Hyborian War Elephant (photograph from Tony Bath's Collection courtesy of Rudi Geudens)

ORIGINAL FOREWORD by Phil Barker and Bob O'Brian

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Wargaming has become one of the fastest growing indoor hobbies, and is now served by a growing number of firms making excellent models in all scales and periods, as well as a vast and increasing literature, and a number of specialist magazines.

Tony Bath with Don Featherstone, and a few other hardy enthusiasts, have been concerned with the hobby since the days when the numbers were so small that most wargamers knew each other personally! Tony was the founder member of the Society of Ancients, which has now grown to International status, and is also the presiding genius of all the affairs of Hyboria, probably the longest running and most successful (and nerve racking) campaign ever. We speak with feeling, and sometimes bitter experience, both having major parts in the production!

War, in all its forms, is rightly abhorred by the vast majority. For all that, it will always be one of the most compelling of subjects for study. We believe that the wargamer, who researches his subject, delves into the history and causes of wars and becomes aware of the colossal blunders and mis-chances of conflicts, becomes far less belligerent than many who do not follow this hobby.

This book, written by an acknowledged master and enthusiast, will enable the wargames campaigner to make his own decisions, and produce his own particular flashes of brilliance, or abject disasters - and with no one hurt-feelings excepted.

Assyrian and Roman Infantry 40 mm "flats" used as soldiers of the Hyborian Kingdon (photograph from Tony Bath's Collection courtesy of Rudi Geudens)

INTRODUCTION

When Phil Barker first suggested to me that I should write a book on campaigning, it didn't occur to me just what I was letting myself in for. The difficulty has been, not to decide what to put in, but in deciding what has to be left out in order to limit this volume to a reasonable size! There is so much to be said about campaigning that it is not easy to know where to begin, or indeed where to end.

I have decided to assume that the average reader is fairly ignorant about war game campaigns and to explain things with a fair amount of detail. If this is annoying to more experienced readers I am sorry; but in anything as complicated as this subject can be, it is essential to start off with a firm idea of what you are trying to do.

Almost all new wargamers start their careers by fighting a succession of single, unconnected battles; this is inevitable since it takes time to get the feel of the hobby, to learn the rules etc. But if a new recruit is really going to take up war gaming, then before very long he begins to feel that something is lacking: that these individual games, though well enough in their way, need some connecting link to make them more satisfying and to give an objective other than just trying to destroy the other fellow's army. In other words, the desire to fight campaigns rather than battles.

This is the point where the newcomer can make a mistake. It is not wise to try and run before you can walk, and it can be equally unwise to plunge immediately into complicated campaign rules. Some people are capable of doing this, but for many it can end by getting bogged down among the complications and, in the ensuing frustration, vowing never to go in for that sort of thing again. For that reason it is often best to start off with a simplified campaign, and elsewhere in this book you will find ideas and rules for these. If you try these successfully you will probably then find the urge to go on to something bigger and better.

Again, to indulge in a campaign you need at least two, but preferably more people who can engage in it on a regular basis. Campaigns are ideal for local clubs to embark on, but they can also be run by more widely scattered groups. Ideally, a complicated campaign needs a fair-sized group with at least one, preferably two people who do not participate in the campaign as generals or rulers but act as impartial controllers and umpires. However, it is perfectly feasible for two people to run a satisfying campaign; it is even possible for one person to do so with the occasional assistance, for the purpose of battles etc., of visiting firemen. Suggestions and rules for all these eventualities will be found in this book.

What makes campaigning so rewarding? Why, if you have fairly limited time available for the hobby, should you use time that could be spent in fighting on the table-top in poring over maps and situation reports? The answer is that no real-life general could limit himself to the purely tactical problems of the battle-field, and a campaign is the way in which the wargamer general widens his horizon.

The player who merely participates as a general or a ruler finds the opportunity to practice strategy as well as tactics. He may find himself having to solve problems of supply and finance, and, if the campaign is a complicated one, matters of diplomacy etc as well. He must learn one of the hardest lessons for a wargamer: when to cut his losses and abandon a losing battle, instead of fighting on to the bitter end.

The wargamer who either runs or helps to run a campaign gains even more, for he can give full rein to his creative genius, both as regards the rules he uses and the countries and characters he creates. A radio interviewer once asked me whether the desire to run a mythical continent of my own was a sign of power mania; I replied that this was possibly true to some extent, since most of us like the idea of playing God to some degree, but more important was the freedom it gave to a bent for organising things. Certainly campaigning will indulge many complexes. Further, in running a campaign you have to learn to be as unbiased as possible, and to find methods of solving tricky problems, of setting up scales by which to decide just how successful a certain move by a player will be. An example of this is a situation that cropped up quite a while ago in Hyboria, my own mythical continent. Control of the Sea of Vilayet is vital to the interests of Hyrkania, which naturally maintains a large navy; they heard that Turan, on the other side of the sea, was building warships in the port of Agrapur. Hyrkania and Turan were at peace, so Hyrkania could make no overt move, but Charles Grant, the ruler of Hyrkania, gave orders for some old merchant ships to be scuttled in the harbour mouth to effectually block in the Turanian ships. He was of course prepared to deny having any hand in this fortuitous accident! I then had to sum up the chances of success of such an operation, considering the possibilities of challenge by the harbour defences, the accuracy of the scuttlings, etc. On this basis I set up a dice scale of from 2 to 12, 2 being complete failure and 12 being complete success, and rolled two dice. The result gave Charles a nearly complete success which prevented the larger Turanian ships getting out of port for many months, and the whole thing was an enjoyable little exercise for me.

As your campaign develops, you will find yourself adding fresh angles to it which, while quite unnecessary from a purely practical viewpoint, can add much fun and interest to the proceedings. The provision of a campaign newspaper, as mentioned later, can add both

a touch of humour and serve a useful purpose - and enable players to show off their skill at such diverse things as poetry and propaganda! Keeping a detailed history of the campaign can also be fun, and many other side-lines will occur. The danger in fact is of losing sight amid all these things of your original objective and letting the tail wag the dog!

It is however true of campaigning, as of so many other things, that the amount of enjoyment to be obtained from it is pro rata to the amount of effort that is put into it. This will vary from person to person and group to group according to how much time and interest people have to spare, but the main ingredient necessary is enthusiasm for the project and a sense of responsibility toward the other players. Nothing is so frustrating to players as to be held up at a vital moment by one participant who hasn't decided on his current move or responded to a sitrep within a reasonable time. For this reason, if you are running a large or complicated campaign it is necessary to pick your players wisely.

Not all wargamers will wish to progress to the complications inherent in running as large an operation as my own Hyboria. I have always maintained that one of the fascinations of our hobby is that it enables us all to participate up to the level we ourselves decide; and as long as we can find a kindred spirit to join us, the results will be stimulating and satisfying regardless of which level we choose. I hope that in the pages which follow all readers will find something to stimulate their interest and get them into the campaigning habit

One last point before we get down to details. By no means all the ideas which follow stemmed from my brain originally, and even those which did owe something to the encouragement and criticism of the people I have campaigned with over the years. In this connection I would like to mention Don Featherstone, Archie Cass, Neville Dickinson and Peter Millen in particular, all of whom have helped to shape my ideas over the years and contributed many of their own. Without them, and all the members of my Hyborian Group, this book would not have been possible.

1. HOW TO SET UP YOUR CAMPAIGN

At the very outset of your venture into campaigning you have a decision to make: i.e., are you going to refight one of the wars of history; are you going to create your own wars but operate on historical ground by retaining real countries; or are you going to go completely overboard and start off by creating your own mythical continent, island etc. This decision is quite a big one, so let us examine the implications of each course.

If you decide to stick to realistic history as your basis of operations, you will have the initial advantage that maps of the area already exist. These will be available - in the hexagonal pattern which fits all the rules in this book - from the Research Group, and cover most of the Ancient World. You will also be able to work out fairly simply the number of troops etc. involved from reading accounts of the particular war you intend to refight. On the other hand, you have to accept the limitations of the historical approach and deny yourself use of many of the most interesting and enjoyable of the rules mentioned later purely because they do not fit into this context.

If you choose this course, there are numerous interesting wars you can select. From the strategical viewpoint, the Peloponnesian War is ideal. At various times all the city-states of Greece, the Aegean islands, and even parts of Sicily were involved, so that you operate over a wide area; diplomacy can play a vital part, since some states changed sides or remained neutral at times; and the naval side of the war is extremely important. A factor which tends to be overlooked is the dependence of Greece on outside grain sources - notably the Black Sea countries and Sicily — and this greatly affected the strategy of both sides in the closing stages. The disadvantage of this particular war is of course that the land battles were almost exclusively fought by armies of hoplites; light troops were used to some effect on special occasions, such as at Sphacteria and in Boeotia, and cavalry in the Syracuse operations, but normally it was a heavy infantry affair, which tends to make a somewhat boring war game. So your choice of troops is severely restricted.

Both the 1st and 2nd Punic Wars offer wide tactical and strategic scope; the area covered is even wider than in the Peloponnesian War since it includes Spain and Africa, and troop types are extremely varied. One also has to take into account the differing systems of command of the Romans and Carthaginians, both of which had advantages and disadvantages; the presence in the 2nd Punic War of a military genius in the person of Hannibal; and the fact that the Carthaginians very largely employed mercenaries who needed paying.

Most of the later Roman wars were too one-sided to make interesting campaigns, and the same applies to some degree to those of Alexander the Great; the Persian armies were no real match for the Macedonians, and had no commander of the calibre of Alexander. For enthusiasts of later eras, the Crusades or the various wars between the Eastern Empire and its successive foes, offer many attractions.

The second course, of sticking to historical geography but fighting non-historic campaigns, is a typical compromise and, like most compromises, tends to take the worst rather than the best of both worlds. It is true that it gives you rather more freedom of action than the first course, but in an essentially limited way in that you are still committed to historical concepts as regards troops etc., if you are abandoning history in one direction, why not go the whole hog? However, if you decide on this course, an excellent campaign can be constructed on the basis of a Roman civil war during the later Empire, which will give ample scope for strategy and allow for any amount of back-stabbing and such like dirty work.

Having at various times tried all three courses, I have no hesitation in saying that I believe the third, of setting up your own continent, to be far and away the best. With a world of your own, the limitations are only those of your own imagination together with a certain sense of realities. For instance, within the boundaries of my own continent of Hyboria exist armies and cultures ranging from the Ancient Egyptian to the 13th Century mediaeval, enabling me to make use of the whole ancient-mediaeval period. I justify this - if justification is needed - on the grounds that in a continent as large as Hyboria not all countries would be on the same level of culture and development (as was the case on our own Earth) and if you group similar cultures together you get a realistic enough situation. As an example, I started out with Vikings in the north, Greeks in the north-central areas, Romans next to them, a group of mediaevals in the west with Celts between them and the Vikings, Egyptians, Assyrians etc. in the south, Persians and Saracens in the east. Over the years wars and commerce between the countries have gradually altered these original ethnic and material lines, raising the standards of some of the more backward areas; but while regular armies have tended to progress in equipment, militia and levies still retain the old styles, so that I can still find uses for all the varieties of troops which make the ancient period so fascinating.

Another advantage of this mythical continent is that, if your original creation was properly done, it will last you for not just one campaign but for as many as you like, and in the course of these the continent will develop a certain life of its own. Precedents will be created for future actions, traditions of both friendship and enmity arise, and all these will help you later in running the continent. Finally you will probably reach the stage when you wonder just how much

control you have or whether you have created a Frankenstein's monster!

If you are embarking upon a venture such as this, your first necessity is a map. How large this is will depend upon how large an operation you intend to set up. If you are going to limit yourself to relatively small-scale operations, then a large island will probably suffice; or alternatively a large peninsula. This latter gives you room to expand later if required, since you can fill in all the details you require on your peninsula and leave the main continent it is attached to as Terra Incognita, walled off by thick forests or high mountains. Or of course you can create an archipelago; the size of the concept will depend upon how much time and effort you wish to devote to it.

Now not all of us have the necessary skill and imagination to draw up a complete map by ourselves; if this is your position, do not despair.

There are several methods of getting round this obstacle. Firstly, you can pick someone else's brains by utilising one of the many worlds created by writers of fantasy and science fiction - as I did. The basis of Hyboria was created for me by Robert Howard, the author of the well-known Conan books; he included a reasonably detailed map on the end-covers of his books, and I merely took this, blew it up to some 4' by 4', and proceeded to map in much greater detail.

Plenty of other worlds are waiting for you to take possession of them. Sprague de Camp[4], one of the finest living writers of fantasy fiction, offers much material for mythical worlds in many of his books, especially "Tritonian Ring" which develops the Atlantis theme, and the Krishna books. No maps are provided, unfortunately, but plenty of geographical detail is given. Edgar Rice-Burroughs similarly gives enough detail in his books to create his worlds of Mars and Venus. Fritz Leiber has created - and mapped to some extent - the world of Nehwon for his heroes to inhabit, Andre Norton the Witch World. The list goes on and on, and most members of the Society of Ancients at least seem to be addicted to this type of literature.

Another method is that used by Neville Dickinson when he chose to set up a continent of his own. With the typical craftiness that has won him so many battles, Neville proceeded to collect a number of holiday brochures of such places as the Isle of Man, Northern Ireland, Jersey, Guernsey, Luxembourg and Corsica, and used the outlines of these to form various countries of his continent. By grouping them together, and filling in little independent duchies to take up blank spaces between them, he soon had the outlines of all his countries

[4] He also played the Fletcher Pratt Naval Wargame in New York. Editor.

drawn in on his map. Similarly, rivers were taken from local Ordnance Survey maps, while the coast-lines of such countries as Norway and Sweden were utilised to give his sea-coast. This sort of thing is within the scope of anyone, and can be fun to do as well.

Having made your outline map, you now need to add terrain to it; even if you have taken over a fantasy map, it will not have much detailed terrain to begin with. You will first need to grid it into hexagons; you can simplify this by using the blank hexagoned sheets supplied by the Research Group to draw your map on in the first place. You then throw two dice for each hexagon: score of 2 gives Hills and Woods, 3 Hills, 4 Woods, 5 Open Country, 6 Open Country, 7 Hills, 8 Open Country, 9 Open Country, 10 Hills, 11 Woods, 12 Hills and Woods. Should a double be thrown (i.e. two 3s, 2 4s etc.) toss again, and if a second double is thrown then the hexagon is extreme of its kind - for example Hills would become mountains and Woods would become thick forest.

A certain latitude however must be allowed for realistic terrain; in other words, having plotted your terrain to begin with, do not be afraid to alter parts of it to make a mountain chain or a range of hills look more the thing. You should also make sure that your rivers and lakes fit into the scheme of things, the rivers rising in higher ground and tending downhill. Remember that national boundaries very often follow natural lines; i.e. they are run along rivers, hills, lakes and such-like. Since you drew in your boundaries first, allow for this when laying out your terrain.

You now have to create your civilisation. If you began with an outline map, it will already contain a certain number of towns, but probably not enough for your purpose. You can of course proceed to site others at your own discretion, placing them at strategic and likely points, such as the confluence of two rivers, river mouths, etc. If you need a method of siting population centres, however, a simple one is to throw a dice for each hexagon; an open hexagon turning up a 4, 5 or 6 will have some form of habitation, hilly or wooded hexagons a 5 or 6, mountainous or forested a 6. You can then dice again to see what sort of habitation it is: 6 would be a city, 5 a town, 4 a village, 3 a hamlet, 2 a castle, 1 a farm. Again, you will have to use a certain judgement rather than sticking absolutely to these results, in order to obtain a balanced population; otherwise you will find yourself stuck with heavily over-populated areas and others nearly deserted. You can't for instance have a mountain chain studded with cities!

If you wish to discover the population figures of your towns, villages etc. this is also simple enough to do. First of all come to a decision as to how populous your continent is intended to be: should cities average several hundred thousand inhabitants or less than a hundred thousand? The answer will decide how many dice you throw

for each location; the more dice, the more people. Six dice will give you pretty large populations; one dice will give pretty small. Average it out to suit yourself. Having decided on the number of dice, throw that number for each habitation, multiply by 5 for a farm or a castle, ten for a hamlet, one hundred for a village, one thousand for a town, ten thousand for a city. Thus a score of say 15 would give a population of 75 for farm or castle, 150 for a hamlet, 1,500 for a village, 15,000 for a town, 150,000 for a city.

You now have the problem of naming all your creations: your countries, towns, rivers, mountains etc. Of course, if you have an unlimited imagination, this will be no difficulty; but if you are like me, by the time you've named a dozen or so places, you're fast running out of names. Again, no difficulty: let the professionals do the work for you! The pages of fantasy fiction literally teem with suitable names - or if you don't have access to this, use a large dictionary, a Latin or German or Greek lexicon, the indices of history books: all of these contain ready-made names and others which can be used with slight alteration. And of course you can always fall back on colours - Green Hills, Brown Rivers, Black Forests, etc!

Your map is now almost complete. One main item remains, and that is to fill in the roads, bridges and fords. It is a good idea to have main roads and lesser roads - call them 1st Class and 2nd Class for want of a better name - and these can be shown by using different colours. I personally use red for 1st and green for 2nd Class, but any colour code will do. The amount of roads will depend on individual taste, but of course all inhabited localities will be linked into the road system, and the bigger the locality, the more roads will lead to it. Similarly, places at the centre of road networks become of more strategic value. However, if you are thinking of setting up players as rulers of countries and having them run their countries in detail - not just as war leaders in effect - it is probably a good idea to lay out initially a very sparse road network and let the individual players decide how much of their resources should be devoted to building roads - something you will find covered in later rules.

Your map is now virtually complete: your next task is to decide on the types of people which inhabit the various countries, and thus lay down the sort of troops it will provide. This you will have to do on your own initiative, and the result will depend on just how much variety you wish to include, and how many different countries you are starting with. In Hyboria, for instance, I started off with 28; of these two were declared to be Vikings, 1 Celts, 6 Mediaeval, 1 Norman, 3 Greek, 1 Roman, 2 Persian, 1 Assyrian, 2 Saracen, 1 Indian, 1 Aztec, 2 Egyptian, I Numidian, 2 Carthaginian and 2 mixed Asiatics; with several independent city states and a wilderness peopled by natives akin to Red Indians!

I also began by laying down standing regular armies for all these countries and designing uniforms for them. I worked on the assumption that each sizeable town could supply from 2 to 4 regiments of infantry, usually medium or heavy; countryside would supply cavalry and light infantry, depending on the terrain. Since my countries varied widely in size, so their armies varied in strength, but the average country disposed of a regular force of probably 12 to 16 regiments of infantry and 4 to 6 of cavalry. In addition, I decided in which areas elephants were available, and there was a desert area which produced camels. Some countries of course also sported chariot forces - in particular the Celts. Uniform design was fairly simple; I worked out a colour combination of two main colours for each country - black and gold for Aquilonia, blue and silver for Hyrkania, black and red for Nemedia, etc. - and painted the troops of each country in these main colours, with a third colour added in lesser degree to signify the province or town, and possibly facings of a fourth colour for individual regiments.

It is not, of course, necessary to go as far as this, but since you are presumably going to use the continent for some while you might as well paint your armies to suit it, or if you already possess the armies, design your continent to suit them.

2. MAP MOVEMENT

You now have your hexagoned map, be it historical or mythical, and you have your countries and armies. Your next need is for rules to govern the movement of armies across the map. The hexagons have been designed to provide a basis for this, in that they represent the average distance moved by infantry in a day's march.

The first question to decide is not so much the daily distances to be moved under varying circumstances, but the duration of the campaign move. The obvious move is a day, but the obvious is not always the best choice. Early on in my campaigning experience, it became obvious that daily moves were not ideal, in that they made little allowance for rest periods and led to some unrealistic situations. Armies would fight three battles in the course of a single week, campaigns lasted a couple of weeks instead of whole seasons; added to this, if the campaign involves a number of people, the amount of paper work involved in keeping track of things is greatly increased. For these reasons I adopted the weekly move, and instead of multiplying the daily march distance by seven, I multiplied it by a lower figure to make allowances for rests, late starts, bad management etc. This not only gives you a reasonable weekly move, but it gives you a longer time scale, staggers battles, and makes the whole thing move more smoothly. The move distances quoted below are, therefore, all weekly moves.

1. Move

	1st Class Road	2nd Class Road	Country	Desert
Infantry	4 hexagons	3 hexagons	2 hexagons	1 hexagon
Cavalry	6	5	4	1
Chariots	6	4	3	1
Camels	6	5	4	4 Desert Nil Mountain
Elephants	4	3	2	Nil
Supply Train	4	3	1	Nil
Pack horses	5	4	3	1

Movement of couriers, spies, scouts or individual horsemen will depend on circumstances, drawing of chance cards etc but will normally be in the region of 30 hexagons by 1st Class road and the remainder proportionally.

In close country, such as forest or mountains, all movement must be by road. Only 12 regiments may occupy one hexagon at any time, so if the force consists of 36 regiments it will occupy 3 successive hexagons. If its path is blocked by an enemy, only that portion of the force in the first hexagon will be able to take part in the initial battle. Similarly, an ambush on the flanks of the column may elect to let the first 12 regiments past and attack the second twelve as they enter the hexagon. March orders will therefore have to be written in advance, stating the order in which the regiments are placed in the column.

In open country, a force moving by road may elect to throw out flank guards to right and left. If the central force is infantry and the flank guards are cavalry, all can move at the basic infantry road speed; but if infantry are employed on the flank guards, the whole force will be reduced to country rate. A force deployed in this manner will of course be better able to safeguard its own flanks and envelop those of an enemy moving in single column. When the enemy are met, a series of separate battles may need to be fought between the individual forces on both sides.

5. Apart from supply and siege trains, any force may forced march 50% faster if it so desires; but if involved in battle while doing so or at the conclusion of such a move, will reduce all its moves by one third Any troops engaged in such a forced march will lose 10% of its strength each move by straggling. These stragglers will catch up with the main force during the first full week's halt, unless they are being pursued by a hostile force. If so pursued, the stragglers are lost for good.

6. Ships at sea will move, under normal weather conditions, at 8 hexagons per move.

7. Ships on rivers will move at 4 hexagons up-river, 6 hexagons down-river. Where there is a tidal flow near the river mouth, this can be taken into account so that ships moving with the tide use downriver speed.

8. Mountains can only be crossed by formed bodies of troops where roads lead over or through them. Forested country can only be traversed by road except by infantry, who are reduced to 1 hexagon per move.

9. Crossing a minor river without aid of bridge or ford deducts 1 hexagon from the move.

10. Crossing a major river without benefit of bridge or ford will be subject to various delay. If boats have been collected in advance, delay will only be 1 hexagon. If the force has a bridging train with it, delay will be 2 hexagons, If neither, a dice will be thrown: 5 or 6, boats

can be collected locally, delay of 2 hexagons; 3 or 4, delay of 3 hexagons while boats are collected; 2 delay of one full move while rafts are built; 1 no boats or timber for rafts are available locally, force must move along the river and try elsewhere.

11. Navigability of rivers must be determined before hand. It is suggested that major rivers should be navigable by hexeres and hepteres for reasonable distances from their mouths, that quadriremes and quinqueremes should be able to go considerably further inland, and that biremes and triremes should be able to navigate any river large enough to be shown on the main map.

12. Transport ships will rank in size with quinqueremes. Their capacity will be:

a) 30 infantry figures b) 15 cavalry figures with horses
c) 6 chariots d) 10 camels
e) 5 elephants f) 6 siege engines

13. Troops can be embarked on transports anywhere along a river bank. Infantry alone take half a map move to embark or disembark, anything else a full map move.

14. Troops embarking or disembarking at a port will require 1 hexagon for infantry, 2 for anything else.

15. Infantry and cavalry can be disembarked over an open beach, infantry taking 2 hexagons, cavalry a complete move. When disembarking horses, a dice will be thrown: 3 or 4, loss of 5% through injury or drowning, 1 or 2 loss of 10%.

16. Sufficient transports may be hired in any port to lift 150 figures at one time; but having taken the ships from a port, another such lift cannot be obtained from it for 4 map moves unless the original ships are returned in the meanwhile.

17. Ships operating on rivers will not be affected by storms in the same way as those at sea, but only by general weather conditions.

18. Ships at sea will similarly be affected by local weather conditions in that their speed may be increased to 8 squares by a following wind or reduced to 4 squares by a headwind and heavy seas. If a storm blows up, ships must run for a beach if they are within one hexagon of the coast. If the map does not show what sort of coast it is, throw a dice: 1, 2 rocky shore 3, 4 moderate beach 5, 6 good beach. If the result is good, all ships will beach safely; if it is moderate, dice for each ship: 1 it beaches but receives severe damage in doing so, 2 moderate damage, 3 slight damage. If the shore is rocky, dice again, 1 2 3 lost on rocks with all hands, 4 5 lost on rocks but half crew get

ashore, 6 stuck on rocks but does not break up, crew survive. Ship counts as severely damaged.

19. An infantry force without a supply train and thus dependent on foraging will deduct 1 hexagon from its move. A force supplied with cavalry will move at normal infantry rates as it is assumed that the cavalry do the foraging and can still maintain this speed.

Weather

It is of course necessary to consider the effect of weather on movement. Bad weather can impede movement on most surfaces, and one cannot assume that all operations are taking place in excellent weather conditions. The sort of weather which can be expected, however, will vary from season to season and climate to climate, so that to make your weather realistic you must relate it to the time of year in which you are campaigning, and the type of climate for that particular region. More often than not, campaigning will cease during the winter months, so you are most concerned with autumn, summer and spring; but rules must be available for winter also in case of need. Circumstances are sure to arise when troop movement becomes necessary out of the normal season.

Various ways can be found of determining the weather. In the tactical rules produced by the Research Group will be found a system for discovering local weather over the battlefield; they are excellent for this purpose, but need to be taken a little further for campaign purposes. We have to consider cumulative conditions over a week or even several weeks, and over wide areas.

To begin with, it is necessary to decide on the method of determining the weather: whether to merely throw dice each move for whatever forces are involved, or - and this will give better results though take a little more time - to divide your map into weather areas and have possibly two weather forecasts for each area, one general and one local. In order to make your weather logical, it is best to relate your map in some way to places on Earth, so that you have a basis on which to work out your weather. This can be done quite simply by identifying some of the focal points on your continent with similar focal points on Earth. You now have a basis on which to work out the general weather pattern and the seasons of the year.

The actual weather can be determined in a number of ways. For instance, you can make a set of weather cards for each season: these would cover things like heavy and moderate rain, high winds, drought and average weather in the Spring, the addition of intense heat in Summer, of snow and fog in Autumn, and blizzards in winter - depending on the regional climate you would have more or less cards of each type, but in any case at least one-third of your cards would

indicate average weather. Then each move you would draw a card for each area and determine the general weather.

Again, if you wanted to go into even greater detail, you could work out a chart for each area. Down one side you would list the months of the year, and against each of these would be a list of eleven weather conditions. Not all would be different - you would have say 4 average, 3 moderate rain, 2 heavy rain, 1 high winds, 1 drought for a spring month. You would then throw two dice and see which of these became your month's weather. Another system is to use the information provided by certain agencies; the Cessna Aircraft Co. for instance publishes a monthly pamphlet which gives weather charts and trends for the month, and these can be used to great advantage. Not only do these pamphlets give general trends, but they give rainfall and sunshine in selected cities, which enables you to localise your forecasts.

For sea areas you will need to be a little more specific since wind direction and strength are going to be vital to naval operations. You also need to make some sort of daily weather selection, since a storm would not necessarily last for a week. You therefore need to set up a system of prevailing winds and storm trends, and relate your weather to this. You can still work out your weather on a weekly basis, to keep in line with the inland forecasts, but you will need to supply more detail. A naval forecast might read: Wind from the west on Day 1, increasing in strength Day 2, rising to gale force Day 3, decreasing Day 4 and going to west-south-west, moderate wind Day 5, dead calm Day 6 and 7. Not all weeks would have as much activity as this, of course.

Having discovered the weather, you now have to decide on its effect upon movement. The following rules should cover most eventualities.

Rain One period of moderate rain will reduce the efficiency of secondary roads. Wheeled transport will reduce its move on these by 1 hexagon, and across country will not move at all. A second period will reduce any travel on secondary roads by 2 hexagons, and cross-country by 2 hexagons. A third period will make both roads and country completely impassable. It will then take one dry period to restore the damage of each wet period. Fords will become impassable to infantry after two periods, or cavalry after three.

One period of heavy rain will reduce travel across country or by secondary road by 2 hexagons, two periods by four hexagons.

One period of heavy rain will make fords impassable for all arms.

Two periods of heavy rain will be dangerous to all temporary bridges, which must score 3 or more on dice to survive. Rivers will overflow banks in low ground, covering any roads which run alongside them.

During heavy rain movement on 1st class roads is reduced by one hexagon, not because of effect on the road surface, but because movement in these conditions tends to be slower and it takes longer to pitch camp, etc.

Drought will begin when there has been no rainfall for a period of four successive weeks, or three if one of these was a period of intense heat, or two if both were intense heat. During the first period of drought, rivers will fall in height, all except large rivers becoming fordable in most places, and will reduce the navigability of large rivers. Further periods of drought will increase this trend. During the first period of drought foraging will become more difficult as grass and crops wither, so that for each period a force subsisting from the country will reduce its move by one hexagon. After two periods of drought general water shortages will start causing losses among cavalry and draught animals unless they are moving in the vicinity of a large river.

Fog does not as a general rule have a great deal of strategical effect on movement by land when this is by road. It does however make it easier to take the wrong road, or to go astray in moving across country, and this should therefore be considered as a special circumstance. As a general rule, fog at sea will prevent ships leaving harbour, and will reduce the speed of those at sea by a half. Similarly on rivers. It must be remembered, however, that fog, while it might possibly last a whole day, will not last a whole week, and it should therefore be determined which parts of the week it affects.

Snow Moderate snowfalls do not affect movement by road during the first period, but reduce it by one hexagon during the subsequent thaw. Continued snow halts all movement in mountains, and reduces movement elsewhere to half speed. If the weather remains cold when snow ceases, movement remains restricted. When it thaws, movement will still be restricted for one period due to slush etc.

Blizzard will halt all movement anywhere during the period. After blizzard counts as after two periods of normal snowfall.

Intense Cold One period of intense cold will freeze small rivers, lakes, marshes etc and enable troops to cross them. It will make navigation of larger rivers difficult due to partial freezing. Two periods will stop navigation on larger rivers. Three periods will freeze even large rivers thick enough to cross on foot or horseback. Two periods of freezing will thaw in one period of thaw. In northern latitudes snow will freeze, blocking passes, and harbours will be blocked by ice.

High winds prevent transports putting to sea, and make it too dangerous for ships at sea to use their sails, proceeding only under oars. In desert areas, high winds raise sandstorms and bring movement to a halt.

Intense heat will reduce movement by one hexagon due to heat exhaustion. It may also cause forest or grass fires.

3: CONTACTS, BATTLES AND AFTER EFFECTS

Let us assume that you have now set up your continent, or selected your historical war, you have adopted your movement rules, war has begun, and armies are on the move. Methods of keeping track of movement, forces etc are discussed in the next chapter; here we are dealing with the procedure where two opposing forces come into map contact.

Much will depend at this point on how detailed your main map is. Is it in such detail that from it you can produce the necessary information to lay out your battlefield? Unless you are operating in a small area, or have access to such things as Ordnance Survey maps of the area, this is unlikely; very probably your main map only gives a general indication of a hilly area, or a plain. So, your first need is a system of transferring from the large-scale campaign map to the small-scale battle map.

Some years ago in Hyboria I got over this by preparing sectional maps in great detail of particular areas we were likely to campaign in. When a contact was made, we could refer to these more detailed maps and see what the actual terrain looked like. This worked very well, as it gave a general a much better idea of whether a good battleground existed anywhere in the immediate vicinity. However, when campaigning grew much more wide-spread with war on a fully continental scale, it was impossible to follow this system without virtually making my original map ten times larger, a labour which was quite beyond me.

Another system I then tried was to prepare at random 6 terrain maps for each general type of country I expected fighting over, hilly, plainland, cultivated areas, hill and forest, etc. These maps were 20" x 16", gridded into 1" squares, and without any roads or major rivers. When a contact was made, a glance at the main map indicated which type of terrain map was required; a dice throw decided which actual map was used (the maps of course being numbered 1 to 6) and the selected map was then covered with a sheet of transparent plastic. On the plastic the necessary roads and major rivers, if any, were drawn in with chinograph pencil, and a suitable terrain map was thus produced. These maps could of course be used again and again.

Similarly, detailed Ordnance Survey maps, large maps of small areas, and many others can be used with the addition of particular features marked in on a plastic overlay. Whichever system you use, however, it is essential that some method is available to give the commanders a fair idea of what terrain exists, since this may well govern whether they decide to fight or retreat.

Thus, by now each general will have some idea of the country around him, and the approximate size and composition of the opposing army. How much he knows will depend on the efficiency of his scouts and intelligence service, and this again is discussed in the next chapter. On this information he will have to decide whether he wishes to fight a battle, or whether he will attempt to avoid one. If he chooses the latter, it will of course be up to his opponent to attempt by manoeuvre to force him to action against his will; this is the essence of strategy. Again, he may elect to stand in so strong a position that his opponent refuses to attack him; then of course it is up to the opponent to manoeuvre him out of the position, by operating against his lines of communication, by starving him of supplies or water, by threatening some other point of vital importance. In any of these operations, knowledge of the nearby terrain is of great importance, thus the necessity of the detailed terrain map.

However, let us assume that both sides are eager to fight. It is still necessary to select the actual battle-ground, and possibly there will be some pre-battle jostling for position. This will depend on the methods of movement used - an item which again is discussed in the next chapter. Finally, however, the actual terrain will be decided. The resulting battle can be of several types, depending on circumstances. In many cases, it will be an encounter battle. Here, at the outset, only the leading elements of both armies will be present on the field; the rest will arrive at measured intervals, dependent on march tables. Initial dispositions may depend on how your army was moving on the map, of course. Again, both armies may have already got into position, with their full forces drawn up along the base-lines. Or finally, one army may have selected its position and be drawn up in battle order on it, while the opposing general has the chance to study its dispositions before launching his attack.

Another point to be borne in mind is the size of the forces involved. Both sides may be using large armies and thus operating under the rule which specifies three actual roads for the one road shown on the map. One of the reasons for this rule is that it is not always either practicable or even desirable to use the entire forces on one battlefield. If, for the sake of argument, each army consists of 30 or more regiments (or warbands or legions or whatever designation you are using), even if you possess enough troops to match these numbers, on the normal sized board their use may so crowd it as to inhibit manoeuvre and turn the battle into a simple slogging match. You can of course avoid this by using skeleton forces and a roster system, but this will not obviate another possible disadvantage - the time taken up by such a large battle. The point I am trying to make is that while large battles are sometimes feasible it is arguable whether they are more enjoyable - and there are many occasions when they are just not

possible at all. Therefore, this system of dividing forces into three groups enables you, if you wish, to fight the battle in three sections.

What you would do in this circumstance is to make your terrain map the size of three tables and then in effect to fight three battles. Ideally, the three sections should be fought by different pairs of generals, but this is not always possible; if it is not, then initial orders for all three battles should be written out before any of them are fought; otherwise inevitably the second battle will be fought in full knowledge of the results of the first, with considerable effect upon its progress. When all three have been fought, it will be possible by relating the results of all three to either reach an overall decision, or to fight a fourth battle by reducing the three maps to one, placing the remnants of each corps in the positions it held at the end of the individual battles, and carrying on from there.

The next item to consider is the question of night-fall. The number of tactical moves possible in the course of a full day's fighting will of course depend on the tactical rules you are using, most of which give some indication of time-scale. It must, however, be remembered that days vary in length according to the time of year, and that a battle will not necessarily start first thing in the morning! Your movement system should allow for this and give you some indication of when during the day the action began. Having thus determined how many moves are available until nightfall, if no decision has been reached by that time a halt must be called.

The cover of night is of course an ideal time for a withdrawal if you consider yourself to be on the losing side, or if you have some other reason for breaking off the action. On the other hand, if both sides are still in good shape, night-time will be spent in resting on the battle-field, replenishing supplies of missiles, re-grouping etc, and action will recommence next morning. But it is essential for the purposes of the campaign diary to keep track of the days; the forces involved are very probably not the only ones concerned in the campaign, and the others are probably moving while these two are fighting. The length of time consumed by the battle is therefore of vital importance.

When fighting ordinary individual battles, the game ends either by one general conceding defeat, or by both counting up points to decide the victor. In a campaign battle things are not so simple. The loser has still to make good his escape with what he can salvage of his army, and the victor has to deal with the twin problems of clearing up the battlefield - i.e. gathering in his own wounded and the spoils of war in the shape of undamaged missiles, equipment etc - and of following up the beaten enemy.

If the fighting went on till nightfall, the loser will be able to disengage any of his troops which were not actually cut off from his line of retreat by hostile forces. Such troops as were cut off must either fight to the death or surrender, as their morale decides. If, however, a general wishes to concede defeat before nightfall, then he is faced with the necessity of in fact continuing the action while he physically withdraws his units across his base-line. In certain circumstances, of course, the opposing players may reach an amicable agreement that certain units are deemed lost and others are deemed certain of escape; but at all events it is not good enough for the losing player to merely admit defeat and automatically get away with whatever he has left at that stage.

Close pursuit by the victor will sometimes be possible. This will depend on a) whether the retreating enemy are falling back in good order or withdrawing in confusion and b) whether the victor has fresh cavalry, or at least cavalry capable of pressing a pursuit. Normally it will not be possible to reproduce this pursuit upon the table, and we must therefore have recourse to an alternative system. The simplest method is to deal with this in the same style as a reaction test in the tactical sense. In other words, we set up a table of plus and minus factors, discover which apply to the immediate circumstances, throw an average dice and from the resultant score consult a chart.

Factors

Army withdrawing in good order + 2
Reasonable cavalry force to cover withdrawal + 1
Organised rearguard +1
Suitable defensive terrain + 1
Army withdrawing in some disorder - 1
Army withdrawing in panic rout -2
Fresh cavalry pursuing -2
Reasonable cavalry force pursuing - 1
Open terrain- 1

Total Score

+7 to 9 Very little damage
+4 to 6 Loss of 5%
+2 to 3 Loss of 10%
+1 Loss of 25% 0 Loss of 30%
-1 Loss of 50%
-2 Loss of 75% -
-3 Whole army destroyed

At first sight these results may appear to be a little harsh, but by working out a few situations you will sec that an army withdrawing in good order, even with the worst combination of enemy resources and bad dice throw, cannot suffer more than 25% loss and is much more likely to get away with 5% or less. To suffer really heavily an army

would have to be in panic rout, when such a loss is easily inflicted by a vigorous pursuit.

Alternatively, if suitable ground is available, a retreating general may prefer to drop off a sacrificial rearguard to fight a delaying action - rules for this are discussed later.

We have, of course, got slightly ahead of ourselves by discussing pursuit and whether an army is retiring in good order or not before finishing the subject of ending the battle itself. Let us therefore return to the point where the battle is still raging, but one side is getting the worst of it. If at this stage its commander decides to withdraw, and succeeds in getting at least 25% of his original strength off the table and still under control, then he is deemed to have retired in good order, and no morale test is required.

If, however, no such decision is made, and the battle continues, the first side to be reduced to one-third of its original strength must dice for morale, (if in your particular campaign generals are graded in efficiency, higher grades will add something to their dice throw - see the chapter on characterisation). If a total of 5 or 6 is made, the battle may be continued; 3 or 4, the army will commence to retire but in good order; 1 or 2, all units engaged hand to hand with the enemy or cut off from a line of retreat will surrender, remainder will withdraw in disorder. If both armies fall below one-third in the same move, the weaker will throw first, and the stronger will only throw if the weaker decides to fight on.

An army which thus has to throw for morale and then retreats is in danger of demoralisation. It will throw again: if it retreated in good order it will be shaken by a throw of 1 or 2, if in disorder by a throw of 1, 2, 3 or 4.

A shaken army will dice yet again. With a throw of 5 or 6 it will retire in disorder; 3 or 4 it retires in disorder but at normal pace for two full map moves; 2 it retires to the nearest friendly fortress, and remains there until reinforced; 1 it retires by forced marches for two map moves and must then spend two more moves re-organising. An army retiring thus by forced marches will abandon its baggage, supply train and military chest to the enemy.

It would, of course, be possible to work all this out by one dice throw instead of using several as suggested above; but the advantage of the several throws is that it allows for a wider range of results, and at the same time gives more room for dice luck to average out than in a single throw.

We now come to the question of assessing losses from a campaign point of view. We could of course merely accept the full

losses suffered in the battle; but this would probably reduce our armies quite soon to impotence, and would make no allowances for recoverable wounded, losses and gains in equipment etc. For this reason it is suggested that both armies should lose 25% of their battle casualties as dead or seriously wounded. A further 25% will count as moderate wounds: in the case of an army which abandons the field these become prisoners. In the case of an army occupying the field this 25% is out of action for two map moves and may then rejoin the colours. In the meantime they may be left where they are to recuperate and then moved on, or taken with the army in baggage wagons. In the latter case, should the baggage train be lost any wounded with it become prisoners. Prisoners must be sent to a fortress or town under an escort of one-fifth of their own number. According to the type of campaign you are fighting, they can then be held as prisoners, sold as slaves or disposed of in other fashions.

In assessing campaign casualties they must be applied pro-rata to the losses of the units engaged; thus units will tend to shrink in size unless reinforced. Units may of course be amalgamated but will retain their original equipment unless other is available.

If the outcome of an action is indecisive, i.e. neither side has been defeated and both are still capable of fighting if attacked, though not wishing to attack themselves, neither will lose prisoners if both decide to encamp on the ground.

An army retiring by forced marches will, even if not pursued, lose an additional 25% of its casualties by straggling and desertion. However, if not pursued half of these will rejoin the colours after a delay of one move.

Losses in equipment and weapons must also be considered. Obviously a good deal of armour and weapons will be broken in action, and there will be considerable expenditure of missiles. In the case of the retiring loser, not only will he lose the equipment belonging to his casualties, but the equipment and weapons of 10% of his surviving troops will need replacing. Missiles which have been used will also need to be replaced, and there will have been losses among cavalry horses. The victor is better placed, since he can scavenge the battlefield. Only 5% of his surviving troops will therefore need new equipment, and he can replace 60% of his losses in missiles. In addition, he can scavenge the enemy dead and prisoners for suitable equipment, weapons and missiles and round up loose horses. 50% of the enemy equipment is considered to be in shape for use, but whether it is of use to the victor will of course depend on the type of troops involved. A Roman army defeating Gauls, for instance, will not find much in the way of useable equipment, whereas if the defeated were also Romans almost all the spoils should be of use.

4: UMPIRES - AND THE LACK OF SAME

So far we have talked in general fashion of basic rules for selecting your campaign or your continent, setting up the operations, rules for map movement, and what happens when you contact the enemy. We now have to consider the actual mechanics of running the campaign, and this will depend very largely upon the size of the group concerned and upon how many of them wish to interest themselves only in the actual campaigning and how many in running the campaign itself.

In my early days of campaigning I had no group to call upon, there being only myself and Don Featherstone active in the area. We had at that time a pretty good working arrangement: I collected ancients and mediaevals, and we used these when fighting at my home; Don collected horse and musket, and we used them at his home. Similarly we each set up various campaigns in which the other took part, but mainly the home representative devised the rules and did most of the mechanics. I can look back nostalgically upon some most enjoyable campaigns, even though the rules, by later standards, were fairly crude. I think our first ever was Don's Indian Mutiny; he naturally took the part of the British, while I was cast as the Mad Mullah of Muckypore and ended by driving the filthy British from India! I also remember numerous American Civil War campaigns, while at my home we indulged in several Hyborian affairs and also refought the 2nd Punic War - with, of course, myself as Hannibal. Quite naturally the devisor of the campaign allocated the parts and might be a little biased, but we had surprisingly few arguments on this head.

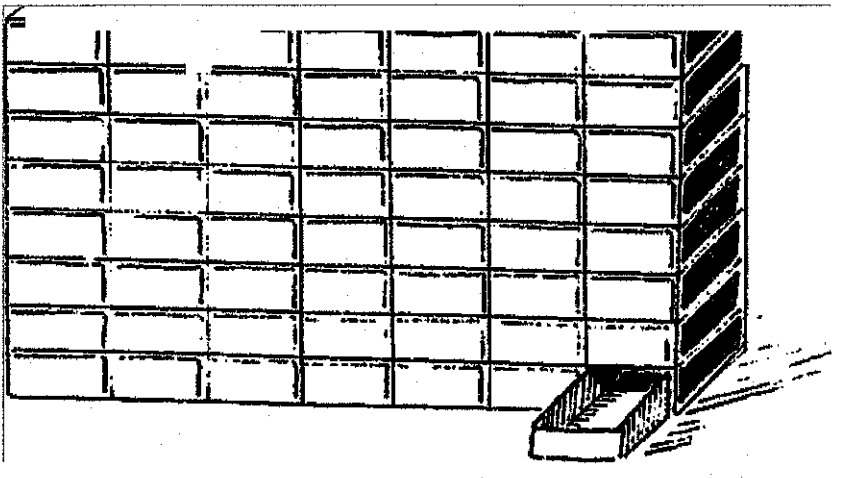
Later, with Neville Dickinson, I devised a new scheme for Hyboria in which we ran the continent together, worked out events and movement on a joint basis and, when a battle was imminent, tossed up to see which side we espoused. Thus I might command a Vendhyan army in one battle, only to find in the next that I was leading Hyrkanians against my former command. The purpose of this was to make us both take an unbiased attitude, and it worked to a great degree.

However, it did of course have the drawback that we knew everything that was going on and we worked to a logical system both of starting wars and of manoeuvring armies. For this reason I later expanded this idea into my present system, under which I asked various other wargamers to take on the parts of various rulers of Hyboria and to make all the necessary decisions and movements, while I as Controller, Umpire or Tin God ran the whole affair, made the necessary movements on the master map, fought the battles, etc. etc. Each campaign week every player is provided with a situation report giving him all the information to which he is entitled; he then issues his instructions, based on this information, and I put them into practice.

They are not concerned with the mechanics of the affair; I formulated the rules without consulting them and ultimate decisions are mine to make. Suggestions as to the way affairs are conducted are of course welcome, but are only implemented if they happen to suit me - in other words I am totally selfish about the whole thing. But nevertheless it works out pretty well.

Now if you are going to adopt some such style as this, with one or possibly two people doing all the actual work of keeping track of everything, your problems of running the essential aspects of tracking movement on the map, etc are greatly reduced. I have a large map of Hyboria mounted on my study wall, and all movement - and indeed much else - is recorded on this by means of coloured pins. Map pins and indicator pins are available in a great variety of sizes, shapes and colours; you can obtain drawing pins in about 6 colours, indicator pins in a very large range of colours, coloured map tacks complete with numbers, and others with various symbols. With these, you can represent virtually anything on the map — and it has the advantage that as long as you keep your coding secret, anyone can be allowed to look at the map since it will not mean all that much to them — a pin might equally well represent an army, a single unit, a spy, or even such things as mines, supply dumps, armouries etc. A great advance over my earlier system of little flags which were always hard to read but gave away too much information, so that when friends were due I had to hastily hang a sheet over the wall!

SET OF MATCHBOXES FOR CONCEALED MOVEMENTS



One thing that is essential, however, is to have a grid reference system for easy identification and movement. In a continent as large as mine I can't always remember exactly where every fort or village is; its handy to have a grid reference against its name for easy identification,

and at the same time its very easy to say in a sitrep that your scouts have located enemy forces in Map Ref A2-36. Making your grid reference is very simple. Along the top of your map you number the hexagons from 1 to whatever number you have; down the side you use letters. If your depth is more than 26 you simply begin again with Al, B1 etc. If you wish you can carry this a stage further by numbering not just the rows of hexagons, but the faces of the hexagons; this will give you a much more minute and accurate reference point but it does make for a little more work initially.

If you are lucky enough, like myself, to have a room where you can put your map up on the wall, then you have few problems of recording movement, since you can use all the pins you need as markers.

One word of advice, however: cover your map with thin plastic sheeting, and when boundaries change, as they will if your continent or what have you is to last for several campaigns, you can redraw these with chinagraph pencil on the plastic instead of having to spoil the map itself. If, however, you haven't a wall available (and some wives and mothers do object to their walls being used for such purposes, believe it or not!) then you must mount your map on folding sheets of cardboard, hardboard or some such substance. Again the ubiquitous plastic sheeting and chinagraph pencils are pressed into use, and now you must use the latter to record movement as well.

When a contact is made between opposing forces, the umpire or controller will then tell them both what he considers they are entitled to know. This is not likely to be the whole truth. Much may depend on the methods of scouting and spying used by both sides, and this is where an umpire must be totally unbiased and objective. He must never deliberately mislead either side, but he is quite entitled to pass on doctored information according to circumstances. If, however, no rules have been devised for special scouting or spying, then a good rule is for the umpire to give estimates of strength within 10% either way of the truth. The player receiving the report has no way of knowing of course, whether the figure he is given has been over or under-estimated, which leaves him a little uncertain as to what he is facing! Of course, if you arc going deeply into the campaign, both sides should be taking precautions about intelligence, by means of cavalry screens and scouts, and the umpire will have to decide how effective these have been.

Where only two people are engaged in a campaign they will have to make do without the services of an umpire, and problems therefore increase. Obviously they cannot both just move pins or counters around a single map; even though the opposing player may not be sure exactly what the pins or counters represent, it will still give him far more information than he is entitled to. Some method of

concealment must therefore be devised, and one of the best is the matchbox method. For this, you need a matchbox for every reference point - either hexagon or hexagon face - on your map. It may take you a while to collect this number of matchboxes, but if you appeal to friends, neighbours etc. to collect for you things will go quicker. You then glue these matchboxes together in a square or oblong as shown on the diagram, and number both sides of each box with the map reference it represents.

Your two players then sit at a table with the matchbox collection placed between them. Each has his own in front of him, but far enough away to be illegible to his opponent. Each has made his opening dispositions on his own map and provided himself with a numbered counter to represent every separate force he is using. Moving alternately, the players now place their counters in the matchboxes and, as the troops move, move them from box to box. In the course of this, if they traverse several hexagons, the player is of course entitled to look in the requisite matchboxes representing the spaces he has moved through. It will probably be best for the player not moving to turn his back while the other does so, otherwise by looking at the reverse of the matchboxes he could possibly gain some unfair indication of where his opponent is moving. An objection to this is that an unprincipled player might take advantage and look in boxes he wasn't entitled to; there is only one answer to this — if you can't trust your opponent to play fair, don't play with him. There is no other course. In my experience however, while most wargamers are wily individuals who will take advantage of any weak point in rules, etc, they would regard actual cheating with horror.

Up till the time that a player finds one of his opponent's counters in a matchbox that he is entering or passing through, no disclosure is of course made of strengths, dispositions etc. When two counters reach the same box, however, some information has to be given. This is where problems arise as to how much the truth may be strained. One system I used in my early days was that the player involved must state whether his force constituted a detachment, a corps or an army. Relative sizes were laid down for these three definitions: a detachment could be up to 80 points, a corps from 80 to 200, an army over 200. This simplified things considerably, but it still tended to give away too much information and prevented the possibility of a small force boldly handled imposing on a larger force. If, of course, either force was stationed within a town or fortress it was not required to give any indication of its strength.

Nevertheless, this system worked out quite well. A commander who discovered that he was faced by greatly superior numbers was able to refuse battle and withdraw; unless, of course, his opponent had managed to cut off his retreat by some method, either by placing a second force across it or by interposing some obstacle. This led to

quite a bit of jockeying for position, and encouraged both sides to push out small forces in advance to feel out the enemy and try to gain a picture of his overall dispositions. It also led to several small scale actions between forces of say brigade strength; in fighting these we either fought them as small affairs, or substituted regiments for companies to make a bigger battle of it; casualties etc. afterwards were scaled down again to the original size. I can remember several enjoyable cavalry actions of this type, where two cavalry regiments meeting were represented on the table by eight regiments on each side.

Later I devised a little game to add some spice to the original contact. It was laid down that each force would have in advance of it five mounted scouts. When a contact was made, no information was at first exchanged. Instead a gridded board was produced, and each commander set out his five horsemen on his base-line. The objective was to move to the opposing base-line, from which it was assumed they would have a view of the opposing main body, and of course to prevent the enemy scouts from reaching their base-line. All the figures moved at 6 spaces a move.

A scout or scouts could attack an enemy by entering a space adjacent to his. Each then threw 1 dice per man. Equal scores meant no hurt; advantage of 1 was a wound to the lower scorer, reducing the scout to half speed and half throw in subsequent encounters; advantage of 2 killed the lower scorer; advantage of more than 2 captured him. If a single scout reached the enemy base-line and returned safely, the opposing commander had to give an estimate of strength within 10% of the true figure. If 2 scouts achieved this, the figure must be correct. If 3 or more succeeded, then details of the composition of the force had to be given as well. If an enemy scout was captured and brought back to the base-line, a dice was then thrown: 1 or 2 he refused to give any information; 3 he gave false information, i.e. the figure could be inaccurate by as much as 50%; 4 or 5 he gave a figure within 10% of the truth; 6 he gave the true figure and furnished details of composition. This little game both offered a short entertainment -and considerable skill was reached in manoeuvring scouts - and added another element to how much information was divulged.

The matchboxes can of course be used for purposes beyond this. When both sides wish to fight, the situation can be transferred to a gridded terrain map, and a second set of matchboxes used for this. A second set is of course needed since you almost certainly have other forces still occupying parts of your original strategical set. You now need a counter for each unit; you deploy your army on your map, utilising say the first five lines of spaces to do so. Movement then takes place in the same way as on the strategic map until opposing counters enter the same box. Each then discloses the strength of the unit or

units within the box, with the usual margin for inaccuracy. Each commander then decides whether to stand or retire, and gives his decision.

If one or both have decided to retire, then their counters are moved out, and manoeuvring for position continues. The moves will be related to campaign time; if they chance to go on beyond the end of the move week, then at that stage another campaign move must .be made before the battle is fought. This may of course have the result of moving other forces toward or into the battle area, but if so they cannot enter the tactical map before they have expended the time needed to reach it. For example, if at the end of the map move during which the original contact was made, a supporting force is two hexagons away and moving at 4 hexagons per move, it will be three days into the second week before it enters the tactical map and it will of course enter from a base-line or side-line.

Once the contact space has been decided on the tactical map by both sides deciding to stand and fight, a piece of perspex scaled in size to your table is placed over the map with its centre on the contact space, (i.e. if your table is 8' x 4', your perspex would be say 8" x 4"). If two contacts have been made, the perspex will be placed so that if possible it covers both; otherwise, it will be placed length-wise across the map. This will give you your battle terrain, and any units of either army which occupy spaces within this area will be placed out on the table in these positions. Any forces outside the area will continue to move toward it while the battle goes on, only reaching the table at the point in time and space when they would arrive within a space covered by the perspex.

In this way, a certain amount of uncertainty and concealment can be obtained. If wished, further complications can be introduced by the use of couriers and chance cards for the movement of supporting forces, as mentioned later. All these rules can lead to some interesting and unusual battles and will make a change from the stereotyped affairs of both forces deploying on the base-line.

However, campaigning does not necessarily consist of a series of battles between relatively equal forces: we have to consider methods of dealing with various other situations. Firstly, there is the point that most countries will contain a number of defended localities; the number and strength of these will of course vary greatly according to country and period, but in the ancient and mediaeval period of which we are mainly speaking at present, most towns had walls of some sort, and there were many castles and fortresses within most countries. For my Hyborian continent, which of course is set entirely in this period, I therefore worked out a set of rules which would enable sieges to be decided by calculations rather than having to fight them on the table. This was partly to save time, partly because in my experience sieges

tend to follow much the same course; too many of them during a campaign, if all are actually fought on the table, can become boring and use up too much time better spent in other ways.

1. All towns, forts, castles etc within the area of operations will be classified into 1st, 2nd and 3rd Class Fortresses. Walled Towns, Strong Forts and Weak Forts.

2. In addition to these permanent places, field fortifications may be thrown up at any time to protect a river crossing, supply dump, crossroads etc. At least four units must work on them for three days before they are ready.

3. Values and garrisons necessary are as follows:

	Strength	Maximum Garrison
1st Class Fortress	150 points	No Limit
2nd Class Fortress	100	200 figures plus engines
3rd Class Fortress	60	100 figures plus engines
Walled Town	40	200 figures plus engines
Weak Walled Town	100	60 figures 6 engines
Fort	20	40 figures
Field Fortifications	60	No Limit

4. A defended locality can be captured by the following means:

a) Treachery b) Poor morale of garrison commander
c) Starvation d) Surprise
e) Assault f) Regular Siege Operations

5. 1st and 2nd Class Fortresses and Strong Forts cannot be carried by assault as long as they have a minimum garrison of 20 figures for a fort, 50 for a fortress, and their morale is good.

Treachery. Anyone of regimental commander or over is able to betray a fortress. In the case of regular officers, this will depend on character; mercenary officers are always suspect. If it is only a suspicion of treachery, a dice throw of 1 will confirm it. Having established a traitor, a throw of 1, 2 or 3 means that his treachery is successful, in which case the whole of the garrison become prisoners.

7. Poor Morale. Class B or C commanders are liable to loss of nerve, and this will increase if their country's field armies have suffered defeat, or if the garrison itself has been involved in defeat. For such a defeat, subtract 1; if the garrison was involved, subtract 2. Remember a B Class commander always adds 1 to his throw. 4, 5, 6

the garrison fights; 2 or 3 surrenders on terms, garrison gets safe conduct; 1 surrender unconditionally, garrison prisoners. Class D commander of course subtracts 1 and is automatically a bad risk.

8. Any defended locality can only hold out as long as its supplies last. If it is a town, with civilian population, you can assume that the civilians have supplies for a month, and after that must be fed from the military stores.

9. Both troops and civilians can be reduced to half rations, but this will affect morale. Troops must throw for normal morale, and a treachery throw must be made for civilians.

10. Once supplies run out, dice following move: 1, 2 or 3, surrender unconditionally; 4 or 5, garrison cut their way out, dice to see how many escape; 6 garrison get safe conduct. A garrison which becomes prisoner is of course lost in total, not proportionately.

11. **Surprise.** Any defended locality may be captured by a surprise attack providing attackers are at least equal to defenders in men. Throw of 5 or 6 followed by a 4, 5 or 6 means success; if assault fails, attackers lose 50% of garrison strength in men.

12. **Assault.** This means storming the place out of hand. Add points value of garrison to that of defences, double it if a Class A commander, if Class D halve it. Do the same with points value of attackers. Having obtained relative strengths, throw 1 dice and consult chart:

Score	**Odd of 3:2**	**2:1**	**3:1**
1	Bloody Repulse Attackers lose 50% garrison strength	Bloody Repulse Attackers lose 50% garrison strength	Repulse - both sides lose 25% garrison strength
2	Bloody Repulse Attackers lose 50% garrison strength	Repulse - both sides lose 50% garrison strength	Repulse - both sides lose 25% garrison strength
3	Repulse - both sides lose 50% garrison strength	Repulse - both sides lose 25% garrison strength	Repulse - both sides lose 25% garrison strength
4	Repulse - both sides lose 25% garrison strength	Repulse - both sides lose 25% garrison strength	Position stormed; garrison lost, attackers lose same strength
5	Repulse - both sides lose 25% garrison strength	Position stormed garrison lost Attackers lose same strength	Position stormed; garrison lost, attackers lose 20% garrison strength
6	Position stormed Garrison lost Attackers lose same strength	Position stormed garrison lost Attackers lose same strength	Position stormed, garrison lost, attackers lose 20% garrison strength
	Odds of 4:1	**Odds 5 to 1**	
1	Repulse - both sides lose 25% garrison strength	Repulse - both sides lose 25% garrison strength	
2	Repulse both sides lose 25% garrison strength	Position stormed Garrison lost Attackers lose same strength	
3	Position stormed Garrison lost Attackers lose same strength	Position stormed Garrison lost Attackers lose same strength	
4	Position stormed Garrison lost Attackers lose same strength	Position stormed Garrison lost Attackers lose 20% garrison strength	

5	Position stormed Garrison lost Attackers lose 20% garrison strength	Position stormed Garrison lost Attackers lose 20% garrison strength
6	Position stormed Garrison lost Attackers lose same strength	Position stormed Garrison lost Attackers lose 20% garrison strength

13. In the case of a bloody repulse, attackers dice again. Throw of 1 or 2, they raise the siege and retire. Cannot resume siege again until reinforced.

14. **Regular Siege Operations**. It takes 2 map moves to get siege engines into position (presuming attackers have them). According to the difference in ratio of siege engines between attack and defence, consult chart to see how long it takes to breach walls.

	3rd Class	2nd Class	1st Class
Attacker has advantage			
3:2	4 weeks	6 weeks	8 weeks
2:1	3	4	7
5:2	2	3	6
3:1	1	2	5
More	1	1	4

15. Breach once made, attacker summons fortress, which dices:

3rd Class:
1, 2 surrender unconditionally
3, 4 surrender, garrison given safe conduct
5, 6 refuses surrender

2nd Class:
1 surrenders unconditionally
2, 3 surrenders, garrison given safe conduct
4, 5, 6 refuses terms

1st Class:
1, 2 retires to inner defences
3, 4, 5, 6 Fights on in outer defences

16. If the garrison retires into the inner defences, the same procedure is repeated. It is assumed that they have withdrawn all their defensive engines with them. After which on throw of 3 or up they retire again to the citadel and the procedure is again repeated. Once in the citadel the garrison of course has no civilian mouths to feed so starvation risk is reduced.

17. If the garrison refuses to surrender, the breach can then be assaulted. Re-assess the garrison strength, this time counting points value of troops plus 25% but no fortress strength. (Note: this second assessment cannot exceed original assessment). Dice and consult assault chart.

18. In the case of a 1st Class Fortress, if the assault is successful but the garrison throw a 4 5 or 6 they can retire into the inner defences, losing 25% of their strength, including engines. They can of course retire voluntarily before the assault if they wish

19. If the besieging force continues the siege for more than a month, each move it must dice: throw of I followed by second throw of 1 2 or 3 means sickness in the camp, loss of 5% of strength every following move. After 2 months, throw also for garrison. If the latter are on half rations, deduct 1 from dice throw.

20. A fortress whose walls have been breached must have these properly repaired before it can stand a second siege; otherwise it can be assaulted at once under the breach rules.

It will be seen that under these rules sieges can be dealt with quite simply, but at the same time major decisions still remain to be made by the commanders. Whether or not to risk an assault; at which stage to withdraw voluntarily from ruined fortifications, etc. etc. On occasion, of course, it may be wished to actually fight out the siege of an important city; or at least to carry it further than some simple dice throws. If you do not possess the necessary equipment to reproduce fortress defences, siege equipment etc then you have an alternative in that you can work it out as a type of board game. You would need a large map of the city and its defences and the surrounding area; on this you place counters to represent troops, engines, mineheads etc, and proceed to the various moves and counter-moves. In many ways this is preferable to getting out your troops and trying to do the whole affair on the table-top; by its very nature a siege was a fairly long-drawn-out effort, and it is difficult to relate this to table operations. In your board game, however, this is no difficulty.

Sieges are not the only points which we must consider, of course. One item which has always interested me is the question of

delaying actions, where a small force sets out to hold up the advance of a greatly superior one for a set period, to enable reserves to be brought up or operations elsewhere to proceed unhindered. Or a rearguard is deliberately sacrificed to enable the main body of an army to escape pursuit. These sort of operations are very often vital to campaigns, yet they are among the most difficult to portray on the table. Often, too, in the attempt to produce a situation in which the small force has any chance of success, the position is made so strong or so restricted that the action becomes a mere frontal slog with very little opportunity to display any generalship. These sort of affairs have little attraction for me personally, so I set out to draw up suitable rules which would enable me to work them out without recourse to the table. Whether you choose to adopt these will depend upon your own personal attitude to the subject; but if you want a system which saves you from having to fight out every little encounter, here it is.

1. To fight a delaying action, or in effect simply to be able to delay an enemy force of superior strength, the delaying force must take up its position in a hexagon the previous map move to the enemy reaching that hexagon, and must state the intention of fighting a delaying action rather than a pitched battle. The only exception is a rearguard left behind after a battle.

2. The maximum superiority in numbers which can be delayed in this way is 3 to 1.

3. Before deciding to fight a delaying action, if the map gives no indication of obvious position the commander has the right to discover whether a suitable position exists. He first discovers whether the terrain is Open, Hilly or Wooded and then throws for strength. 6 indicates a very strong position, 5 a strong position, 4 or 3 a good position, 2 or 1 only a weak position.

4. Both sides now work out their Power Ratio according to the following formula:

(PV + RTG + SP) MT x MC

PV is points value RTG is Relative Troops to Ground, i.e.

		Open Ground	Wooded	Hilly
Unit of	Light Infantry	10	20	25
	Heavy Infantry	20	10	15
	Light Cavalry	20	NIL	15
	Heavy Cavalry	30	NIL	10
	Horse Archers	40	NIL	20
	Camels	15	NIL	10
Each	Elephant	10	NIL	5
	Chariot	5	NIL	5
	Siege Engine	5	NIL	10

SP is Strength of Position:

Weak	20
Good	50
Strong	100
Very Strong	150

MT is Morale of Troops, which is dependent upon recent experiences:

Lost last 2 battles engaged in	1
Lost last battle engaged in	2
No fighting this campaign	3
Won last battle engaged in	4
Won last two battles engaged in	5

MC is Morale of Commander. Class A 3 Class B 2 Class C 1

5. Having thus discovered relative strengths, consult the following chart:

Ratio of attacker to defender		Dice Throw					
		6	5	4	3	2	1
4:3	Delay in Days	10	8	6	5	4	3
3:2		8	7	6	4	3	2
5:3		7	5	3	2	1	ND
2:1		5	3	1	ND	ND	ND
5:2		4	2	1	ND	D	D
3:1		3	2	1	ND	D	D

ND No Delay at all, delaying force loses its nerve and retires
D Attackers rush position and destroy delaying force, attackers losing 50% of value of delaying force.

5. After delay period is up, delayer has now to withdraw. This will be done by night, obviously, as he is attempting to evade the enemy. He will therefore throw a dice, adding to or subtracting from his throw the difference between the morale class of the two generals, (i.e. if attacker is B (2) and delayer is A (3) then delayer adds 1)

4 5 6 Delayer slips off unobserved, moving one hexagon as his night march.
2 3 Delayer gets away, but loses 25% of his force in doing so.

1 Delayer only extricates 50% of his force.

6. No further casualties are levied on either side as it is surmised that the delay was due more to the attacker being imposed upon by the delayer and not putting in a real attack, rather than actual hard fighting on the position.

The final point we have to consider is the effect that chance can play on such things as the speed of couriers and the reaction of officers on detached duty. One can of course assume that couriers will always ride at top speed, never lose their way or meet with mishaps, and that generals either detached to make flank marches etc or ordered to march to the support of their comrades will obey instantly and efficiently. While this makes for a very tidy state of affairs, it hardly makes for a realistic one; and we therefore need a system to bring a certain amount of chance into play in these affairs. As usual, the following rules are drawn from the experiences of Hyboria.

1. When sending off a courier on a special mission, a Chance Card will be drawn from a specially prepared pack to see how he performs his mission. The pack will contain the following selection:

a) Courier moves at normal speed - 5 of these cards

b) Courier has good horse, adds 2 hexagons per move to his speed — 2 of these cards.

c) Courier has fast horse, goes at double speed if journey is 6 hexagons or less, if over that distance adds 50% to speed. 2 of these cards.

d) Courier loses his way - deducts 3 hexagons from each move

e) Courier's horse goes lame, reduced to half speed - 2 of these cards

f) Courier's horse dies: dice, 1 2 3 he never reaches destination,4 5 6 spends 3 days obtaining fresh mount and then draws another card.

2. If a general detaches a force to make a flank march or to carry out an independent operation, there is always the chance that his subordinate will either be stupid, cautious, or downright disobedient. If you give your individual generals proper characters you will already have some indication of this; likewise if you classify them for efficiency. A Class A subordinate will only draw a chance card if he throws a 1, a Class B if he throws a 1 2 or 3. A subordinate whose character indicates loyalty will not disobey orders though he may be slow to execute them through caution or mishap. Chance cards will read as follows:

a) Execute orders (there will be three of these cards)
b) Behave cautiously, move at half speed only
c) Behave cautiously, halt half a day's march from the objective and send out scouts to discover the position.
d) Force takes wrong road, dice: 1 2 3 loses 1 day, 4 5 6 ½ a day

3. If a general who has run into trouble knows there is help within reach and sends a courier to ask for it, that commander will draw a card:

a) Will move to his comrade's help with all available force - 2 cards
b) Will ignore the request
c) Will take an extra half day to assemble his troops and then move
d) Will march at double speed to help
e) Will send on his cavalry ahead and follow with his infantry
f) Will send only one-third of his troops at normal speed.

Obviously most of these situations will only arise if either a) only two people are taking part in the campaign or b) if it is a big enough campaign for each player to have numerous separate forces in the field. Nevertheless, these things have to be catered for; we are not all lucky enough to have suitable groups available for campaigns, and there will always be cases where two people want to conduct a campaign of their own. Furthermore, with these type of rules it is even possible for one person to run a solo campaign. In wargaming, all tastes must be catered for.

5: SUPPLY AND REPLACEMENT

We have already dealt with most of the essential features of campaigning, and by adopting these one can run a successful, enjoyable and quite authentic campaign. However, war-gamers being what they are, most of us are never satisfied and wish to dig a little deeper, bring in more complications in order to make our productions yet more realistic. This inevitably brings us to the very tricky subject of supply. Napoleon is supposed to have said that an army marched on its stomach (rather a strange maxim from him, considering that his armies were some of the worst supplied in history, relying upon local foraging rather than supply trains: a factor that contributed greatly to the disastrous Russian campaign and consistently strangled operations in Spain and Portugal, where Marshal Massena remarked bitterly that a large army starved and a small army was beaten) and it is of course true that troops can only operate with maximum efficiency if they receive regular supplies of food and drink - not to mention clothing and weapons. Another historical example is the Libya campaigns of World War II, which were said to be a tactician's paradise but a quartermaster's nightmare.

Undoubtedly bringing the supply factor into a campaign can also bring in many interesting and exciting operations. Enemy sources of supply become important objectives and influence strategy, protection of one's own lines of communications has to be considered, as have the natural resources of the territory to be operated in; cavalry raids on enemy supply lines and dumps can be planned, and armies can be brought to battle by the threat of starvation. But it cannot be denied that in order to do this you have to be prepared to devise thorough and complicated rules and to engage in a fair amount of paperwork to keep track of the supply situation. To my mind, if you have the time to indulge in this sort of thing it is well worth it, bringing yet another dimension into the campaign; but I advise against falling into the trap of half-measures, which will only become irritants instead of advantages. If you are not prepared to go the whole way, it is better to leave it entirely alone.

In early campaigns which I participated in, some simple ideas for supply were introduced. For instance, I remember that in one campaign each side had three supply bases, and an army had to have a line of communications open at all time with one of these. If the enemy could cut that line by placing a force astride it, then the army had to halt and send a force of its own back to clear the supply line. This was an attempt to make us supply-conscious; in fact it gradually led to us detaching all sorts of forces for the purpose of protecting our own supply lines and interrupting the enemy's - forces which would have been of far more use in the main operations. Moreover, it was a

very artificial situation, since these detached forces were allowed to operate without supply lines of their own; and no allowance was made for building up stocks of supplies either with the armies or in supply dumps to guard against temporary interruption of communications. Nevertheless this was a first step in tackling the problem of supply; the idea was abandoned in later campaigns but it gave birth to other thoughts on the question.

Various other experiments were tried later, but none of them really worked any better than the first, simply because we were not going deeply enough into the problem. It hadn't at that stage dawned on us that there is really only one way to tackle the supply problem, and that is to put it on a proper footing by going back to essentials - starting from the bottom and working up. In fact, it wasn't really until I gave up taking an active part in the campaigning itself and took on instead the job of organising and controlling the whole operation that I found I had both the opportunity and the enthusiasm to really study the subject in the detail it required.

When you look at it logically, the first step is obvious: you must in some way assess the resources, both natural and human, of the countries involved and the area of operations. By this I mean that you must find out how many recruits a province can produce, what sort of food it grows: does it run cattle, horses or sheep; what minerals are available for such things as weapon production etc. If you are fighting a historical campaign, or at least using historical geography, you can discover these facts by a little research; any library will have books on food production, mineral resources etc, and even if these only give modern figures you can work back from these to give a fair idea of what was available in earlier periods. You can also pick up much information from books on the campaigns of the period you are dealing with - though of course you have to treat their figures with a certain scepticism!

If, however, you have created your own continent, world or what have you, you are faced with also creating its supply resources. This was my problem in Hyboria. However, I had of course marked in a great deal of the physical features of the countryside for the purposes of map movement etc; and I now added to this by giving the map basic colour codes for plains, steppes, woods (as opposed to forests) and cultivated ground. I then set up a basic system of seven area types, with certain resources for each. These were:

a) Cultivated Ground. Produces crops of various kinds, mainly basics for food and clothing.
b) River Banks. Good water supply, so produces crops; also would have resources in fishing and hunting.
c) Coast Lines. Main resource would be fishing.
d) Plains. Could produce rich resources in wheat, cattle and

horses.

e) Forests and Woods. According to thickness of trees (i.e. woods or forests) would have resources in hunting, small animals in the forest but larger game such as deer, boar etc. in the more open woods.

f) Hill Country. Some hunting. Often good sheep country. Poor crops.

g) Mountains. Some hunting; generally low on food resources. Possible mineral sources.

Having done this, I then set about calculating resources on the level of the smallest territorial units -counties, khanates, etc. I counted up the spaces of each type of country within the boundaries of the area, and, on the basis of this and an arbitrary decision as to soil conditions plus other factors such as population, I worked out the annual resources of each area in crops, animals, general food production, manufacturing potentialities etc. My next step was to consider mineral resources: after all, weapon and armour production had to be considered, also timber for boats, carts, bridges and many other items. I already had the figures for woods and forests, so it was fairly simple to lay down resources of timber; for the minerals I had to do some sort of test in likely areas.

Not being an expert on geology etc. I had to work by some arbitrary method; undoubtedly better and more realistic methods could be used if one wishes to go deeper into the subject. For my purposes I ignored the possibility of mineral deposits in low-lying areas, and concentrated on the hills, and mountains. For each space which contained any hills or mountains, a dice was thrown, a 5 or 6 followed by a second throw of 4 5 or 6 being needed to establish a worthwhile vein of ore. This of course could be varied according to the prevalence of hills and mountains on your map; I had a lot and 1 didn't want to be swamped with mines. Moreover, this was only to establish known deposits; later I allowed players to fit out special expeditions to try and discover fresh lodes to supplement their resources.

Having discovered a source area, two things had now to be established: the type of ore, and the richness of the lode. I decided on nine types of mine: silver, gold, copper, lead, tin, iron, emerald, diamond and ruby. Obviously others could have been added, but these were enough for my purpose: which was not only to set up resources for weapon production etc. but also a basis for local taxation - hence the precious metals and jewels. Having established the type of mineral, (which I did by throwing two dice) I then threw another dice which decided on the richness of the mine, 6 of course being very good, 1 being only a poor area.

I had thus established a basic idea of the resources of the whole country. This of course could be varied by weather conditions: drought

at the wrong time could greatly reduce food production, kindly weather bring bumper crops, floods and other natural disasters could be ruinous. Any of these things can be worked into the system as required, or if you prefer you can decide that the basic average has taken into account these possibilities. At all events, a player knows the basic resources of his own country; he may know something of those near his borders, either from experience, or traders, or spies, and can thereby plan his operations, knowing that here he can collect supplies, but there he must bring them in from outside.

The other items to be reckoned with from the supply point of view are of course men and money. Men are needed to fill the ranks of your army and replace casualties; money is needed to supply them with arms, equipment and food. We have discussed earlier the question of assessing the population of your country; of this population it is possible that some 20% are of military age. In times of crisis, of course. older men and young boys could be pressed into service, but in normal periods we are talking only of those males in their prime. Of this 20%, however, far from all would be available for military service; many would be required for agriculture and commerce; for we are in the main considering regular forces on a full-time basis, not levies made after the harvest is in. So your figure must be greatly reduced; 10% is probably a reasonable figure for the permanent force, with say another 10% available to replace wastage and battle casualties.

We now turn to the question of money. In the period we speak of, many countries did not produce a regular coinage; of those that did, values and coins varied greatly. Others dealt in trade metal, going by weight of copper, bronze, gold etc. However, for ease of keeping records, having standards easily comprehended by all players, it is probably best to set up a single monetary system even if it is not strictly historical and accurate - just as I tend to speak of regiments, brigades and divisions rather than using historical terminology because everyone understands what these modern terms represent. For this reason I decided that in Hyboria everyone used a single monetary system based on the crown - I could have called it the talent, ducat, florin or a dozen other names but this happened to be the one I chose. The system therefore has the gold crown, made up of one hundred silver crowns, which is in turn made up of one hundred bronze crowns.

Having established a money system, it is then of course necessary to provide money to the country's treasury - in other words you have to institute a tax system. Working on what you have already learned of local resources, this can be done fairly simply. You first of all put a monetary value on the resources you have allocated to your types of ground, thus:

Cultivated Ground 1000 gold crowns per annum
River Banks 1200 gold crowns per annum

Coast Lines 600 gold crowns per annum
Plain 800 gold crowns per annum
Forest 500 gold crowns per annum
Hills 600 gold crowns per annum
Mountains 400 gold crowns per annum

These are the total resources of the hexagons; you add up your various hexagons and their resources to reach the total annual resources in money of the County, Khanate etc. Of this amount I then levy one quarter in taxes; but not all of this goes to the State Treasury, because this would not allow for the local nobility, who must have their share. What I have done is to, in effect, set up a feudal system or tier system. The peasantry and petty lordlings are the lowest tier, and they pay over a quarter of their income to the Count or Khan or whatever his title is who occupies the next tier. Above the Count is probably a Duke who controls several Counties, and above him is the King who controls several Duchies. In some states there may be more or less tiers. At all events, the Count collects the money from the lowest tier; he retains one-third of this for his own use, pays one-third to his next superior, and one-third to the final tier (the State Treasury). On the next tier, the Duke collects from his subordinate Counts, and in turn pays one-third of this to his immediate superior, which is probably the State. The State thus gets a cut at each level, and each rank of nobility similarly receives its own revenue. This has several advantages, in that if a revolution or a civil war breaks out it is easy to assess the monetary resources of all parties.

But the system does not stop here. So far we have dealt with only the direct resources of the land; taxes can also be levied on other items. There are the various mines: these are all the property of the State, not of the noble whose land they are on. The annual income of these therefore goes direct to the State Treasury — or alternatively the State might prefer to lease the mine to a noble or a contractor for an annual fee. By the original dice throw which decided on the productiveness of the mine you can assess its monetary value, based on the comparative worth of diamonds, gold, iron etc. Then we have the various cities and towns in the country; these must also pay taxes, based usually on population, and this tax also goes direct to the Stale. Finally we have customs dues, which are levied on all trade routes and entry and exit points such as seaports.

From all of these you can calculate the lax revenue of a country to the last crown. How you collect these taxes and credit them to the treasury depends yet again on how much time and paperwork you intend to devote to it. For ease of work, I credit the whole annual revenue of a country to its treasury on the 1st of the year, and unless directed otherwise by the player concerned, store this amount in the Treasury at the capital city; you could of course collect quarterly, or monthly, and you could collect it at provincial centres and then

transport it to the central treasury, allowing time for this to be done. If one had the time to devote to it, this alone could be an interesting exercise, in which one could bring peculation among the collectors, robbery of the bullion trains, etc. etc.

You now have to cost out all the things you need to use in a campaign. Not all countries in this period paid their troops, many of whom were citizen-soldiers; not all supplied their weapons, even. But once again, in order to have a recognisable system, in Hyboria all troops are paid at a standard level, all weapons and equipment are supplied by the state. Thus the cost of all these things have to be calculated. I soon found, from experience, that other items had to be costed as well; largely because crafty players thought up all sorts of schemes for both raising and spending money, and expected me to be able to tell them the cost of same!

The values I worked out are as follows:

Salaries per annum:

Infantryman	50 silver crowns
Cavalryman	150 silver crowns
Infantry Colonel	100 gold crowns
Cavalry Colonel	200 gold crowns
Infantry Brigadier	50 gold crowns for each regiment under his command
Cavalry Brigadier	150 gold crowns for each regiment under his command
Divisional General	Equivalent to the total pay of all the Brigadiers under his command, with a minimum of 600 gold crowns.
Naval Marine Galley Captain	100 silver crowns. 50 gold crowns for command of a trireme, with an additional 50 for each rate upward

In addition to this, of course, there would be other people receiving salaries, such as court officials, intelligence agents etc; but these were left to the individual players to fix. In addition, I laid down that 10% of all revenues, whether of state or individual noble, should be deducted for general living expenses.

Purchase costs: (worked out on a regimental basis, which under my system is some 600 men)

Leather Armour	25	gold
Armour	50	
Full Mail	100	

Plate	200
Shield	25
Horse Armour	100
Sword	20
Spear	10
Lance	15
Axe/Halberd	15
Short Bow	10
Composite Bow	15
Longbow	15
Javelin	5
Pilum	10
Pike	15
Crossbow	25
Sling	Nil
Ponies	50
Horses	75
Heavy Horses	100
Elephant	100 each
Elephant Armour	125 each
Light Siege Engine	50 each
Heavy Siege Engine	75 each
Camels	75 each

It was also necessary to work out the going price for slaves, since players soon developed the nasty habit of selling off prisoners or eking out revenues by some slave raiding in hostile territory! I established that values fluctuated from time to time, and that if large numbers were thrown on a local market at once, prices would drop!

Averages were:

Fieldworker	5-10 gold crowns
Workwoman	10-20
House Salve	10-20
Concubine	20-100

Since I operate in Hyboria on regimental levels and not in individuals, pay was generally quoted on a regimental scale; and to save the trouble of working this out, for anyone who requires it I quote the regimental pay scales here:

Infantry	100 gold crowns per quarter
Cavalry	200
Camel Squadron	50
Chariot Crew	25
Elephant Crew	30

These were peace-time rates of pay, and troops have to be paid regularly every quarter. In war-time, pay rates are increased by 50%. Guard troops receive double rate at all times.

In addition to their pay, troops have to be fed, and forage provided for their horses. Even if living off the land in enemy territory, their requirements need to be known, otherwise you cannot calculate how much supplies need to be drawn from the country. Rates were decided on as follows:

Food for a regiment	30 gold crowns per month
Fodder for a cavalry regiment	30
Fodder for an elephant	10
Fodder for a camel squadron	20
Food and fodder for a baggage train	150

It was also necessary to consider the costs of various other items. Ships, for instance, had to be built and maintained and their crews paid - and time taken for building and repairs calculated, as follows:

Shipbuilding

Type	Cost gold crowns	Building Time days	Pay of Crew Gold crowns per quarter
3er	300	7	40
4er	400	10	60
5er	500	14	100
6er	600	21	125
7er	700	28	175
8er	800	35	200
9er	900	42	300

Ship Repairs

	Minor Damage		Medium Damage		Severe Damage	
	Cost crowns	Period days	Cost	Period days	Cost	Period days
3er	50	1	75	2	150	3
4er	60	1	100	2	200	5
5er	80	1	120	3	250	7
6er	100	1	150	3	300	10
7er	120	2	175	4	350	14
8er	130	2	200	4	400	17
9er	150	2	250	7	450	21

Some of the other costs involved were also worked out:

Hire of a transport 100 gold crowns per month

Building new roads: 1st Class 40 gold crowns per hexagon
2nd Class 25

New Bridges: Over small river 25 gold crowns
Medium 50
Large 200

Fortifications:

Type	Cost Gold crowns	Building Period	Strengthened	
Small Fort	200	1 week	200 Gold	2 weeks
Strong Fort	400	3		
Walled Town	1500	12	300	4
3rd Class Fortress	3000	18	1000	6
2nd Class Fortress	3500	22	1500	10
1st Class Fortress	4500	28		

Repairs after a siege:

Small Breach	200 gold crowns	1 week
Medium Damage	300	2
Severe Damage	600	4

Frontier Type Wall: 200 gold crowns per hexagon

With all these figures to consult, a ruler can now work out his resources and decide just what sort of a war he can afford to fight! If his resources are too small for the task in hand, then he is in a certain amount of trouble. He can of course levy extra taxes, either directly on the lower tiers of the tax edifice, or on his nobility or towns; but such an act may possibly cause unrest, or even revolution, within his domains, and in any case will take time. Alternatively, he can attempt to borrow money from his nobles or from rich merchants; rules for this can be worked out if required.

On this firm base can now be erected your actual rules for supply and replacement, and a selection of these is given below:

1. Each year, recruits may be levied from each province up to the agreed percentage of population. These recruits can serve as infantry or cavalry.

2. Such recruits will be mustered at a depot within the province and must spend 6 months in training before becoming qualified troops. During this period, if engaged in action they will count as levies only.

3. Exceptions may be made in the case of specially qualified recruits.

For instance, recruits drawn from areas noted for horsemanship could qualify as cavalrymen in say 4 months; huntsmen would make excellent light infantry, as would hillmen.

4. Once trained, these recruits can be posted to existing regiments, used to form new units, or as garrisons. During the training period the recruits will be on half scale of peace-time pay. At this stage they need not be issued with full equipment unless desired.

5. Replacements for elephants and camels can only be obtained from areas which have previously been classified as producing these animals. Production rates will have been already specified - remembering that it is necessary to leave enough animals for breeding purposes.

6. New troops may be equipped in whatever way is desired and compatible with facilities available.

7. Multiplicity of weapons is recommended - i.e. sword and spear etc. - on the grounds that if excessive losses of equipment are suffered, troops who have lost their weapons could at least be issued with the secondary weapons of other units; similarly men who have broken their spears or pikes in action would still have a sword left instead of being weaponless.

8. Captured enemy equipment can of course be used to replace damaged or inferior weapons or equipment; however, a unit originally equipped with say spear and sword and now issued with captured bows must spend a month training with the new weapons before becoming fully proficient with them.

9. Troops must at all times be supplied with food and animals with forage. Any force lacking these will lose 10% of its effectives during the first week without supplies, a further 20% the second week, 30% the third week, and after that will cease to exist. If only forage is lacking, these figures will apply to animals only.

10. In friendly country, supplies may be drawn from towns upon payment, dependent of course upon the resources of the countryside and whether they have been drawn upon already.

11. In enemy territory, supplies may be requisitioned without payment, and without consideration of the needs of the inhabitants. If this is not sufficient, supplies must be brought up from other areas by supply train.

12. Wagons with supplies for three weeks can accompany an army without effectively reducing its normal mobility.

13. Supply trains may of course operate-between depots, and dumps of supplies can be established as desired.

14. Ships are considered to carry supplies for their normal requirements for two weeks. Special supply ships may of course be used to support either a fleet or an army.

15. Cities, fortresses etc. will draw their daily needs from the surrounding countryside. Supplies may of course be stock-piled there either as supply depots or against the possibility of siege.

16. Supply trains may also carry spare weapons and equipment. It takes 1 supply unit to carry weapons for 1 regiment, 2 units to carry equipment for one regiment. Each supply unit will consume the fodder of one-third of a cavalry regiment.

17. Manufacture of weapons and equipment will take place at special armouries. Usually these will be located near to iron mines in order to have ready access to raw materials. If not, arrangements must be made for the necessary materials to be brought to them. Armouries will be rated 1st, 2nd and 3rd Class according to their production capabilities and the skill of their workers.

18. 3rd Class armouries will be capable of turning out leather equipment, shields, and all common weapons.

19. 2nd Class armouries, in addition to the above, can produce armour and also longbows and composite bows providing such construction is known locally.

20. 1st Class armouries can produce any type of weapon or equipment, again providing that the necessary knowledge is held locally.

21. Production of armouries will be limited by the amount of raw materials available and the skilled labour assigned to them.

22. Production of certain weapons will be limited initially to certain areas. This will depend on historical fact in historical campaigns, or in mythical continents how you originally set things up. Fori instance, Western nations would not have knowledge of the composite bow, crossbows would be more prevalent in the West, as would plate armour.

22. Such items as cannot be produced in an area can of course be purchased elsewhere and shipped to it. Similarly, it is possible to attract the services of skilled craftsmen from one area to another and thus bring knowledge of special weapons and equipment to new areas. In this case, time must be allowed for any real production to get under way.

23. The same is true of types of horse, which will be indigenous to certain areas. Large, strong horses are not normally found in hill

country, for instance. Horses likewise can be imported, and such imports can be used to raise breeding standards over a period. In such cases, however, imports of breeding stock must be maintained, or otherwise over any long period the native strain is liable to re-assert itself.

These rules will enable you to operate a very realistic supply system, but it should be noted that they do require the keeping of not inconsiderable records. For instance, it is not enough to have a plentiful supply of money in your Treasury, and to decide to raise and equip more troops, or to assume that your troops operating in distant areas will be paid. In the latter case, supplies of money must accompany the armies, so that when pay-day comes around the money is there, not two hundred miles away in the Royal Treasury. Similarly stocks of weapons and equipment, and supplies of food must be built up ready for use. If an army engages in battle and loses a lot of its equipment, the fact that you have enough money to purchase replacement equipment - even if the money is with the army - will avail you nothing if the replacement equipment itself is not also in the army supply trains, since you will then have to produce it from an armoury and ship it to the army - a process that could take weeks during which the efficiency of the army is greatly reduced.

It will therefore be seen that these supply rules make players look very much ahead of present needs and attempt to provide for later eventualities. Money, supplies and equipment must be spread around the country instead of being concentrated in one spot; armies must be properly equipped with reserves of men, food and weapons. Operations must be conducted, if possible, in such a way that you obtain for yourself the resources of a rich area and deny them to the enemy. Supply routes must be protected by both fortifications and garrisons, and many other points considered. It is impossible to think of every eventuality; but under these rules the general who covers more of them than his opponent will put himself in a winning position.

Windfalls can of course also be picked up under these rules. You may capture the baggage train of an enemy and find it contains his war chest or quantities of equipment or supplies; when you occupy an enemy city you can plunder its treasury and also levy a fine on the citizens if you wish. If you have good intelligence of the area you may be able to seize one of his principal mines or armouries and force him to either give up valuable resources or fight at a disadvantage. The possibilities are indeed endless and, if you have the time necessary to devote to them, supply rules will greatly increase your campaign enjoyment.

6: CHARACTERISATION

The subject-matter of this chapter is really only for those who have set up a mythical continent of their own, so historically minded readers can skip it if they wish! Even those who have only made up a map for one brief campaign will probably not wish to adopt the whole system set out here, though there may be a few points which would be of use even in this situation. But for those who intend to use their continent, island or whatever it is for a good period, with continuing campaigns, some degree of characterisation is essential.

Obviously, if you are setting up a new continent, you must provide its various countries with rulers, with ruling systems, and with generals. Here again, personal preferences will decide just how detailed a system you require; but, from my experience, the more detailed a system, though it takes a good deal of initial work, makes less work in the end besides soon giving your creation a real life of its own. You will be surprised to find how simple it is to make decisions and to influence events merely by consulting the characters of the people you have created. An example of this happened not too long ago in Hyboria and may be worth quoting.

The situation had arisen in Hyperborea that a certain noble, Lodivarman by name, had raised a revolt with the aid of a large force of mercenary soldiers left unemployed at the close of a campaign. Lodivarman himself was a patriotic type and was acting in what he thought was the country's best interests - though, of course, these also coincided with Lodivarman's best interests - but the mercenaries were only interested in hard cash. When Lodivarman's money ran out, they began to loot and ravage the countryside. Lodivarman therefore attempted to disband them.

We — the Controllers, that is - assumed that the leaders of the mercenaries would not be too keen on this and would hold a council to decide what to do. There were eight of these leaders; and since I had gone to the length of setting up characters for everyone down to regimental commander, it was perfectly easy to look up each leader's character and see what his feelings would be. Some of them were related to each other, which was also taken into account. As it happened, two, being cruel, greedy types voted to simply cut Lodivarman's throat; three others, being just as greedy but with considerable cunning, voted to imprison him but to keep him as a figurehead to take the blame for their crimes; the other three were undecided, so they sided with their relatives. As a result, the vote went 5-3 in favour of Lodivarman's imprisonment, so this is what happened.

Without these characters all we could have done, in fact, would have been to have a simple dice throw to see whether they accepted

disbandment or not; and if they hadn't, would have had to decide what they would do. Similarly, without Lodivarman's given character, even though his part was being taken by a player in the group, we would have had no indication of what his reaction to the situation should be. Thus it can be seen the work of setting up these fairly elaborate characters is worth the trouble -and, moreover, if you have a bent in that direction you will get a lot of interest and amusement out of the actual initial setting up.

Your first step is to decide on the form which your nobility is going to take. This will depend to a great deal on what you have based your various countries. If, for instance, they are all to be mediaeval countries, you will simply need a mediaeval nobility; but if, as in Hyboria, each country is based on a different nationality — Greek, Roman, Celt, Persian, Egyptian and so on — then you will need a good few different systems. You must, therefore, first plan out the skeleton design of your countries.

When setting up Hyboria I used a good few different systems and was not afraid to mix mythical with historical or even to slightly mix my historical nomenclature where necessary! You may prefer to stick to the strictly historical, of course, but even there you have plenty to choose from. To take first of all the mediaeval state: in the main, assuming that it was large enough, it would be headed by a King, with beneath him Dukes, Counts and Barons. Starting at the bottom, each castle or town would form the centre of a Barony; three or four Baronies grouped together would form a County; two or three Counties would form a Duchy or an Earldom. In addition to this, there would be several Court officials: the Chancellor, High Constable, Earl Marshal etc.

You could of course also have an organisation such as the Holy Roman Empire (which someone quite truly said was neither Holy, Roman, nor an Empire) headed by an elected Emperor and an Electoral College formed by the heads of the various states within the Empire. I have something like this in Hyboria in the shape of the Aquilonian Federation. The federation is formed of a number of self-governing states, the rulers of which are the members of the Federation Council. From the Council is elected the one who is the Chief Executive; I didn't want to use the term Emperor as not being suitable for self-governing countries, so I substituted the old Saxon term of Bretwalda or war-leader.

Turning to the Persian idea, you would have at its head a Caliph or Sultan - or, if you are early Persian, a King of Kings - with under him a certain number of Satraps; each Satrapy is divided again, and your lower nobility could be Khans, Pashas of Beys. Royal officials would be the Grand Vizier, various Atabegs and Beglerbegs. In somewhat the same style, you could have an Indian state, probably ruled by an

Emperor - mine started out as a Matriarchy and was headed by a Devi — with Princes, Maharajahs, Rajahs and Khans making up the lower orders.

Greek culture is a little more difficult, since in order to adopt a pure Greek regime you must have merely city states ruled by democratic assemblies; leaders tended to change easily. You could, of course, adopt the Macedonian style of Kings. I compromised here by mixing Greek and Carthaginian terms. I had a King at the top, with his country divided into two portions each ruled by a Suffete - a Carthaginian term for a powerful magistrate — and each again divided into portions to which I assigned Polemarchs, Xenagos', and Strategoi, Greek terms for soldiers and war leaders. This gave a firm basis rather than trying to run several democracies. Anyway, I'm a convinced Royalist, not a democrat!

For your Roman state you must choose between Republican and Imperial Rome. You may of course start off with a Republican culture and let it graduate into an Imperial one. If you are going to be Republican, you merely need to set up a dozen or so powerful families, which would contribute the bulk of the members of the Senate. From these you would elect the yearly Consuls and in case of need a Dictator and a Master of Horse. You might also have provincial governors and other officials. Under the Empire much of these titles would remain, though they would now be appointed officials rather than elected ones. You would also have Legates commanding the legions, who would usually again be drawn from the main families.

You can also have various less civilised states, usually of the smaller kind. For instance, I had two Viking countries; each of these was ruled by a Jarl (the term from which we get our Earl) and the areas within the country by Thanes. My Celtic area was intially ruled only by tribal chiefs, though under various stresses it coalesced into a kingdom. I also had various native countries headed by Princes, Dwars, Beys and Khans and I later formed a number of these into a Confederacy which was an earlier prototype of the Aquilonian Federation; in this case I used an almost modern Egyptian title and called the ruler a Khedive.

For some reason I never adopted an ancient Egyptian system; but this of course would be headed by the Pharaoh and would have local Governors as well as various officials such as the Master of Chariots, Master of the Offices, etc. etc. You can also have such things as a country ruled by a Council of Priests — a system I adopted originally in Stygia, a country noted for its worship of the snake-god Set. Later on the people rose against the oppression of the priests and reverted to a monarchical government.

Other ideas will undoubtedly occur to you if you think about it; all you need is a little historical research into the various countries of antiquity, Assyria, Babylon, Persia, Egypt etc. and you will soon find all the information you need. I personally used a type of feudalism in all countries — i.e. there are various orders of nobility, and each order owes fealty to the one above it. This was because it made the tax system easy and logical, and it also helped to work out spheres of influence in civil wars or revolts.

In addition to all these dignitaries, you may decide, as I did, to set up a sort of lower gentry who supplied the bulk of the regimental officers and brigadiers, intelligence agents, foreign Ambassadors and various other posts. Here, of course, it is not strictly necessary to formulate all the intricate relationships you need in the higher nobility; but in my own case it seemed only sense to carry through the same system to its logical conclusion, rather than to have these people named but created, so to speak, from a vacuum without families or relationships.

At all events, I found that once having decided on the various systems of Government, it was worthwhile drawing up a chart for each showing the various ranks and orders. Similarly when I created my families I drew up for each a "family tree"; and specimens of both of these are shown overleaf as typical examples of how this can be done.

Principality of Hyrkania
Prince

Beflerberg of Babihi | Beglerbeg of Tabal | Beglerberg of Barsip

Voivode of Auriga | Voivode of Kutu | Voivode of Haurani

Voivode of Bisri | Voivode of Halman | Voivode of Zarka

Voivode of Yuetshi | Voivode of Shushan | Voivode of Quarar

House of Hyperborea

Namelides I m. Nemone

Sofodai-m. Belesa of Corinth | Ylana-na Conaire of Hyrkania | Duran-m. Ana-Bet of Zem | Nemone-na Vakar of Hyrkania

Ramizail-m Fritharik of Cimmeria | Kandive the Golden-m Sais of Zem | Yana

Namedides II-m. Parsayates of Hyrkania

Having created your ranks, you now need people to fill them; in other words you have to create noble families. My system for this is quite simple: for each particular position you create an original family - in other words, to take the example shown, of Hyrkania, you would need to start with thirteen families, one for the Prince, three for the Beglerbegs, and nine for the Voivodes. First you have to discover how many people make up your original family; this is done by a simple dice throw. Some years ago I came across a cheap little game called

"Shake a Number"; the game itself was pretty useless, but it contained a number of unusual dice: each had one side left blank, and they were divided into evens and odds, the odds having the other sides numbered 1, 3, 5, 7, 9 and the evens 2, 4, 6, 8, 10. I therefore use one of these dice which gives me a chance of anything from 2 to 10 in a family. The same result could of course be obtained by using two normal dice.

Suppose you throw a 7; you now take seven ordinary dice and throw them: odd numbers are female, even numbers male. You next need the ages of these individuals; this is simply done by using one normal and one special dice, the normal indicating the tens and the special dice the unit. Thus a dice throw of a 2 on the normal and a 7 on the special dice would give you an age of 27. If the special dice turns up a blank, then you throw again with the ordinary dice, odds the blank counted as a 0, evens you use the ordinary dice as a unit instead of a ten, so that you have a person aged under 10.

You now have a number of persons, male and female, of varying ages. You now arrange them into generations. Let us suppose your seven people turned out to be males of 52, 44, 33 and 16, females of 65, 25 and 23. You would take the male of 52 as the head of the family and incumbent of the noble position, and in this case I would take the female of 65 as being his wife, and the male of 44 as his brother, and the next male, of 33, as his son. The remaining 3 could also be children of the first pair, or one of the females could be the wife of the son. Again, the other female could be the wife of the brother if you wished. The permutations of this can be rung as you wish, or again of course this can be decided by dice throws. In the main, however, this will be influenced by one consideration on your part - relationship between families. If you take your female creations to be wives, then you are in effect denying them an initial family; if you leave them as unmarried females you can later marry them off and thus create relationships with other families.

It is, of course, desirable to have the head of the family married so that you can logically have the next generation already created; if no suitable female was turned up by the dice throws, then my solution is to presume that the wife is deceased, and throw in a dead wife on the family tree. You will find all sorts of families turn up, with sometimes results that just won't fit; in these cases you must use your own judgement to suitably amend the results. Mostly, however, you will be able to fit your families together without much trouble; some families will have two or even three generations, others may have a large group of brothers and sisters; others again perhaps just the head of the house and his wife. This is all to the good, as you don't want too much similarity between families.

Your next task is to name all these people. Be advised, and first fix on a family name for each household. When I first started off in Hyboria I gaily gave each person just the one name, and related them to the area they held, i.e. Trocero of Poitain, Valannus of Brythunia. It later became obvious that it would be much easier for reference and indexing if each group had a distinct family name and I had to go back over and Fit this in. Your family name can still be that of a town, castle or province if you wish, or it can be a corruption of the name of the head of the family - for instance, you could have, as I have, Constantius Hebor, Count of Hebor, or alternatively Ossian Oss or Raka Rak.

Be as careful as you can to suit the names to the nationalities involved. For instance, if the family comes from a country that has a Roman culture, don't go giving them Persian names, and vice versa. For the actual given names, you can have recourse to numerous sources. You can use historical ones, taken from military and history books - most of these obligingly have an index of names at the back which will prove a happy hunting ground. You can also take names from the pages of fiction, particularly historical and fantasy fiction. I make it a habit that when reading this type of book I make a note on a pad of any suitable names I come across, and endeavour to keep a reserve supply of these names. Funnily enough, I have more trouble with female than male names, I suppose because in these sort of books the males inevitably outnumber the females! Thus I tend to have a good few females with the same given name, which would be terribly confusing without the family name!

You can of course cheat a little in this respect by using the same name in different generations. Parents tend very often, particularly in royal and noble families, to name their offspring after either themselves or their own parents, and this helps to cut down the number of names you need. Of course, if you only have a relatively small group of families, or if your imagination is unlimited, you won't need to adopt these methods.

The same methods may be used if you wish to set up military families for your unit commanders. In this particular case I did this as an after-thought. Quite early on I named all the regimental commanders and gave them military ratings, but later I recognised the advantages of giving them proper families and relationships to each other, and of course the possibility of marriage into noble houses (or seduction from either side!) since this was not unknown though not by any means common. I already had, therefore, the names and ages and I was assuming a certain relationship within the army. For each country, therefore, I went through the army list and linked the names up into family groups. I took about three men of forty or fiftyish as the first generation, with a corruption of the oldest's name as the family name, and then fitted in what I could in a second and possible third

generation. A man of 52, for instance, could easily have a son of 36, and he in turn could have one of 20.1 fitted in women as and where necessary to help this out, and additionally created a few extra so that they could be married off to suitable bachelors and thus link families in the same way as with the nobility.

You now have your families set up and all their members named. You now need to create personalities or characters for all these people, and this to my mind is the most fascinating part of the whole thing. Various methods can of course be used for this; you can if you wish assign arbitrary characters to suitable people, or create personalities and then dice to see who they belong to. The system I use is based on assigned values and playing cards. Originally I also used the number of letters in a person's name, dealing one card for each letter; but later I found it was better to use an arbitrary number of cards, and I decided on seven, which gives you a good variety without over-doing things.

So, for each person's character you deal out seven cards. The first card dealt will decide upon his or her's most outstanding characteristic: a Heart will indicate Good Nature, a Diamond Love of Wealth, a Spade Ambition, and a Club Love of War in a man, Patriotism in a woman. The value of the card will determine the depth of this passion, a high card being very strong, a low card relatively weak. The rest of the cards are used individually, and each has a value of its own, as given below:

Ace: Spade or Club, a disloyal intriguer. Diamond, loyal intriguer. Heart .exceptional good nature.
King: Spade or Club, Energy: Heart or Diamond, Courage
Queen: Great lover
Knave: Spade/Club, Unreliability, oath-breaker, liar. Heart/Diamond, Merciless, revenge-prone.
Ten: Loyalty, absolute in Diamonds, grading down through Hearts, Clubs, Spades.
Nine: Physical beauty, except for Spade, which is Ugliness.
Eight: Spade/Club, Cruelty Heart/Diamond, Generosity.
Seven: Spade/Club, Personality
Heart/Diamond, Jealous of Family Honour.
Six: Spade/Club, Lazyness Heart/Diamond, Charm
Five: Spade/Club, Wisdom Heart/Diamond, Cunning
Four: Spade/Club, Stupidity Heart/Diamond, Cowardice
Three: Spade Club, Bad Temper Heart/Diamond, Good Temper
Two: Spade/Club, Arrogance, Pride. Heart/Diamond, Merciful.

A reversed Ace (i.e. one dealt upside down) signifies a hunchback or cripple.

So, you deal out your seven cards and proceed to evaluate the character. In most cases this will be straightforward enough, but on some occasions conflicting cards will show up. If, for instance, you turn up a Nine of Hearts and a Nine of Spades, then physical beauty obviously cancels out physical ugliness and you discard both cards. An example of a character reading might be a deal of Knave, King, Ten and Nine of Hearts, Nine of Spades, Nine and Two of clubs. This would give you, assuming a male, a very good natured fellow, brave, handsome, very loyal, but a thought arrogant. Of your three nines, two are beauty and one ugliness, so the three finish up as one beauty card.

Another deal might give you, again for a man, the Ten and Seven of Spades, Eight of Clubs, Nine and Four of Diamonds, Four of Hearts, Two of Spades. This gives you a pretty clear cut though not very pleasant character — very ambitious, handsome, cruel, arrogant, a strong personality but an extreme physical coward. All of your characters will not be as finely drawn as these — sometimes you will get a real nonentity, with no outstanding characteristics. This is quite realistic - all of your people can't be heroes or villains!

These characters will have a great bearing on any decisions which you have to make involving them, and this is particularly important for the controller of a mythical continent, whether he is running it by himself or whether he has a group of players involved. There will always be occasions when the attitudes of nobles and officers who are not being played by actual people - what we in Hyboria call cardboard characters - can be vital to an event, and by using these characters you can often solve the question. If you are still undecided, further use of the cards is often better than a mere dice throw. For a straightforward decision, deal out 6 cards; four or more reds mean yes, four or more blacks no. Similarly in a case of whether someone should support a revolt or remain loyal, if you have no clue in his character, deal out four cards for him. Four reds means complete loyalty, three reds loyal but not going to extremes, two of each undecided so remains neutral, three blacks rebel but cautious, four blacks thoroughly rebel.

A similar use of cards can be made to determine the success or failure of a plot, an assassination or other affairs. Deal out six cards again and add up the points value of the reds and blacks. Presuming that the chances of success were fairly even, if the red total is double the black, news of the plot or assassination has leaked out, the victim strikes first and arrests or eliminates the plotters; if the count goes the other way, it is complete success for the plotters, who arrest the Government or kill their victim. Anything in between can be worked out as shades of success or failure.

A decision to go to war, or to accept a treaty etc. can be decided in the same way if you want an unbiased decision. Use the six cards again for the ruler, four or more reds for yes, four or more blacks for no. If an even score turns up, then the decision must be passed to his Council, however that is constituted, and each of these members will be dealt six cards to determine his vote. Count of the votes will then give you your decision.

For your soldiers you will obviously need a better idea of their military capabilities and possibly their loyalty. When I first worked this out for Hyboria, I in effect set up four classes of officer, A, B, C. and D and gave each class four rankings. Class A stood for Loyalty, Class B for Disloyalty, Class C for Military Ability, and Class D for Military Stupidity. An A1 was completely loyal under all circumstances, but this shaded down to an A4 whose loyalty could be compounded under extreme circumstances. Similarly a C1 was an officer of great ability, C4 of no more than average, a little better of course than a D4; anyone employing a D1 in a position of responsibility obviously needed his head examined! As I set this up more or less as an after-thought, and assessed characters by a random system, players had to very hurriedly promote and relegate officers and switch them around as necessary! The system I used was simple - Hearts were A, Diamonds B, Clubs C and Spades D, with the four rankings according to the highness of the card.

Somewhat later Richard Nelson came up with a system of character-definition based on a simple chart and some dice throws. The chart is shown overleaf, and the system is as follows:

Throw 1 dice for each of the A characteristics except the Popularity factor. If both 1s and 6s are present, convert them to 2s and 5s respectively. The popularity factor is the average of the first five A characteristics, except that a 1 for Loyalty counts as a 6 in assessing popularity as the character is assumed to be a skilled dissembler.

Next throw 1 dice for each of the B characteristics except 4 and 6. Average out 1s and 6s as for A characteristics. This gives the basic details of the character, which can be developed by either political or military experience. All characters start with Grade 1 military and political experience. They advance one grade after the following experience:

a) Political - As independent Ruler 1 year
As subordinate Provincial Ruler 2 years
Subordinate Position (Senator, Mayor) 3 years
A course of study at a University gives 1 upgrade in Political experience.

b) Military - As Corps or Army Commander 1 year
As Divisional Commander 2 years

As Regimental or Fort Commander 3 years
As Regimental Officer 4 years

The above military figures relate to war experience, and must be doubled in peacetime. Study at a Military Academy gives 1 upgrade. This can only be claimed twice in an officer's career, and not within the same period of five years.

	1	2	3	4	5	6
I. General Disposition	Savage & Morose	Gloomy	Average	Cheerful	Happy	Open& Sunny
2. Morals	Totally Deprave d	Vicious	Drink & Women	Drink or Women	Highly Moral	Saintly
3. Generosity	Miserly	Thrify	Thrifty Tendency	Generous Tendency	Open Handed	Spendt hrift
4. Loyalty	Complet ely untrustw orthy	Bribable	Dutiful but can be blackmailed	Dutiful	Loyal	Totally Loyal
5. Appearance	Repulsiv e	Ugly	Undistinguis hed	Striking	Handso me	Adonis
6. Popularity Factor	Universa lly Detested	Disliked	Average	Popular	Much Liked	Beloved by All
1. Intelligence	Idiot	Stupid	Average	Intelligent	Very Intellige nt	Outstan ding Intellige nce
2. Activity	Idle and Sluggish	Lazy	Average	Active	Active with Initiative	Erratic
3. Martial Aptitude	None					Outstan ding
4. Martial Experience	None					Outstan ding
5. Political Aptitude	None					Outstan ding

The combination of aptitude and experience factors gives the skill rating for Political and Military Attainment. Added together these factors run from 2 to 12. A character may hold a position in which he gains both political and military skill simultaneously. The initial military and political aptitudes must not be less than the average of Intelligence and Activity.

The complete character analysis can be expressed as 12 numbers The following example will show how it works:

Prince Valiant, Aged 20: throws for A characteristics 4, 3, 6, 4, 1, converting to 4, 3, 5, 4, 2 with a popularity factor of 4. The Prince, is cheerful, with a weakness for drink and women, open-handed dutiful, but ugly. Now for the B characteristics: the throws are 3, 4, 2, 4 which converts to 3, 4, 4, 4,as the aptitude factors cannot be less than the intelligence and activity average. The prince is of average intelligence but active disposition. Say the Prince has ruled his state for 2 years advanced two grades in political experience, but only one grade in military experience as his army has not been engaged in fighting. His Military Skill, is thus 6 and his Political grade 7. As for his popularity, this is measured as the average of the popularity factor and half the military or political skill grade, which at present is 4 in both cases, but if there is no war in the next year or so, the Prince will be less popular with the army than with the people.

The complete character analysis of Prince Valiant can be expressed as 20 (i.e. age) 435424/344243. The effect of individual characteristics in a given case will obviously depend on individual campaign rules, but a character with Morals 3, Loyalty 1 and Appearance 5 should not be left to look after the castle and Queen while Hubby is away at the wars!

Having created all your families and characters your task is by no means over! Obviously some of your characters will be removed from time to time by death in battle, but so far we have not made any provision for death by natural causes, accident, sickness etc. or for either marriage or childbirth. All of these have to be allowed for, and my system is to deal with this annually (continent year, of course) except in the case of state marriages which of course are dealt with as situation arise.

So, at the beginning of each continental year, I go through the list of characters, and firstly test each for death during the coming year. This is done by a simple dice throw and a check on the age group as follows:

Under 20 If a 1 is thrown, throw again: 1 or 2 dead, 3 or 4 seriously ill, will die if a 1 or 2 turns up next year, 5 or 6 a minor illness.

21-40 Throw of 1, dice again: 1 2 3 dead, 4 5 6 serious illness.

41-50 Throw of 1 or 2 throw again: as above.

51-60 Throw of 1 2 or 3 throw again: as above.

Over 60 Throw of 1 2 3 4 throw again: 1 2 3 or 4 dead, 5 6 serious illness.

For anyone who dies other than after a serious illness, throw to determine cause of death: 1 2 3 natural causes; 4 accident; 5 suicide, or child-birth in a woman if applicable, 6 murder. In the case of murder you can then endeavour to work out the reason and/or the murderer.

Your next test is birth. Women are reckoned to be capable of child-birth up till the age of 40; so, each year, every married woman is tested to see if she has produced a child. A throw of 4, 5 or 6 means yes. If you wish you can complicate this by throwing a 6 again, a throw of 6 means twins. You then throw for sex in the normal way. If you find that you are getting too many children or not enough deaths, you can add extra rules, limiting a woman to so many children, or throwing again after a birth, 1 the mother dies in child-birth, 2 the child is still-born. There are all sorts of ramifications you can add, and these will occur to you as you go along. You can, of course, if you wish also test unmarried women for children, making the test very much harder, in order to get a small crop of illegitimate children; you can then find out the father by a simple process of elimination, allowing for the fact that he may not be of noble birth! In the same way, if you wish to carry things a stage further, you can see if any of the males have had bastards by girls not of noble birth. These measurements can be taken if your legitimate birth-rate is falling below requirements.

There are then marriages to be arranged. Each year you will find that in every country you have a crop of unmarried men and girls, and also widows and widowers. These should be married off as soon as possible so as to both carry the creation a stage further and to strengthen family alliances. In most cases you will find that the marriage prospects narrow down to a few eligible parties; you have to take into account the relative standing of families, inheritance, political alliances etc. This is of course of even more importance among the royal families. Having determined who the eligible suitors are, a simple dice throw will then determine who is the successful one.

Personally, I don't draw a character for a newly-born baby. I leave it until the babe has grown to 5 years old before doing this; partly because it seems a bit silly to have a child of 2 with a character which describes him as lecherous, disloyal etc, partly because he may

anyway die off at an early age and your work is thereby wasted. Incidentally, a point I haven't mentioned is that you can of course work in a bit of heredity when casting your characters, looking back through the preceding generations and seeing if there is a common characteristic which would be passed on through the genes.

Obviously, with all this information you will need a system for recording it. Mine is, in effect, two-fold. For every family I have a family tree drawn up, on the lines of the specimen on page 113, and these are filed in alphabetical order of families in separate national sections. When someone marries I record this information on the two family trees involved, and this is the last entry regarding the woman which is made on her original tree unless her husband pre-deceases her and she is returned to her original family. All issue of the marriage are recorded on the husband's family tree only. This gives an at-a-glance record of family relationships since a look at the family tree will show marriage alliances with various other families - not always of the same nationality.

Then for each character I have an index card. These are filed alphabetically under family names so that if I want to look up the card for Ramaos Vanir I merely look in the tray under V. Each card is headed with the name in block capitals. Under this I record first of all his immediate family history, such as "Son to Ban Cruach, Crown Prince of Aquilonia" or "Second daughter to Vakar, Prince of Hyrkania", since this helps to establish the generation and the direct family line; obviously after a while families become fairly prolific, with fathers, sons, brothers, nephews, cousins etc. and with the same given name used more than once. Nicknames also help in this respect, such as Liane the Wayfarer, Kandive the Golden and such. After this is recorded the character, and then follows any information which is added from time to time - the barony he inherited on the death of his father, his marriage to such and such a person, promotion to command a brigade, taken prisoner at the battle of blank; it all helps to keep the records straight, and while much of it may never be used, you will be surprised at how much of it can come in useful at times.

This is probably a good point to mention the question of inheritance. In these modern times, rules of inheritance are fairly straightforward, in that normally a son inherits his father's goods etc; but you have to remember that in ancient times many different systems of inheritance were in vogue. In some cultures women counted for nothing, and inheritance could therefore not be counted through the female line; a son could inherit, but not a daughter or a widow. In others, the position might be reversed. Again, because a man was Count of Gunderland might not necessarily mean that on his death his eldest son inherited the title; the title and the lands might be in the gift of the King, who might decide to confer them on an entirely different person to whom he owed a favour. In the main, my own systems of

inheritance are pretty simple, in most cases lands and titles are hereditary, but having to be confirmed by the King, who could in theory set aside the legal claimant though in practice this rarely happens. Minors, of course, automatically come under the guardianship of the King, who attaches their revenues until they come of age or marry - quite a good way of padding out the royal revenues!

This question of inheritance can be of considerable importance and can be used as an excuse for both external and internal war. The death of an important and wealthy noble might leave several claimants to his rank and position, there being no direct heir. Each claimant may call upon the support of friends and related families, and the thing can end up in full scale civil war quite easily. These things all add to the enjoyment of the continent, since once again they tend to give it a life of its own and a certain inevitability without you needing to rack your brains for an excuse for a battle!

To revert to the yearly sorting out of births, deaths and marriages: though this is actually done at the beginning of each continental year, obviously it does not in fact all take place at once. I therefore throw dice for each event, be it birth, marriage, death, illness etc. to determine which month it is due to happen in. With this information, I then draw up a list month by month of these events and communicate them to the players involved at the correct times. In this way I have a good deal of foreknowledge of the coming year, and it is amazing how often these events fit simply into the pattern as if they were intended all along. A quite recent occurrence is a case in point: at the beginning of this continental year in Hyboria, the annual head-count threw up the fact that half-way through the year Calliope, Ranee of Agrapur and mistress of Prince Vakar of Hyrkania, was due to be murdered. At the time I merely recorded this and wondered who I was going to blame for the deed when the time came. A month before she was due for the chop, what should I receive but a scheme from the arch-villain Mnester, originally in the pay of Prince Vakar but having recently abandoned his service for that of Valannus of Brythunia, for the assassination of no less than the Ranee of Agrapur! No mention of her impending doom had ever been made, so the whole thing was quite spontaneous, and yet another almost frightening example of how Hyboria has developed a life of its own.

As I have repeatedly mentioned in this book, how much of the foregoing you adopt for your continent will depend entirely on the amount of time you have to spare and your interest in working up these sort of things. The initial effort involved is fairly large; once this is achieved, only the annual culling of the flock involves you in a great deal of work. Providing you have the time and the enthusiasm, your toil will be well worth-while, and the results will give you many hours of interest and amusement besides having a great effect on the campaign as a whole. It must, however, be remembered that such a set-up is

essentially a long-range affair, designed to last for very many continental years; obviously it's not much use going to all the length of having children born in quantities if you are going to close down the continent within the foreseeable future.

Of course, you do not need to closely work out the affairs of the continent for year after year, regardless of whether an actual campaign is being fought. In the past, I have often finished off a war and then jumped forward several continental years; intervening events are worked out in considerably less detail, and the picture is then brought back into focus with everyone a good few years older. This in fact can be quite necessary at times, as otherwise not a month would pass without bloody war raging over a good part of the continent, a situation which could not endure for ever — economies and agricultures just wouldn't be up to it! So periods of enforced peace are sometimes necessary.

At all events, I hope that this chapter will at least have whetted your appetites for carrying your creations a stage further, and shown you some of the results which can be gained thereby.

7: CAMPAIGN EXTRAS

So far we have discussed both the essential ingredients of a campaign such as maps, organisation, troops etc, and also the important but not essential items like supply and characterisation. In this chapter I want to deal with non-essential items which nevertheless can add a lot of fun and interest to your campaign if you can afford to devote the time and effort to them. These are things without which your campaign will run quite efficiently, but which add a touch of humour to what can otherwise be too serious an affair, and also bring in both natural and out of the ordinary events which would otherwise not come into the scheme of things. All these items have been tried out at various times in my Hyborian continent, and have I think helped its development.

The first item on the list is a calendar. When you are running a campaign in which time is important, it is essential to be able to date events so that they relate to other happenings. Now you can of course simply use a current calendar; but this is rather like the old joke about the actor in the Elizabethan play shaving with an electric razor - it doesn't fit the conception of ancient times. Therefore it is worth the small effort involved of constructing your own calendar. When I set up Hyboria I was of course basing my ideas upon Howard's Conan stories, and these quoted years by name - the Year of the Lion, Year of the Elephant etc. I imagine Howard may have taken his example from old Chinese history since they also gave the years names instead of numbers. At all events I decided to have a fourteen year cycle with each year named after an animal; at the end of each cycle it is repeated again, and the complete cycle runs:

Year of the Jackal		Year of the Crocodile
Wolf		Panther
Horse		Dog
Ox		Snake
Dragon		Lion
Elephant		Tiger
Leopard		Bull

I then took this one step further by having twelve months named after birds, and related them to our own calendar, thus:

January =	Hawk	February	= Peregrine	March	= Falcon
April =	Kestrel	May	= Eagle	June	= Vulture
July =	Tiercel	August	= Owl	Sept.	= Kite
Oct =	Buzzard	Nov.	= Merlin	Dec.	= Albatross

By this means I can date an event as 12th Eagle/Lion and everyone knows when I mean. A number of similar calendars can be constructed very easily; or of course you can work on the actual calendars used by various ancient states.

Mention of calendars leads me on to the next point - a campaign diary. This may seem an obvious thing, but surprisingly it does not always occur to people. I find it simplest to buy a cheap desk diary from Boots or some such place, of the type which has three or four days to the page with a reasonable amount of room for each day. A page for each day would of course be better still, but this type of diary costs more, and I'm mean about this sort of thing! The controller of a campaign needs a fairly large diary since it is essential that he marks down a variety of information such as dates troops are ready for action, when supplies are collected, dates people are in certain places, etc. You can mark in advance dates on which things are due to happen as a reminder to you, and you can also look back easily to check on previous occurrences. For the ordinary player who has only one country to look after the diary is less essential and less detailed, since he can always ask the over-worked controller to supply the necessary information; on the other hand, the controller is not infallible, and can make errors or omissions, so it isn't a bad idea to keep your own records! It is of course also an idea to keep a record of your monthly expenditure if the campaign is being run on a monetary basis — otherwise you may find you've spent all your resources with the year only half gone. You can't always rely on the controller to warn you of these dangers!

Our next item is a fairly new innovation in Hyboria, though I am certainly not the first by any means to introduce it. This is a campaign newspaper. Robert Louis Stevenson was probably the first to produce one of these in the campaigns he waged. His was a very one-sided paper, which continually vilified his opponent, making light of his successes, emphasizing his defeats and criticising his personal habits etc. This annoyed the chap so much that he made desperate efforts to capture the town in which the newspaper was situated - after which he hung the Editor with great jubilation and took over the paper. which immediately changed its policy!

In a small group, and particularly if only two people are involved, a newspaper hasn't a great role to play, although if any of the players has a literary bent he can of course get some amusement out of ragging his opponents in this way. I remember many years ago in an American Civil War campaign with Don Featherstone, typing up what I claimed to be newspaper clippings of my victories and giving them to Don, but I don't recall his reactions. I suspect they merely ended up in his wastepaper basket!

However, with a larger group, and particularly a wide-spread one who campaign largely by post, a newspaper can serve a very useful purpose in disseminating rumours and publishing information which players couldn't realistically get by other means. The snag, of course, is that for this you need access to printing, duplicating or photo-copying facilities, since you can't produce more than about six carbon copies of reasonable quality, and the effort of typing the same thing several times over will soon dry up your enthusiasm for the project, especially if your paper runs into several pages.

Fortunately I am able to produce what I need by a reasonable expenditure of time, labour and cash, so the Shadizar Herald was born. It was decided to site this at a fairly central point in the continent. and to assume that it had reporters all over the map, plus magical means of getting their reports back and also of distributing the printed copies to players in remote areas! From the first I set out to produce something that bore a faint resemblance to an actual newspaper, in that it was printed in columns instead of typing straight across the page - a conceit which adds to the labour but I think pays off in authenticity - and to make each issue a composite of purely humorous articles, "hard" news of events, rumours and exposes. In the early days all material was supplied either by myself or my co-controller, but soon the players themselves had caught on and were sending in contributions. Richard Nelson, that doyen of propagandists, quickly made it the vehicle for his humorous attacks, both in poetry and prose, upon Vakar of Hyrkania, to such an effect that poor Prince Vakar, whom I originally conceived as a lean, hard, cruel but soldierly character, is now universally regarded as an over-weight coward who wears corsets and cheats at dice! Such is the power of the Press.

With each weekly situation report I print an issue of the Shadizar Herald - which means on average about once every four or five weeks in our time. The paper runs to four or five quarto pages, and a typical issue will carry a couple of battle reports - usually not completely accurate, and sometimes two accounts of the same affair issued by opposite sides! - a current events column, an excerpt from something like Prince Vakar's diary or Princess Yana's memoirs supplied by Richard Nelson, a humorous feature such as an account of the Annual Torturer's Convention or the Aquilonian Archery Championships, weather forecasts, etc. Small spaces at the end of columns are filled in with humorous adverts which sometimes lead to bigger things - I once casually put in a piece about the attractions of the Shadizar Pleasure Palace and now find that I have had to actually create such a place.

Almost at once we had to deal with a take-over bid. Shadizar is a city of the Kingdom of Corinth. In an early issue an uncomplimentary though veiled reference was made to the Queen — it suggested, in a slightly roundabout way, that she was overfond of cavalry troopers - and the King of Corinthia, Dave Millward, used this as an excuse to

send a force of guardsmen to arrest the Editor and take over the presses. This, of course, couldn't be allowed because it would have made the Herald a Corinthian puppet, whereas it is intended to be completely unbiased (or, as Phil Barker puts it, hostile to everyone!); but we couldn't just tell Dave it was forbidden, so we had to organise a riot among the citizens and students in favour of a Free Press, which succeeded in staving off the situation. Dave had enough on his hands with a Hyrkanian invasion, without facing internal revolt as well! It was all very good fun, and is an example of what can be done in this way. I enjoy running the Herald almost as much as I do Hyboria itself, and I think the players look forward to receiving it.

As we all know, religion played a large part in historical conflicts, and this is another campaign extra which can be introduced with good effect. Originally I did not pay too much attention to this in Hyboria, apart from vaguely feeling that the eastern regions were sort of Mohammedans and the western pseudo-Christian. The only real part it played in the early days was that Stygia was ruled by a Council of Priests, since this fitted in with Howard's conception of the area, but this system got overthrown at a later date. Religion really began to take effect when Ed Smith was installed as King of Shem. He at once asked about local religions, so I proceeded to work some out. In Howard's books the two main religions of the west centred round the worship of Mitra (presumably derived from the Roman Mithras) and the lesser known Ahura, so I set these up as the twin gods Ahura-Mitra with Shem as the focal point of their worship. Ed at once began setting up a proper religious framework with priests, bishops, missionaries etc, which he used as an illicit communications network with great success. Other players followed suit - Richard Nelson for instance founded monarch-worship in his country and proceeded to capitalise on it very effectively.

Religions can thus be used for a number of things - as cloaks for other activities, as either bolsters for or checks upon governments, and of course as excuses for holy wars etc. Also, it should be remembered that in mediaeval states the finances and often foreign affairs of the country were usually entrusted to churchmen who were often the only ones with the necessary education for such tasks.

Talking of education brings me quite smoothly to another point. The members of my group being gifted with a good deal of low cunning and the ability to think up ways and means of stretching the rules to their advantage - hallmark of a good wargamer! — it wasn't long before several of them hit on the idea of founding Universities and Staff Colleges. The idea of these was of course that University graduates would be capable of higher skills in finance and other spheres, and might be responsible for revolutionary new devices in the fields of communications, agriculture etc, while officers who passed through the Staff College would have their efficiency ratings increased. I am always

willing to allow ingenuity to gain its proper reward, so this was allowed and proper regulations set up to see to it. I also made sure that such institutions were costly to their inventors!

At one time an institution much used in Hyboria was that of mercenary soldiers. To some extent, of course, any soldier who receives pay could be termed a mercenary, but in this context I mean the soldier who sells his sword to the highest bidder. In the early days I had a number of mercenary bands, on the lines of the Italian condottieri, which hired out to a country for the term of one campaign. Later I changed this to a system whereby anyone could raise mercenary regiments, as opposed to regulars or levies. These would count as fully-trained at once instead of having to go through a training period since their basis would be old soldiers, not raw recruits. This was very useful since you could raise them in a hurry at the start of a campaign or in times of desperate need, and then dismiss them at the end of the campaign; the snag was that they cost, besides an initial raising fee, twice as much as regulars and tended to be far less reliable — most mercenaries were quite capable of selling out their current masters, and woe betide anyone who used them to garrison an important point!

Later, when I altered the campaign rules to allow players to increase the size of their regular forces and their composition - something which had previously been banned - I had intended to go back to the original idea of special bands of mercenaries for hire. After considerable thought I finally abandoned this idea, partly because it would have necessitated a lot more record keeping, finding bases for the mercenary leaders, deciding how they lived when unemployed, keeping books for their earnings and expenditure etc, and partly because I couldn't see players wanting to employ such notoriously unreliable persons now that they could merely raise more regulars. So at present there are no mercenaries in Hyboria as such.

Of course, when drawing up rules for the employment of mercenaries there are two ways of looking at the problem. Firstly one must consider the probability that mercenaries, as purely professional soldiers, would be better trained and better fighters than would levies, or, indeed, many regulars. They would be more capable of looking after themselves in the field, their commanders would often be skilled generals and, despite the popular picture, most mercenaries were loyal to their paymasters as long as they received their pay. After all, it reflected on their professional reputation and decreased their chances of employment if they constantly betrayed their employers! The obverse of the coin, of course, is that mercenaries were hard-bitten and rapacious troops who could be relied upon to commit the worst excesses on captured territory, and could be almost as dangerous to friendly inhabitants; while since soldiering was their livelihood and their lives their main capital, and since they were not inspired by any sense

of patriotism, they were not likely to go to extremes to support a losing cause. In difficulties they were prone to surrender in the hope that their opponents might one day need their services and therefore would give them reasonable terms. Moreover, two opposing mercenary armies tended to manoeuvre rather than fight, their objectives being booty rather than hard knocks. So you see, you can draw up rules for mercenaries in almost any shape you please and be able to justify them to some extent.

If you have created a monetary system in your continent, a logical development is to also lay out some system of trade. In Hyboria, when I first introduced supply rules, I worked out which provinces and countries produced surpluses of certain items, and which other countries needed these supplies. From this beginning I was able to set up a pattern of trade routes, using for instance rivers more often than roads as easier lines of communications, which in turn gave me nodal points as large trade-centres and a basis for revenue from customs dues etc. The danger here, of course, is of going too far in one's enthusiasm and getting the whole thing so complicated that it becomes unworkable. In a country the size of Hyboria too much detail of trade is impracticable as I just haven't the time to devote to it; but in a smaller set-up it is easy to see that the movement of trade caravans could be a useful feature, having an effect upon strategy and particularly upon supply.

Another fairly recent innovation in Hyboria has been the introduction of chance effects. We decided that in addition to all the complications devised by the players, there ought to be certain events outside their control which played a part in the proceedings. Obviously harvests could fluctuate, landslides could block important roads, earthquakes could occur; similarly dishonest treasurers could embezzle funds, riots could break out, and numerous other things could happen. We didn't want to make this too effective but merely to introduce a certain chance element which would occur now and then to generally liven up the proceedings.

First of all we drew up a list of events which came under the categories we thought reasonable, some good, some bad. There turned out to be 16 of these, and I list them below; doubtless if you put your mind to it you can think of others as well.

Plague
Bumper Crops
Religious riots
Efficient Treasurer saves money
Crop Damage
Discovery of new mine
Peculation in the Treasury
Betrayal of enemy spy network

Fraudulent Quartermaster
Success by own intelligence network
Treachery in High Places
Outbreak of Banditry
Forest Fire
Earthquake
Sex Scandal among Nobility
Assassination of important person

For each of these we made a Happening Card, which we shuffled and put face down in a pile. We decided to draw from this pile once a month, so as to strictly limit the number of happenings; and, so as to be fair to the players, since we had at the time have power groups we decided to give each a certain number of draws. To make it easier we split the largest, the Aquilonian Federation, into Northern and Southern Aquilonia, so that six areas each had two happenings a year. A simple draw soon decided the "order of play", Northern Aquilonia drawing a card the first month, Hyrkania the second, and so on till all six had drawn, and then repeating in the second half of the year, not necessarily in the same order, of course.

As each month came along, we drew a card from the pile and applied it to the requisite country. First of all a dice was thrown to see the strength of the happening. A six of course made it very strong, a one relatively weak. We then worked out the actual locality of the happening, either geographically or among the characters. Two examples will show the sort of thing. A card drawn for Northern Aquilonia gave us an earthquake, and the dice throw made it moderately severe. By dividing the map into areas (which was already done anyway for other reasons) we settled on the area, and another dice throw pin-pointed the occurrence in Bossonia. We then made quite a thing of this, reporting it in the Herald, starting a Bossonian Earthquake Disaster Fund, etc, and had a lot of fun from it. As it happened, it had no effect upon any military activity, being far away from the fighting fronts; but this was pure luck — it could have happened anywhere.

A second happening card later fell upon Shem and called for a success by their intelligence apparat. This called for rather more work, but some dice throws indicated a happening in the capital of Vendhya, with whom Shem was at war. A look in the diary for the month showed that the Hyrkanian Ambassador to Vendhya was due to die — and Vendhya and Hyrkania were then in a delicate position vis a vis each other, where an incident could spark off war. So, we set up the death of the Ambassador as an assassination, played it up in the Herald, released rumours of Vendhyan plots — and lesser rumours of Shemite plots - and let things take their course. As it happened it didn't push Hyrkania into war with Vendhya, but it did worsen relationships and generally stir things up.

Intelligence systems are of course another item which can be used to effect in a campaign. Spying has always gone on in Hyboria, and in the past I tended to be fairly lenient about this. Hyrkania penetrated Turan early in the war against the Aquilonian Federation, planting spies in all the main towns; these had a number of successes and also a few defeats. They were responsible, for instance, for the successful betrayal of Tadmor, the Turanian capital, which virtually finished Turanian resistance, but they failed in an attempt to burn the Turanian fleet. Until players also set up anti-espionage systems I allowed spies a good deal of latitude; only taking strong action against them under special circumstances. Phil Barker, for instance, allowed himself to be carried away by a desire to "needle" Charles Grant on the occasion when the Hyrkanian fleet suffered damage in a storm and straggled back into port rather the worse for wear. Phil directed that his agents in the port should stick up copies of a scurrilous ballad, and this alerted Charles to their presence. He directed a house to house search and I ruled that Phil's whole apparat in the area was uncovered and smashed.

Ed Smith, with typical cunning, set up a very complete network of pseudo traders with regular routes and methods of passing information. Gradually the idea spread until the continent began to be infested with spies! At this point I passed control of spies over to my fellow-controller, Peter Millen, who adopted a much harder attitude. He worked out strict rules for spying, which were as follows:

If it is required to send an order to an agent in foreign territory, throw one dice, multiply by ten for the maximum number of hexagons the message can travel.

a) If message received, will agent obey? 1 or 2, no
b) If message not received, will agent move? 1 or 2, yes

Divide up the potential cities and throw to see which the agent will make for.

Throw for success of journey:

1 to 3 hexagons	2 or up, successful
4 to 6	3
7 to 9	4
10 to 15	5
16 up	6

If unsuccessful, throw again:
1 Turned back
2 Changed Course
3 Killed by bandits

4 Captured by enemy counter-intelligence
5 Delayed — throw dice for number of weeks out of commission.
A major disruption, agent ends up in city at least twenty hexagons from position.
6. Agents reports - receipt determined as in 1.

Agents having a permanent station will be immune from having to throw as in 2b. Local circumstances may alter the chances of success of travellers, i.e. excessive guerrilla activity etc.

8: HORSE AND MUSKET CAMPAIGNS

So far, although many of the things we have discussed are applicable in some ways to any period of campaigning, the emphasis has tended to be on campaigning in the ancient and mediaeval periods; largely because my own Hyboria, on which so many of these rules are based, is set in that particular era. All of us, however, have our own pet periods of operation, and campaigning fits just as well into any of these, as I hope to show by dealing with each in turn.

The term Horse and Musket I use loosely to cover the period which started around the Thirty Years War and came to an end with the Napoleonic era or a little later. In my early days of war gaming it was also used to describe the American Civil War, but for campaign purposes I have felt it necessary to draw our line before that famous conflict, which you will find considered in the next chapter.

At first glance, one wonders just how many changes are necessary to adapt our original ancient and mediaeval campaign rules to those of Horse and Musket. We have not yet reached the period of mechanisation, so transport remains on the level of the horse, horse-drawn transport, and the footslogger. Naval and river transport still depends on the oar and the sail. Indeed, as far as movement is concerned, there is probably not a great deal of difference; possibly there are more roads available, rivers are bridged more regularly and ferries in operation over large ones where bridges are not available. On the other hand, there is a distinct possibility that the physical characteristics of our soldiers have, if anything, weakened slightly; with the growth of towns and factories, recruits are not necessarily brought up from boyhood on physical labour, so that marching ability and staying power may be slightly less than in ancient times. This is a characteristic which will increase in ratio as we go forward in period; there can be little doubt that the average soldier of say, World War Two could be marched into the ground by a Greek hoplite or a Roman legionnaire. The point can be made that both the former wore heavier clothing and armour; on the other hand they carried little excess baggage, while the foot-soldier of Marlburian or Napoleonic vintage is usually depicted as bowed down under the weight of his pack, so this tends to cancel out.

Still on the subject of movement, we have one extra item to consider: the question of artillery. In our earlier periods we have allowed for baggage wagons; normal artillery would certainly not move faster than these, and much of it would indeed be slower. In the earlier part of the Horse and Musket period, the Thirty Years War and the English Civil War, guns were an extremely mixed breed but all of them were slow, bulky, cumbrous pieces - if we discount the leather pieces introduced by Gustvus Adolphus, for instance. They would really only

move by road, and in the slightest bad weather would be completely immobilised.

In fact, it is not until the Seven Years War and the Napoleonic era that we find artillery relatively mobile. By then horse artillery was in vogue, and these light pieces could move at cavalry speed. Field artillery could keep up with infantry on good roads, but it became bogged down in mud and such conditions just as easily as its earlier editions. Siege artillery would be very slow indeed and would need large numbers of horses for its transport. Crossing an unbridged river would present greater difficulties for artillery, being impracticable in many cases by boat, thus needing the building of rafts of fairly heavy construction. Forests and hills become much more difficult country.

As you progress into the period, so this problem of transporting the artillery becomes more important. In the Thirty Years War and the English Civil War, if conditions became too bad for the movement of artillery, you abandoned it and pressed on with the cavalry and infantry, just as you could leave your supply train behind to catch up later. The absence of artillery was not usually of decisive effect on the battlefield, since the guns of the period were almost incapable of manoeuvre; they were placed in position at the beginning of the action and had no means of moving from that position; it is hard to think of more than half a dozen actions in which they proved the decisive arm.

Even in the wars of Marlborough and Turenne artillery is still a subsidiary arm, important largely in siege operations or entrenched positions; not so much because the guns themselves were still lacking in execution, but because there was still little understanding of the way to construct their carriages for mobility, to properly supply them, or the need for a proper corps of artillery to deal with all their needs. But in the days of Frederick the Great and Napoleon, artillery was a full partner of the other arms, and no general in his right mind would abandon his artillery because it bogged down and press on to accept battle without it. So in these later periods bad weather or bad road conditions become a much greater obstacle to the passage of armies.

It is when we turn to the question of supply that we find the greater changes. To begin with, on the mere question of filling a soldier's belly, we once again have to realise that times have changed. It is necessary to provide food on a larger and more regular scale since the average soldier needs more food than before and needs it in more civilised styles; moreover, the average soldier is less capable of fending for himself. This should not be carried to excess, of course - most veteran soldiers could forage pretty successfully, but at the same time they preferred to be issued with properly baked bread, regular meat rations etc. On a march, riders would be sent ahead to towns on the route to requisition so many thousand rations, field-bakeries would

accompany the army, and generally speaking the baggage train and supply train would swell to alarming proportions.

When you come to the question of weapons and equipment the difference becomes really frightening. In the ancient, and to a limited extent, the mediaeval period, almost all weapons and equipment could, at need, be fabricated and repaired on the spot. Spears, javelins, arrows, pikes, lances, breast-plates, chain-mail, a competent smith with only a little equipment could produce new weapons and cobble up damaged equipment. The only supplies needed were a certain amount of metal, and wood which was almost certainly obtainable locally. As soon as you get into the gunpowder period, your difficulties are increased tenfold.

Not only do the weapons themselves become more complicated, more difficult to make and harder to repair, but ammunition can no longer be cobbled up from local materials. You need ample supplies of gunpowder, and gunpowder is dangerous stuff, highly inflammable and capable of causing great damage if set off accidentally - yet at the same time easily ruined by wet or even damp. These latter dangers decrease somewhat later in our period when powder is more sophisticated and musket ammunition more of a pre-packed variety, but it remains a matter of some consequence throughout this era.

You therefore have to reckon on setting up special factories for making gunpowder, muskets, pistols, and artillery just as in the ancient and mediaeval period you set up armouries to produce in bulk the weapons you needed. But now the time element must be more closely considered; you don't produce a musket or a field-piece in five minutes. Captured stocks of weapons and ammunition become even more important; and in this period there is still really no question of difficulty of use, since we are not talking of exact calibres in guns or artillery, and the bulk of your ammunition is not in cartridge form but loose powder and ball. Thus supplies captured from the enemy will often be usable in your weapons, and captured weapons take your ammunition.

Even so, this again complicates your supply problem. In ancient days, an archer carried his quiver with perhaps 20 arrows in it; a baggage wagon might carry enough to refill the quivers of a whole unit many times over. In this period, a musketeer, who gradually became the standard infantryman, carried a small supply of charges on his person, but relied very much on the supplies of powder and ball in the train; and powder and ball are heavy and bulky items, so that your baggage and supply train swells once more. Towards the end of the period this becomes complicated by the introduction of special weapons such as the rifle, which needs specialised ammunition; at Waterloo, La Haye Sainte was lost purely because the ammunition

sent up for its garrison at a crucial period did not fit the men's weapons, leaving them virtually defenceless.

Amphibious operations, too, become more complicated by the difficulty of embarking and landing all the heavy equipment now needed over open beaches. Ports are therefore much more necessary for embarkation and disembarkation. Warships are far more complicated than our old galleys, they rely now entirely on sail instead of oars, so that wind is all important, they cannot beach on an open shore as galleys could, and they need heavy ordnance.

If, therefore, you are going to introduce financial rules, you need to virtually start all over again. Your taxation rules can be adopted without too much trouble, though they should be revised to a national rather than a feudal system; the pay system for the troops can also be retained on the same scales. But you need a whole new conception for the supply of weapons, equipment and ammunition; especially ammunition, since this cannot be used over and over again like arrows or javelins. Cannonballs, of course, are recoverable to some degree, but gunpowder and musket balls, once discharged, are gone for ever, and consequently must be replaced before the next battle. Armies must therefore either carry very large supplies with them or make arrangements for regular replenishing from supply depots.

Battle losses, too, need slightly different treatment. The losers often had to leave a high proportion of their artillery on the field because of animal casualties, and it is worth bearing in mind that casualties caused by cavalry other than lancers have a far higher recovery rate than those inflicted by fire.

The question of prisoners, too, takes on a somewhat different aspect. If we disregard the exceptional circumstances and take the normal ones, we find that arrangements now have to be made for holding large numbers of prisoners of war under possibly hard but usually reasonable living conditions, and to exchange them either during truces or at the end of a war. No longer can they be simply sold as slaves, which both got rid of them and earned a profit as well! Financially, therefore, and supply-wise, allocations must be made for this purpose, which also means that guards must be assigned to look after them. Prisoners therefore retain a certain nuisance value.

Siege warfare has also altered to a considerable degree. However, if you are merely wishful to treat sieges as necessary nuisances - as in effect we did in the ancient rules - your problem is if anything simplified as you go on. In the day of Vauban, the great French engineer, and in later periods, siege-craft had become such a predictable thing that, given a superiority of men and siege guns for the attackers, and no interference from an opposing field army, a competent engineer could predict almost to the day when the place

would fall. He would tell you that the first parallels would be opened on such a day, the batteries would be planted so many days later, the second parallels would be ready on such a date, and a breach ready for assault later. Moreover, by this time sieges were so stylised that in ninety per cent of cases assaults were never delivered; the place automatically surrendered when the breach became practicable for assault, to save unnecessary bloodshed on both sides. It is really only when you get to the Napoleonic period that you find these rules of war set aside and a return to such scenes of carnage as Badajoz and Ciudad Rodrigo.

It is therefore a relatively simple task to set up new equations for sieges, based on the numbers of garrison and attackers, the power of the guns on either side, and the resolution of the commanders. This latter is most important; a resolute commander of the defence could greatly delay affairs by mounting constant sorties by counter-mining, and by repairing shattered defences and building new ones in their rear. Only in the most exceptional circumstances, however, could this defence be a successful one unless a relieving army arrived. Moreover, while in earlier periods a city or fortress could only be reduced by the starvation of its garrison's bellies, in this period it can also fall by starvation of its guns and muskets when supplies of ammunition run out. All these things must be taken into account when setting up your equation.

Strangely enough, in all my years of war gaming I have never been involved in a Napoleonic campaign, even as a mere subordinate commander. I can't think of another period that I haven't dabbled in at one time or another, but Napoleonic has eluded me - largely I think because for many years it was the most popular one and I avoided it from motives of inverted snobbery! The opinions I give are therefore not based on practical experience as they are in all other periods. Nevertheless the Napoleonic era, being in effect the culmination of a period of experimentation with the possibilities of smoothbore muskets and artillery, is only a logical extension of the rules which apply in the earlier horse and musket eras, so I feel that I am on relatively safe ground.

One of the most important innovations of the Napoleonic period was the introduction, in Continental countries, of the conscript army in place of the old professional one. This did not apply in England, and was probably one of the reasons for the superiority of English troops, in the main, to their continental adversaries. The English, being professionals, were better trained and disciplined, while in France at least conscripts were sent into action with a minimum of training, in some cases being barely able to load and fire their muskets. This criticism of course can not be applied too sweepingly, as many of the French regiments would contain a large percentage of veterans; but it is certainly a point to be born in mind when assessing the capabilities

of continental armies and the training periods necessary to turn recruits into soldiers.

Another point was the increasing importance of artillery under Napoleon's influence. Armies tended to include more and more guns in relation to the number of infantry and cavalry, and calibres became much more standardised - the French tending to concentrate on heavier pieces than, for instance, the British. At Waterloo much of the French field artillery was 12-pounder, while the British were only just standardising on the 9-pounder. These things should be borne in mind when setting up your armies for the opening of a campaign.

To recapitulate, therefore: campaign rules for the Horse and Musket period can effectively be built on the framework of those for earlier periods, but a good deal of adaptation is needed to allow for the development of gunpowder and more sophisticated methods of war.

9: VICTORIAN CAMPAIGNS

In this chapter we reach the beginning of the mechanised period. Not only did it see the adoption of breech-loading, rifled artillery and the repeating rifle, but, even more important, it saw the introduction of the railway engine as a means of transport From now on, speed of movement was not entirely to be expressed in terms of leg-power. Accordingly we have to consider new movement rules to express this new conception.

The railway, however, had not reached as yet the speed and efficiency it was to achieve in later periods. It had a very great influence upon the American Civil War, the first large-scale conflict in this period, but this influence could be disastrous as well as advantageous. Generals tended to become tied to railroads for supplies and reinforcements, and railroads were easily torn up and destroyed by relatively small raiding forces. On at least two occasions in the West Federal advances were brought to a complete halt because Confederate cavalry tore up the railroad tracks in their rear and deprived them of the supplies without which they could not move.

The efficiency of the railroad depended on maintenance of its track and a sufficiency of rolling stock, and this in turn called for raw materials, factories and heavy industries. It is notable that as the war progressed, the efficiency of the Southern railroads got progressively worse as they were starved of these vital adjuncts. Thus, although on the face of it, railways would increase speed of movement very greatly, when you allow for these difficulties, for time taken loading and unloading trains, breakdowns and the general fact that railroads were still in their infancy, it would seem reasonable to make the average rail speed three times that of cavalry.

Time spent on repairs to the railroad would of course depend on the type of damage done. If a raiding party, as was usual, merely tore up lengths of track, it would be a relatively simple task to replace these, providing spare rails, sleepers etc. were available. On the other hand, a railway bridge, a culvert or a tunnel blown up with high explosives would mean a very lengthy delay and the necessity for skilled engineers. The same factors apply of course to the construction of new railway lines.

It can therefore be seen that railways at this stage present as many headaches as assets. Their main value, in fact, is as a means of transferring troops from one front to another in a minimum time without wearing out men and horses by forced marches; the American Civil War gives us numerous examples of large bodies of troops being moved great distances in this way.

With the introduction of the repeating rifle half-way through this period - it was known in the American Civil War but not used in great quantities, although toward the end many Federal cavalry carried repeating carbines - problems of supply increase once again. Obviously with the abundance of firepower thus offered, the expenditure of ammunition increased by leaps and bounds, and with it the necessity to stockpile larger quantities both with the army itself and at the forward supply depots. If both sides are using the same basic equipment, as in the Civil War, these supply depots become important targets, both to deprive the enemy of needed supplies and to replenish one's own.

Sea and river transport was also in the process of transition from sail to steam, and to some extent from wooden ships to metal ones. However, all that this achieved for the moment was a means of movement against the wind or in the absence of one. Actual speed was not increased, though speed of passage might be, and to a degree this was offset by the need to give up cargo space for carrying coal, and of coaling stations to supply the necessary fuel. In general, therefore, we should regard the engines for the moment more in the nature of auxiliaries, except in river transport, where the steamboat was making a considerable impact by the time of the American Civil War. The river steamboat tended to burn wood instead of coal, and this could be cut locally without too much trouble; it therefore became a valuable transport and warship on such rivers as the Mississippi.

The American Civil War offers much scope for campaigning on either a large or small scale. On the large scale it is possible to deal with the war as a whole; ample maps and information are available on the period, and this will give scope for grand strategy in determining where best to apply your resources to the best advantage. The one real drawback is the inevitability of the whole thing: one cannot escape the conclusion that despite all bravery and skill possible, the North only needs to retain its will to fight (something a wargamer never lacks!) to eventually overcome the South by sheer weight of numbers and industrial potential. There was never any real chance that the South would win unless the North lost its nerve.

Coming down to a more local level, this disadvantage can be discarded if you choose particular campaigns to fight within the main war, or even to construct one of your own. I remember that in our early days Don Featherstone and I fought several Civil War campaigns of a local character, though I seem to remember that most of them were eventually abandoned without reaching a real decision. I know I greatly enjoyed most of these, probably because on the whole I had rather the better of them, whereas when we later switched to the Franco-Prussian War I never got to grips with the problems and suffered a series of heavy defeats - in fact I think I only won one battle, so that I

don't remember the campaign with a great deal of enthusiasm. As I was commanding the French, for once things ran true to history.

Reverting to the American Civil War, I normally commanded the Federal forces, although by preference I must admit to being a Confederate and a great admirer of Robert E. Lee. Funnily enough Don thought more of Grant (presumably because he won in the end, I can't think of any tactical reasons) so it's rather surprising that we didn't switch commands! One campaign we fought was Jackson in the Valley, and Don endeavoured to make this realistic by the device of marking on the map two Confederate armies, only one of which really existed. This was intended to reproduce the uncertainty Jackson's speed and secrecy created among the Federal commanders. Unfortunately Don didn't think up any rules which forced me to commit the errors made by the Federals, and although I never knew until actual contact which was the real army, it didn't have the desired effect of clouding my judgement. This was one of the campaigns which was abandoned, since after two battles Jackson was not in much shape to continue!

We also fought a campaign in the West with the addition of river flotillas, and I have vivid memories of a handsome victory over Don's fleet — one of the few occasions on which I shone as an admiral, my record afloat being well below average! Perhaps I'm not seasick on rivers! I also remember that campaign for an attempt to grapple with the problems of rail transport — we each had three trains available and went mad trying to work out time-tables etc.

There are of course many other wars during this period which can be reproduced as war game campaigns, though most of them have not caught the imagination to the extent which the American Civil War did. There is of course the Crimean War, the Austro-Prussian War, or the Franco-Prussian War; of the three, the Crimean possibly offers the most since it was a limited war; without too much time and effort a very good Crimean game could be set up. Both the others involve very large forces and, unless much time is available, can only be treated in a limited fashion.

However, this does not exhaust the possibilities of the period, since this was the era of Colonial Wars, which offers much scope for campaigning. The Indian Mutiny, for instance, is a natural for a campaign. I may be slightly biased, since this was the first and possibly the most enjoyable campaign I ever fought in - as mentioned earlier I commanded the mutineers with great success - but it has the advantage that forces tended to be small and strategical opportunities very wide. In our campaign we started off by dicing for all native regiments to see if they mutinied or remained loyal. Those which remained loyal were still, however, suspect, and when they first went into battle, at any one time during the action I had the right to try and

bring them over to my side by a second dice throw. This gave a great element of chance to the whole thing which distinguished it from any other campaign I have fought, except a Wars of the Roses one which included a slightly similar proviso.

There is also, of course, the Boer War, with its wide strategic scope and the use of masses of mounted infantry. Like the American Civil War; the outcome is of course inevitable, but if it was run on a time limit — i.e. the British had a limited time in which to defeat the Boers — this disadvantage could be overcome. Campaigns of this sort, however, have one inherent difficulty — wargamers, with the advantage of hindsight, don't usually commit such stupid blunders as generals of the calibre of Sir Redvers Buller did, which further reduces the chances of the Boers!

Apart from this you have the very many smaller colonial wars - Zululand, Afghanistan, the Sikhs, the Sudan, etc. Any of them can make an interesting single campaign to fill up a relatively short period of time. In most of them you have to balance a European army against native forces, less well equipped and disciplined but probably needing less in the way of supplies and often capable of faster movement than their opponents.

This is a period, moreover, in which it is Very easy to make up a semi-historical campaign or a completely fictional one. An example of the former is another campaign I fought with Don Featherstone. This was set in Southern Africa and included a Boer revolt against the British, but was slightly complicated by the inclusion of a powerful and independent Native State in the same area. We had just been doing a lot of research into the Sikh Wars, and Don had been very impressed by the Sikh heavy artillery. This Native State was thus equipped with a number of very heavy guns which made it an awkward customer. On this occasion I for once commanded the British (it made quite a change from my usual role of native chieftain) and soon got involved with this Native State. Those darned heavy guns were always an awkward thing to face with my lighter artillery - I seem to remember I complained about this and Don obligingly built in a rule which made the heavy guns capable of blowing up occasionally! - but we had a number of very enjoyable games. There were some interesting points built into the campaign - for the first time I remember civilians were brought in, for instance. These were the inhabitants of several out-stations; I couldn't just abandon them as I lost points for captured civilians, so I had to conduct a series of fighting retreats to cover them and their cattle as they moved slowly to safety. There was also a river gunboat available, which was complicated by the fact that the main river went through a tunnel which the Boers kept on trying to blow up, which made it dangerous for the gunboat to operate above the tunnel!

The other example, of a completely fictional affair, is provided by Joe Morschauser, who for years ran the Hauserian Empire in Africa. This was a native state, but equipped with a good deal of modern fire-power, which was bordered by French, German and British territory. Many wars were fought between varying alliances, as the Empire struggled to retain its territory and the European powers sought to increase theirs at its expense. One outstanding feature of these wars was that the battles were fought with 54mm figures on an immense table in Joe's basement - probably one of the last campaigns fought on this sort of scale. I also remembered being impressed by pictures of the Great Wall of Morobad, the Hauserian capital, and of Joe telling me that he had constructed it by filling children's sand castle moulds with plaster - it looked very realistic. Alas, the Hauserian Empire was at last overrun and though at one stage there was talk of impending revolt and its revival in a new campaign, I don't think it ever got off the ground.

This sort of thing, however, can be created on much the same lines as those laid down earlier for a mythical continent in former periods. Central Africa, for instance, can be taken as the basis for your map, giving you much of the geographical information you need, and you can parcel out the territory between large native states and smaller European enclaves. Much can then be achieved by diplomatic manoeuvring in setting one off against the other, the aim of course being the eventual absorption of all the native areas by the Europeans. Care should, however, be taken not to make the latter too strong initially, limiting the number of European troops and equipment, and making them rely heavily upon locally raised regiments, Kings African Rifles and the like. They should be encouraged to give support to the native states as auxiliaries rather than, at first at least, being able to openly attack the latter. This sort of set-up can provide a good deal of enjoyment for either a couple of friends or a larger group, and can last a long time if wished.

A European war of the period I have so far failed to mention is the Russo-Turkish War. This also makes for a good campaign if you give the Turks better leadership, organisation and supply services - in other words, treat them at the same value as the Russians. There are plenty of strategic opportunities, yet the campaign itself is a limited one and is therefore suitable for a relatively short-term operation.

Mention of the war, best remembered for the long defence of Plevna by Osman Pasha, the one high-quality Turkish leader, brings me to the point that this was the period in which fortifications, both field and fixed, played large parts. Sebastopol in the Crimean War, Plevna in the Russo-Turkish, Paris in the Franco-Prussian - and Metz as well - innumerable field works in the American Civil War, Ladysmith and Kimberley in the Boer War, all influenced greatly both the strategy and tactics of the times. Although it was not yet properly realised, and

would not reach its full development until our next period, the increase in rapid delivery and weight of firepower was giving the defence a very great edge over the attack under most circumstances, and this must be kept in mind in planning campaigns within this period. Fortifications of the old style were, it is true, increasingly vulnerable to modern weapons, but artillery was, as yet, incapable of seriously damaging troops concealed in well-sited, well-constructed trenches, as the British found to their cost in the Boer War. Relatively small forces could now hold ground against much larger ones for fairly long periods if they were resolutely led. Our rules for delaying actions, for instance, therefore need bringing up to date and the stopping power of the defence strengthened. Like most transitional periods, this presents certain problems in setting up a campaign, but at the same time offers a lot of opportunities and will, with the necessary research and organisation, give you considerable enjoyment.

10: WORLD WAR ONE

To my knowledge, the 1914-18 War has been sadly neglected by wargamers, both tactically and for campaign purposes. It is easy to understand why: most of us think of the Great War in the context of the stabilised Western Front, of abysmal tactical thinking, of blood-baths to gain a few miserable yards of stinking mud. This, however, is a rather short-sighted view for the wargamer.

For one thing, if you forget the Western Front you will find a number of areas where fluid campaigns were fought from time to time. The opening campaign in the West, for instance, is full of strategical and tactical interest; much of the fighting on the Russian front was of a fluid nature rather than full-scale trench warfare, partly because of the huge frontages involved and partly because there was less concentration of men and depth of defence and thus the front was easier to rupture than in the West; there was mobile war on a small scale in Africa, and, above all, there was Allenby's campaign in Palestine. Moreover, strategically even the Western Front can be converted into an interesting exercise.

Having, I hope, convinced you that the period is worth more than a cursory glance, let us now consider the changes from those preceding it. Firstly, of course, mechanisation has now reached a fairly high level, though in the actual fighting areas reliance is still to a large degree on footslogging and horsepower. Railways now deliver troops and supplies to the rear areas, light railways have some use further forward, but the lorry has yet to make any real impact. Full mobility has not yet been reached — it was, in part, the fact that the advance could only be made at foot speed, and that continuous marching gradually wore out the hard-pressed infantry, that militated against the success of the Schlieffen Plan in 1914. Rifles and artillery have reached a high level of efficiency, but they have also diversified to the extent that captured ammunition and weapons are no longer of such value to their captors; French ammunition does not fit German guns and vice-versa, so unless you captured both guns and large stocks of ammunition to fit them, they were of no value other than their loss to the enemy. Cavalry as a shock weapon have lost their value - a lesson which should have been learnt from the previous period but wasn't — but, if trained as mounted infantry instead, could still be of considerable value in fluid conditions, as the British proved in the opening campaign and in Palestine, and the Russians likewise in their Civil War.

At sea, sail has now disappeared completely, as have wooden ships, the latter replaced by armour plate, and the character of naval war has been changed completely by the mine and the torpedo. Close blockade is no longer possible, and even naval support for landings or coastal operations has to consider the menace of enemy submarines.

Even more important, a third factor has been introduced which in our final period is to complicate matters unbelievably - air power. Beginning purely as a substitute for, or extension of, cavalry reconnaissance, by the end of the war it was also to be reckoned with on the battlefield and had for the first time in a century brought the terrors of war beyond the battlefield by striking at towns miles from the fighting lines.

One inescapable conclusion is reached as soon as we start considering the impact of all this on our campaign rules. Up to now I have preached steadily the doctrine of a weekly map move in order to keep to the tempo of the times; now there is no option, even if we are contemplating only a strategical campaign, but to change over to a daily map move. Too much can now happen in the course of a day and, moreover, fighting is now constant — battles last for weeks, even months, instead of hours, and movement can be so rapid that it is no longer possible to issue positive orders for a seven-day period. The situation can change too rapidly.

This being so, we have in effect to scrap our old movement rules and draw up new ones on the basis of daily averages. The difficulty lies in deciding upon a daily average in this period, and to do so we must in fact differentiate not so much between road movement and cross country movement as we did in the old rules, but between movement behind the lines and within the fighting area. Even so, it remains a difficult question, because at different times different conditions existed. For instance, in the Retreat from Mons, the B.E.F. marched 59 miles in 60 hours on one occasion, and the advancing Germans also covered astonishing distances. These were marches entirely on foot: the men undoubtedly suffered, but after brief rests they were capable of fighting severe actions. Yet it would be wrong to say that the average daily movement for marching columns was twenty-odd miles. Similarly, during the later fighting in Flanders, at Passchendaele and such places, an approach march to reach jumping off positions of only some three or four miles might take all day and leave the troops so exhausted at the end of it that they were not fit for offensive operations.

Movement rules must therefore be much more diversified, making allowances for weather, terrain and special circumstances; this applies likewise, of course, to artillery, now once more getting cumbersome, in particular the heavy pieces so greatly needed for the Western Front battles, and, later, for tanks, whose engines were far from robust and, while quite capable of crossing trenches, tended to ditch in shell holes and stick in the mud. On the other hand, rail transport is now much more efficient, and relatively free from interruption since the front lines are no longer fluid enough for raiding forces to slip through at will, and the infant air forces are not yet capable of serious bombardment of such facilities. Moreover, repairs to

damaged lines are now routine matters, and it takes a great deal to put a railway out of commission for very long. Sea transport is also now much more rapid and cargo-carrying capacity has increased considerably with smaller and more efficient engines.

Naturally, however, the amount of supplies needed to keep an army of this period at the proper level of efficiency has mounted very considerably, and living off the country has ceased altogether unless circumstances are exceptional, such as the breakdown of organisation during the Russian Revolution. On the other hand, it is no longer really feasible to deal with supply on a monetary basis, since money has ceased to be of first importance in the short term - no country in the Great War was seriously embarrassed by financial difficulties, though the results of frantic spending were later to ruin economies.

Supply must therefore be considered on the basis of resources available: foodstuffs grown, factory capacity, availability of raw materials, skilled and unskilled labour. This presents a very serious problem, and one which can only be solved, in the time we are likely to have available, by rule of thumb methods. Arbitrary Figures can be assigned for all these items: the skill then lies in the apportionment of ones resources between the various calls upon them.

For instance, manpower: if this is limited, as in the case of Great Britain, how do you apportion it between the demands of factories, agriculture, the Army, Navy and Air Force? All are important, and at different times all will seem to be priority cases, yet you cannot rapidly shift men from one to the other without wasteful retraining. Similarly, factory production: how much of it do you allot to the production of guns, rifles, ammunition of various kinds, tanks, aircraft, shipbuilding? A factory cannot produce aircraft one day, tanks the next and ammunition on the third day; it would need retooling etc. Again, if you have to import much of your raw materials, you may have limited carrying power and have to decide whether you will allot it to items necessary for explosives, or special metals for aircraft, etc. It can easily be seen that quite a complex game could be devised, based on strategy and supply, without any actual tactical work necessary. Battles could be allocated certain proportions of men and materials, comparisons worked out and dice thrown to determine the percentage of success and failure; for a certain type of analytical mind this could prove a most interesting game.

If, however, you don't want to become too deeply involved in supply problems, but just to fight a relatively simple campaign, probably the best for your purpose would be Allenby's Palestine campaign. This has a great deal of interest and offers considerable scope for both strategy and tactics. If one starts off with the Turks holding the Gaza-Beersheba position, then the British commander has, as Allenby did, to solve the problem of avoiding costly frontal attacks

on heavily defended positions, and instead to induce his opponent to concentrate on the wrong portions of his front. Lawrence and his Arab guerillas can be included in the campaign if wished, and the small but active air forces in the area must also be considered. I have never heard of anyone reproducing this campaign, and yet it has all the ingredients of a most enjoyable operation.

Another campaign of much promise is the Dardanelles. The fact that the actual campaign was completely bungled should not be allowed to disguise the fact that the idea behind its conception was a brilliant one and that, if properly planned and executed, it could have been a great success. It offers a good deal of scope to both attacker and defender as either a straightforward naval attempt to force the Narrows, or as a combined operation involving[1] seaborne landings. While, with the equipment and methods of the time, an opposed landing was bound to be a bloody business and had few prospects of real success, the Suvla Bay landings show that it was not possible for the Turks to guard every possible landing point in real strength, which leaves the whole operation as an exercise in guessing the other's intentions. As a short-term operation, this too could be a fascinating exercise.

Moving on beyond the Great War itself, there is a certain broad attraction in some of the campaigns of the Russian Revolution, particularly those fought in the South where sweeping cavalry operations were often carried out. True, there was never a great deal of hard fighting in these actual campaigns, morale being the conclusive factor in most cases, but this need not be born too much in mind in reproducing them. The Russian campaign against Poland would also make for interest, as would the Greek attempt at the conquest of Asiatic Turkey. These can be carried out as limited operations without too much involvement in the difficulties of supply.

If we go still further forward, there is the Spanish Civil War to consider. Though it is close indeed to falling within the context of our next and final period, that of World War Two, it was still fought very largely with the method and armament of the earlier age. True, both Germany and Italy sent troops, equipment and aircraft and the Russians also supported the Government side, these auxiliaries were no more than that, the bulk of the armies being home-grown. Even the imported equipment was, by later WWII standards, out of date and soon to be obsolete. The war can be treated as a whole, or individual campaigns can be refought. Strategy is particularly important; ordinary supply problems could be largely ignored, but limits put upon the amount of foreign help so that skill was needed in deciding just where and when to employ this. As a larger canvas, this war probably offers more attractions than the Great War itself.

11: WORLD WAR TWO

World War Two, being relatively recent[5], has always drawn a large body of devotees in war gaming, and certain areas of it have already proved favourite campaigning grounds. More than any other, the Libyan campaigns have attracted attention, partly from their great fluctuations and partly from the relative ease with which the terrain can be reproduced. However, I think it is true to say that most attempts at relighting these campaigns have lacked in realism since they have made little or no attempt to include the supply problems which, to a very large extent, dictated the course of the Libyan fighting. If we examine the succession of desert campaigns, we find that each of them, until the very last, fell short of complete success because the victor ran out of steam at the crucial moment. In 1941 Wavell could have finished the desert war at a blow if he had had the troops and supplies necessary to continue his advance from Benghazi - for which, of course, the Greek adventure was partly responsible; similarly, Rommel was checked at the Egyptian border because, not expecting the success he achieved, he embarked on the offensive without sufficient resources. Auchinleck's subsequent attack again ran out of puff at Benghazi, and the suppression of Malta by the Luftwaffe at that period allowed Rommel to build up his resources as fast or faster than the British, with the result that he was capable of the riposte which carried him to the gates of Alexandria. But there once again supplies ran out; it was now the Afrika Korps which was at the end of a long and tenuous supply line, so that once again complete success eluded the victor. In the final campaign, the supply problem was licked by the British, while Malta was now sufficiently well supplied itself to seriously cut down the intake of supplies for the Germans; this, plus the landings in North Africa, prevented Rommel from ever being in a position to mount the sort of counter-attack which had defeated Wavell and Auchinleck.

The gravest difficulty, however, of reproducing World War Two campaigns seems to me to be the impossibility of really bringing large scale operations to the war game table. I have no claims to expertise on this subject as I have never seriously dabbled in it, but discussions with leading practitioners has convinced me that so far, owing to ranges, speeds and scales, the largest level at which a modern war game can be fought is probably that of a battalion with tank support, and that company level with just two or three tanks and some artillery is even better. There just isn't the room on a table to deploy an armoured division. True, the recent innovations of extremely small tanks and other pieces may have partially solved the problem, but

[5] Recent, in so much as the early wargamers had served in World War II. Editor.

even so the tactical basis of a campaign is going to be fraught with difficulty.

Many years ago, before in fact I ever took up war gaming with soldiers, I ran a semi strategical World War II campaign purely on maps, using pins to represent divisions. I worked out a dice formula for the actual battles, and by using this method I could order an offensive at a certain point, work out the points values of the troops, tanks, artillery and aircraft involved, and by a dice throw decide what had happened. Admittedly, this early campaign of mine was an extremely crude affair and, run as a solo operation, was full of considerable bias. The various nationalities of troops, for instance, were worth different points values, and I seem to remember that a British division was worth the same points value as three or four Italian ones!

Later I worked up a very large campaign game in this period but with radical changes in alliances to make it more interesting. For instance, in this concept America was allied with Italy and France plus Russia against Britain, Germany and Japan, the two main reasons being firstly that this gave a more balanced naval alignment and thus some interesting naval strategy, and that I had a lot of detailed maps of the U.S.A. which I was now able to use. I cheated rather by initially deploying the whole of a somewhat increased British Army in Canada and later adding some German divisions to give parity with the Americans and was thus able to launch an offensive into the U.S.A. Rules were kept very simple and again all tactical actions decided by dice throw but I got a lot of interest out of it until real war gaming intervened and turned my attention in other directions.

Since then I have several times toyed with the idea of starting this game all over again but with the addition of much more sophisticated rules. Basically, everything was to be worked out to a points scale. Firstly the layout potential of each country involved would be calculated. I reckoned that about 25% of the total population would be males of age suitable for either the services or for agriculture and factory production, and that another 10% would be women who could be drafted into the factories and on to the land. This would give the necessary figures for recruitment, strength of various services etc. Then each country would be assessed for production capacity i.e. factory output, in terms of points, and this total would have to be located in industrial complexes throughout the country. Raw materials would be another assessment, what was available and what had to be imported. Then all products would be rated at a points value per ton or per thousand rounds of ammunition etc.

In this way a pattern would be built up of the resource potential of each country, which could be deployed in slightly different ways at different times. For instance of your factory production capabilities you might allocate say 5000 points to aircraft production, 4000 to tanks,

6000 to artillery, 3000 to ammunition, 4000 to ship-building, making a total of 22,000. But your annual intake of raw material might only be 17,000 points and your available labour, after filling up the services, 16,000 points. So you could juggle somewhat with your production, one year making the full quota of aircraft but butting back on tanks, another year reducing each product pro rata, and so on. The time element would also be included, the various factories having monthly production figures, and time taken to build ships worked out, so that didn't for instance order 50 tanks and a couple of battle ships one day and have them in action the next.

I also planned to work out rough estimates of carrying capacities for railways, mercantile marine etc, and to calculate average expenditures of ammunition etc. in battle. Then, when a battle began, I would work out an equation for terrain, points values of troops and equipment, amounts of ammunition available etc. and from this plus dice throws get the results of the fighting. Similarly, the air forces and naval operations would be worked out on paper — while I firmly believe that modern naval actions cannot be reproduced on a table, or even with complete realism on the average living room floor - and who can afford to regularly hire a hall for the purpose? — I do feel that such a battle could be worked out very realistically by plotting movements etc. on paper. For the air forces, their points value would be included in with everything else for tactical purposes, while they could also be used for strategic attacks on targets such as factories, railway complexes etc.

Obviously, to do this properly would mean an immense amount of work to set the whole thing up initially - presuming of course that it was to be done on a world wide scale; and one of my besetting sins is that I tend to go overboard on things and do them lavishly rather than on a small scale. Once the initial work was done, the actual campaigning could be done in an unhurried fashion, using only whatever time was freely available. So far, I have never had the opportunity to really make a start on the scheme at all whenever I have some time potentially available someone seems to set me off on another project, like writing this book, for instance! However, one of these days I'll get around to it -after all, its only another nineteen years till I'm due to retire!

The attraction, of course of doing a campaign, or rather a whole war, on this basis is that when you have all your various resources plotted as to area etc, you have in effect set up strategic targets which will effect the course of the campaigns. When an invasion takes place, the over-running of an area that contains an industrial complex will lessen the production resources of that country and in turn will affect its ability to wage war. This in turn sets a pretty problem to whoever is first engaged in apportioning the production resources - do you for instance concentrate all your aircraft production in one area for ease of various

problems, and take the risk of losing it all if the area is over-run, or heavily bombed, or do you scatter everything around the whole country in penny packets. An interesting decision to make when you think of the various factors to be taken into consideration.

I have often thought, also, that another interesting game could be worked out on the basis of strategic bombardment from the air. I think it would almost inevitably need three people, i.e. an attacker, defender and umpire, although it is possible that a variation of the matchbox system described elsewhere could be used successfully with just the two players. The defender would have his country set up with the various strategic objectives such as important factories, shipyards etc. He would be supplied with certain quantities of anti-aircraft guns, radar stations, searchlights and such defensive equipment which he must position to cover these objectives and the routes to them, plus aerodromes and squadrons of fighter aircraft.

The attacker would have knowledge of where the principal objectives were, but not of course, initially at least, of the positioning of the defences and the fighters. He would have his squadrons of bombers, and, depending on distances and whether it was a question of day or night attack, escorting fighters. He would then launch his raid or raids, and the umpire would plot its track, giving the defender such information as became available to him from his radar stations, tracking positions etc. so that he could alert his defences and get his fighters airborne. Losses from anti-aircraft fire could be determined by a simple equation of density of fire, number of aircraft etc. plus a dice throw; actual contacts between the attackers and defending fighters could be worked on the same method or by one of the several tactical games which exist. If the bombers got through to their target, then bomb damage again would be assessed by use of a chart and dice.

Winning or losing the campaign could be decided by a variety of methods, depending upon the type of campaign envisaged. Victory might mean the crushing of the defensive power of one side by the elimination of its fighters, or the attacking side losing too high a proportion of its bombers; or it could mean a points total of damage done to the enemy less damage suffered oneself. It could be complicated by making the damage to factories reflect on the availability of replacements for lost aircraft, or by both sides possessing bomber forces and suitable targets for them. The possibilities are very numerous and the work involved needn't be too strenuous.

One thing about this period is that there is certainly no lack of information available on every aspect of the war. Not only are there dozens of books on each and every campaign from a purely military point of view, but every item of equipment, each tank, aircraft and warship type has been the subject of reams of paper. Statistics are

available on war production of almost every type, on the effects of bomb damage on industry, on the use of available manpower in both industry and the armed services — the researcher can quite easily find all his heart desires. In fact, it is of course this plethora of information which tends to complicate the period from a campaign point of view; the endeavours to make use of it all lead to more and more complications in the rules and the keeping of more and more records. Essentially this is a period of paperwork, and if you wish to avoid the latter then you might well be best advised to switch your attention to an earlier period when life was less hurried.

On the other hand, the modern period — as one still tends to call it, though it is now over twenty years in the past and far outdated by later developments — offers certain attractions in the wideness of its canvas and the scope of strategical and logistical accomplishment. For anyone who likes to play with statistical figures it is of course the ideal period.

So far no mention has been made of more up to date events such as the various wars of one kind and another which have been fought since the close of World War Two. These have all been limited type conflicts Korea, Vietnam, the guerrilla operations in Malaya etc. — and have been fought very largely with just more sophisticated versions of World War Two equipment. Korea offers the same disadvantages from the tactical point of view as any World War Two campaign - the difficulty of reproducing action on the war game table. As a strategical campaign it offers rather more attraction, with its emphasis on naval co-operation and the fact that neither side in effect attacks the other's sources of supply - the North Koreans and Chinese because they were unable to, the Americans because they did not dare risk the escalation of the war by operating north of the Yalu. The war is therefore fought in a sort of vacuum.

The French struggle for control of Indo-China and the subsequent Vietnam wars are of a different pattern. Though there were of course occasional large-scale actions - Dien Bien Phu and the like — the war is largely a guerrilla one and therefore of a very different pattern than the normal war game campaign. The same can be said of the Malayan war against the terrorists, which was even more of a police action. This could no doubt be reproduced for the purposes of a campaign, but is possibly a little outside the scope of this volume, since guerilla activity really needs a book of its own — and several such exist.

Again, the struggle in the Middle East between Israel and the Arabs offers a certain scope as another example of a limited style war, but the opponents were of such different calibre that a realistic re-enactment of it gives little chance to whoever plays the Arabs. Skill and morale were far more important than equipment, and this is always

harder to legislate for in a campaign than anything else. One would presumably need to establish reaction tests of a very different standard for the two sides!

All in all, therefore, to sum it up would seem that this period has a good deal to offer strategically and to the analytical mind, but not so much for the war gamer who prefers his campaigns to be simpler and more free and easy. Possibly the very fact that war gaming is itself in a way an escape from realism, from the stresses and strains of modern life into a world of the past or of fantasy, militates to a degree against the period with its semi-modern complications. Who knows - in fifty or a hundred years time, when it is completely out of date, it may be as attractive to the war gamers of the time (and they will exist, never doubt it) as the Ancient and Napoleonic periods are today.

12: MINI CAMPAIGNS

In all the preceding chapters we have discussed ways and means of running relatively complicated campaigns which involve a good deal of paperwork and much calculation of movement rates, all of which tends to take up time. There are, however, other ways in which battles can be linked together so that their results will influence future actions; these are suitable both for those who wish to start off campaigning in a simple fashion and for those who do not wish to devote excess time to map movement and prefer getting on with the actual battles. They are also usfull as "fillers" between more important campaigns, when you start to have a quick means of laying on battles for a few weeks while a main campaign is in progress, or as auxiliaries to a bigger campaign you are involved in. I have regularly used these both in between campaigns in Hyboria and lately as a sort of local campaign to fill in the periods when Hyborian battles weren't available, and they can, if properly thought out, provide just as much fun as a full-scale campaign, with often just as much scope for strategical and tactical skill.

One of the first affairs of this sort which I ran was an attempt to get all the local players involved. There were at that time six of us, and we tended to fight fairly regularly either at my house or Don's, but usually in two's or three's. For this particular effort we split into two teams of three. Each team was given a complete army, both being of the same total strength and composition, which it had to split up into three corps commanded by the three players. Maximum and minimum numbers were laid down for a corps, but within these limits you could juggle around somewhat. The team also decided on an order of play, i.e. who commanded the leading corps etc. A battlefield had been mapped out in advance and both sides had copies of it. After these arrangements had been made, the two leading corps commanders fought the first battle with their corps, fighting for the space of an evening. Positions at the end of that time were marked on the map, and notes made of what troops were left in action. (Of course, if I'd had a permanent table it would have been much simpler, because I could have just left the troops in position).

On the second evening, the survivors of the first corps were put back in position, and the second corps of each side, with its commander, arrived on the base-line. Again fighting lasted all evening, positions were marked, casualties noted etc. On the third evening the last corps of each side arrived and the action was carried to a final conclusion with all 6 players present.

This sounds, of course, a very simple and ordinary affair, and certainly from the point of view of work involved this is so; but, especially if your players are not all of the same experience and

calibre, it can pose some very interesting questions of procedure. In this case, for instance, Don and I were very much more experienced than the other four players, and it was therefore a matter of importance at which stage of the battle we were committed. Again, was it best to commit a large corps in the opening action in the hope of gaining an early success and a commanding position, or to hold your largest corps back and fight defensively in the initial stages? As it happened, Don's team chose to divide their troops fairly equally but to commit Don first in the hope of gaining an advantage; my team put in our second string as opening commander with an under-strength corps to fight a purely defensive action, while I went in second with a large corps. As it happened this paid off, largely because our second string put up a great resistance and held Don quite successfully; I was thus enabled to go for the kill in round two against a weaker opponent and put our team in an almost unchallengeable position for round three.

There are of course several variations of this mini-campaign. You can fight all three corps battles separately on different fields, and either award points for win, lose or draw, or carry forward the survivors to a final battle with everyone involved. Or again, you can use the method Don once adopted for the Battle of Spicheren, which was fought in the Franco-Prussian period after we had finished the main campaign. He drew up a detailed map of the battle-ground, and split it into three corps areas; we then assigned corps to the areas, and fought three separate battles between them. Winning corps had the alternative of moving forward or swinging in on the flank of another area; losing corps had to retire. A final battle was then scheduled. The main disadvantage of this sort of thing is that if one player wins too decisively in two of the three initial battles, there is not much point in fighting the final one.

Moving on from this, my next effort was to try a slightly wider range historical affair, by doing a mini-campaign on the Wars of the Roses. For this, I selected a number of battlefields of the period and assigned to them armies of the relative size and composition as the historical ones. I also, as mentioned earlier, brought in a chance element by having a wing commander from each side who was not totally reliable - one was the Duke of Clarence, I can't remember who the other was. Clarence sticks in my mind because he defected from my Yorkists at a crucial moment with disastrous affect! We fought each of these battles on a points system, and what was left from each of the armies involved then gathered on Barnet Field for the final. In those days we tended to fight battles much more to the bitter end than in these enlightened times, so the survivors of six armies barely made up one reasonably sized one! This was quite an interesting little campaign which involved almost no paper work.

Another very simple campaign I indulged in was a semi-postal affair conducted between myself and Joe Morschauser of New York.

Joe obtained for us some fairly detailed maps of the Lake Champlain area and we set up a war between the two countries of Boozonia and Gluttonia in the Valley of Cheese. (We had a lot of fun naming army commanders and towns but this was all part of a regular weekly correspondence between us and was not an essential part of the campaign). We each had 6 town depots, each with an army of fixed size, and we moved these around the map on the available roads in 10 mile moves, advising each other of our moves by post. When two armies contacted each other, we took it in turns to fight the battle and advise the other of the result. Obviously this had to be a case of complete trust as it would be easy to falsify results if either of us wished to cheat. A winning army remained at full strength, the losing one was cut to half. You were not allowed to bring overwhelming force to bear by concentrating two armies against one; two defeated armies could be joined together to make one whole one. The objective was, of course, to capture the enemy depots while holding your own.

Though this campaign was very limited in simple map movement and the rule against two to one, it did give scope for a good deal of strategical thought in manoeuvring to protect your depots and threaten your opponents, when to take the offensive and when be defensive, etc. It also had the big advantage that the person fighting the battle could do so in any way or period he wished as long as both sides had an equal chance of winning or losing, since it made no difference at all if one battle was fought with ancients, another with Napoleonic and a third with American Civil War troops; the result was all that counted.

Talking of mixing the periods reminds me of something Don Featherstone and I tried in this manner -its possibly digressing from the subject a little, but it may well be of interest. As I've mentioned before Don collected predominantly horse and musket armies, while I concentrated on ancient and medieaval, and we fought with each other's troops on alternate weeks. We came up with the idea of using my map of Middle Earth from Tolkien's Lord of the Rings series as a sort of undiscovered continent, still in ancient/mediaeval stage, which was suddenly found by an American expedition of Civil War vintage. We worked out some tactical rules in which siege engines became something of the equivalent of artillery, the Americans had the advantage in long range firepower but my troops had a similar advantage at close quarters from their superior protection and better hand to hand weapons. Movement was very simple: Don selected a landing point and said he'd invade there, I brought my army to meet him. It was all very amusing and enjoyable except for the fact that after two attempts the modern invaders hadn't succeeded in establishing themselves ashore, having been driven back to their ships on both occasions! In an attempt to get the campaign going better I finally allowed Don an unopposed landing but nevertheless the campaign ended in the complete repulse of the invasion. I have a sneaking feeling that the rules distinctly favoured my side!

About this time two factors influenced my campaign thinking. One was the discovery of two large wall maps printed for schools by George Philip and Co. - one of Ancient Egypt and the Sinai Peninsula, the other of Biblical Palestine. They were quite cheap and gave a good deal of historical detail and I quickly obtained a copy of each. The other was the fact that I had just started the Society of Ancients and I was getting a series of weekend visitors, each of whom of course wanted to fight a battle. Willing as I was, I had reached the stage that single battles no longer had such an attraction for me, so I wanted some sort of system under which these visiting firemen could play a part in the larger canvas.

The idea I came up with was very simple. First of all I linked up the cities by a series of roads which, at six points, ran off the edge of the map. These were known as entry points. Two of them were allocated to each of the three local players who would regularly take part in the campaign, and each player was allocated two armies per entry point. All armies were of a regulation size, based on the points chart I was then using, but could be of different composition according to the player's individual choice. Each player then moved in turn. A move was the distance by road between two towns, regardless of distance - you couldn't move across country, so you could only get directly from one town to another if there was a connecting road. An attack move was made by moving an army from the entry point to the next town along the road, which would have a defending army, and a battle would be fought. If the attacker won, the defending army was eliminated and he occupied the town; if he lost, his own army was eliminated. He then made another attack move, either by moving his victorious army forward to the next town, or by moving on a different route. Having completed his three attack moves, he then drew a fresh army for each victory he had achieved. The fresh armies appeared at the entry points, and the march move could then be moved to advance one stage along the route to the front.

To add to the interest I then added certain other features. Firstly I took advantage of the possession of large numbers of troops of greatly varying kinds to work out a list of 31 armies, all of the same points value but differing in some detail from each of the others. Some might contain camels, others elephants, others chariots; some had all missile troops, others no missile troops; some were nicely balanced, others hideously uneven. Then, when a neutral town was attacked by one of the players, a card was drawn to see which type of army it possessed. This gave the attraction that you never know what type of army you had to face, and it was very rare for two identical armies to face each other. It could, of course, lead to the occasional completely one-sided battle, if, for instance, a light all-missile army faced a heavy non-missile one; but a basic rule for these battles laid down that the defender, to avoid defeat, must maintain his communications with his

city - so that a defender with a light missile army couldn't manoeuvre at will all over the board, and the heavy attacker had a chance of bulling through by sheer brute force.

The other additional item was a choice of terrain and situation. To start with I worked out 11 basic terrain types, as follows, numbered 2 to 12:

2. Plain with river(s)
3. Plain with village
4. Wooded Plain
5. Hilly Country
6. Hills with river
7. Hills with woods
8. Hills with village
9. Heavy Forest
10. Open Plain
11. Forest and River
12. Mountains and river

Two dice were then thrown to determine the basic terrain type when a battle was fought, and a terrain to fit this type was set out.

Eight different situations were then worked out, as given below:

1. Defender's whole army already in position
2. Part of defender's army already in position
3. Attacker's army already in position
4. Part of attacker's army already in position
5. Both armies in process of arriving
6. Both armies concentrated on base-line
7. Part of defence army making flank march
8. Part of attacker's army making flank march

In the case of (1) or (3) a dice was thrown to decide how long the position had been occupied. If a 5 or 6 were rolled, it had been occupied long enough for it to be strengthened by barricades if wished. This would of course depend on the terrain type and whether the commander intended to fight a defensive or offensive action.

In the case of situations (1) to (4), the army or part of an army may occupy any part of the table it chooses. It may be assumed that terrains (5) to (8) will all offer defensive positions of some sort, and that terrains (9), (11) and (12) will offer strong defensive positions, while the remaining terrains will be less advantageous from this point of view.

In the case of situations (2) or (4) the side with only part of its army in position may decide how this part is composed, up to 50% of its strength in points. A dice will then be thrown to see how many moves elapse before the rest of the army reaches the base-line. The

opponent will not know the result of this throw, but it must be written down together with the point on the base-line at which the rest of the army will appear.

In the case of situation (5), both sides will divide their armies into van, centre and rear. At the outset only vanguards will be on the base-line; centre will appear at the beginning of move 3, rearguard at the beginning of move 5. Place of entry must be decided in advance, but that of the rearguard can be different from that of the centre if wished. Proportions should be roughly 25%, 50%, 25%.

In the case of situation (6) both sides will start as usual from their respective base-lines.

In the case of situation (7) or (8) the army not undertaking the flank march is assumed to be already in position in its own half of the table. The army making the flank march then dices to determine on which move the detachment (which may not be stronger than 40% of the whole) will arrive at whichever point is selected for its entry. This point will be selected at the start of the battle and stated in writing; if at any time it is wished to change this point, the player must throw a 5 or 6 in the presence of his opponent, and can then alter the point by 12" without penalty; if he wishes to alter it more than 12" he must delay entry by one move. Such alterations must be logical - i.e. a detachment sent off to march round the enemy's right flank must appear somewhere in that area, and not on his left flank! If the entry point is within 9" of enemy troops who are facing in that direction, they must be informed of the presence of the flanking force before the move commences on which such force moves on to the table.

In the case of situations (1) and (3) the army not in position may elect to try a flank march of its own. In that case the same procedure is adopted as in (7) or (8), but 6 is added to the dice throw; thus the flanking force cannot arrive before Move 7 at the earliest and it may not appear on the enemy's rear before Move 10. If its appearance is on Move 7, 8 or 9 it must be on a flank. If the enemy's flank is more than 24" from the base-line (or side-line, rather) then the flanking force can be placed on the table further in rather than on the side-line to be within 24" of the enemy.

At any time prior to the actual commencement of battle the attacker may decide that his chances are not good enough. If he has an attack move still in hand, he can elect to manoeuvre the enemy out of his position. In that case, the current attack is abandoned, and a fresh draw is made for terrain and position. It is assumed that the attacker has moved round the first position, and the luck of the draw of course decides whether the attacker or defender does better out of the manoevure.

When once a battle is commenced, the line of retreat of the defence army is important. It will be laid down beforehand and may consist of up to two roads, tracks, or points. If all these lines of retreat are blocked by the attackers, any stalemate will give victory to them since the defender's troops are unable to regain the city, which can be occupied unopposed.

This thus formed a very simple little campaign from the point of view of paperwork involved, but it called for a good deal of strategical thought: which way to turn at a road junction, where to commit your new armies; whether to press on with a victorious army or halt it for reserves to come up. Also, sooner or later your line of advance is going to intersect that of one of the other players, so you have to bear this in mind. The big advantage, however, from my point of view was that a visiting general could now be simply asked to take command of a defence army, and the resulting battle helped the campaign along, as well as providing some variety. Normally, of course, one of the other two local players would take the defence.

Some while after this I was unwise enough to bring up the subject of war gaming at my office, and before I knew what hit me I had three new recruits who were soon hotly engaged in regular visits to my house. As at this time I was engaged not only in a Hyborian campaign, a Colonial campaign at Don's, in two postal campaigns and editing "Slingshot", the regular magazine of the Society of Ancients, I certainly didn't feel like getting involved in another full-scale campaign; but here were these three enthusiasts demanding some sort of campaign to fight. Our first campaign was a very simple mediaeval affair, in which we all started off with a certain number of points we could invest in troops. We then took it in turns to draw up terrains and situations, and on the night of the battle we drew cards to see which quarter of the table we took. Everyone was then free to fight anyone else for a certain number of moves; at the end of this time points were awarded for territory held, special features, and troops left, and these could be invested in more troops. This was enjoyable enough but it developed into a tendency to ganging up on one person.

In any case, my friends were now ready to try ancient troops as a change from mediaeval, so I devised a new simple campaign, again making use of the Biblical map of Palestine. On this were selected thirty six towns, and we drew to see which nine each of us possessed at the opening of the campaign. One of the nine was selected as a base town. Each participant started with 1,250 points. From this he had to provide a field army of 200 points and garrisons for his eight other towns. These had to be a minimum of 20 points or a maximum of 200. All the 1,250 points had to be selected at the outset, and certain types of troops, such as cataphract cavalry, cavalry with composite bow, elephants etc. were limited to certain maximums, both as to total selection and maximum in one field army.

Each player also had an initial treasury of 1,000 crowns. Each of the towns was allocated a certain type of terrain on each side it could be attacked from. This, as in the former town campaign, was a general description but helped to give some idea of what garrison to put in it or what troops to attack it with; obviously if it was heavily forested you didn't garrison the town with heavy cavalry and elephants!

At the outset the field army was placed in the base town, and we then drew for order of movement, each of us making a move in turn. This order was then permanent.

The first player then made his move. As before, a move consisted of the movement of either a field army or a garrison between two neighbouring towns. He could thus move his field army from the base up to the next town along the road; if this was already in his hands, nothing else happened. If it was held by one of the others, then he attacked it with his field army. Alternatively, he could use the garrison of one of his advanced towns to attack a neighbouring town belonging to another player. Since the draw had scattered towns fairly widely between us, both the initial deployment and subsequent movement called for a certain amount of strategical thought!

When an attack was made, the battle was fought outside the town on the specified type of terrain. The defenders would be the town garrison. This, of course, so far only involved two players. But each of these was now entitled to hire a mercenary company from one of the remaining two players, the attacker having first choice. Each player at the outset was allocated three different companies; only six were actually available, each one being allocated to two different players. Each company was 150 points strong, and it cost 150 points to hire, this hire fee being paid to the player it was hired from, who now commanded it in the battle as lieutenant to the player hiring him. Thus all four players took part, but the two mercenary commanders had no axe to grind, since casualties in their companies were automatically replaced; they could therefore concentrate on simply enjoying the battle.

Each side could thus have a maximum of 350 points engaged in the battle. If, however, the city garrison was 50 points or less, even with the support of mercenaries it would be too weak to fight successfully: a card was therefore drawn from an ordinary pack. If a Heart turned up, the town surrendered and the garrison was taken over by the attacker.

If it was a Club, the town again surrendered but the garrison was disbanded. If a Diamond, then the town could hold out for a complete map turn in the hope its owner might get reinforcements to the scene. Finally a Spade entitled it to hold out for two map turns.

If the defence force could make up a total of 220 to 300 points, the defender drew the terrain map and would be entitled to a reasonable defensive position which he could occupy at the outset. Otherwise he still drew the map but the attacker could object if he thought it was unfair, in which case the other two adjudicated. The map always had to show the line of retreat to the city under attack.

If the result of the battle was still in doubt when time was called, victory would go to the side holding the most ground if they had started equal, otherwise to the side which had lost fewest casualties. In point of fact I don't remember us ever having to use this rule, because my three friends were all late retirers who were quite happy to go on fighting till two o'clock in the morning - a not uncommon occurrence!

The loser of the battle lost 50% of his actual casualties, the winner 25% of his. Mercenaries were not of course included in the casualty count. If the attacker lost, he fell back to his starting point. If the defender lost, but was still in contact with his city, he fell back into it, and then withdrew to the next city if that was friendly. If he had no other city to retreat to, the garrison was disbanded. If, however, the defeated defender had lost contact with his city, he lost all his casualties, not just 50%, and the survivors were taken over by the victor.

If the attacker was the winner he of course occupied the city, and in addition received a bonus of 200 crowns. When each of the four players had made his map move, each could use his reserve funds to recruit fresh troops, paying 1 crown per point. All such fresh troops had to enter at the base town and could only be moved up from it by the usual movement.

This in fact made a very successful and enjoyable campaign. First of all there was not much to do in the way of record-keeping after the initial work, and the actual map moving took a few minutes after the end of each battle. Each of us kept his own individual record of troops, losses etc. Next, a good deal of skill came into the initial choice of troops, the disposition of the garrisons and armies according to the terrain types and one's preconceived strategy. Then, when either attacking or defending, there was a certain skill in selecting which mercenary company and which other player to have on your side - particularly as abilities varied somewhat! For instance, the other three considered me to be some way above them in ability (it was really more a matter of longer experience) so it was a good thing to get my services - but none of my three companies might be the sort of troops either to fit the terrain or to fit in with the troops already in hand. So it was a matter of juggling the advantages and disadvantages.

Similarly, since mercenary troops didn't have to be accounted for, one could afford to be much more reckless with them than with one's regulars. It was notable that not only did the attacker or defender attempt to fight the battle as much as possible with his mercenaries while trying to do as much damage as possible to his opponent's regulars, but that the mercenary commanders tended to jump in with both feet and thoroughly enjoy themselves.

Mind you, as usual things didn't go quite as planned. For instance, we had laid down at the start that there were to be no alliances; at once, everybody got around this to a certain extent by making non-aggression pacts in certain areas, and also there was a certain swopping of indefensible cities in order to strengthen one's general position. Before long a pattern emerged, however, and we all got one area of the map under control. A number of most interesting battles were fought; I always enjoyed being a mercenary without any responsibility and indulged myself in escapades I wouldn't have dreamed of risking with my own troops!

More recently I again needed a simple campaign to cover the regular Saturday meetings of three people. I had recently inherited a very nice map of a mythical continent which someone had started and then abandoned, so this provided the geography. It was divided into 39 provinces, and as in the previous campaign the three of us drew for possession of them, with the result that our possessions were fairly well scattered across the map. Each province initially produced an army of 350 points, and in addition each player was given three spare armies of the same value. I should make it clear that here I am talking about my own points system and not that used in Research Group rules, which is entirely different.

For these 16 armies I drew up a list of the following nationalities, each with its composition of 350 points: Mongols, Egyptians, Assyrians, Goths, Saracens, Carthaginians, Persians, Barbarians, Romans and Greeks. In fact except for the first four, which were single armies, the other nationalities were each given 700 points which had to be split into two separate 350 point armies at the discretion of the individual player. Each player now had to place one army in each of his provinces, and could place his three spares wherever he desired in his dominions. Numbered and coloured pins were used for this, red, blue and yellow for the three players, and thus it was easy to see from a glance at the map the general distribution of forces. Of course, no-one knew which type of army his opponent's pins represented until he actually encountered one; and as the campaign progressed a pin didn't necessarily mean a straight 350 points as armies had casualties or reinforcements.

We then tossed for sequence of moves. The first player then made his attack move, which meant that he moved one of his armies

into a province belonging to another player. As before, a move was the distance between cities by road, and it was also possible to move by sea providing the distance was not more than 12 hexagons. As most provinces contained more than one city, invading a province did not automatically mean contact with a defending army at once; if a province was isolated from the main bulk of one's possessions, or contained what one considered to be an inferior type army (no-one fancied the chances of the Egyptian army, and the barbarians weren't too popular) you put the army in a town not directly linked to an enemy town if you could, and thus delayed any contact with an invading force.

Normally the attacker would only move one army; but provision was made that if he could attack a province from more than one direction he might do so. As the campaign progressed this became more common.

When two armies met outside a city there was of course a battle unless the disparity in numbers was too great - in which case the weaker side retired if it had anywhere to retire to. If the defender lost the city automatically fell, and the defender retired to the next friendly city, presuming there was one. The attacker, if he lost, retired as before to his starting point. The loser of the battle lost all his casualties, the winner only one-third of his.

In order to avoid battles being carried on past a certain point, once an army was reduced below 50% bf its strength a dice was thrown; if it turned up 4, 5 or 6 the army could fight on, but otherwise must retire. If it went on fighting, a dice was thrown again when losses reached two-thirds, when a 6 was needed.

After the attack, the attacking player was entitled to move one more army, providing that in doing so it didn't come into contact with the enemy. This was known as a free move.

At the close of a round - i.e. when all three players had made their attack moves - each player received replacements of 350 points which he could deploy in any of his provinces except any which were in dispute - i.e. had been invaded by an enemy. In addition, for each battle he had won during the current turn he received an extra 100 points. These fresh troops could be made up entirely as the player desired, and need not be disclosed until they came into action. In fact, after about six complete rounds we cut out the 350 points, since armies were getting too numerous, and reduced the bonus to 50, so that the numbers of troops in the continent gradually began to decrease.

Any troops caught without any line of retreat to friendly territory and thus forced to surrender were incorporated in the army of their captor.

This system gave us an easy and quick means of running an enjoyable campaign. Each of us had to work out the initial disposition of his armies and set up a suitable record; after that it was merely a question of writing off casualties and adding reinforcements, a matter of a few moments. An attack move took five minutes after the end of the current battle: both sides then disclosed the make-up of their armies, and the third player, who attended the battles to act as umpire in case of need - very rare — and to make snide remarks upon the generalship of both the other players and give unwanted, irrelevant and usually bad advice, besides cracking corny jokes (the oldest and most favourite being, as one side put his archers in a wood, to inform him that the local name for the place was the Wood of Dead Archers), was entrusted with drawing a terrain map for the coming battle, on the grounds that he would be unbiased, or hostile to both sides!

In all the battles fought, I don't remember a single encounter in which armies of similar nationalities clashed, let alone armies of similar composition. Thus every battle was a fresh one, and in most of them you had to think out fresh tactics to deal with the new foe you faced. Personal idiosyncrasies soon became established: I am of course well known for my love of elephants, while one of the others became equally addicted to javelin cavalry, which one personally despised - though I had to admit that they were pretty formidable under his leadership. A strong controversy grew up over the correct method of dealing with cataphract cavalry, which under my rules are deadly fellows. It was agreed that elephants made a good counter to them, but there was much argument over the effectiveness of Macedonian pike columns against them - I fielded pikes very successfully against cataphracts on one occasion, but when one of the others tried the same thing a couple of weeks later his pikes got terribly cut up, so the controversy continued!

The several methods I have discussed of course by no means exhaust the possibilities of mini-campaigns, and have merely been included in the hope that they will direct your minds into the right paths if you want to regularise your battles into a campaign of sorts without going into too much detail. Many more ideas will no doubt occur to you if you put your minds to it. Amusing as these limited campaigns are, it is to be hoped that they will act in the main either to fill in time between larger and more detailed campaigns or to wet your appetite for better things. After all, if our object in war gaming is to reproduce historical realism in any detail, and to match our skills with the generals of the past, we must set ourselves more detailed problems than can be found on the average battle-field; and the only way in which this can be done is to engage in campaigns which will test our resources in both strategy and administration. Only in this way can we reap the full benefits of our hobby.

13: NAVAL CAMPAIGNS

Although sea transport has been touched upon in the preceding chapters, it has only been as a subsidiary to the main land campaigns. For a war gamer whose principal interest lies in naval affairs, however, purely naval campaigns can be conducted in much the same way as continental ones. At first sight it might appear that naval warfare, with its greater fluidity, lack of rigid frontiers etc, is not so suitable to campaigning, but a closer study will show that this is not so. Naval battles throughout history have been fought within the context of campaigns more often than as unrelated actions. Moreover, fleets need bases and supplies just as much, and often more, than do armies - while an army can often live off the land, this is only possible for a fleet if it is tightly tied to a coastline which presents ample harbours. In very few wars, therefore, has it been a simple matter of two opposing fleets merely sailing out to meet each other and fight; always there have been the considerations of supply and strategy; the desire to protect one's own shores and commerce while damaging those of the enemy. Often, of course, such protection or damage is actually carried out by light craft of various types; but even so, this can only be done under the shield of the main fleet which prevents enemy heavy ships from interfering. This factor did not change radically until the introduction of the submarine and the aircraft carrier — although privateers in both the Napoleonic wars and the War of 1812 could damage British commerce, in the absence of an effective fleet of heavy ships they were unable to strangle it in the manner in which the Royal Navy strangled the commerce of its opponents.

If we start in ancient times, we find ample scope for either purely naval or amphibious campaigns in the Mediterranean in Greek and Roman times. The Greek war galley carried its complement of marines, so that a Greek fleet had a built in expeditionary force even if it was not accompanied by actual troops, and could easily engage in land warfare of a limited nature. The disadvantage of the times lay in the fact that the galley, quite apart from its low freeboard which made it vulnerable to bad weather, was not designed for living in; nights were usually spent with the crew ashore and the ship beached in a suitable cove, and the amount of rations and water carried aboard was very limited. This had two important effects: by and large fleets or squadrons were tied to the coast, tending to reach their destination by coastal routes rather than taking a direct line from point to point - and this in turn led to a certain cramping of strategy, since admirals had no real room for strategical manoeuvre. You always had a pretty fair idea of which route your opponent would take, and where you were likely to find him. Though the possession of a fleet greatly increased your mobility, it didn't necessarily widen your sphere of operations to any great extent.

This disadvantage, of course, would not be so apparent in a campaign fought largely in the Aegean, where islands are very often within sight of each other, and thus a certain freedom of choice is available. As long as islands were within a day's sail of two or more others, a far greater strategic freedom was given, since choice of routes was more varied and it was no longer so certain that opposing fleets would follow the same course, or head for the same objective.

A very good campaign could be worked up, for instance, on the basis of the revolt of the Greek Ionian cities against the Persian Empire - a revolt which, in the final analysis, might well have succeeded but for the fatal inability of Greek cities to work together in an atmosphere of mutual trust; a point which could be worked into the campaign rules.

Most of the other campaigns of the Greek period were, naval-wise, largely auxiliary to the main land fighting, but several interesting amphibious operations were carried out. The Athenian expedition to Syracuse, for instance, would certainly make a valuable limited campaign, and later operations in the Peloponnesian War around the Dardanelles are also worthy of consideration.

Moving on to Roman times, we find that the backbone of the fleet has now become the larger quadrireme and quinquereme, and that fleets are no longer quite so restricted in their operations. Both Rome and Carthage had little hesitation in despatching fleets on the direct run from Africa to Sicily — admittedly not a voyage of great duration, but nevertheless out of sight of land for days - and that, though the Romans lost more than one fleet to storms, they were not lost in mid-ocean but by being driven ashore on the rocks - the indication being, therefore, that it was in fact probably safer to stand further out to sea than to risk being caught on a lee shore by a storm. This is born out by the fact that most writers now attribute the collapse of Cretan seapower in an earlier period to the fact that when earthquakes and volcanic eruption devastated Crete most of the Cretan fleet was either in harbour or offshore and so wrecked, while the fleet of the mainland Greeks was at sea and survived, despite the tidal wave raised by the disturbances.

In fact, during the Punic Wars both sides failed to make full use of their fleets, the Romans because they were not basically a seafaring people, the Carthaginians from lack of an enterprising central control of the war effort. Had they produced an admiral of the same calibre as Hannibal displayed on land, it could have made a vast difference to the result of either war. Instead, it would seem that Carthaginian admirals allowed themselves to be hypnotised by the Roman introduction of the corvus. Nevertheless, a little departure from strict historical reality can produce some basically interesting campaigns throughout Roman armies.

Remaining in the Mediterranean and with the galley as the main warship, much can be done both with rivalries between Italian cities such as Genoa and Venice, and larger scale operations between the Barbary States and Spain and later between the main Turkish fleet and those of the Christian states. The campaign of Lepanto in which the combined Christian fleets under Don John of Austria broke the power of the Turkish navy for all time can be merely the climax of a series of campaigns throughout the Mediterranean and including several amphibious operations.

The 17th Century Wars between England and Holland give us an example of a purely naval war. Neither side made any attempt to invade the other — it is doubtful whether either could have found the troops even if undisputed sea supremacy could have been achieved for long enough — and the war was fought almost entirely for commercial reasons, the control of the ocean trade routes. Main objectives were not only the destruction of the enemy fleet but the interception of his inward and outward bound trade - in which England's geographical position should have given her a decided advantage. In the result, naval strategy was not yet far enough developed for her to take full advantage of this opportunity. Strategically, in fact, these wars are somewhat cramped, being fought in the narrow waters of the Channel or off the British and Dutch coasts. Nevertheless, interesting results could be obtained from reconstructions of this period.

With the opening of the long period of Anglo-French conflict, first just for colonies and later for European supremacy, we are in the period which I personally prefer for sea warfare. Our ships are now bigger and more seaworthy; sail has replaced oars as motive power, which makes the wind all-important; guns have replaced the ram and the marine as principal weapons (though boarding might often decide single ship actions it had little place in fleet battles); more space for sleeping and supply carrying, plus great advances in navigation, have made the fleets free of the chains which tied them to the coasts. On the other hand, bases now become of much greater importance. No longer can you run your ships ashore on a shelving beach; a harbour is needed, preferably one which gives shelter from the prevailing wind. Ships take longer to build and need more and bigger timbers; dockyards are necessary to a much greater degree than in ancient times. Ships have settled into a pattern which does not change greatly for over a hundred years: the main fleets are composed of line of battle ships of from 64 to 120 guns; frigates mounting anything from 24 to 50 guns act as scouts, commerce raiders, convoy escorts; and lower down the scale come sloops, brigs, gunboats, bomb vessels etc. for all the inshore work, commerce protection and thousand and one jobs which the bigger warships cannot do or cannot be spared for.

Though naval operations and naval actions took place virtually all over the world during this period, certain areas seem to offer better campaign opportunities than others. I have always thought that the little-known series of actions fought between Hughes and Suffren off the coasts of India and Ceylon would make the basis of a fascinating little campaign, with shortages of supplies and lack of proper bases affecting both sides. The other area which teams with opportunities is of course the West Indies. Either a purely naval campaign or an amphibious one of limited scale could be extremely interesting, with both sides getting the occasional reinforcements — or demands for troops and ships — from Europe.

A campaign in this area could be treated very simply, with rules only for movement, or it could be made more complicated by introducing supply factors, base values and possibly a few troops. Movement in this period is relatively simple: each type of vessel has an average speed under certain conditions, so that it is easy enough to work out a daily mean in light winds, good winds, tacking against the wind etc. Prevailing winds in the area at different seasons are easy to discover with a little research, and a daily dice throw or chance card will determine variations from the norm.

Supply, again, offers a fairly straightforward problem. If we assume that the various bases contain enough spare masts, yards and cordage to make good reasonable battle damage, the only supplies we have to consider are food, drink and ammunition. Food is no great difficulty since the islands are close enough together for a base to be within reach when a ship needs food; all that is necessary is to decide that a ship will normally carry X days supplies and must call at a base for more before she runs out. Water can be obtained not only from bases but also from local rivers — again so many days supply would be carried. An additional chance could be introduced by having a possibility of food or water going bad, a very reasonable possibility in those days.

Ammunition is a slightly different proposition. First you would have to work out the average consumption in battle, and the amount a ship would carry. This would have to be done by reasonable guesswork; to try and relate actual expenditure to the number of salvo's fired in a war game would be a very ticklish proposition! You would start the campaign with your ships presumably fully stocked, plus reserve supplies of so many tons at the various dockyards; this could be all that would be available, or you could have one or more factories turning out so much extra per week. If the latter, it would be interesting to limit the number of these factories drastically, rather than having one on each island, as you would then have to arrange for transporting fresh supplies to bases on those islands without factories. This at once introduces new strategic objectives: firstly the factories

themselves become objectives, and secondly the interruption of supplies from them to the bases.

Capture of bases themselves can be determined by a simple equation much on the lines of those in the siege section of our ancient land campaigns. On the one side we have morale of base commander, points value of defences, and of garrison. On the other is points value of attacking troops, a value for naval gunfire (not too heavy, since in this period it was an accepted fact that ships could not fight shore batteries with any degree of success, though specialised ones like bomb vessels were a different proposition) morale of both general and admiral, and one other factor — degree of co-operation or lack of same between general and admiral, since again in this period there was often little love lost between navy and army. A dice throw then determines success, failure or relative degrees of either.

With its strongly seasonal prevailing winds, the area needs considerable strategic thought in planning both defence and attack, and a study of the campaigns fought in these waters during the Seven Years War, War of American Independence and the French Revolution will be of great assistance to the prospective commanders. Weather conditions play a far greater part in operations of this sort than in land campaigns: lack of a suitable wind for two or three days can mean all the difference between success and failure.

If desired, of course, this could be expanded to take in naval operations on the American coast during the War of Independence. This would be a logical development as the two areas were interdependent in a naval sense. Both British and French followed the practice of sending out a fleet to the West Indies for the campaigning season, with instructions to move on to the American station at its end. This was a practical use of prevailing winds and weather conditions, and the early or late arrival of one of the contending fleets could be a matter of vital importance.

Moving on in time, a period of perhaps sentimental attraction is that between the American Civil War and the introduction of the dreadnought battleship. It was a curious hybrid period. Steam had replaced sail, though both admirals and naval architects still flirted with the latter for a considerable while, and the rifled, breech-loading gun was now the main weapon. But for some reason no-one thought of building ships with armaments of a single calibre, but would arm a battleship with guns of six or seven different sizes, greatly complicating the supply problem, since so many kinds of ammunition had to be carried. Yet many of the ships produced were extremely graceful looking craft, and they were painted often in gay colours rather than the dark greys we are used to in these days.

Freed from the limitations of sail, but restricted nevertheless by the necessities of refuelling bases, I feel that a limited type campaign in this period could be a lot of fun.

The Great War offers us the last period in which it is possible for massed fleets to engage in large-scale battles. As a campaign, however, the possibilities are not very great if we stick to history, since the North Sea is the only possible area of operations. Again, a non-historical war in this period based upon the available fleets could be worked into a worthwhile campaign between fairly well-balanced navies. Though the torpedo and the submarine have to be taken into consideration, the period is still fairly uncomplicated from the naval point of view.

For those who like complications, of course, the period of the Second World War is ideal. Though naval fighting in the West was very one-sided, the Pacific fighting offers innumerable fascinating campaigns, both large and small. One of the best, indeed, would be the Guadalcanal campaign, in which both sides deployed strictly limited naval forces and in which, for once, the decisive part was played by surface warships rather than aircraft carriers. A reconstruction of this would give ample opportunity for the budding admiral.

Similarly, if one did not wish to refight historical campaigns, the West Indies could again be used for a limited modern campaign. Postulate a war between England and the U.S.A. — unthinkable though it might be — and assume that the main strengths of both countries are committed in Canada and the North Atlantic. As a secondary operation, however, America decides on the conquest of the West Indies, and assigns to it two or three divisions of troops, and a naval force which might muster a battleship, a carrier, a couple of cruiser squadrons and some destroyer flotillas. Give the British defenders about a division of regulars plus perhaps another of local defence forces, and a naval force a little inferior in strength to the invaders. Limit the air forces of both sides. The result could be a very interesting and enjoyable affair; and, as in our earlier West Indian campaign, you could bring in the chance of occasional reinforcements or calls upon the resources of the area, presence in the area of a squadron of heavy ships of one side or the other for a very limited period, etc.

A totally different campaign could also be devised to imitate the German attempt to strangle Allied commerce by submarine attack. This would call for a good deal of paperwork and could be best run with an umpire to carry out the map moves of the British and German players, though once again the old matchbox system could be used. The German player would be given a certain number of submarines, each of which would only be allowed to patrol for a limited period

before returning home for rest and replenishment; the British commander would similarly have a limited force of escort vessels and perhaps aircraft, and would have to run regular convoys across the Atlantic. Results would be on a points format, points being awarded for submarines and merchant vessels sunk, merchant vessels safely reaching port, etc. Though without the romance and glamour of battles and amphibious operations, I think it could make an interesting and intriguing game.