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THE STRATEGY OF EXTERIOR AND INTERIOR LINES IN THE LIGHT OF MODERN WAR.

By LIEUT.-COLONEL J. C. DUNDAS, D.S.O., R.A. (Gen. Staff).

GENERAL.

1. THERE is probably no subject which has been dealt with in greater detail by military writers in the past than that of the Strategy of Interior and Exterior Lines; and justly so, for both forms have played an all-important part in the great campaigns of history.

Notwithstanding the fact that each form had had its exponents and adherents, and had proved victorious in different hands and under different conditions, it was possible up to the opening of the war in 1914 to deduce which form would be most likely to prove effective under given conditions of leadership, time, space, and materiel.

With the coming of national armies, modern weapons, aircraft, and improved means of intercommunication, however, the premises on which such deductions have so far been based require revision, even if they are still to some extent true. If the old saying that strategy never changes is still accurate, it is none the less certain that the methods of applying it do.

It is proposed, therefore, in the following pages to consider the aims of these forms of strategy, the reasons which have influenced commanders in adopting one or other and the conditions necessary to secure success—all with relation to campaigns prior to the Great War—and finally to discuss how far these factors are unchanged, and what the effect of any changes noted may be on the employment of these forms of strategy.

DEFINITION OF EXTERIOR AND INTERIOR LINES.

2. Many definitions of interior and exterior lines are given by military writers, but it will be sufficient to say that "Interior lines are those of an army centrally situated acting against divided hostile forces; exterior lines those adopted by divided armies acting against a centrally placed opponent."

AIMS OF THESE FORMS OF STRATEGY.

3. Although in historical campaigns the ultimate aims of commanders are often obscured by the prominence given to subsidiary objectives introduced through political or other causes, it seems clear that the true

aim of both these forms of strategy is, or should be, the destruction of the enemy's forces by concentrating against them superior force at the decisive point and moment. Both Napoleon in 1815 and Von Moltke in 1866 had this object in view. It was only in method that their strategy differed.

METHODS OF ATTAINING THIS AIM.

4. Since, then, the aims of these two forms of strategy are identical, it is well, before proceeding to discuss details, to show clearly wherein the difference of method lies.

Firstly, the employment of interior lines implies *assembly* of forces at an early date, though not necessarily *concentration*. Napoleon's armies were rarely concentrated until immediately before battle, but almost invariably assembled within supporting distance. The Jena Campaign furnishes an excellent example of this *bataillon carré* system. Exterior line strategy on the other hand implies wide dispersion of forces up to the last moment, and initial deployment on a wide front.

Secondly, interior line strategy involves concentration prior to the decisive battle and the skilful use of detachments, as is exemplified in Napoleon's campaign of 1796 in Italy, while exterior line strategy to attain its maximum effect, should produce concentration on the decisive field of battle, earlier concentration tending to reduce the value of the tactical decision resulting from the operation. Von Moltke's actions in the last stages of the campaign of 1866 prior to Königgrätz make his views on this point clear.

REASONS WHICH HAVE INFLUENCED COMMANDERS IN THE PAST IN ADOPTING ONE OR OTHER OF THESE FORMS OF STRATEGY.

5. The reasons which have led commanders in the past to adopt one or other of these forms of strategy are various. The more important are mentioned below.

(a) *Political.*

(i) The strategy of exterior lines generally speaking ensures the protection of a wider extent of one's own frontier during the initial stages of a campaign. The political effect produced by hostile incursions at unguarded points of a frontier is considerable, as is shown by the Federal fear of invasion in 1861-64; the desire to avoid such a possibility, too, was one of Von Moltke's reasons for his initial dispositions in 1866 which have been much criticized.

(ii) Offensive action on exterior lines throws the burden of war on a wider area of hostile territory, and tends to have a greater effect on the moral of the enemy population. The Federal operations in Western Virginia in 1861 did much to prevent the inhabitants of that district from throwing in their lot with the Confederates, while their operations in the west hampered the supply system of the Confederates in the main theatre of war in Virginia.

(b) *Configuration of Frontier, and Divergence or Otherwise of Lines of Communication.*

(i) Where the frontier forms a re-entrant there is always a tendency to resort to exterior lines in view of the fact that such strategy facilitates action against the enemy's flanks which are peculiarly vulnerable, especially if his forces be situated within the re-entrant. Moreau's advance from the Rhine in 1800, or the Federal use of sea power to form an angular base, furnish illustrations.

(ii) Where allied armies whose lines of communication diverge are acting against a common enemy, they are likely to employ exterior lines, thus covering their own communications directly. Conversely, a force acting against such allies tends, *caeteris paribus*, to employ interior lines.

The campaigns of 1796 in Italy, 1806 in Germany, and 1815 in Belgium furnish examples of this tendency.

(c) *Topography of the Zone of Concentration and Theatre of Operations.*

(i) The grouping of roads and railways leading up to and issuing from possible zones of concentration affects a commander's plan of operations to a great extent. It is impracticable to assemble an army in one area or to operate thence successfully unless both road and railway facilities are such as will (a) admit of the concentration and approach march of the force being carried out more rapidly and with greater precision than can a counter-movement by the enemy, and (b) enable the army to be supplied during the concentration and subsequent operations.

In the case of large armies concentrations in a single area are always a matter of grave difficulty, and the employment of interior lines is thereby rendered correspondingly less probable.

Von Moltke's concentration in 1866 could not have been carried out with the then existing roads and railways in such a way as to have permitted him to employ interior lines, without such a delay as would have given the initiative to the Austrians who had begun to mobilize earlier than Prussia.

(ii) Since the employment of containing detachments forms an essential feature of interior line strategy it is evident that topographical obstacles favour its adoption. Transverse obstacles enhance the delaying action of weak detachments, while lateral obstacles hinder communication and combination between the wings of an army acting on exterior lines. These factors were well brought out in the Italian Campaign of 1796.

It may, therefore, be stated generally that in a country where obstacles are numerous the assailant will tend to act on interior lines.

(d) *Grouping of Hostile Forces.*

Lack of information as to the situation and grouping of hostile forces invariably forms a factor to be considered by a commander in making his initial dispositions. Although to "take counsel of his fears"

is the greatest mistake a commander can commit, yet, unless and until definite information is available as to the enemy's strength and grouping, and until he has by seizing the initiative to some extent forced the enemy to conform to his will, there is a danger that he may find himself attacked by a concentrated enemy, while his own forces are still dispersed beyond supporting distance.

Similarly, if the enemy's forces are known to be widely distributed exterior lines can rarely be adopted.

Ignorance of the enemy's situation or probable intentions, or knowledge that his forces are deployed on a wide front will therefore often lead a commander to adopt interior lines.

(e) *Relative and Absolute Strengths of Opposing Forces.*

(i) It is self-evident that a force which is numerically inferior to the combined forces of the enemy cannot hope for success on exterior lines. If Napoleon, in 1796, had moved against the Austrian left by Voltri, the united Austrian and Sardinian armies would have opposed him in superior force. Similarly, in 1815, a like situation would have resulted had he acted other than on interior lines.

(ii) Further, the employment of exterior lines involves reconnaissance and protection on a far wider front than is necessary in the case of interior lines. This presupposes a superiority in aircraft, cavalry, and in the future, tanks. It seems not impossible that the inferiority of Napoleon's cavalry may have been a predisposing cause of his constant employment of interior lines against Prussia.

(iii) The larger the force the greater room to manœuvre required. Consequently since exterior lines facilitate manœuvre it seems clear, even admitting that room to manœuvre is an essential factor in the employment of interior lines, that the latter form of strategy is more likely to be employed with small forces than with large ones.

(f) *Supply.*

The old maxim that armies must separate to live is true, whether they live on the country as did the French in the Peninsula, or be supplied from regular dépôts and lines of communication. No system of roads or railways can support more than a certain force, and unless, therefore, a suitable system of parallel communications, within supporting distance is available, operations by interior lines become more difficult to carry out as the size of the force increases.

Exterior line strategy therefore facilitates supply but increases the area of lines of communication to be guarded, and consequently reduces the force disposable at the decisive point.

(g) *Mentality of the Commander.*

Last, but by no means least, history shows that the form of strategy adopted depends frequently on the personality of the commander. Even

in the same theatre of war, under approximately similar conditions, the different personalities of commanders will produce totally different campaigns.

Napoleon laid down that "there is only one line of operations," and he almost invariably adhered to this maxim. Von Moltke, on the other hand, never hesitated to operate by several. One cannot imagine Napoleon deploying for the campaign in 1866 in the way Von Moltke did, yet in the latter's hands the strategy adopted proved successful.¹ Again, Napoleon's plan of campaign for operations in Austria in 1800 would probably have failed when executed by Moreau.

RELATIVE ADVANTAGES OF THESE FORMS OF STRATEGY.

6. Having discussed some of the motives which influenced commanders in adopting one or other form of strategy, it is necessary to note shortly the advantages which may accrue from their employment.

(i) Interior lines ensure unity of command and facilitate control, thus allowing the personality of the commander to make itself more directly felt. Exterior lines, on the other hand, render accurate combination difficult to ensure, and failure in this respect has generally resulted in the loss of the campaign; as witness the campaign of Moreau and Jourdain in Germany in 1796.

(ii) With interior lines subordinate commanders possessing a very high degree of capacity for exercising independent command are not so vital to success, except in the case of the commander of the containing force, but in the case of exterior lines subordinate commanders must be prepared to act on their own initiative in the spirit of their Commander-in-Chief's instructions right up to the decisive moment of the campaign.

It is worth noting in this connection how few of Napoleon's marshals, though brilliant leaders under his direct command, were successful when given independent missions. Whether their failure was due to Napoleon's constant employment of interior lines (and thus direct command), or whether Napoleon's strategy was due to a knowledge of their weakness, remains an open question.

(iii) By the employment of interior lines the enemy commander is kept in doubt during the progress of a campaign as to the side on which the blow will fall. Doubt in his mind often leads in turn to hesitation in making decisions, and this to stagnation and loss of initiative. Exterior lines, on the other hand, tend to mystify the opposing commander at the commencement of a campaign, and may cause him to dissipate his forces in defence.

(iv) With interior lines tactical success tends to drive the enemy's forces apart, rendering subsequent reunion difficult and probably necessitating the abandonment by one wing of its primary line of communications, while a force acting on interior lines, if defeated, retires on its supports.

¹ It must be admitted that Von Moltke was not opposed by a Napoleon.

(v) Interior lines facilitate the employment of reserves. With exterior lines it is difficult to transfer reserves from one wing to another sufficiently rapidly and secretly either to reinforce a threatened point or to deliver an attack from an unexpected direction. Consequently a commander employing exterior lines is more deeply committed to his original plan than one employing interior lines.

(vi) A force acting on exterior lines is always liable to defeat in detail; a danger which is accentuated by the fact that a commander acting on interior lines can generally keep his opponent in the dark as to his intentions. Examples of defeat in detail are furnished by many incidents in the American Civil War, e.g., Jackson's defeat of Milroy and Banks in the Shenandoah Valley in May, 1862.

(vii) Interior lines reduce the area of lines of communication to be protected, and facilitate change to another line, but render supply problems much more difficult to solve. Exterior lines, on the other hand, enable pressure to be brought to bear more effectively on the enemy's communications without endangering one's own, since concentric action necessarily involves a blow against one or both hostile flanks. Consequently, the moral effect of exterior lines is apt to be greater than that of interior lines.

(viii) Tactical success is usually more quickly obtained if the strategic concentration on exterior lines is successful; it also tends to be more decisive, as witness the difference between the campaigns of 1796 in Italy and 1866 in Austria. With interior lines it is difficult to obtain a decision. The distance at which a containing force can act is limited; if, therefore, the enemy wing menaced by the main body continually withdraws a moment comes when the force containing the other hostile wing must draw back towards the main body, or the main body cease to follow up the other wing.¹ The dangers arising in such a situation are somewhat obvious. Again, with interior lines pursuit is difficult. After one hostile wing has been defeated, it is essential to turn immediately on the other wing; and only a small force can be spared to follow up the defeated wing (unless the assailant has a very great superiority in numbers); consequently, unless very much demoralized, it gains time to reorganize and may require to be again dealt with, as was the case at Deigo in the campaign in Italy in 1796.

(ix) Interior line strategy is not suited to passive defence. Its success lies in the power of the commander to force his will on his opponent, and demands, therefore, rapidity and judgment to ensure a sufficient zone of manœuvre being gained both as regards time and space. This in turn postulates offensive action, for otherwise the force will of necessity be nipped between the wings of the opposing army, as was the Austrian army at Königgrätz.

¹ Cf: "The Campaign of 1813." Colin. "Transformations de la Guerre."

CONDITIONS ESSENTIAL TO SUCCESS.

7 Lastly, history has shown certain conditions to be essential to the success of these forms of strategy. These are :—

(a) In Interior Lines.

(i) Rapid and determined offensive action at the right time and place. Delay is fatal, but a blow struck too soon will be left *en l'air*. Similarly a blow against the wrong wing will fail to achieve success.

(ii) The zone of manoeuvre must be such as will allow freedom of action, but not so great as to enable the enemy to avoid the blow.

(iii) Sound use of obstacles and judgment as to size and employment of containing forces cannot be dispensed with.

(iv) The force must be superior, if not in numbers, then greatly in moral or armament, to the hostile wing assailed, after detaching the necessary containing force to deal with the enemy's other wing.

(v) Internal communications must be shorter than those of the enemy.

(b) In Exterior Lines.

(i) Means of communication and intercommunication must be as perfect as possible.

(ii) The force must be numerically superior to that of the enemy.

(iii) The theatre of war should be reasonably free from obstacles of a serious nature.

(iv) Continuous pressure must be maintained on the enemy from the earliest possible moment until the strategic combination has been effected.

EFFECT OF MODERN CONDITIONS

8. Having so far considered the relative values of these two forms of strategy prior to the recent war, it remains to discuss how far the deductions drawn from earlier campaigns must now be modified.

The effect of modern developments may be dealt with under four heads :—(a) effect of national armies ; (b) effect of modern weapons ; (c) effect of aircraft and improved means of intercommunication ; (d) effect of modern transport facilities and administrative requirements.

(a) Effect of National Armies.

(i) The recent war was a struggle not of trained armies but of nations. We saw not only national armies of vast size, but, more than that, allied national armies fighting side by side on the same front, and not until the last stages of the war under one supreme command. We saw, too, allied armies acting in concert, but divided in some cases by half a continent, and in others by half the circumference of the globe.

Under the last-mentioned conditions, where theatres of war stretch across continents, and lines of communication round the world, strategy assumes such vast proportions and involves the consideration of so many factors such as sea power, etc., as to form a special subject totally outside the scope of this paper.

In the second case, where allied armies were fighting on opposite sides of a great country such as Germany, the scale of strategy was still so large as to permit of no real comparison of values; for although the Germans were fighting on true interior lines, and possessed all the advantages inherent thereto, the Allies in Russia and on the Western front could hardly be considered as acting on exterior lines, but must rather be thought of as fighting two separate campaigns. For notwithstanding the fact that the armies on both fronts belonged to Allied Governments who could discuss and concert combined operations, yet political conditions, the lack of unified military control, and other similar factors, reduced their practical power to apply combined pressure to a minimum, while the extreme distances between the two forces rendered any transfer of force from one wing (i.e., front) to another, such as would have been practicable in operations on exterior lines on a smaller scale, a physical impossibility, and nullified any hope of effecting such a strategic envelopment as would produce a decisive tactical result. In actual fact, the only effect of successful operations on one front was to produce a temporary stagnation on the other.

If, however, such a campaign as that conducted by the Allies in Russia and France is held to be one of exterior lines, then there can be no doubt that from every point of view, moral and physical, interior lines have an immense superiority.

When, however, we come to consider other campaigns, where distances are nearly as great, but where sea power makes its influence felt, it is not so simple to generalize. In the case of the campaigns in Egypt and Mesopotamia, the British forces acted on exterior lines as regards the Turkish forces in both theatres. Unified control from England, however, ensured co-ordination of operations in both theatres, and command of the sea permitted of the transfer of troops from one theatre to the other, while lack of co-ordination on the part of the Turkish command, added to their other heavy commitments and German influence in Turkey in Europe, tended to effect detrimentally their conduct of the war. As events turned out, there is no doubt that the inter-related effect of the British campaigns in Egypt and Mesopotamia was great, and did much to secure the victory in both theatres, but even so it seems doubtful whether, had the Turks been led by an able strategist and free from German influence which tended to draw the bulk of their best troops towards other objectives, the advantages of their interior lines position would not have proved the superiority of this form of strategy in campaigns on such a scale.

(ii) On a continuous and stabilized front, such as existed in France, strategy and grand tactics became so nearly akin that it was difficult

to say where one began and the other ended. A plan of operations may have had a strategic aim, but where forces were in continuous close contact, penetration and envelopment immediately became questions of grand tactics, and never emerged again from the tactical to the strategic sphere, except in the latter days of the war.

(iii) Certain deductions can, however, be deduced as to the effect on the strategy of interior and exterior lines of extension of front which is the main characteristic of the development of national armies.

Firstly.—Exterior and interior lines become less clearly defined, and more involved. Both may apparently be employed by the same commander at almost the same moment, or at any rate in rapid succession, according to the scale on which the operations are viewed. For example, in July, 1918 Marshal Foch launched his counter offensive on both flanks of the German salient between Soissons and Rheims. The strategic aim of the offensive was to envelop the German forces in the salient, although it must be admitted that beyond the original conception of the plan and the initial concentration all action was purely tactical. The two armies carrying out the operations acted from divergent directions, their immediate bases and lines of communication were separate, and no rapid means of mutual reinforcement existed. In other words, they acted, as regards the German forces in the salient, on exterior lines. Yet if we consider Marshal Foch's plan on a larger scale, he acted on interior lines, since he aimed at driving the Germans apart on either side of the Ardennes; while on a still wider basis again, including the operations of the Americans based on the Toul area, the French based on Paris acting in conjunction with part of the British army based on the "southern ports," and the Belgians and British second army based on the "northern ports," Marshal Foch's strategic plan at the time of the Armistice approximated to exterior lines.

Secondly.—Extension of fronts tends to eliminate flanks, except in so far as these may be created by the action of sea power. In the late war, as far as France was concerned, lack of man power prevented our employment of sea power to turn the enemy's flank, even if such an operation were feasible, which seems extremely doubtful in view of our experience of maritime operations in Gallipoli.¹

Again, extension of fronts weakens the front as a whole. For these two reasons, interior line action, aiming at penetration of the hostile front and the throwing of the two wings penetrated apart, would appear, *cæteris paribus*, the more likely to be successful in a modern campaign similar to that in France, in that, where man power and consequently reserves are limited, a powerful concentration by surprise on one portion of the front has a better chance of securing that tactical

¹ It seems practically certain that at present the landing of any considerable force in the face of even weak opposition is almost impossible except in most exceptional circumstances. The Tank of the future may however produce great changes in this respect.

penetration which must precede strategic development in such circumstances, than two or more less powerful concentric assaults aiming at enveloping a section of the hostile front. The failure of the Franco-British offensive in April, 1917 seems to bear this out.

In this connection it is worthy of note that, whereas in former days strategy led up to a decisive tactical result, under the conditions which prevailed in France tactical success must precede the development of the strategic situation.

Further, whereas in former days the exterior line strategist divided his forces of his own free will and the interior line strategist endeavoured to prevent their junction by the delivery of blows on each hostile wing in turn and the use of containing forces, nowadays interior line action must aim at penetration by delivering a violent tactical blow with all available forces to drive the enemy on to exterior lines. Such action is tactical, but without it the rôle of interior line strategy cannot be brought into play. Subsequent interior line action is similar to that of former days, though the handling of containing forces (usually a defensive flank) is different.

If, then, interior line strategy seems the more suitable of adoption for the reasons given above, it must none the less be remembered that the preliminary concentration necessary is difficult to effect secretly, that lines of operation by which troops can be supplied with food and munitions on the scale necessary in France will rarely be available¹, that the necessary freedom of manœuvre will be hard to achieve, and that the perpetual movement of troops through each other will tax staffs, transportation services and the troops themselves to the utmost. The effect of these conditions will be that, generally speaking, against troops whose moral is good, interior line operations will tend to slow down and come to a standstill before they can procure a sufficiently decisive tactical result to ensure strategic development unless the force carrying them out is possessed of a highly organized cross-country traction service. This was exemplified by the German offensive in the spring of 1918.

(iv) Where allied armies are fighting side by side but not under one supreme command, the tendency will certainly be, as in France, to operate on their own parts of the front covering their own communications, and therefore generally on exterior lines.

(b) Effect of Modern Weapons.

(i) The enhanced fire power of modern weapons, especially machine guns and small arms, has increased the fighting value of a weakly held line or small detachment. It has therefore become possible to employ containing forces weaker in relation to the force contained, or to expect them to delay the enemy for a greater length of time than formerly. This fact favours the employment of interior lines, but is negated to

¹ Tanks will in future reduce the quantity of munitions required and cross-country tractors will undoubtedly simplify to a very real extent the supply problem in roadless areas or on congested fronts

some extent by the fact that this delaying power of modern weapons also tends to prolong battles and therefore give time for forces acting on exterior lines to concentrate at the decisive point.

(ii) The effect of aircraft, in their fighting as opposed to their reconnoitring capacity which will be referred to later, is confined as regards strategy to their action against means of intercommunication, headquarters, and lines of communication. As regards their action against headquarters and means of intercommunication, it seems clear that their effect will be greatest on that force which is most dependent on intercommunication, namely, that acting on exterior lines, and conversely that that effect will be most easily produced and with the smallest number of aircraft by a force centrally situated, and one with a small area of headquarters and communications to guard, i.e., a force acting on interior lines.

As regards their action against lines of communication (such as roads and railways), the force acting on interior lines is more dependent on those available on a narrow front than is a force acting on exterior lines with a less dense concentration. The area to be attacked is also more clearly defined in the former case than in the latter.

Aircraft as fighting machines, therefore, appear to favour interior line strategy in their action against headquarters and means of intercommunication, and exterior line strategy in their action against lines of communication.

(iii) Tanks, though so far a tactical weapon, even now influence a commander in his decision as to the strategy which he will adopt, for their power of penetration has greatly increased the probability of a tactical stroke delivered with the intention of forcing two wings of the hostile army apart proving successful. Their effect in this respect is much greater than that which they would produce during a strategic concentration on exterior lines.

What the effect of the tank of the future will be on strategy is less easy to predict, but it seems fair to imagine that, with increased speed and radius of action added to their present power of penetration, they will form a strategic weapon constantly employed, in some ways as are cavalry, and in others as are aircraft.

Their power of penetration will still favour interior lines, as will probably their power to destroy means of intercommunication, but their action against lines of communication may favour exterior lines.

At present, however, it is rash to attempt to forecast their effect beyond the general statement that they will prove a strategic weapon of the first importance.

(c) *Intercommunication and Air Reconnaissance.*

Improved means of intercommunication such as wireless telegraphy and telephony have, together with the advent of aircraft, undoubtedly facilitated exterior line action, even in its widest sense, but, none the less, delay and mistakes in transmission will still occur, and no method of communica-

tion can make up for that loss of personal touch with subordinate commanders which is so much more easily attained by a commander acting on interior lines, nor ensure the exact co-ordination of the action of widely separated forces, especially when, as must always happen, unforeseen circumstances arise, although in this respect aeroplanes are of value in providing a means of personal contact between the staffs of widely separated formations.

On the other hand, aeroplane reconnaissance and the information furnished thereby tends to destroy that power of surprise which formerly was the main strength of interior line strategy and to reduce to a minimum the atmosphere of doubt which so often paralyzed the action of an exterior line commander.

Absolute surprise can nowadays only be achieved in exceptional circumstances. Modern surprise is a matter of degree, achieved rather by misleading the enemy as to the exact time or point at which some action is intended, than by concealing completely the fact that any action is intended.¹

Finally, improved means of intercommunication have assisted the intelligence service. It is doubtful, however, if this has materially assisted one of the forms of strategy under consideration more than the other, except in the wider sense where the Allies, acting on exterior lines as regards the theatres of war considered as a whole, were enabled, by their command of the sea, to secure information and transmit it to an extent to which Germany could not hope to attain.

(d) *Transport and Administrative Requirements.*

(i) Highly developed road and railway systems, motor cars, and lorries for conveyance of troops and stores undoubtedly favour exterior lines. Reserves can be transferred rapidly to meet a situation arising, the weight of an offensive can be transferred from one wing to another with a speed undreamt of in, say, 1866, and the fear of defeat in detail becomes much less pressing.

The cross-country tractor of the future will, however, in one respect to some extent counterbalance this advantage, in that it will render a force independent of road and rail facilities for its supply and munitionment in the battle zone, and will also carry troops and guns forward with a minimum of delay and fatigue.

From this it will result that a force can be more densely concentrated in an area where road communications are bad, can be supplied in its advance regardless of road and rail facilities in the forward zone, and can reinforce or relieve its advanced troops without delay or fatigue. Consequently, it seems probable that interior line operations in a war

¹ There is hardly any instance of a strategic intention in the late war which was not to some extent known to the opposing commander in advance. Date and exact place were in most cases the only factors wherein lay a degree of surprise.

such as that in France will prove more often successful than heretofore, since they will not lose their impetus through the difficulty of keeping up the supply of fresh troops and materiel, as was almost invariably the case in the past war.

(ii) The effect of modern administrative requirements is closely bound up with the question of transport, for as improved means of transport have facilitated supply and munitionment, so have the demands of these services correspondingly grown. Consequently, the supply of troops acting on interior lines remains up to the present a more difficult problem than that of a force acting on exterior lines.

As previously stated, the effect of cross-country tractors may in the future materially alter the situation in the forward areas in this respect, but where lines of communication are long and rail or fast road transport of stores is essential the supply problem of operations by interior lines seems likely to remain an extremely difficult one.

CONCLUSION.

9. Such, then, are some of the relative advantages and conditions essential to success in the employment of these two forms of strategy as deduced from history and reviewed in the light of the recent war.

In the past, on the whole, interior line strategy was safer, less startling, and usually productive of less decisive results than exterior line strategy, but less likely to lead to disaster in the hands of an average commander. Neither is better than the other ; all depends on the man and the conditions under which he acts.

As regards the future, the same appears likely to apply with two provisos : (1) That exterior lines will be less dangerous than heretofore, and (2) that interior line strategy will be extremely difficult to carry out in the case of large forces, unless staff work (and especially administrative staff work) is of a very high order, and exceptional transport facilities are available.

As regards the form which is most likely to be adopted, it seems probable that in small wars, or even in a national war before national armies have taken the field, the selection of one or other method of operating will be dependent as in the past on the mentality of the commander and the conditions in which he finds himself.

As regards the later stages of a national war on one front, such as that just ended in France, it seems probable that both forms of strategy will be adopted by the same commander during the same series of operations, often in rapid succession.

As regards operations on two or more "national" fronts, there can, however, be no doubt that interior line strategy has every advantage.