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## THE WAR-GAME. A PASTIME OF THE GERMAN ARMY-OFFICER

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An essential part in perfecting the tactical proficiency of the German army officer is played by the "*Kriegspiel*" or war-game. Although of comparatively recent origin, it has occupied for a number of years, and does now, a prominent place on the winter-programme of German army officers of all branches of the service. In the original sense the term "war-game" was applied to all tactical exercises, executed on a drawing or a relief, with a view to objectively supplementing instruction in the elements of knowledge which is required by commanders of troops of various grades. Certain problems were set and solved by the instructor co-operating incessantly with the players, whereby the instructor took one side and the players constituted the opposition, or the players were divided into opposing forces whose movements were supervised and criticized step by step by the instructor. As played more recently, however, the war-game has outgrown these earlier exercises of a mere theoretical nature. Its aim now is a representation of actual conditions of warfare and, as a consequence, it has become so practical that it may be defined as "playing at war" as differentiated only from really "being at war." The required knowledge is gained no longer by instruction merely, but by experience,—the contemplation of consequences accruing from the commanding officer's own actions. In this respect it is said to be equal, if not superior, to the manoeuvre, since the greater perspective, and the distinctness of the whole arrangement, in the war-game, overbalances the advantage of the more drastic lessons taught by the results of mistakes or errors of judgment in actual manoeuvres. In the latter, moreover, the exercises necessarily are isolated and the movements of troops are executed only as far as the initial stage of an action, thus making an enormous claim on imagination, whereas in the war-game action is continuous and is carried through to the end, and again, since repetition is possible day after day, the essential points of procedure are acquired spontaneously and are apt to be more firmly impressed on memory.

The tract of land which is to serve as territory for the

exercises may be reproduced in the form of a drawing or relief. Of these, the drawing, usually on a scale of from 1 : 2500 to 1 : 5000, is the more popular one, owing chiefly to its cheapness. The relief, however, is much superior. Elevations and depressions being marked for the eye, a more clear and life-like picture of an action is created, attention is not diverted by minor details, and the whole course of the war-game is facilitated and accelerated. The cost of such a relief need not be excessive. A wooden base painted light green, rivers and lakes painted blue, woods and forests of coarse sand glued to the base and painted dark green, hills and other elevations of putty, and the whole cut up into four or eight sections, thus permitting a variety of combinations, make an inexpensive and acceptable working-model. Exact reproductions of a really existing territory or of fortresses and their surroundings require of course more careful workmanship and, owing to the large number of models necessary, make the relief much more costly than the simple use of charts.

The marks representing troops of different sizes and arms are pieces of sheet-zinc, variously colored, and must in form and dimensions reproduce reality as closely as possible. Troop-marks which are too massive or so high as to rise above the buildings on the relief act as disturbing factors. If rightly proportioned they are easily manipulated with the aid of a small magnet. In addition to the painted troop-marks, representing the various formations of bodies of infantry, cavalry, or artillery, it is advisable to have on hand a number of small, plain pieces of zinc to serve as marks for railroad-trains, ambulances, trenches, impediments, etc. All these marks, but especially the troop-marks representing different formations, should in their dimensions approximate the scale of the relief. Distances are measured with the aid of a compass.

The most important personage in the war-game is the director. The combination of qualities which he must embody is of such rare occurrence that the service-regulations of the army recommend the waiving of all distinctions of rank and length of service in his selection. Logically, of course, the commanding officer of a regiment should be the man best fitted for this position, but that is not always the case. In the first place, the director must be possessed of comprehensive knowledge and ample experience in the sphere of tactics and the history of military campaigns. Next, a lively imagination, of particular service in the plastic description of details, is required, which, on the other hand, he must

know how to curb by calm reflection. He furthermore needs a vivid, concise, and effective mode of presentation, a good memory, and, finally, a fair amount of didactic endowment should be his.

It is obvious that the course of the war-game will be beset by difficulties unless the commanders of the opposing forces and their subordinate officers have considerable tactical skill at their disposal, including a knowledge of the tactical fundamentals and the various formations of not only their own arm but of all three branches of the service, and, in addition, sufficient practice in the giving of orders for, and during, the development of an engagement. Proficiency in these accomplishments is best acquired in a brief preliminary series of exercises under a competent instructor. Suggestions concerning the nature of such exercises and the manner of conducting them may be found in two publications, (1) *Taktische Entwicklungsaufgaben für Kompanie, Bataillon, Regiment und Brigade*, by R. von Briesen, (2) *Taktische Aufgaben für Kriegspiel, Übungsritt, Dispositionsübung und Selbststudium der Infanterie, in Anlage und Durchführung*, by Zöllner. Since experience teaches that from 15 to 20 is the most favorable number of participants in the war-game and the whole body of officers in a regiment of each of the three branches of the service exceeds this number considerably, the exercises also offer an opportunity for selecting the more clever ones and then gradually advancing the rest to the required standard of efficiency.

Concerning the size of the bodies of troops employed in the war-game the most promising procedure is to begin with smaller bodies of men, emphasizing intensive analysis, and later manipulate with divisions and whole regiments. Analogously, in the choice of problems the prevailing maxim should be from the simple to the complex. Valuable information with regard to these matters may be secured by the director of war-games from the study of relevant chapters in the following publications:

- (1) Balck,—*Taktik*.
- (2) Briesen,—*Taktische Entwicklungsaufgaben*.
- (3) Meckel,—*Grundriss der Taktik*.
- (4) Scherff,—*Sämtliche über Taktik erschienene Schriften*.
- (5) Schlichting,—*Taktische und strategische Grundsätze der Gegenwart*.

As model collections of tactical problems the following are recommended:

- (1) Gizycki,—*Strategisch-taktische Aufgaben nebst Lösungen*.
- (2) Häsel,—*Taktische Aufgaben und Besprechungen*.
- (3) Immanuel,—*Taktische Aufgaben*.

- (4) Moltke,—*Taktische Aufgaben aus den Jahren, 1858-1882.*  
 (5) Zöllner,—*Taktische Aufgaben für Kriegspiel, etc.*

The director's first function is the presentation of a war situation and of the tasks of the playing parties which oppose each other. Situation and tasks combined are known for short as "supposition." Since in actual warfare small bodies of troops (the most advantageous units for the war-game to begin with), are rarely expected to solve independent problems, and since the first consideration in the choice of a supposition is that it represent natural conditions, suppositions taken from small warfare, such as the covering of requisitions, evacuations, etc., are usually at first selected. The supposition given, the opposing forces proceed with the solution of the problem and, in the opinion of some writers on the subject, this is best followed by a brief critical review of the whole game on part of the director. The essential factors which tend to make the game, even on a small scale, a success, are a probable and tactically correct supposition, exact and careful consideration and computation of all proceedings by the director, a strictly neutral attitude on his part, which figures mechanically with facts and situations as created by the initiative of the players, and a faculty to develop the whole in a manner so life-like as to cause the players to leave the game with the conviction that in reality things would have happened in just that way.

The claim of the advocates of small bodies of troops in the war-game is that consideration of details is facilitated, that the discussions are more exhaustive, and the game as a whole is more interesting and instructive. The disposal of the three arms and their co-operation, the relations and tactical formations of the single arms in an engagement, the utilization of the ground, in brief, all general doctrines of military science, may be illustrated, they hold, just as interestingly and instructively by the activities of a detachment consisting of one battalion, one squadron, and some pieces of ordnance, as by the manoeuvring with brigades and divisions, whereby details, which to the majority of officers are of the greatest import, are more or less excluded. More recent writers advance the view that the minor problems are left more profitably to active service in the field and that the war-game be reserved to those actions which afford opportunity for applying all the principles of modern warfare and acquainting officers with the elements of strategical science, thus introducing them into what constitutes the highest art of their calling. It is in accordance with this view chiefly that the war-game is played today.

The cartographic material for the war-game on a larger scale is as a rule obtained from publishing houses. Ready-made troop-marks are also for sale. These and a compass and longimeter constitute the necessary apparatus. The course of the game is the same as in the smaller exercises. It is divided into supposition, execution, and discussion and is played under the leadership of a competent director who also acts as referee whenever the services of such an official are required.

The choice of problems and the skill of the director in presenting the supposition and conducting the game are of the greatest moment. The former cannot be selected arbitrarily but must be calculated to fit into a pre-arranged programme. They should also be chosen with due consideration to the particular needs of the various troops and branches of the service. Thus, there should be included demonstrations of the operations and engagements of large bodies of cavalry, the behavior in modern warfare of extended lines of field-artillery, the peculiar conditions of attack and defence of fortified places and positions by foot-artillery and pioneers, the manner in which the crossing of rivers is accomplished, and of other technical work. Of equal importance for all arms is occasional illustration of modes of attack and defence, encounters, contests for a fortified position, outpost duty, replenishment of ammunition, sheltering troops, supplying them with provisions, and sanitary service under the most varying conditions.

The war-game is usually preceded by a brief orientation of the officers present as spectators. This is best accomplished with the aid of a sketch on a blackboard of the operative and tactical situation which forms the starting point for the opposing forces, and by a brief presentation of the problems involved in the game. Next, the actual players are called in. The director begins with picturing for the benefit of both parties the environment in which the game is to develop. He describes the ground under the effects of the influence of the season of the year, weather, illumination and temperature. He recalls to the mental eye the characteristics of summer, for instance, waving fields, shady orchards, mellow, green meadows, dusty highways, woods and forests in full foliage, over which stretches a blue and cloudless sky, or dark clouds presaging thunder-storms and rain; or he pictures late autumn with trees defoliated, fogs hovering above valleys and rivers, and naked heights in the rays of the sun; or perhaps the frosty landscape of winter which has covered the fields with snow and brooks and ponds with ice, and whose

clear and chilly atmosphere tends to relieve distinctly from the background everything that stirs and moves. He further gives information concerning the construction of villages, the practicable state of forests, the width and depth of streams, the nature and condition of their banks and the possibilities and means of crossing; he likewise speaks of the passableness of roads, in a word, of all those matters which are likely to exert an influence on the movement of troops, the effectiveness of arms, perspective, cover, etc.

After all necessary information of this sort has been imparted, one of the playing sides retires while the other is retained, the players being seated around the war-chart. A leader is appointed or elected and he presents to the director a report of the preliminary plans of his side in the preparation of which all his men have co-operated and which is to be made the basis of the game. This report is criticized by the director and eventual changes are made immediately. Next, the allotment of parts is in order, which may be done by either the director or the leader of the side. One officer takes charge of the cavalry operations, a second handles the artillery, a third guides the pioneers, while the remaining players of the side are most suitably reserved for the several bodies of infantry. Since, however, it is well known that the respective leaders of a side profit most from the game, a second officer may be similarly benefited by acting in the capacity of staff-officer or adjutant as counselor of the leader. The duties of this officer would correspond to those in actual warfare. He must ascertain in detail the position of his own army as well as that of the enemy and keep constantly posted in regard thereto; he must take charge of the order, report, and messenger service, call the leader's attention to necessary arrangements concerning the disposal of heavy baggage, trains, sanitary stations, ammunition supplies, and assist him in devising means and giving orders.

Preliminaries being concluded, the director starts the game by choosing a certain point of time up to which the side is supposed to have advanced in accordance to orders without anything of moment having occurred. If patrol engagements are to be avoided, it will usually be the time of arrival of a report which demands a change of previous arrangements or requires new orders. The situation at that particular time is now definitely fixed. The director, for instance, turns to the leader with the words: "The advanced guard under your command has fallen in according to orders at 6 A. M., an advanced guard of cavalry has started at 5.45 A. M. along

the road to the village N. with orders for the time being not to cross the brook P.; it has arrived in that vicinity, according to your computation, about 8 A. M.; personally you have put under marching orders your main body of troops and have then proceeded to its head. At 8 A. M. you have just arrived at the village Z.; with you are your adjutant, the division commander of the first division of the first field-artillery regiment and his adjutant, an orderly-officer and two trumpeters, and there are furthermore at your disposal four orderlies on horseback and two bicyclists. Before I acquaint you with the reports which have just arrived you will place in position on the chart the marching column of your advanced guard as you conceive it to be at 8 A. M." Having done so, the leader is given all messages and reports that are supposed to have arrived for him previous to the time selected as the starting point of the game.

It is needless to point out that the various messages, reports and other communications which, in the course of the game, are repeatedly transmitted by the director to the leaders should, in content as well as in form, resemble closely those of actual warfare. To give full, detailed and precise information would not be war-like. In actual warfare information usually is scant, indefinite, and often unreliable. It is the commander's business to sift the probable from the improbable, the true from the false, and to shape his course of action from his own deductions. Hence, it would not be correct for the director to say, for example: "The Western edge of Pournoy la Grasse has been occupied by two dismounted squadrons," or perhaps, "three batteries of the enemy have been mounted on the height North of the village X." In real warfare the size of an opposing force and the branch of the service to which it belongs as a rule cannot be immediately recognized, and the number of the pieces of artillery and their position remain uncertain until surmised from the frequency and the direction of the firing. Even concerning infantry exact information is not to be had at once. The size of a body has to be estimated from the length of the columns and the time they take to pass a given point, and that although modern facilities for observation are available. For a similar reason, having given all necessary information, the director should not ask: "What do you do now?" This form of question would tempt the leader to answer narrative fashion, invite drawn out discussions and delay the game. The correct way to ask is: "What are your orders?"

The course of the game will therefore be as follows: The



director imparts the necessary information. The leader gives his orders. The leader's subordinates give their orders on the basis of his.

The side then retires and the same process is gone through with the opposing side.

Since the war-game in a way resembles the game of chess, in which first one side moves and then the other side, "the length of the move," that is to say, the period of time which the game may progress without the other side being heard, is a matter to which the director has to give careful consideration. Too short moves delay the game and are apt to tax the patience of players and spectators. Too long moves involve the danger of having to retrace one's steps and to play over part of the game when, for instance, one of the two leaders rightly objects: "I would have known that already at such and such a time and consequently have given the following orders at the fork of the roads." Such objections are not easily ignored.

Briefly stated, the following is to be said concerning the length of the move: The further along the war situation has developed and the greater is the fleetness of troops in motion, the shorter should be the length of the move. This suggests at once that the cavalry war-game demands the shortest moves. On the whole, however, the length of the move will undergo frequent changes in the course of the game. Success depends on the director's good judgment, and that is acquired only by experience.

The discussion of the game at its close by the director assumes most profitably the form of a resumé. Aside from a general review of the question as to whether the solutions of the several tactical problems by the leaders were correct or not, criticism is best avoided. Generally speaking, discussion of topics as the following is in order:

(1) Was the conception of the situation at different points of the game a proper one, and were the subsequent moves appropriate?

(2) Were the orders clear and definite and correct in form?

(3) Did the subordinate leaders give suitable directions and were they justified by the situation?

(4) Were the conditions of the ground sufficiently appreciated?

(5) Was there effective co-operation of the various branches of the service?

(6) Did any serious violations of the regulations occur?

For the rest, what the service regulations say of the manoeuvre applies also to the war-game: The discussion should be of appropriate brevity, without tartness, and objectively instructive. It should never be confined to fault-finding and mere criticism but should always supplement disapproval with a statement of what, in the opinion of the director, would have been the proper mode of procedure.\*

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\*The psychological aspects of the game would form an interesting subject for study. It involves, obviously, the utilization and the bringing to a high degree of perfection of many of the so-called higher mental qualities but, above all, those of memory and of constructive imagination.