The Use of Miniatures in Gaming

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THE USE OF MINIATURES IN GAMING

The world of the miniature lies somewhere between the collector's and the historian's abd owes its current popularity to the world of wargaming. But the origins of the miniature lie far from simulation in the field of artisan crafts.

Modern collectors of miniatures are uncertain themselves just where the limits of their field lie. In consequence, they frequently touch upon areas that might strike us as far afield: ancient tomb images, porcelain figures, 19th century Aisearian paper cutouts, chessmen, and other small images of the human form.

Nonetheless, if we seek the origins of the figures currently employed in conflict simulation, the place to look is western Europe in the 18th century. It was there two centuries ago, in Germany and France, that craftsmen worked out the new production techniques that first permitted lead and tin figures to be produced in quantity at low price. By so doing they took a craft skill, previously available only to the wealthy, and made it available to an ever growing middle-class market.

As is often true in the history of technology, the rise of miniatures rested upon several related advances worked out by various individuals, so that it's hard to name a "father" of the industry. The best contender, however, is Johann Gottfried Hiltpert, a Nuremberg craftsman of the mid-18th century. Hiltpert took advantage of the abundant lead deposits near the city, the high engraving skills of the era, and the presence of good German casting clays, to manufacture low relief castings, commonly called "fleis" today, in great quantity. Other
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ter of the industry, while making the flat the tradi-
tional form of German miniatures.

Originally the castings were marketed as cur-
iosities, usually in small collections depicting some
period scene, be it civilian or military. Hastily
painted by cottage workers, the scenes were intended to
grace shelves and curio-cabinets, although many undoubt-
edly found use as children's toys as well.²

As the product found acceptance it also found new
producers, chief among them, 19th century French manu-
facturers who departed from German models to produce
their own "solids"—three dimensional castings that were
most commonly inspired by the Napoleonic military heri-
tage.³

With time, moreover, these figures came to take on
two new tendencies: large systems of collections and
primitive simulations. The former owed much to col-
lectors who not only purchased the clumsily pre-painted
castings, but now began to repaint them to ever higher
standards of accuracy and detail. The latter owed its
popularity chiefly to Germany, and the rise of "kriega-
spiel"—games of war derived from chess--in which parti-
cipants began to substitute the increasingly available
miniatures for the colored blocks or tiles that had pre-
viously been used.⁴

The Franco-German origins should caution you that
these tendencies found their way into the English speak-
ing world comparatively recently, at about the turn of
this century. Their introduction owed much to two prin-
The former was a manufacturer who contributed widely
marketed, inexpensive hollow-cast figures, modern ver-
sions of which are still produced. The latter, best

known as a popular novelist of science fiction and
socialism, contributed Little Wars, the first generally
available set of rules for games employing Britains'
figures.⁵

From these English antecedents have continued the
two contemporary tendencies of collections and simula-
tions. Collectors today generally stress larger figures
(54mm as a man's height is the most common scale)
designed for display individually or in small group
dioramas. They are judged partly by the manufacturer's
skill in sculpting and casting the model; partly by the
craftman's ability to convert the casting to unique
poses; and partly by the skill in painting, with flash
tones, shading, and darklining the principle tests.⁶

Simulation figures, on the other hand, are gener-
ally smaller (30mm was once the standard scale, today 20
and 25mm are rapidly replacing them). Fewer poses are
available than in the 54's, conversion is less practiced,
and painting — although it is still done by some to
competition standards—is generally created as loss of a
requirement.

Originally both types of figures were metal alloys,
and usually blends of tin and lead and antimony: the
first for hardness, the second for low cost, the third
as a running agent. Today plastics are bidding to re-
place them, especially in France and among some English
manufacturers of wargame figures. But metals hold the
power of tradition in some circles, and still generally
represent the best quality figures in English-speaking
countries.

Obviously many considerations give direction to the
specific periods and types of figures available to the
simulator, but there do seem to be at least three key
determinants today. One is the literature of uniform
Illustration. Commencing in England and France toward the end of the 19th century, there has grown up a considerable body of these studies. Some of it is disseminated by journals (such as Tradition in England), some of it draws upon active societies (such as the Company of Military Historians in the U.S.), and some of it is the work of individual illustrators (such as Fred and Lillian Function, in France, whose works I consider the most entertaining modern introduction to the field). Although today it mutually reinforces the design of new model castings, the availability of such costume designs traditionally gave much direction to the miniature market. Generally costume studies confirm the miniaturist’s stress upon Western Europe, although it’s to be noted there are fashions in the study of fashion. In earlier periods parade ground dress and regulation uniform held sway; today campaign dress and field improvisation are bidding to take over. Understandably, uniform illustrations have had the effect of focusing attention upon the more colorful periods, which are disproportionately represented in both costume literature and conflict simulation—witness the stress upon the Napoleonic wars, probably the most popular era of them all.

In fairness, however, let me note that uniform illustration is not the only source of such choices and trends. Simulation is a popular hobby that draws, secondly, upon a larger popular culture. Take the cinema as an example. The movie Kelly may not have been a great dramatic triumph, but it converted African colonial war into a major simulation topic. Waterloo, Cromwell, and Star Wars have had the similar effect of encouraging any number of period forces to form. Literature has the same effect, witness the way in which J. R. R. Tolkien’s Lord of the Rings has helped spawn the current craze for fantasy (or magical) war.

The other great shaping force which miniatures share with much of the popular interest in other types of conflict simulation is our knowledge of tactics. Miniatures are, by their personalized nature, most conducive to tactical simulations. Thus, they are often seen to provide the most satisfying results in replicating situations where a high degree of technical proficiency was based upon well-established textbook systems shared by roughly comparable opposing armies. Authors from Vauban to David Chandler,11 by developing such systems, have encouraged sets of rules that seek to recapture that proficiency.

To illustrate my point, consider popular interest in the era of the French Revolution. In some ways the more interesting portion of that period lies early, in the 1790’s, when the French army experimented, with varied success, with any number of tactical innovations against foes wedded to a well-established pattern of linear war. Later, much of this charm disappears as both the French and their opponents move toward relatively similar performance levels, and turn many of their later battles into uninspired slugging matches. Yet it is the later period that has in practice attracted more interest, possibly because the magic name of Napoleon intrudes, but more probably the comparability factor has entered the situation.

Although he brings a distinctive craft object to the process, the miniaturist thus shares with other conflict simulators the problem of reducing the vast complexities of the field of battle to a manageable series of situations under some form of implicit or explicit rules that will stress the role and processes of human decision. But one needs a caution at this point — the mere appearance of a miniature on a board will not basically alter the game. A casting may lend a greater sense of realism to the situation, but, as in chess, a miniature piece is merely a three-dimensional counter or
marker that could equally well be represented by any block, chip, or card.

Instead, the miniature will impose unique conditions upon the simulator only when he is prepared to allow a further degree of realism in which the field of conflict assumes a scale unique and appropriate to the figures upon it. And that carries with it a few special problems. First, there is the problem of numbers. Except in very small unit combat—knight against knight, tank against tank, patrol against patrol, and the like—the numbers of men that commanders choose to mass upon the battlefield quickly impose problems upon the simulator. It is not easy to prepare, and, it is often expensive to obtain, the figures necessary to represent regiments and other large units on a one-for-one basis.

The common and obvious result has been to compress the numbers according to some appropriate ratio. Depending upon situation and resources, ratios between castings and live men of one to three, one to ten, and one to twenty have become fairly standard among modern simulators, and most games accordingly represent reality with greatly reduced numbers. That's all well and good, until we remember that the three-dimensional character of those castings given them breadth and depth in proportion. At one to twenty, for example, a casting on a gaming board actually represents a clump of men roughly five wide by four deep. Thus, if we choose to place a unit of those castings in line across a board, we are actually representing men four deep standing there for action—a condition which is often historically unsound. In the model period, for example, it would do injustice to the thin red British line that stood only two deep. Yet if we revised the ratio to accommodate the British, we'd suddenly thin out the French lines that often stood three deep. True space, in short, is extremely difficult to occupy on the miniature battlefield.

In practice, I might add, this problem of true space most often results in broadening columns and thickening lines, especially as the ratios increase. That, in turn, creates flanks that shouldn't be there. Using my example of the model period, a battle line on the historic field would be difficult to flank if only because of the many yards it was extended along. But in too many simulations this compression factor suddenly opens gaps on the field through which packets of horse and the like rush with gay and unhistorical abandon.

Nor does the problem end with the individual casting. As units increase on the field of simulation, the difficulty of placing and moving ever larger numbers of castings sooner or later results in the decision to group the castings on flat base plates—a decision you are likely to make sooner if your figures are carefully prepared collector's figures that don't stand up well to the oils and grime of the human hand. The conventional approach is to group castings on bases according to some convenient unit division, such as the company, squad, or platoon, permitting from two to ten castings (and proportionately as many live men) to be moved by gripping a single base. Once again, however, the penalty suffered is a further loss of realism as groups of men become locked into relationships that deny much of the flexibility of the unit. To revert again to my model period example, most ardens were trained for three basic formations—a line, a broad column of companies, and a narrow column of route march, each of which involved both different numbers of men abreast and another and different distances between individual men—physical differences the use of bases forces you to rectify by abstractions in your rules.

While on that problem of compression and its effect
on realism, we also ought to pay more to the question of distances. Men, horses, and, especially, missile firing weapons can traverse great distances--which are often difficult to recreate in the limited areas available for many simulations. Allow a casting one inch tall to represent a six foot man, and full realism requires that other scales be appropriate. Again using the musket period example, when accurate musket ranges might exceed one hundred yards and some rifles three hundred, you have four foot musket ranges, twelve foot rifle ranges, and cannon firing from the next quadrangle. Obviously you can't do it that way, and soon the vertical scale of the field is very different from the horizontal, with linear distances greatly compressed.

There are ways to reduce that problem. One, very simply, is to concentrate upon a period when shock rather than missile fire dominated the field. The interest in medieval and ancient warfare probably draws strength from this consideration. An alternative solution is simply to reduce the scale, as many N gauge simulators are doing (N gauge being, in practice, a label to describe human figures everywhere from six to fifteen millimeters in height). A third solution is to stream terrain conditions under which long range fire is meaningless, such as urban guerrilla action.

The problem of compression also extends to the question of time. A single move in a miniatures game usually consumes the better part of an hour, so that those who seek a resolution in a limited time span must either limit themselves to a small, close, tactical situations or they must compress time. The convention of fifteen, thirty, or sixty minutes to one turn of movement has become common today. Once more, however, some part of your realism usually suffers as you consider both the number of actions a unit could perform in that time span, and the number of actions their opponents would be likely to carry out in response to them. Too many musket period rules, for example, limit army units to a single formation change in these long time periods, and thus deny a flexibility that was historically there. While it need not be the case, I might note in conclusion on this topic that most current sets of rules do not take these elements of compression into adequate consideration, with the result that they underestimate the terrors of the battlefield and allow close encounter melee conflict far more frequently than should be the case.12

On the subject of realism, there is another feature of the miniature world that bears notice: the problem of terrain. Modern manufacturers have provided us with an outstanding range of figures for simulation. They have not, however, supplemented those with a similar range of terrain objects for our use--the buildings, fences, walls, forests, and other physical features of the ages in which their castings seek to fight. Some good craftsmen can scratchbuild these items, but for most, terrain features become stylized abstractions--impressionist landscape with realist figures upon them.

My message, in short, is that the miniature does add an element of dramatic realism to conflict simulation—a realism that has attracted many admirers and devotees. Take a small, two mirror periscope device, invert it over a miniature battlefield, right along ground level, and you'll develop a compelling sense of what the field of battle might look like. But be careful that you don't substitute that vision for reality. The world of miniatures subtly distorts the picture and almost always leaves us with problems that require a mental leap to the abstractions of the rule book.13

George Crib
NOTES


13. The current volume most sympathetic to this point is John Keegan, The Face of Battle (New York, 1965).