高产水稻。这项试验成功后，尤努斯博士在其学生的帮助下，着手研究其它课题，包括建立小额贷款银行的基础工作。一开始，尤努斯博士一起签署每一个贷款项目，并不收取任何利息。那时，几乎 75% 的孟加拉人是文盲。因此，学生帮助那些不识字的人填表。尤努斯博士建立了一种简单的信贷偿付机制。每一申请人须借贷 365 塔卡 (\$25 美元)，每天从利润中偿还一塔卡 (大约 2 美分)。这样，偿还贷款的压力减小了，问题很快解决了。

## A Lesson Learned

## 经验和借鉴

Dr. Yunus cites an example of the response from one of his early borrowers in his book. He well remembers a young woman who passed her oral exam on banking policies and what happened when it was her turn in the group to ask for her lump-sum loan (US\$25).

How does she feel? Terrified. She cannot sleep at night. She struggles with the fear of failure, the fear of the unknown. The morning she is to receive the loan, she almost quits. Twenty-five dollars is simply too much responsibility for her. How will she ever be able to repay it? No woman in her extended family has ever had so much money. Her friends come around to reassure her, saying, 'Look, we

all have to go through it. We will support you. We are here for just that. Don't be scared. We will all be with you.' (p. 64)

尤努斯博士在他的书中举了一个早期借贷者的例子。他清楚地记得一个青年妇女通过了关于银行政策的口语考试，当小组中轮她申请\$25美元的贷款时，发生了这样的情景：

“她感觉如何？太可怕了。她整夜无法入睡。她内心在挣扎，担心失败和无法预料的未来。早晨当她接受贷款时，她几乎放弃。25美元对她来说责任太大了。将来怎么能还得起呀？她的家族中从没有一个妇女曾经拥有这么多的钱。她的朋友来到她身边鼓励她说，“看，我们都必须完成它。我们支持你，我们到这里就是为了这个。别害怕，我们将与你在一起。”

Dr. Yunus continues the example on the next page of his book:

This is the beginning for almost every Grameen borrower. All her life she has been told that she is no good, that she brings only misery to her family, and that they cannot afford to pay her dowry. Many times she hears her mother or her father tell her she should have been killed at birth, aborted, or starved. To her family she has been nothing, but another mouth to feed, another dowry to pay. But today, for the first time in her life, an institution has trusted her with a great sum of money. She promises that she will never let down the institution or herself. She will struggle to make sure that every penny is paid back.

尤努斯博士在他书的下一页继续描述著例子：几乎所有格莱明银行的借贷者都是这样开始的。整个一生中，她都在被指责她的过错，她只是这个家庭的苦难和不幸，没有人能为她购买嫁妆。她父母多次对她说，你应该被流产掉，或一生下来就应该被杀掉或饿死。对她的家庭来说，她什么都不是，只是多了一张吃饭的嘴而已，而且要多买一份嫁妆。但今天，她生命中的第一次，有人相信她并且借她一大笔钱。她发誓她绝不会让人失望，她绝不会失败，她将归还每一分钱。

Dr. Yunus has done more than create an interest-free lending institution for the poor, he has developed interdependency and trust in the groups. Because nearly all borrowers are women, they feel more comfortable with one another because of their common situations. Some women are married with children while others are widowed or their husbands have left them and the children they sired.

尤努斯博士不仅仅为穷人建立这样的零利率借贷机构，他还建立互相依靠和信任的贷款小组。因为几乎所有的贷款者都是妇女，相同的背景使她们感到在一起会更容易一些。其中，有些妇女已经有孩子和家庭，另一些则是寡妇或被丈夫离弃了。

For only a few pennies a day, these Bengali women have a chance to break the bounds of poverty and exploitation by moneylenders. Several of these women borrowers were with Dr. Yunus when he accepted his Nobel Peace prize.

由于每天只还几美分，孟加拉妇女有机会打破贫穷的枷锁及高利贷的剥削。当尤努斯博士接受诺贝尔和平奖时，有几名孟加拉妇女一同出席了颁奖。

## Grameen Bank Expands

## 格莱明银行的发展

After each successful project, the Bank would introduce another loaning enterprise. As mentioned in the beginning of this article, the Bank created other services. Savings and pension accounts gave the Bank resources to grant more loans. These loans invested in fledging businesses and in educating and feeding children. Grameen Bank joined with Dannon Yogurt to develop a special yogurt formula to fight malnourishment. The yogurt is sold to poor families and children are regaining their health. This joint-venture enterprise reinvests its dividends.

每一贷款项目成功后，格莱明银行都会介绍另一项贷款项目。正如本文开始介绍的，银行开设了许多其他服务项目。储蓄和养老金使银行有更多的资金用于贷款。这些资金可用于企业启动，教育和扶养儿童。格莱明银行与丹能酸奶公司合作研发了一种特殊的酸奶配方治愈儿童营养不良。这种酸奶出售给贫穷家庭，孩子们重新获得了健康。这家合资企业将利润用于再投资。

Another unique project is Grameen's Beggar program. Since beggars went from house to house begging, Dr. Yunus thought that they should be given small items to sell. Most of them are now part-time beggars because they were able to survive on their earnings. Ten percent are completely self-sufficient. This is astounding since there are 100,000 beggars in the program poverty (Vanderbilt Remarks, 2006).

格莱明银行另一个特殊的服务项目是乞丐项目。由于乞丐们挨家乞讨，尤努斯博士认为他们应该能同时卖一些小商品。现在，这些乞丐都只是偶尔乞讨了，因为他们卖小商品能养家糊口生存下来。其中，10%的乞丐能完全自立，不再乞讨。这是惊人的成果，因为这个项目有 10 万个乞丐参加。(Vanderbilt Remarks, 2006).

In summary, sixty-four percent of borrowers were able to drag themselves out of poverty. Most were able to provide education and food for their children far beyond what they ever had. Their children are the first generation to live outside poverty. It all began with a loan of US\$27 by one man-Muhammad Yunus. For a complete listing of Dr. Yunus' awards and other writings about him, search wikipedia.

总而言之，有 64%的借贷者脱离了贫困。大多数人能为孩子提供教育机会和食品。他们的孩子成为脱离贫困的第一代人，而这都开始于一个人——穆罕默德·尤努斯的 27 美元的贷款。尤努斯博士的各种奖励和关于他的其他报道，可参看维基百科 (wikipedia)。

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## Search for Order in Nature and Three Well-Known Chinese-American Physicists

## 尋找自然的秩序與三位 聞名的美籍華人物理學家

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Throughout history, people sought harmony and order in the world we live in. We seek to make sense out of apparent disorder that often seems to dominate natural phenomena as well as human relationships. We also hope better understanding may help people better deal with issues of surviving in this world.

歷史上，人們在居住的世界尋找和諧與秩序，我們於明顯的混亂中尋求道理，其似乎經常控制自然現象及人間關係，我們也希望理解它可以幫助人們處理好這個世界的生存問題。

Science is the branch of knowledge by which we attempt to make sense out of this apparent natural disarray. With information gained from science, we also search for techniques to better control nature and thus improve the quality of life. Yet even disregarding how science is applicable to improving of life's quality, our minds also craves to just better understand the principles behind the workings of the universe.

科學是我們試圖於這明顯的自然混亂中尋求道理的學科。當信息從科學被獲取，我們也搜尋技術改善控制自然和因而改進生活水平。忽視科學怎樣可適用到改善生活的質量，我們的頭腦也熱衷更瞭解隱藏在宇宙的原則。

Mathematics is the most important tool used in science. Scientists use it to develop models for expressing relationships in natural phenomena. We can also say mathematics is a language used in science to describe ideas. When we give mathematical expressions for physical processes, we indeed place order, harmony, and simplification to phenomena being studied. Thus mathematics is sometimes referred as the "queen of the sciences" and is considered itself a science.

數學是用於科學的最重要工具。科學家使用它發展模型以表達自然現象的關係。我們可以也說數學是用於科學描述想法的語言。當我們為物理過程給數學表達式時，我們確實安置命令、和諧和簡單化到被研究的現象。因而數學有時被稱為科學的「女王/王后」和被認為它自己是一門科學。

Mathematics possesses great beauty itself. Regardless to how it is used as a tool by other branches of knowledge, its deductive reasoning has elegance in its own right and so is similar to any work of art. That is why I often exclaim after seeing a mathematical derivation, "piece of art!" Since nature, when properly understood, amazingly, are expressible as mathematical relations, part of the nature's beauty is from the very fact that it is expressible with mathematics, which is in itself aesthetic.

數學本身擁有優美。不管它怎樣由其他學科使用作為工具，它的演繹推理因本身之能力有高雅，因此與所有藝術作品是相似的。所以我在看數學推導以後經常驚嘆，「藝術品！」因為自然，當適當地瞭解，驚人地，是可表示的作為數學關係，一部分的自然的美麗是事實上它是可以數學表示的，本身是審美的。

This elegance of mathematical deductive reasoning to model physical phenomena was also one of the themes in Chen-Ning Yang's book shown as item #1 in the bibliography below. It also stated Einstein felt an ultimate goal of physicists is to reduce physics to a small number of

irreducible hypotheses and to infer all conclusions, which should match reality, from such elements by only applying mathematical deduction.

數學演繹推理塑造物理現象的高雅也是其中一個題材，如在參考書目#1 下所示的楊震寧的書。它也陳述愛因斯坦感到物理學家的一個最終目標是使物理降低到很小數量不能降低的假說和推斷所有結論，只有利用數學可配合現實。

Over ages of history, Chinese culture produced numerous great works of art, science, and mathematics. One of the purposes of the *Voice of Han* is to describe aspects of Chinese and American culture and education, and their intermingling. With that in mind, we give the main gist of the work of three prominent Americans of Chinese ethnicity, two of whom won the physics Nobel Prize for their contributions to making sense out of this apparent disarray of nature. As expected, the elegance of mathematical ideas was a tool used to express the newly found order. Their names are Chen-Ning Yang, Tsung-Dao Lee, and Chien-Shiung Wu.

在過去歷史的時代，中國文化產生了許多巨大藝術作品、科學和數學。其中「漢之聲」的目的是描述中國和美國文化和教育的方面及它們混合。因此我們介紹三個著名美籍華人，二位由於他們對於自然的混亂規劃成有意義的貢獻而贏取了物理諾貝爾獎，如同預期的，數學的美麗是一個表達新發現秩序的工具，他們的名字是楊震寧，李政道和吳建雄。

Chen-Ning Yang was born on September 22, 1922 in Hefei located in the province of Anhui, China. He received his formal education at the National Southwest Associated University, Tsinghua University, and the University of Chicago. Dr. Yang received the Nobel Prize in physics along with Tsung-Dao Lee for their work on parity theory in 1957, which we briefly described in this article.

楊震寧於 1922 年 9 月 22 日出生在中國安徽省合肥。他在中國西南聯大、清華大學和芝加哥大學接受了正規教育。1957 年楊震寧與李政道二博士一起接受了諾貝爾物理獎由於他們的在同等理論的工作，我們在這篇文章裡簡要地描述。

Tsung-Dao Lee was born on November 24, 1926 in Shanghai, China. His ancestors were from Suzhou in Jiangsu, China. Dr. Lee studied at Zhejiang University, National Southwest Associated University, and the University of Chicago.

李政道於 1926 年 11 月 24 日出生在中國上海。他的祖先是從江蘇蘇州人。李博士曾在浙江大學，西南聯大學和芝加哥大學學習。

Chien-Shiung Wu was born in May 12, 1912 in Shanghai but raised in Liuhe, approximately 30 miles from Shanghai. She studied at National Central University in Nanjing. This school was renamed Nanjing University. She then studied at the University of California and earned a PhD there in 1940. She died on February 19, 1997.

吳建雄於 1912 年 5 月 12 日出生在上海，在離上海約 30 英里在劉河(英譯)長大。她在南京中央大學學習，這所學校後來改名南京大學。1940 年她在加州大學取得了博士，她於 1997 年 2 月 19 日逝世。

The theory that Dr. Yang and Dr. Lee dealt with in the early 1950's concerns subatomic particle behavior when they are transformed by a mathematical mapping called a parity transformation. They theorized that for certain interactions, the behaviors of subatomic particles are not preserved under this transformation, which seemingly disturbed physicists' ideas of symmetry, a type of order, at that time. However, they discovered a new symmetry in those elementary particles that demonstrated a new sort of order in nature. The two physicists proposed tests to test their conjecture.

楊博士與李博士的理論是當他們通過一數學映射叫同等變換時，李處理了在 50 年代初

期關於亞原子粒子行為。他們推理為某些互作用，亞原子粒子行為在這變換之下沒有被保存，那時它表面上干擾物理學家的對稱想法，一種秩序的類型。然而，他們發現在那些基本粒子發現了一個新的對稱證明了自然新的秩序。二位物理學家提出測驗去試測他們的猜想。

In quantum physics, there are 3 known interactions and gravity. They are in the order of strength, the strong forces, electromagnetic forces, weak forces, and gravitation forces. The strong forces involve nuclear interactions, electromagnetic forces involve electron interactions only as in chemical reactions, weak forces involve radioactive decay interactions, and gravitational force, by far the weakest, is from gravity.

在量子物理學，有 3 已知的互作用和重力。他們按力量、主力、電磁力、微弱的力量和萬有引力力量的順序。主力介入核互作用，電磁力介入電子互作用只在化學反應，微弱的力量介入放射性衰變互作用，並且引力從地心引力是最微弱。

A parity transformation in a three dimensional Cartesian coordinate system is a coordinate transformation where the signs of each coordinate are reversed. So Cartesian axes  $(X, Y, Z)$  are mapped by the parity transformation  $\Phi$  as  $\Phi: (X, Y, Z) \rightarrow (-X, -Y, -Z)$ .

Although the  $(X, Y, Z)$  is often defined as the coordinate axes (each with unit length), in applications we prefer to define it as the point or vector under consideration that is represented by the coordinate axes, instead of the axes themselves. The formula is identical. The matrix form

of this transformation is 
$$\begin{pmatrix} -X \\ -Y \\ -Z \end{pmatrix} = \begin{pmatrix} -1 & 0 & 0 \\ 0 & -1 & 0 \\ 0 & 0 & -1 \end{pmatrix} \begin{pmatrix} X \\ Y \\ Z \end{pmatrix}.$$
 Since the determinant of this matrix

representing this mapping is  $-1$ , not  $1$ , this transformation is mathematically not considered to be a rotation. We also notice reflections (mirror images) constitute parts of such a parity transformation.

同等變換在三維解析的坐標系是坐標的變換，每個座標的符號變負。那麼解析的軸  $(X, Y, Z)$  由同等變換映射  $\Phi: (X, Y, Z) \rightarrow (-X, -Y, -Z)$ ，雖然  $(X, Y, Z)$  經常被定義作為座標軸（其中每一個以單位長度），我們定義它作為點或向量是相同的。這變換的矩陣形式是

$$\begin{pmatrix} -X \\ -Y \\ -Z \end{pmatrix} = \begin{pmatrix} -1 & 0 & 0 \\ 0 & -1 & 0 \\ 0 & 0 & -1 \end{pmatrix} \begin{pmatrix} X \\ Y \\ Z \end{pmatrix}$$
 因為代表這個矩陣行列式映射是  $-1$ ，沒有  $1$ ，這變換不稱為旋轉。

我們也注意反射（鏡像）構成這樣同等變換的部分。

With regards to parity transformations in subatomic particle physics, we are actually concerned about mirror images rather than a full parity map, since the lack preservation of parity only seems to affect a mirror image portion of the transformation. The mirror image part of the parity transformation only changes the signs of one of the axis instead of all three axes. Thus,

$$\Phi_1: (X, Y, Z) \rightarrow (-X, Y, Z); \quad \Phi_2: (X, Y, Z) \rightarrow (X, -Y, Z); \quad \text{or} \quad \Phi_3: (X, Y, Z) \rightarrow (X, Y, -Z)$$

each represents a mirror image transformation or reflection. As a matrix example,

$$\begin{pmatrix} -X \\ Y \\ Z \end{pmatrix} = \begin{pmatrix} -1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} X \\ Y \\ Z \end{pmatrix}$$
 is the matrix equation for  $\Phi_1: (X, Y, Z) \rightarrow (-X, Y, Z)$ . A parity

transformation is a composition of three these mirror images. So parity is expressible as

$$\Phi = \Phi_1 \circ \Phi_2 \circ \Phi_3; \quad \Phi = \Phi_2 \circ \Phi_1 \circ \Phi_3; \quad \Phi = \Phi_3 \circ \Phi_1 \circ \Phi_2;$$

$$\Phi = \Phi_3 \circ \Phi_2 \circ \Phi_1; \quad \Phi = \Phi_1 \circ \Phi_3 \circ \Phi_2; \quad \text{or} \quad \Phi = \Phi_2 \circ \Phi_3 \circ \Phi_1$$

Specimens outside laboratories may not be aligned to particular coordinate axes. Thus we rather refer to parity conservation instead of mirror image conservation since parity is more general and, as seen as above, has all three mirror image.

關於在亞原子粒子物理的同等變換，因為同等變換的缺乏保存似乎影響變換的鏡像部分，我們實際上關注鏡像甚於同等映射。同等變換的鏡像零件只改變座標的一個軸而不是所有三個軸。因此，

$$\Phi_1 : (X, Y, Z) \rightarrow (-X, Y, Z); \quad \Phi_2 : (X, Y, Z) \rightarrow (X, -Y, Z); \quad \text{or} \quad \Phi_3 : (X, Y, Z) \rightarrow (X, Y, -Z)$$

其中每一代表鏡像變換或反射。作為矩陣例子， $\begin{pmatrix} -X \\ Y \\ Z \end{pmatrix} = \begin{pmatrix} -1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix} \begin{pmatrix} X \\ Y \\ Z \end{pmatrix}$  是矩陣等式為

$\Phi_1 : (X, Y, Z) \rightarrow (-X, Y, Z)$ 。同等變換是三個鏡像的合成。如此同等是可表示的

$$\Phi = \Phi_1 \circ \Phi_2 \circ \Phi_3; \quad \Phi = \Phi_2 \circ \Phi_1 \circ \Phi_3; \quad \Phi = \Phi_3 \circ \Phi_1 \circ \Phi_2;$$

$$\Phi = \Phi_3 \circ \Phi_2 \circ \Phi_1; \quad \Phi = \Phi_1 \circ \Phi_3 \circ \Phi_2; \quad \text{or} \quad \Phi = \Phi_2 \circ \Phi_3 \circ \Phi_1$$

實驗室以外標本不可以對特別座標被排列，因此我們寧可提同等保護而不是鏡像保護，因為同等是一般的，如上所見，有全部三個鏡像。

In quantum wave mechanics, parity is said to be preserved for interactions if the magnitudes of interactions remain the same under a parity transformation. Strong interactions and electromagnetic interactions indeed preserve parity. Physicists originally thought parity is also preserved in weak interactions. Yet, during the time period 1954-1956, experiments showed that a certain charged particle decayed into 3 sub-particles called  $\pi$ -mesons, but another similarly charged particle decayed into two  $\pi$ -mesons. So experimentalists assumed the parent particle must have been different. They called the one disintegrating into 3 particles,  $\tau$ , and the one that disintegrated into 2,  $\theta$ . Yet other than the differences in how they decayed, these particles had identical properties. Evidence indicated  $\theta$  and  $\tau$  were actually the same particle.

在量子波動力學，如果在同等變換之下巨大相互作用依然是同樣的，同等被稱為相互作用保存。強相互作用和電磁相互作用事實上是保存同等。物理學家最初認為同等在弱相互作用也被保存。然而，於 1954-1956 期間，實驗表示，某一荷電粒子衰變成 3 個次級微粒叫  $\pi$  介子，但另一個相似地荷電粒子衰變成二個  $\pi$  介子。如此實驗者假設父母微粒一定是不同的。他們叫那個瓦解入 3 個微粒叫  $\tau$ ，和瓦解入 2 個微粒叫  $\theta$ 。除在他們怎樣衰變的區別之外，這些微粒有相同物產。證據表明  $\tau$  和  $\theta$  實際上是同一個微粒。

Chen-Ning Yang and Tsung-Dao Lee noted all evidences of the conservation of parity related to electromagnetic and strong interactions. There was no actual experiment confirming the parity conservation in weak interactions, whose conservation was only assumed. The two physicists performed an intensive theoretical investigation of this problem and suspected parity is indeed not preserved in weak interactions. They designed experiments to test this possibility. We describe the first such experiment by Columbia University physicist Dr. Chien-Shiung Wu.

楊震寧和李政道注意到所有同等守恆證據與電磁式和強相互作用有關。沒有同等守恆在弱相互作用的實際實驗，它們的守恆只是假設。二位物理學家進行了這個問題的一次密集的理論調查，並且被懷疑的同等在弱相互作用的確沒有被保存。他們設計實驗測試這種可能性。我們描述由哥倫比亞大學物理學家吳建雄博士所做的這樣實驗。

Chien-Shiung Wu tested the parity of the disintegration of radioactive Cobalt 60 at the National Bureau of Standards (NBS), called the National Institute of Standards and Technology (NIST) of the US Department of Commerce today. In 1956 she and NBS staff members, Ernest

Ambler, Raymond W. Hayward, Dale D. Hoppes, and Ralph P. Hudson performed the experiment on Cobalt 60, which decays into nickel and emit electrons, known as “beta particles”, and gamma rays. This is a weak interaction. They cooled a sample Cobalt 60 to near absolute zero in order to eliminate random thermal agitations of the its atoms. Since this isotope is magnetic, the “spin” and thereby the magnetic poles of its atoms can be aligned to a single direction by subjecting the isotope to an exterior magnetic field. So the scientists used an external magnetic field in a given direction to align the Cobalt 60 atoms. They noticed that more beta particles were emitted opposite the direction of the magnetic alignment than along its direction. It was unsymmetrical. In order to produce the mirror image transformation, they reversed the direction of the magnetic alignment and noticed more beta particles were then produced in the opposite direction than the original direction. The beta particles were always emitted in greater numbers in the direction opposite the magnetic field direction, and thereby mirror images of the decay differed from each other. Recall that physicists were only concerned about the reflection part of parity. This experimentally confirmed that parity was not conserved in this particular weak interaction.

吳建雄測試了放射性鈷 60 的崩解的同等在美國標準(NBS)局，現在稱美國商務部國家標準技術局(NIST)。1956 年她和 NBS 職員，Ernest Ambler, Raymond W. Hayward, Dale D.Hoppes 和 Ralph P. Hudson 在鈷 60 執行了實驗，衰退成鎳並且散發電子，稱為「 $\beta$  粒子」和  $\gamma$  射線。這是一個弱相互作用。他們冷卻樣品鈷 60 到近絕對零度為了消滅它的原子的任意熱量鼓動。因為這同位素是磁性的，「旋轉」和從而它的原子磁極可以對一個唯一方向被排列通過服從同位素到一個外部磁場。如此科學家在一個特定方向使用外部磁場排列鈷 60 個原子。他們注意  $\beta$  粒子散發了在磁性對準線的方向對相反於沿它的方向。它是不對稱的。為了導致鏡像變換，他們扭轉磁性對準線的方向，並且被注意  $\beta$  粒子導致了在原始方向的相反方向。 $\beta$  粒子散發了大量的數字在磁場方向的相反方向，並且從而衰退的鏡像彼此不同。回憶物理學家只關注同等的反射性。這實驗證實同等在這個特殊弱相互作用未被保存。

Many other later tests further confirmed that mirror image symmetry (parity) was not preserved in weak interactions. Recall symmetry is one simplifying property that sub-atomic particles were expected by scientists to follow. So this new finding at first seemed to indicate nature was in a sense not as orderly as originally expected and physicists may need to accept that. Yet history proved the story did not end here and there indeed existed a less obvious symmetry when anti-particles were considered.

許多其他最新測試促進證實鏡像對稱(同等)在弱相互作用未被保存。回憶對稱是一簡單性質科學家預計亞原子粒子具有。如此這新發現起初似乎表明自然實際上不是像物理學家最初期望也許需要接受。歷史證明這故事沒有結束及的確存在了一個較不明顯的對稱，當反粒子被考慮。

Before proceeding further, let us explain what we are anti-particles. For each given sub-atomic particle, there exists a particle of equal mass known as an anti-particle. The world as we know it is nearly exclusively made of the non-anti-particles, mainly protons, neutrons, and electrons, but anti-particles can be produced in subatomic collisions and radioactive decay. In other words, the strong and weak interactions may produce anti-particles as some of their products. These products are detectable from cosmic rays and high energy particle accelerators. If a particle has a charge, its anti-particle has the opposite charge of the same magnitude. For example, the anti-particle to an electron, which has a  $-1$  charge, is known as a positron and has a

+1 charge. If a particle has no charge, its anti-particle also has no charge. Regardless to charge, when a particle and its anti-particle come in contact, they annihilate each other and their masses transform into energy in accordance to the energy mass equivalence of relativity theory,  $E = mc^2$ , where  $E$  represents energy,  $m$  represents mass, and  $c$  is the speed of light. In contrast to weak interaction parity, the totality of mass and energy is indeed conserved. In the parity experiment, the mass in the form of nickel and electron plus the energy from the gamma ray is equivalent to the mass of cobalt 60.

在進一步討論之前，讓我們解釋什麼是反粒子。每個特定亞原子粒子，存在相等的大量微反粒子。在我們知道世界，幾乎完全被做主要非反微粒組成，主要是氫核、中子和電子。但反粒子可以被生產在亞原子的碰撞和放射性衰變。換句話說，強和弱相互作用也許產生反粒子作為它們的一些產品。這些產品從宇宙光和高能粒子加速器是可測試的。如果微粒有充電，它的反粒子有同大的相反充電。例如，反粒子對電子，有-1 充電，通認作為正子並且有+1 充電。如果微粒沒有充電，它的反粒子也沒有充電。不管怎麼樣充電，當微粒和它的反粒子碰上時，他們互相殲滅，並且他們的物體在依照變換成能量到相等於相對論能量， $E = mc^2$ ， $E$  代表能量的地方， $m$  代表物體，並且  $c$  是光速。與弱相互作用同等對比，物體的全部和能量的確被保存。在同等實驗，物體以鎳的形式和電子加上能量從伽馬射線同等於鈷 60。

Further parity experiments were performed with weak interactions, but this time anti-particles were involved. It happened that when positrons, the anti-particles counterparts to beta particles (electrons), were considered, the mirror image symmetry was indeed preserved. In contrast to beta particles, positrons prefer to be emitted in the direction of the magnetic alignments. Thus in weak interactions, particles behaved identically to the mirror images of the anti-particles.

更加進一步的同等實驗執行了以弱相互作用，但這次反粒子是包含的。它發生，當正子，反粒子相對物對 $\beta$ 粒子(電子)被考慮，鏡像對稱的確被保存了。與 $\beta$ 粒子對比，正子喜歡朝磁性對準線的方向散發，因而在弱相互作用，微粒相同地表現了與反粒子的鏡像。

So although by definition, parity is not preserved for weak interaction, we still have mirror image symmetry, provided we define the symmetry to be particles versus its anti-particles as objects of the reflection. With this extended definition, symmetry is still preserved, and physicists had the satisfaction that subatomic particles again portray simplistic symmetry that they originally expected. Also, mathematical elegance is exhibited here as in other mathematical representations of physical processes.

雖然由定義同等沒有被弱相互作用保存，我們仍然有鏡像對稱，假設我們定義了對稱是微粒對它的反粒子作為反射的對象。以這個延長的定義，對稱仍然保存，並且物理學家滿意亞原子粒子再刻畫他們最初期待過分單純的對稱，並且數學的高雅在這裡被陳列在物理過程的其他數學表示法。

Although not part of this Cobalt experiment, it was also statistical. We can model the direction of emission of beta particles by a probability,  $P$ , where the sample space is the unit sphere,  $S \equiv \{(x, y, z) : \sqrt{x^2 + y^2 + z^2} = 1\}$ , and each unit random point  $(x, y, z)$  models a beta emission angled in the emission direction. The probability can be estimated in the experiment by a ratio of the number of emitted beta's in given directions divided by the total number of particle emission, as a set of emissions can be considered to be a random sample. Let  $P'$  be the probability for the opposite magnetic alignment. If parity was preserved, the experiment would

imply that  $P' = P$ . In the experiment  $P'(A) = P\{\Phi_j(A) : j \in \{1, 2, 3\}\}$  for reflection  $\Phi_j$  and any  $A \subseteq S$  of  $(x, y, z)$ 's at their emitted directions. Probability theory requires  $A$  also be "Borel" in Cartesian space, but we will not elaborate this. Parity preservation in the experiment would imply  $P' = P$ ; otherwise  $P' \neq P$ . If we desire the cumulative distribution in  $S$ , we transform from Cartesian to spherical coordinates for simplicity. The cumulative distribution is also unchanged here if and only if parity is conserved. So statistics and probability theory give 2 more samples of how simple mathematical elegance beautifies a natural process even without parity preservation and regardless to the antimatter symmetry!

雖然不只是部分的這個鈷實驗，它也是統計的。我們以由塑造  $\beta$  粒子放射的方向以機率  $P$  表示，樣本空間是單位球面， $S \equiv \{(x, y, z) : \sqrt{x^2 + y^2 + z^2} = 1\}$ ，並且每  $(x, y, z)$  單位任意點塑造在 beta 放射的放射方向。當一套放射可以認為隨意抽樣，機率可以估計在實驗的比率由散發的 beta's 數量除以微粒放射總數劃分的特定方向。讓  $P'$  是為相反磁性對準線的機率。如果同等被保存了，實驗將暗示那  $P' = P$ 。在實驗  $P'(A) = P\{\Phi_j(A) : j \in \{1, 2, 3\}\}$  為反射  $\Phi_j$  並且其中  $A \subseteq S$  任一  $(x, y, z)$  的在他們的散發的方向。概率論要求  $A$  也是「Borel」在解析的空間，但我們不會詳盡闡述這。同等保存在實驗將暗示； $P' = P$ ；否則  $P' \neq P$ 。如果我們在  $S$  渴望漸增分佈，為的簡單我們從平面座變換到球狀座標。漸增非分佈在這裡也是未改變若且唯若同等被保存。如此統計和概率論給 2 個樣品，如此可見數學的高雅如何簡單的美化一個自然過程而不用同等保存和不管反物質對稱！

Although we did not extensively describe the mathematical details of the theory and computations behind parity, we showed in a simplistic way that Professors Yang, Lee, and Wu's discovery indeed demonstrated how the beauty of nature is partly due to the elegance of the mathematics used to model it. We also gave a simplified description of how three Chinese Americans contributed to Chinese-American culture and education through their great work in theoretical and experimental physics.

雖然同等之下，我們沒廣泛地描述了理論和計算的數學細節，我們用一個簡單的方式描述，楊教授，李教授和吳教授的發現確實展示了大自然秀麗如何部分歸結於數學高雅的塑造。我們也作的一個簡化的描述，這三位美籍華人如何通過他們在理論和實驗性物理的卓越表現對美籍華人的文化和教育作出了貢獻。

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**Commentary****Smartboards in University Classrooms:  
Learning from the Public Schools**

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**評論****大學教室的智慧板：  
學習於公立學校**

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(由編者翻譯成中文)

**Introduction****介紹**

In a 2007 presentation delivered for the University of Mary Washington Faculty Academy I discussed some of the recent changes I'd seen in how public schools in Virginia are making use of new technology. In the presentation I made the following points regarding what I believe to be a fundamental change in how these schools view educational technology:

- Schools are moving away from the model of playing “catch-up”, with constant upgrades to faster, more powerful lab-based computers with bigger hard drives
- Schools are taking advantage of the wide variety of technology/applications now available.
- Schools are using technology that is economically feasible, has direct applications to learning, and can be used in many different teaching/learning situations
- Students are using this technology to learn in new and exciting ways – they play a much more active role in their own learning

2007 年在瑪莉華盛頓大學教授學術發表會的一報告，我討論最近在維吉尼亞公立學校利用新科技的改變，我列出下列幾點關於這些學校如何看待教育科技：

- 學校從迎頭趕上模式改變到更快換新，更多有效實驗室電腦用大硬體盤。
- 學校利用現在可用大量的科技/運用。
- 學校利用廉價可運用的科技，直接運用到學生學習，並且用在許多不同的教學/學習情況。
- 學生運用這技術以創新及興奮方式學習 – 他們更主動的學習。

Examples I cited included the use of handheld computers (palmtops or PDAs) with wireless keyboards in third grade writing lessons, Vernier data probes (for temperature, pH, conductivity) linked to computers via USB ports on laptops being used to collect and work with environmental data in middle-school science classes, smart pens such as the Fusion Pentop computer and the soon-to-be released SmartPen from Livescribe, and smartboards. In closing, I pointed out that in some ways public schools were “leapfrogging” universities and colleges in terms of how they were now integrating technology and teaching. In this commentary I would like to suggest how one particular device, the smartboard, might be brought into college classrooms.



我列舉的例子包括在三年級寫作課利用無線手提電腦；在中學科學課程中為了尋找數據(溫度，pH 值，流通量)運用 USB 線接到電腦去收集環境數據；智慧筆如筆電腦及最近剛上市的智慧型筆及智慧板。總而言之，我指出在某方面來說公立學校好像是「青蛙跳躍式」大學及學院從他們如何結合技術及教學的角度。在這評論，我願意提出一特殊工具 - 智慧板，可能帶入大學教室。

A smartboard is a large, touch-controlled screen that works with a multimedia projector and a computer. The projector throws the computer's desktop image onto the interactive whiteboard, which acts as both a monitor and an input device. A finger or a stylus allows the user to control computer applications by pointing, clicking and dragging, just as with a desktop mouse. It is also possible to write or annotate on the board using a stylus or pen. Two examples of smartboards would be the Promethian ActiveBoard and Smart Technologies SmartBoard. The ActiveBoard uses a stylus as the input device and the SmartBoard uses a pen or even a finger for input.

智慧板是一個大的手控制多樣媒體投影及電腦螢幕。投影機投射桌面影像到反應白板作用如影像機及輸入器。一手指或尖筆讓使用者控制電腦應用利用指、碰或拉如同桌面老鼠。它也可能在板上用尖筆或筆寫或作註解。智慧板的兩個例子是 Promethian 活動板及智慧技術板。活動板用尖筆當輸入器，智慧板用筆或手指當輸入器。

Smartboards are appearing in public school classrooms in increasing numbers. They are relatively inexpensive and easy to learn and to use. And, since they closely resemble in use a familiar classroom object, the chalkboard, teachers are willing to invest the time and effort needed to use the smartboard. Just how these smartboards may best be integrated into classrooms is an area that has not been widely investigated. In this commentary I would like to outline some basic concepts regarding the educational use of smartboards and provide a suggestion as to how educators might take full advantage of the features provided.

智慧板在公立學校漸漸增加，它相對比較是不貴且容易學與容易用。智慧板類似於一般教室器材，粉筆板，老師們願意花時間及精力去用智慧板。現在智慧板最好被運用到還沒有大探究的教室。在這評論我願意列舉一些基本概念有關智慧板的教育用途及提供一個建議教育者如何完整利用種種機能。

### Levels of Use for Smartboards

### 智慧板運用的層次

In general, a higher level would indicate a more sophisticated use of the smartboard with interactivity and specificity increasing at each level. There are exceptions, for example a PowerPoint presentation that includes hyperlinks, action buttons, sequencing, and multimedia might fit category 2 or 3.

一般高層次將顯示智慧板互相反應及特殊功效比較複雜的使用。有一些例外，如 Power Point 展示包括超結合，行動紐，次序及媒體可能適合第 2 或 3 類。

1. Use of standard applications such as Word, PowerPoint, Internet Explorer. The instructor is using the stylus as if it was a mouse, but is standing in front of the Board rather than in front

of the computer. Benefits of using the smartboard in this way would include a greater level of interaction with what's projected on the board – the instructor can double-click, underline, circle, annotate, etc. Problems would include need for keyboard input, and, unless the lecture is computer-intensive, having to move the screen out of the way (and then recalibrate if it's used again) to use the chalkboard.

一般應用如 Word, PowerPoint, Internet Explorer，老師用尖筆如同老鼠，站在智慧板甚於站在電腦前。智慧板的好處包括什麼投射在智慧板的互動層次 – 老師可雙次按、畫底線、畫圈、註解等。問題包括鍵盤輸入，除非講課是電腦加強，須移開螢幕去用粉筆板。

2. Use of software designed specifically for smartboards (or touch screen computers.) This software allows users to manipulate objects (using the stylus or pen) on the board. These are interactive programs and manipulating objects on the board will produce some result or feedback. Examples would be the library of virtual mathematics manipulatives: <http://nlvm.usu.edu/en/nav/vlibrary.html> or the Explore Gizmos site (the link is for an example of an elementary-level density lesson) at: <http://www.explorellearning.com/index.cfm?method=cResource.dspView&ResourceID=629> These can be excellent teaching tools, the only limitation might be that they are often not as specific in providing examples or exercises as the instructor might wish. This use also might limit the use of the smartboard to one particular application.

軟體利用特殊為智慧板設計(或接觸螢幕電腦)。這軟體讓使用者在板上控制物體(用尖筆或筆)。有相互反應項目及在板上控制物體將產生一些結果及回饋。舉例如數學控制圖書館 <http://nlvm.usu.edu/en/nav/vlibrary.html> 或 Gizmos 探究(小學濃縮課程) <http://www.explorellearning.com/index.cfm?method=cResource.dspView&ResourceID=629> 這些是很好的教學工具，唯一的限制是它們不顯然提供例子或習題如老師所期許的。這使用可能限制智慧板到特別的應用。

3. Instructor-designed smartboard applications. These would be applications designed by the instructor to fit a particular topic or lecture or even a lecturer's particular teaching style. They would be highly interactive and might even include class participation through the use of a wireless slate. These applications might be designed using a multimedia programming language such as Flash, proprietary smartboard software such as Promethean's FlipChart Builder, or even Microsoft's PowerPoint if an instructor is skillful in using hyperlinks, triggers, action buttons, and multimedia. The obvious problem at this level is that the instructor must learn to use the design software and then have time available to build applications.

老師設計智慧板應用，這應用由老師設計為了適合特別課題或課程或老師特別教學形式。它們是相互作用及可能包括班級參加經過無線器使用。這些應用可能用多媒體程式語言被設計如 Flash，智慧板軟體如 Promethean's FlipChart Builder 或 Microsoft's

PowerPoint 如果老師善於運用高連接，接觸，動作鈕及多媒體。在這層次的明顯問題是老師必須學習用設計軟體及有時間去製造應用。

An overall trend that might be seen in the levels described above would be that as we move from level 1 to level 3, we get closer to taking full advantage of all that the smartboard might do, but we also see that each higher level requires more time and effort from the instructor. I believe this is a serious problem and will almost certainly limit the use of smartboards in most classrooms. If most instructors stay at level 1, are smartboards cost effective? Why not just use the mouse to control the computer while standing at the podium?

總體形式可能在不同階層看見如從層次 1 移至層次 3，我們漸漸仔細利用智慧板可能作的，但我們也看見每一更高層次老師需花更多時間及精力。我相信這是問題所在及將限制智慧板運用在教室。如果大部分老師停留在第一層次，智慧板能有效嗎？為什麼不站在台上只用老鼠去控制電腦？

## A Solution

## 解決方式

One solution to this problem might be to see the smartboard not just as the delivery method for one aspect of a lecture, wheeling it out to illustrate a difficult or abstract concept, but to use it as the primary delivery system for the entire lecture. Typically, lectures might include most of the following:

對這問題的解決方式智慧板不只是講課的運輸方法，以解釋一困難或抽象的概念；而且用它可以當作整個課題的主要的講課方式。一般來說，講課方式包括下列：

- |                            |                  |
|----------------------------|------------------|
| • Talking                  | • 說話             |
| • Writing on the board     | • 寫在板上           |
| ○ Equations                | ○ 方程式            |
| ○ Outlines                 | ○ 大綱             |
| ○ Timelines                | ○ 時間表            |
| ○ Graphs                   | ○ 圖形             |
| ○ Diagrams                 | ○ 圖表             |
| • Overheads                | • 影像器            |
| • Slides                   | • 幻燈片            |
| • Video                    | • 錄像             |
| • Computer projection      | • 電腦投影           |
| ○ Links to web pages       | ○ 連接到網頁          |
| ○ PowerPoint presentations | ○ Power Point 展示 |

In most cases, talking, and writing on the board to emphasize or illustrate a concept are the dominant forms of delivery. Overheads, slides, and video might be used occasionally to provide a more detailed explanation or graphic demonstration of a topic or concept. If the

smartboard fits into the latter category, then questions regarding its value are relevant. Especially in light of the time/effort involved in learning to make use of the board and the logistics involved in setup and calibration. If, however, the smartboard can additionally be used for the “writing on the board” component as well, and if there is a way to avoid the time needed for the instructor to develop the applications needed to accomplish this task, then the smartboard’s value becomes much more apparent.

在大多數情況，說話及寫在板上強調或解釋一概念是講課的主要方式。影像器、幻燈片、錄像偶而用之以提供詳細解釋或解釋一概念或一課題的圖解。如果智慧板適合下面種類，那關於價值問題是重要的，尤其在學習如何運用智慧板所花的時間與精力及裝置及設計它的補助。但智慧板也可額外當作粉筆黑板，如果可讓老師避免時間去裝置而完成任務，那智慧板的價值是很明顯的。

I believe the solution would take the form of content-area specific “toolboxes” equipped with a number of “tools.” The Promethean ActivBoard provides a toolbox of this sort that would be used in a geometry class. The instructor can bring up the toolbox then select tools such as on screen protractors, compasses, and x-y grids that can be used interactively throughout the lecture. For example, the instructor might draw a set of intersecting lines on the smartboard, and then measure various angles with the protractor. The tools are simple to use and usually take the place of some familiar device or diagram that the instructor might use or draw at the chalkboard.

我相信解決方式是用內容「工具箱」裝備一些「工具」。Promethian 活動板提供一工具箱可以運用到幾何教學。老師可以利用工具箱，選擇一些工具，如螢幕量角分度器、圓規、xy 方塊座標可運用到整個講課。例如老師可以畫一些相交線在智慧板，然後用量角分度器量角度。這些工具是容易用的，一般替代老師在黑板上用的一些器具或圖表。

If this concept can be broadened to include tools such as map tools, graphics tools (video clips and graphics), web access tools (perhaps a menu of links), and flip charts, and if the toolboxes are easy to use and take the place of objects or graphics already being used, I believe that many instructors might be willing to make extensive use of a smartboard in their classrooms. We might see a wall-mounted smartboard taking the place of a chalkboard. Instructors can use the smartboard as a simple whiteboard (using dry-erase markers) and then switch over to the smarboard when a more interactive, graphic teaching surface is needed.

如果這概念可以推廣到工具包括地圖工具、畫圖工具、網業工具、翻牌板及如果工具箱很容易用與替代已經被用的器具及畫圖，我相信很多老師們可能願意在教室廣泛運用智慧板。我們可能將看到一牆壁智慧板代替粉筆黑板。老師們可以用智慧板如同白板(用 marker)，當需要更多相互交應及畫圖教學空間時，便更換智慧板。

## **Preview of the 2008 Olympiad XXIX in Beijing, China**

Hongbo Tang

## **2008 年中國北京第 29 屆奧林 匹克運動會的前瞻**

唐洪波

The Olympiad XXIX will be held and celebrated from August 8 to August 24, 2008 in Beijing, People's Republic of China. The Chinese people graciously welcome people all over the world to participate this spectacular sports event. The grand opening ceremony of the Olympiad will commence at the Beijing National Stadium. Chinese will open and share three seas and nine ancient chambers in Beijing with people throughout the world. Since Beijing was elected to be the host city on July 13, 2001, the Chinese have prepared for this Olympic Games for more than six years.

「三海九門京華迎奧運」，第二十九屆奧林匹克運動會將於 2008 年 8 月 8 日至 8 月 24 日于中華人民共和國首都北京盛大舉行與慶祝。中國人們將熱烈歡迎全世界人們參加這偉大壯觀的世界運動會。從 2001 年 7 月 13 日北京申奧成功開始，至今奧運會緊張籌辦已 6 年多。

Juan Antonio Samaranch, former president of the International Olympic Committee (IOC) has boasted that the Olympics Games in Beijing will be “the best in Olympic history.” What will the 2008 Olympic Games bring to China? Many people, including the IOC members, as well as many politicians and economists, share the views that the Olympic Games will bring prosperity and promote new developments for China, a country with a population of 1.3 billion. We are looking forward to this great spectacular sports event in the coming summer.

國際奧委會主席薩馬蘭奇認為 2008 年北京奧運會“將會是奧運史上最好的奧運會”。2008 年奧運會將會給中國與北京帶來什麼？各界人士包括國際奧委會的許多委員以及許多政界人士、經濟學家在內均認為，奧運會將促進中國這個有着 13 億人口的國家的发展。我們有信心展望---

**More prosperity in Beijing -  
GDP US \$6000 per capita**

**一个更加富裕的北京 -  
人均 GDP6000 美元**

Since the 1964 Olympic Games in Tokyo, many host countries considered the Olympic Games as an accelerator of economic development. One objective of Olympiad 1988 in Seoul was to drive its “economic take-off”. From 1981 to 1988, the Olympic preparations brought Korea 7 billion dollars in revenues and 2.7 billion dollars national income. Korea had annual economic growth rate of 12.4% on an average, and its GDP increased from US\$2,300 per capita to US\$6,300, which made Korea ranked as one of the four small dragons in Asia in a short period of time.

從 1964 年東京奧運會，許多主辦國都將奧運會當做推動經濟發展的加速器。1988 年漢城奧運會的一個目標就是帶動“經濟起飛”，1981 年至 1988 年間的奧運籌備給韓國帶來了 70 億美元的生產收益和 27 億美元的國民收入，韓國經濟增長速度年均達到 12.4%，人均國內生產總值從 2300 美元增加到 6300 美元。韓國就此一舉躍進“亞洲四小龍”行列。

As a city lacking of international recognition in the past, Barcelona ranked one of famous tourist cities in the world after the Olympiad 1992. It is estimated that the GDP of Barcelona

increased an average of annual growth rate of 1.8% due to the Olympics from 1987 to 1992. At present, the economic growth rate of Barcelona is still higher than that of Spain and Europe. Barcelona is well-known as one of the fastest growing economies in Europe. The average GDP of Barcelona has reached at US\$20,000 and surpassed the average level of Spain and Europe.

巴塞罗那奥运会让世界知道了巴塞罗那，使这个过去在世界上知名度不高的城市一跃成为国际著名的旅游城市。据估算，1987 年至 1992 年，仅仅由于奥运因素的影响，巴塞罗那 GDP 年均增长多出 1.8 个百分点。目前，巴塞罗那的经济增长率高于全国和欧洲的水平，被誉为欧洲经济的发动机之一，人均 GDP 已达到 2 万美元，超过全国和欧洲平均水平。

The 2000 Sydney Olympics was the most successfully commercial operation in the history of the Olympics States by the IOC. It brought Australia 6.5 billion Australian dollars for economic profits. From 1997 to 2000, the marketing profits of IOC and the Sydney Olympic Organizing Committee made US\$2.976 billion, which mainly came from the ticket sales, television, business licenses, the global sponsorships and domestic sponsorships.

2000 年悉尼奥运会被国际奥委会称为奥运史上商业运作最为成功的奥运会，为澳大利亚带来 65 亿澳元的直接经济收益。从 1997 年到 2000 年，国际奥委会和悉尼组委会的营销计划从门票、电视转播、经营许可、全球赞助及国内赞助诸方面获得的收益为 29.76 亿美元。

Hosting the Olympic Games also will promote the developments of relevant industries, in particular, communication, transportation, tourism and catering industries. For example, the 2000 Olympic Games brought Australia US\$4.27 billion income from tourism only. The *Sydney Herald* reported that the Olympic Games had attracted the foreign investment as much as US\$8.7 billion.

举办奥运会还促进了相关产业的发展，最受益的是通讯、交通、旅游、餐饮等行业。2000 年奥运会仅旅游一项给澳洲带来的收入就达 42.7 亿美元。《悉尼先驱报》还称，这届奥运会引来的海外投资达 87 亿美元。

Since Beijing was elected the host city, both domestic and foreign experts have analyzed the role the 2008 Olympic Games would play in promoting economic growth in Beijing. According to calculations of the economics model, from 2002 to 2007, Beijing's GDP will accelerate due to the demand of investment and consumption caused by the Olympic Games; by 2007, its GDP will reach 590 billion RMB, and will achieve the goal of US\$6,000 per capita.

北京申办成功后，国内外许多专家就举办 2008 年奥运会对北京经济增长的促进作用做了不少分析。根据投入产出模型测算，2002 年至 2007 年，因奥运引起的投资和消费需求，将促进北京市国内生产总值增长提速，到 2007 年，全市国内生产总值可达到 5900 亿元左右，实现人均 6000 美元的目标。

The development of the economy will certainly promote the rapid growth of people's income and the quality of their lives. By 2008, the Engel Coefficient of Beijing residents, a parameter reflecting the level of consumption level of residents, is expected to be reduced to 26% from 33% in 2002. The living conditions, environment, medicine and health care situations of residents will be greatly improved. The physical constitution of residents, especially the youths, will improve markedly and further enhance the average life expectancy.

经济的腾飞必将带动居民收入的较快增长和人民生活质量的提高，预计到 2008 年，北京反映居民消费层次水平的恩格尔系数将由 2002 年的 33% 下降到 26%，广大居民的居住条件、居住环境、健身及医疗保健条件将大大改善，居民体质尤其是青少年体质将明显改善，平均预期寿命将进一步提高。

In addition, hosting the Olympic Games will enhance international communications between Beijing and the world. The Olympic Games is the largest integrated tournament in the world which involves in 200 countries and regions. The process of hosting the Olympic Games will bring China a vision of globalization and will make Beijing a more open and dynamic city. At the same time, hosting the Olympic Games also will provide Beijing a good opportunity to present a good international image.

此外，举办奥运会能够增强北京的国际交往和交流能力。奥运会是世界上最大的综合性赛会，全球 200 个国家和地区都参与其中，在举办奥运会过程中，将给中国带来全球化的视野。奥运会将使北京更加开放和充满活力。同时，举办奥运会也为北京树立良好的国际形象提供了难得的机遇。

Also, hosting the Olympic Games will enhance the international competition reputation of Beijing. Beijing will draw the attention of the world. As a matter of experience, once an Olympic Games host city is elected, it becomes the focus of the world at immediately. With the growth of its reputation, it would have more opportunities to show its potential economic and social benefits. For example, during the seven years before 2008, tourists in Beijing will increase to 20% annually, and the tourism revenue will increase by US\$2 billion per year; and during the 2008 Olympic Games, Beijing will increase by one million tourists who will bring Beijing US\$5 billion income. At the same time, the tremendous business opportunities, which result from construction projects, the development of related industries and finance programs for the commercialization of the Olympic Games, will attract many investors to seek cooperation opportunities.

举办奥运会也能够增强北京的国际竞争力。举办奥运会将使北京成为全球关注的热点。根据经验，奥运会举办城市一经确定，即成为全世界关注的焦点，知名度大大提高，其潜在的经济效益和社会效益也有了更多展现的机会。以旅游业为例，估计在北京奥运会准备期的 7 年中，旅游者每年可以增加 20%，旅游收入每年增加 20 亿美元，奥运会期间会再增加 100 万旅游者和 50 亿美元的收入。同时，由建设项目、相关产业发展和奥运会商业化筹资方式形成的巨大商机将吸引众多投资者前来寻求合作机会，形成巨大的投资市场，给北京带来巨大商机。

In the preparation for Olympic Games, a host city in any host country will build or extend massive Olympic Games venues, and thus bring a number of infrastructure constructions or renovation of the host city. In 1988, the direct investment of Seoul Olympic Games was US\$2.28 billion, but the other investment of its necessary facilities and infrastructures was several times the number of its direct investment. Beijing will invest 180 billion RMB on infrastructure construction, 71.3 billion RMB on the environmental protection and pollution control and 17.3 billion RMB on the construction of venues. The tremendous investment for the Olympic Games will promote Beijing's economy greatly, and impel the development of the national economy. During the Olympic Games, the host city will attract attention of the world. Countless travelers all over the world will visit Beijing. The consumption of their eating, drinking, lodging, shopping, and so like will keep on impelling the national economy steadily. In the period of Post-Olympic Games, the host cities will still be able to take advantage of the remaining influence of the Olympic Games to attract international and domestic tourists, to hold international and domestic exhibitions and conferences, sports exchange programs and so on, continuing to keep the fast development of their economy.

在奥运筹备期，不管是哪个国家的哪个举办城市都会新建、改建或扩建大量的奥运体育场馆，带动大量城市基础设施的建设和改造。1988 年汉城奥运会直接投资金为 22.8 亿美

元，其配套设施及城市基础设施则几倍于直接投资。而北京奥运将有 1800 亿元用于基础设施建设，713 亿元用于环境保护及治理污染，173 亿元用于场馆建设。巨大的奥运投资对经济产生强大的拉动作用，推动国民经济的发展。在奥运举办期，举办城市吸引了世界的目光，世界各地的人蜂拥而至，旅游、观看比赛、吃、喝、住、行等消费因素继续推动国民经济稳步发展。后奥运期，各举办城市会利用奥运的余热吸引国际、国内旅游，办国际、国内展会，体育交流等活动继续刺激消费，保持经济的快速发展。

Currently Beijing is cooperating with all related groups to prepare for the Olympic Games. Beijing will try its best to implement the strategy of “new Beijing, new Olympic Games,” targeting the three ideologies: “Green Olympic Games,” “Technical Olympic Games,” and “Humanities Olympic Games”. The results of current work give us reason to anticipate a bright future for China.

目前，北京正与相关各方团结协作筹办奥运会。北京将尽最大努力实施“新北京、新奥运”战略，落实“绿色奥运、科技奥运、人文奥运”三大理念。从目前的效果来看，我们也有理由展望---

### **A more beautiful Beijing –perfect combination of ancient and modern factors**

### **一个更加美丽的北京—— 古老与现代的完美结合**

The large-scale construction of the infrastructure for meeting the standard construction of the Olympics will promote the modernization level of the hosting city greatly. For instance, Japan built the first 210 km/hour high-speed railway in the world before the Olympics were held in Tokyo. In order to meet the needs of the Olympics, Los Angeles extended its international airport and increased its capacity to 7,000 passengers per hour. As contenders for hosting the Olympics, Greece and Germany invested to construct the Athens and Berlin urban highway networks and railway transportation facilities separately, thus promoting the modernization of their urban transportation.

以满足奥运会举办条件为标准的大规模基础设施建设能够有力地提高城市现代化水平。日本在举办东京奥运会前建成了世界上第一条时速达 210 公里的高速铁路。美国洛杉矶市为满足奥运会需要，对原有国际机场进行扩建，将客运能力提高到每小时 7000 人次。希腊和德国为争办奥运会，各投资建设了雅典和柏林的市内高速公路网和轨道交通设施，加快了市区交通的现代化。

In order to host the 2008 Olympics, the Chinese are building and renovating a number of stadiums to meet the standard of the Olympics in Beijing. At the same time, considering of long-term development in Beijing, the Chinese are building and renovating the airport, railway stations, urban roads, telecommunications systems, information centers, the Olympic Village and its ancillary facilities, as well as other large infrastructure facilities in Beijing. This will promote Beijing as a modern international metropolitan city.

为了举办 2008 年奥运会，北京正在新建和改造一批符合举办奥运会标准的体育场馆，同时从有利于北京城市长远发展的角度，对机场、火车站、城市道路、电信系统、新闻中心以及奥运村及其辅助设施等大型基础设施进行建设和改造，这将加快北京跻身现代化国际大都市的步伐。

The Chinese are focusing on the improvement of its public transport in Beijing, with a total investment as much as 90 billion RMB. Anticipating a huge rush during the games, Beijing's subway system is currently undergoing a major expansion which will increase its capacity to



more than twice its existing size. The current system is composed of four lines and 64 stations. An additional seven lines and more than eighty new stations are constructed, including a direct link to Beijing Capital International Airport. In the airport itself, eleven unmanned trains will expedite the movements of people throughout the new terminal buildings. On the ground, Beijing is set to designate thirty-eight official public transit routes that will link the Olympic venues. During the games, 2,500 large-size buses and 4,500 minibuses will be operated by a total of 8,000 drivers to transport people across various venues.

北京正在重点改善公共交通状况，整个在改善城市交通方面的总投资会达到 900 亿人民币。预计在比赛期间的交通高峰，北京的地铁系统目前进行正在将它现有的容量扩展两倍多。它目前的地铁系统有四条线和 64 个站，正在修建另外的七条线和八十多个新站，其中一条线直通北京首都国际机场。机场方面，十一列无人操纵的火车将加速运输乘客到新候机楼。在地面交通方面，北京将开辟三十八条专用车道以连接各比赛场馆和奥运村。在比赛期间，将由 8,000 个司机驾驶 2,500 辆大公共汽车和 4,500 辆小巴提供人们在各比赛场馆之间的运输。

Beijing will highlight the integration of its traditional characteristics with modern elements. As Beijing tries to focus on the protection of its old Imperial City, the axis of the traditional city, the water system of historical city to reflect the basic pattern of an ancient capital. The remodeled Imperial Academy Street, Shicha Hai, the Forbidden City, the Great Wall and other landmark buildings and facilities in Beijing will bring the ancient capital some modern urban atmosphere.

除了现代化建设以外，作为一座建都 850 年的城市，北京将突现传统特色与现代气息的融合。北京将重点保护旧皇城、传统城市中轴线、历史城市水系和古城基本格局，以体现古都基本格局。焕发新的生命力的国子监街、什刹海、故宫和长城将与一大批集中体现城市形象的标志性建筑和设施共同为古都北京增添新的色彩和现代都市气息。

In addition, the official logo of the 2008 Olympics appeared all over Beijing. It is included on the emblem entitled “Chinese Seal: Dancing Beijing,” the Olympic slogan “One World, One Dream,” as well as “Fuwa”, the mascots of the games, not only calls upon the world to unite in the Olympic spirit and the value of “humanities Olympic Games” ideology, but also reflects rich Chinese culture and unique oriental wisdom.

此外，遍布北京城的 2008 奥运会形象标识，包括北京奥运会会徽“中国印·舞动的北京”、奥运会的主题口号“同一个世界，同一个梦想”，奖牌“金镶玉”、吉祥物“中国福娃”等，不仅体现了奥林匹克精神与“人文奥运”的理念所蕴含的价值观，而且反映了内涵丰富的中华文化和独特的东方智慧。

For example, the 2008 Summer Olympics emblem entitled “Chinese Seal: Dancing Beijing,” combines elements of traditional Chinese society—a red seal and a calligraphic word for *Jing* (literally “national capital”) with athletic features. The open arms of the calligraphic word symbolize the invitation of China to the world to share in its culture. Besides, the calligraphic character, *Jing* looks like another Chinese character *Wen* (literally “culture or literary”), which symbolizes the ideology of “humanities Olympic Games”.

例如，这次奥运的会徽名为“中国印·舞动的北京”，将中国印、汉字“京”与运动员形象结合在一起，演变而成。变异后的“京”字像个蹦跑的人形，贴切地将北京和奥运会联系在一起，人形张开的双手也可视为“北京欢迎你”的象征。同时，“京”字也像个“文”字，寓意“人文奥运”。

For another example, the mascots of the Games, the Fuwa (literally “good-luck dolls”) consist of five members that incorporate fish, giant panda, fire, Tibetan antelope, and swallow

designs. They are named Beibei, Jingjing, Huanhuan, Yingying, and Nini. When the first syllable of each of the five names is said together, the result is the phrase “Beijing Huan Ying Ni”, which means “Beijing welcomes you”. The Fuwa each have as their primary color one of the colors of the five Olympic Rings.

再如，2008 年夏季奥林匹克运动会吉祥物福娃。由五个形象组成，分别是：贝贝（鲤鱼形象）、晶晶（大熊猫形象）、欢欢（奥林匹克圣火形象）、迎迎（藏羚羊形象）、妮妮（北京燕子形象），是“北京欢迎你”的谐音，其颜色也是奥运五环的颜色。

### **A more modern Beijing --experience a technological Olympiad**

### **一个更加现代的北京—— 体验“科技奥运”**

Hosting the Olympics will accelerate Beijing into scientific and technological Olympic city and the “Digital Beijing.” For example, in the Beijing Olympic Venues Plan, the Chinese will build advanced sports and culture architectures, apply new technologies extensively and make the technology of digital network to a broader, deeper involvement in the entire process of athletic competition in Beijing. Thus, the technologies of remote audios and videos and images displays will bring a close link between people and sports.

奥运会的举办将大大加快科技奥运和“数字北京”的建设步伐。譬如，北京在奥运场馆规划中就明确提出，要建设高水平的体育文化建筑，广泛应用高新技术，使数字网络技术更广泛、更深入地介入体育比赛的全过程，远程音像传输技术及图像显示技术将使人与体育建立更为紧密的联系。

Among the thirty-one Beijing-based Olympic Games venues and six venues outside Beijing as well as fifty-nine training centers, the largest architectural pieces are the Beijing National Stadium, Beijing National Indoor Stadium, Beijing National Aquatics Centre, Olympic Green Convention Centre, Olympic Green Park, and Beijing Wukesong Culture & Sports Center. Construction of these venues has reflected the improvement in innovation ability of the Chinese people in science and technology. In particular, the National Stadium, the centerpiece of the 2008 Summer Olympics, nicknamed the “Bird Nest” because of its nest-like skeletal structure, features a lattice-like concrete skeleton forming the stadium bowl and has a seating capacity of 80,000 people. The 24 steel poles that support its skeleton are made of a kind of special steel “Q460” as it to be called, a product developed by Chinese engineers and technicians independently.

在 31 个北京市内和 6 个外地运动场馆及 59 个训练中心之中，北京国家体育场、中国国家游泳中心、中国国家体育馆、五棵松体育馆和奥林匹克水上公园等最大。这些运动场馆的建设均凝聚着中国人自主创新的心血，体现了中国科技创新能力的增强。例如，最受瞩目的奥运主场馆国家体育场（因其外观设计像一个鸟巢，又被俗称为“鸟巢工程”），它的格子状的混凝土结构构成可容纳 8 万名观众的会场。支撑“鸟巢”的 24 根钢柱使用了一种叫做 Q460 的，完全由中国工程技术人员自主研发的高强钢材。

By 2008, Beijing will guarantee everyone a safe, convenient, fast and efficient access to an affordable, abundant, beyond-language-barrier and personalized information services at any time and any place in Beijing. In addition, Beijing sees a leadership role for China to enter the era of comprehensive, information application technology, such as e-government, e-commerce and digital communities. The applied engineering technology of Beijing, such as telecommunications networks, digital TV system, satellite broadcast is approaching advanced international standards.

By that time, Beijing will have built a virtual Olympic Museum. People can access various Olympic information and watch the vivid pictures of the Olympic Games at home by Internet.

到 2008 年，北京将基本实现任何人在任何时间、任何场所都能够安全、方便、快捷、高效地获取可支付起的、丰富的、无语言障碍的、个性化的信息服务。除此以外，北京在全国将率先进入全面的数字应用时代，电子政务、电子商务、数字化社区等信息化应用将更趋成熟，电信网络、数字电视、卫星直播等应用工程达到世界先进水平。届时，北京还将建成一个虚拟奥林匹克博物馆，人们通过网络在家里就可以查阅到各种奥运资料，并看到形象生动的奥运图景。

Beijing has also pledged to provide the 3G network service for the 2008 Olympic Games. It is hard working on the optical fiber network, the digital wide band, the seabed optical cable and the digital satellite TV system to serve for the Games. According to the international convention, during the Games, the Beijing government will waive the visas of the foreign reporters, custom tax of photographic equipments, application interview and so on, in order to provide the media better and more convenient service.

北京还承诺在 2008 年奥运会时提供 3G 网络服务。它正在建为奥运会服务的网络、数字宽带、海底光缆和数字化卫星电视系统等。另外，北京政府于奥运期间会按国际惯例，免除外国记者的签证、摄影器材关税，采访申请等安排，以令媒体可以提供优质和便捷的服务。

### **The Cleaner Beijing ---Built An Ecological Garden City**

### **一个更加清潔的北京—— 建成园林生态城市**

Generally speaking, the Olympic Games always helps to improve the environment of host cities. For example, when Munich hosted the 20th Olympic Games, it built an Olympic Park by reconstructing an old airport. When Seoul prepared for the 24th Olympic Games, from 1981 to 1986, the South Korean government and the Seoul community invested nearly \$ 40 million to plant 30 million trees, build many gardens and flower beds, rehabilitate several historical relics, harness the Hanjiang River, improve the management of urban environment and sewer and water quality, and prevent pollution. As a result, the environmental situation of Seoul has improved dramatically. When Sydney hosted the 27th Olympic Games, Australia also tried many ways to protect and improve its environment.

通常来讲，奥运会的举办对举办城市的环境改善将产生巨大的促进作用。德国慕尼黑市为举办第 20 届奥运会，将一个旧机场改建为奥林匹克公园。韩国政府和汉城社会各界为成功举办 1988 年的汉城奥运会，在 1981 年至 1986 年间投资近 4000 万美元，植树 3000 万株，兴建了许多花园、花坛，修复了多处名胜古迹，治理了汉江，改善了城市环境、下水道和水质管理，并开展了防治公害等工作，城市环境状况得到显著改善。澳大利亚在申办和举办 2000 年奥运会时更是采取了许多环保措施。

Similarly, hosting the Olympic Games will push Beijing to develop and improve its environmental resources, and bring Beijing a more beautiful environment. At present, Beijing is taking the good opportunity to intensify environmental protection. On one hand, the Beijing Government, in its bid file in 2001, committed to lower air pollution, increasing environmental protection and introducing environmental technology. Beijing, in its commitment to improve air quality and reduce the areas of industrial land, will relocate 200 local factories before the games begin. For example, one prominent factory in eastern Beijing, Beijing Coking Chemical Plant, will be closed. As a result, the consumption of coal in Beijing will reduce 2.96 million tons every

year. Another large enterprise, Capital Steel Corporation will be removed from western Beijing, in order to save more than 50 million cubic meters of water for Beijing every year.

类似的，举办奥运会可以使北京的环境资源得到进一步开发和改善，使北京的生活环境更加美丽。目前，北京正在借助举办奥运会的有利时机，进一步加大治理环境的力度。一方面，北京政府已经在 2001 年启动资金用以降低空气污染，加强环境保护，引进环保技术。它正为改善令人担忧的城市环境状况而搬迁治理 200 家污染企业，降低市区工业用地比例。例如，北京市一东一西两家著名企业——北京炼焦化学厂全面停产后，每年能为北京市减少煤炭消耗 296 万吨；首都钢铁公司搬迁后每年可减少用水 5000 多万立方米。

On the other hand, Beijing has been developing new environmental resources. For instance, it has completed a 120-square-kilometer afforesting belt, which shows 66% of “the blue sky” in Beijing. Now, the rate of plant coverage of Beijing is 51%, and the rate of sewage disposal is 90%. As a result, the ecological environment changed dramatically. For another example, the Olympics Green Park located in Shunyi has some 640,000-square-meter water surface and some 580,000-square-meter grass area. Its total rate of afforesting area surpasses 82%. The previous wild sandbank has turned into a “natural green oxygen bar” for Beijing.

另一方面，北京一直大力开发新的环境资源，包括建设 120 平方公里的绿化隔离带，使“蓝天”比例达到 66%，目前全市林木覆盖率达到 51%，城区污水处理率达到 90%，生态环境明显改观。顺义奥林匹克水上公园水面面积约 64 万平方米，绿地面积约 58 万平方米，绿化率超过 82%。原来的荒河滩变成了北京的“天然绿色氧吧”。

In addition, smoking is banned in the 66,000 cabs. A violation would lead to a fine of 100-200 RMB (US\$13-\$26). Beijing authorities are thus trying to make the event a non-smoking event. Let us expect that by 2008, Beijing will have more blue sky, clean water, green ground and clean air, and thus becomes an ecological garden city.

此外，北京将在奥运会期间于 6 万多个场所禁烟，违者罚款 100-200 元（折 13-26 美元）。北京当局正努力将这届奥运会办成“无烟奥运”。我们期待着到 2008 年，北京将会天更蓝、水更清、地更绿、空气更清新，初步建成园林生态城市。

### Negative Concerns -- Protests and Potential Boycotts      负面影响——抗议和潜在的抵制

Although the Chinese government sees the games as a chance for China to highlight its economic rise and emergence as a world power, it is suffering from some protests and potential boycotts. Some groups of protesters and activists are protesting or will call for protests against the host country in 2008. There will likely be issues over the environment, human rights violations, Tibetan independence, broadcasting and so on.

尽管中国政府将举办奥运会看作突出它的经济增长和大国地位的机会，它仍遭到一些政治抗议和潜在的抵制。一些组织正在或将在 2008 年举行抵制北京奥运会的活动或举行抗议活动，包括环境问题，违反人权问题，西藏独立问题，媒体转播问题等等。

In August 2007, for example, more than 40 Chinese intelligences circulated a public letter to the leaders of the Chinese government, calling for improvement in human rights. A press freedom organization, “Reporters without Borders,” advocated a boycott of the 2008 games in Beijing, citing its abridgment of press and personal freedoms and the positive effects of earlier Olympic boycotts. Both of them expressed concerns over violations of free speech and human rights in China.

例如，2007 年 8 月，包括著名作家沙叶新和戴晴在内的中国大陆 40 多名知识分子发

出致中共领导人的公开信，呼吁办好奥运的同时尊重人权。自由媒体“无国界记者组织”提出抗议北京奥运的言论，以控诉中国的出版和个人自由受到限制。他们均表达对中国违反言论自由和人权的关心。

Activists working to address the ongoing violence in Darfur, Sudan, have called for pressure to be exerted on China because of their financial and diplomatic support for Omar al-Bashir, who is responsible for the Sudanese government's proxy militias in Darfur. Some activists in Taiwan have begun to refer to the Beijing Olympics as the "Genocide Olympics" in *The China Post*. The Chinese government, in turn, has criticized the activists for "politicizing" the Olympics.

一些和平主义和人权活动人士指出苏丹达尔富尔冲突问题，要求向中国施压，以解除中国政府向苏丹总统奥马尔·巴希尔的财政和外交援助；台湾的活动人士在《中国邮报》上指责北京奥运是“种族屠杀奥运会”。中国政府则认为这些人“将奥运会政治化”。

Pro-Tibetan independence groups, such as "Students for a Free Tibet", have initiated a campaign to protest the Beijing 2008 Summer Olympics. The group plans to protest for Tibetan independence and objects to the Chinese government's use of the Tibetan antelope as one of its five mascots.

在西藏独立运动方面，自由西藏学生运动已经发起了抗议北京奥运的运动。同时，该组织亦计划要求西藏独立并抗议中国政府使用藏羚羊作为五个吉祥物中的其中一个。

Additionally, Olympic lawmaking of the Beijing authority in 2006 included that Beijing would banish local people who don't have hukou (residency permits) for Beijing during the 2008 Summer Olympics. It would also banish vagrants, beggars, and people with mental illness from the city for the Olympics event. A group of 106 lawmakers in the United States have circulated a letter calling for the US to boycott the coming Olympics because of China's forced relocation of 300,000 Chinese poor to make room for the games.

此外，针对 2006 年北京当局的“奥运立法”，内容包括对出入北京的外地中国公民进行“流动人口数量管理”，即限制外地人进京，并“劝返”在京的外地人；对于城市的流浪人员、乞讨人员、精神病患者将实施强制救助，迁出北京等，106 位美国立法委员联名写信表示抗议北京为了奥运腾地方而强制迁徙 30 万穷人出北京。

Concern has been raised over the air quality of Beijing and its potential effect on the athletes. Although Beijing invested a lot of money to lower air pollution and increase environmental protection since 2001, research data shows that even if the city were to dramatically reduce its emissions, pollution would still drift into from the neighboring provinces. At current levels, air pollution is at least two to three times higher than levels deemed safe by the World Health Organization. Marco Cardinale of the British Olympic Association has stated that air pollution, coupled with heat and humidity, makes it "very unlikely we'll see outstanding performances in endurance sports." Several countries also have indicated that their athletes will arrive at the games as late as possible to avoid exposure to pollution.

一些舆论指出北京的气候不利于运动员比赛。北京已经在 2001 年启动资金用以降低污染，但是数据表明虽然已经大幅度的降低了排放量，污染仍有可能从附近的省市漂浮而来。当前，空气污染大概在世界卫生组织所要求的安全指标的两到三倍。英国奥委会的马哥卡亚说：“（鉴于这种污染和高温高湿）我们不太可能在耐力项目上看到出众表现”。另有几个国家则表明，他们的运动员将尽可能晚地到达北京以避免污染。

Another concern is the supply of tap water in Beijing. The people in Beijing have suffered from a drought and a lack of major fresh water sources for 15 years. Many residents drink bottled water instead of tap water. The water coming from the water plant is safe, according to the

Beijing Water Management Bureau. The water is contaminated during the process of its transportation throughout the city. The city officials in charge of the city water have ensured that “the safety and efficiency of the water system” will be maintained and that the recycled water supplied to the Olympic Villages will be as clean as tap water.

另一个重点问题是水问题。基于北京长达 15 年的缺水，以致欠缺新鲜清洁的用水，许多当地居民都饮用瓶装水代替自来水。根据中国水利局所说，北京当地的饮用水是安全的，只是由于饮用水在排出过程中受到污染，但已经经过处理。但无论如何，北京奥运期间，运动员与教练等人也能在奥运村等地享用到清洁的饮用水和洗浴用水。

Some competitors in the Games, especially swimmers, have voiced dissatisfactions with the IOC's decision to schedule some events to meet the requests of NBC who paid US\$3.5 billion for exclusive United States broadcasting rights for the Summer and Winter Games from 2000 to 2008. NBC requested that popular events, such as swimming, athletics, basketball and gymnastics, be broadcasted live during the television primetime in the United States from 8:00 to 11:00 pm to increase advertising revenues. This would require some events to be held in the early morning from 8:00 to 11:00 am, Beijing time. The IOC granted the request for swimming and gymnastics, but denied it for athletics and basketball, thus most of Europeans would not be able to watch gymnastics during their primetime.

一些运动员，尤其是游泳运动员，不满国际奥委会根据美国国家广播公司（NBC）的要求，将比赛时间作出调整的决定。当中如游泳、田径、篮球和体操等有现场直播的项目，都安排在美国的黄金时间（8:00-11:00 pm）以增加收视率及广告收益。因此，不少赛事也被迫在北京时间上午举行。虽然国际奥委会已接受了游泳和体操运动员的请求，但却拒绝了田径和篮球不在上午进行的要求，使大部分欧洲人不便在黄金时间观看田径赛事。

## Conclusion

## 结论

In summary, hosting Olympic Games is a process of mobilizing, encouraging, and assembling the people of the host country. Hosting Olympic Games will enhance people's confidences and prides, and thus stimulate the national spirits. We not only expect that the Olympics will bring more prosperity, beauty, modernity and cleanness to Beijing, but also hope that it will improve the quality of the Chinese people. In other words, if Chinese people succeed in hosting the 2008 Olympics, the international image of China will be highly improved. The subsequent expansions of trades and developments of economic and technological exchanges would lay solid psychological bases for strengthening their national confidences and for the subsequent rapid developments of economy. We wish China the best luck for hosting the 2008 Olympiad in Beijing!

总而言之，举办奥运会是一个动员民众、振奋民心、集结民气的过程。举办奥运会能够提高国民、市民的自信心和自豪感，可极大地激发民族精神。到 2008 年，我们不仅期待着拥抱一个更加富裕，更加美丽，更加现代，更加清洁的北京，也期待着看到一个更加文明的，市民文明素质提高了的北京。换言之，如果中国能够成功地举办这届奥运会，其国际形象将得到极大改善，随之而来的必是贸易扩大，经济、技术交流加速发展，并为增强民族自信心和后来经济的高速发展奠定良好的心理基础。北京好运！

**The Picasso of Oriental Art: Zhang  
Daqian, the Greatest Chinese Artist  
in the Last Five Hundred Years(1)**

Ou Wen

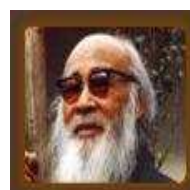
(Translated into English by Hongbo Tang)

**東方畢卡索  
五百年來一大千(1)**

我聞

(由唐洪波翻譯成英文)

**《東方畢卡索》五百年來一大千**



On July 28, 1956, Pablo Picasso, the western master of modern art invited Zhang Daqian, the eastern master of modern art to his mansion in Europe and had lunch together. They discussed and exchanged many concepts and techniques of art in eastern and western paintings. “The most memorable time of the eastern and western history of modern art” or “the summit meeting of modern art between the east and the west,” was described by all the news reporters throughout Europe next day.

一九五六年七月廿八日，代表東方近代美術的大師張大千和代表西方美術的大師畢加索的會晤，畢加索在他的古堡中招待這位東方的大師，二人共進午餐，並談了一些藝術上的問題。第二天西方的報紙把兩位大師的會晤描述為「中西藝術史上值得紀念的年代」、「藝術界的高峰會」。

**Biographical Sketch**

**簡介**

**Zhang Daqian** is the most legendary traditional Chinese painting master in the 20<sup>th</sup> century. He was excellent at paintings, calligraphy, seal cutting and poetry. In the early times, he learned from the ancient calligraphy and paintings, specially made an outstanding achievement in the landscape paintings. When he went abroad, his painting style became characteristic of combining concrete styles with abstract ones and of merging the ink skills into the color ones. In particular, he developed a new artistic style by the splashed-ink and splashed color techniques. His method

of doing research is very valuable for those painters who attempt to transform the traditional styles into modern ones.

**張大千**是二十世紀中國畫壇最為傳奇的國畫大師，無論是繪畫、書法、篆刻、詩詞都無所不通。早期專心研習古人書畫，特別在山水畫方面卓有成就，後旅居海外，畫風工（筆）寫（意）結合，重彩、水墨融為一體，尤其是潑墨與潑彩，開創了新的藝術風格。他的治學方法值得那些試圖從傳統走向現代的畫家們借鑒。

Zhang Daqian ((or Chang Ta-Chien, 1899-1983) was born in Neijiang County, Sichuan Province on May 19, 1899 (the 25<sup>th</sup> year of reign of the Emperor Guangxu, the Qing Dynasty). His original given name was Zhengquan, and was later changed to Yuan, while he had a childhood name Ji and a studio name Jiyuan. He took the religious name Daqian Jushi or “Layman Daqian”, and Xia Li Ba Ren. He also had a house name Da Feng House. He loved painting since childhood. As a little boy, Zhang was encouraged by his mother and elder brothers to pursue painting. His mother was a well-known female painter at that time. His second elder brother, Zhang Ze (another name Shanzi) was a famous painter known for his tiger paintings, as well as landscapes, figure and floral paintings. Zhang Daqian also learned from him. When he was young, Zhang Daqian once had been a Buddhist monk, and had been kidnapped by gangsters and forced to be an advisor there. He began to grow a beard in his twenty's, which became his unique symbol. As a great collector, Zhang Daqian had collected hundreds of ancient calligraphy and paintings, which became the so-called Collection of Da Feng House. Since the Chinese Communist Party came into power in 1949, he left mainland China at the age of 48, and had never returned to his hometown until he died.

張大千（1899年—1983年），原名張正權，後改名爰、媛，小名季，號季爰，署大千居士、下里巴人、齋名大風堂，1899年（清光緒25年）5月19日生於中國四川省內江縣，從小就愛繪畫，童年跟隨母親、兄長習文學畫，母親是當時知名的女畫家，他的二哥名澤，字善子，別號虎痴，是畫虎專家。善子的人物山水花卉，無一不精，大千也是從他受益的。少年時，曾做過和尚，又被土匪綁去做師爺；廿多歲便蓄著一把大鬍子，儼然成了他特有的標誌。張大千是大收藏家，他的大風堂珍藏，收集了幾百幅歷代名畫；因政治的關係，自中國共產黨執政後，從48歲離開中國大陸，終其餘生直至去世也未曾返回中國。

The artistic style of Zhang Daqian's painting may be divided into three periods: the period of classical style, the period of transforming style and the peak period of his career. The first period spanned the first 60 years. Zhang Daqian focused on copying the art works of Shi Tao, Zhu Da, Xu Wei, Chen Chun and other famous ancient painters in Song and Yuan Dynasties, as well as Dunhuang fresco. Thus his painting style transformed from the similar style of Shi Tao and Zhu Da into that of ancient painters in Jin, Tang, Song and Yuan Dynasties. The second period was when he was between 60 and 70 years old. After having explored for ten years, he had finally developed a wonderful new style by having explored for ten years. That was: combining the splashed-color with splashed-ink and 勾皴 techniques. The peak period of his career started at an age of 70, marked by his work *Thousands of Miles on the Yangtze River* finished when he was 70 years old. He reached the creative peak in art, characteristic of splashed-color skill as his unique painting technique. Its main steps of plashed-color techniques are as follows: at first, draw an outline with ink and brush; then mount a piece of paper on the back of the picture (or mount the picture on a paperboard); at last splash ink and color on the picture. The splashed-color technique is approximately similar to the automatic technique in modern Western art. That is: move the picture or the picture on a paperboard with the hand and let the color flow automatically and freely in order to form some kind of accidental, artistic result.



Then the painter adds water or enriches color to the picture, or adds some buildings, the foot of a hill, some branches of trees and figures with the brush according to his preference, in order to create some kind of artistic result which combines concrete styles with abstract ones, and merges the ink skills into the color ones. He explained his art works by Chinese ancient philosophic theories such as “the ideas surpass the phenomena” and “half-positive and half-negative” and so on, and believed they conform to the traditional esthetics principle. In fact, the notable change of Zhang’s painting style in his old age did not only lead his painting style to the modern ones from the classical ones, but also ranked him as one of the innovators of the traditional Chinese paintings.

張大千的繪畫藝術可分為 3 個時期:古典作風期、轉變期和高峰期。60 歲前為古典作風期，張大千集中精力臨摹，由石濤、朱耷追徐渭、陳淳及宋元諸家，直至敦煌壁畫。其畫風亦由近似石濤、朱耷而變為晉唐宋元風範。60~70 歲為轉變期，張大千歷經 10 年探索，融潑彩于潑墨、勾皴法，終於創造了雄奇壯麗的新風貌。70 歲後為高峰期，以 70 歲所作《長江萬里圖》為標誌，他邁入了創造性的高峰期，潑彩成為最富個性的畫法。其過程大略是：先以墨筆略勾大形，然後托裱一層紙（或將畫裱在板上），再潑墨潑彩。其潑法近似現代西方繪畫的自動技法，用手牽動畫紙或畫板，使墨彩漫然自流，以形成某種偶然效果，再憑感覺注水或加濃顏色，或用筆添補房屋、山腳、枝幹或人物，造成半抽象的、墨彩交輝的境界與情調。他以『超以象外，得其環中』，『神光離合，乍陰乍陽』等古人言論解釋這些作品，認為它們是符合傳統美學原則的。事實上，張大千晚年的這一突變，不僅把他的藝術從古典畫風引向了現代畫風，也把他推上了中國畫革新大家的行列。

Zhang Daqian had painted countless works, including many posthumous works. The most popular one was the “*Thousands of Miles on the Yangtze River*” finished in his old age in the United States. The huge picture was 15 meters in length and 50 centimeters in height. Zhang Daqian mixed various painting techniques together to paint this picture: not only did he handle different drawing techniques skillfully, but also dealt with ink appropriately; in the view of color, he unified dark red and dark green, combining the splashed-color with splashed-ink; in the view of structure, he began to paint the Yangtze River from the bridge on Minjiang River to Mount Qingcheng, via Chengdu, Dragon Gate, the Three Gorges, Yichang, Shashi, Lake Dongting, Wuhan, Jiujiang, Mount Lu, Lake Pengze, Nanjing, Zhenjiang, Jiangyin, Mount Madang and Shanghai, ended this work at the delta of Yangtze River, the Chongming Island. This painting was noted not only for its huge structure in which covered so many places Yangtze River passes through, but also for its outstanding skills by which marked the diverse characteristics of those places. For example, sometimes the painting showed us the endless smoky mountains whereas sometimes the cliffs and canyons; sometimes it displayed a gorgeous river with great waves whereas sometimes a still river with smooth waves. These superb painting skills made the *Thousands of Miles on the Yangtze River* a landmark art work in Zhang’s era. It is said: “To paint a mountain needs five days, and to paint a river needs ten days.” Zhang Daqian, however, only took ten days to finish this grand-scale painting. No wonder he obtained praise for his efficient and excellent skills in painting. Zhang Daqian believed that “a painter should try any kinds of painting”. He also insisted that, “a traditional Chinese painting must express some kind of emotion and interesting with the brush and ink, no matter it is a large or small size picture, a concrete or abstract topic painting.” The fields of his painting also involve flower, bird, fish, insect, landscape and figure. He was never rigidly adhered to the available painting skills, and finally formed his unique painting style.

張大千一生作畫無數，遺作甚多。其中最為人們熟悉的是他晚年在美國所作的《長江萬里圖》。這幅畫長有十五米，高有五十公分。在這幅畫中，張大千融匯了諸家畫法。在用筆上，皴擦點染，運用自如；在用墨上，乾濕濃淡，恰如其分；在色彩方面，淺絳與青綠相結合，潑墨和潑彩相交融；在景致結構上，從岷江徑流的索橋畫起，經青城、成都、龍門、出三峽，歷宜昌、沙市、洞庭湖，入武漢到九江，畫出了廬山、彭澤，到馬當山而達南京、鎮江、江陰到上海，以長江口的崇明島為結穴，不僅結構驚人，而且長江所經地方，一一畫出特點：時而煙雲繚繞，山雲萬重；時而懸崖峽谷，縱橫交錯；時而一瀉千里，江靜波平。縱橫開合，聚散得宜，堪謂劃時代的巨作。古人云：「五日一山，十日一水。」而這樣一幅鴻篇巨制，張大千從落墨到完成僅用十日，其速度之快，功力之深，令人嘆為觀止。張大千常說：「一個畫家，應該什麼都畫。他也一貫主張，不管畫大畫小，或工或寫，都要有筆有墨，有情有趣，這樣才能稱得上是一幅中國畫。」他的畫作也涉及花鳥魚蟲山水人物各個方面，不拘於成法，自成一系。

Amongst the Chinese artists of the 20th century, Zhang Daqian is undoubtedly an outstanding one with his painting style elegant and clean. Xu Beihong had ever said, “**Zhang Daqian is the best Chinese artist in recent 500 years**”. He was very talented and knowledgeable, and was good at all fields of paintings including landscapes, figures, flowers, ladies, and birds, and made special contributions in landscape paintings. Along with many other famous artists of his time, he undertook the responsibility of reviving the classical styles in early years of the Qing Dynasty and inheriting the traditions of artists from the Tang, Song and Yuan Dynasties, thus leading to resurgences of the classical styles that had been falling since the era of the Emperor Qianlong of Qing Dynasty.

在 20 世紀的中國畫家中，張大千無疑是其中的佼佼者，其畫意境清麗雅逸。徐悲鴻說過：「**張大千，五百年來第一人。**」他才力、學養過人，於山水、人物、花卉、仕女、翎毛無所不擅，特別是在山水畫方面具有特殊的貢獻：他和當時許多畫家擔負起對清初盛行的正統派復興的責任，也就是繼承了唐宋元畫家的傳統，使得自乾隆之後衰弱的正統派得到中興。

Just like many other artists, Zhang Daqian also experienced a period of imitating from old masters. He was one of several modern artists who learned from old masters extensively: He achieved the high level of “targeting toward the soul of art” by learning from old masters, modern masters, creatures, and nature. While inheriting the traditional culture, Zhang Daqian sought for innovation. He created unique splashed-ink and splashed-color styles, and improved the quality of Chinese painting using rice paper simultaneously. Though he became a master of art, he felt lonely. “Who will take over this boat of art, after a master passes away?” he described in his poem *Lotus Pond*. (to be continued)

和許多畫家一樣張大千也同樣經歷了描摹之路，在近代像大千那樣廣泛吸收古人營養的畫家是為數不多的，他師古人、師近人、師萬物、師造化，才能達到“師心為的”的境界。他師古而不擬古，在繼承傳統文化的同時他還想到了創新，最後在繼承傳統的基礎上發展了潑墨，創造了潑彩、潑彩墨藝術，同時還改進了國畫宣紙的質地，最後成為了一代畫宗。然而，思想的先行者往往是孤獨的，在他五言絕句《荷塘》有“先生歸去後，誰坐此船來。”之句似乎暗示著後來者繼續他的道路。（未完待續）

## Who Understands the Spirit of It —the Taste and Sensation of *The Red Chamber* (1)

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(Translated into English by an editor)

## 誰解其中味——《紅樓》 的吃與情 (1)

歐陽宜璋編撰  
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(由編者翻譯成英文)

- Entering the main theme of the taste and sensation of *The Red Chamber*

- ◎ 進入主題——紅樓  
的滋味與情味

### 1. Introduction: live between life and death      1. 楔子：躍動在死亡與新生之間

*Food is the resource to maintain human life, which is connected something between known and unknown.*

~E. M. Forster

飲食是一種維持生命之火的燃料補充過程。……是已知之事（死亡）和未知之事（出生）間的連線。

~E.M.Forster (佛斯特) 《小說面面觀》

The above statement shows that food is inevitable in human life. On one hand, it helps human seeking and illusion; on the other hand, the philosophy of food has another meaning. Who understands the spirit, behind the *Dream of the Red Chamber*? In the beginning of this article, I would like to express appreciation for Professor SifanYe's encouragement since my study and research of *The Red Chamber*. She started teaching it at the Green Garden in Taipei, Taiwan in recent years.

以上這段評論，一方面體現了飲食在生命中不可或缺的價值，一方面也暗示著人們的追尋與幻滅；而飲食文學的本身，卻往往寓含著自我覺知之後的另一番觀照與新生。

在燈火輝煌之後的《紅樓》，誰解其中滋味？在本文之始，要先感謝葉思芬教授的啓迪，因為我的《紅樓》閱讀經驗與探尋起點，始於近年來她在綠園的紅樓深耕。

### (1) Abstract thought versus understanding of real life      (1) 抽象思維 v.s. 生命體會

Mr. Lin Yu-Tang described in his book, *The Art of Life*, that Western people think with their brains, but Chinese people think with their stomachs: *British use their healthy skins to think just like the Chinese use stomachs to think. Chinese say a knowledgeable scholar is a scholar with a stomach full of knowledge. When lovers are separated, their stomachs are full of pain or when they are apart, their stomachs and intestines are broken.* In daily life, for instances, intestines are without thoughts, stomachs are without knowledge, intestines are full with minds, stomachs are filled with worry, gall as big as the sky (audacious), hearts are cool, intestines are broken, etc. Therefore, Chinese put western abstract thinking into real life. Chinese can get across the thinking and enter into the traditional spirit. *The Red Chamber* is a novel of combining Chinese thinking and real life into the climax.

林語堂在《生活的藝術》中，以為相對於西方人用腦思考，中國人是用肚子思考的：<sup>8</sup>

英國人用他們健康的皮膚去思想，正如中國人用他們偉大的肚腸去思想的；我們說一位學者有學問為滿腹經綸……情人分別之後寫信會說愁腸百結，或在別離時說肝腸寸斷。

在日常生活中，諸如腸枯思竭、腹笥甚窘、腦滿腸肥、心腹之患、肝膽相照、膽大包天、沁人心脾、柔腸寸斷等成語，都可以印證這個趣味的觀察。因而，把西方形而上的抽象思維挪移至全人的生命體會，現代的我們才能跨越思維的盲點，重新契入傳統的神髓。

《紅樓》就是這樣一本把中國人的思考和生活方式發揮至極之作。

## (2) Three in one: Stone, Sau Shei –Qing and me (2)三位一體：石頭——曹雪芹——我

The luxurious food of *The Red Chamber* was similar to the food in the palace of an emperor. The author skillfully portrayed the power and wealth of the Jia's family. What are the implications behind this? In the 1<sup>st</sup> section of *The Red Chamber*, a cultivated man investigated and recorded: "he sees color from the transparency of sky, he sees love from color and transforms love into sex, so he changes the title to the monk of sensation." Therefore, this novel was also named *the record of the monk of sensation*. In the 12<sup>th</sup> section: "Wang Shifung established the missed dream and Jia Tianxiang observed the mirror." "This mirror is from another planet and is made by an angle of warning. It cures the diseases of illusion and obscenity, and affects a long life. I bring it to families of high officials, you should watch it from the back, but not from the front. I will return to take the mirror back after three days," said a cultivated vegetarian man when he took out two sides of a mirror and gave it to Jai Rei. Unfortunately, Jia Rei only looked at the front of the mirror. He indulged in sex and luxuries which made him die. His parents complaint about the mirror and burned it. A voice came from the mirror: "Who told you to look at the front of the mirror? You looked at what was false as the truth, why did you disobey me?" This treasured mirror shouted to everybody in this novel and shouted to all the readers and people all over the world. The author of *The Red Chamber* intended to instruct all the readers to look at the back of the mirror and then introspect their own lives.

《紅樓》的飲食排場，呈現了皇室般的豪奢和富麗；在作者以巧妙的映襯展現賈家空前的權力和財勢之外，有沒有表層結構之下的深層意涵？

《紅樓》第一回曾提及空空道人在檢閱、抄錄此書後，「因空見色，由色生情，傳情入色，自色悟空，遂易名為情僧」，<sup>9</sup> 因而此書被題名為《情僧錄》或《風月寶鑑》。而在第十二回〈王熙鳳毒設相思局 賈天祥正照風月鑑〉中，這面寶鏡正式現身，那天跛足道人前來化齋，取出一面兩面皆可照人的「風月寶鑑」，遞與賈瑞，說：

這物出自太虛幻境空靈殿上，警幻仙子所製，專治邪思忘動之症，有濟世保生之功。

所以帶他到世上，單與那些聰明傑俊、風雅王孫等看照，千萬不可照正面，只照他的背面，要緊！要緊！三日後吾來收取，管叫你好！

只可惜賈瑞只走入鏡子正面，沈溺聲色享受，因而被死神拘捕；其父母怪罪此鏡而燒之，只聽鏡內哭道：

誰叫你們瞧正面了！你們自己以假為真，何苦來燒我！

<sup>8</sup> 引自林語堂《生活的藝術·第三章我們的動物性遺產》，頁 82。（台北：遠景，2004 年）。

<sup>9</sup> 在佛家思想中，「空」是宇宙的本體，瞬間生滅為萬事萬物，稱為「色」；而「情」是人們因為各種外「色」產生的悲愁喜樂。

這面寶鏡既對每一個劇中人吶喊，也向所有的讀者和世人悲嘆！

原來《紅樓》要給讀者看的是故事的反面，它要讀它的人一起編織故事，進而省思自己的人生！

It is interesting that Jia had Rei as a first name and Tain Xiang as a middle name. Wen Tain-Xiang had Tain-Xiang as his name, and Sung Rei as his nick name. He was a courageous and patriotic general sacrificing for China in the Sung Dynasty. The author interchanged these two names and their personalities also had big differences. In fact “Jia” means “false”, the author dared to use the ideology of the five thousand years of history and culture of royalty and filiality to satire conversely. The author repeatedly criticized the abuse of power and bureaucracy of high officials as the acts of animals. Food in *The Red Chamber* reflects the Chinese civilization and sets off the spirit beyond the affairs of male and female.

有趣的是，賈瑞字天祥，而他的父親賈代儒專掌賈家的家塾；賈瑞名瑞字天祥；而南宋名臣文天祥，名天祥字宋瑞，是正氣凜然的一代忠烈。兩者的名、字正好互換，兩人的人品和定位也有天壤之別。這類的反諷手法在書中一再出現（其實「賈」即為「假」的諧音），可看出作者對五千年來忠孝節義的觀念，作了大膽的顛覆和質疑。在《紅樓》一次次「原應嘆息（元迎探惜）」的追蹤躡跡之後，作者也一再諷喻著那些集權勢與功業於一身的人物，有的人只不過是衣冠禽獸的化身而已！由此看來，飲食在《紅樓》中反映了中國的文明與精巧，也表現出藉由食物針砭人性的才思；更藉由映襯手法，投影出飲食男女之外的精神內涵。

### (3) Thought after the banquet of crabs: (3) 螃蟹宴後的思考：共飲聖杯 or 萬豔同悲 drinking a saint cup or a sexual cup

In the western civilization “a saint cup” was the cup of grape wine that the Christ used at the last supper with 12 disciples together. But there is a legend which says that Joseph used that cup to collect the blood of Jesus who was put onto the cross and died for people’s sin. In the wedding ceremony at the Christian church, bride and bridegroom drink a cup together indicating that the union of wife and husband as a family together. When bridegroom holds hands with bride together, they start a new beginning of life. Therefore, “Drinking a saint cup together” means the gain of scarifying and also means the ownership of sharing. Let’s look at the 5<sup>th</sup> section “Vacant Illusion”. Boyu drank the wine:

*Boyu smelled this wine, unusually sweet. “This wine was made by the stamen of many flowers and juice of many fruits. Milk and wheat were added, and it was named ‘Many pretties go to sadness’,” he said alertly.*

在西方傳統中，「聖杯」是耶穌在最後晚餐時，與門徒共飲葡萄酒的那個杯子。但基督於另一個傳說，有人認為亞利馬太的約瑟用那個杯子收集了耶穌被釘十字架上時所流的血，由於這樣的理由，聖杯亦稱為聖血。在教會的婚禮儀式中，共飲聖杯則象徵著夫妻自此成為一體；當新娘纖纖玉手，握滿盆芬芳的聖杯，令新郎飲下那滿溢愛情的甜蜜，就正式揭開了紅毯另一端的人生旅程。

由此觀之，「共飲聖杯」既是犧牲後的獲得，也是分享後的擁有。

相對於第五回「太虛幻境」中，寶玉所飲的酒：

寶玉聞得此酒清香甘冽，異乎尋常，又不禁相問。警幻道：「此酒乃以百花之蕊，萬木之汁，加以麟髓之醅，鳳乳之麴釀成，因名為『萬豔同悲』。」

*The Red Chamber* is a love story. The fragrance of many flowers, the

spring tea of many red colors, and the wine of many pretty women, all relate to the fate of women. In the 38<sup>th</sup> section, at the corner of crab banquet, when Boyu saw Daiyu, he felt a little touched. He warmed the wine of flowers for her, but she only drank a bit. In the mean time, Bochai also brought a cup of wine and drank a little bit and wrote a poem, *Memory of Chrysanthemum*.

《紅樓》作為一本刻劃女兒風情的書，無論是「群芳髓（碎）」的薰香、「千紅一窟（哭）」的春茶或是「萬豔同杯（悲）」的醇酒，都雙關著女子的芬芳與命定。因此，當三十八回螃蟹宴的角落，寶玉因見黛玉心口微微的疼，為她溫了「合歡花浸的酒」，黛玉只吃了一口（用她選的「海棠凍石蕉葉杯」）便放下了；這時，寶釵也走來另拿了一杯飲了一口，便沾了筆寫下詠菊組詩的第一首〈憶菊〉。

Boyu's happy wine mingled with Daiyu and Bochai together at the banquet of crab was a skillful arrangement. It hinted of Boyu's unhappy love through well-rounded Bochai which was different than Daiyu drank her wine as a play girl, which may have resulted in a sad ending.

寶玉給的合歡酒與黛玉、寶釵的淺酌，在熱鬧的螃蟹宴中實在是天外一筆的精采安排，它藉由綽約豐盈的寶釵與獨具氣質的黛玉各飲此酒，來暗示她們和寶玉那份不圓滿的愛情；如同每一個紅樓女子，走向悲與離的結局。

In "the taste of the Red Chamber", Miss Han Lianglu wrote: *In the 18<sup>th</sup> section, no matter who eats what or who sends what to other people to eat, they all involve love, power, position, and fate.*

*The Red Chamber* is not only a love story, but also a play of real life.

韓良露在〈《紅樓夢》的美味情事〉中，對紅樓的美食安排有著精闢的闡述，她認為：

在前八十回中，不管是何人吃什麼，或何人送什麼吃的給別人；每一食物的出現，都……關係著愛意、權力、身分、命運

《紅樓夢》的飲食男女除了成功的點染了表層的豐富色調，亦如是烘焙世態人情，重品生命滋味。

## 2. Taste and personality

## 2. 品味與個性

In *The Red Chamber*, the taste of food often reflects the personality of people. For instance:

在《紅樓》中寫食物的滋味，常常是用來襯托人物的品味和性情，以下就以略引數例，拋磚引玉：

### (1) Dai Yu with two personalities and Xiang Yun with optimism

### (1) 黛玉雙關，湘雲豪放

The author constructed a narrative that at a banquet, Daiyu said few words, making a nervous triangle with Boyu and Bochai. In the 8<sup>th</sup> section, "A bird shows its mind and Bochai and Boyu were a little sad." Boyu came to visit Bochai and Daiyu came shortly. Mrs. Shai saved a few fruits for them to take with tea. She also prepared wings and legs of ducks with wine. Interesting talks began as follows:

"I only drink a glass of wine," said Boyu. "Why not a bottle of wine?" said Mrs. Li.

*"Don't warm it up, I like to drink it cold," said Boyu. "Don't drink it cold. If you drink it cold, you will feel chilly and tremble," said Mrs. Li. "Boyu, don't you know that if you drink warm wine, then it will spread quickly. If you drink cold wine, it will stay cold in your stomach. It is no good to let your stomach warm it up," said Bochai. Being convinced, Boyu then asked his servant to warm it up for him.*

*Daiyu smiled and was eating snacks. Sheiyen, her servant sent a small heater to her. "Who told you to send me the heater? You are very thoughtful. I feel cold," Daiyu asked her with smile. "Tzguang asked me to send the heater. She is worried about you," said Sheiyen. Daiyu took the heater and held it into her breast. "You listen to her, but you don't listen to me," said Daiyu. "Her words are like the words of a queen."*

在作者的塑造下，眾人的宴飲歡聚中，黛玉的一言半語，常呈現精明的保護色和寶玉、寶釵之間的緊張三角。第八回〈比通靈金鶯微露意 探寶釵黛玉半含酸〉中，寶玉至梨香院探視寶釵，不久黛玉也來了，薛姨媽「擺了幾樣細茶果來留他們吃茶」，又端了自己糟的鵝掌鴨信，用最上等的酒配著吃。有趣的對話發生了：

寶玉央求：「媽媽，我只喝一鍾。」李嬪嬪道：「不中用！當著老太太、太太，那怕你吃一罈呢！」……這裡寶玉又說：「不必溫暖了，我只愛吃冷的。」薛姨媽忙道：「這可使不得：吃了冷酒，寫字手打顫兒。」寶釵笑道：「寶兄弟，虧你每日家雜學旁收的，難道就不知道酒性最熱，若熱吃下去發散的就快；若冷吃下去便凝結在內，以五臟去暖他，豈不受害？從 此還不快不要吃那冷的了！」寶玉聽這話有情理，令人暖來方飲。

黛玉磕著瓜子兒，只抿著嘴笑。可巧黛玉的小丫鬟雪雁走來與黛玉送小手爐，黛玉因含笑問他：「誰叫你送來的？難為他費心，那裡就冷死了我！」雪雁道：「紫鵲姊姊怕姑娘冷，使我送來的。」黛玉一面接了，抱在懷中，笑道：「也虧你倒聽他的話！我平日和你說的全當耳旁風；怎麼他說了你就依，比聖旨還快些！」

*"Who told you to send me the heater? You are very thoughtful. I feel cold," said Daiyu. "You listen to her, but you don't listen to me. Her words are like the words of a queen." These conversations reflect two meanings - one meaning about Bochai's talking to Boyu, another meaning about Daiyu's jealousy.*

其中「誰叫你送來的？難為他費心，那裡就冷死了我！」和「也虧你倒聽他的話！我平日和你說的全當耳旁風；怎麼他說了你就依，比聖旨還快些！」都雙關著寶釵勸寶玉的對話，在黛玉的小心眼中也暗示了情人眼中的纖介不容。

Boyu drank three glasses of wine, and ate Aunt Shai's chicken and rice. Finally, he drank a cup of tea and said goodbye. In Han Lianglu's article "The Romance in the Red Chamber", she thought that his future mother in law caught Boyu's appetite first.

而在三杯過去，心甜意洽之餘，寶玉又痛飲了薛姨媽煮的酸笋雞皮湯和半碗碧梗粥；最後砌了茶來大家吃了，寶釵才告辭而去。韓良露〈紅樓夢的美味情事〉（2005.05.12，聯副）中以為這位의未來丈母娘（薛姨媽）先抓住了寶玉的胃。

In 49<sup>th</sup> section: "white snow in the world turning red and the fragrance of cosmetics and make-ups disappeared," Xiangyun made an expedition for her life. Her honesty made the world with snow warm up. At one night, when Boyu was at a meeting with many ladies, she acted like a gentleman among all the ladies and looked special.

而在四十九回中〈琉璃世界白雪紅梅，脂粉香娃割腥啖膻〉的情境中，湘雲一直處於生命探險的進行式中，她的豪爽明快，使冬雪之夜的氛圍一下子活絡起來；那晚寶玉與眾

姊妹在稻香村集議，湘雲一身俊俏的男粧翩翩而來，在眾姊妹中特別出色：

*Xiangyun came wearing a black fur coat, a golden red monkey hat and a scarf. "Look! A monkey is coming. She behaves like a monkey," Daiyu said with a smile. "Look at my dress!" said Xiangyun. She took off her coat and wore a golden sweater, and had a butterfly on her waist, and wore a pair of boots. "Look at her, dressed as a young man, she looks even better than when she dresses like a lady."*

一時史湘雲來了，穿著賈母與他的一件貂鼠腦黛面子大毛黑灰鼠裡子裡外發燒大褂子，頭上帶著一頂挖雲鵝黃片金棘大紅猩猩毡昭君套，<sup>10</sup>又圍著大貂鼠風領。黛玉先笑道：「你們瞧瞧，孫行者來了，他一般的也拿著雪褂子，故意裝出個小騷達子來。」湘雲笑道：「你們瞧我裡頭打扮的！」一面說，一面脫了褂子，只見他裡頭穿著一件半新的靠色三鑲領裡秋香色盤金五色綉龍窄袖小袖襖銀鼠短襖，裡面短短的一件水紅裝緞狐肱褶子，腰裡緊緊束著一條蝴蝶結子長穗五色宮絛，腳下也穿著麂皮小靴，越顯的蜂腰猿背，鶴勢螂形。眾人都笑道：「偏他只愛打扮成個小子的樣兒，原比他打扮女兒更俏麗了些。」

*"Discuss how to write a poem. Who wants to be the author?" she said. Next morning, people gathered at the Shei-on House. "There are some fresh deer, we can eat together. We cook in the garden," Xiangyun said to BoYu. Boyu loved to plan this picnic, and Bochai and Bochai were happy to join together. However, Daiyu did not like this and said "Where can I find flowers?" At this moment, the author used Xiangyun's teasing to describe the false conduct of some hypocrites.*

她搶著說「快商議作詩，我聽聽是誰東家」。次日一早，眾人在蘆雪庵雅集，湘雲又悄悄和寶玉說：「有新鮮鹿肉，不如咱們要一塊，自己拿了園裡弄著，又頑又吃」，寶玉巴不得共同籌畫這場吃野趣的農郊烤肉會，而寶琴、寶釵也跟著大吃大嚼起來，大夥都樂了，只有黛玉玩不進去，在旁邊說：「哪裡找這一群花子去！」這時作者借湘雲的冷笑，來說出他對世上名士假清高的不屑：

*What do you know? "This is a gentleman." You are hypocrites. It is disgusting! We enjoy eating here! The taste after eating is sweet for my heart.*

你知道什麼！「是真名士自風流」，你們都是假清高，最可厭的！我們這會子腥膻大吃大嚼，回來卻是錦心繡口。

## (2) Bo Yu looks uncaring, but cares in his heart (2) 寶玉表面博愛，內心專情

In *The Red Dream*, Boyu appreciates different foods just like different sensations. He had feelings for Bo Chai, She Ren, Xiang Yun, and Jin Wen. It is similar to universal love. However, he loved Dai Yu the best for her very special personality, like the leave of a lotus.

《紅樓》中，寶玉欣賞不同口味的飲食，就像欣賞不同的情感一樣，除了對寶釵、襲人、湘雲、晴雯柔情款款外，連擦身而過的齡官都令他「癡及局外」；即使如此「博愛」，他挨了打後最脆弱時想吃的卻是像黛玉那樣子性情的小荷葉小蓮蓬湯。

<sup>10</sup> 此處的「昭君套」，似乎是日後史湘雲出嫁後夫君早逝的情節伏筆。



In the 35<sup>th</sup> section, Bo Yu was beaten and could not move. Mrs. Wang and her mother came to see him. Mrs. Wang asked him what he would like to eat.

*"I don't feel like to eat anything. However, I would like to eat the lotus soup." "Listen! The taste is not great and it takes a while for my teeth to eat and chew. You are eager to eat this," Sister Fung smiled and said.*

在三十五回寶玉挨打以後，睡在炕上不能動彈，老太太、王夫人、薛姨媽都來看他，王夫人問想吃什麼，寶玉笑道：

「也倒不想什麼吃，——倒是那一回做的那小荷葉兒、小蓮蓬兒的湯還好些！」鳳姐一旁笑道：「聽聽！口味不算高貴，只是太磨牙了，巴巴的想這個吃了！」

According to the introduction of Sister Fung, Jia family constructed a model made from silver with many star shapes. The model was filled with lotus mixed with flour and added the lotus to the chicken soup. Drinking this soup of lotus could make people's blood circulate better and felt good. This shows the author's knowledge of Chinese medicine. This soup indicated that Boyu cherished Daiyu and showed his considerate thought about her.

據鳳姊的介紹，是當年因元春歸寧，賈府特別訂做了銀製的小巧蓮蓬模子，用濕麵一扣，做成小朵兒用荷葉蒸熟（帶荷葉清香味），之後再加上熱雞湯後飲用。其中麵皮要的造型，是用純銀打造的模型。然後弄成綠豆大小的小荷葉、小荷花，很像騙小孩吃的麵線是星星形狀的一樣。可以想像吃一碗漂浮著淡綠的色澤、帶著淡淡清香的小蓮葉、小蓮花湯，在盛夏的天氣格外清爽；此外，蓮葉具有活血、退燒、降火的功能的。也可看出作者醫療常識之豐富！而這碗湯卻也描繪出了寶玉懷金悼玉、不離不棄的溫厚。

Through the analysis of Professor Kang, this soup named "Lotus", pronounced "Lian", indicated the thoughtfulness and good heart of women. This is corresponding to the first section about the daughter of Jen Yin-Lian. This lady looked like Qin Ko-Chin. She became the second wife of Shei Pan, and was mistreated by Shia Jin-Gui. Her bitter and misfortunate life reflected the result of playgirls. Boyu's love for Dayu was beyond the usual sexual love which reflected his philosophy of life.

根據康來新教授的分析，湯名的「蓮」正好諧音「憐」，象徵著作者對世間女子的善解與惻隱之心。這也呼應了第一回中甄士隱的女兒甄英蓮（諧音真應憐），這位佳麗長相酷似二奶奶（即秦可卿），因幼時在元宵節失蹤，後來成了薛蟠的妾，飽受夏金桂的虐待；而她「有命無運，累及爹娘」（第一回）的夙命，事實上也暗示著紅樓女子將一一面對的結局。<sup>11</sup> 寶玉的憐香惜玉，證明了他超越了物質和現實之上的人生品味，對人對事對物皆然。

Boyu also liked to send delicious food to people. In the novel, he delivered the fresh longan to Tanchan (in the 3<sup>rd</sup> section), sweet cake to Chanyun and chicken covered with red plum and Chinese herb (in the 37<sup>th</sup> section). He would not forget to bring some food to the servants Jinwen and Shiren. But, he would not bring delicious food to Dayu due to her health. "Do you feel better?"

<sup>11</sup> 這個概念來自周汝昌《文采風流第一人·五探佚》頁386，認為脂硯齋的批語中，最強調的一條，是全書出場第一位不幸的女兒英蓮，由她的身世命運而引出「有命無運，累及爹娘」八字，脂硯齋批云「八個字屈死多少英雄！屈死多少仁人志士！……見得裙釵尚遭逢此數，況天下之男子乎？」（北京：東方出版社，1999年）

Have you taken medicine today? How much food did you eat today? What would you like to eat?" he usually asked. "Please tell me and I will ask an old woman to bring it tomorrow morning." He was so considerate and thoughtful, which was the best spiritual medicine for her.

寶玉也愛送他喜歡的人好吃的東西，書中的他不但會送風寒的探春新鮮荔枝（第三十七回），也會送湘雲桂花糖蒸新栗粉糕，又送新鮮的紅菱和芡實雞頭（第三十七回），而且又不忘會留東西給院裡的丫環晴雯及襲人；但只有在對待常讓他心疼的黛玉時，不會送吃的，而是在嘴裡說著：「今兒好些？」「吃藥了沒有？」「今日一日吃了多少飯？」「你想什麼吃，告訴我，我明兒一早回老太太」。這樣善解人意的關懷，想必是黛玉的「天王補心丹」。（參二十八回所提到的「金剛丸」。（待下節的「養生補劑」作介紹）

### (3) 妙玉品茶，自高反低

### (3) Mioyu tasted tea, and boasted herself

Everybody's mind was different, just as everybody's taste was different. The narrative of the author is very lively. In the 41<sup>st</sup> section, after a big breakfast, Mrs. Jia took grandma to Mioyu's place to drink tea. Mioyu was very busy to prepare the tea for her, but Mrs. Jia did not drink such kind of Lu-On (six kinds of healthy herb) tea. She thought Lu-On tea was inexpensive tea, but Mioyu said that it was precious tea. "What water did you make this tea?" said Mioyu. "I used the rain saved for a few years to make the tea." These two ladies wanted to compete their tastes with each other.

人心不同，各如其「味」；在曹雪芹的筆下，表現得尤為鮮活！第四十一回姥姥在大排場的早餐後，賈母帶她去妙玉的櫳翠庵飲茶，妙玉忙著獻茶，賈母則說我不吃六安茶（第四十一回），此語一出顯出賈母視名物六安茶為俗物；但妙玉也回說這是老君眉（可是少見的稀世珍品）。賈母又問是什麼水，妙玉笑回是舊年蠲的雨水。這兩人高來高去比見識，妙玉顯然高出一等。

Mioyu invited Bochai and Dayu to her room to drink tea (her private tea) and she wanted Boyu to come with them together. In front of Boyu, she wanted to show off. Dayu asked whether she used the rain saved for a few years to make this tea. Mioyu sneered at her:

*"You are a mediocre person, and therefore, you don't know how to taste this tea. This tea was made by the snow in a devil bottle covered with plum which was buried at the monastery for five years. I just dug it out for a bottle. I drank this tea once. This is my second time to drink it. Why can't you tell? If I use rain to make the tea, how can it taste so fresh and delightful?"*

妙玉雖然對賈母客氣招待，但還是留了一手，她請寶釵和黛玉到室內去喝梯己（同體己，指私藏的）茶，也暗含招引寶玉同來之心。在寶玉面前，她更要顯高，當一向高傲的黛玉問用的水是否也是舊年的雨水，妙玉冷笑道：

你這麼個人，竟是大俗人，連水也嘗不出來！這是五年前我在玄墓蟠香寺住著，收的梅花上的雪，共得了那一鬼臉青的花甕一甕，總捨不得吃，埋在地下，今年夏天才開了。我只吃過一回，這是第二回了。你怎麼嘗不出來？隔年蠲的雨水那有這樣輕浮，如何吃得？

In her article *The Great Tastes in the Red Chamber* published by the United Newspaper in December 12, 2005, Miss Han wrote that the "devil bottle" gave people a feeling that Mioyu had a devil talk. Afterwards, the author narrated that Mioyu disliked Grandma Liu's dirty cups and

threw away the set of cups. He described one high taste and one low taste, about people's feelings, and increased the temptation of *The Red Chamber*.

韓良露在〈紅樓夢的美味情事〉（聯副 2005.5.12）中，認為這段情境中鬼臉青的「鬼」字用得真妙，既可讓人看到具象的甕，又給人一種妙玉在說什麼「鬼」話的感覺。之後曹雪芹又寫妙玉嫌劉姥姥用過的杯子髒而丟棄一整套的茶具，也有因高反低之感。這一高一低寫茶寫水寫人情，更增紅樓滋味。

When Mioyu took Bosia and Dayu to drink tea, Boyu followed. Mioyu put aside Grandma Liu's cups. She gave a cup with a ear to Bosia, a tiny cup to Dayu, and a cup made by green jade to Boyu. Mioyu gave people different kinds of cups for tea which indicated their different positions. It is interesting that when Boyu complimented her different cups made by different materials, Mioyu was very happy. Afterwards, she found "a gigantic cup with nine arches, ten loops, and 120 sections of bamboo" for Boyu. "You can drink this cup of tea like the sea of tea. After Boyu finished the tea, "Though you drank this tea, it was no worse than other tea. The first cup of tea has good taste, the second cup of tea is for thirst, and the third cup of tea is drunk like a buffalo. What would you look like after you drank a sea of tea?" Mioyu smiled and said.

而在妙玉剛拉著寶釵和黛玉去喝梯己茶時，寶玉也尾隨而至；從妙玉遞送的茶具上，不難看到一些玄機：妙玉先令人把劉姥姥喝過的整套茶具擱到外頭，再斟了一杯「分瓜 甕」（旁有一耳）給寶釵，並且斟了點犀角（形似鉢而小）給黛玉，卻拿出自己日常用的綠玉斗給寶玉喝；由此可見妙玉對姥姥、寶釵、黛玉和寶玉間的不同的定位不言可喻。最有趣的是當寶玉恭維妙玉庵中連金玉珠寶都是「俗器」後，妙玉十分歡喜，就找出「一只九曲十環一百二十節蟠虬整雕竹根的一個大壺」出來，說：「就剩了這一個，你可吃的了這一海」，當寶玉喜的忙道：「吃的了」後，妙玉卻笑道：

你雖吃得了，也沒這些茶糟蹋！豈不聞「一杯為品，二杯即是解渴的蠢物，三杯便是飲牛飲了」，你吃這一海便成什麼？

Mr. Sui Jin thought this conversation about two Yu's talks in his *Private talks in the Dream of Red Chamber* reveals that Boyu likes all the human beings. When he saw this Mioyu, he forgot about Dayu. This reminds people that one should focus one's love on one person.

在水晶先生的《私語紅樓夢》裡，以為在這段「雙玉」的對話中，作者不但搬出了妙玉家傳的古玩，也搬演了一段精彩象徵——對寶玉「泛愛眾，而親仁（人）」、「見了姊姊忘了妹妹」的作風提出當頭棒喝——情有獨鍾方為情。<sup>12</sup>

#### (4) Jingui bites bone and Jia Jen cooks pork (四) 金桂啃骨，賈珍燒豬

When describing the indulgence of Jia Jen, the head of Ni government, the author used "cook a pig" and "toast a lamb" to indicate the originality. In the banquet, there was a voice of signing which indicated the falling of Jia's family luxurious life:

*Jia Jen cooked a pig and grilled a lamb. There were a lot of delicious food, fruit, cakes, wine and drinks. He took his wife and lovers to eat meals and wine, and felt very excited. Then they recited poetry and played music. At midnight, there were fresh air and beautiful moon. Jia*

<sup>12</sup> 引自該書頁 14（台北：九歌出版社，2002 年版）。

*Jen was drunk, and asked his servant to give him a flute. He asked Peifung to play the flute and Wenhua to sing. About three o'clock in the early morning, he was very drunk. When all the people put on more dresses to avoid chill, they heard a voice of signing. "Who is there?" Jia Jen asked. Nobody answered. "There are some people outside," said Mrs. Yio. "There is no house around. How can there be people here?"*

在描述放蕩無品的寧國府大家長賈珍時，作者用「煮了一口豬」與「燒了一腔羊」（七十五回）的方式來呈現其粗俗；而在他大開夜宴時，竟然有悠悠嘆息聲自天香樓畔的會芳園牆角下傳來，象徵著賈府在窮奢極侈之後的敗落：<sup>13</sup>

……賈珍煮了一口豬，燒了一腔羊，餘者桌菜及菓品之類，不可勝記，就在會芳園叢綠堂中，屏開孔雀，褥設芙蓉，帶領妻子、姬妾，先飯後酒，開懷賞月作樂。

將一更時分，真是風清月朗，上下如銀。賈珍……有了幾分酒，益發高興，便命取了一竿紫竹簫來，命佩鳳吹簫，文花唱曲，喉清嗓嫩，真令人魄醉魂飛。唱罷，復又行令。那天將有三更時分，賈珍酒已八分。大家正添衣飲茶、換盞更酌之際，忽聽那邊牆下有人長嘆之聲。大家明明聽見，都悚然疑畏起來。賈珍忙厲聲叱咤，問：「誰在那裡？」連問幾聲，沒有人答應。尤氏道：「必是牆外邊家裡人，也未可知。」賈珍道：「胡說！這牆四面皆無下人的房子，況且那邊又緊靠著祠堂，焉得有人？」

Jia Jen was truly a smart pig. In 80<sup>th</sup> section of *The Dream of Red Chamber*, Shia Jinguia, Shei Pan's wife loved to bite bones. When she killed chicken or bucks, she gave meats to people, and she bite bones instead. The author described her low class as follows:

賈珍真是一頭神豬！而八十回中薛蟠之妻夏金桂最愛啃骨頭，她殺雞鴨，將肉賞與他人，自己則啃油炸焦骨頭。也寫出了夏金桂的低俗潑辣：

Jingui's temper was not stable. When she was happy, she asked people to play dies and cards with her. She liked to bite bones. Whenever she killed chicken or duck to cook, she gave meats to people and she bit bones with wine. When she felt bored, "Don't forget other happy things, why am I not happy?" she said. Shei's family ignored her. Shei Pan felt regret marrying her. All the people in the neighborhood knew what was going on.

金桂不發作性氣，有時歡喜，便糾聚人來鬥紙牌、擲骰子作樂。又生平最喜啃骨頭。每日務要殺雞鴨，將肉賞人吃，自己只以油炸焦骨頭下酒。吃的不奈煩或動了氣，便肆行海罵，說：「有別的忘八粉頭樂的，我什麼不樂？」薛家母女總不去理他，薛蟠亦無別法，惟日夜悔恨不該娶這攪家星罷了，於是寧榮二宅之人，上上下下無有不知無有不嘆者。

<sup>13</sup> 這裡的情節安排，在作者的原稿中是用來呼應第十三回〈秦可卿死封龍禁衛〉（原題為：秦可卿淫喪天香樓），在十三回的情節中，某次賈府家宴中，賈珍在天香樓對媳婦可卿逞其淫威，被瑞珠撞見，因而可卿自縊，瑞珠觸柱；而脂硯齋的批本中，經過家中畸笏叟的建議刪除這段太露的描述，而保留一些蛛絲馬跡（如十二金釵判詞，秦氏的結局是「畫梁春盡落香塵」）。

## Journey Along the China's Silk Road (2)

## 中國絲路之旅 (2)

Dr. Edward C. Chang

張暢繁博士

After Turpan, we returned to Urumqi for a flight to Dunhuang. The city of Dunhuang is located in the northwestern part of Gansu province, close to the borders of Qinghai and Xinjiang. Dunhuang was once an important town because it was situated near the junction of the old northern and southern Silk Road. It was a historic point of interchange for traders between China and other part of the world during the Han and Tang dynasties.

離開吐魯番後，我們回到烏魯木齊，然後飛去敦煌。敦煌市位于甘肅省的東北部，靠近青海和新疆的邊境。因為敦煌是舊絲路南北兩條路的交叉點，所以它曾一度是一個非常重要而具有歷史性的市鎮。在漢唐期間，中外的過路商人都曾在此做買賣。

Now Dunhuang is known to the world for its culture relics and its famous sand-dunes. Many travelers come to Dunhuang for a tour of the famous Maogao Grottoes, the Echoing-Sand Mountain, and the Crescent Lake.

敦煌現在聞名世界是因為它的文化遺跡和它的沙山。很多來敦煌的遊客都為了要看有名的莫高窟、鳴沙山和月牙泉。

After lunch, the first day we arrived at Dunhuang, we were taken on a bus to the Mingsha Mountain.

我們來到敦煌後，吃過中飯，隨即乘巴士去鳴沙山。

The words Mingsha literary mean “echoing sand.” It was so named because when the wind swept across the dunes, a thunder-like sound could be heard.

鳴沙的意思是沙的回響，當風在沙山上橫過時，人們可以聽到一陣陣如雷的響聲。我們第一個活動是騎駱駝。導遊說騎駱駝是絲路旅遊一個難忘的有趣活動。

Our first group activity was to ride camels, promised to be one of the most memorable funs of the trip.

我們第一個活動是騎駱駝。導遊說騎駱駝是絲路旅遊一個難忘的有趣活動。

First, we were given a brief introduction on how to ride a camel by our local guide. When the camels lowered down the front legs, each of us, at the instruction of the camel guide, would ride on the back of the camel by holding tightly the mental guard in front of us. As the camels walked slowly to the sand dunes about half miles away, we enjoyed both the camel ride as well as the wonderful spectacle of this natural wonder in the Gobi Desert.

首先，導遊對我們講解一些騎駱駝應注意的地方。譬如，當駱駝屈低前腳時，我們就要騎在駱駝的背脊上，同時雙手要牢牢握緊鐵手把。駱駝走得很慢，我們不但可以享受騎駱駝的快感，而且欣賞沙漠上的奇景和風光。

After about a twenty-minute ride, we got off the back of the camel after it kneeled down at the prompt of the guide. We then climbed up to the top of the dune by walking on a series of wooden steps. Standing atop the dune, we could clearly see the smooth contours and shapes of the hill, like a lying dragon. The amazing view of the surrounding was beyond description.

二十分鐘後，我們到達目的地。駱駝隨即屈低前腿，讓我們下來。然後我們沿着木做的階梯向上爬，一直到沙丘的頂點為止。在上面，我們可以看到鳴沙山的輪廓，平滑得有如一條躺在那里的臥龍。四周圍的景色，美得真難以描述。

Now the exciting activity was about to take place. Each of us would first sit on a slide and

then slid all the way down to the level surface below. What a wonderful experience it was to hear the sound created by the slide against the sand.

有趣的活動快將開始了。我們每個人輪流坐在一塊滑板上，從高處滑下來。滑板 and 沙互相摩擦的聲音，聽起來別有一番滋味。

### Camel Rides on Mount Echoing Sand

*On the camel's back we toured  
Mount Echoing Sand.  
We were at ease as the camels walked steadily in  
rhythm with the sound of their bells.  
A camel was able to go on a long journey  
without drinking water in the desert.  
Time and again it bought its owner to the west  
and then returned him safely to the east.*



### 鳴沙山騎駱駝

駱駝背上過沙山  
步穩鈴搖意態閒  
蓄水行沙經百里  
幾回西往又東還



We returned on the back of the camel and then walked to the Crescent Lake nearby.

大家都坐過滑板後，我們隨即騎着駱駝去另一個名叫月牙泉的景點。

Crescent Lake is considered a natural wonder in the Gobi Desert. The existence of the lake has been known for at least two thousand years. It was so named because it looked, and still does, like a crescent moon in shape. For all the problems of wind blowing and sand flying, the lake has physically remained as it was for all these years. It has never been buried by the movement of the sand. How could the lake escape the falling sands from each side of the dunes? The tour guide suggested that one explanation would be that the sand falling from one side would be sent back to the other side without touching the lake due to a combination of geological factors.

月牙泉是大戈壁的一個自然奇景。早在兩千年前，人們就知道月牙泉的存在。它的名字一如其景，因為它看來就像一彎新月。雖然千百年來風沙不斷地在吹動，但這小湖並沒有被沙埋沒。為什麼沙山四面的沙落下來而對月牙泉沒有做成任何影響呢？導遊的解釋是由于地理環境的各種因素，一邊落下來的沙，却被吹到另一邊去。

### Crescent Lake at Mount Echoing Sand

*The yellow sand goes all the way  
to the azure sky.  
A crescent lake is surrounded  
by sandy hills at all sides.*

### 鳴沙山月牙泉

黃沙直上碧雲間  
一月牙泉四面山  
昔日駝鈴搖晝夜  
今人探勝向高攀

*Camels in the past shook their bells  
as they passed through day and night.  
People now climb to the hilltop just to enjoy  
its height and the great sight.*



Next morning, we went to tour the famous Mogao Grottoes. Known as the Thousand Buddha Caves, the grottoes stretch for about 5000 feet along the Mingsha Mountain, about 15 miles southeast of Dunhuang.

次日早晨，我們遊覽有名的莫高窟。莫高窟又名千佛洞，在敦煌東南部十五里的明沙山側，所有佛洞加起來有 5000 尺長。

The first cave was carved out of rocks by a monk named Lezun in 366, A.D. It was said that when Lezun passed by the area, he saw a flashing light of a thousand Buddha. The visual phenomenon inspired him to start the cave-carving work, which lasted ten dynasties for a span of 1500 years.

莫高窟的第一個洞是公元 366 年時，一個名叫樂尊的和尚從岩石開掘的。據說當樂尊經過那里，他突然看到一道千佛出現的閃光。這奇妙的現象，啟發他開掘洞穴的理想。此後，歷經十個朝代和長達 1500 年，仍有人進行鑿掘洞穴的工作。

We were told that there are 492 caves in existence today. The total area of frescoes in these caves amounts to 54000 square yards. There are also more than 2,000 sculptured figures in these caves.

現存的洞穴一共有 492 個。所有洞穴的壁畫加起來約有 54000 平方碼。雕塑的神像也有 2000 個。

What makes Dunhuang famous to the world is the secret library cave discovered in 1900. The library was filled with numerous ancient manuscripts and documents, extremely valuable for the studies of medieval Chinese civilization. The cave was sealed without being discovered for some 900 years. For obvious reasons, the cave was not open to travelers for viewing.

敦煌聞名於世是因為在 1900 年的時候莫高窟被發現有一個秘密的藏經室。裏面充滿無數古代的文稿和檔案。這些文件對研究中國古代有很大的價值。900 年來，這個洞一直未為人所知。當然，這些有高度價值的東西是不會開發給遊人看的。

## Mogao Grottoes

*Viewing from distance, the cliff  
looks like a series of bee hives.  
At the side of a sandy hill across the desert,  
an art gallery is in sight.*

## 敦煌莫高窟

懸崖遠望若蜂房  
大漠沙山出畫廊  
塑像泥神宏肅穆  
牆圖壁景展琳琅

*So magnificent and solemn  
are the Buddha statues and clay idols.  
Frescoes of portraits and scenes  
are a feast for the eyes.  
A single monk was the first to work  
on the Buddha's caves.  
Many more were added  
over ten dynasties by people of faith.  
The whole world was excited  
at the discovery of hidden religious books.  
Today thousands of tourists come to Dunhuang  
to pay tributes to this place.*

孤僧鑿窟開先例  
暗室藏經震四方  
十代遺留千佛洞  
今朝萬客訪敦煌

After lunch, our group asked the local tour guide if we could alter the itinerary: Visiting the famous fort called Jade-Gate Pass (Yumen Guan) instead of a movie-making studio as scheduled. He said he was flexible to accommodate our needs if we would agree to pay the difference as required by his company's policy. We all agreed to pay the extra fees.

中飯後，我們問導遊可否把原定的行程變更一下，不去參觀電影拍攝場所，而去看歷史上著名的玉門關。他說只要我們願意按照他們公司的規定，附加一些費用，行程是可以變更的。我們大家都很樂意這樣做。

About 55 miles northwest of Dunhuang, Jade Gate Pass was built in the second century B.C. during the Western Han Dynasty. Along with the nearby Yang Guan, the Jade Gate Pass was one of the most important forts, through which traders entered and left China along the silk road.

玉門關位于敦煌西北約 55 里外。它是在公元前二世紀漢代時起建的一個關口。它和附近的陽關都是在絲路來往中國的商人的必經之地。

As ancient China's western most pass, Jade-Gate Pass used to be a military stronghold during the Tang Dynasty. Many soldiers had to leave home several thousand miles away to perform their duty in this town for years. For this reason, Jade-Gate Pass was the subject of several well-known poems. One of the most famous poems was written by Wang Zhihuan.

在唐代，玉門關是中國最靠近西部的一個重要軍事要塞。有很多士兵從中原數千里來此常駐。離情別緒，塞外風光就成了文人筆下的作詩材料。其中最出名的玉門關詩，就是王之渙的出塞詩。

### Passing the Frontier

*The Yellow River flows  
all the way to the white clouds.  
A lone town lies beneath mountains  
of many thousand feet high.  
Why must you blow the sad  
"Willow" tune with a tartar pipe?  
Spring wind will not reach  
the Jade-Gate Pass.*

### 出塞

王之渙

黃河遠上白云間  
一片孤城萬仞山  
羌笛何須怨楊柳  
春風不度玉門關



I myself had written the following two poems to show how I felt about the Jade- gate Pass.  
為了表達我對玉門關的感想， 我也寫下面兩首詩。

**Jade Gate Pass (1)**

*This place was once a post of the old Silk Road.  
Nowadays people rarely travel by this route.  
Yellow sand covers the wide desert;  
hot air rises upward to the sky's rim.  
The ancient ruins continues to withstand sand storms;  
the desolate walls stand quietly in the sun.  
The old reed bundles have not been burned.  
They stay close to the Jade Gate Pass*

**玉門關(其一)**

昔日絲綢驛  
今人少往還  
黃沙封大漠  
熱氣湧天環  
古堡經風敗  
荒城伴日閒  
積薪猶未點  
長伴玉門關

**Jade Gate Pass (2)**

*Traveling one hundred miles to this lonely and barren land,  
it is hard to sit or stand still on a bumpy road.  
Yellow sand invades the ancient path;  
the Mount Heaven hides beyond the desert.  
A flock of sheep roam freely along the reedy marsh;  
the ancient ruins face quietly toward the Great Wall of Han.  
As spring winds do not blow this way,  
How can greens be seen at the Jade Gate Pass?*

**玉門關(其二)**

百里荒涼路  
來回坐立艱  
黃沙侵古道  
大漠隔天山  
葦沼羊兒漫  
漢城舊堡閒  
春風長不到  
難綠玉門關



(End. 全文完)

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Editor's note: Dr. Edward Chang has recently published his new book |**"How to Read A Chinese Poem: A Bilingual Anthology of Tang Poetry.** (BookSurge Publishing, 2007)"

## The Patriarchs of Buddhism (2)

## 佛祖道影 (2)

Collected by Master **Hsu Yun**

Instructed by Master **Hsuan Hua** (condensed)

(Translated into English by an editor)

虛雲老和尚編集

宣化和尚講述(濃縮)

(由編者翻譯為成英文)

### Third Patriarch Sanakavasa

### 三祖商那和修尊者

尊者，摩突羅國人也，姓毗舍多，在胎六年，應瑞而生。後出家學仙道，居雪山。因阿難將入滅，時山河大地六種震動。尊者同五百仙人禮阿難足，而跪請曰：「我於長老，當證佛法，願垂度脫。」阿難即變恒河為金地，為說大法曰：「昔如來以正法眼付大迦葉，轉付於我，我今付汝。」尊者既得法，降二火龍，以建梵宮，轉大法輪。後付法與優波鞠多，即隱闍賓國象白山，現十八變火光三昧，用焚其身。

**Interpretation:** Sanakavasa was Motu's citizen and his last name was Pisado. His mother was pregnant with him for six years. When he was born, there were many auspicious signs. When he grew up, he took refuge and became a monk. He learned how to become a saint in a snow mountain. Because the 2<sup>nd</sup> Arya Ananda was going to manifest Nirvana, there were six kinds of noises on the earth: shocking, attacking, shoaring, moving, pouring and rising. During that time, there were five hundred people who followed Sanakavaso to learn how to cultivate. "Before you are going to manifest Nirvana, we would like to learn the proper dharma from you. Please be compassionate to us, and help us to revolve life and death!" they all bowed and saluted Arya Ananda and asked. Suddently, he made the Hindu river to become golden land. "Buddha delivered the proper dharma to Arya Mahakasyapa, who delivered it to me. I now pass the proper dharma to you!" said Arya Ananda. After Sanakavasa received the proper dharma, he came to the world to assist and to save human beings. When he went to Country Motulo, it used to be a good place. Unfortunately, there were two fire dragons there. Whenever people built a temple, two fire dragons burned it. Then Sanakavasa used his wisdom to convince these two dragons who also believed the Buddha later. Afterwards, he built a divine temple and propagated Buddhism. He then passed the proper dharma to Arya Upagpta. When he manifested Nirvana, he flew into the sky and became a variety of 18 pieces, which turned into fire and burned himself.

(Note: At the end of each patriarch, there are two similar verses in Chinese describing his life, one by the original author and the other one by Master Hsuan Hua, there is no need to translate them into English.)

**白話解：**三祖商那和修尊者，是摩突羅國家的人，他的姓是毗舍多。他在胎內住了六年。他出生的時候，有很多祥瑞的事情發生。後來他就出家了，學的是仙道，在雪山那兒修苦行。因為阿難尊者那時候將要入滅了，所以在這個時候，一切地方都有震、吼、擊、動、湧、起這六種的震動。那時有五百個仙人，跟著商那和修尊者在一起修行，他就向阿難尊者頂禮叩頭，跪到阿難尊者的面前請法，說：「我在長老您現在要入滅的時候，向您學習佛法，將來也成佛。我應該是您的弟子，在您的面前得到佛法，所以請您憐憫我的困苦艱

難，度脫我，令我了生脫死。」在這個時候，阿難尊者就將恆河變為完全都是金地，也沒有水了。就為商那和修尊者說正法眼藏這個法：「以前，佛把正法眼藏傳給大迦葉尊者，大迦葉尊者又傳授給我，我現在把這個正法眼藏又傳給你。」商那和修尊者得到正法眼藏後，就遊化世間來教化眾生。後來到了摩突羅國優留荼林地，這個地方本來是很好的，但是有兩條火龍在這兒佔著，不准其他人來用，所以一造廟，就會被火燒。之後，商那和修尊者把這兩條火龍降伏了，牠們也歸順佛教，尊者就在這地方建造了一座清淨的道場，在那兒弘揚佛法。他以後把這個法傳給優波鞠多尊者，然後就隱遁在北印度的罽賓國南方，在那兒的一座象白山。等到圓寂的時候，也現空中十八變，現出火光三昧，把自己焚了。

**贊曰 應瑞而生 轉妙法輪 五百仙眾 惟祖特尊**

**無端一語 印破面門 降龍伏象 道播乾坤**

**或說偈曰**

宣化和尚作

**修仙學道入深山 叩請慶喜望垂憐 五百丹客皈三寶 兩條火龍上九天**

**正法眼藏付心印 金色頭陀定雲南 祖祖相承無言說 燈燈互映更光前**

**Fourth Patriarch Arya Upagpta**

**四祖優婆鞠多尊者**

尊者，吒利國人也，姓首陀。年十七，投三祖出家。祖問：「汝年幾何？」答曰：「十七。」祖曰：「汝身十七耶？性十七耶？」答曰：「師髮已白，為髮白耶？心白耶？」祖曰：「我髮白，非心白也。」答曰：「我身十七，非性十七也。」祖知是法器，遂為落髮受具。告之曰：「昔如來以無上法眼付囑迦葉，展轉相授，而至於我。我今付汝，勿令斷絕。」尊者得法已，隨方行化，魔宮震動，波旬愁怖。後得提多迦已，遂躡身虛空，呈十八變，復坐，跏趺而逝。

**Interpretation:** Arya Upagpta was the 4<sup>th</sup> patriarch. He was born in Tsyli in India and his last name was Sho To. When he was 17 years old, he took refuge from Sanakavasa. "How old are you?" asked Sanakavasa. "17 years old," he answered. "Is your body 17 years old or your mind 17 years old?" asked Sanakavasa. "Your hair already turned to grey. Is your hair grey or your mind grey?" he replied. "My hair is turning into grey, but my mind is not grey," said Sanakavasa. "My body is 17 years old, but my mind has no 17," he answered. Sanakavasa knew that he was brilliant. Therefore, he cut Upagpta's hair and passed five precepts to him immediately. "The original teacher Shakymuni taught the best and proper dharma to 1<sup>st</sup> Patriarch AryaMakakasyapa. Afterwards, the proper dharma was delivered one generation after another. I now passed it to you, and hope you will light the torch and deliver it to next generation. Don't let it discontinue!" said Sanakavasa. After he learned the proper dharma, he taught people how to cultivate themselves and how to resolve lives and deaths. He had real cultivation and enlightenment such that ghost Boshon was timid. He defeated the ghost such that he became a

buddhist. After he met Arya Micchaka, he passed the proper dharma to him. When he passed away, he flew into the sky and turned his body into many varieties, eg. sit in the sky, lie in the sky, stand in the sky, etc. Then his body has water and fire, and came back to earth, and manifested Nirvana.

**白話解：**優婆耆多尊者是第四代祖師，他生在印度一個叫吒利國的地方，姓首陀。他十七歲的時候，跟著商那和修尊者出家。第三祖就問他：「你多大年紀了？」他答說：「我十七歲了！」三祖又說：「你是身體十七嗎？還是你自性十七呢？」。優婆耆多尊者就回答說：「您的頭髮都白了！是您髮白呢？還是心白呢？」就這麼樣，他不答他是年十七或者性十七；反問三祖：「您髮已經白了，那麼是您髮白嗎？還是您心裏白呢？」你看！三祖反而答覆說：「是我頭髮白了，我心沒有白啊！」優婆耆多尊者就說：「我的身體是十七，可是我的性沒有一個十七。」三祖知道這個人是不錯的，有點智慧，即刻就把他頭髮給剃了，再給他受具足戒。三祖就告訴他：「從前釋迦牟尼佛，以沒有再比這個高上的法眼，付囑給迦葉尊者，一代一代傳下來，直到現在傳給我。我現在再把這個法傳給你，你將來要傳出去，不要讓它斷絕。」尊者得法之後，到處去教化眾生，度化很多眾生，所以魔王波旬就害怕了，優婆耆多尊者有修行，有真正禪定的功夫，所以就把魔王降伏，皈依三寶了。以後四祖優婆耆多尊者遇到提多迦尊者，就把法傳給他。傳法之後，就往上一跳，跳到虛空中去，在空中現十八變——在空中躺著、在空中坐著、在空中站著，在空中身上出水、身下出火；身下出水、身上出火等等，有十八種的變化。然後他又回到這個世界，結跏趺坐，就圓寂了。

**贊曰**                      **身性十七    有何交涉    降伏波旬    全憑渠力**  
                                  **震動魔宮    了無倫匹    巍巍堂堂    光舒化日**

**或說偈曰**                      宣化和尚作

**幼時出家遇祖傳    抖擻精神忘睡眠    身性十七多言說    髮心白耶乃戲談**  
**機教相扣契真理    師資道合演妙玄    法本流遍三千界    十方普化續絕詮**

**Fifth Patriarch Arya Micchaka**

**五祖提多迦尊者**

尊者，摩伽陀國人也。生時，父夢金日照曜天地。長遇四祖，求出家。祖曰：「汝身出家，心出家耶？」答曰：「我求出家，非為身心。」祖曰：「不為身心，誰復出家？」答曰：「夫出家者，無我我故，即心不生滅。心不生滅，即是常道，諸佛亦然。心無形相，其體亦然。」祖曰：「汝當大悟，心自靈通。」即為剃度受具，付以大法。尊者得法已，行化至中印土，轉付法與彌遮迦。乃躡身虛空，作十八變，火光三昧，自焚其身。

**Interpretation:** The 5<sup>th</sup> patriarch was Arya Micchaka. He was a citizen of Mojia country. When he was born, his father had a dream of golden sun that the sunshine made the earth lightening.

When he grew up, he met the 4<sup>th</sup> patriarch Arya Upagpta. He wanted to take refuge with the patriarch. “Does your body or your mind want to take refuge?” asked Upagpta “Neither my body nor my mind wants to take refuge,” he answered. “What do you take refuge for?” asked Upagpta again. “A monk has no me. If no me, how can I have body or mind to take refuge. My mind is neither growing nor diminishing,” he replied. “Buddhism is the proper dharma, neither growing nor diminishing. My mind and my body have no images at all.” “You will understand your mind comprehensively in the future,” said Upagpta. “When that time comes, you will attain the right enlightenment naturally.” Then the patriarch shaved his head immediately. Afterwards, he took refuge and received the complete ordination under the 4<sup>th</sup> patriarch Upagpta. He passed the proper dharma to Micchaka such that he became the 5<sup>th</sup> patriarch. Then Micchaka went to the middle part of India, and passed the proper dharma to the 6<sup>th</sup> patriarch. When he passed away, he jumped into the sky, made his body into a variety of pieces, and used fire and light to burn his body.

**白話解：**第五祖是提多迦尊者，他是摩伽陀國的人。出生的時候，他的父親夢見一個金色的太陽照耀著天地。等他長大了，就遇著第四祖優婆毘多尊者，他向四祖要求出家。四祖對他說：「你是身想要出家呢？還是心想要出家？」他說：「我就是來求出家，也不是身出家，也不是心出家，不是為著身心出家。」四祖就問他說：「你不是為著身心，不是身出家、心出家，那麼究竟誰出家呢？」他就答覆說：「怎麼叫出家呢？出家的人，沒有我，也沒有一個我所有；若沒有我了，又怎麼會有身、心呢？就是在心上，也是不生不滅。這個心也不生、也不滅，這就是真常之道，一個經常不變的道。諸佛就是這樣子，也是心不生不滅。這個心沒有個形象，也不是青黃赤白黑，也不是長短方圓。心的體性也是這樣子，也沒有個形象。」四祖就說：「你將來應該會開大悟的；你開悟的時候，心裏是很明白的，自然就靈通了！」於是就把他頭髮給剃了，為他授具足戒，然後傳與他正法眼藏，涅槃妙心的大法。尊者得傳法之後，在中印度那個地方，又把這個法傳給第六祖彌遮迦尊者。隨著他就跳到虛空，作十八種的變化。十八變，就是身上出火、身下出水；身下出火、身上出水；在虛空又站著、又坐著、又在那兒躺著，現出種種不可思議的境界。又入火光定，用火光三昧，就把自己燒了。

**贊曰**            **心非生滅 欲隱彌彰 法非常道 好肉剝瘡**

**夢中說夢 家醜外揚 火光三昧 雪上加霜**

**或說偈曰**

宣化和尚作

**父夢金日祖降生 不迷本性覓離塵 無我出家非異滅 有願脫俗斷苦因**

**與佛為鄰思齊聖 同師護教正法興 火光三昧焚幻體 魔宮震動鬼神驚**

〈to be continued 待續〉

## Elder Master Venerable Hsu Noble Yun's Self-Description of His Time and Instructions (3)

## 上虛下雲老和尚自述年譜開示(3)

Edited by Tzen Shai Lu (Kang Xian) in Shan De  
(Translated into English by an editor)

岑學呂(寬賢) 編輯  
(由編者翻譯成英文)

Eighth Patriarch Hsu-Yun De-Ching's 56-character  
Verse for the Transmission of the Weiyang Sect:

為仰宗第八代祖虛雲  
德清演派五十六字：

*The Virtue of words proclaims in profusion and the Way greatly propers.  
The morality tripod's fragrance permeates with five shares renewed.  
The wisdom flames fully pervade, enveloping worlds as many as sands.  
The incense cloud everywhere masks the splendor of old and new.  
Kindness and pity deliver the world with vows which have no end.  
The light excels the sun and moon, bright and totally clear.  
He revived the sect and held the flower to propagate the Wei.  
The perfect mark of the mind-lamp is eternally glorious and bright.*

詞德宣衍道大興，戒鼎馨遍五分新；慧燄彌布周沙界，香雲普蔭燦古今。  
慈悲濟世願無盡，光超日月朗太清；振啟拈花宏為上，圓相心燈永昌明。

Illustration of disposition  
By Master Hsu Yun

示天性  
虛雲老和尚作

*Buddha sympathized for human being's suffering; he showed compassions to us.  
Decaying flowers deceive our eyes; there is no dust at all in the world.  
Buddha assisted his escaped son; he used a scarf to make six nodes for the illustrations of  
six consciousnesses.  
There is no image at all; a thought could produce chaos.*

佛憫蒼生苦。慈悲為我人。空花留翳眼。虛世不容塵。  
逃逝憐驕子。啟纏示結巾。本來無我相。一動便紛紜。

Master Hsu Yun's Self-Description  
of His Time (1840-1959)

上虛下雲老和尚自述年譜

\* In the 10<sup>th</sup> year of Tong Zi, I am 32 years old.  
同治十年（歲次辛未）三十二歲

I lived with Master Zong Zi, and was inspired by him during this time. The Master was 80 years old and was specialized in precepts and Buddhism. He gave me many lectures which helped me to pursue the Way of Buddhism.

在龍泉庵侍融鏡法師。時有啟發。法師年已八十餘。精研戒律。宗教並通。令予多參

講座。以利遊方。

\* In the 11<sup>th</sup> year of Tong Zi, I am 33 years old.

同治十一年（歲次壬申）三十三歲

The Master mandated me to learn Zen at the Monastery Guoqing and to study *The Dharma Flower Sutra* at the Monastery Fangguan.

奉老法師命。往國清寺參學「禪制」。至方廣寺習「法華」。

\* In the 12<sup>th</sup> year of Tong Zi, I am 34 years old.

同治十二年（歲次癸酉）三十四歲

\* In the 13<sup>th</sup> year of Tong Zi, I am 35 years old.

同治十三年（歲次甲戌）三十五歲

I studied sutras at the Monastery Guoqing and accompanied Master Jing the last two years.

以上二年。在國清寺習經教。時往茅庵伴鏡老人。

\* In the 1<sup>th</sup> year of Guang-Shu, I am 36 years old.

光緒元年（歲次乙亥）三十六歲

I finished studying *The Dharma Flower Sutra* at the Monastery Cauming and said farewell to the Master Zongjin. I climbed over mountains to Monastery Yeiling to listen to the lectures of the Amitabha's sutra. Afterwards, I went to Mountain Puto. In October, I saw a huge fish on the beach which had a long body over 100 feet. The eyes of the fish were as big as sinks. Somebody killed the fish and found two small boats in its abdomen which had hair and combs. The skeletons of the fish could be used for the construction of a building. When the tide of the sea was rising one time, I saw a dragon with golden color. I saw four feet of the dragon, but not the head. The tail of the dragon looked like the tail of a fish. The dragon left after a while.

至高明寺聽敏曦法師講「法華經」畢。辭別鏡老法師。不無依戀。談數夕。珍重而別。下山經雪竇。到岳林寺。聽「阿彌陀經」畢。渡海朝普陀山。在後寺度歲。住普陀時。遍參各寺刹。是年十月。潮來一大魚。在千步沙上。不能去。長數十丈。眼大如盆。於人取肉。破出兩支小木船。有髮及釵釧等物。以魚脊骨作柱墩。其大骨可作棟樑。又大潮時於潮陽洞來一龍。鱗甲作金光色。四足全身皆現。惟不見首。其尾似魚尾。久之乃去。

\* In the 2<sup>th</sup> year of Guang-Shu, I am 37 years old.

光緒二年（歲次丙子）三十七歲

I returned to Ninbo from Puto. Then I went to the Monastery Aryu and ate there, three dollars for a month. I bowed and saluted two Buddhas to appreciate my parents for raising me. Afterwards, I went to the Monastery Teintong to listen to *The Shurangama Sutra*.

由普陀回寧波。至阿育王寺。寄火食。三元一月。拜舍利二藏。以報父母劬勞之恩。至天童寺。聽講「楞嚴宗通」。

\* In the 3<sup>th</sup> year of Guang-Shu, I am 38 years old.

光緒三年（歲次丁丑）三十八歲

When I returned to Hangzhou from Ninbo, I visited a few beautiful scenes. Afterwards, I saluted Monk Teinlong and stayed there in the winter. When I traveled from Ninbo to Hangzhou, I took a small boat with many people. While I was falling sleep, I felt a person touch my body. I woke up suddenly and saw a lady take off her clothes. I kept quite, meditated and recited a sutra immediately. Then the lady was afraid of moving. When I took the boat, I forgot to watch people around me. This was a mistake. Cultivated people have to be very careful.

自寧波至杭州。朝三天竺。及各處聖境。於半天禮天朗和尚。及長松西堂。在西天目過冬。當予自寧波至杭途中。時際三伏。船小人多。無奈與青年婦女臥鋪相連。夜深熟睡。有撫摩予體者。驚醒。見鄰女卸衣相就。予不敢聲。急起跌坐。持咒。女亦不敢動。斯時倘失覺照。敗矣。勉諸修行人。不可不慎也。

\* In the 4<sup>th</sup> year of Guang-Shu, I am 39 years old.

光緒四年（歲次戊寅）三十九歲

I went to Monastery TeinNin, saluted Master Qingguan, and stayed there.

至天寧寺。禮清光和尚。在寺過冬。

\* In the 5<sup>th</sup> year of Guang-Shu, I am 40 years old.

光緒五年（歲次己卯）四十歲

I went to the Mountain Jio and saluted Monk Daisui. During this time, the Palace Navy stayed here. They invited me to instruct Buddhism a few times and believed it very much.

至焦山。禮大水和尚。時彭玉麟宮保督水師駐此。曾邀予數次談論佛法。及修行途徑。深生敬信。

**[Major Events This Year]** Japan invaded the Ryukyu Islands.

**【是年大事】** 日本併琉球

\* In the 6<sup>th</sup> year of Guang-Shu, I am 41 years old.

光緒六年（歲次庚辰）四十一歲（1880 年）

I went to the Monastery Jinshan. I was close to Monks Guanshin, Shinlin, Dading, etc. I meditated all this winter.

至金山寺。親近觀心和尚。新林大定等和尚。禪坐過冬。

\* In the 7<sup>th</sup> year of Guang-Shu, I am 42 years old.

光緒七年（歲次辛巳）四十二歲

I went to the Monastery Cauhou, saluted Monk Lanhui, and stayed there in the winter. My meditation was improved.

至揚洲高旻寺。禮朗輝和尚。是年在高旻過冬。禪功尤進。

\* In the 8<sup>th</sup> year of Guang-Shu, I am 43 years old.

光緒八年（歲次壬午）四十三歲

I had lived a secluded life for 20 years since I said farewell to my parents. I felt embarrassed that my cultivation was still no good and my mind was not firm. I planed to visit the southern sea and the Mountain Wutai. I lived in the Monastery Puto for a few months and made a



little progress about my cultivation. I started at the Temple Huaon in the Monastery Puto on July 1, did one bow in three walking steps untill I reached the Mountain Wutai. In the beginning, there were monks: Bianjen, Qiuni, Shanshia, Jushen, and me. When we passed the southern sea, we did not walk much each day. When we traveled through Huzhou, Shuzhou and Chanzhou, four monks gradually left. I was the only one continuous to bow in three steps. When I arrived in Nanjin, I saluted Tower Nuto-zongu, passed the river and went to the Monastery Lion for the Chinese New Year.

予割愛辭親。出家二十餘年矣。道業未成。隨風飄蕩。心生慚愧。欲報劬勞。擬再東朝南海。北禮五臺。駐普陀數月。靜中稍見勝境。發心朝臺。於七月初一日由普陀法華庵起香。三步一拜。以直拜至五臺為止。時附香者。有遍真。秋凝。山遐。覺乘。等四禪人。渡海後。每日行路不多。中間曾停湖州。及至蘇州常州。四人漸皆退去。予仍向前拜。至南京。禮牛頭融祖塔。渡江。止浦口獅子山寺。過年。

**[Major Envents This Year]** French troops evaded Bay Dongjin.

【是年大事】法據安南東京灣

### Master Hsu Yun's Instructions at Monastery Tse Yun on January 17, 1943

民國 32 年 1 月 17 日重慶市慈雲寺開示

Edited by Weiyin

侍者惟因筆錄

I am pleased that you are revolved to take refuge with the Triple Jewel-the Buddha, the Dharma and the Sangha today. You hope that you will receive some benefits. If you want to receive some benefits, you have to take precepts. Since taking refuge with me, you are Buddhists now. If you were a descendent of an emperor, and developed virtues, you would receive benefits too. From now on, as Buddhists, you should hold five precepts and cultivate yourselves. Everything in everybody's mind is like an illusion. Everybody's conduct is similar to a bee producing honey and a silkworm building a cocoon. Due to a thought, a person is born into this world. One grows up who knows oneself and other people. As a child, one has desire, temper and vein hope. After a child becomes an adult, one communicates with the society to make money for oneself and one's family. People are busy year by year. In the end, everybody is going to die and make lots of sins which can not be removed. It is similar to a silkworm making a cocoon to bind itself. You should not kill animals and try to become vegetarians. If it is impossible, try to eat more vegetables and less meat. When we kill animals, the animals must escape or strive for death. Because animals are weaker than men, they can not resist. When they die, they resent people. This resentment will produce revenge. This is similar to a strong and big country use arms and forces to defeat or to invade a small and weak country in the world. Buddhism is nothing special, but from our hearts. Many people ask me many questions due to my old age. When will the war end? When is there a peace? They want to learn "Enlightenment." In fact, everybody has enlightenment in mind. You don't need to seek it. As a Buddhist, you should cultivate yourself diligently, resolve life and death and develop bodhisattva's mind. In one word, do all the good things and don't do any bad things. Don't benefit yourself, but benefit others. If you hold precepts, you will have a firm mind. When you have a firm mind, you will produce wisdom. If you can practice in this way, you are not regretted for taking refuge with me today.

今天諸位發心來皈依三寶。老衲甚為欣慰諸位遠道過江來此。無非希望得些益處。但

若想得益。自須有相當行持。如徒掛空名。無有是處。諸位須知現既皈依。即為佛子。譬如投生帝王之家。即是帝王之孫。但能敦品勵行。不被擯逐。則鳳閣鸞臺。有分受用。自今以後。須照佛門道教修持。要曉得世間萬事如幻。人之一生。所作所為。實同蜂之釀蜜。蠶之作繭。吾人自一念之動。投入胞胎。既生以後。漸知分別人我。起貪嗔痴念。成年之後。漸與社會接觸。凡所圖謀。大都為一己謀利樂。為眷屬積資財。終日孽孽。一生忙碌。到了結果。一息不來。卻與自己絲毫無關。與蜂之釀蜜何殊。而一生所作所為。造了許多業障。其所結之惡果。則揮之不去。又與蠶之自縛何異。到了最後鑊湯造爐。自墮三途。所以大家要細想。要照佛言教。宜吃長素。否則暫先吃花素。尤不可為自己殺生。殺他之命。以益自己之命。於心何忍。試觀殺雞捉殺之時。彼必飛逃喔叫。只因我強彼弱。無力抵抗。含冤忍受。積怨於心。報復於後。以現在武力強大之國。用其兇器。毀滅弱小民族。其理正同。諸位既屬佛子。凡悖禮之事。不可妄作。佛法本來沒甚稀奇。但能循心順理。思過半矣。許多人見我年紀虛長幾旬。見面時每有探討神通之情緒。以為世外人能知過去未來。每問戰事何日結束。世界何日太平。其實神通一層。不但天魔外道有之。即在鬼畜俱有五通。此是性中本具。不必注意。我們學佛人。當明心見性。解脫生死。發菩提心。行菩薩道。從淺言之。即諸惡莫作。眾善奉行。不但不可以損人利己。更宜損己利人。果能切實去做。由戒生定。由定生慧。一切自知自見。自不枉今日皈依也。

A few people asked me the meaning of *The Shurangama Sutra*. I would like to describe it very briefly. This sutra originally contained 100 chapters, but we only translated ten chapters. It illustrates the right way of Buddhism in the first four chapters. It shows how to cultivate in chapters 5 and 6. It tells people how to develop the virtues of Bodhisattvas in chapters 8 and 9. It finally interprets wild thoughts and illusions. Arya Ananda inquired many questions about cultivation and Buddha Shakymuni answered in the sutra. All the dharma comes from mind. Ananda observed Buddha's 32 images with golden color which he fell in love. "How do you watch?" Buddha asked him. "I use my mind through my eyes to watch," said Ananda. "Where is your mind?" asked Buddha. "I see two eyes are on Buddha's face. I have eyes, ears, nose and tongue on my face, and therefore, I can comprehend my mind," said Ananda. "It seems that mind is on my face, in fact, it is in my body." "Mind is not on your face, not in your body and not in between. It does not touch anything, and therefore, no image. Because laymen don't know two sources of fundamentals, they can not become Bodhisattva. Firstly, there is no life and no death. People think that the feeling of surrounding is mind- which is not true. Secondly, there is no Bodhisattva and no nirvana. Actually, mind and body are pure. There are six organs including eyes, ears, nose, tongue, body and brain. Therefore, there are six feelings including vision, hearing, smelling, speaking, taste, and thought. Plus, six consciousnesses contain the consciousnesses of eyes, ears, nose, tongue, body, and brain. Plus, there are earth, water, fire and wind. Plus, there are the large sky, the large sight and the large view. If we add them all up, there are 25 total. In *The Shurangama Sutra*, Buddha taught 25 Bodhisattvas how to cultivate themselves by practices according to 25 causes. In the six levels of reincarnations, sex is the worst act. Because sexual acts deteriorate people's spirit and bodies, people kill animals and eat their meat for nutrition. Afterwards, people have a series of bad behaviors such as lying, stealing, smoking, being alcoholic, etc., and then commit sins and crimes. This is no good. In the beginning, Ananda was lured by a beautiful lady and was bothered by the obscenity. After he was lectured and taught by Buddha, he learned to adjust himself and to cultivate well. Later, he could comprehend Buddha's 32 images, was not lured by a lady anymore, developed all the great virtues and became the 2<sup>nd</sup> Patriarch of Buddhism. When a man meets a woman, he can think

himself as a woman. When a woman meets a man, she can think herself as a man. This is a good way to prevent a sexual act. If we concentrate on cultivating, it can change our spirit and mind. For instance, before I lived a secluded life, I also thought of and dreamed of a love story and marriage. After I took refuge, I recited Amitahba and sutra and practiced Buddhism day and night. When I dreamed, I dreamed of reciting and Buddhism. Onions, garlic and spices are no good, because they increase our desires. Please avoid such spice and food which will help our cultivation. When we cultivate, we can not depend on anybody else. For example, Amada was a cousin of Buddha, he had to cultivate himself. If we concentrate on cultivating diligently, it is possible to develop good virtues and reach a high level of enlightenment. We can eventually reach ten levels of enlightenment through ten believes, ten precepts, ten practices, ten salutes and repentances. Though 25 ways of Bodhisattvas's cultivations are different, they are all good. The beginner may learn from 24<sup>th</sup> Bodhisattvas Dashize's way of cultivation or 25<sup>th</sup> Bodhisattvas Guanyin's way of cultivation. If Amitahba resigned in the western paradise, Guanyin would replace him in the western paradise. Similarly, if Guanyin resigned, Dashize would replace her. Bodhisattvas Dashize used reciting "Amitahba" to reach the enlightenment. If we can learn from Dashize to concentrate reciting "Amitahba" to catch six consciousnesses just like a child thinking of the mother day by day, month by month, year by year, then we will cultivate successfully and meet the real Buddha eventually. If we learn from Guanyin from hearing, thinking, cultivating, accept all the Bodhisattvas's spirit in the high level and sympathize all the animals in the low level, then we can eventually reach the Buddha's land.

方纔有幾位詢問楞嚴經意旨。茲乘大眾在此機緣。略說概要。此經原有百卷。而此土所譯。只有十卷。初四卷示見道。第五第六卷示修行。第八地九卷漸次證果。最後並說陰魔妄想。阿難尊者為眾生示現詢問。而佛首明諸法所生。惟心所現。因阿難尊者見佛三十二相。如紫金光聚。心生愛樂。佛問其將何所見。阿難尊者白佛言。用我心目。由目觀見。如來勝相。佛問心目何在。阿難尊者白佛言。縱觀如來。青蓮華眼。亦在佛面。我見觀此浮根四塵。只在我面。如是識心。實居身內。佛告心不在內。不在外。亦不在中間。若一切無著。亦無是處。諸修行人。不能得成無上菩提。皆由不知二種根本。一者無始生死根本。則汝今者與諸眾生用攀緣心為自性者。二者無始菩提涅槃。元清淨體。則汝今者識精元明。能生諸緣。緣所遺者。由諸眾生遺此本明。雖終日行而不自覺。枉入諸趣。應知諸法所生。惟心所現。一切因果世界微塵。因心成體。而一切眾生不成菩薩。皆由客塵煩惱所誤。色聲香味觸法為六塵。眼耳鼻舌身意為六根。是為十二處。加眼識耳識鼻識舌識身識意識六識為十八界。另地水火風為四大。再加空大見大識大為七大。合為二十五數。由二十五位賢聖分別自陳宿因。入道途徑。至於六道輪迴。姪為基本。三界流轉。愛為之基。阿難尊者為眾生示現。歷劫修行。幾難免摩登伽之難。所以示罪障之中。姪為首要。因姪損體。遂殺生補養。而盜妄等惡。亦隨之而生。阿難見了如來三十二相。如紫光金聚。對摩登伽之美色。而不愛樂。男子見了女子。或可觀想自己亦作女子。女子見了男子。或可觀想自己亦作男子。以杜妄想。自己終日思想。卻可轉移心境。譬如我從前幼時再加垂辮髮。衣俗衣。終日所觸所想無非俗事。晚上做夢。無非姻親眷屬。種種俗事。後來出家所做所思。不出佛事。晚上做夢。亦不外念佛等等。至蔥蒜五辛。不可進食。未免助長慾念。所謂除其助因。修其正性。更加精勤增進。自能漸次成就。更須自己勤奮。不可依賴他人。阿難尊者以王子佛弟。捨其富貴。出家從佛。希望佛一援手。即得超登果位。詎知仍需自己悟修。不能假借。不過吾人如能發心勤修勿怠。則由十信十住十行十迴向以至十地。亦自得步步進益。以達等覺妙覺。而三界七趣。無非幻妄所現。原本不出一心。即一切諸佛

之妙明覺性。亦不出一心。是以心佛眾生。三無差別。香嚴童子可說即是我鼻。憍梵菩薩可說即是我舌。二十五位聖賢因地。雖有不同。雖有不同。修悟並無優劣。不過現在時機。發心初學。似以第二十四之大勢至菩薩。及第二十五之觀世音菩薩。二種用功方法。或更相宜。觀世音菩薩於阿彌陀佛退位時。補佛位。而大勢至菩薩。則候觀世音菩薩退位時。補佛位。大勢至菩薩以念佛圓通。吾人學習應念阿彌陀佛。都攝六根。淨念相繼。得三摩地。因十方如來。憐念眾生。如母憶子。若子逃逝。雖憶何為。子若憶母。如母憶時。母子歷生。不相違遠。若眾生心。憶佛念佛。現前當來。必定見佛。至於觀世音菩薩。則從聞思修。入三摩地。上合十方諸佛。同一慈力。下合六道眾生。同一悲仰。若遇男子樂持五戒。則於彼前。現男子身。而為說法。令其成就。若有女子五戒自居。則於彼前現女子身而為說法。令其成就。如是或現天人。或現聲聞緣覺以至佛身。所謂三十二應。以及十四無畏。四不思議。經無量劫。度無量眾生。眾生無盡。諸位善體斯意可也。

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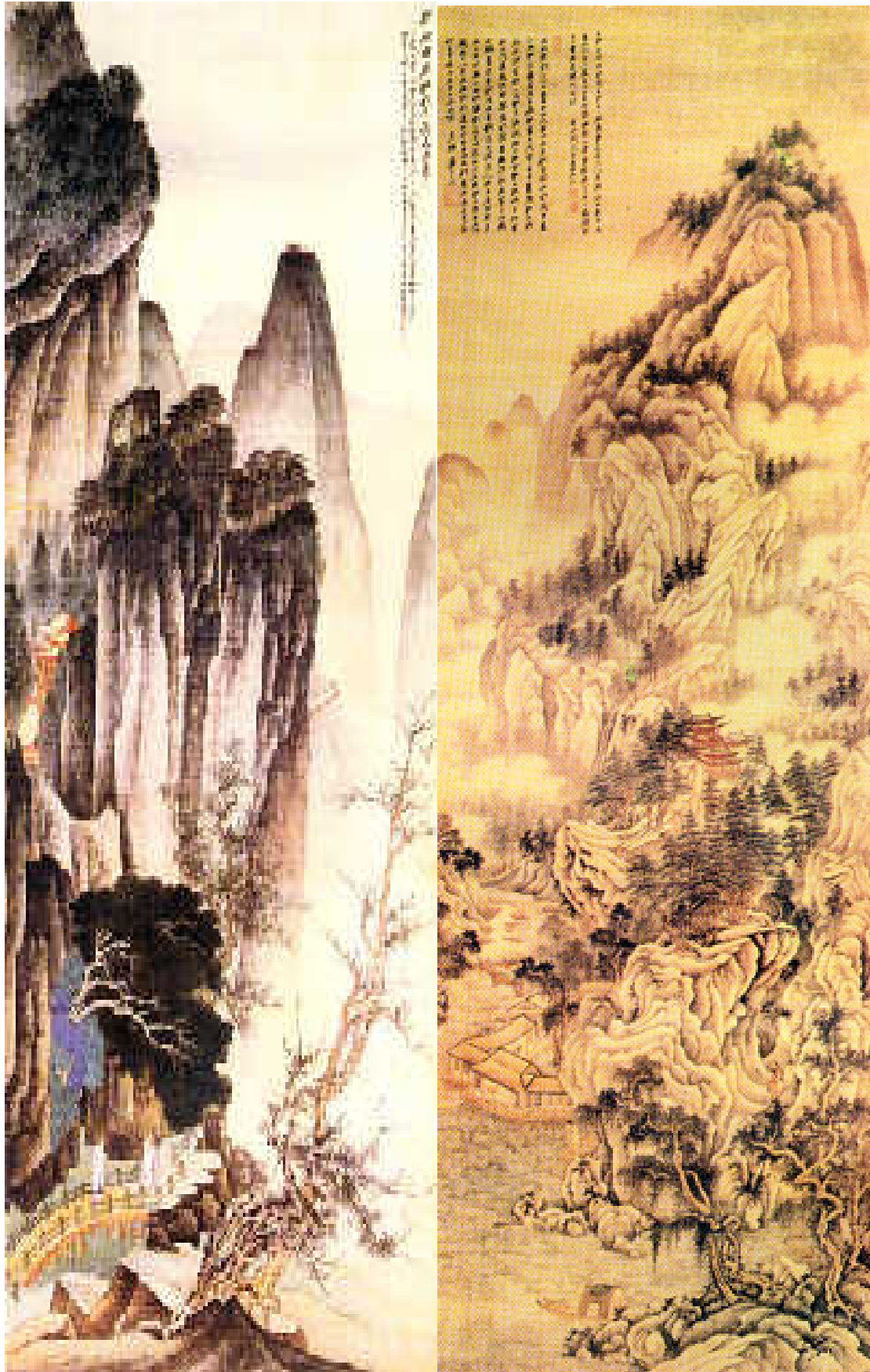
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