## Why Are Wargames Rules So Complex?

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The short answer is because the authors of wargames rules inadvertently write rules with quite complex logic. Unfortunately, this is often not by design but by a combination of default and neglect. They are supported in this approach by the conventions within the hobby on how rules should be written. I have been reminded of this very recently during my efforts to learn the Field of Glory Renaissance (FOG R) rules.

I have always had a strong interest in Renaissance wargaming using the excellent De Bellis Renationis (DBR) rules. Despite this I have spent most of the last three years playing the Ancient & Medieval variant of Field of Glory (FOG AM), both recreationally and competitively, fitting in the odd test game with FOG R. However, this year I intend to enter a few FOG R competitions; the time had come to look at the rules in depth. So I set myself a little a weekend task to work through the tables in the back of the rulebook as a way of memorising the detail you need to play fluently.

Sadly, it did not prove quite as easy as I had hoped. Nothing serious but I was struck by how one or two tables took longer to process than I anticipated. There seemed a jarring lack of structure. I was puzzled by this because the rest of the rules seemed fine. I became intrigued by this and set about uncovering why and stumbled across an interesting example of something that goes some way to answering the question posed by this article's title. Let me explain.

Depending on the rules author's approach, rules tend to tell you either what you can do or what you can't do. Sometimes complex logic arises when these approaches are unintentionally used together and compounded by detailed rules structured like "factor W applies against X except against Y in circumstance Z". This later approach is often parodied by comments like "X only applies against Y on a wet Wednesday, with an R in the month following a full moon".

In the body of the rules many authors take care to make their meaning clear and unambiguous. However, the space restrictions of a quick reference sheet, and when rules are tabulated in the body of the rules, place a heavy emphasis on logical consistency, brevity and clarity to ensure readers can quickly assimilate masses of detail.

To illustrate how hard this is to achieve in practice I would like to use some rules from the Points of Advantage (POA) table on page 123 of the FOG R rulebook. It is not a general point as far as FOG R is concerned but it illustrates my point really well. Before doing so I should explain, for those not familiar with FOG, the purpose of this table and why it is important.

All variants of FOG split a game turn into separate phases such as shooting, movement etc. The table in question lists the factors used to calculate the overall POA for one of the two close combat phases. The POAs govern how easy, or hard, it is to score hits in combat. As such they have a material effect on the outcome of any game and players frequently need to calculate POAs many times during the course of a turn. Here are four examples of factors from the table:

- 1. Impact foot / + POA / against any foot.
- 2. Heavy weapon / +POA / against any except pike in 3 or more ranks, protected pike, protected shot, foot with bayonet or impact foot.
- 3. Light lancers / Only in open terrain / +POA / against any except elephants, battle wagons, heavy lancers, pistol or non-charging steady foot who are any of spearmen pike, protected shot or foot with bayonet.

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4. Pike in 4 or more ranks whether charging or not, unless Fragmented or Severely Disordered / Only in open terrain / +POA / against any.

Rule [1] is both a simple rule and an unqualified positive statement. Rule [2] is not so clear as the standard "against any" is so heavily qualified it becomes redundant and meaningless. In effect it reads as a negative list despite the positive phrasing. Taken together rules [1] & [2] illustrate how the logic used switches between rules: more of this later. Rule [3] is complex because not only is it written as a false positive like rule [2] but the troop type is now qualified. Rule [4] is more complex still with a second troop type qualification. Stripping away the detail shows the inconsistent sentence (or table row) logic:

- 1. Type A has factor B against C.
- 2. Type A has factor B except against D.
- 3. Type A, if X, has factor B expect against D.
- 4. Type A, unless X, if Y, has factor B against C.

All the examples can be accommodated in this somewhat inelegant and generalised logical form:

1. Type A, unless X, if Y, has factor B against C, except against D.

Needless to say, I found my first reading of the table stilted and a touch confusing. Then I realised what was causing it: the "false positive" phrasing of many of the rules coupled with the occasional complex qualification of the troop types. When scanning this full page table the sentence (or table row) logic repeatedly switches back and forth breaking the flow within the table. One row tells me what applies whilst the next tells me what doesn't. Furthermore restrictions and qualifications occur in three different parts of the table. I wished they'd all been phrased something like this:

- 1. Impact foot / +POA / Not vs. mounted, Elephants.
- 2. Heavy weapon / +POA / Not vs. Pike in >2 ranks, protected Shot, bayonet or impact Foot.
- 3. Light lancers / +POA / Not vs Elephants, Battle Wagons, Heavy lance, Pistols, non-charging and steady Spear, Pike, protected Shot or bayonet Foot / Only in open terrain.
- 4. Pike in 4 ranks / +POA / Unless Fragmented or Severely Disordered / Only in open terrain.

They are not perfect either but they are all of a simpler and consistent logical form:

1. Type A has factor B Not vs. C unless D only if E.

To me the major benefit would be increased ease of use when scanning the table during a game. I would always be looking for restrictions and qualifiers of the same format and in the same place(s).

The table is more unwieldy than in need be and it is easy to imagine how the logic, restrictions, and the table format evolved during the development of the game, the many rounds of playtesting and finally as the POA rules were tweaked and further refined to balance the final game. Nothing wrong with that at all, but in the above examples there seems a lack of, for want of a better phrase, final polish. So the reader is left with an unnecessarily complex table. Thankfully this is not endemic throughout the whole of the FOG R rulebook.

To move away from FOG R for a moment and generalise, there is a significant difference to the reader, or player, between a working rule in the eyes of the rule's authors and a honed and simplified version of the

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same rule. There is also a difference between a collection of individual rules, no matter how simplified, and a set of simple rules consistently expressed. The latter represents a final level of review, or polish, and could even be the difference between a good set of rules and a great set.

Sadly, these problems are not restricted to Field of Glory. Historically, rules have often been written this way. This is where convention plays its part. The table looks like many others in other rules. There's nothing unusual, or untoward, in the table to alert the authors to the existence of a potential problem or an area for improvement. Put another way, the table fits well within the norms and conventions of wargames rules. Unfortunately, this is not necessarily a compliment.

As I said at the beginning the short answer to why wargames rules are complex is because the authors of wargames rules inadvertently use complex logic. I hope the long answer has given you something to think about.