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我國絲業的前瞻.

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第一集

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發刊辭

孟治

自抗戰軍興，我政府提倡精神總動員運動，目的在求動員全民族之「人力」「物力」，謀抗暴敵而興國家。所謂「物力」者，當指一切物產資源而言，所謂「人力」者，當指吾人之體力及智力而言。在過去五年之偉大抗戰中，吾人雖動員所有物力，但我國資源不足，是為人所共知之事實，其所以能堅持此艱苦之長期抗戰者，實賴人力之堅強，不論在前線或後方，吾人動員「人力」之功效，遠在動員「物力」之上，自不待言。丁茲抗戰步入第六年代，國際局勢日趨緊張之際，吾人願發起「知識動員」之運動。

一國家文明之高低，一民族文化之盛衰，端視其知識力量之強弱。吾中華民族，今日能矗立於列強之中而維持世界惟一獨立古國之地位者，完全因吾人有悠久之文明歷史。而吾中華民國，今日能粉碎日寇侵略迷夢仍能繼續擊退強敵者，亦完全因吾人有淵深文化背景。

現代戰爭，並非純武力之戰爭，一切技術或行政之強弱，皆足影響戰事之勝敗。所謂「效率」二字，在戰爭上實重於「武力」。觀乎美國在珍珠港慘遭日寇突擊之結果，可知空憑武力之不足為恃。武力之動員，首應配合知識動員，其理至簡。尤有進者，自第二次世界大戰爆發後，各國紛紛利用新武器，此種新武器，完全由科學家在試驗室內動員而生，是故知識動員在戰爭期間可謂重要已極矣。

五年來，在祖國之前線後方，知識份子均有偉大之成就。知識階級自抗戰來，身受最大之苦痛，作最艱難之工作，茲不贅論。今願專向我留美同學略申知識動員之重要：

中國學生來美留學，已有七十年之歷史，其中最盛時期，為自一九〇九年至一九三〇年，彼時之留美學生，多在大學本部攻讀，

在研究院者較少。前者態度，較為自由，學生運動，亦甚發達。出版方面，有年刊月刊等，頗呈蓬勃之氣。迨至一九二九年後，留美學生之生活為之一變，來美學生多入研究院，讀書空氣日趨濃厚，而因時間與金錢之限制，將精力全部埋諸書城，對於課外各種運動，漸趨冷淡，盛極一時之北美學生聯合會，亦於一九三〇年停止活動。

自我抗戰後，一般留學生均感自身對祖國之責任，較前倍增，抗戰期內及大戰後之種種工作，頓成目前一大問題，為國捐軀，身臨疆場者，自然功績宏偉，但戰期及戰後之各種建設問題，亦不容忽視，我留美學生，學有專長，如能作學術討論，問題研究，以及產生公正輿論，互相鼓勵，互相觀摩，則其貢獻於祖國者，當更宏大。念美國各業公會，所定標準極為嚴格，其律師公會，勢力極大，每次各地選舉法官，不論民主黨或共和黨之候選人，如係該會所反對者，幾無法當選。又如美國醫士公會，勢力亦大，該會不贊同之醫生，頗難隨意行醫，公共輿論，不但提高職業地位，又促進私人修養之水準，吾人實不能不仿效之。

再者，我留美同學，研究科目，多屬專門，如非互相交換心得，難收分工合作之效。而多數同學，遠離祖國有年，長期閉門讀書，不免與國內情形隔閡，若不隨時研討問題，將失學以致用之旨。吾輩留美同學應立即起而舉行與建國有關之研討，作我留學界之知識動員。

我政府有鑒於此，於上月成立「留美中國學生戰時學術計劃委員會」，專為留美學生設計戰時在學術方面各種問題。並自五月起主辦學術建國討論會，哈佛大學與普渡大學生起而響應，密西根及明尼蘇達大學亦組織學術建國討論會。西岸之中國科學社及中國工程師學會，亦均起而聯絡。舊金山少年中國報，更一再著論，商討學術建國問題，可見旅美文化界對於學術建國問題，極為注目。

「留美中國學生戰時學術計劃委員會」，為適應此種重要思潮起見，特編行不定期刊，以薈集旅美文化界研究之精粹，備供祖國建

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設之參考。其長期巨著，編行叢書，第一冊 China's Health Problems 業于七月一日出版，其短篇著論編行叢刊，今日創刊第一集。今後兩種刊物，均當繼續問世。

關於叢刊內容，完全注重於直接或間接有關祖國建設問題之研討。除請旅美諸位學者撰述專論外，同時，亦為留美同學交換意見之園地。但建國巨業，責任重大，門類及工作，均極繁多，尙有待旅美文化界之總動員！抗戰五載，國事日急，吾人既不能流血驅場，則惟有運用智力，作有永久性之建國準備，敬希海外先進與留美同學對於本刊多加賜教與愛護焉！

中國戰後工業化問題

方顯廷著

胡福源譯

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本文目的在對中國戰後之工業化所將引起之各種問題，作一概論。中國有何種資源……(包括礦產，農產，及人力)……使其能進行工業化？發展何項工業才是於她最有利的？我們有何種保證而相信中國有能力進行此工業化計劃？更重要的是中國在工業化過程中的根本需要是甚麼？聯盟國家如何能於戰後幫助中國之工業化計劃？本文對此種種問題，不擬提供最後之答案，只指出有關之各點，冀以引起各方面對此問題作進一步之討論。

一、中國的資源

我們首先討論中國……(包括東北三省)……之資源問題。煤，鐵，煤油三者為工業化之基本礦產。中國煤之蘊藏，約計有二千五百億噸。以中國在戰前之消耗率來算，此大量煤之蘊藏，足供其一萬年之用。鐵之蘊藏約為六百至七百億噸，足供其六百至七百年之用。唯中國缺少煤油，其貯藏量據估計只能及美國所有者百分之一。「白煤」中國亦很少，因為在中國之水力資源，最多約為二千萬至四千萬馬力，佔全世界所有之百分五至百分十。

中國之農業資源……(包括食料與工業原料)……雖不是富有，但足以自給。新的農產物可以隨時多加種植以供工業上之需要。例

如原棉一項；在第一次世界大戰後，中國遭遇嚴重的原棉不足問題。但不到二十年，中國的原棉生產量迅速地增加到將近能自給的地步。在一九二五到一九二九年間，每年棉產量為四百五十萬公担。而在戰前之一九三六到一九三七年間之產量增至八百七十萬公担。所有工業農產品之主要缺點，為缺乏標準之生產與適量之生產。因此任何製造家在中國須加倍甚至三倍購買各項原料，方能適當地獲得合乎生產條件所需要的數量。近年來政府用統制方法以改良農產品質和各處利用合作組織，以推廣改良農產種子的辦法，已發生很大的成效。將逐漸把以往之中國農業上之無組織及生產不良之各種缺點清除。

中國的人力供應是無窮盡的。以現在的自然增加率來算，於六五年後，中國的人口將加倍。但人力(Man Power)不就是工業上所需要的勞工(Industrial Labor Manpower)。中國今日在一方面有四萬萬五千萬的人民，但在另一方面則遭受工業勞工供應不足的痛苦。中國工人必須先施以技能和紀律之訓練，使彼等對工廠生活有新的見解，方足勝任新工業上的職務。

二、工業化的範圍

中國戰後工業化之主要範圍為交通與公用事業，農業及工業。

(一)中國必先建設現代之交通制度；此不特為開發工業資源之所必需，且亦有助於全國統一局面之實現。大陸國家如中國的，鐵路的建築是戰後任何工業化計劃中之最首要一項。中國鐵路……(包括東三省在內)……在戰事發生前，每百萬人口只有四十五公里，較之英屬印度每百萬人口有二百二十公里，日本本部之每萬人口有三百四十九公里，俄國之五百一十一公里，英國之七百五十四公里，德國之八百八十四公里，法國之一千零四公里，美國之三千二百公里，相差實太遠。其次為航運問題。中國有海岸線二千一百五十里，及世界上之兩首要河流……(黃河長二千五百里，揚子江長三千二百里)……但中國輪船登記噸數只有九十萬噸，較之美國者一千四百六十萬噸，實太不夠用了。如果美國之造船程序在一九四二

年爲八百萬噸，在一九四三年爲一千萬噸能夠完成，則戰後除去在戰時損失者外，所存之噸數必大。此大量之船隻，在適當的合作條件之下，可轉而供戰後中國之用。其他如公路，運河，內地水道，及航立運輸和共用事業如電燈與電力，自來水，煤氣廠及埠內電車路等，皆屬於發展中國現代交通制度程序中之一部分，一如孫中山先生所條列者。

(二)中國在未進行工業化以前，必先改良農業。五分之四的中國人民，係倚靠農業爲生。如果中國的廣大民衆的生活常延滯於困苦環境中，且因天災，戰禍，流行病或其他的災禍之威脅，人口增加率遭受阻礙，國內市場隨之減縮，則工業是無由發展的。因爲國內的市場是靠繁盛的農村爲基礎的。

改良中國農業方法可從三方面進行：第一應先設法減少循環的天旱與水災，使農業生產歸於穩定。大規模之造林，土壤及河流之保護，灌溉運河及堤壩之建築等，皆爲穩定農業生產之初步工作。前全國經濟委員會及全國建設委員會對此項工作進行，已收很大的成功。第二爲以更善的方法利用已耕土地及充分的使用可耕未耕地，使農產品增加。此種可耕未耕地，約計有三千五百萬英畝。科學化農業在中國已試辦。如改良種子，防止昆蟲及傳染病症，應用化學肥料及科學的農場管理等皆獲得相當的成效。條田制度如能廢除，以前的田界，即可變爲耕地。同時便利機器使用，使農場之面積更趨合理，減少灌溉困難。並增加生產。倘若灌溉，資本，肥料及防止土壤腐蝕各問題能夠解決，則用各種方法開墾及移植新的農產物於適用「旱耕」(Drying Farming)的地區，亦可增加農產。第三乃如前段所說之從普遍合作運動中使農產物標準化。

(三)關於中國戰後工業之發展可有四類。第一類爲消費品工業；如衣服，食物及其他日用品。在過去之數十年中，許多中國的工業建設，是屬於此一類的，此類工業在中國，有很多特別的地方。如發展之規模有伸縮性，國內市場之利便，及不受中國資本缺乏之影響，因此類工業之發展，倚靠地方上的工人及原料較倚靠資本來

得大。第二類爲重工業；包括動力工業，鋼鐵，及其他金屬工業，飛機，汽車，造船，化學等工業。此類工業需要大量之外資和機器之輸入。中國此時對此類工業之前途，是最不一定的。因爲其發展如何，要看各工業先進國家將來對中國所需之資本，技術和管理人員，甚至初期之原料如鋼鐵等之供應如何而定。美國目前之龐大戰時生產計劃，生產量之目標在一九四三年爲一十二萬五千架飛機，七萬五千架坦克車，三萬五千尊高射砲，及一千萬噸之船隻。此大規模之戰時生產量，在戰事完後，將發生如何調整而使其適於平時需要之極大困難問題。然苟中美兩國能在互利的條件之下，待戰事完後，把美國用於戰時生產之機器，一部運往中國，則美國可減輕此種困難問題，同時亦大有助於中國之重工業發展。第三類爲出口品工業；出口品可償還戰後由外國借入用以發展工業之外債本息。屬於此類工業者，有四種可以發展：(甲)金屬礦產如鎢，錒及錫等。(乙)農產品如桐油，植物油，茶，絲，生皮，蛋及蛋製品等。(丙)手工業品及藝術品等。(丁)『遊覽』工業……(招引外國遊客到中國遊覽……譯者註)。第四類爲製造『資本財』(Capital Goods)工業。此類工業是在製造機器及工具用以生產者。在過去之八十年中，因中國政府及工業家缺乏遠大眼光和計劃，至使中國工業要長期的倚靠工業化的國家供給其『資本財』。目前的戰事已使中國之工業家深感到發展『資本財』工業之重要。：

三、戰時中國工業化之成就

四年半來之抗戰，使中國深感工業化之必要。此次戰爭，爲中國第一次遭遇需用現代化戰爭方法以抵抗強悍的工業化國家之侵略。在此抗戰過程中，中國戰時工業化的進行，頗多足記。例如交通及公用事業，農業及工業等發展皆是。此種成績，足以證實中國雖在極困難的環境中能有能力進行工業化的計劃。

- (一)在戰事發生後，因軍事上與運輸上的需要，使中國建築了許多的公路，伸展到各地區。此等地區，有的以前是罕有人類到達的。著名的滇緬路為其中之一例，由重慶至仰光途程為三千三百六十公里，共分三大段。由重慶至昆明為一段，由昆明至滇緬邊界之臘戍為一段，由臘戍至仰光為一段。每段之路程長約相等。雲南下關縣至臘戍間之一段為滇緬路正段，路長為五百五十三公里。於一九三七至一九三九年間，動員人夫十五萬築成。其他尚有中蘇公路，長三千五百一十公里，乃世界上最長公路之一。川滇公路，長一千一百九十三公里，此路由重慶經貴陽達昆明。
- (二)中國戰時之農業發展，未及交通事業及工業方面之迅速。因為農業係分散在全國各處的，政府對之統制與管理較難。但是戰時的民糧與軍糧皆極重要；同時許多戰時應與工業極需原料，對外之貨物輸出數量要繼續維持，以償還美俄等國之借款。凡此種種，極須後方之農產增加。在此方面工作收穫之成績頗為可觀，其最要者如在中國西南與西北各地所舉辦之農田水利工程。此項農田水利工程築成後足供灌溉二百萬畝田地之用。又如開墾數百萬畝荒地以安置難民，以穀類替代以往之鴉片種植，改良種子使生產收穫加增百分之三十到五十，普遍的農村合作社組織，以及由蔣委員長親自提倡之四萬萬圓(華幣)之政府農貸計劃等皆是。
- (三)中國在此戰時之工業發展都屬於下列三種：即重工業輕工業及小型工業是。在重工業方面；於戰事未發生以前，全國資源委員會在湖南，湖北及江西三省，進行三年(一九三六至一九三九)之工業建設計劃。此計劃擬集資二萬萬三千萬華幣，內定三分之一由政府撥給，三分之二借用外資，如果此『三年計劃』得全般完成，則工業生產量足供給中國所需要之鋼，銅，煤油之半數，及中國所需要之鉛，錫，電器品，鎢，鎳，鐵，煤及機器，工具，硫酸之全數。此計劃在一九

三六年至三七年間之第一年，政府撥給一千萬華幣，第二年則加倍此數。但自戰事爆發後，有一部工作被迫廢棄。其他則遷入內地繼續進行。於一九四一年，此委員會在內地直屬有七十一個之工業單位。在此七十一個單位中，二十九個屬工業的，二十二個屬鑛業的，二十個屬電氣工程的。

中國之輕工業屬於私人所經營者居多。在經濟部之「工業調整處」之金融及技術鼓勵與援助下，發展非常之速。戰事爆發後，「工業調整處」之第一責任是如何用數千隻民船及很少的汽船把那數百家散在上海與無錫間之工廠遷入漢口，然後再由漢口搬入內地。到一九四〇年尾，被搬入內地之工廠為數達四百五十家。機器重量為一十一萬六千三百七十六噸。此等工廠，現在內地重慶，樂山，昆明，及其他主要工業地區，重新建立。除機器與各項設備之搬運外，「工業調整處」尚津貼費用，把一萬二千之技工，移遷到後方。尚有三萬名由別方面資助遷入後方者。在內地重建之工廠，在一九四〇年冬，有一千三百五十四家，出產品價值達四十七億華幣。其中有十八億屬紡織工業，十四億屬化學工業，其餘十五億屬其他各種工業。

在「中國工業合作社」努力之下，中國小型工業之發展，已奠定其基礎了。「工合社」自一九三八年秋成立後，工作推進甚速。到一九四一年三月三十一日止，所成立之合作社，已有一千六百六十四個，會員有二萬一千一百九十九人，每月出品價值八百萬圓華幣，貨品之種類有一百一十四樣。

四、戰後中國工業化之資本與管理問題

中國之資源，工業化之範圍，及戰時工業化發展之情形，已在上列各段中略為指出。現在所欲討論者乃戰後中國工業化所需要者為何？此種需要，可總括為二項：即資本與管理。

工業化之先決條件為資本；此乃各工業化國家曾經實驗的事實。中國在戰前工業投資之總值約為三十八億華幣。而此數目中四分

之三種外資。中國資金缺乏，足以說明在過去八十年中中國工業建設未能得到顯著成就之原因。目前之戰事，更把中國僅有的貧弱資本力量摧毀。故戰事停止後，中國之工業發展，將遭遇很嚴重的資金缺乏問題。然則中國有何辦法可獲得資本？此問題可從三方面解決：即利用外資，利用華僑資本及中國國內資本是。利用外資的辦法，有兩個問題先要顧到。第一是屬於政治的；將來外人在華治外法權取消以後，外國的投資者，是否願意投資於中國，將先視中國政府能否有力維持國內之統一與和平而定。第二是屬於經濟的；第一次大戰後，世界各國鬧着生產過剩問題，故孫中山先生於一九二〇年鼓吹國際開發中國，意即利用過剩之各國過剩生產以助中國發展工業。此次大戰過後，各國之過剩工業生產量可用以復興本國或投資外國。以美國情形而論，美國的財力雖將因戰事而被大量消耗，但無論如何，美國在戰後尚有充分的實力向外投資。而美國之投資中國是極有可能的。因為工業化的中國將為美國之有力的聯盟國，同時亦為太平洋對岸之民主集團堡壘。在目前戰爭期間，中國已得到英，美，蘇，法及捷克等國之借款十餘億美元，深望同盟國於戰後能繼續於金融及技術上幫助中國。

海外華僑為數約一千萬。在戰事未發生前，華僑匯回中國之款，每年達一萬萬美圓，從此數目而觀。華僑之經濟能力足為資本來源之一。近年雖因戰事影響，但華僑匯款不特不見減少，反增加數量。據可靠之統計數目，華僑匯回中國之款在一九三六年為一萬萬一千萬美圓。一九三七年為一萬萬五千萬美圓。一九三八年為一萬萬三千五百萬美圓。一九三九年為二萬萬二千五百萬美圓。一九四零年為一萬萬五千萬美圓。一九三九與一九四零年間之華僑匯款數目特大因為此項匯款之一部屬於中國之逃往國外資本復向中國匯回者。此顯係日本勢力伸張到香港，安南，泰國及星嘉坡後所受影響之結果。將來的情形，當然是不容樂觀的。戰事延及南洋各地後，華僑經濟力量將被摧毀。即在太平洋戰事爆發前，華僑居留地之各政府曾多方禁止華僑資本輸出及很少予以有利投資之機會。凡此種種，皆足以減滅華僑在戰後中國工業化投資之前途。

在中國本國內籌集資本方法；可包括長期放款，發行公債，擴充信用及設法使戰時逃資之復回中國等。近年來中國之銀行制度及信用組織，益見集中。相信上述之各種方法，在戰後必能實行而獲得成功。中國各銀行業務向偏重於商業與投機性質。主要的為短期商業放款，購買政府公債及地產囤聚金銀及貨物等的投機事業。故戰後中國的銀行應以工業，農業及其他經濟事業上之長期放款為其主要工作。其次為發行公債；在北京政府時代，都靠借外債以補財政之不足。但自從一九二七年國民政府成立後，內國公債漸見重要。中國的公債數目，與他國比較，為數甚微。中國戰爭勝利後，國內公債發行數量，必能大量地增加。關於信用制度之擴充，最重要的辦法為上述之增發公債。其他尚有兩辦法具有同樣的作用。一為票據市場之設立，另一為土地陳報之舉辦，使田契得為土地放款之抵押。最後中國現存貯在外國之戰時逃資，數值約為美國三萬萬至四萬萬。此項逃資在於有利益投資機會時，將復回中國。在必要時。可由政府指定此項逃資為戰後發展工業之用，而予此等投資者有提支利息之權。

技術與管理人材之需要，亦不亞於資本。在中國早年工業化，此項人材，有一部由投資國家所供給。以後則有買辦，留學生，華僑，外國專家及國內大學畢業生之興起，但猶極感不足。在戰後中國進行大規模工業化時，中國須加倍在國內大學，工廠和在國外訓練此項技術人員，以應需要。同時在初期借用外國之技術與管理人員正和要借用外國之機器與原料一樣重要。

我國絲業的前瞻

方柏容

方柏容 一九二八年畢業於山東紡織專科學校。在德意兩國研究紡織多年。一九三七年在意大利 Royal Polytechnic of Milan 得博士學位，最近由歐抵美，研究實業。

在一九四〇年中，根據統計，美國的婦女們穿掉五萬萬雙絲襪。內中百分之九十幾乎是來自日本的天然絲做成的，其餘的百分之十是「奈龍」Nylon。在這百分之九十以上的絲襪原料，湊巧又合到日本輸入美國生絲原料的百分之九十。按日本在一九四〇年對美輸出生絲原料共值一萬〇七百萬美元，百分之九十就是九千六百萬美元。以美國婦女約四千萬估計，平均那一年每人輸入日本絲費二元五角美金。以中國國幣每二十元合一美元約計，則每人應負擔五十元。這筆消費為數誠足驚人了！

一九三九年的年底，美國新發明「奈龍」成功，作成絲襪替代品初次應市。最初美國的婦女們都和剛見了人造絲織品上市時的情況一樣不敢嘗試。經試用後據說比天然的絲襪還要耐穿，才漸漸地普遍起來。在最近的兩年來奈龍有了技術上的改進，只除掉富有階級仍有那種心理上的猶豫，以為那是人工製成的東西，不及天然絲名貴，不十分樂意外，幾乎是人人必不可少的日用品了。所以當日美關係緊張，美國敢毅然在去年的秋天停止向日本購買生絲而無恐，說：「縱然讓天皇之子的蠶兒爛在桑樹上，也與美國人無關了！」

生絲除用作婦女絲襪以外，在軍用品中佔的地位也很重要。例如近年發明的降落傘，消耗量也非常大。又如大炮上用的子彈衣，

學從建國叢刊

也需要生絲，藉以利用他的急速蒸餾性，和不遺留殘餘灰渣在炮管中的優點，但經過種種實驗和改良之後，他們已能應用棉紗，羊毛或者安果拉的羊毛布替代了，生絲的用處僅在乎做繩索而已！

我們姑不論生絲的價值是否僅止乎此，生絲的用途自從奈龍出世後遭受了空前的打擊是不成問題的，不單是奈龍而已，預料不久的將來會有比奈龍更好的替代品要出來，那末生絲好比兵燹之後又將遇盜劫了！

生絲從此要在美國市場絕跡的話很難說，雖然美國有化學上新發明用作替代，可是當人造絲發明成功後，生絲也有過同樣的恐慌，至今彼此依然是並行不悖，我們正可以不必替真絲擔憂慮，却鬆懈了對事業前途的努力。日美戰爭尙只在劍拔弓張之時，美國人民對日本的仇恨却已深如切骨，預料三五年內日絲必難重見於市場，但是美國人還不會忘情真絲的好處那樣快，却也可以預言的，因為美國一方專儘量在找着化學上的替代品來彌補對日本的損失，同時也屢屢試驗着在國內飼蠶製絲，不過很少成績罷了。據康乃爾大學教授霍夫曼氏 M. B. Hoffman 的談話說，他們曾經試驗着用桑樹，山梅花 Mock Orange 和其他多種樹葉去飼蠶，成績很壞，可以說完全沒有。據說他們已用了全力去試驗，多年來並且也從中國買了桑樹來試驗，除得到很少的絲量外，大部份是失敗的。又說在北部產的蠶不能耐寒，一遇冬寒便凍死；在南方的蠶不吐絲，所以經濟不富裕的經營者都因此而破產。霍教授以為在日本與中國的氣候宜於飼蠶，並且那裏有便宜的人工，由上面的情形看來，美國只是不能得到生絲，否則仍是仍樂意發展的。

我們知道日本絲的市場是美國，美國與海外的生絲貿易幾乎全以日本為對象，在一九一九年以前中國山東河南的絲綢曾經在這裏以及歐洲有過十幾年黃金時代的歷史，可是和現在的絲襪用途根本毫無關係。以後中國生絲也在這裏插足，只因品質惡劣，美國的製造廠家以及婦女們都視若敝屣。日本絲品質高超，合乎穿着標準，所以絲市場完全被日本霸佔到了現在。在現今生絲遇着空前浩劫時

，一般經營絲業的或者關心祖國絲業的人士必然會有空前的憂慮的：因為我們一向認絲，茶，和桐油為對外出口的三大宗，尤以絲為中國有名特產之一，焉得不有唇亡齒寒之懼呢！

現在，我們且回顧一下中國最近幾年裏，棉花絲綢對外貿易的情形，茲列表如下：

	民國二十七年	二十八年	二十九年
棉花	101,003,000元	8,654,000元	8,462,000元
絲	37,700,000	142,352,000	280,940,000
綢緞	3,846,000	6,267,000	12,820,000
繭綢	4,637,000	5,466,000	4,699,000
總計	147,186,000元	162,739,000元	306,921,000元

就上表看來，絲的對外貿易確實是與年俱增，這是中國絲因質地太差，被日本絲擠出市場之後力加改革的成績。中國絲的最大市場當然是美國，歐洲次之。統計上的綢緞大都是銷在香港和南洋羣島新嘉坡等華僑聚集之所，可以說仍舊是供給國人應用的。至於繭綢則有許多是銷給外人的。以上的統計湊巧在祖國抗戰時期中，國幣價格時時降落。如以平均值每十五元合美金一元估計，則民國二十九年中國絲對外貿易值約合一千九百二十萬美元（民二十八年的輸出平均合以上的半數，二十七年則僅僅八分之一），比起同時日本對美輸出的一萬〇七百萬美元，簡直是小巫之見大巫了。這正是因為中國的絲雖然在名義上銷到外國，實際上能行銷的地方非常有限，大部分市場都被日絲佔住。所以假如人造原料猖獗，擺毒生絲銷路，中國在海外的貿易至多也不過損失二千萬美元，假如我們仍能保持國內的市場的話。

現在，我們再來看看中國在同一時期由國外輸入的原料與成品如下：

	民國二十七年	二十八年	二十九年
棉及其製品	42,876,000元	199,973,000元	367,091,000元
絲及製品 (包括人造絲)	17,831,000	25,862,000	42,149,000
毛及製品	18,889,000	26,170,000	34,197,000
總計	79,596,000元	252,005,000元	443,437,000元

照統計看來外國輸入中國的衣服原料在民二十九年約合美金二千九百五十二萬元，比中國輸出的棉，絲，綢緞和繭綢的二千萬美金還要入超到一千萬美元。如果我們設想華絲在海外的市場因人造原料的原故失去銷路，國內的絲業如保持同一生產量的話，則生絲必致發生過剩情形，到那時市價必致跌落。原來銷在海外的絲將轉向國內銷售，在理論上講應該是不再會再向外國購買原料的。但是事實上不會那樣簡單。因為一，中國的百分之七八十農工羣衆，都因經濟能力，地位或習慣的關係不慣穿絲綢織品，反以棉織品爲主。二，人造絲織品比真絲織品便宜，並且將來「奈龍」等原料也會到中國來的。三，受過歐美國文明洗禮的人喜權穿外國貨毛織品。四，日本在美國失去的銷路會向中國廉價傾銷。有此數因，華絲要受打擊當在意料之中。

據作者個人愚見，中國絲業縱然要受很大的打擊，然而並非是致命的打擊。我們不單是應該設法救護絲業的危運，並且我們認爲前途的希望還是很大，絲毫不值得灰心失望，只在乎經營事業的人有否決心努力而已。我們現在且談談(一)中國絲業在貿易上之地位，(二)國人對於絲業應有的態度，而後再略略的談談(三)方法問題。

(一) 中國絲業在貿易上之地位

誰都知道我國的蠶業是遍及全國的。黃河流域爲蠶業發祥地，長江和珠江流域是現在蠶絲業的中心。分布範圍之廣，北至遼甯，南至南海，西至新疆，差不多都有蠶絲業的痕跡。現今蠶絲業最繁

盛的地方(截至抗戰未起地方未種蠶繭時)首推江，浙，川，廣，四省。江浙一帶，多產白繭，每年有春繭，夏繭和秋繭三次收成。粵桂一帶因氣候關係產多化性繭，每年收成有八次之多。次則爲鄂，魯，皖，豫四省。豫魯諸省多產柞蠶繭，可以說是特殊區域。至於桑田面積，養蠶農民以及全國每年的產絲量，因我們向來沒人做統計，所以無從知道。但據以前農商部的調查，桑田面積約佔五百八十九萬畝，蠶戶三百〇八萬七千餘家，佔全國農民戶數百分之五。六。如每戶以平均五，六人計算，則有蠶的農民大概有一千七百萬人，再加上其他製種，繅絲，織綢業和工商人等共合計有二千萬人。又柞蠶絲業的人口約爲四百萬人。所以全國倚絲業生活的人可以說有二千四百萬。如根據當時的市價計算二十九年出口的絲大概在七萬到八萬担左右。如平均以每四蠶戶出絲一担計，則全國每年的絲量應該在七十到八十萬担，那末出口絲僅佔全國絲量的十分之一。在國外失去銷路的絲，僅值二千萬美元，可是得增加三百四十萬依蠶絲謀生的人失業，這是一個非常嚴重的問題，所以我們應該努力消滅這危機。

(二) 國人對於絲業應有的態度

作者認爲中國人在中國應該穿中國裝。歐美諸國的人民都穿西裝，並不是因爲西裝比世界上其他各國的裝束特別好看些，乃是因爲他們除西裝以外並沒有其他裝束。所以西裝成爲他們的便裝，日常裝。此外非洲各國有非洲各國的裝束，(就是歐洲還有不以西裝爲便裝的)阿剌伯人有阿剌伯人的裝束，印度人有印度人的裝束，推而至於亞洲的，日本也有日本人的裝束。爲什麼中國人在中國不以中裝爲榮反以穿西裝爲漂亮呢？說西裝方便，中國的短裝何嘗不方便？說西裝美觀，講究的中裝何嘗醜？並且美的標準能因地而異，誰也不能說誰國的裝束一定比別國的裝束要美些。說西裝合理嗎？老實說，嚴格地講沒有一種衣服是完全合理的，也沒有那一種衣服是完全不合理的。反過來中國人堅持在中國穿中國裝是中國人愛國意識的表現，這種精神是國家的至寶，不僅不應該非薄，並且要竭力提倡。戰前的中國各大都市裏的地主買辦階級公子哥兒以及上

學術建國叢刊

等「自相人」等等竟買了外國呢絨做中裝，雜視闊步，炫耀兼前，可以說是中國人對自己的最大侮辱！中國人到外國來穿西裝，那是尊重外國風俗習慣，為什麼外國人到中國來可以不穿中裝而中國人反恬不以爲怪呢？在這裏且引一件小小的故事。喜馬拉雅山發現人，瑞典探險家斯文赫定領導的西北科學考察團，在未成立以前曾請求中國政府許可，訂立合同。那時中國政府的代表是已故北大教授劉半農先生。劉先生準備了中英文本的合同各一份請斯氏先在中文本上簽字。斯氏不允，只肯在英文本上簽字。劉先生很是不悅，乃嚴正地向斯氏說：「閣下既要在中國考察，與中國政府簽訂合同，應該尊重中國政府的意志。中國有中國人的文字，爲何拒絕在中文本上簽字，反只允簽英文本合同呢？」彼此面面相覷者久之。劉先生對斯氏先簽中文本合同事始終不放棄。最後斯氏只得如命辦理。這手續還是中國人與外人簽訂合同用中文本簽字的第一次！劉先生雖爲文人，可是意志堅強，從未爲惡勢力所屈。自法回國後就不再穿西裝，不獨如此，連罩在長衫裏面的西裝袴都不穿！我們生爲中國公民，在中國不穿中裝，專替外國人做「捐客」，怎樣對得起我們的國家？

除在國家意識的觀點上講，我們應該穿中裝外——國貨的中裝，而非外國貨的中裝——在形式與衛生上我們也該穿中國裝。中國裝寬大，柔輦，翩翩的風度充分地代表出一種高雅和平民族的精神，比起西裝的堅挺含有驕傲，狹窄之氣正是相反。寬大就舒適，能舒適才合衛生。中國人春有春裝，夏有夏服，一年四季都有不同的衣服代表；反之西裝差不多全年皆宜。在這一點上中國裝似乎比西裝有意義得多。倘使我們能把中裝全用中國原料來做，男子不穿西裝，女子不穿外貨，普遍地實行起來，區區的絲業損失，真可以說是不值得計論了！

(三) 方法問題

挽救絲業的方法有三個原則：一、推廣絲的用途。二、增加人民的購買力。三、技術上的改進。如果經營絲業的人能不畏艱難，

努力實行，不獨絲業不會因此失敗，反大可增加生產。

一，推廣絲的用途 除上面談過的中國人在中國應穿中國貨的中裝外（中國人有許多穿的布料都是外貨，作者曾在國內發表多文評論衣服原料問題，姑不贅。總之提倡布衣節儉救國根本不是澈底辦法。）我們應該鼓勵人民改善生活，使他們知道一些較舒適的生活。例如清潔上改良些，整齊上進步些，布置上優美些，把不合理的點綴取消，却把新生活運動綱領上所提的實行起來。魚肉人民之後揮金如土固然要不得，愛錢甚於愛命，終生不費分文也不值得讚美。我們虔誠希望全國的同胞都能夠過一些真正「文明之邦」的生活，至少也要過些水平線以上的生活，把一個家庭布置布置，成爲一個恢復疲勞，增加幸福的優美園地，不僅是一個吃飯睡覺的「客棧」而已！愛美、理是一種好的德性，美觀能夠給人以希望；反過來卑陋醜陋能引人走上自暴自棄的路。絲織品的文采遠勝於西料的單調，在增加美觀上很有價值。倘使人人能改善一下家庭生活，也許絲綢的需要能夠增加不少。此外另聘專門人材研究創造絲的新用途也很需要。

二，增加人民購買力 以前絲織品都是富貴人們的專利品，銷路有限，價值當然昂貴。爲使絲綢普及起見，應該使他的售價與棉布相等，至少也不應相差很多。如此一來絲織品既可以廉價購到，同時品質優美，人民購買力當然可以增加。至於如何使人民增加財力，提高生活標準等，因與本文無關，姑不論。

三，技術上改進 絲織工業應該日夜努力研究改良絲綢，使他能成爲多方面需要的普及品。提高品質，增加生產，降低售價是最基本的原則。同業應該互相團結向外國貨競爭，不要在同業間競爭。倘使能儘量使售價降低，即使日本絲綢橫行中國我們也不怕。魯豫遼甯出產的柞蘭絲可以供西服料之用，他有西服料所沒有的長處，而沒西服料的短處，前途很有可觀。作者在國內也曾有文詳論及此，因篇幅所限，只好從略了。

刮地皮

孫守全

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中國有無限的煤，然而人民沒有溫暖的住處，每年冬季必有成千上萬的人凍死在街頭上，鐵苗儲量在東亞算第一位，平均每個人一年用鐵量不到半斤。錒，鎢，錳都是特別聞名世界，然而我們不知道如何用，還得賣給外國人，地下寶藏無限，我們只站在地皮上受窮，真是一段可恥的事。這只有紅印地安人守着黑山(Black Hill)金礦榜不名一文的故事可以和我們比擬。我常想在軍閥時期的刮地皮方法太拙太笨，他們只刮老百姓的一點頭皮，並未想到深在五百尺或一千尺下有更多的財可發。我們恨軍閥是恨他們不會刮。如果他們真能鑽到地下去掘出寶藏來，則中國今日又當成一局面。

我在這裏提倡刮地皮，不過是真的向地下去鑽。而不是只在地面上抽抽捐徵徵稅。中國今日情形可用一句話來形容就是「民窮財盡」。如果更進一步說就是「百物皆無」。在戰前我們仗着祖先留下的一點白銀，還可勉強支持，用汽車有福特老頭替我們作，用電料有西門子公司來代勞，用汽油有美孚，亞細亞，德士古各公司來侍候，戰爭中我們開始明白了過去的錯誤，我們得用血肉來和敵人的鋼鐵拚命，飛機來炸我們除了呼喊叫罵外，就沒有能力去叫敵人嘗嘗同樣滋味。海路不通了，外國洋人的交易也辦不成功，人民政府皆感到空前的痛苦，在痛苦中我們固然要罵敵人的殘暴，同時也許怨張三怨李四，事實上這都不能減去一點困難，在極度危急中想起了「抗戰建國」這個口號，這是一個很正確的標語，我們也應當按着這個理論向前進。然而如果再冷靜細想一下，則我們難以否認的，

如果建國提前了二十年，說不定我們就不用抗戰了，因為敵人根本就不敢向我們進攻，就是敵人不量力不度德要來自取滅亡，我們也就不必受這些痛苦，就能達到最後勝利了。

建國晚了一步，我們無法去改變既成事實。則今後就應當各站本位的去努力建國運動，在如今建國與抗戰是互相聯在一起，不能建國就不能得到抗戰的勝利，建國當然包括政治與實業，政治方面留給學政治的人去談，我僅能提出一點與實業有關的建國事情。

刮地皮不是一件容易事，過去軍閥們誤解了這三個字，結果是禍國殃民，就是工程師如果智識不足，輕則賠光本錢，得不償失，重則水災火災死人無數，刮出的東西有好有壞，不會選出仍然沒有用途，選出來的鑛物不能冶鍊也是廢物，這樣一來刮地皮專家就得有高深的科學智識，又得有經驗，美國是富，這些財富也是刮地皮的結果，有鋼鐵，有石油，有黃金，有鋁，有各種金屬。所以有原料去製造物品，也有了國防。我們應當來看一下美國如何來養成刮地皮專家，有好些地方可以效法。

第一件事是美國有鑛冶研究所，這個機關是由政府管理，算是內政府的機關，在首都都有總部，其餘的分散全國各地，大部份是和鑛冶學校聯在一起，不過不受學校當局的指揮，雖然如此，這機關和所屬學校的關係非常深，學校供給一部份房舍及各種補助及便利，所內照例有化學分析部，有選鑛部，有其他特殊問題研究部，各種問題都有專人負責，這機關除了扶助各鑛場的研究外，並代人民解決鑛業問題，所以各小鑛家都有了諮詢機會。按其指示進行。因為所內的人都是專家，所以信用昭彰，除此以外並研究各臨近區域的鑛物新用途，這樣可使各鑛商開闢新市場，政府需要某種鑛物，就可以由此機關去負責探尋解決，這個機關的最大效能是在培養專家，青年學者在這裏服務，受專家指導，並且又可以在學校選聽功課。慢慢的就變成了專家，政府每年所費的錢固然很多。然其對國家之供獻則千萬倍其經費，這是美國鑛冶界的主幹，作者在這個機關作了三年的研究工作，深深感到祖國需要這樣的組織，不用我多

說，凡在祖國從事於鑛冶的人，都有詢問無門之感，遇到了問題沒有地方可以代為試驗，代為設計，大公司或可請專家去作，小公司則就徒呼負負了。

第二件事是美國有完美的地質調查所。各州都有。地質調查所和鑛冶研究所的組織相同，幾乎完全設在州立大學中，雖然偏重地質方面工作，然而並不拘於此點，其職責是代該省解決鑛冶上的困難問題，所以各州地質調查所的研究問題也就不是相同，作者在意大利諾地質調查所作了一年的研究工作，述出來可作比喻，該省的烟煤是十分富，可惜煤中含雜質太多，煙氣太重，許多大城市不用該省的煤。地質調查所就得來解決這煙氣問題，用化學方法來減去煙氣，煤中含硫，磷，太多，不合於煉焦之用，該所就來解決洗煤問題，煤末太多，該所就發明了製煤球新法，加省地質調查所則偏重於石油問題，米蘇里地質調查所則偏重於水利，最近更從事於石油之探測問題。意大利諾省最近石油業之開展，其首功當然屬於該省地質調查所。此外則與學校當局合作各種研究問題，訓練青年科學家。

第三件事是大學教育：中國的工程教育，已有了基礎，此後應步向發展研究院這一步，只有大學本部則大學僅是一個教書的地方，有了研究院則大學同時可以成為高深學術的煖室了。中國不能永遠送學生到外國，也不能永遠跟在外國人的背後，在科學界中必需有大量的專家，能獨立的解決高深問題，我有一個感覺，就是青年科學家返國後沒有地方繼續前進，教了幾年書不但無法前進，反而落伍了，這些問題都需要研究院來解決，普通人最大誤解工程教育的地方是以為大學畢業後就去工作才對，工程人才應當分爲研究人才及實際工作人才，這兩種人各有其特殊效用，前者是適合於研究工作，後者是去作工程師。在美國各工廠，有了基礎，仍然要需研究人材去解決各種問題，在中國各種工業還未有了根基，則問題需要研究的更多，有了試驗室的結果則工程師就有了指南針，較大選鑛廠的建立有時候需要兩三年時期的預備試驗，最近祖國各種金屬

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都缺乏。又無多人去作研究工作。各工程負責人在極度無法中只好先向外國訂機器，冒險實在過甚，如果失敗了，社會上無法責備工程師，他們缺乏試驗室的結果，而問題是不但無人去試驗也無地方去試驗，祖國鑛冶大學有數所，可惜內中沒有發展起研究院來，否則的話，則教授研究生最低限度也可以替戰時鑛冶業解決一部份問題，研究人材是很重要的，這樣的人必備有更深的科學基礎，有獨立的研究能力。研究院是養成這種人材的惟一地方，除此以外，研究院可以引起大學本部學生的前進興趣來，吸引有名科學家來作教授，這樣才能促成中國學術的獨立。

這個題目的範圍太大，包括的問題也太多，設備，書籍，教授待遇，師資的選取，都是需要經費的增加，我沒有忘記今日在各大學負責人的勞苦功高，我更明白沒有經費就無法保持現狀更何從談到擴充，大學既是一國的最高學府，最高人材養成所。則大學教育的擴大充實，誠為抗戰建國中首要工作。

第四件事是引用外國專家，中國的鑛冶界雖然急起直追，因為環境所限，歷史關係，始終未能達到高度，在培養專家的呼聲下，我們還得等候些時間，我們的實業是迫切待發，在這時最有效的方法是引用外國已訓練成的專家，在專家的指示下，則設計方面是正確，不但實業可以發展，並且青年工程師在專家的薰染下也可以學習前進，這樣工程師的水準才能提高，派學生到美國來實習固然是辦法之一，可惜費用太大，到後來又有言語困難，更難有長久時間的居留，有許多工業上的事，根本無法看到，還有的廠家不允許進入，最困難的是不能大批派送，如果能引請外國專家到中國，則可大量的訓練祖國青年，同時實業也開發了。速成班難養成專家，留學生在外國能住久的又有幾個，未到外國的人以為一過太平洋或大西洋就變成萬能博士，事實上到了外國的起初二年吸收性是很弱的，住了四五年仍然感到未學了什麼，學術深如浩海，不但要鑽進去，並且得繼續前進。短時期的嘗試還不是走馬看花麼？

尾語：忙亂中來寫這篇文章，沒法避免錯誤，有些事始終離不開我

學術建國叢刊

的心頭，祖國派留學生有五六十年的歷史，如今仍得每年派送。學術上始終未能完全獨立，在抗戰中我們這些科學人未能有較大表現，反過頭來看我們的敵人，如今在美國尋不出幾個日本留學生，他們有了帝國大學，有了帝國研究所，有了學術的煖室，在科學上是能獨立，所以也有了國防，有了生產能力。前二十年日本請了很多美國工程師去主持他們的工廠。如今不必依賴外國工程師了，再看我們友邦的蘇聯，第一個五年計畫時期，工程師都是美國人，還有一部份是德國人，第二個五年計畫時就有了獨立性，如今呢，是頭角崢嶸，各種學術都有了基礎，身在美國，離國較久，想到同胞水深火熱，敵人的兇惡氣焰，再看看此間科學家趕造國防實業的情形。不知道是一種什麼滋味！希望不久的將來，祖國也有科學的煖室，充實的研究院，千百萬的科學家在埋頭工作，巍峨的工廠散佈在祖國的各個角落上，每個人都有了溫飽的生活，每個人的子女都有能力進學校，在星期日大家可以休息一天，我們便會有笑容了。

一九四二，六月

麻省工大

參與「加拿大公共衛生年會」記

宋 黃 翠 梅

宋黃翠梅 一九三一年畢業於嶺南大學，一九三六年在北平協和醫院得醫學博士位，現在加拿大 Toronto, Canada 大學研究公共衛生。

民國三十一年初夏，筆者在加拿大杜郎度大學衛生學院研究工作，才告完畢，適逢「加拿大公共衛生學會」舉行年會，遂與參加焉。查加拿大歸英屬後，由一荒蠻之區建成今日之新進聯邦者不過七十五年。全加之最高衛生行政機關在一九一九年始告成立。在此短短二十三年中，衛生事業居然臻至井井有條之境；若非各個衛生行政人員之努力，殆難有此成績。公共衛生學會乃衛生行政人員所組合而成；其年會秩序可代表其會員之一切思想，工作與精神。我國尚無類此之獨立公共衛生學會之組織，自覺有借鏡之價值，特將赴會見聞，略述於後，幸我國衛生當局者，有以垂教焉。

（一）加拿大公共衛生學會

加拿大公共衛生學會乃全加，各省，市，縣衛生行政人員的一個組織。會員大多數屬醫師，但公共衛生工程師，稽查員，護士，牙醫師及營養學者加入者亦不少，會員約計有二千八百名。其機構如下：

常務委員會：一
名譽會長 一人
正會長 一人
副會長 一人
名譽秘書 一人
協助秘書 一人

特務委員會：一
一．公共衛生試驗室組
二．生命統計及流行病學組
三．公共衛生護士組
四．公共衛生工程組
五．工廠衛生組

名譽理財 一人	六·心理衛生組
出版部主席一人	七·衛生教育組
幹事 一人	
各省衛生行政機關代表	每組有主席，副主席，
各省公共衛生學會代表	書記及小組委員會。

除常務及特務委員會外，隨時可增設其他特種委員會，以應臨時之需要，如：公共衛生稽查員會試委員會，城市及縣衛生工作成績比賽委員會等是也。

其工作中最重要者有四：

- 一，舉辦每月刊行一次之『公共衛生雜誌』一種，及其他臨時或有價值之刊物。
- 二，舉辦每年一次之城市及縣衛生工作成績比賽——先由欲參與比賽之城市或縣向公共衛生學會報名。年底時由其城市或縣將學會所備之調查表填妥交會。會方請後美國公共衛生學會之協助，派專家前來依次考察各參與比賽之城市及縣之工作成績，并得美國 W. K. Kellogg Foundation 之贊助，負責一切旅費所需。考察畢，由美國公共衛生專家與公共衛生學會之衛生工作成績比賽委員會酌評應領獎者。
- 三，公共衛生稽查員之會試及訓練。
- 四，舉辦每年一次之加拿大公共衛生年會。

(二) 年會之性質及此次開會情形

加拿大公共衛生學會每年舉辦年會一次。年會時間為三日，規定在每年六日間，取各機關每年工作結束的一個月舉行。適逢夏季，趁此可令衛生行政人員，有一個變換空氣的機會，并增進些精神食糧。年會地點：每年輪流在各省之大城市舉行。一方面每年赴會者可蒞臨一新的環境；別一方面亦藉以掀起各大城市行政當局對於衛生事業之興趣，俾得榮選為公共衛生年會會場。年會目的：第一，給會員以機會發表其一年來研究或經驗所得。第二，報告國內并

國外各種公共衛生事業之新進展。第三，討論各種有關公共衛生之問題及應採之方針。第四，鼓勵各衛生行政人員對於事業上從新努力。第五，關於會務之報告，討論及進行一切事宜。

此次為加拿大公共衛生學會第三十一屆年會，日期為六月一二三日，在安泰廳省杜郎度之賓路大旅館(號稱英帝國最大之旅館)內舉行。「安省各市縣衛生局局長聯會」亦借此盛會同時舉行其第二十八屆年會。安省之衛生稽查員聯會亦同時舉行大會。

當步入會場地點時，先見「存放衣具處」。此數日適逢陰雨，雨具得以卸放，殊感辦事員籌劃之週到，先發生一良印印象。隨即見「赴會報名處」，不論會員與非會員，須填具赴會報名單，并繳赴會費一元；然後上報名處發給一綢帶之赴會證懸扣胸前。聞此次報名赴會人數越七百餘名。

由報名處通達大會堂之廊廳上，便是赴會者休憩室兼陳列室。陳列物品計有：

加拿大福利事業委員會印行之免費與收費之婦嬰衛生書籍

都會人壽保險公司印行之免費衛生教育書籍

某書局出版之學校衛生課本及參考書籍

某書局出版之醫學書籍

某藥廠新製之藥品

某衛生罐頭食品製造廠之出品

「籌備醫院預訂治療計劃」之宣傳品——安省醫院聯會辦理關於最近加拿大公共衛生事業之統計圖表。

陳列休憩室之兩旁有三間小組敘會室，并一間衛生事業諮詢處，諮詢處由安省行政機關負責，詢問者須先約定會見時間。大會堂及小組敘會室內俱用直靠背之木椅，并有無數之煙灰座。會堂及敘會室內雖無特別之陳設，但光線適宜，空氣流通，與會者得集精會神焉。

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每年年會所用經費，開大部由赴會報名費及陳列處租賃費充當，其餘則由該年年會地點之省最高級衛生機關補助云。

每日開會，上午屬分組會議，隨意自選；下午屬全體大會。每次開會前一剎鐘，放映衛生教育影片或戰時宣傳影片以饗早蒞臨會場者。各會秩序豐富并饒有意義，茲節錄其秩序單於後：

六月一日 上午九時 分組會議

甲，安省衛生局局長主持聯合大會

- 一，會長致開會辭并選舉新職員
- 二，一九四二年安省之新立法案
- 三，戰時工業之工廠衛生問題——及安省工廠調查報告
- 四，新修改之預防花柳疾病法案與衛生局局長職責關係之分析

乙，公共衛生護士組組務會議

丙，安省衛生稽查員聯會——參與安省衛生局局長聯合大會

丁，生命統計組討論會

- 一，一九二六年後加拿大產婦嬰兒死亡之統計及分析
- 二，加拿大生命統計事業之新計劃
- 三，死亡原因密告表研究委員會之報告

六月一日 下午二時半 全體大會

- 一，公共衛生學會會長致開會辭
- 二，加拿大空軍後備隊之預防接種
- 三，淋病——可預防之疾病
- 四，戰時英倫與兒童衛生事業之觀察
- 五，中學之學校衛生

六月一日 下時六半午 晚膳公譚(票價一元七角半)

- 一，特約客賓演說——美國米西干大學公共衛生學院院長
- 二，加拿大公共衛生學會宣佈本年頒贈之名譽永久會員

三，宣佈一九四一年加拿大衛生工作成績比賽最優良之城市及縣——城市衛生工作成績比賽揭曉：

第一組：十萬人口以上而有專任衛生行政專員之城市
領獎者有二——安省之哈米頓城及溫爾沙城

第二組：十萬人以下而有專任衛生行政人員之城市——無領獎者

第三組：十萬人口以下而有兼任衛生行政人員之城市
領獎者——安省之聖加頓城

農村縣鎮之衛生工作成績比賽揭曉：

加西區域——阿拔他省某縣領獎

加東區域——古璧省某五縣領獎

六月二日 上午九時 分組會議

甲，安省衛生局局長聯會之環境衛生討論會

一，如何應付環境內過多烟灰之怨控？

二，城市對於防制過度嘈吵聲音之適宜法規為何？

三，須禁止有屬犯性之買賣否？

四，氣味(非直接有傷身體之氣味)應如何管制？

五，公共衛生「障礙物」之定義為何？

六，衛生局局長對於環境衛生之責任為何？

七，如何應付城市內畜養獸類(馬，牛，豬，狗，狐狸等)
之怨控？

八，學校內水之供給問題應如何查驗及改良？

九，屠場之廢物或其他地方發現有死獸之處理難題應如何
解決？

十，私用澄糞池裝置前棧之處理為何？

十一，城市需用之衛生稽查員數目標準為何？

十二，關於飲食營業店之最良管理法為何？

乙，安省衛生局局長聯會之獸醫問題討論會

一，乳牛乳房炎與公共衛生之關係

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二，牛乳外之牛乳製品之管理

三，農村居場

四，飲食用具之微菌防制

五，馬屬腦炎之預防接種

六，巴氏殺菌法之改善

丙，安省衛生稽查員聯會敎會

一，環境與公共衛生之關係

二，飲食店之教育問題

三，衛生稽查員與公之關係

四，杜郎都城衛生局之管理出產牛乳場所辦法

五，鼠虫類之管制

六，床褥管規例

丁，工廠衛生與公兵衛生護士合組討論會

總題：戰時大量婦女參加工業對於社會健康之影響問題

一，家庭中所受之影響

二，營養上一——(子)家庭之營養問題

(丑)工場內之營養問題

三，兒女之保育——(子)託兒所之組織問題

(丑)託兒所之最低標準

四，聯絡及合作

戊，生命統計與流行病學組討論會

一，錫省北伯徒佛城副腸熱症流行之經過

二，古璧省學校教員之癆病檢查

三，嬰兒死亡之最新研究法

四，加拿大專任衛生行政人員之城市及縣衛生事業調查委員會之報告

五，白喉與膿菌性咽喉炎兩症一併流行之經過

六，白喉類毒素之接續注射

六月二日 下午二時半 全體大會

- 一、「真流行性感口」之最新研究
 - 二、戰時加拿大之癆病管理問題
 - 三、滿其可城空軍後備隊之醫務工作
 - 四、國防地區(加西海岸哈力法斯城一帶)之衛生問題
 - 五、戰時加拿大之營養事業
- 六月二日 下午八時

加拿大公共衛生學會常務委員會會務會議——歡迎會員參加

六月三日上午九時分會會議

甲，安省衛生局局長聯會及公共衛生學會生命統計與流行病學
組合會

- 一、安省斯加伯勞城白喉流行之經過
- 二、源于乳酪之傷寒症流行——古璧省
- 三、源于乳酪之傷寒症流行——文尼吐巴省
- 四、安省倫敦城中學學生之癆病檢查
- 五、安省溫而沙城之猩紅熱預防接種
- 六、那省之白喉症
- 七、公共衛生試驗室之工作

乙，衛生教育組討論會

- 一、社會羣衆對於衛生之興趣
- 二、推進營養教育方法
- 三、關於衛生教育印刷品問題
- 四、利用社會團體以協助公共衛生事業之發展
- 五、安省畢第伯勞城衛生局局長之經驗談

丙，安省衛生稽查員聯會會務會議

六月三日 午十二時一刻 午膳公議(票價一元一角)

- 一、特約講員——杜郎都市兒童病院主任。題爲「加拿大
急需——兒童衛生行政者」
- 二、公共衛生學會選舉職員

六月三日 下午二時半 全體大會

甲·脊髓灰白質炎症——

病源及傳染法

管理及治療

乙·腦炎症

一，腦炎症之傳染性

二，一九四一年加西腦炎症之經過

丙·宣告選舉新職員結果及會務新議案

(三) 會中論文摘要

會中諸論文及討論頗有博告國內同志之價值者，只因限于篇幅，未能悉數譯出。筆者自己興趣在婦嬰衛生，因而撮摘有關該門者於後：

第一篇：戰時英倫與兒童衛生事業之觀察——黑克氏醫師
(按講者乃美洲最著名之精神心理病學專家，及加拿大心理衛生委員會主任委員。最近被邀赴英考察，此其歸來後初次演詞。)

英倫三島，自加入戰事以來，四千萬人同心協力，不顧私財，私物，私見，惟向公衆安全問題設想。且政府衛生當局，早有籌備及組織，故空襲一蒞臨之時，各方機構立即發動，各事施行有條不紊。戰時英倫之各種福利事業中，尤注重兒童衛生事業之發展，有如下述：

甲，兒童方面——

- 一，戰事發生以後，已有二百萬兒童曾經衛生行政機關補助，輸運至安全地帶。
- 二，抵安全地帶以後，半由安全地帶當地住戶報效代為保育，半由政府設辦之戰時兒童客旅院保育，亦有一部份運至加拿大。凡屬病孩，則送醫院免費療治。衛生當局

常派遣負責人員巡迴教導寄養兒童之處所，俾臻完善。

三，空襲對於兒童沒有不良之心理變化。在戰事開始時衛生當局下令各醫院預備三分之一床位，留為空襲受傷民衆之用；但不久以後，只見此三分之一之床位常空而無應用者。尤以精神病院留下之床位為完全空虛，蓋料想不到，民衆中未嘗發生過因空襲驚擾而致精神心理變態之病案。惟在兵士中，身在前方，得聞後方被炸襲，消息遲鈍，掛慮過度，間或因此而發生精神變態者。所以現在當局更着重於前方士兵及其他須遠離家鄉為國效勞之工作人員之家屬及其兒女之福利事情。

四，學校教育，并不因戰事而停滯。在安全地區中，各兒童照常入學；教室太少，則利用露天草場，在太陽之下上課。年齡稍長之女生，則訓以實用家政，如：分派至各託兒所內料理嬰孩們沐浴等實驗工作，并授以各種家庭衛生常識。

五，戰時食糧缺乏購買食品俱受統制。但今日之英國兒童營養，比以前任何一時代為優良；因為衛生教育極量擴充，各婦女明瞭營養要素以後，不再浪費金錢購買無益食品；且有百分二十之兒童可在政府專營之廉價膳堂或食物商店，得享減價而富營養價值之餐膳并購售食品。

乙，產力方面——

- 一，最近之英國產婦死亡率為千分之二·七，乃有史以來最低之統計數目。
- 二，戰時各安全地區內設有臨時產院，凡屬孕婦可在預產期前十日至兩星期入院休息，免費料理，并有營養最佳之食物。
- 三，利用大量資格合適之助產士分佈全國，以施行科學化接生及產前產後之料理。
- 四，舉辦母職訓練班。

丙，民衆方面——

一，推行衛生教育——利用巡迴放映之電影教育車，每日分赴各地，俾多數之民衆得以享受。

二，空襲竟亦有其益處多數貧民窟因此被毀滅。今日之英人誓踐生活平等。富裕之家庭，不再獨享高樓大廈，惟邀無家可歸之窮人分居同住。因為一般窮苦工人，正是戰時英雄，其兒女更是將來國家之柱石，國難期中，正反映人類犧牲互助之美德也。

第二篇：託兒所之最低標準——那威女博士

甲，設立託兒所之目的

一，凡屬工作之母親，日間可將其學齡前兒女寄養於託兒所內。

二，託兒所乃一兒童之保健及教育機關。

三，研究兒童身心發育之場所。

乙，最低限度之設備標準

一，兒童宜分小組管理，三十至三十五為一間託兒所之收容數額。因為初離家庭之年幼兒童，在一規模較小之環境中，比較易於適應也。

二，託兒所址宜求寬大，至少室內有大房兩間，廁，廚，洗手間外。室外須有花園及空地以為遊戲之用。

三，一切傢俱設備，宜按兒童高度裝置。如門上之門球，若裝置適宜，則兒童自能開閉門戶出入，養成一種自立不求人之習慣及心理，且工作人員亦可減省幾許照顧之事工。

四，玩物宜按年齡設備，須洗潔，種類多，并須屬有教育價值者。

丙，最低限度之工作標準

一，衛生上——應受健康檢查，預防接種，及健康巡視。

二，每日之秩序不宜煩多，時間不宜急促，并避免一切強烈有刺激性之事情。

四，訓練日常身體必需之適宜生活食法，作，學，睡，俱宜注意。

五，每日遊戲，宜分在室外及室內舉行，及分個自發展及合羣兩種遊戲法。

丁，最低限度之工作人員標準

一，工作人員俱須接受專門之訓練(理論兼實驗)。

二，每間託兒所至少有一已受訓及有經驗之主任，已受訓練之副主任及其他在受訓之學員或自願助理員。

三，工作人員之工作必須屬一致，持恆按規實踐，俾兒童易於模倣。

四，工作人員宜預先策劃及安排一切之工作及秩序。

以上乃加邦最高衛生行政機關婦嬰衛生系之婦嬰衛生事業委員會最近擬定之託兒所最低標準，以作各地託兒所辦理者之準繩。詳細及呆板之標準未必能適應各當地之情形，故各地在此最低標準而外，可按當地情形自行發展云。

第三篇：戰時加拿大之營養運動——畢第博士

甲，營養事業之目標

一，改善營養不良，以保持健康，預防疾病。

二，戰時英倫，改善工人在工廠內之食物以後，顯明證實營養事業可增加工業品之出產率及減少工廠意外事件之發生。

乙，營養事業之對像為誰？答案：每個一人。

按加拿大四大城市之調查，飲食不合營養原則者，在富裕與貧窮之家庭，有同等需求之存在。營養不良之故：或因經濟困難，或因缺乏營養知識，或因漠不關心於飲食及健康問題。是以營養事業，乃人人之事業也。

丙，推動營養事業之機構組織

最近加邦最高衛生行政機關已添設一營養系。其目的：一方面在研究適合戰時，營養優良之加邦食物；但別一方面，則

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務求聯絡及推動全加各地之營養事業。各地衛生行政機關及其他之團體都應歡迎參加此種事業，若需最新營養知識時，營養系樂於供給，并可協助指導一切事宜。現正希望各省衛生行政當局，在短期間中，可設立一全省營養事業委員會，以求貫徹事業於一致。

丁，推行營養教育方法

- 一，民衆方面——利用影片，無線電播音台，戲劇，演講，報章，刊物，展覽等。
- 二，學校方面——從小學至中學每年級俱應有衛生課程，而營養學之課程，則應設在多數學生未離校前之年級，俾人人俱可接受營養教育。此外，尚可設辦營養研究班，營養班之教員應常常繼續受訓及接受新的營養學識。
- 三，其他——工廠膳堂，公衆飲食場所，諮詢處，圖書館，及醫生都可協助推行營養教育。

評「中國國語入門」

嚴仁廣

嚴仁廣 一九三三年畢業於南開大學，在中央研究院研究財政問題達八年之久，論著甚豐，昨年來美，專門注意研究美國戰時財政問題，現在加省大學攻讀。

SHAU-WING CHEN: *Chinese Reader for Beginners*

(中國國語入門) Stanford University Press;

London: Humphrey Milford Oxford University Press, 1942. \$4.00

學習中國語言文字，向來被西洋人士視為艱難可畏。在過去沒有好的教授法，又沒有完善的教本，作教材，乃是中國語文令人視為畏途的主要原因。從前，祇有去華傳教的教士們會感到學習華文華語的需要，但他們大都太注重方言和會話，雖也屢有教本印行，但大都盡有所偏。為西人學習華文所編著的華文教科書，在國語方面，遠者如C. W. Mateer 所著的 *Mandarin Lessons* (1892) F. W. Baller 氏所著的 *Mandarin Primer*, (Eighth Edition, 1911) Sir Walter Hillier 氏所著的 "The Chinese Language and How to Learn It"—A Manual for Beginners, (London, Fourth Edition, 1916); 近如J. M. McHugh 氏所著的 *Introductory Mandarin Lessons*, (Kelly and Walsh, Ltd., 1931) 和北平華文學校(California College in China) 所用的自編教本，都各有其可取之處，但因一概偏重會語，對閱讀寫作未能多所致力，都還不能謂為十分完善的華文教本。

近年以來，西方人士漸漸注意遠東問題，東方語文已稍為世人所注意，自太平洋戰事爆發以後，美國政府也已感到學習東方語文的重要，聞現已開始訓練其一部政府人員和軍事人員學習華文華語

·在這需要華文教材孔殷之時，適司丹佛大學陳教授能夠拿出他四年在司大教授國語的教材加以修正增改，付印問世，自然是一件至可欣幸之事。

這本「中國國語入門」，本文共二八七頁，連序文及引言另二十六頁，合共三百餘頁，據作者在自序裏面說，這本書適合為初學者一學年的教材。全書分為六十課。每五課成爲一個單位，每一單位中，前四課介紹新字新句子和練習題，後一課溫習過去四課的生字和句子。全書六十課中，共有四十八課介紹新字，每課介紹新字自十二至十八，故全書共用生字約七百，每課均分為四段，第一段爲生字 (Vocabulary) 用大號字模將十幾個字列滿全頁，每字之旁註明羅馬拼音 (Romanization) 和四聲 Fones，下加釋義。各字之旁，復註明筆劃 (Strokes) 的先後，第二段爲文句 Reading Text，每課用引入的生字造句子，惟在第四十五課以後，則每課用長約三百四字的短文。第三段和第四段都是練習的題目，所用的句和詞或用字都和 Reading Text 差得有限，但是第三段是練習說話 (Oral Exercises)，第四段則是練習寫作 (Written Exercises)。每一練習包括漢譯英及英譯漢各十句，所以每課有練習之詞兩句計四十。在全書正文六十課之後，從第二四五頁起至二八七頁止，爲集註 Glossary，將全書所習的七百多字和詞按筆劃多寡依次排列起來，並也如前註明羅馬拼音，四聲和講解，藉爲參攷之用。

本書的優點，第一，作者在引言裏，曾把中國文字的源流，國語四聲的區別，中國文字近代的趨向，和羅馬拼音的用法，作一個概括的介紹，使初習中國語文者在沒有研習以前，腦中可以先得一個概念。第二，練習課約佔全書一半左右，使學者可多得習練的機會。第三，印刷精美，也是本書特色之一，所有中國字模，完全不用普通的鉛字，改用一種細體的正楷字模。頗爲美觀醒目。不過也正因爲不用普通鉛字，於是寫錯的字遂亦不免 (詳後)。

但是本書的缺點也不少。第一，作者似乎以往對英文造詣極深，所以在本書內他所舉的詞句，和練習題裏的文句，英文的色彩顯

得太淺厚。這不僅使本書大為減色，却又掩沒了上舉一切的優點，而且使本書失去其價值的大部，不能不算是一件異常可憾的事。

作者在他書中所學的示例，不論是前面的語句，或是後面的練習題，完全都把英文刻板式的文法，硬加到一種比較有伸縮性的中國文字上。中國文字有它自己的文法，也有它自己的規律，不能硬要與英文的文法強同。雖然中國語文中每句話也必要有個動詞，可是有時可以藉蓄在內，盡在不言之中。例如說：「我今年二十五歲」，這是一句完全的中國話，也是一句完的中國文，但是句子的動詞含蓄在內，沒有直接說出來。本書作者沒有體會到這種中國文法上的活用，於是把他的每句中國話，都細之以英文的文法。這種例子充滿全書各課各段，無法逐一指出，現在祇提出少數的例子來。例如書中第六課Reading Text「我的學校是大，他的學校是小」，兩個「是」字都不應該用。又如第八課Written Exercises 第四句「山下的空氣是不好的」，不如改為「山下空氣不好」。第十九課Oral Exercises 第十句「這些樹木不是很高」。不如改為「這些樹不很高」，第二十一課Reading Text 第五句「中國是在美國的東，美國是在中國西」，不如改為「中國在美國東邊，美國中國西邊」，同課Oral Exercises 第三句「美國的南方的天氣是很好的，不如改為「美國南方的天氣很好」，第五十一課Reading Text 「天氣是非常寒冷的」，不如改為「天氣非常寒冷」，第五十二課Reading Text 「所以是非常的寒冷的」，不如改為「所以非常寒冷」。以上各例至少應以不用「是」字的為基本式，以用「是……的」的為又一可能式。至於用「是」不用「的」那是歐化的中國話。

本書作者又以為在中國國語或白話文中，每句話裏所有的形容詞 (Adjectives) 副詞 (Adverbs) 和所有格的名詞或所有格的代名詞 (Possessive Nouns or Possessive Pronouns) 部應該隨之以「的」字，因此之故，書中凡遇稍為複雜的句子，就都弄得「的」字連篇，累累贅贅，十分難看難聽，也十分難懂。這種例子多不可數。現亦僅舉少數例子如次：第六課Reading Text 的註解裏有「一輛大的車」一詞

，不如祇說「一輛大車」。此外，如同課 Oral Exercises 「你的教員的書，我們的學校的學生」，「小的犬和小的羊是你的嗎？」第七課「住在山下的小的屋裏的人是大學生和中學生」，第八課 Reading Text 第四句「那些書是他的教員的和你的哥哥的」，同課 Written Exercises 第九句「看不見地上的牛羊的人是一個中人」；第十一課 Oral Exercises 第九句「山上的第四間大的屋不是我們的」，第十七課 Written Exercises 第一句「大的碗子裏的鹽水是你的妹妹的」；第十八課 Reading Text 第九句「山下的舊屋前的新的汽車是你的嗎？」第十九課 Reading Text 第三句「春天的草的色綠，秋天的草的色黃」，第二十一課 Reading Text 第三句「這個地方是我們的學校的學生來看日出的」，同課 Written Exercises 第五句「你是我們的學校的最好的教員」；第二十八課 Reading Text 第一句「他的哥哥的年紀比較我的大，他的妹妹的年紀比較我的小，你的年紀和我的一樣」。第二十九課 Oral Exercises 第五句「你是我們的學校的最勤力的學生」，第三十四課 Reading Text 第十句「我們個個都穿衣服的」；第三十六課 Reading Text 第五句「你要分別我的和他的妹妹的書」；第四十三課 Oral Exercises 第十句「爲什麼你的樣子和你的哥哥的完全不同的呢？」第四十八課 Reading Text 第八句「科學的進步，是靠人類的思想的進步的」；第五十二課 Reading Text 「女兒把她的小的手放在火的上面來取暖」；第五十三課 Written Exercises 第二句「桌子的上面有什麼東西」。

作者又以爲中國文字或語言中所有過去式的語句都要用「了」字來表示，如同第十一課 Written Exercises 「他的叔叔今年看見了日出二百三十五次」，「爲什麼不改爲「他叔叔今年看見過二百三十五次日出」」；「你看見了日出幾次多？」，又如第三十六課 Written Exercises 第一句「學生不聽先生的話，先生於是出了課室外」，但是，在其他情形下，「了」字在本書內又有很奇怪的用法。如二十九頁「明天下午他不下山看地下的雨水了」；八十六頁「沒有失敗我們就不會有成功了」；九十三頁「我的哥哥三年前去了歐洲讀書，明年他會回來美國了」；九十八頁「你去美國大學讀書，不能不坐大的船去

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了”，一百二十三頁“這個學期在一個星期後終止了”，一百六十五頁“那間屋裏很黑，我自己一個人不敢進去了”；一百七十七頁“他和你不能合作，你們將來一定沒有成功的了”。各句的“了”字都可刪。

作者又以爲“着”字是進行式 Progressive Tense 所必備，例如第四十六課狼和羊的故事有謂“誰上着山來呢？”，又五十三課 Reading-Text“發出着很多熱的氣”。

作者又以爲中國語文在完成式 (Perfect Tense) 時必須也如英文的用“To Have”來表示，例如書中八十一頁“他有見過中國的西北和美國的西北的美麗的地方嗎？”，八十二頁“你知道他的爸爸有學過中文嗎？”，八十三頁“媽媽說，她有坐過汽車，但是沒有坐過汽船”，又如一〇一頁“你有看見過在我們的學校旁邊的新屋嗎？”，一二三頁“他今天上午有溫習過他的功課嗎？”，一四八頁“你有收了他上星期寄給你的信嗎？”，一六五頁“你得罪了他，有同他賠禮嗎？”，二〇六頁“她有賣了她的火柴嗎？”，二二六頁“你們有看見過美國的兵操演嗎？”，二三四頁“你有讀過中國的歷史嗎？”，都不能算是中國話。

在英文裏 They 字可以用於“人”，也可以用於“物”，可是在中文，“牠們”二字極少用，不過本書的作者則不然。本書常見如下的句子：“你看見的書是誰的，牠們是你的書嗎？”“不是牠們不是我的書，牠們是你的教員的書”(第六課)；“這本書的字太深，我不會讀牠們了”。(第二十四課)“礦物是在地裏的，因此你不能夠看見牠們的了”。(第三十二課)。類此的例子書中頗不少，這些話無論用在白語文或國語裏，都覺得異常生澀而不自然。

作者又以爲所有英文裏用 and 的地方，中文都應當用「和」字。於是句子裏又充滿了「和」字，這樣，使句子既笨拙，又不容易懂。例如第十七課「你知道牛奶的味是不甜不鹹和不酸嗎？」同課「很多人在早上吃雞蛋和喝牛奶」。第二十課「弟弟和我在學校很好和很用心讀書」；第二十四課「海中的浪是高和大的，河中的波是低和小的」；三十八課「我們的學校有一個很大和很貴的鐘」；第四十一

課『青年人的希望是很長和遠的』。爲什麼不改爲『你知道牛奶的味道是不甜不鹹也不酸的嗎？』『很多人早上吃雞蛋牛奶』。『弟弟和我在學校很好也很用心讀書』。『海中的浪又高又大，河中的波又低又小』。『我們的學校有一個又大又值錢的鐘』。『青年人的希望是很遠大的』。改過的句子也並不見好，不過較原樣已大有進步了。

作者也沒有注意中國文字文法裏面，一句中每段的排列次序。副詞在英文中可以放在動詞的前面，也可以放在動詞的後面。但在中文則一般的都放在動詞的前面。作者沒有注意這些，完全依照英文的慣例，來造中國文句，這樣怎能求得文字的通暢呢？今舉二例以概其餘：「沒有草在山上」應改爲「山上沒有草」；「他沒有讀書很久」應改爲「他很久沒有讀書」。類此的文句也是多不勝數。

作者還不能分辨國語裏「呢」字和「嗎」字的用法。如188頁「你今天有什麼新聞呢？」[48頁「大概你從歐洲太遲回來了嗎？」都不是通常的用法。

作者也不明白「沒」字和「不」字用法上的區別，遂造出許多奇特的話語出來。例如——頁「羊不看見船內有人」；二頁「我的學校的學生上午看見日出，他的學校的學生上午不看見日出」；六六頁「我不看見碗子裏的糖水」；一三三頁「那個女子今天不穿襪出外」；一七〇頁「他完全不聽見你說什麼」；二〇一頁「真是奇怪了，我不看見你來，也不看見你去」。

從上面所舉例子中已可見出本書文句受害於英文刻版文法者之深，使全書所寫的中文，不像是普通的中國文或中國語。從書中的語句看來，頗懷疑作者是先寫出英文來，然後再譯成中文。再者，自上面所舉各句已可略見作者造句之欠精。我們也還可以選出一些文句來以見書內文句未能通順和生澀難讀的一班：第三課『明日有三人行出門外上山』；第四課『犬不小心走下山』，人行，人坐，犬也行和坐嗎？第五課『山中有三隻小犬，在山下不看見日出』；第六課『不小心走上山的小牛是他們的』；第七課『我們的屋是在一個山上的，明年我們的屋不是在山上』，「我和弟弟和妹妹是三個不好的學

生」；第十四課「快的火車多人坐，慢的火車少人坐」；第十八課「你明天不回來學校，他就不和你出外了」，「回來學校」應作「回學校來」；第二十二課「能夠有成功的學生都是很用心讀書的」；第二十八課「我信人可以長生的，但是二十世紀的人有很多不信人可以長生的」；第三十三課「他告我金是貴過銀，銀是貴過鐵的」；第四十九課「一個有很多黃金出產的國家是美國」；第五十八課「因為怕先生責他遲回學校上課」；第四十七課「但是誰人從何處來的，因何事來這裏呢？」；第五十九課「這本書的大意太深，我不能解他給你聽了」。
 • 這些話一方面欠通順，一方面有些也不像普通的中國文字。

文義難通或不可索解的句子在本書中也不為少。例如第六課「他的學校在大門裏」，第八課「我們去年這裏的天氣不好，我們沒有一天不下雨的。」（我們怎可能下雨呢？）第十六課「他不想你喝青茶，他想你喝水」；第十九課「天上的明月看不見快要落的黃葉」；第二十二課「一個不怕難的青年人的成功」，「那個很怕失敗的女學生的失敗」；第二十八課「他今年的年紀是四十一歲，去年的四十歲」，既然說年紀就不能說多少歲；應改為「他今年四十一歲，去年四十歲」，或「他的年紀很大了，今年四十一歲」。第三十六課「他們說只是美國有的車，別的國家沒有的」。第三十七課「我想方便你早上去學校，因此我買了這輛車子」，（「方便」怎能用為動詞）；第三十八課「他沒有緣故說你是一個沒有用的人」；第四十一課「這裏的街道不平真快快改良了」；第四十九課「現在有絲出產不少的國家是什麼呢？」第五十一課「她真是一幅貧苦的生活的圖畫」，「她是一幅什麼東西的圖畫呢？」（一個人怎麼能是一幅圖畫呢？）；第三十七課「不能夠做大事的人，不能夠自己做事的」。

許多中國的詞語本來一個字可以通，常用兩個字來說使文字生動悅目，並且單字和擴大的兩字詞在意義或文法上常有不同。這一點作者在引言裏似乎想到過，但是不幸在他的正文文句中，忽略的時候偏又很多。例如第八課「不出了，今天下午我不出外看雨了」；第十八課「你看天上的新月出來了」；二十三課「我不告他了」（少寫

一個「既」字，好像是要去告狀的意思。此外，用字不當的地方也極多。例如第三課「日出」與「日入」，普通只有說「日落」沒人說「日入」；第五課「山人」一語乃由英語 Mountaineer 一字直譯過來，生硬得難過（記得只有諸葛亮自稱山人）第二十三課「我會寫淺的中國字，他會寫深的中國字」。「我能看報紙因為報紙沒有深的字」；第二十四課「這本書的字太深，我不會讀牠們了」，文可以有深淺，意思也可以有深淺，但是字只有難易，怎能說深淺！第二十九課「我不覺得冷」應改為「我不感覺冷」或「我不覺得冷」才可以通。第三十三課和第三十四課「造」字的用法也很奇特，作者認為造和做可以相通，他說「因為如果沒有布，人就不能夠造衣服了」。「我不喜權用這隻用金造的碗子來吃飯」。作者以為「東西」二字可以和「事情」二字通用，他說「一個有才能的人要作有益於人類的東西」，（三十七課）「無益的東西我們千萬不要作，東西的種類有很多，我們不可不小心」（三十六課）。又如第三十八課「你在歐洲的大學裏學什麼東西」，也不很恰當。「服從」兩字不能夠隨便亂用。第三十七課「學生要服從教員的命令是一件很重要的事」，教員既不能下「命令」，學生也不必「服從命令」，又「命令」只能「發」或「下」，但不能「給」，電報也只能「打」或「拍」而不能寄，都是作者獨出心裁的用法。作者對於「看」和「見」二字的用法似乎也不甚瞭然，例如第四十一課有「這是他今天早上見的書」一句話，「見」應作「看」，他處類此的句子正復不少。又在三十八課有「爸爸或媽媽明早十時五十分會來見我」一句話，這句話出於小孩子之口，未免口氣太大了。第四十課有「失敗是成功的母親」一句話，這句話說得很滑稽，如果以此類彼，則我們也可以說「成功是失敗的兒子」了。

除去本書文句類似英文之之外，又有許多地方雖可說是中國語文，但是有一些是文言用法，有一些是特殊地方的方言，以「犬」字代「狗」字，以「足」字代「脚」字是前者；以「幾多」代「多少」，以「思疑」代「疑惑」是後者。不過若說「上午犬出大門外行，下午犬入大門內坐」是文言的說法，却也沒有人能相信。此外，作者以「屋」代「房子」，於是如有如下莫明其妙的句子：「我們的家是在一間大的屋裏。」

『殊不知屋子是Room, 房子是House 或Room, 類是者不一而足。以去年改爲昨年, 明年改爲來年, 上星期改爲昨星期, 則又不知何所據而云。出外是出遠門的意思, 作者用代『出門』, 許多句子都弄得失了原意。『你識用中文寫信嗎?』似乎是一句廣東話, 國語和白話文都沒有這樣說法。前述完成式都用『有』字, 好像廣東話僅有的用法。Spoon 可說『調羹』或『羹匙』, 絕不能如作者之謂爲匙羹。作者又以『窗口』代『窗戶』, 實則二者有不同的意思。『這間屋一個窗口也沒有』, 也是似通非通的一句話。

以上所論者僅限於本書每課第二第三第四三段造句方面的面的錯誤。由於造句乖謬百出, 業已成爲本書價值上致命之傷。現在再略論每課第一部的生字 Vocabulary 部分。全書共有生字七百, 於每課之首排起來, 頗爲醒目。不過因爲作者是用正楷細體鉛字來代替普通的鉛字, 於是寫錯的字遂亦不在少數。書內所有的『節』『餓』『發』『鄉』『概』『鞋』『滿』『歲』『飯』『蛋』『兩』等字, 不是筆劃多少不對, 便是寫了『白』字。書中各字的筆劃先後, 則還大致不差, 不過也有不少字是『倒下筆』和用很怪的寫法的。

生字的羅馬注音錯處却很少, 這不能不說是作者精細審校之功

不過拚錯的字却不是沒有。例如引言裏倉韻的『倉』字應爲 T'sang 誤爲 Ch'ang, 第九課『此』字應爲 T'zu 誤爲 Chih, 二十三課『鉛』字應爲 Ch'ien 誤爲 Ch'u'an, 五十一課的『尋』字應爲 Hsun, 誤爲 Hsin, 似也是作者忽略之處。『被』字拚爲“Pi”, 墨字拚爲“Mi”也非國語拼音, 應刪去。

四聲在國語中極端重要。因爲如果四聲不辨, 往往會曲解了說話者的意思。關於這點作者也曾在引言裏再四申說。不幸的是作者在他的書中正文內竟對於這一點未曾留心。書上的四聲注釋, 錯誤層出, 頗足引學生誤入迷途。在本書中幾乎每一課的十幾個生字裏都有一個或幾個四聲上的錯誤。這些錯謬, 不僅在各課中見之, 即在溫習的各課以及最後的 Glossary 中也都一誤而再誤, 可見倒不是筆誤。且也, 作者在引言裏, 講四聲的一節所引的例子, 也有許多字

把四聲完全寫錯。四聲錯誤最多是以第一聲或第二聲誤為第四聲，例如「沒」(Mei)，「昨」，「學」，「讀」，「伯」，「碟」，「國」，「薄」，「舌」，「鼻」，「覺」，「石」，「植」，「服」，「別」，「俗」，「角」(Chieh)「結」，「實」，「獨」，「活」，「玩」等字的均應為聲二聲，一概誤為第四聲，「吃」，「隻」，「的」，「八」，「答」，「發」，「阿」等字，均應為第一聲，也一概誤為第四聲。又如「們」，「失」，「鉛」，「微」都是第一聲，誤為第二聲。「幅」，「忘」是第四聲，誤為第二聲；「法」，「髮」，「鐵」都是第三聲，誤為第四聲；「這」，「記」，「市」都是第四聲，誤為第三聲；「爸」字「於」字誤為第一聲；「長」字「顛」字誤為第三聲。又「不」字不限僅於第一聲，亦有時為第四聲，原文有誤；「給」Chi 字不僅作第三聲，也可作第四聲；『必』字在國語普通均用第四聲，本書列為第二聲，『倒』字如照本書所注“On the Contrary”的意思應為第四聲，(如『反倒』)也非第三聲。『礦』字如拚作Kung 應為第三聲，如拚作K'uang 則為第四聲，本書亦誤。

至關於各生字的英語譯義，大致還沒有什麼大錯。但如以『子』譯為“Teacher”，『失』譯為“to Err”，『良好』譯為“Excellent” or “Splendid”，『明』譯為“Following.”，『空氣』譯為“Climate.”，『原』譯為“Reason.”，『差』譯為“To Miss.”，『掉』譯為“to Change” or “to Move.”，『啼』譯為“Singing, to Sing”，『畫』譯為“Stroke.”，『窗口』譯為“Window”，『較』譯為“Examine”，『該』譯為“Right, Necessary”，『跳』譯為“Beat”，『滿』譯為“Complete”，『礦』譯為“Metal Ore”，『羹』譯為“Spoon”，也都是有乖原意。

總而言之，作者多年的努力，完成這本著作，我們十分佩欽他這書能這樣井井有條，也表示作者教學很有經驗。不過因為作者旅美年代過久，全書似乎把中文都完全變成英文的結構。這樣，使本書的特長，不只於全部埋沒，而且懷疑到它印行的價值。這個書評，不過想把這書的主要錯誤指出。全書不當之過多，不能逐一列舉。作者在他的引言裏曾很謙虛的希望讀者能指點書中的錯誤，我也就毫不客氣的指點出來。當能獲得作者之原諒。最後，我十二分誠意的希

望作者能虛心的將全書完全重新另寫一過，找一個會說國語的人，幫着把書中每句話多加思考一番，通篇改一改，再修正為第二版，這樣我們才可以得到一本很完滿的華文教本。因為不如此的話，將令我們很難便說這書是一本可採用的中國文教科書，尤其不能承認是一本「國語」教科書。

一九四二，六，十四

如何籌措戰費

蘇在山

蘇在山 一九三三年畢業於交通大學，畢業後，服務津浦鐵路局，客歲由交通部遣派來美，研究公路運輸管理，曾在 Hayes Freight Line 等公司實習。

韓德教授 M. H. Hunter 係 Illinois 大學經濟系主任，近著政府財政之原理一書，對於戰時財政討論殊為詳盡，本文大部取材於彼，特誌數語，以申謝悃。不過所有意見，仍由筆者個人負責。

戰爭開始以後，政府應作之事，驟然增加，故支出浩繁，美國自一七七五年至一九二一年總共戰費支出約為五百二十萬萬元，其為數之鉅，殊可想見。是以各國政府在開戰以後，如何籌措戰費，為最重要問題之一。

在資本主義制度下，籌措戰費，最簡單者，確為增高稅率，以裕國庫，因在開戰以後，政府急於收買大宗必需品，製造軍需，故一般商業，均有盈餘，以提高稅率，應付戰時需要，自是正當之措施。

以稅收應付戰費，則戰費之負擔，易於確定，而難於轉嫁，倘所收稅入由於進款稅，戰時盈利稅，特別盈餘稅等，則戰之負擔，大多降於富者，對於財政之原則，亦殊融洽。

徵稅機關在平時已經設立，在戰事開始以後，立可籌徵戰費，無需另設新機關，既省開支，復省時日。

惟對於所增加戰稅，須特別審慎，否則其影響於產業之發達極巨，蓋戰時生產事業，較平時更為複雜，私人企業，大多以謀利為依歸，稍一不慎，則資本易於轉移，如紡織業在戰時因對於衣被之

需要增加，獲利甚厚，但如對於紡織業課以特殊重稅，則資本將由紡織業，轉至其他徵稅較輕之工業。

倘擬將增稅負擔，加於新興工業之上，則需另設機構，教育民衆，而新興工業，又未能遽爾負擔重稅，故需要相當時日，而後始可應付裕如，特別產業發達落後之國家，尤難用徵稅辦法，以應付戰費。是以許多國家，用借債辦法籌措戰費。

在游資較多國家，政府公債易於推銷，民衆樂於購買政府公債，既可表其愛國思想，復可獲得相當利息，將資本購買公債，與存於銀行，相差無幾，故公債較稅務易於推行。

政府公債大概可分短期，長期，中期，永久數種，短期公債在一年以內還本，長期公債，須在五年以後還本，中期公債，還本期間在一年以上，五年以內，永公久債，則不定還本期間，長期公債較短期公債易於管理，倘非國家財政狀況鞏固，不宜發行短期公債，以增財政之負擔，還本時期甚近，政府難於措款，一朝失信於民衆，則人民對於政府財政信念動搖，國家財政，無法維持。

清償公債之法甚多，然常用者，大多為公積金辦法，但公積金易於動用，且在財政緊縮之時，公積金亦不易籌積，其次則用發行連續公債辦法次第減低利息，以將債額減至最低，此種辦法，較公積金辦法，較為簡便，但在戰爭時期甚長國家，殊難以此辦法，清償公債也。

故籌還戰債辦法，最主要者，仍為收稅，用何種稅收，作籌還戰債主幹，對於民衆生計關係至大，例如用銷賣稅以支付公債，則貧者負擔較大部分，蓋銷賣稅負擔大多降於中下階級民衆，譬如每月進款百元之家，其銷費大多為日用品，假設負擔三元銷賣稅，則此稅已為其進款百分之三，而月入百萬之富翁，假令其負擔銷費稅三十元，亦不過為其進款百分之〇〇三，而能收買大量政府公債者，又為富翁，故富人對於作戰之負擔，遠較貧者小也。

倘如向外國借債，則暫時可渡過難關，但將來須償付外債，債

學徒建國叢刊

付外債之方法，固甚多，然其主要者，則不外乎出口貿易，即將自己之資源或製造品運出國外，以清償外債，故將戰費負擔移至下代。

籌措戰費之最不得已辦法，為發行不兌現之紙幣，以其易於通貨過度膨脹，勢將引起整個經濟破產，增發紙幣以後，物價逐漸上漲，資本家可以囤積居奇，增高物價，勞動者可以增加工資，惟一般薪給階級，日就窮困，無法維持，不安於生計，何安於工作，但薪給階級，實國家之主要動力，其影響於行政效率及作戰，何堪設想。

韓德教授在其近著政府財政之原理曾有下列幾句話：特引之以結束本文。

「這第一個辦法，是將各種富源，納歸國家管理，實行社會主義，生產事業國有政策。」

太平洋西岸工業化之實況

羅開富

羅開富 一九三五年畢業中山大學，考取第七屆英公費留學生額，入加拿大克拉克大學地理系研究地形學。
(原書係太平洋經濟研究叢書第三冊，Kate Miller著，紐約太平洋國際研究社出版，一九四二年。全書共二百九十六頁)。

本書所論區域為太平洋西岸，包含中國，日本，南洋，及澳洲，於每一區域敘述其近數十年來經濟發展之過程，及於此次大戰開始以後之演變。

戰事既啟，不獨實地材料難以搜羅，即政府編纂之材料亦不易得。本書於困難之下，卒能搜集最近而最可靠之材料，不失為難能之作。關於我國材料，大都根據經濟部，資源委員會，地質調查所，主計處，或其他專家於戰後所撰專論。其最優之特點，亦如本叢書之其他兩冊，在併列西岸諸國，俾讀者易於比較。

……所論各地，除中國及日本外，所有朝鮮，台灣，安南，泰國，緬甸，印度，菲律賓，荷印，澳洲，紐西蘭等處，其經濟發展之過程與實況，在在表現殖民地之通性，換言之，在經濟上，亦為其所屬國之附庸，而不能獨立自主，蓋其經濟發展之目的，在使供給所屬國之農產與鑛產，即使偶有工業，亦在榨取當地資源（例如鑛苗之提鍊與農產之改製），藉以利便所屬國之工業。至於本地所需之製造品，大部由其所屬國接濟，在此情況之下，因有大量輸出，其對外貿易容有良好表現，惟其經濟基礎殊不穩固，一旦原料不能外輸，或製造品不能運入，則全盤經濟，立見動搖。觀夫上次歐戰及一九三十年經濟恐慌給予上舉各地之打擊，其理最顯。

更有一例，菲律賓羣島雖經美國允予獨立，而竟不敢獨立者，（自願提出十年，一九三五至一九四六年，以爲試驗獨立之期，）無他，以其農產以外，無所出，而所有農產，皆以供給美國工業之原料，而非食糧，設於獨立以後，美國不再向其購取原料，則饑饉立見矣。

歐戰及世界經濟恐慌，誠使各地經濟感受壓迫，然各地所起之反響，並不一致。澳洲經過兩次之打擊，其經濟之改革，已漸使其接近工業自主國家。此次大戰既啟，更增加不少國防工業。反之，紐西蘭則猶不能脫離附容地位，良由前者有煤有鐵，具備基本工業之條件，而後者則無之也。

中國與日本之經濟，與上述各地絕異。

中國經濟，過去備受外資之控制，其機構與殖民地相同，惟改變經濟之主要因素，出自國內而非國外。上次歐戰，誠使我國之錫銻兩礦之輸出驟增，惟其他經濟部門，似無顯著影響。反之，近十餘年，內政漸上軌道，於是經濟之發展，乃趨於獨立自主之途。以棉織工業而論，一九三四年以後，國營紗廠已壓倒日本紗廠，且可輸出棉紗。其餘麵粉，製紙，及化學工業，亦因政府之努力而逐漸設立。

九一八以後，國力更爲集中，交通之迅速發展，使工業門類，作適量增加，國防工業，已在內地積極興設。八一三以後，沿海一切工業，深蒙損失。而其唯一之反響，乃促進內地之開發，川滇各省，素以農業爲唯一經濟門類，今已感受工業動染。重慶環近百餘公里，有煤有鐵，殊可作爲國防工業之起點。岷江下游之煤，及其附近之石油，陝西之石油，均足資爲可靠之燃料，而利用當地之農產林產，以興舉適宜之工業。

今日國防工廠已有十餘處，散於川滇桂黔。各省皆積極採煤，以應新興工業之需要。我國鐵礦極少（以前估計爲十萬萬噸，約合美國五分之一）。惟最近吾人在西康瀘沽發現一萬萬噸之儲量，雲

南易門亦有發現。吾人須知澳洲所有鐵礦，不過十萬萬噸，願已足為英帝國今日之主要國防工業區，然則我國鐵礦，焉不可發展國防工業乎？

由是言之，我國工業已踏入光明之路。此次戰事，適足使我國經濟基礎，漸趨穩固。反之，日本工業及經濟基礎，漸呈逆轉。

戰前，日本雖已高度工業化，但以輕工業為主；以其所售，轉購機器。質言之，其重工業尙屬幼稚。戰後，大興重工業，以實軍需。然而所謂「大興」，乃在改變或限制原有輕工業。可謂顧此而失彼（我國則免此弊）。輕工業既減，外匯之來源亦減，其漏卮乃因戰事之延長而愈甚。戰事初年，未嘗不竭力規奪東三省之煤鐵，並在東三省建置重工業工廠。孰料一九四〇年，國債已增至戰前時之三倍。所謂「偽滿第二次五年計劃」（一九三七至一九四二年），原欲逐年擴增煤鐵之提取，於此，乃覺計窮力盡，已明令停止擴增計劃。不少重工業工廠，因此倒閉或停工。

本書雖僅敷敘事實，而未分析及比對各國之情勢，然讀者未嘗不可利用其材料而作進一步之解說。其最引人訾議者，在標立「滿洲國」可為一經濟單位。謂不能了解國際心理。

本書屢云我國國民革命為資本階級，鑒於我國資本控制國內經濟而作反抗行動之表現。此種見解，在吾人目中，實屬滑稽與誕誕。我國革命先烈雖洞察當時經濟危機，革命之動機，雖含經濟因素，但革命之主要目的，實在內政之改革，絕非對外之行動也。

THE POSTWAR RECONSTRUCTION OF CHINA, ITS PROGRAM AND PROPER MACHINERY

W. K. Chen

A Project of Research and Planning

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PROBLEMS OF POSTWAR RECONSTRUCTION

Much attention is being focussed on the significance of problems of postwar world reconstruction. In view of the immensity and complexity of the task which must face all nations throughout the world at the end of the present conflict, no time should be lost in its serious study and planning. It has been said that winning the peace will be more difficult than winning the war. This fear is not unjustified when one reviews the modern history of international politics. It is no exaggeration to say that the whole problem of obtaining an enduring peace after the present titanic war against the Axis is won will depend very largely upon the success of the postwar reconstruction carried out by the continued cooperation of the United Nations. The Atlantic Charter jointly declared by President Roosevelt and Prime Minister Churchill and later subscribed to by other United Nations has laid down the fundamental principles of world peace and prosperity. The recent United States' invitation to Russia and China to conclude master Lend-Lease agreement similar to that concluded with Great Britain with the purpose of bringing together the four great nations as the cornerstones for a world economy is a great step forward to the future economic cooperation between the United Nations. Such steps having been taken, foresight requires that detailed studies and comprehensive planning be undertaken without loss of time as regards both the resources and requirements of each of the nations in the postwar reconstruction.

**THE IMPORTANCE OF POSTWAR RECONSTRUCTION
IN CHINA**

President Roosevelt recently declared:

We remember that the Chinese people were the first to stand up and fight against aggressors in this war; and in the future a still unconquerable China will play its proper role in maintaining peace and prosperity not only in Eastern Asia but in the whole world.

The strategic importance of China not only in the present war but also in the future peace cannot, indeed, be over-emphasized. However, in order to fulfill her essential role in the maintenance of world peace and prosperity, China must be fully developed economically. It can, therefore, be readily seen that the postwar development of China will be not only the immediate concern of China herself but of other nations as well. Economically, China's postwar reconstruction will have even further significance. On the one hand, China will require unlimited foreign material assistance in her reconstruction program; and on the other, the highly industrialized nations, especially the United States, where war production is scheduled to reach as high a point as 56 billion dollars annually, will face the highly difficult task of postwar industrial readjustment, and by giving China extensive help this burden may be lightened. Furthermore, in the industrialization of China there lies a most promising opportunity for profitable enterprise by foreign countries, an opportunity such as perhaps has never existed hitherto except when the American continent was being developed. Dr. Sun Yat-Sen, the father of the Chinese Republic, did not exaggerate, when, proposing a comprehensive program for the international development of China shortly after the World War I, he said:

The world has been greatly benefitted by the development of America as an industrial and commercial nation. So a developed China, with her four hundred millions of population, will be another New World in the economic sense.

**THE PROGRAM OF POSTWAR RECONSTRUCTION
OF CHINA**

Dr. Sun's program for international development of China was proposed "to end the trade war by cooperation and mutual help in the development of China" and to "root out probably the greatest cause of future war." Unfortunately, no attempt was made to carry out this program. The plans

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laid down in Dr. Sun's original work were later incorporated in his "Program for Reconstruction" (建國方略) and "Outline of Reconstruction" (建國大綱) which have been adopted by the Chinese Government as its cardinal program for the reconstruction of China. There is no doubt that in the postwar reconstruction this program will be very closely followed. Briefly, it may be outlined as follows:

1. Development of Communication Systems
 - (a) 100,000 miles of railways
 - (b) 1,000,000 miles of macadam highways
 - (c) Improvement of existing canals
 - (d) Construction of new canals
 - (e) River conservancy
 - (f) Construction of more telegraphic and telephone systems
2. Development of commercial harbors
3. Development of modern cities with public utilities
4. Water power development
5. Building of iron, steel and cement works on a large scale to supply the above needs
6. Mineral development
7. Agricultural development
8. Irrigation work on a large scale in Mongolia and Sinkiang
9. Reforestation in Central and North China
10. Colonization and Development of Manchuria, Sinkiang, Kokonor and Tibet.

For advancement of the general welfare and livelihood of the people, Dr. Sun further outlined various projects concerning the food industry, the clothing industry, the housing industry, the motor industry and the printing industry.

REQUIREMENTS OF CHINA'S RECONSTRUCTION PROGRAM

The above program was originally proposed by Dr. Sun with a view to instituting a joint international effort of development of China in which foreign capital and experts would participate. Clearly, such a colossal program will require all available foreign material and technical assistance possible, without which it will be at best a painfully slow process. Lack of capital has been a chief deterrent to China's industrialization. After the exhaustion of the prolonged warfare, China's own financial resources will be even more depleted. International cooperation in the provision of neces-

early capital goods and materials will, therefore, be the first requirement of the postwar reconstruction of China. While China's manpower is unlimited, there has been and will be a great scarcity in skilled workers and technical and managerial personnel. Extensive training of skilled workers and technical personnel will be necessary to meet this requirement. But at the initial stage of large scale reconstruction, foreign technical and managerial personnel will be as indispensable as foreign capital goods and materials.

**PROBLEM OF PROPER MACHINERY FOR CARRYING
OUT THE RECONSTRUCTION PROGRAM
MOST IMPORTANT**

In view of the increasing recognition of the important role of China in the maintenance of world peace and prosperity in the postwar period, the possibility of close economic collaboration among the United Nations in the postwar reconstruction, and the fact that China's demands resulting from her industrialization will greatly lighten the burden of postwar industrial readjustment and excessive productive capacity of the industrialized nations, especially the United States, it seems that to secure the necessary foreign assistance to carry out the gigantic program as outlined by Dr. Sun will not be a great problem. The most important question, however, is that of the machinery to carry out this program. It must be fully realized that the extent of foreign participation in China's reconstruction will depend very largely upon whether the program will be faithfully and efficiently carried out. A satisfactory solution must be found so that foreign capital and experts will be best utilized and the work conducted in a most economical and efficient manner which will in turn create greater confidence abroad in the prosecution of the program, thus assuring continued foreign participation. The importance of organization will be easily seen when one considers that, in addition to the magnitude and complexity of the program itself, it involves the problem of financing, coordination of the various projects and the full utilization of foreign material and technical assistance. Indeed, it may be said that upon the problem of organization will depend the success or failure of the reconstruction program. Will the ordinary governmental agencies, known as departments or ministries, each in charge of certain phases of the program, meet with the requirements adequately? Or should there be a central agency responsible for carrying out the whole program with the cooperation of different departments or ministries; and if so, how should such a centralized organization be constituted and what authorities should it be given with respect to both the execution of the reconstruction program and its internal administration?

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Dr. Sun in his original work "The International Development of China" suggested "in order to carry out this project successfully" that "the various governments of the capital-supplying powers must agree to joint action and a unified policy to form an international organization with their war work organizers, administrators and experts of various lines to formulate plans and to standardize materials in order to prevent waste and to facilitate work." We can, therefore, see that Dr. Sun himself fully realized the importance of a unified policy and a proper organization for carrying out the reconstruction program, while no further details with respect to the organization were given, it is clear that Dr. Sun had in mind an international organization formed by the "capital-supplying powers." In such an organization, it is apparent that the initiative would rest with the foreign countries which were to supply the capital, administrators and experts. Whereas, the conditions as existed two decades ago might have been such that this plan was thought the only workable one, it may be generally agreed that in the coming postwar period, while foreign assistance will be necessary, the initiative must rest upon China herself. The international organization as suggested by Dr. Sun over twenty years ago will be unnecessary if a proper machinery organized under the sole initiative and auspices of the National Government of China is set up, the integrity of which will insure the confidence of foreign governments and nationals, and under which foreign capital and personal will be best utilized in the reconstruction work.

A GOVERNMENT CORPORATION TO TAKE CHARGE OF THE RECONSTRUCTION WORK

It has been found unsatisfactory to have departmental agencies of the government take charge of work where unity of policy and action is essential. Coordination will be difficult if not impossible. Inter-departmental jealousies and friction have been found unavoidable in any system of government. Governmental red tape will entail delay and waste of work. To meet the above conditions, probably the best solution will be found in the organization of a centralized body in the form of a government corporation, which will be independent of, but will cooperate with, ordinary governmental agencies. Organized under provisions of a special law, this corporation, however, will be under the control and direction of the highest authorities of the government. It will be responsible for carrying out the whole reconstruction program as adopted by the government. Its capital will be provided by the government, with foreign loans for the special purposes of carrying out the reconstruction work, and its credits will be fully backed by the National Government of China. Financial autonomy

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with respect to its capital and financial operations will be exercised by the corporation. The various projects of the reconstruction program will be studied and coordinated and they will be financed with the resources of the corporation. When necessary, subsidiary corporations may be established and capitalized by the corporation for the operation of specific enterprises. Private enterprises, when approved and considered essential to the reconstruction program, may be given loans at fixed rates of interest by the corporation. The administration of the corporation, in which foreign administrators also may be invited to take part, must be entrusted to those who are best qualified. Its personnel must be selected on the sole basis of merit, and the services of foreign experts in various fields will be utilized.

Pending further study of the subject, only the more evident advantages of this form of organization may be pointed out. First, coordination and unity of policy and action, which are so important in carrying out the reconstruction program as has been clearly pointed out by Dr. Sun, may be best achieved by a centralized body in the form of a corporation. Second, the full utilization of the services of foreign administrators and experts in the different fields which is essential to the success of the reconstruction program will be possible only under such an arrangement, and political embarrassments resulting from employment of citizens of foreign countries in direct government services thus may be avoided. Third, greater confidence in the work of reconstruction will be created abroad, when foreign personnel takes part in its administration in different capacities and when the responsibility is centralized and easily identified, thus assuring continued material support by foreign countries. Fourth, participation in industrial and agricultural developments by private individuals, both Chinese and foreign nationals, will be important to the success of the reconstruction, and the promotion of these private enterprises will be much more effectively accomplished with the encouragement and assistance of a corporation, which has at its disposal extensive financial resources. Fifth, financial autonomy and freedom from political interference, as must be maintained as the chief characteristics of the corporation, are the best means of insuring efficiency and continuity in the execution of the reconstruction program which are at once essential to the success of the program

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and to further foreign material and technical assistance. And sixth, government red tape, waste and delay can be avoided in the case of a corporation where the work is to be conducted in the business like fashion.

STUDY OF THE WAR FINANCE CORPORATION AND THE RECONSTRUCTION FINANCE CORPORATION OF THE UNITED STATES

Students of public administration agree that when a service is predominantly economic in character, the best form of organization is a corporation. In modern times this type of organization has been extensively adopted in many countries both in times of emergency and in the development of national resources. While instances of successful operation of services by government corporations are many, the two corporations mentioned above, one of which was established during the first World War and the other in 1932, its functions being greatly expanded later, have the closest similarity in both scope and nature to a corporation of China responsible for carrying out the postwar reconstruction program. Much may be learned from a careful analysis of the organization, administration, methods and techniques of operation of these two corporations. Our study, moreover, will deal particularly with the problems that will confront a similar corporation of China when the large scale reconstruction program is to be undertaken, and it is hoped that concrete recommendations will be made for such an organization.

The War Finance Corporation was established in 1918 with a capital of \$500,000,000, and in addition it was given power to issue bonds and other obligations up to three and one half times its subscribed capital stock. Its purpose was to finance industrial operations essential to the prosecution of the war. It was later authorized to make advances to American exporting and banking institutions to finance American exports and also to extend its services for agricultural purposes.

The Reconstruction Finance Corporation was established in 1932 with an initial capital of \$500,000,000, but its borrowing power has recently been increased to \$14,000,000,000. Originally, its purpose was to make loans to banks, railroads, insurance companies, and other private and public organizations to relieve prevailing financial difficulties and credit stringency, and to promote economic recovery. Its functions have been greatly expanded to include assistance to agriculture, commerce and industry, and most significant of all, promotion of the United States National Defense Program. Under the Reconstruction Finance Corporation, there are many subsidiary corporations, including the Export-Import Bank of Washington,

the RFC Mortgage Company, Defense Plant Corporation, the Rubber Reserve Company, the Metal Reserve Company, the Defense Supplies Company and the Defense Homes Corporation.

*STUDY OF THE RECONSTRUCTION PROGRAM
OF CHINA*

While a comprehensive outline of the reconstruction program was given by Dr. Sun and adopted by the national Government, detailed planning is as yet to be made. Dr. Sun pointed out that detailed plans must be made on the basis of study and investigations by experts in the different fields before the program can be put into execution. The program must be flexible enough to encompass changes and modifications in the light of recent scientific advancement. This will include investigations into the nature and relative importance of each of the projects, thus coordinating them and outlining their precedence; the requirements as to time, materials, manpower and technical personnel; the possible financial and natural resources of China herself, and the extent to which China must rely on foreign countries for the necessary materials at each stage of development of the reconstruction program as well as what supplies China will be able to produce and develop with which to pay other countries for the capital and materials she requires. On the basis of these detailed studies, three or five year plans may be formulated as a working formula for completely carrying out the reconstruction program.

*A MASTER BLUE PRINT FOR THE POSTWAR
RECONSTRUCTION OF CHINA*

The final purpose of this research is to furnish a master blue print for the entire work of the postwar reconstruction composing both the working plans, stipulating the projects to be undertaken and accomplished each year and the organization of a centralized machinery which will be empowered to and capable of taking charge of the enormous task of carrying out the reconstruction, looking after the financing, administrative, materials, engineering and all other aspects of the work. This preparation is necessary so that, when time and conditions allow, the gigantic reconstruction work will be launched on a full scale without lost of time. It will also serve as a basis for negotiation with other United Nations as to China's postwar requirements with respect to materials and technical services. Without this preparation, mistakes and loss of time, which may prove much more costly than we can perceive, will be inevitable.

**HOW IS THIS RESEARCH PROJECT TO BE
UNDERTAKEN?**

This research and planning will require the services of students of public administration, finance, economics, civil, chemical and mechanical engineering, mining, agriculture and geography. While the studies of each of the phases of the problem may be undertaken separately, they must be coordinated and integrated so that the problem may be treated as a whole and no aspects of it overlooked. It is to be emphasized that each phase of the problem must be regarded as a part of the whole and treated in its connection with the others. Preliminary conferences must be held before the research project is undertaken; consultations must be made during the process of studies; and the final findings and recommendations must be put together jointly by the researchers with due emphasis on all aspects of the reconstruction program which China will and must carry out. It is recommended that Chinese students be selected to do this research and, if necessary, American students invited to participate. Opportunities for consultation with American authorities in different fields must also be provided.

CONCLUSION

The important role that China will play in maintaining the peace and prosperity of the world in the postwar period is receiving increasing recognition. Upon invitation by the United States, China has promptly joined Great Britain and the United States in a formal pledge for full economic collaboration in the postwar world. The recent United States loan of \$500,000,000 and British credit of £50,000,000 to China may be taken as a herald to greater Anglo-American assistance to China's postwar reconstruction. In view of the immense market that China will offer to the world, and the problem of postwar industrial readjustment that the United States and other highly industrialized nations must face, it is to the self-interest of these nations to assist China in her efforts towards industrialization. While extensive material and technical assistance from other United Nations may be expected when the work of reconstruction is undertaken, the question remains how such a gigantic work may be carried out most economically and efficiently and how such foreign materials and technical services may be best utilized. In case the United States extends another \$500,000,000 loan to China for the purpose of economic development when the Allied victory becomes a fact, how can such a loan be utilized to the greatest extent and immediately? It must also be kept in mind that only efficient organization and conduct of the work will create confidence both within the country and abroad which is necessary to encourage en-

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terprising Chinese and foreign nationals to participate in the great task of industrialization and agricultural rehabilitation. It is to answer these questions and to prepare China for the task ahead that this project of research and planning is proposed. It is the hope that as a result of this study detailed and workable plans will be presented for carrying out Dr. Sun's original program for international development of China. Furthermore, as much thought is already being given to the problems and the responsibility of the United States in the postwar world reconstruction and studies and plans of such nature are being made by the civic leaders and government authorities in this country, the findings and recommendations as a result of this study may be provided for their careful consideration and examination and they may be incorporated as a part of the total planning for the postwar world reconstruction.

AMERICA AND JAPAN'S WAR IN CHINA: BEFORE PEARL HARBOR

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"It is a maxim founded on the universal experience of mankind that no nation is to be trusted further than of it is bound by its own interest; and no prudent statesman or politician will venture to depart from it."

George Washington

"It is vain to expect nations to act consistently from any motive other than that of interest. . . ."

Alfred T. Mahan

"We are not furnishing this aid as an act of charity or sympathy, but as a means of defending America. . . ."

Franklin D. Roosevelt

Japan's premeditated and treacherous but swift and precise attack on Pearl Harbor on December 7, 1941, finally forced the United States to fight the aggressor in the Pacific on China's side and the long Sino-American historic association, economic, cultural and educational, was amalgamated in a common war effort. China's important position in the struggle against Axis' world domination was at long last recognized not only by the United States but also by the other members of the United Nations. However, because of the Anglo-American complacent and unrealistic attitude toward Japan in addition to their underestimation of Japan's navy and air strength and consequently because of the unpreparedness of the Democracies in the Pacific, Japan was able within six months after Pearl Harbor to occupy Hongkong, Manila, Singapore, the Malay States, the Dutch East Indies, the Philippine Islands and Burma which supply Japan the raw materials she badly needs. Whether Japan

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can consolidate her control over these areas depends largely upon her ability to remove the rear and flanking threats that can come from China. To eliminate such threats, Japan, having succeeded in destroying the strongholds of the Democracies in the Far East, is trying to knock China out of the war by concentrating her forces to attack China on all fronts. As Japanese forces advance in the maritime provinces of Chekiang and Fukien, along the Yellow River in Honan, on the borders of Yunnan, and toward Shaokwuan in Kwangtung and Changsha in Hunan, China's position seems to be more serious than at the time she was fighting Japan single-handed. It may be opportune to review the policies and positions of the United States in the Sino-Japanese struggle prior to Pearl Harbor in order to understand the present situation and future developments.

The Sino-Japanese war which broke out on July 7, 1937, as a sequence to the struggle between Chinese nationalism and Japanese imperialistic expansion and as a prelude to an open conflict between the assertion of Japan's "new order" and the struggle of the Western Democracies to maintain the *status quo* in Eastern Asia will soon be five years old. In this titanic struggle for existence and domination the position and policy of the United States, which, prior to the freezing order of July, 1941, supplied Japan with foreign exchange and sinews of war on the one hand and expressed sympathy for China's heroic struggle on the other, had been the chief concern of both China and Japan. Because of America's traditional friendship for China and the historic Open Door Policy, because of American treaty rights and obligations and interests in the Far East, and because of the American advocacy of international law and order and human decency, many Chinese including some high government officials had hoped for, if not counted on, a type of American support that did not materialize until the passage of Lend-Lease Act of March, 1941. When Japanese aggression menaced the security of the Philippines and the source of American supplies of tin and rubber from the Dutch East Indies and the Malay States and when China's resistance had tied up two-thirds of Japan's land forces, 75 per cent of her army air force and a considerable part of her navy, the United States and Great Britain began to treat China as their valuable ally by extending more credits and supplying some military weapons to China. Japan's complete control of all Indo-China and her attempt to move into Thailand in the summer of 1941 invited strong warnings from England and the United States. After the United States called Japan's bluff by cutting off the oil supply to Russia via Vladivostok in spite of Japan's protest, Prince Konoye, premier of the third Konoye cabinet during this

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war, addressed a personal note to President Roosevelt on August 28, 1941, seeking rapprochement. Then the Japanese-American "exploratory" talks, which began in April, 1941, but were disrupted by the sudden German attack on Russia, were resumed between Japanese Ambassador Nomura, Secretary of State Cordell Hull and President Roosevelt. In the meantime, conversations between American Ambassador Joseph Grew, and the Japanese Foreign Office continued. It was a foregone conclusion that unless the United States and Japan altered their policies toward China, the American-Japanese negotiations could not end in anything but failure. Since neither Japan nor China could force a peace on their own terms at that stage of the war, the success or failure of the negotiations certainly affected its course.

Realizing the military might of her foe and the weakness of her own military forces, China developed a three-stage strategical theory of resistance: Japanese offensive and Chinese defensive; guerrilla warfare and stalemate; Chinese counter-offensive and Japanese retrograde movement. During the first stage of the war which ended in the loss of Hankow, October, 1938, China lost practically all her important commercial and industrial cities. Since the chief cities and important sea ports fell into the hands of the Japanese, the American nationals and their properties in the occupied areas received no protection. The Government of the United States gradually changed its policy from assertions and reassertions of general principles and diplomatic protests to the clarification of American policy and definite statements of American interest in the Far East. After the fall of Hankow, General Chiang Kai-shek adopted general guerrilla warfare against Japan, thus marking the beginning of the second stage of the war. As their offensive power diminished, the Japanese tried to "dig in" in the territories under their control. Japan adopted economic measures such as the re-introduction of the transit tax, tariff revision in favor of Japanese imports, exchange control, import and export control, regulation of shipping and port facilities, and the establishment of monopolies and other enterprises, to eliminate foreign interests in China. These discriminative measures caused the United States to state definitely its displeasure toward Japan's pretensions in China. In December, 1938, the American Export-Import Bank began to extend to China a series of loans and credits to buy non-military supplies.¹ In January,

¹American loans and credits to China before Pearl Harbor consisted of the following: \$25,000,000, Dec., 1938; \$20,000,000, March, 1939; \$25,000,000, Sept., 1940; \$100,000,000, Dec., 1940. In Feb., 1942, President Roosevelt asked Congress to authorize a new \$500,000,000 loan to China to bolster her internal economy and her war effort which was passed unanimously by both Houses and signed by the President, Feb. 12.

1940, the United States terminated the treaty of commerce and navigation with Japan and in July of the same year put the exports of aircraft parts, metal-working machinery, aviation gasoline and iron and steel scrap of the Number I grade under a licence control. American warnings failed to prevent Japan from moving into Northern Indo-China and the conclusion of the Berlin-Rome-Tokyo alliance on September 27, 1940, led the United States to embargo all scrap metal after October 16, 1940, to extend the export control to include steel and iron, and to extend a new and larger loan to China. The Tripartite Pact purported to isolate Great Britain and to warn the United States, but the result was just the opposite. Anglo-American cooperation in world affairs materialized and the United States intensified her policy of aiding nations resisting aggressors. China's share in the Lease-Lend program had been small but rather significant.

Immediately before Pearl Harbor the Sino-Japanese war had reached the twilight zone between the second and the third stage as Japan began to feel the shortage of manpower and the limitation of her natural resources. On the other hand, the Chinese army has been growing in number and strength. Because of the lack of planes, tanks and heavy artillery China cannot launch counter-attacks successfully against Japan. Had China received a large quantity of such heavy equipment from the friendly nations, particularly the United States, China would have been able to launch effective counter-attacks against Japan. Since the United States adhered to her policy of refraining from too serious commitments and of trying to avoid being involved in war in the Pacific while she was so preoccupied by the Nazi menace in the Atlantic, she was ready to reopen the "exploratory" talks with Japan and continued the negotiations after General Tojo took over the Japanese premiership on October 18. The position of the United States in the Japanese-American negotiations can be better understood in the light of the American interests and rights in China and American policies in the first and second stages of the Sino-Japanese war.

AMERICAN INTERESTS AND RIGHTS

The desire for trade and commerce and missionary enterprises brought the United States to the international political arena in China. Before the writing of the first Hay Notes of September 6, 1899, the United States depended on the most-favored-nation clause to protect her trade interests in China. After the Boxer Rebellion, Hay added the logical corollary to the Open Door, namely, China's independence is essential to equal

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treatment in trade for Americans throughout all parts of China. Thus from 1900 to 1922 the principle of equal treatment for trade of all nations in China was not only enlarged to include equal opportunity for commerce and industry but also inseparable from the principle of respect for the territorial and administrative integrity of China. The Nine Power Treaty of 1922 adopted these principles of the Open Door and respect for China's independence and integrity as rules of conduct in Far Eastern relations. This basic American Far Eastern policy rests on the conviction that in the long run American interests are better served by preserving China's political independence and territorial and administrative integrity. This farsighted policy bore fruit when the American trade with China from 1931 to 1938 exceeded that of Japan and England, although American trade with, and investment in Japan were still over that with China.²

The American interests in China are: commercial, religious, educational and philanthropical enterprises; and China's independence which is essential to peace in the Far East. Closely related to the American interests in China are the American rights secured from the bilateral and multilateral treaties with China of 1844, 1858, 1868, 1901 and 1903, and the Nine Power Treaty. These rights are: the rights of residence and trade in the open ports and travel in the interior, the right to protect citizens and property by stationing military forces in China, rights in special areas (such as national concessions, international settlements and Peking Legation Quarters) rights in relation to special Chinese agencies (such as Chinese maritime customs service and the Whangpoo Conservancy Board), rights of shipping and inland navigation, rights under the Nine Power Treaty, and the right of extraterritoriality. Many of these rights and special privileges granted to the Powers after the Opium War and the British-French War with China constitute a serious infringement upon Chinese sovereignty. During the present war both Great Britain and the United States have promised China that they will re-

²In 1936 the year preceding the war the value of American exports to Japan and China was \$204,300,000 and \$55,400,000 respectively; of imports from the two countries, \$171,000,000 and \$32,800,000 respectively. In 1935, American direct investments in Japan amounted to \$387,000,000 and in China \$132,000,000.

In 1938 the figure for American investments in China accepted by the Department of Commerce and by Secretary Hull was \$132,000,000. To this figure some estimates added \$40,000,000 of Chinese obligations in default since the World War I, \$25,000,000 to \$35,000,000 covering the properties of American citizens permanently residing in China and \$40,000,000 for properties of American missionary and other charitable organizations. A. W. Griswold, *The Far Eastern Policy of the United States*, pp. 468-69.

relinquish the extraterritorial rights and other special privileges when conditions of peace again prevail.³ So long as these rights and privileges are neither renounced by international tribunals nor by mutual agreement between China and the United States, the latter has a right to hold Japan responsible for any disregard or violation of the rights and privileges in the occupied areas.

Besides her interests and rights in China, the United States has territorial possessions and economic and commercial interests in the Pacific. The American Far Eastern trade in 1937 constituted one-fourth of the total, which was twice as great as her trade with South America, and the United States is dependent upon the Far Eastern countries for a number of raw materials, vitally essential to her in peace and war. Of the twenty-one war materials (aluminum, antimony, chromium, coconut shells, coffee, hides, iodine, manganese, manila fiber, mica, nickel, opium, optional glass, quartz crystal, quicksilver, quinine, rubber, silk, tin, tungsten and wool) which the United States lacks, twelve (antimony, chromium, coconut shells, hides, manila fiber, mica, quinine, rubber, silk, tin, tungsten and wool) come in a good part from the Orient. More striking was the American dependency on the Dutch East Indies and the Malay States for tin and rubber, over 70 per cent of American tin and rubber supplies came from this region.⁴ So long as there were no substitutes found for these materials or new sources of supplies discovered, the United States could not afford to let the Malay States and the Dutch East Indies fall into the hands of, or this trade route be cut by, an unfriendly Power. Moreover, because of her territorial possessions in the Pacific, any shift or change of the balance of power in the Pacific was an American concern. Since Japanese aggression had upset the *status quo* in the Orient, the United States could not remain indifferent. The American position was clearly specified by Acting Secretary of State Sumner Welles in his statement of July 24, 1941, denouncing Japanese

³On July 18, 1940, Prime Minister Churchill stated in the House of Commons that Britain was ready to negotiate with the Chinese Government, after the conclusion of peace: the abolition of extraterritorial rights, the rendition of concessions, and the revision of treaties on a basis of reciprocity and equality. On July 20, of the same year, Acting Secretary Sumner Welles declared it has been American government's traditional policy and desire to relinquish extraterritorial and other special rights by process of orderly negotiations when conditions warrant. In the exchange of letters between Foreign Minister Quo Tai-chi and Secretary Cordell Hull which was made public on May 30, 1941, Hull declared that the United States would relinquish the extraterritorial rights and other special privileges when conditions of peace again prevail.

⁴E. B. Dietrich, *Far Eastern Trade of the United States*, p. 17.

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occupation of Southern Indo-China in that month, and by President Roosevelt's explanation of American policy on supplying oil to Japan. Welles warned:

"In the light of previous developments steps such as are now being taken by the government of Japan endanger the peaceful use by peaceful nations of the Pacific. They tend to jeopardize the procurement by the United States of essential materials, such as tin and rubber, which are necessary for the normal economy of this country and the consummation of our defense program.

". . . The steps which the Japanese Government has taken also endanger the safety of other areas of the Pacific, including the Philippine Islands.

"The Government and people of this country fully realize that such developments bear directly upon the vital problem of our national security."⁵

Following the denunciation by Welles of Japan's move for the occupation of Indo-China, President Roosevelt told members of the Volunteer Participation Committee that the United States had permitted oil to go to Japan for the past two years in order to prevent war from spreading in the South Pacific. "Therefore, there was . . . a method in letting this oil go to Japan, with the hope,—and it has worked for two years—of keeping war out of the South Pacific for our own good, for the good of the defense of Great Britain, and the freedom of the seas."⁶

Had this policy of appeasement of Japan by a supply of oil not been pursued, more Chinese might now be alive; but that is out of consideration in power politics. In admitting the failure of this policy the President removed American-Japanese policy from the field of confusion, misunderstanding and certain forms of criticism. Now, in order to prevent Japan from moving forward in the southern Pacific or attacking Siberia the United States entered into negotiations with Japan. American policies and positions during the first and second stages of the war—throw considerable light on the American-Japanese negotiations.

*JULY 1, 1937, TO THE FALL OF HANKOW,
OCTOBER, 1938*

When the Roosevelt administration began, Japan was on her march to conquer China. Where Secretary Stimson had made an effort to mobilize

⁵New York Times, July 25, 1941.

Ibid.

collective action to restrain Japan in Manchuria and had concentrated the entire American Asiatic squadron ostentatiously in Shanghai Harbor and the American fleet in Hawaii, Secretary Hull chose the tack of easing the severe tension between Japan and the United States: when Japan added Jehol to Manchuria and invaded China Proper, Hull made no public protest other than that implicit in his endorsement of the non-recognition policy; after the recognition of Soviet Russia the American fleet was withdrawn from the Pacific, a gesture of friendship toward Japan; the belated protest of Japan's proclamation of an Asiatic Monroe Doctrine was accompanied by birthday *felicitations* from President Roosevelt to Emperor Hirohito; and even after Japan's attempt to detach the five northern provinces from China, Hull merely continued to reiterate the fundamental principles of the traditional American policy.

It was a foregone conclusion that the United States was not prepared to check Japan's aggression in China in 1937. Five days after the outbreak of hostilities Secretary Hull informed China and Japan that an armed conflict would be a great blow to world peace.⁷ A still more harmless note was Hull's statement of July 16, 1937, in which he dwelt at length on the following general principles: maintenance of peace, abstinence from the use of force in the pursuit of national policies, pacific settlement of international disputes, the sanctity of treaties, revision of treaties by an orderly process, revitalizing and strengthening of international law, lowering tariff barriers and freedom of trade, limitation and reduction of armaments and cooperative efforts by peaceful and practical means in support of these principles.⁸ The United States was not concerned with the political issues of the war, and on August 17, when the American Government ordered marines to Shanghai to protect and evacuate Americans,⁹ Hull first made reference to the Nine Power Treaty.¹⁰ After Japan proclaimed an illegal blockade of China's coast in August and September, Hull warned on September 10 of the danger to shipping along the China coast and President Roosevelt declared that government owned merchant vessels would not be permitted to transport to Japan or China and that other merchant vessels would do so at their own risk.¹¹

⁷U. S. Department of States, Press Releases (Hereafter cited as Press Releases), July 17, 1937, p. 31.

⁸Ibid., pp. 42-44.

⁹By November about 4,561 of 10,500 Americans residing in China had been evacuated.

¹⁰Press Release, Aug. 28, 1937, pp. 87, 166-.

¹¹Ibid., Sep. 18, 1937, p. 227. China made a vain protest over the *Wichita* which unloaded at San Pedro the planes bought by China and proceeded to Hongkong with another cargo.

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The act hurt China more than Japan since the former possessed neither a navy nor a sufficient merchant fleet. On the other hand, Roosevelt refused to apply the Neutrality Laws in spite of the pressure of public opinion. When Japan conducted indiscriminate bombing of Nanking and warned, on September 21, foreigners to leave the city, the American Ambassador was one of the first among embassy circles to move his staff hurriedly aboard the American gunboat. Before the United States sent her delegate to the Brussels Conference, the American Government stated that the purpose of it was to study peaceful means and that the United States entered the Conference without any commitments.¹² The Conference was doomed to failure.

It was not difficult to explain why the United States limited its policy to the protection of nationals, their property and legal rights in the first year of the war. The domestic program of social and economic reform of the New Deal deterred the Administration from any ventures in world politics. The American public's attitude varied with the particular interests of the individuals or groups concerned, but it was, on the whole, as evidenced by the negative reaction to Roosevelt's Chicago speech, against the policy of quarantining the aggressor, and isolationism was at its peak. The remoteness of China, brisk business with Japan and the since proven false assumption on the part of the West that "progressive" Japan might guide China more rapidly forward, made the situation seem quite innocuous, at least in so far as the interest of the United States were concerned. The United States had miscalculated the seriousness of Japanese aggression.

The Panay incident which was proven to be a deliberate action made the American public realize the real threat of Japanese militarism. The sack of Nanking, the destructive and indiscriminate air raids over open cities and villages, the slapping of Americans and increasing violations of American rights stirred the American public. The widespread sympathy for China changed to a desire to do something and labor, liberal intellectuals and businessmen engaged in manufacturing goods long subject to Japanese competition organized volunteer boycott movements. Although the American Government still attempted to remain uninvolved, the American interest in the Far East was more clearly and definitely stated. In his letter of January 10, 1938, to Vice-President Garner, Secretary Hull stated that the interest in orderly process far transcended in importance the American trade with China and again on March 17

¹²Ibid., Oct. 23, 1937, p. 313; The Conference of Brussels, Washington Printing Office, p. 7.

when he spoke on "Our Foreign Policy" to the National Press Club, Hull declared that "to waive rights and to permit interests to lapse in the face of their actual or threatened violation—and thereby to abandon obligations—in any important area of the world, can only serve to encourage disregard of law and of the basic principles of international order, and thus contribute to the inevitable spread of international anarchy, throughout the world. . . ."¹³ However, except for informal discouragement by the State Department of the sale of bombing planes to nations bombing civilians, the American Government did nothing during the first stage of the war but protest the bombing of American properties and interference with the exercise of American rights in China.

*FROM THE FALL OF HANKOW TO AMERICAN-
JAPANESE NEGOTIATIONS*

The Munich settlement encouraged Japan to attack the southern ports of China and made the United States realize that she had to act alone in the Pacific. Making it clear that American Far Eastern policy was not affected by Munich, the United States sent a strong protest on October 6, 1938, to Japan giving a detailed summary of Japanese continuing violations of the Open Door in China.¹⁴ In its answer to the protest, the Japanese Government refuted the American position stating that their actions in China were not illegal and not violating the Nine Power Treaty and that Japan was devoting her energy to the establishment of a "new order" in Eastern Asia.¹⁵ Confronted with this rejection and challenge, the United States sent another sharp note to Japan on December 31, denying that any State had the right to establish a new order that impaired the rights of other States and stating that the United States was willing to negotiate through orderly processes.¹⁶ In the Spring and Summer of 1939 American public opinion crystalized and the majority was in favor of economic pressure against Japan. The Gallup Poll of the months of June and July showed that 66 per cent were in favor of boycotting Japanese goods and 51 per cent were for embargoes. In the meantime the Senate Foreign Relations Committee also considered the problems of embargo and requested Secretary Hull to indicate whether an embargo would violate any treaty. In his reply to the Senate Committee on July 21, Hull evaded the question but suggested that the ques-

¹³Press Releases, Jan. 15, 1938, p. 104; S. S. Jones and D. P. Myers, *Documents on American Foreign Relations, 1938*, pp. 6-.

¹⁴Press Releases, Oct. 29, 1938, pp. 283-86.

¹⁵*Ibid.*, Nov. 19, 1938, pp. 350-53.

¹⁶*Ibid.*, Dec. 31, 1938, pp. 490-93.

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tion be postponed.¹⁷ However, the British surrender to Japan prompted early American diplomatic action and, two days after the announcement of the Craigie-Arita formula of July 24, which recognized the Japanese army's special requirements in occupied China, Hull without waiting for Senate action sent a terse note to Japan denouncing the treaty of commerce and navigation of 1911.¹⁸

The outbreak of the European war in September, 1939, added new factors to the calculations of American, Japanese and Chinese policies. As Japan did not change her action and policy, Ambassador Grew made his statement "from a horse's mouth" on October 19 in which he said that "American public opinion strongly resents some of the things that Japan's armed forces are doing in China today" and that Japan's "new order" deprived Americans of their rights. In this statement nothing was said directly concerning the maintenance of an independent China.¹⁹ Grew's warning failed to change Japan's course, and, on January 23, 1940, the Department of State notified Japan that trade would be on a day to day basis and that no working agreement or other special arrangements would be entered into by the United States.²⁰ Since the war materials continued to flow to Japan, the termination of the treaty brought no serious effects on Japan, and in the summer of 1940 Japan began her southward move which became a formal part of her foreign policy.

Japanese occupation of Northern Indo-China and the conclusion of the Tripartite Pact shocked the American people and Congress into the realization of the danger of this new expansion and combination of powers capable of acting against the United States in both the Atlantic and Pacific. The issue between Japan and the United States was more clearly drawn. The strong American opposition to Japan and America's aid to England brought the latter back into line with the American policy in the Far East. Both England and the United States began to realize and appreciate the value of China's resistance. For the first time the independence of China entered into association with the security of the Anglo-American empires. Although the United States refused to accept Japan's "new order" in Asia, she had no desire to engage in a costly war with Japan. Even after Japan had occupied Northern Indo-China and openly sided with the Axis, the United States still clung to the hope of negotiat-

¹⁷U. S. Department of State, Bulletin (hereafter cited as Bulletin), July 22, 1939, p. 61.

¹⁸*Ibid.*, July 29, 1939, p. 81.

¹⁹*Ibid.*, Nov. 11, 1939, pp. 509-16.

²⁰*New York Times*, Jan. 23, 1940.

ing with Japan. On September 20, 1940, Welles' statement on American policy reiterated that:

"From the standpoint of reason, of common sense, and of the best interest of all the Powers possessing interests in the Far East, there is no problem presented which could not be peacefully solved through negotiation provided there existed a sincere desire on the part of all concerned to find an equitable and a fair solution which would give just recognition to the rights and to the real needs of all concerned."²¹

THE FAILURE OF AMERICAN-JAPANESE NEGOTIATIONS

From this brief review of American positions and policies in the present war several conclusions can be drawn. First, Japan's aggression in China and Japan's attempt to establish a "new order" in Asia have violated American rights in China and menaced American territorial possessions and economic interests in the Pacific. Secondly, the United States could not afford to let Japan have a free hand in China and the southern Pacific but she did not attempt to protect her interests either by economic sanctions or possibly military force until 1941. The unwillingness on the part of the government to impose restrictions on the flow of war materials to Japan did not, however, reflect American public opinion. American policy was weakened from the beginning for the Manchurian affair had already clearly proven that only collective and firm action on the part of foreign Powers could possibly stop Japanese aggression. Thirdly, although the United States did not surrender any rights in principle in her dealings with Japan, she failed completely to change Japan's course. Finally, the United States had no desire to fight Japan but had been willing to negotiate a settlement of Far Eastern questions on a basis of equality. This desire was heightened by the uncertain outcome of the German-Soviet struggle and the tense situation in the Atlantic.

Alarmed by the increasing direct American aid to China and the State Department's stiffening policy toward the "new order" in Asia, perturbed by the uncertainty of the European war and the Anglo-American aid to Russia, and apprehending Anglo-American economic pressure against Japan, Premier Konoye took a step to appease the United States. In his personal note to President Roosevelt who had refrained from directly condemning Japan in his public pronouncements, Konoye pleaded that the United States and Japan ought not let bad feelings deteriorate into worse, and worse into war. Since the American Government had held the

²¹Bulletin, p. 249, Sept. 28, 1940.

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position that the United States was willing to settle the problems in the Far East to the mutual advantage of all by an orderly process, the response to Konoye's move was favorable. The problems confronting the American-Japanese negotiations were, however, myriad: the "China incident," Japan's partnership in the Axis, Japanese occupation of Indo-China and southward expansion, Japanese ambition in Siberia, and Japanese-American trade relations. Japan might be willing to desert the Axis, withdraw from Indo-China, and give up the idea of southward conquest and her ambition in Siberia temporarily for American recognition of her conquest in China and normal trade relations with America and American economic aid, but she would not withdraw from China. On the other hand the United States could not reverse its historic policy without losing its prestige and jeopardizing its interests in the Far East by legalizing brigandage in Manchuria and condoning territorial aggression in China Proper. Since the United States was unwilling to come to terms with Japan at the expense of China, the negotiations were doomed to collapse.

In deference to Japan's desire, the negotiations were being kept secret. Consequently the proceedings of the negotiations have not been made public. However, based on the published texts of American Proposals of November 26 and Japan's Reply to the Proposals on December 7, the main objectives can be summarized as follows. Japan sought the recognition of Japan's "new order" in Asia, the end of American aid to China and economic concessions from the United States that would break the economic blockade. The United States sought to win Japan away from the Axis, to induce Japan to give up their adventures in China and to withdraw from their occupations of Indo-China. Chungking watched the developments of the negotiation with misgivings. In an interview with the Chungking representatives of the United States press in early September, General Chiang warned the United States not to be "duped by Japanese trickery" in a "show of conciliation." He pledged China's resistance to Japan to the bitter end. In the meantime formulas and counter-formulas were proposed: September 25, Japan replied to the American draft of June 21 with another draft; October 2, the United States offered a basic proposal; November 20, Japan replied to the proposal with the suggestion of a temporary *modus vivendi*. The Japanese reply of November 20, did not give up the demands published by the *Japan Times Advertiser* on November 5, which included: cessation of economic and military aid to China; ending the "military and economic encirclement" of Japan;

recognition of Japan's "Co-prosperity Sphere" and of "Manchukuo;" and an American hands off China policy.

After Kurusu arrived in Washington on November 15 and had his first talk with President Roosevelt, General Chiang spoke to the People's Political Council on November 17, urging the Democracies to destroy the weakest link of the chain of aggressors. Meanwhile the negotiations were bogged down. In order to resolve divergences implied in the Japanese plan of November 20, and the principles declared to be fundamental in the American policy, Hull offered, on November 26, proposals which required Japan to withdraw all her military, air and police forces from China and from Indo-China and to abandon her "new order." The news of General Chiang's strong warning—that if the Democracies did not stand by China it would be hard for some Chinese elements to resist pressure brought upon them by the Axis—was not made public in the American newspapers until November 28. On December 3, Hull made it plain that the negotiations had reached no common ground. Before Japan's reply to Hull's document of November 26 reached him, Japan had already attacked Pearl Harbor. It is well to recall that when the negotiations began many experts on Far Eastern affairs branded the negotiations as futile and not moral, ridiculous and disastrous blunders. There can be no permanent peace in the Far East so long as the military machine in Japan is not destroyed. To this goal Churchill and Roosevelt have committed themselves by the joint Atlantic Eight Point Declaration which has been endorsed by China. The voice of Paul Reinsch, American Minister to China from 1913-1919, raised in his letter of resignation on June 7, 1919, to President Wilson was prophetic, when he said in part:

"In fact, the situation requires that the American people should be made to realize what is at stake here for us in order that they may give the necessary backing to the Government for support in any action which the developments here may require. Unless the American people realize this and the Government feels strong enough to take adequate actions, the fruits of one hundred and forty years of American work in China will inevitably be lost. Our people will be permitted to exist here only on the sufferance of others, and the great opportunity which has been held out to us by the Chinese people to assist in the development of education and free institutions will be gone beyond recall. In its stead there will come a sinister situation dominated by the unscrupulous methods of the reactionary

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military regime centered in Tokyo, absolutist in tendency, cynical of the principles of free government and human progress. If this force, with all the methods it is accustomed to apply, remains unopposed there will be created in the Far East the greatest engine of military oppression and dominance that the world has yet seen. . . ."²²

²²Paul S. Reinsch, *An American Diplomat in China, 1922*, pp. 164-65.

THE PACIFIC CHARTER

Plau Lim Yuen

Paul Lim-Yuen—Student at the University of Michigan. The article below was a prize-winning oration of the Northern Oratorical League at Northwestern University. Though the subject matter of this article does not belong strictly to the alleged field of this journal, we publish it as a sincere plea for a world democracy.

Perhaps I have no right to say the things I shall say to you tonight. I have frequently imposed upon myself the obligation not to criticize the faults of America. I have rather, in the past, undertaken to examine the faults of my own people, the Chinese, and to ask your aid for them.

But today, I am wearied, and confused, and pained. For three years now, I have lived in America, privileged to pursue my studies in one of her greatest institutions of learning. For three crucial years, I have witnessed every step this great nation has taken inevitably toward war. During these years, I have talked intimately with American students, American businessmen, and American factory workers. And in nine cases out of ten I was disappointed, until I began to believe that what they said represented widespread confused thinking in the great masses of the American people. They extolled my people's fight; they made much of fine phrases about international bills of rights and Atlantic Charters, but they seemed addicted to circumlocution whenever challenged to take their clear and realistic role in defense of right throughout the world. I had expected the deep, clear faith that America had brought into the world in the Declaration of Independence—but it was not there.

That is why I must speak frankly to you today, not in bitterness, but because, having lived in America, I love America. And loving America, and hoping for the common salvation of both America and China, at this dark hour I must speak of you as I would of my own people, without reserve. If I offend, I shall ask your forgiveness. But I shall also be gratified that the offense will have attested to a truth sent home.

I want first to tell you that my people have been fighting this war, not for five months, but for ten years. For them, Pearl Harbor was not enacted on December 7, 1941. It was enacted on September 18, 1931, at Mukden, in Manchuria. It was enacted again for 88 bloody days in

The Pacific Charter

Shanghai, the following year. It was enacted again at Lukouchiaou, in North China, on July 7, 1937. Pearl Harbor has been enacted ever since in every unholy act of drug distribution, incendiarism, outrage and murder in 800,000 square miles of Japanese-penetrated territory. How I could tell you the whole ghoulis tale of those ten years of agony—of the rape of Nanking, the sack of Hankow, the bombings of Canton and Chungking, where the casualty lists alone would dwarf the total of all the other bombed cities of the world put together. Imagine this great university bombed from the air, invaded by foreign troops, these great halls converted into military headquarters and torture chambers and enemy barracks. Imagine yourselves, together with students from your sister universities in the East and Midwest, trekking on foot for over 1,000 miles to establish yourselves again in universities dug in the hillsides of Nevada. You can then appreciate what has happened to over 90 per cent of China's universities and colleges since the Japanese descended upon them. Imagine fifty million starving refugees, over one-third of your total population, driven by war from the Atlantic and Pacific seaboards, into interior states like Utah, Colorado, Wyoming, and Nevada, there to find their only subsistence. You can then approach a correct view of the colossal migration into Free China.

This is the picture you must have of fighting China before you can talk about her courageous resistance. Surely to my people who have braved ten years of these conditions, freedom and democracy and justice cannot be mere catch phrases to win the war. They are as real and virile and vibrant as life itself.

Are they as real—as virile—as vibrant—to Americans? Are they truly alive at all in western democracy? Have the British, and the Americans, shown any imaginative desire to break the sad precedents of history in making this a revolutionary war? Do they know and believe what they are fighting for? Or have they come to cherish liberty and democracy as they cherish automobile tires, and unrationed sugar, and two-pants suits, and sheer silk stockings?

I cannot doubt that deep in the heart of the American people there burns a fierce love for the highest of principles. But can it be that in their desire to do fullest honor to these principles, they have enshrined them in a great national temple so encrusted with gold and other glittering symbols of material civilization that this inheriting generation has come to worship the whole fetish of wealth and luxury and has forgotten the shrine within the temple? I fear that they must have come to identify a high standard of

national living with a high standard of national morality. That is their false icon.

Ten years ago, in Manchuria, the Chinese nation fled into the front line trenches of democracy. At first, they too, knew little what they were fighting for in terms of principles. To most Chinese, these principles were identified with the great art treasures of Peiping, the modern brilliance of Shanghai, or the vast rice fields of Kwangtung. Even to the humblest peasant, these principles were identified with the little thatched hut that was his home, and the tiny plot of land that was his subsistence. But when the Japanese bombers came and blasted the cities out of existence, when the Japanese tanks came and drove the peasant from the land that he tilled, the Chinese people suddenly found *their* false icon destroyed. And they hastily helped to destroy it in their moral emancipation. Then they knew that if they were to fight on, it would not be for the destructible institutions their hands had raised, not for an earth that could be rendered sterile, but for the deeper, elemental things of the spirit, indestructible and creative, —freedom, democracy, equality and tolerance, truth and morality for *all men*—the final principles that must never be violated by the invaders.

They turned hopefully to the western democracies, which they had always deemed to be the stronghold of these principles of faith. They appealed for aid to save their idealism by stopping the Japanese. But the great western powers literally rejected the appeal, and in effect helped turn the Articles of the League Covenant, the Kellogg Peace Pact, the Nine-Power Washington Treaty, into waste paper in which was destined to be wrapped and discarded nearly every international code set up by the nations. In the tragic years that followed 1931, while China pleaded for western recognition of the global implications of Japan's expansion, America and the British Empire supplied on the one hand nearly 100 per cent of Japan's war needs, while on the other, nearly 100 per cent of China's medical supplies. It was as if the West were enjoying a sadistic drama in which the victim needed to be given new leases on life that the drama could go on. And to obtain places as spectators in the gallery of nations, they paid exorbitant prices in ideals.

Germany and Italy viewed Japan with admiration and America and Britain with satisfaction. They took Japan's cue, and the stream of events since 1931 has grown into a turbulent flood of world disaster. Manchuria in 1931, the so-called "Chinese problem," was the broken dike democracy itself helped to breach. Ethiopia, Austria, Munich, Czechoslovakia, Poland

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—every point along the banks of the flood marked a shipwreck of democratic conviction as much as an advance of aggression.

But why disinter the past? The present is more important. The Japanese have been winning. The whole Allied cause is in grave danger. It is time we took inventory, and investigated the causes of our defeats.

The reason for the losses we have suffered so far does not lie ultimately in disunified military strategy, in lack of military decision, in lack of planes and ships. The trouble lies ultimately in disunified democratic thinking, in lack of moral decision, in namby-pamby dereliction of democratic faith. It lies in the kind of British Tory dereliction of faith that could afford to be mealy-mouthed about inequality and injustice to half a billion colonial Asiatics, that could prevent the British Prime Minister himself, indomitable war leader though he be, from applying, with a sweep of noble boldness, the towering principles of the Atlantic Charter to 390 million Indians. It lies further, in the kind of America First dereliction of faith that for ten years, while world civilization tottered, could see only isolation as a national policy—a policy which has, for five months of war, persisted in appealing, not to the highest of international ideals, but to the narrowest of national passions. No, my friends, it is not the planes and the guns and the tanks that are at fault. It is the state of mind—a state of mind far out of consonance with the true spirit of this revolutionary, global war which we hope to win.

I know these are bold utterances. Forgive me if they pain you. But my people have a right to speak—however unworthily I represent them. Before any Atlantic Charter was set up to marshal the scattered moral forces of Atlantic nations (for such indeed had come to be its purpose), my people had written a *Pacific Charter* for their nation and *all* democratic nations without exclusion. It is a Charter, not a facsimile of the Atlantic Charter, not written in ink, but, written in the blood of five millions of China's manhood. And the parchment is her scorched earth, the pen, the indomitable will of her people. That Charter is not set in eight meticulously worded points. It is etched deep into the daily thinking of her people, from the humblest peasant to Generalissimo Chiang Kai-shek himself. And the clear, unfettered terms of this Pacific Charter might well have said: "We hold these truths to be self-evident, that *all* men are created equal; and that they are endowed by their Creator with certain inalienable rights, and among these are Life, Liberty, and the Pursuit of Happiness."

These words flame today in China's battle skies. These words declare a glowing faith in the universal meaning of the revolutionary struggle in

National Reconstruction

which they are engaged—"inalienable rights" not alone for Americans and Chinese and British—not for individual nations and races—but for common humanity. These words declare that China is fighting for the expansion of an ideal long cherished in her own philosophy, an ideal for which America, over a century and a half ago, struck the first revolutionary blow.

China is at her Valley Forge. She is confident of final victory for this ideal, because she is confident of America, the America whence came the re-emphasized, dynamic philosophy for the moral resurgence of her people. If only America could see—could see herself as the Chinese people have seen her in the past one hundred years—the true America, in the role of mighty champion, towering among the nations, with justice and liberty and equality and democracy emblazoned on her escutcheon—names that spell neither national nor racial creed, but the creed of mankind.

Not only China, but all Asia, is looking toward America. Let there be a definite assurance of her spiritual return to the dynamic, unalloyed idealism that we believe to represent the real America, and a thousand Asian armies would move with her and China to fight for a world empire of freedom. I adjure you to believe me, a continent and a billion men and women have cast you in the greatest role in the most soul-stirring drama of all times, O America! We are, in the words of Matthew Arnold, "Wandering between two worlds, one dead, the other powerless to be born." The world of yesterday is dead indeed—cremated in the consuming fires of great bombed cities. At this hour, reaffirm your faith, O America! Upon you depend the light and the life of the coming world! This is the message, and this is the exhortation, of the Pacific Charter!

SULFANILAMIDE IN WAR SURGERY

Chia-Ssu Huang, M.D.

Chia-Ssu Huang—M. D. from the Peiping Union Medical College, now doing practice and research in the field of thoracic surgery in the University of Michigan, Ann Arbor, Michigan.

The introduction of sulfanilamide and its derivatives into clinical use has revolutionized the prognosis and treatment of several infectious diseases. Its effect on wound infections has been, however, less dramatic until very recently. Wound infections are, in the main, local diseases. Sulfonamide given by mouth or through subcutaneous or intravenous route is uniformly distributed to the body fluid, and its concentration has an upper limit, beyond which, toxicity appears. Logically it will be most efficacious if the drug can be given in such a high concentration in the zone of infection as to act effectively on the bacteria, but its concentration in the general body fluid is kept low enough as not to give rise to toxic symptoms. This aim is attained when the drug can be applied locally to the wound.

Jensen, Johnsrud and Nelson in 1939 published the first material on the local use of sulfanilamide. In a series of 39 cases of compound fractures and two cases of compound dislocations, 5 to 15 grams of sulfanilamide was introduced into the wound after thorough debridement and careful hemostasis, and the wound was closed without drainage. There was not a single case of wound infection. In a control series of 94 cases of compound fractures similarly treated except that sulfanilamide was not used, wound infection developed in 27 per cent of cases, and in five cases amputation was necessary for the control of infection. This brilliant result has led to the wide acceptance of the method within a short period of time, and, at present, extensive experimental and clinical works have been done for the determination of its value. The following points seem to be established:

1. Local application of sulfonamide is exceedingly effective in the control of wound infection owing to its high concentration. In its full

saturation, sulfanilamide is 800 milligrams per 100 cc. of the wound serum, while in the general circulation, it is below 15-20 milligrams per 100 cc. of blood.

2. The effect of sulfonamide in wound infection varies inversely with the amount of pus or necrotic tissue in the wound. The most plausible theory on the bacteriostatic action of sulfonamide at present is that advanced by Wood who found that P-aminobenzoic acid, an intermediary protein metabolite essential in the process of bacterial cell division, has to be acted upon by a specific enzyme before it can act in bacterial metabolism, and sulfonamide resembling closely in the molecular structure of P-aminobenzoic acid competes with the latter for position on enzyme. If the enzyme is occupied by sulfonamide, the utilization of P-aminobenzoic acid is blocked and bacteria cease to multiply. On the other hand, an abundance of P-aminobenzoic acid which is present in pus and necrotic tissue will inhibit the action of sulfonamide.

3. Among the sulfonamides, sulfanilamide has the highest solubility and it is, therefore, the drug of choice for the local application. Other compounds, such as sulfapyridine, sulfathiazole and sulfadiazine often remain undissolved in the wound and act as foreign bodies.

4. Sulfonamide does not interfere with the healing of the wounds, although some workers believed that wound healing is delayed to a certain extent, and advised against its routine use in clean wounds.

5. Local application of sulfonamide has no general or local toxic effect. It is well tolerated in the cranial, pleural and peritoneal cavities as well as bones, muscles and subcutaneous tissues.

In war wounds, the local application of sulfonamide is of particular importance. All the war wounds are contaminated and, therefore, potentially infected. It has been found in the last World War that the wound will become infected if not treated within the "golden period" of the first six hours. In the present war, the action of mechanized army makes it impracticable to have field hospitals situated within a comparatively short distance from the front line, and the air attacks have scattered the wounded far and wide. Under such conditions, only a small percentage of the wounded can be satisfactorily attended within the golden period. This is particularly true in China where the transportation of the wounded is a very difficult problem. What a tremendous help it will be if the bacteria in the wound can be prevented from multiplication by the local application of sulfonamide!

Sulfanilamide in War Surgery

The experience of the French and British surgeons in Europe and the recent experience of the American surgeons in Pearl Harbor have given very gratifying results. The wounded when first seen are given local sulfanilamide application and adequate doses of the same drug by mouth besides other necessary emergency measures. They are then sent to stations where operations can be performed. After adequate cleansing, careful debridement and complete hemostasis, the wound is thoroughly smeared with sulfanilamide and packed open with gauze for 48 hours. If the wound is found clean at the end of this period, it is then closed by sutures. Following this scheme, Moorhead reported that in Pearl Harbor, purulent discharge in the wound was almost non-existing, and there was not a single death nor a limb sacrificed in eleven cases of gas gangrene.

The amount of sulfanilamide used varies with the size of the wound. Not more than 20 grams should be used at one time. It is generally given in powder by insufflation or smearing with any instrument, but it is also feasible to be given in ointment. Oral administration should be given to prolong the effect of the drug since it is fairly rapidly absorbed and excreted.

In conclusion, it can be stated that the beneficial results of the local application of sulfanilamide in the wounds have been amply demonstrated in the present war. Through its strong bacteriostatic property, the operative treatment of the wound can be considerably delayed, as such is often inevitable in the war surgery. It is needless to say that other principles of surgery, such as the combat of shock, the replacement of blood loss, the cleansing and debridement of the wound, the support or immobilization of the injured part, and the proper drainage of localized suppuration should never be neglected.

NUTRIENT-SUBSTITUTES AND INEXPENSIVE METHODS OF FOOD PRESERVATION

Yu-chieh Wang, (Mrs. C. W. Chang)

Yu-Chieh Wang (Mrs. Chai-Wei Chang)—Trained in chemistry and biology, Cheeoo University. Mrs. Chang is interested in home nursing and household sciences, she is now doing research in these fields.

The use of substitutes has been so common in Germany that people cannot keep track of their origin.¹ These substitutes, synthetic materials or the so called "Werkstoffe," are not only indispensable to industry but also to the daily life of every home. Any handbook of Werkstoffe or *ersatz material* may contain full information regarding synthetic rubber, petroleum-products, machine parts, gears of plastics, musical instruments, utensils, jewelry, household appliances, textiles, meat-products, flour, butter, coffee, milk and hundreds of others. Contrary to this, the American Journal of Home Economics² and the Yearbook on Nutrition³ have seldom advocated the use of substitutes in the past. Such an indifference towards substitutes was probably justified during the pre-war period in view of America's vast resources and ample manufactured products.

Unfortunately, foreign students, including a number of Chinese, in Home Economics, are too much influenced by the American way of teaching and practice to the extent that they can only follow standard procedure, or recipe, through the use of typical American material and processed products bearing a certain patent-name or trade mark. This sort of practice will, naturally, be handicapped in regions other than the United States on account of the scarcity of a certain material and a lower standard of living. Consequently the health of the people of other nations, particularly the lower-income brackets, can hardly be benefited by these inflexible methods.

¹Dorn, Karl, 1941 "Werkstoffe's" Miracles of German Chemistry, German Library of Information, N. Y.

²Journal of Home Economics published by American Home Economics Association, Washington, D. C.

³Yearbook, U. S. Department of Agriculture, 1939.

Nutrient-Substitutes and Inexpensive Methods of Food Preservation

Recently, nearly every class of Americans has begun to realize the curtailment of the war-economy. It is probable that they are themselves seeking substitutes for rubber, tin, silk, chromium, magnesium, paints, drugs, and a number of scarce commodities. They also develop rapid and inexpensive methods for food preservation, so that large amounts of food can be packed for lend-lease purposes.⁴ These techniques and experiences might be only of temporary value to the United States but will be of tremendous and permanent value to China. It is true that China needs a canning industry, but the cost of a couple of cans could provide one day's living expenses for the whole family of a farmer or coolie. On the other hand, dehydration of the food in question in an oven or under the sun following a certain pretreatment for cleansing and disinfection⁵ will cost so little that everybody could afford to apply it.

Therefore, I would like to suggest to our fellow Chinese students in Home Economics the following:

1. Study the use of substitutes for standard apparatus, procedure, raw material and food supplies. Special attention should be directed to the fact that such substitute must be equally effective and free from detrimental effect or poison, e.g. the use of soybean milk, in place of cow's milk, without supplementing available calcium compounds, will diminish children's resistance to *tuberculosis*. It may also result in development of poor teeth. Therefore, one must be aware of the possible secondary effects, chemical and biological, that may arise through improper use of substitutes.
2. Build up our basic knowledge in chemistry, biology, and nutrition. This knowledge will aid us to interpret research data correctly. It also enables us to modify standard procedures with reasonable accuracy and safety.
3. Learn the techniques of applying modern research-findings concerning nutrition, inexpensive food preserving processes, housing, sanitation, home hygiene including prenatal care, baby delivery and child health.
4. Visit and investigate those institutes which deal with research, education and extension of Household Sciences and Home Nursing.

⁴Current industrial information from various journals including New York Times and Wall Street Journal.

⁵Unpublished research from Division of Fruit Products, College of Agriculture, University of California; or, Cruess, W. V. and Mrak, E. M., 1942, What's known today about dehydrating vegetables. Food Industries 14, No. 1 (Jan., 1942), pp. 57-60. (Dr. Cruess is head of Division of Fruit Products, Univ. of Calif.)

The coordination and cooperation between various organizations should be investigated and studied with special attention. If time and finances permit, the investigation should be extended to food packaging companies, bakeries, home gardening community and clothing and textile manufacturers with the aim of studying the possibilities of applying and modifying their methods to Chinese conditions.

GET YOUR VITAMINS THE NATURAL WAY

(Sources of material: Largely from papers by Miss Loretto M. Reilly, Home Economics Supervisor, Madison Education Association and counter-checked with textbooks of Biochemistry, Nutrition, U.S.D.A. Yearbook 1939, Nutrition and Foods, Journal of Home Economics and pamphlets from leading drug stores and biological laboratories.)

Vitamins are yours for the asking! Produce them in your garden.
Buy them in your food.

To save vitamins and minerals, prepare all vegetables and fruits just before use. In cooking, cook vegetables quickly in a little boiling water. Do not use soda. Use leftover liquids in soups, gravy, and cream sauce.

Types of more important vitamin	Food Sources	Function
VITAMIN A	<p><i>green vegetables:</i> parsley, spinach, kale, broccoli, beet and turnip greens, endive, chard, lettuce.</p> <p><i>yellow vegetables:</i> winter squash, sweet potatoes, carrots</p> <p>yellow peaches, apricots—fresh or dried.</p> <p>liver, egg yolk, butter, milk, cream, cheese</p> <p><i>others:</i> prunes, tomatoes,</p>	<p>protects our eyesight</p> <p>helps us to see in dim light</p> <p>helps us to grow</p> <p>helps us to keep healthy tissues which resist infection.</p> <p>believed to prevent colds (The deeper the green or yellow color, the more Vitamin A will be supplied.)</p>
VITAMIN B includes thiamin riboflavin niacin (nicotinic acid)	<p>whole grain bread and cereals; meat—especially liver and lean pork, egg yolk, milk, lima and soy beans—fresh or dried</p>	<p>protects the nerves</p> <p>promotes growth</p> <p>Stimulates the appetite and aids digestion</p> <p>helps to keep the skin and eyes healthy</p>

Nutrient-Substitutes and Inexpensive Methods of Food Preservation

	navy and kidney beans— dried peas—green, fresh, and dried peanuts.	believed to restore color to gray hair. helps build red blood promotes good intestinal health
VITAMIN C	oranges, grapefruit, lemons, tomatoes, strawberries, raspberries, rhubarb, pineapple parsley, spinach, kale, broccoli, beet, turnip, and dandelion greens, cauliflower, turnips cabbage; potatoes, if eaten in sufficient amounts (?)	helps us to have good bones and strong teeth helps us to grow makes firm gums that won't bleed aids in resistance to disease prevents inflammation believed to relieve joint pains.
VITAMIN D	rays of the sun shining directly on the skin fish liver oils oily fish as salmon, herring, and sardines liver egg yolk butter	necessary for normal growth prevents rickets necessary for proper formation of bones and teeth believed to relieve joint- pains. aids to resist cold

PERMEABILITY CONTROL IN THE SINTERING OF ORES

Lo-ching Chang

Lo-Ching Chang—Assistant chemical engineer in the Chinese government from 1937 to 1939 and research investigator in the Steel Company of Montreal, Canada in 1940. Now doing research in the field of ferrous metallurgy at Carnegie Institute of Technology in Pittsburg, Pennsylvania.

INTRODUCTION

The advantages of using ore sinters instead of raw ore as blastfurnace burdens are lower blast pressure, higher smelting rate, less dust loss, less coke consumption and smoother operation. The development of the Dwight and Lloyd sintering machine has revolutionized the sintering technique.

It is the purpose of this paper to point out that the permeability control of the sintering charge is one of the important factors leading to successful and economical sintering operation. The permeability of a sintering charge is largely influenced by the amount of water added. For a given sintering mixture there is a critical water addition which gives the best results. By means of proper permeability control the author has succeeded in producing strong and porous iron ore sinters as low as 0.02 per cent in sulphur content from a high sulphur containing siderite using pyrite as fuel.

EXPERIMENTAL

The apparatus used to determine the permeability of a charge is simple. A hard glass tubing, one inch in inside diameter and ten inches long is held

Two years ago in Chungking the author was told of the discovery of siderite deposits in Western Szechuen. As to the method of treatment the author here suggests sintering, using any available fuel, such as flue dust, pyrite, coal, coke, etc. For small scale operation it is advisable to use the Greenwalt sintering process which requires less mechanical equipment and less initial cost than that of the Dwight and Lloyd. When the sintering charge is under control the operation is very simple. The important factors to be considered in making up a sintering charge are: the size and chemical composition of the ore to be sintered, the amount of fuel, and the moisture content of the charge. The last factor, moisture content control, is well discussed in this paper. Whoever is interested in this subject will please correspond with the author.

Permeability Control in the Sintering of Ores

in the upright position. The upper end of the tubing is connected to a gas flowmeter. The flowmeter is calibrated to read liters per minute per square inch of cross-sectional area of the charge. The lower end of the tubing is connected to a suction flask which in turn is connected to a suction pump and a manometer. The rate of air flow is indicated by the flowmeter and is controlled by a valve inserted between the suction flask and the suction pump.

The charge whose permeability is to be investigated is introduced into the tubing to a depth of six inches according to a definite procedure to insure equal compactness of the charge. Six sizes of a siderite ore having the following average size are studied:²

SIZE-NUMBER	AVERAGE SIZE IN M. M.
1	2.759
2	1.914
3	1.123
4	0.838
5	0.682
6	0.397

Each size of ore is investigated for its permeability at various moisture contents. About forty tests are made including a blank one without any charge in the glass tubing. Each test is the average of two to four parallel runs. The amount of suction (manometer reading) is plotted against the rate of air flow (flowmeter reading) for each test. Three typical plots are shown in Fig. I, all representing straight lines. The slope of each line is measured. The difference in slope between any line and the line for blank test represents the resistance to unit air flow of the particular charge expressed in millimeters of water column per liter per minute per square inch cross-sectional area per six inches of charge depth. The calculated results are given in Table I.

The resistance to air flow as given in Table I, are plotted against the moisture contents in Fig. II. These curves show for each size of charge there is a moisture content corresponding to minimum resistance to air flow or maximum permeability. This moisture content of maximum permeability is here defined by the author as the critical moisture content of the charge.

² The average size is calculated from the screen analysis of the ore according to the method of Kinney, U. S. B. M. Technical Paper 459, 1930.

These curves also show that as the average size of the charge decreases: first, the critical moisture content goes up, and, second, the parabolic curve becomes narrower telling that the control of moisture becomes more and more important.

SUCTION (PER 6 IN. BED) M. M. WATER COLUMN $\times 1/20$

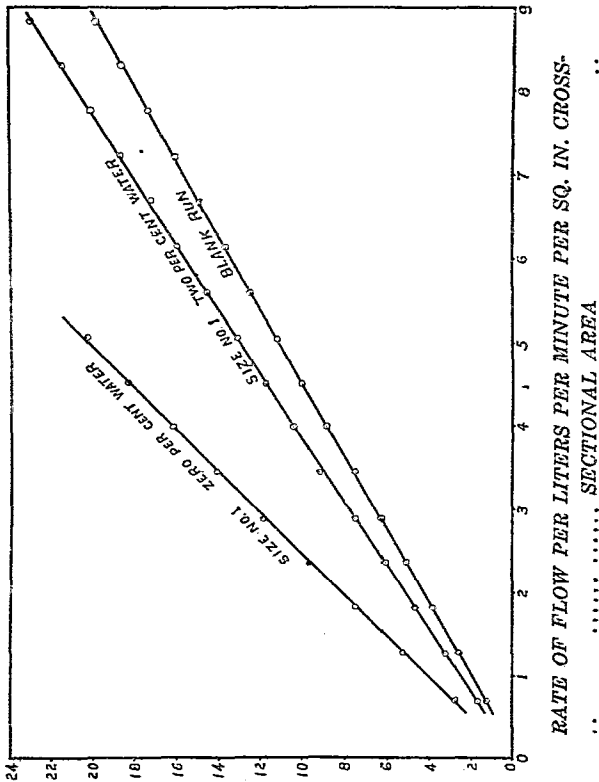


Fig. 1. Showing three typical plots of the amount of suction and the flow rate.

Permeability Control in the Sintering of Ores

-Table I. Resistance to unit air flow for the six sizes of ore investigated at different moisture contents in m.m. of water column per liter per minute per square inch cross-sectional area per six inches of bed depth.

Size No.	Av. Size M. M.	Resistance at the following moisture contents								
		0%	2%	3%	4%	5%	6%	7%	8%	10%
1	2.759	35.24	7.54	.....	3.32	.....	6.78	.....	14.66	30.24
2	1.914	93.96	15.54	.....	5.10	4.36	6.62	.....	12.88	55.06
3	1.123	.....	25.02	9.90	9.34	6.38	9.42	17.72	44.84	256.62
4	0.838	.....	106.30	.....	17.46	11.02	11.90	21.48	86.70	.....
5	0.682	.....	.....	.....	35.50	19.70	16.62	20.01	55.78	.....
6	0.397	.....	.....	.....	.....	82.58	49.76	33.92	44.62	924.30

The critical moisture content and the corresponding minimum resistance to air flow for the six sizes of ore, as read off from the curves shown in Fig. II, are given in Table II.

Table II. Critical moisture content and minimum resistance to air flow for the six sizes of ore investigated.

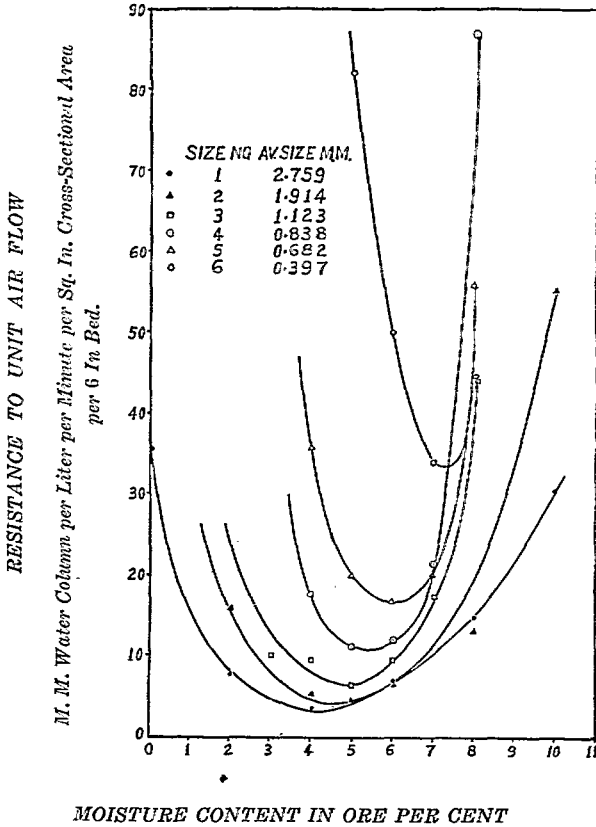
Av. Size of ore M. M.	Reciprocal of av. size	Critical moisture content Per Cent	Minimum resistance to air flow in M.M. of water column per unit rate of flow per six in. of bed depth
2.759	0.362	4.20	3.10
1.914	0.522	4.50	3.60
1.123	0.890	5.00	6.38
0.838	1.193	5.60	11.00
0.682	1.466	5.95	16.50
0.397	2.519	7.35	33.40

When the critical moisture content is plotted against the reciprocal of the average size of the ore in Fig. III, a straight line is obtained. Making a few empirical assumptions, the author has derived theoretically an equation assuming the form:

$$H = \frac{a}{D} + b$$

where H represents the critical moisture content and D the average size of the ore, while a and b are constants characteristics of the ore.

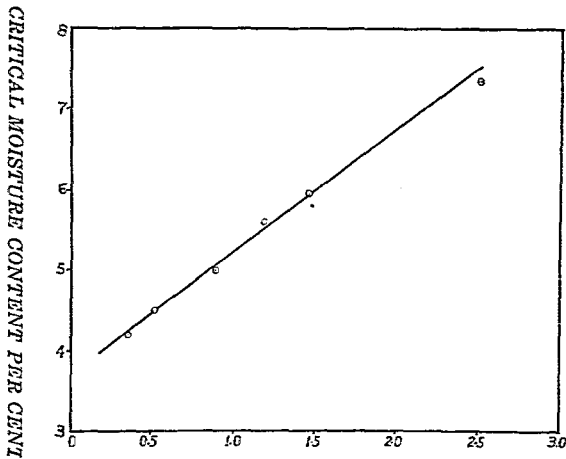
Fig. II. Curves showing the relationship between resistance to air flow and moisture content.



Permeability Control in the Sintering of Ores

Determinations were made on mixed charges consisting of ore, fuel and sinter return. Similar curves seen in Fig. II were obtained. It was found that, as the amount of sinter return in the charge increases, the critical moisture content rises while the resultant resistance to air flow decreases. The use of a certain amount of sinter return in the charge improves the permeability of the charge considerably.

Fig. III. Plot showing relationship between critical moisture content and
RECIPROCAL OF AVERAGE SIZE M. M. -1



SUMMARY

A simple method to determine the critical moisture content of a sintering charge is described. For a given sintering charge there is a critical moisture content corresponding to maximum permeability of the charge. The critical moisture content increases as the average size of the charge decreases. The permeability of the charge at its critical moisture content decreases with decreasing average size of the charge. For a given ore, a straight line relationship is found to exist between the critical moisture content and the reciprocal of the average size of the ore. The addition of sinter return to a charge raises its critical moisture content but improves its permeability.

學術建國工作報告

Organizational Report

學術建國工作報告

紐約學術建國討論會

第一次會議

紐約學術建國討論會於五月十六日假萬國公寓開第一次會，到會會員十餘人，六時半先行聚餐，七時半開會，首由主席孟治先生闡述學術建國討論工作之重要，及戰時留美學生之使命，旋即開始討論，題目為「現在留美學生對祖國在學術上應有之準備」。到會會員輪流發表意見，九時半散會。茲將討論結果摘要如下：

一，值此抗戰時間，留美同學之責任較前培增。學術建國討論工作，實屬重要，吾人應立即推動之。

二，討論會最好按科目分成若干小組，每次先由小組負責籌備，然後在大會中報告，報告後舉行公開討論。

三，編行學術建國刊物，以便彙集旅美文化界之研究精粹，備祖國建設之參考。

是日參加會員如下：

袁桓猷 章粹吾(旁聽) 孟治(主席) 鍾禮時 姚錦新 劉金齡(旁聽) 陳世驥 周舜莘 嚴仁穎(記錄) 林霖 魏永清 李辛之 翁興慶 李冠媛 劉彭年 車鏡 徐近之

第二次討論會

紐約學術建國討論會於六月十六日假萬國公寓開第二次討論會，到會者四十人，孟治先生主席，六時半聚餐，席間自由交談，七時半由劉彭年先生報告最近赴美中及美西與各學術團體及學生會商洽學術建國討論之經過，八時起由該會經濟組報告物價統制之各種問題，先後由周舜莘及言穆賓兩君提出「強制儲蓄及消費統制」，「物價統制之必要及其困難」等問題，然後請最近由祖國抵此之林津

等君報告國內物價統制情形。繼以自由討論，十時由最近抵紐約之褚應璠君演講「祖國抗建近況」，對於大戰中及大戰後之經濟建設加以詳細之分拆。然後由孟治主席歸納各方意見又加勉詞，最後由姚錦新女士奏琴，表演其新編中國民曲，十一時散會。

到會會員

茅於恭 熊大紀 袁桓猷 周舜莘 孟治(主席) 林津 張鍾元
車鏡 董蔚翹 薛炳蔚 徐澤予 諸應璠 翁心源 李冠媛 陳
秀端 陳金○ 宗九齡 姚錦新 洪舜華 言穆賓 魯桂珍 楊崇
瑞 趙華娟 汪台鵬 戚報三 嚴仁穎(記錄) 林倬聖 王自辛
林霖 李任公 張千里 金維賢 陳世讓 王世濬 郭煥煒 黃顏
祥 夏雲

第三次討論會

紐約學術建國討論會于七月十六日在萬國公寓開第三次會，到會會員約五十人，六時半先行聚餐，七時半由李任公先生及徐欣小姐領導唱國歌戰歌。八時正式開會，主席孟治先生，略講學術建國之意義並介紹新會員，此次討論題目專重工程建國問題，資源委員會尹國墉先生講中國工業化應取的途徑，王自辛先生講中國機械製造工業的發展問題，侯德榜先生講戰後中國化學工業之建設，十一時散會。詳細內容將於第二期學術建國叢刊中發表。

到會會員

孟治(主席) 侯德榜 王自新 尹國墉 嚴仁穎(記錄) 易榮庠
湯棟仁 趙鏗 言穆賓 陳裕堅 翁興慶 曹友德 熊大紀 秦
寶雄 郭仲穎 李冠媛 方開 董蔚翹 華文廣 陳金○ 沈運乾
袁桓猷 方柏容 孫鍾旭 沈守澤 沈允公 林霖 侯德榜 戚
報三 車鏡 程夢(記錄) 甯鈺程 王世濬 王自辛 武遲 楊崇
瑞 魯桂珍 田鳴鵬 徐欣 李任公 鍾禮時 唐振緒 徐澤予
寶果 楊一 李崇高 沈曾蔭 顏樸生 周小韜 王世熊 程華寶
譚夏光 黃佐衡 伍重光 李盪持 惠聯甲

哈佛大學學術建國討論會

中華民國三十一年五月，紐約華美協進會致書哈佛大學中國學生會，囑於留美學生對祖國建設在學術上應作何種準備一問題布陳意見。會長周一良君六月五日舉行全體大會時提出此事，經議決組織特種委員會討論作覆，隨即選出五人為委員，由謝強君主持召集。先後開會數次，並請其他同學列席參加，茲將討論結果，扼要綜作報告如次。

本題牽涉範圍甚廣，就題析義，學謂學問，術謂技術。理論實踐，自宜兼及。就留學言，留學生之責任與出洋考察者似有不同。考察者不過借鏡他邦，收知已知彼之效；留學則於知已知彼之外，兼有取彼變己之假定。故於祖國之問題安在，世界之趨向何在，祖國在何方面不可變，何方面須改變，其可變與不可變之程度若何，此諸問題，皆當統籌兼顧。譬之古有殿堂，今欲增飾改建，則設計及資料，大而樑柱，小至裝修，不得有通盤之謀劃。留學生以個人論，不過為此舊屋新築中之一木一石。然而必知其用，必得其用，大廈同支，始成輪奐。本報告限於篇幅，對於專門問題，不能作深切之討論。謹就國家前途關係全局之犖犖大端，粗陳崖略。

中國之系統地接受西洋學術，殆始於五四運動，當時有兩大口號，一為科學，一為民主，此二端誠是西洋學問政術之精華，然而當時認識之謬，似有未真，接受之方，似有未當，是以成效不著，請申論之。

五四運動時所謂科學，可分兩方面，一指方法論，一指自然科學，所謂方法論，大抵以實證主義為主，胡適之先生所謂『拿證據來』殊可以盡其義諦，實證主義為近對西洋學術風尚之一部，吾人承其流波，用之或偏，此方法論與清代樸學之餘緒相會，激盪而成為整理國故之新潮，雖考訂訓詁，斐然可觀，而未流所失，傷于釘○，學人蒙其影響，往往侈談專精，不覩通全。精力所集，常在點滴枝節之間，抗戰軍興，政府求材如渴，徵引之士，各挾其所專業

，吹萬不同，議論紛云。然計劃與計劃或相齟齬，方案與方案或相抵觸，求能對祖國目前問題有融通全局之解發，而為本末等稱首尾兼顧之計劃者，乃百不一見，膏肓之疾，難為良醫，此亦固勢之難免，但今日一般士大夫學養未臻瞻博，要亦不能無咎，所幸近年國內人士，對此偏枯，已有自覺，於綜貫方面，漸多注意，一二學人已能吸收西洋哲學之系統精神，用之於吾國固有之形而上學，詮釋而發揚之，分析名相，卓然成章，西洋科學在系統的求知等方面，淵源於其哲學者不少，中國新哲學之漸具基礎，未始非此後科學昌明之朕兆也。

五四時代對於自然科學，雖有提倡，然當時觀念，似不免體用歧互，一時論者，多以為中國之傳統學術重空談，不若西洋之自然科學為切實用，引而申之則於是所詔自然科學者乃全等於應用科學，此說於使我雙方，所識均有未諦，中國玄談之學，雖有流派可尋燈但自始即未得勢，駢衍雕龍，瞬息而逝，老莊玄學，惟養生明性之部，尚有流傳，其形而上學部分，則漸歸荒落，宋明理學，或謂陸王入於玄而程朱不格致，皆非的論，二家為學途徑，雖有分別，「其歸趨同在於人格的修養，陸王未嘗入玄，而程朱亦不以致知為鵠的，所云道學問者，是過程，是手段，而尊德性者，乃是終極之目的，儒者所格之物，乃典章文物之物，而非自然物，所以格物之說出於禮，一言以蔽之，中國之學風一向是致用的，特其致用之中心在調節」事而非控制自然，此其為用之小大，以方西洋哲學，未易遽言，惟其以道德的實踐為目的，則不可不予以說明者也。

至於西洋科學，則其發生不必由於致用，其歸極亦不在於致用，此可由近代科學史覘之。近代科學之開始，乃係一種思想的革命。乃學者對於傳統的宇宙觀發生懷疑因而形成一種相反的思想運動。對環繞吾人之自然界，由消極的態度一變而取積極的態度，前此之學人認為自然界雜亂無章，無若何內在之價值，系統的宇宙觀，乃無所假於經驗，但當以思辨出之，則萬理秩然而發，充塞宇宙，是為玄想的宇宙論，近世科學斥此為妄誕，以為此世界之真理，

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必於此世界中求之。當前之自然，乃一有秩序有條理可尋之物，在本身自有價值，科學的宇宙觀，不能以純思辨出之，必參之經驗，徵之於實測，然後乃可依據，故發現自然律，乃科學之普遍的應用自然律以控制自然，不過科學之成果，發明相繼，製造翻新，不言實用而用乃大，此西洋科學之真精神，不得此真精神，而徒言實用則無異舍本而逐末，未見其能有所獲也。

吾人爲此論，非謂專門研究，遂可棄置，技術人才，遂不重要。捨此兩者，何足以言學術次今所論者，乃爲適應國情與時勢，專門學者與技術人才應取之態度，以專學言，不但欲自己作深入之研究，尤須養成廣博之學識，期能接受傳布本部門內之一切新貢獻，以技術言，不但欲利用國外之優良環境，以行製造，且須準備適應國內外之物資交通諸狀況，務使求知精神與實踐精神兩俱發揚，則國學術前途，其有冀乎。

請進而論民主，民主乃一種政治制度，吾人當知，凡一制度，必經過相當長久之歷史發展，始得成爲特定之形貌，苟無同樣之歷史背景，則精神或可通假，形貌難能強同，近代民主政治，導源歐美，蓋本諸希臘羅馬之理想，而引於志士學人之論議，發展之際，經緯萬端，其間有君權民權之定限，政權教權之爭雄，新工商業者與封建地主之競利，其所以演爲政黨與議會政治者，殊非偶然，凡經數百年之教訓，而後民衆知憲法之不可不定，人權之不可不保，吾國則帝王專制之規，早定於秦漢，而引士大夫以共治，復沿爲帝王之家法，氓之蚩蚩，但求爲鼓腹謳歌之堯民，不幸而遇桀紂，陷異族，乃揭竿紛起，其黠者力者或爲開國之君臣，蚩蚩者仍歸於田，不復問政出誰室，是以多數民衆，本無政治常識，亦無政治興趣，其治人者，率出於少數之士大夫，而秀才之中，以天下爲己任者已不多見，更無論以教民衆以天下爲己任者矣，清議陷於黨錮，自兩漢而已然，文字結成大獄，在滿清爲尤甚，萬夫線口，居然防川，民國纔得數十年，又大半皇皇於軍政，以此社會，而違言布憲法，召議會，鹵莽滅裂不問可知矣。

然而果當反於類似專制帝王之所謂全體主義乎，是又不可，中國非不宜採取民主政治，但不宜即全採西洋式之民主政治而已，民主政治就精神言，有其倫理的基礎，即所謂個人主義是也，個人主義非惟我主義之謂，非謂人人皆有無限制的自由，亦非謂個人可以任其情感之驅使，其主義似乎假定人人皆有良知，如佛家言人人皆有佛性，耶穌謂靈魂在上帝前皆平等者然，所以所有個人，皆為一目的，無種族無階級，皆有求其個人幸福之權利，國家之有政府，有法律，不過為保障與促進人民一般福利與個性發展之必要工具，而政府之存在價值，亦必以此衡之，此看法與所謂全體主義不同，全體主義以為國家乃一人格，高於一切個人，國家為一目的，個人仍其工具，此在國家興亡與個人福利相一致時，亦非錯誤，但所謂國家者，常不過為某一或多數人意志之變象，此等人之意志殊不必即代表全國家之利益而假國家高於一切之美名，以暴力驅役民衆，供其野心之犧牲，一國家之所以成為侵略國家，實由於此。

吾國國民素愛和平，傳統倫理亦與民主政治之假定相融合，所宜取為鵠的，自無疑問，惟論者謂民主政體效遲鈍，不能適應世界大勢，民主國家之代表，如英美，已向集權方面轉變，民主政治，似已日薄西山，此種見解，其誤在於將民主精神與某一種民主政體混為一談，其實民主精神與某一種特殊民主政體，並無必然關係，民主精神不必表現於某一特殊形式，某一特殊形式之轉變，並不表示民主精神即此委落，而且行政權之擴大與民主精神似亦不相衝突，明乎此，則歐美民治經驗，正吾人所當取為他山之助者，留學生對此方面應多注意自不待言。

尚有一問題為五四時代所未十分注意而後來頗有勢聲者，厥為經濟，中國傳統之經濟基礎在於農業，此農業社會在開明專制良好士大夫領導之下，亦嘗有其光輝燦爛之時代，歷史上屢見之太平盛世，其氣象魄力，文物制度，皆有可觀，但農業經濟亦自有其短失，生產力量不能比擬於工商業經濟，是其一，各區域易於形成自足的單元，進而為野心者割據一隅者的經濟基礎，此其二，欲行工商

學術建國叢刊

業化，則知識份子不得仍存昔日士大夫輕工賤商之成見，使與士農並重工商，非以牟利乃以建國，讀書人皆有爲工爲商之抱負，而技術訓練始有意義，邇來留美同學對中國工業化問題時有討論，亦自覺有時代任務在吾人之肩頭也。

綜上所論，吾人之建議，實止一端，卽作現代化之準備是也，介紹科學，是思想上之現代化，重視技術，是實踐上之現代化，準備民治是政治上之現代化，發展工商是經濟上之現代化，所謂現代乃對待吾人之傳統而言，吾人于二者不作價值優劣之辨，吾人說在此時代中孰爲切要，中國傳統思想主張較品德而不較力量，但吾人處於較力量之時代中，卽不能不圖強自保，此一問題，包羅千萬，不知何自始，亦不知何自終，偃鼠飲河，不過滿腹，吾人所述，亦惟千萬中一之二而已，哈佛大學中國學生會于撰述此報告時，中懷激越，無可形言，一則對此行將過去之傳統，不勝其懷慕與敬意，一則對行將接受之未來，不勝其期待與鼓舞，爲之既竟，乃若雲漢中興，有璀璨之一片橫互於目前。

中華民國三十一年六月哈佛大學中國學生會

哈佛大學第一次學術建國討論會會員

馮秉銓 周一良 謝強 張培剛 陳樑生 任華 高振衡 吳保安 楊聯陞 (以上負責記錄人員) 方顯廷 趙元任 朱向榮 陳汝舟 張師魯 趙理濟 陳鴻舜 陳觀勝 鄧儒敏 裘開明 周家麟 鄧懿 朱木祥 莊道宏 席應中 胡光泰 顧應昌 關淑莊 李惠林 李紹棠 劉秉陽 茅於越 關慶光 沈愛麗 宋杰 施于民 陶祖廉 謝汝達 王就安 王念祖 吳大森 何惠棠 吳元德 伍慶培 吳懋儀 葉達卿 于震寰

普渡大學學術建國討論會

第一次會

普渡大學中國學生會于六月中旬召集第一次學術建國討論會，討論結果如下：

- 一，請中國政府將留美同學集成堅強組織。
- 二，請政府供給所有內地工業狀態，全國富源及目前急需詳細情形，以爲此間同學求學準繩，
- 三，請政府組織留美同學，分工合作，翻譯對於將來建國有關之學術叢刊文摘，並供給國內標準翻譯名詞。

參加討論之會員名單

陳榮元，樂漢，盟承瑞，梁立隴，陳昊，崔祖侃，謝富成，霍寶蔭，鍾啟明，黃振光，林毅孫，林國璋，共十二人，

第二次會

普渡大學我國學生會于七月二十六日，開第二次學術建國討論會後，討論職工教育問題，其討論結果如下：

- 一，請政府擴充工程教育降低各大學入學考試標準。
- 二，縮短技術學校畢業年限每年劃分三學期，連續上課，以求儘速供給發展工業所需之幹部人才。
- 三，建立或擴充工程學校研究院以造就高等工程人才。
- 四，請政府注意工頭訓練。

明尼蘇達學述建國討論會

明呢蘇達學術建國討論會，于六月中旬正式成立，推楊書家喬碩人蔣彥士三人爲會務主持人，決定今後按月舉行常會，互相研討砥礪，期對建國各種問題，稍有貢獻，詳細開會記錄，尙在編整中。

ORGANIZATIONAL REPORT

MINUTES OF THE FIRST MEETING AT MICHIGAN

The first organizational general meeting of *Hsueh Shu Kien Kuo T'ao Lun Hui* met on Sunday, June 21, 1942, at 4 P. M., outdoors in the Arboretum, Ann Arbor, Michigan. The chairman *pro tem* was Gerald Hsing-Chih Tien. Secretary was Paul Lim-Yuen.

Members Present:

1. Herman Shin-Gee Chiu.
2. Kenneth Teng-Seng Chung.
3. Han-Chuan Hu.
4. Chia-Su Huang.
5. Chi-Yang Keh.
6. An-Tsai Kiang.
7. Paul Lim-Yuen.
8. Gerald Hsing-Chih Tien.
9. Makepeace Uho Tsao.

Absentees:

Member: Cheng-Kwei Tseng.

Prospective Members: Celia Hwa-Gwen Chao. (Miss)

Siu-Chi Huang (Miss)

Chi-Mou Tsang.

The chairman called the meeting to order, and proceeded to relate the origin and history of *Hsueh Shu Kien Kuo T'ao Lun Hui* and to clarify the existing stage of the organization and its relation to other groups. He emphasized its independent standing, its vital purpose of service, its need for elasticity to fit immediate and future needs, and its non-political stand. He pointed out the need for extreme care in the selection of its members and to insure progressive and steady growth. He discussed the prospects of working closely with China Institute in America in preparing and sending much-needed up-to-date research material back to China.

The chairman then called upon the secretary to submit the draft constitution. The complete readings of the constitution were followed by submission article by article to the pleasure of the group. With several minor changes, the meeting approved the document in its entirety, and the constitution was accepted unanimously.

The chairman then called for nominations for the Nominating Committee for the General Secretary provided for in Article IV of the Constitution. The Committee of Five chosen were: An-Tsai Kiang, Chia-Ssu Huang, Paul Lim-Yuen, Chi-Yang Keh, and Makepeace Uho Tsao. The committee retired for conference, and returned within 45 seconds to announce its unanimous choice of Gerald Hsing-Chih Tien. Nominations were then thrown open to the general meeting. Mr. Tien nominated Dr. Chai-Ssu Huang. The general meeting elected Mr. Tien to be general secretary by a vote of 6 to 2.

The chairman directed the discussion to the conduct and substance of future meetings. It was decided to leave the system of rotation temporarily up to the judgment of the general secretary, who could in this matter consult the members participating in leading the future meetings. There followed a discussion of possible topics for discussion. It was decided that the discussion topic for the next meeting will be: "China's New Position and Responsibilities in the Far East after the War," that the discussion leader to present the paper will be Paul Lim-Yuen, and that the chairman will be Gerald Tien. The secretary was left to the choice of the general secretary.

The meeting was adjourned.

Notes on the Original Draft of the Constitution

This constitution was conceived in the clear notion that the efficient and effective functioning of our group should by its very nature not depend on any rigid constitution or body of regulations. One of the essential values of our group should enduringly be its inner, wholesome vitality, arising out of the strong spirit and mental vigor of its members, and not taking root from any written code. Our real constitution is more truly a solidarity of common convictions and principles directed towards future service. No article hereinafter provided should be construed in any meaning to deter the fullest and quickest cooperation for effective thinking and effective action. For this reason, those who have drafted the preliminary constitution have sought to create one that is simple and highly flexible, mainly as a guide, subject to future elaboration, to maintain the view of

National Reconstruction

the true direction of movement as well as necessary functioning details.

The original draft was prepared by a meeting on June 15, 1942, of the following persons: Cheng-Kwei Tseng, Gerald Hsing-Chih Tien, Chia-Ssu Hung, An-Tsai Kiang, Kenneth Teng-Seng Chung, and Paul Lim-Yuen. After requiring several changes, the general meeting on June 21, 1942, unanimously accepted the Constitution, which follows:

THE CONSTITUTION

I. Name and Purposes:

1. The name of this organization shall be Hsueh Shu Kien Kuo T'ao Lun Hui (學術建國討論會)
2. The purpose of this organization shall be to promote discussion of existing and future problems of reconstruction in China and to foster research into such problems.
3. The immediate understaking of the organization shall be to render effective aid to intellectual leadership in China by the preparation and dispatch of up-to-date material to China.
4. The larger undertaking of the organization shall be to cooperate with other groups of similar nature in China and overseas in taking up similar projects.

II. Qualifications of Members:

1. The following standards to measure qualifications for membership are prescribed for strict observance in selecting new members:
 - (i) Active interest and enthusiasm for future reconstruction work in China.
 - (ii) Constructiveness and initiative in spirit and ideas, and willingness to contribute to the group.
 - (iii) Good scholastic and general "intellectual" ability and outlook, including breadth of vision to accept wide scope of problems.
 - (iv) Cooperative spirit and real teamwork qualities, including professional tolerance.
 - (v) Willingness to sacrifice a reasonable amount of time and energy towards the work of the group.
2. The selection of new members shall be by unanimous choice of the resident membership.
3. This organization shall be strictly non-partisan in character, and shall not officially embrace any particular political views of its individual members.

III. Voting Membership:

1. Resident membership shall be interpreted to mean those members resident in Ann Arbor. It shall also be interpreted to mean former member who happen to be present at any meeting of the group in Ann Arbor.
2. Full membership includes all members, wherever they may be who can reasonably be reached by mail.

IV. Officers and Their Election:

1. The permanent executive officers of this organization shall be the general secretary, whose duties shall consist of general coordination of research and library activities, editing and correspondence, and finances; an assistant Chinese secretary; and an assistant English secretary; to each of whom the general secretary may delegate certain powers and duties. The general secretary shall be elected by a three-fourths vote of the resident membership from a list of nominees one of whom must be the single choice of a nominating committee of five elected by majority vote of the resident membership. The two assistant secretaries shall be appointed by the general secretary.
2. The temporary officers of this organization shall consist of one chairman and one secretary for each meeting. They shall be set up by a system of rotation whereby a different set of officers shall be in charge of successive meetings. This system shall be under the general direction of the general secretary and shall be developed in such a manner that leadership and service in the active group shall be most equitably distributed. The considerations for selection shall include the fitness of the officers to direct discussion of the particular subject of the meeting in question.

V. Voting Regulations:

All elections shall be conducted by secret ballot and in cases of necessity by mailed ballot. In the conduct of other business, or when the general meeting specifically desires it, the secret ballot may be waived in favor of a quicker method.

This organization shall hold regular sessions for discussion purposes at least once in every month, and shall be convened by the chairman for the particular meeting. Special meetings may be decided upon

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VI. Meetings:

and convened by the general secretary at any time.

VII. Rules of Order:

Necessary rules of order governing the conduct of meetings or otherwise not herein provided for shall be established by reference to Robert's Rules of Order, Revised Edition, 1915.

VIII. Amending the Constitution:

Future changes and additions to the constitution may be decided by three-fourths vote of the full membership.

BY-LAWS

I. Membership Fees and Expenses:

The single membership fee shall be two dollars. Future expenditures and necessary assessments shall be decided by three-fourths vote of the resident membership.

(Passed by the general meeting, June 21, 1942.)

留美中國學生戰時學術計劃委員會

宋子文 (主席) 趙元任 (副主席)

李 幹 (會計) 孟 治 (書 記)

周鯁生 侯德榜 方顯廷 郭任遠
幹事長：孟治

辦事處：華美協進社

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