

中國軍事教育上軍事訓練

現代陸軍軍事教育

之趨勢

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徐教育長，各位官長，各位學員！近半年來屢承陳代校長，徐教育長相約來校和各位講話，今天此機會和大家見面，感覺非常高興！

今天想和各位講的題目是：現代陸軍軍事教育之趨勢。軍訓部是民國二十七年於武漢成立的，這年的過程中，恰當戰爭時期，我們是一面抗戰，一面實施戰時教育。我們國軍不僅是裝備居於劣勢而教育也比較落後，本席自兼掌部務以來，深感職責艱鉅，非常惶恐，明知我們以劣勢裝備訓練未的軍隊，來抗拒近代裝備頑強的敵人，而一切政治經濟文化的條件也不完備，在這種情形之下，使我們不能不從教育訓練上加倍努力。更隨時就第二次世界大戰的教訓，盡量搜集同盟國或軸心國兩面有關軍事教育的材料藉資借鑒。更就國軍的實際情形，歸納若干個人的意見，以備採擇，這些資和意見，本席曾於抗戰八年中乘校閱或視察各戰區野戰軍及各軍事學校的機會，向部隊官兵及學校官長員生講演，期使明瞭現代進步國家軍事教育的趨勢。『他山之石，可以攻玉』，果能取他人之所長，補我們之所短，用他人的經驗，增我們之不足，學術是超國界的，在此次世界大戰中，無論同盟國友邦或軸心國敵人兩方面，舉凡軍事學術與技術的優點，應該衡酌損益，分別取舍，來作我們軍事教育改進的參考。此次世界大戰經過長期的鏖戰苦鬥，我們同盟國軍隊，終於獲得最後勝利。瞻念今後建軍的前途，欲建設現代的陸軍，必須從軍事教育上奠定基石。本席特將頻年以來，關於軍事教育

上所講演內容及搜集若干資料，歸納整理，手訂現代陸軍軍事教育之趨勢小冊，俾供各袍澤研討，以爲我陸軍軍事教育改進之一助。不過今天因限於時間的關係，不能詳述，只能擇要說明幾點意思。

我們知道教育是戰爭的準備，戰爭乃教育的實施，故以軍隊教育之優劣即可判斷其戰鬥力之強弱，這是絲毫不爽的鐵則。現在的世界是科學的世界，現代的戰爭是科學的戰爭，因社會的進化，科學的進步，而一切軍事學術也在不斷進步。拿破崙會說：「戰術十年而一變」，這種說法在當時也許是實在的，但現在人類的進化，在時間上是加速度的，並不是等速度的。試將有史以來五千多年的歷史和近代科學思想發達以來三百多年的歷史加以比較，就可以看到近代科學的突進，再把三百年來的科學發達史和最近五十年來的技術發達史加以比較，就可知技術的發展，尤其是突進的。在拿破崙時代戰術十年而一變，但第一次世界大戰四年期間，其戰法的演變，由運動戰而變爲陣地戰，由平面戰而變爲立體戰。至於第二次世界大戰中，有所謂濫戰，叢林戰，閃電戰的產生。這些演變，都是技術進步，戰術亦隨之進步。充分證明科學戰爭的真象，其演變之速，非意想所及，簡直可說日日在變，時時在變。

一切事物因爲變，所以有新有舊，有進步，有落伍。新的進步的，必然克服舊的和落伍的，在軍事上何嘗不然，如果用兵的目的在求勝，必然要求進步，以新的和進步的來克服舊的和落伍的，兵法上誠然有許多不變的原則，但實施這些原則時所用的手段和方法，則經常在變，並且愈到現代演變愈速。必先把握「變」，纔能運用不變的原則。例如戰史上講集中，拿破崙的集中和毛奇，李特爾的集中，却是各不相同的。毛奇有鐵道可以利用，而拿破崙沒有；李特爾可以利用可行的車輛，但毛奇和拿破崙則都不能。魏剛，甘末林所用攻勢防禦的原則，和霞飛，福煦所用的原則，豈不正是相同的麼

？但霞飛造成了瑪倫河的奇蹟，福煦完成了協約國的勝利，而甘末林和魏剛不能挽回法國悲慘的命運。

生產工具決定戰鬥工具，生產技術決定戰鬥技術，隨着軍事技術和一般技術科學的進展，戰術確在不斷改變，許多新兵器新兵種不斷加入到軍隊裏來，使原有的兵器兵種或為之廢棄，或為之減色。自普法戰爭以至此次世界大戰，因技術而發生的戰術變遷，不勝枚舉。電學和光學的發明，蒸汽機和內燃機的使用，使時間和空間縮短了幾十幾百，甚至幾千萬倍。火器的威力和射程，使乘馬騎兵的效力減少。築城技術與火器的配合，使輕裝步兵難於奏功。戰車使小口徑的火器失去威力，而空軍之重轟炸彈和降落傘部隊的使用，更使要塞的價值為之減色。現在時代是科學的時代，現代戰爭是科學的戰爭，整個的軍隊幾乎已經完全技術化了。

我們深切體認應該採用列強進步的裝備，應當學習其新穎的戰術。尤其在這技術日新，戰術日變的時代，我們決不能輕於放鬆，必須迎頭趕上，隨着時代前進，可是我們儘管有最新的裝備，知道了新穎的戰術，如果沒有適合這新裝備與新戰術的教育，則裝備不能發揮其威力，戰術也不過是紙上談兵而已。

隨着技術與戰術的演變革新，關於軍事教育我們應取法於世界進步國家的，一定很多，唯能如此，我們的技術和戰術，才能達到現代化。

我們更須知道現代戰爭是整個國力的總決鬥！所謂全體性的戰爭，僅是軍事的力量，是不足爭取勝利的，必須政治、經濟、文化等各方面全體總動員才能解決戰爭。軍事教育乃是軍事的中心問題，那麼軍事教育的先決條件也就是政治、經濟、文化等部門的密切配合。

(一) 政治的條件

政治與軍事相配合，政略和戰略的一致，是一個不變的原則。孫子在兩千多年以前說過：「道者，令民與上同意，可與之生，可與之死，而民不畏危。」克勞則維慈在一百多年以前也說過：「戰爭是政治的繼續。」但政治條件對於軍事教育的影響，却在近代更表現得明顯。蘇聯在帝俄沙皇統治時代，人民完全是奴役，談不上政治意識，帝俄的軍隊在第一次世界大戰中終遭失敗，迨十月革命列寧掌握政權，將政治制度，軍事教育制度，軍隊訓練澈底改革，政治與軍事能够配合，所以紅軍的建設得到成功。德日兩國的建軍，雖其政治組織和蘇聯不同，但其政治組織與軍事相配合是無二致。美國有一萬萬兩千七百餘萬的人口，縱然他有崇高偉大的政治家羅斯福總統所領導，假使美國全民的政治意識不充分，此次大戰中美國的參戰，議會首先便不會通過以龐大的人力財力，大量動員陸海空軍分佈於世界各戰場參加戰鬥，更以無數的物資來支援同盟國。美國平時是最講自由的，不是征兵制的國家，第一次世界大戰時，常備兵不過二十萬人，但動員到四百萬人，此次大戰前常備兵也不到一百萬人，自太平洋戰爭爆發，美國在最短期間陸海空軍能迅速動員一千一百五十萬人，如果政治條件不够，政治與軍事不相配合，決難達到目的。足徵政治應和軍事配合的原則，乃是十分正確的。

(二) 經濟的條件

所謂經濟的條件，是指技術水準和生產能力而言。經濟條件對於軍事教育的關係，非常重要。近代戰爭，是科學的戰爭，也可說是經濟的戰爭。一切工業基礎，科學技術都以經濟為轉移。那一個國

家的科學技術高，生產力量大，便能操勝利的左券。現代戰爭不僅是精兵主義，還須多兵主義，所以要總動員，動員一切人力物力，發揮其綜合力量。兵員上固須量多質精，尤須配合高度的生產技術，強大的生產力量。此次世界大戰初期，德國以強大機械化部隊使用閃電戰術，真不可一世。全世界之震驚。德蘇戰爭中以爲德軍憑優勢機械化部隊，可以攻下莫斯科，結果不然，因爲蘇聯也有近代的裝備，而且得英美的協助，飛機的生產和陸軍機械化裝備的生產量德國遠不及英美蘇強大，所以德國的飛機和機械化部隊也由劣勢而被壓倒，蘇聯終能在史達林格勒完成殲滅戰的戰果。至於海軍，德國更較英美居絕對劣勢。此次德國的戰敗，自己承認是生產力量不及同盟國。科學兵器技術不及美國優良。又太平洋戰爭初期，日寇襲擊珍珠港新加坡被倖勝以後，美國兵器產量增加，空軍飛機激增，便能制服日寇，爭取制空權確保制海權，海空軍密切配合，陸軍裝備又較日寇佔絕對優勢，陸海空聯合作戰發揮絕大威力，日寇終遭潰敗。本來日寇的陸軍，並不在德國之下，更加以武士道的精神，作戰有肯死敢死的精神，在阿圖島，硫磺島，琉球島諸戰役中，有整聯隊整師團全體戰死，空軍中有「神風隊」決死隊，如此壯烈犧牲仍不能挽回其必敗的悲慘命運，所謂精神勝物質，在今天科學戰爭中是有相當條件，絕不是無條件的。肉彈主義早成過去了，今天是火力主義的時代。自從原子彈發明，更足證生產技術決定戰鬥技術。我國尙屬於農業經濟時代，一切工業基礎，尙在萌芽時期，生產技術也遠不如進步的國家，我國要提高技術水準，充實生產力量，改進國軍裝備，經濟確是一個必要條件。

(三) 文化的條件

文化的條件即民族歷史的傳統，民族精神的寄託，國民生活的方式，國民教育的基礎等。我國有

五千年文明歷史，民族一貫的傳統精神，自 國父領導革命，推翻滿清專制，建立民國，賴有三民主義和革命精神，所以能够抵抗侵略，支持八年的長期抗戰。然而在文化上，我們國民教育的基礎，實在太不普遍，以美國為例，美國空軍戰鬥員百分之百是大學生，射擊 和通信士也都是曾受高中教育的，海陸軍中曾受高等教育的也佔相當比例數，陸軍中約為百分之二十五。至於蘇聯十月革命成功時便積極從事於新文化的建設，終能建立強大的紅軍，與帝俄時代軍隊的戰鬥力相比較，實屬天淵之別。此次德蘇戰爭中，德軍以爲三個月便可攻佔莫斯科，實在是估量一大錯誤。我們和美蘇兩同盟國比較，殊感望塵莫及，由於政治組織、教育設施、民衆組訓種種條件不具備，國民文化水準低落，政治意識不够，都影響到軍事教育。就戰時人的動員說，實行徵兵以來，絕少自覺自動服兵役義務的，徵集壯丁尚有用繩索束縛以防逃逸的，所謂「不教民戰，是謂棄之」，「不教民而用民，謂之殃民」，追本窮源，是國民 育沒有達到水準，所以兵的素質上服兵役的多是愚而無知，目不識丁的階級。

以此來使用科學的兵器，遂行戰鬥，焉能使兵器發揮其威力？因此我們的新兵教育必須從識字教育開始，普通教育乃是軍事教育的基礎，因爲普通教育不普及，國民教育未能達到相當水準，影響軍事教育的建立，軍校的養成教育便是實際的反映。武漢會戰後，南嶽會議時，據軍令軍政兩部統計，爲適應幹部傷亡補充率，每年需養成初級幹部四五千人，養成人數激增，限於招生困難，取錄標準隨之降低，爲高中肄業或初中畢業。爲適應戰時需要，復將學期三年畢業縮短爲一年或半年畢業，各分校相繼增設，教育期間既很短促，更限於武器器材缺乏，教育難期精練，無論養成教育、召集教育都有同感，部隊中所有的裝備，軍事學校反而沒有，教育內容不免失於空疏，在幹部決定一切的口號下，幹部教育，軍官養成教育，十分重要。基於國民普通教育的不健全，影響到軍校養成教育的素質

，由於武器器材的不足，使教育難臻精練，這種情形之下，實施戰時教育的困難，匪言可喻。自前年起爲謀養成教育素質提高，期符貴精重質之旨，毅然將原有三十二個總隊縮減爲十五個總隊，並將學期延長爲兩年，今後我們的建軍一面是要把國民教育水準普遍提高，使與軍事教育互相配合，同時的軍事教育上是要盡量設法充實教育設備，武器器材，期收加強教育效果，來提高幹部素質。

至於講到軍事教育制度問題，目前國軍的裝備多係採用美式，教育制度和方法需要採用美國的，這種趨勢是毫無疑義，不過有一個較重要的先決條件，就是無論採取任何一種的制度，決不可生吞活剝的整個的抄襲來，必須有獨立自主的精神。過去袁世凱於小站練自強軍時代，適當普法戰爭，德國戰勝了，於是採用德國的操典，托左肩槍，後來日俄戰爭時，日本戰勝了，又改用日本操典，托右肩槍；至於第一次歐戰時，德國初期戰勝了，又恢復左肩槍，完全是無意識的盲從，殊不知人家戰勝的因素決不是這種左肩槍和右肩槍的形式。我國在民國二十四年以前頒行的各兵科操典多半是抄襲德國和日本爲主，到二十四年會由各兵科學校加以修正，最近軍訓部又將各種典範令教程詳密檢討，本着抗戰的經驗，將我們固有的優點發揚光大，一方面將美國操典中的優點慎重抉擇虛心採納，不僅是友邦的優點我們應效法，即敵人的長處，也要學習。因學術乃是無國界的「他山之石，可以攻玉」。典範令經過這次修訂，在軍學上比較是適合國情，有創造和獨立性的。前年本處率同軍訓部次長及各主管兵 各軍校主官到昆明視察幹校訓團，據本部同人觀察美式教育優點，富有自覺自動自治和刻苦耐勞的精神，無論天候晴雨學術科實施不稍懈怠，教育方法分準備、講解、示範、實習、測驗、檢討幾個步驟，更有充分的武器器材彈藥，因此能採用輪迴式的教育，極短期間可以訓練多數官兵，極適合戰時需要，這種教育方法，我們是應當採用，可是決不可忽略了教育設備，武器器材彈藥的條件。參觀

以後，史迪威將軍約本席講評，當時會提出幾點意見：（一）認為近代戰爭在戰場上是必須各兵種密切協同，發揮其綜合力量才可以勝利。對於昆明附近的空軍基地，應適時利用實施陸空協同演習，其在印度的訓練亦須如此。（二）當時參觀他們砲兵射擊，對目標距離下口令喊「六零零零」，平時教練如此，戰時處於槍林彈雨音響嘈雜環境中，假使將口令誤聽漏一「零」字，將六千變為六百，致距離減少，必致危害友軍，所以建議應照我國度量衡標準，以公尺換算施行，都經美方採納。此不過舉一例，總之我們研究軍學的態度，既不可妄自菲薄，更不能妄自尊大，妄自菲薄，便喪失信心，妄自尊大，沒有謙虛心，故步自封，必致阻礙進步，這兩種心理都是不正確的。

其次，將今後養成教育學制的改革，與建立非職業軍官制度，職業軍士制度，概略說明幾點：

（一）養成教育學制改革問題

最近軍訓部會召集各校教育負責主管開會研討，決定軍官養成教育學制改收雙級單軌制，將陸軍預備學校學期延長為三年畢業，加修其普通科學。軍事訓練的要求，使養成軍人精神、紀律、生活、習慣，完成新兵教育。畢業學生按其志願及兵科需要分兵科至部隊入伍半年完成軍士教育，然後升學入軍校受各兵科的綜合教育，不分兵科，凡是步、騎、砲、工、輜重、通信、戰車兵科都應輪流學習，同時軍校教育設備武器器材力求充實，使教育更臻實在。畢業後按兵科分發部隊，見習期滿後即任少尉排長，在軍隊服務至相當時間，再令入兵科學校補習深造，或升考陸軍大學期能養成完全兵科將校。近代戰爭在戰場上是要發揮各兵種的綜合力量，一定要各兵種密切協同，現在為加教育，已決定將軍校修業期間暫定延長為兩年半或三年，施以各兵科綜合教育，其主要着眼即使密切協同容易，

轉移兵料便利，實施具體方案，正在研討中。關於陸軍預備學校，有的意見尙認爲不需設立，不過在非職業軍官制度未確立及健全以前，過渡期間仍感需要。我們看日寇各種兵科都普設有幼年學校，此次大戰後蘇聯更設有蘇瓦洛夫幼年陸軍學校，招收十四歲學生施以七年長期養成教育，預計一九五〇年以後才能養成，他們認爲這才是蘇聯紅軍真正現代的幹部。

(二) 建立非職業軍官制度

即預備幹部，我們的期望是高中畢業學生養成預備軍士，專科以上學校畢業學生養成預備軍官。美國在第一次世界大戰時，能迅速的動員四百萬志願兵，以二百萬由潘興將軍率領開赴歐洲增援協約國，以二百萬人在後方訓練。此次大戰中美國陸海空軍動員達一千一百五十萬人，所需百萬以上的大量的幹部，多係平時由普通學校實施嚴格軍訓儲備的預備軍官，戰時召集施以短期教育，調派服役。美國全國人口計一萬萬二千七百餘萬人，戰時能動員如此強大的兵員，實在是平時普施軍訓的成效。我們有四萬萬五千萬人口，假使一旦要動員三千萬乃至四千萬人，其所需幹部以十分之一爲比例，便需三百萬乃至四百萬人，這種幹部的來源全賴平時訓練儲備。因此建立非職業軍官制度異常重要！本席於民國二十年曾提出口號是要達到「寓將於學」，近幾年來軍訓義務因爲制度、權責、經費、設備種種條件未完全具備，未收顯著成效，今後爲求加強實施，其具體方案，正由軍政軍訓教育三部商討中。

(三) 建立職業軍士制度

此於建軍也有密切關係，我國現在是實行徵兵制，兵的來源是無問題，軍官的來源除由正軍校養成外，還須培養預備軍官。惟在官與兵的中層階級的軍士，特別重要，訓練優秀的職業軍士，其術科必能精練。日寇對軍士的養成設有許多軍士教導學校，畢業的軍士有術科博士之稱，軍士是軍隊中的重要基層，現代戰鬥方式已由散兵線變成散兵羣，當日俄戰爭時，火線上任射擊指揮的是連長，現在則為軍士，一個部隊中的軍士如照兵役法實行退役，則軍隊訓練基礎薄弱，教育訓練乃至作戰上均受影響。軍訓部為謀軍士的培養，曾早有幾次向軍委會建議設立軍士學校或軍士教導學校，養成精練的職業軍士，為軍隊中的骨幹。希望能夠促成此一理想的早日實現，使國軍武力增強，負起國防的責任。

TRENDS IN MODERN MILITARY EDUCATION

(Lecture delivered at the Military College)

by General Pui Ts'ung-hsi

Vice-Chief of the General Staff

During the past six months, I have been invited repeatedly by Acting President Chen and Dean Hsu to have a talk with you, and I feel greatly enthusiastic over this opportunity to meet you all.

The subject I propose to take up to-day is: Modern Tendencies in Army Education. The Military Training Board was established in 1938. In the intervening years since then, this country has been engaged in war. We have been fighting the war of resistance on one hand carrying out war time education on the other. Our Army is not only inferior in equipment, but in the matter of education, it is also backward. Since I assume in a concurrent capacity as Minister of the Military Training Board, I at once realized that my responsibilities were extraordinarily heavy, and I could not but feel a sense of anxiety. I was fully aware that with our Army badly equipped and inadequately trained pitched against a modern born enemy with modern equipment, and at the same time with all political, economic, and cultural facilities not fully developed, we could not but redouble our efforts in the education and training of our troops under the circumstances.

At the same time, with the lessons learned from the progress of the Second World War, we began to collect extensively all relevant material relating to military education, from both our Allies and the Axis nations, to serve as reference for our own efforts. In addition, practical conditions existing in our own Army, as well as some of my personal views on the subject,

were also given due consideration in submitting my plans for for the adoption of the higher authorities.

During the course of the eight years of the war of resistance, I have utilised opportunities afforded by reviews of troops, inspection of various war zones and front line forces, and visits to various military academies, in talking to our officers and men, as well as the staffs and students of the academies, on the material and views to which I referred above, in order to enable them to understand modern tendencies in military education in the progressive nations of the world. The saying has it: "The may adopt the good points of another people to make good our defects, and to profit by the experiences of another people to augment our shortcomings. Knowledge exceeds the bounds of State considerations. The good points in military knowledge and technique exhibited in the course of the current world war, both by our own Allies and by our enemy, the Axis nations, must all be carefully weighed in the light of their intrinsic values, and selection made of them to serve as reference in the promotion of our own military education:

After a long period of tedious struggle, the troops of the Allied nations finally won victory in this war, As I look into the future of military reconstruction, I feel that the building of a strong Army must be based on military education. I have accordingly brought together, and undertaken the necessary revisions in, the contents of the numerous lectures on military education I have made in recent years, as well as other relevant material collected, and compiled therefrom a Handbook on the Modern Trends in Military Education, to serve as reference matter for my colleagues of all ranks, and to be of aid in the promotion of military education in this country. Owing to limitations of time, I am unable to go into the subject fully here today, and I can only refer to a few important points.

We all know that education is the preparation for war, while war is the application of education. The quality of the education of an army will thus determine the strength of its fighting power.

This is an immutable truth. The world today is a scientific world; modern warfare is scientific warfare. Because of the advancement of society and the progress in science, all military technique is also continuously being improved. Napoleon said: "Military strategy changes every ten years." This might be true in his time. But human progress is pursuing the course of geometrical, not arithmetical, progression. By a comparison of the first 5,000 years of world history with the history of modern scientific progress in the past three centuries, the extent of scientific advancement in modern times will be easily gauged. By a further comparison of the history of scientific development during the past three centuries with the technical progress registered during the last five decades, the extraordinary speed with which recent technical progress has been advancing will also be readily understood.

In Napoleon's time, military strategy changed once every ten years. But during the four years of the World War I, military tactics underwent changes from the battle of flanks to the battle of fronts, from fighting on horizontal levels to fighting in perpendicular dimensions. In World War II, furthermore, there have been evolved such strategies as "immersion battles", "forestry battles", and "blitzkriegs". All these evolutions indicate that with the progress of technical knowledge, military tactics also advanced, fully testifying to the real conditions of scientific warfare. The speed with which changes have been effected is sometimes beyond imagination. We may indeed say that changes are effected daily, effected momentarily.

Because everything undergoes change, we have the new and the old; the progressive and the backward. New and progressive things must win over old and backward one's. The principle necessarily holds true in military affairs. If the objective of fighting is to win victory, then progress must be sought, and the new and the progressive must be employed to defeat the old and the backward. There are of course certain immutable principles in strategy, but the methods and means for the application of such principles undergo changes constantly and more rapidly with the advent of

modern times. The ability to adapt ourselves to "changes" in methods is necessary for the successful application of the "unchanging" principles.

As an example, let us look into the famous "concentrations" in military history: Napoleons's concentration, Motke's concentration, and Keitel's concentration, all of which were different in the methods employed. Motke could use railways, but Napoleon could not; Keitel could use vehicles on mountainous terrain, both Motke and Napoleon could not. Again, the principles of offensive defense employed by Weygand and Gamelin were identically the same as those employed by Joffre and Foch. But Joffre created the miracle of the Marne, and Foch accomplished the victory of the Allies, whereas Gamelin and Weygand could not save France from her tragic fate.

Implements of warfare are determined by tools of production, while fighting technique is determined by production technique. With the scientific progress of military and general technique, tactics is continuously undergoing changes and improvement. New weapons and new fighting branches continuously pour into the Armies, so that original weapons and branches are either abandoned or paled into insignificance. From the Prusso-French War to the current world war, changes in tactics arising out of technical progress have been innumerable. Inventions in the fields of electricity and light, and the use of the steam engine and the internal combustion engine, have shortened time and space by tens, hundreds, thousands and tens of thousands of times. The power and range of artillery fire have greatly diminished the effectiveness of the cavalry. The coordination of trench construction and artillery pieces have rendered difficult the successful attacks of light-armed infantrymen. The tank has robbed the small calibre field pieces of their prowess. The employment of heavy bombs and parachutists by the Air Force has minimised the value of fortresses. The present age is a scientific one. Modern warfare is scientific warfare. The whole army has been practically technicalised.

We fully realise that we must adopt the progressive equipment

of the Powers, and we must study their new tactics. Especially at a time like the present when technique improves each day, and military tactics changes each day, we cannot relax in our efforts, but keep up with the progress of the times. But even if we possess the newest of equipment and have studied the newest tactical methods, if we are not in possession of the necessary education that is in keeping with the new equipment and new tactics, then our equipment will not be able to manifest its prowess, and the tactics we have studied will only be armchair strategy.

In keeping with the evolution and reformation of technique and military tactics, we have also a lot to learn from the progressive countries in the matter of military education. Only by so doing may our technique and tactics be modernised.

We must moreover understand that modern warfare is a full-scale combat into which is to be thrown the nation's entire strength. In what is called total warfare, only military strength will not win victory. The complete mobilisation of a nation's political, economic and cultural resources will only settle a war. As military education is the central theme in military development, its successful undertaking must be preceded by its close coordination with the political, economic and cultural policies of the country.

POLITICAL CONDITIONS

That politics coordinates with military affairs and statesmanship is in line with military strategy, is an immutable principle. More than 200 years ago, the Chinese strategist Sun Pin said: "The rule of virtue implies the that there must be agreement between the Government and the people. The latter will then be prepared to live and to die with the State, and will not be afraid of any danger." A hundred years ago, Carlowitz also said "War is the continuation of politics." The effects of political conditions on military education have however, become all the more marked in recent times. In Tsarist Russia, all the people were treated as slaves, and they had no political consciousness to

speak of. Tsarist armies eventually met defeat in World War I. With the October Revolution and Lenin's ascendancy to power, the political system, military education, and military training were drastically reformed, and coordination achieved between political and military policies so that the building of the Red Army was successfully accomplished. With reference to military reconstruction in Germany and Japan, though the political organisation in these two countries were different from that of Russia, nevertheless the achievement of coordination between political and military policies was also effected in the same way.

The United States has a population of 127,000,000. Even with the leadership of the late President Roosevelt, lofty and farsighted political leader as he was, if the American people had not been fully imbibed with a proper political consciousness, that country's participation in the present war would not have been so smoothly effected. Her Congress might not have approved the mobilisation of such huge manpower and economic resources, and the despatch of such large numbers of her men of the various Services to participate in the various battle fronts, and to give such large quantities of material aid to the Allies. The United States is a nation where freedom is most respected, and where conscription is not in force. During World War I, her normal Army was only 200,000 strong, but she mobilised a force of 4,000,000. During the current world war, her normal Army was also less than 1,000,000, but with the outbreak of the Pacific War, the United States mobilised within the shortest time possible, a force of 11,500,000. Had her political conditions been inadequate to cope with the situation, and had coordination been lacking between her political and military policies, she could not have achieved the objective. The principle of the coordination between political and military policies is thus a most correct one.

ECONOMIC CONDITIONS

In speaking of economic conditions, I refer to the technical standards and the production capacity of a nation. The bearing of economic conditions on military education is very great. Mo-