that some games are classified as introductory, intermediate or advanced. If you are thinking of taking up strategy gaming you might be better advised to start at the introductory level, and pick up the basic concepts of war gaming and strategic simulation before advancing to games at the higher levels.

The game format varies to suit the differing needs of the various types of warfare represented. But, in general, the games are played across large maps. Where the map is too large to be displayed on a single screen, then the screen usually acts as a window that can be moved (by means of a joystick) across the map. For an historical simulation the game designers will have tried to reproduce, as faithfully as possible, the terrain over which the original battle was fought. In 'Computer Bismarck' by SSI, the action takes place mainly in the North Atlantic, and this did not pose too many problems in terms of graphics design. On the other hand, for another SSI game, 'Battle for Normandy', the designers' task was far more difficult. Not only did the general terrain have to be correct but so did specific features such as the beaches and the coast, the towns, villages and rivers. For non-historical games the designer has more scope to produce variety for the player to make full use of the forces he has available, but even here the designer must be careful to include sufficient checks and balances to prevent the game becoming too easy for one side or the other.

The map also has a grid superimposed on it. This grid subdivides the map in the same way that a chess board is divided into squares, though the grid on a war games map is often hexagonal rather than square. Each square or hexagon is given a value according to the type of terrain contained within it. This value represents the degree of difficulty a unit would have moving into or through that particular area. The effort of moving through the area would cause the movement allowance of the unit to be reduced by the corresponding value. When the movement allowance of the unit equals zero, or is less than the value of the area it is proposing to enter, it may not move any further that turn.

The game is usually divided into a number of 'game turns' that represent elapsed time, and each player is given a number of objectives that must be accomplished in the time available in order to win the game. In most cases it is not necessary, or even possible, to achieve all the objectives set. So the first decision the player has to make is to assess his chances and determine his strategic priorities accordingly. In such scenarios the role of the opponent is often to stop the attacker from gaining his set objectives. Once again it is probably not possible to protect everything, so the defender must decide when to abandon hopeless positions, how long to cling to strongholds, and whether or not to take the risk of launching counter-attacks to regain lost positions or disrupt his opponent's preparations for a fresh attack.

The player communicates with the program

through the graphic and textual representation of the forces under his command that are on the map. The graphic display represents the location of a particular unit on the battlefield and the textual display supplies information relating to the unit's combat efficiency, and movement allowance. The player moves his units by nominating them with a cursor or by having the computer present them to him in rotation. Once a unit has been nominated, the command to move the unit is given. In the case of a map with a hexagonal grid, 1 would send the unit north, 2 would send it north-east, and so on around the points of the compass. An increasing number of these games work with joysticks or trackballs, in which case the unit can simply be 'picked up' and moved in the desired direction. To terminate the movement of an individual unit the command FINISH or F is often used. Even then some games will allow the player to renominate the unit and move it again, unless its movement allowance has been exhausted. When all movement has been completed, the player indicates the fact to the computer with the command EXECUTE or E. The computer will then initiate the combat phase.





Eastern Front

In this game the player takes on the role of the German army trying to reach Moscow in 1941, whilst the computer plays the defending Russian forces. Written by Chris Crawford and distributed by Atari, it incorporates radical new features, such as 'fine scrolling'

One of the most visually pleasing features of Eastern Front is the way the map changes as the year progresses. In autumn the forests defoliate, and then in winter the rivers freeze up and the ground is covered in snow. It is considered extremely difficult to reach Moscow in this game

During the combat phase the computer will indicate the friendly units that are in a position to engage the enemy and provide information about the relative strengths of the units involved. On the basis of this information, the player may accept or reject each combat suggestion as it is offered to him. Once all the combat has been resolved, and the effects calculated and displayed, the second player begins his turn.

For many people, the fascination of strategic games arises from there being no one 'correct' solution to the problems that are posed by the game. The player's enjoyment is derived from overcoming the physical and logistical problems of the terrain that he is operating in as well as meeting the intellectual challenge of using the resources available to defeat the enemy. Naturally, every strategist would like to win by using the most daring schemes and carefully laid traps, but above all the strategist wants to win!