

Before you read this I suggest looking at the [Forge of Combat](#) first. This article is a follow up to that one that breaks down in combat tactics in the same way that article broke down strategy. I refer to that article frequently in this one so for ease of understanding I highly encourage you to read over that one first.

When I wrote the forge of combat several months ago I was dealing with combat from a strategic viewpoint. I discussed several optimization facts and how they apply to a group's overall strategy even developing a model upon which a group can base itself on and even provided a sample group to demonstrate the model in action. Overall this article dealt almost entirely with strategy, with an overall group goal in order to end fights as fast as possible based upon these optimization maxims.

What I wish to discuss today is not strategy but actual tactics. That is the deployment of this strategy by the model in order to meet the strategy's goals.

To begin we need to understand what each side uses in a combat to win. Groups usually have one or more advantages going for them which they can press to end a fight. These advantages or concepts are as follows:

Numbers: Numbers represent the raw mathematics of each group. Whether it is damage being dealt, passive numerical defenses, attack bonuses, the amount of HP or Wisdom a given character has, any and all math can come into play as being important in any given fight. Optimization generally tells us to worry about those numbers that come up most often sacrificing where necessary to ensure a good numbers advantage when it comes to combat.

In fact over 90% of optimization deals with the manipulation of numbers of one form or another. This is mainly due to the fact that most acts of optimization only really occur out of game (thus out of combat) therefore it is easier for most people to discuss the raw and potential numbers of a character and its abilities rather than discuss individual actions and positioning. This makes it ironic that despite so much time and effort being put into the numbers of a character in actuality numbers are the least important advantage that any group can possess.

Actions: Actions represent the character's ability to do things. The efficiency with which a character can act is often referred to as action economy. Even newer players can tell you that doing as many things as possible in a turn is vastly powerful. So much so that the sheer number of actions possessed by the group can easily overwhelm encounters with much larger numbers per individual. To put it bluntly numbers are meaningless without quality actions from which to use them with. To quantify actions a bit let's discuss how actions are divided based upon quality.

Ineffective Actions: These are actions that provide zero or negative benefit in terms of positioning and numbers. It's in a group's or encounter's interest to avoid taking ineffective actions at all costs.

Example: A critical miss on the first attack of a full attack action.

Partially Effective Actions: These are actions that provide little benefit in terms of numbers and positioning. A group should try and avoid these actions at all times. However during the setup phases of combat it can be unavoidable as groups jockey for superior positioning and numbers in order to make the most use out of their future actions.

Example: A rogue flanking an opponent, dealing sneak attack damage, but ends up flanked themselves.

Effective Actions: Any action that provides a significant benefit in actions, numbers, and positioning or strikes a significant blow against an opponent's is an effective action. Groups should strive for these actions as often as possible. Effective actions are often the actions that determine victory or defeat for many groups. Keep in mind that luck can play a factor in determining what are effective turns. A missed attack, a successful enemy save, or a failed skill roll can turn mathematically sound actions into total missteps. Calculating risk versus reward is often a subtle but invaluable skill that players can develop to avoid disastrous failures.

Example: A full attack with one or more critical hits, a spell that significantly affects the battlefield, a turn in which one or more enemies are eliminated.

The only real weakness to actions as an advantage to take in combat is positioning:

Positioning

Positioning is the most important of the three factors that help determine the victors in any given combat. Positioning is unique in that it deals with both numbers and actions. It can reduce or expand the number of effective actions a group can take, it can reduce or grow numbers, and it can even completely nullify both.

Consider this; it doesn't make any difference if a stone giant has 50AC if he has no ranged weapons and no means of finding cover from the level 1 wizard and his level 1 wand of magic missile if he happens to also be able to fly. In this case the giant has a massive numbers and actions advantage. But his numbers and actions are effectively zero due to the wizard's ability to maintain a superior positioning. Positioning itself is a subject worthy of its own article. But for now we can divide it in three categories.

Bad Positioning: Is any sort of positioning that has a net negative effect on your group or character. Being flanked without anyone to flank in return, being bunched up against a foe with punishing area of effect attacks, fighting against flying enemies without means of reaching them in the sky, or otherwise having your mobility hampered without any such limitations on your foes are all examples of bad positioning.

Neutral Positioning: The most common sort of positioning. Essentially any sort of positioning that gives no real benefit. Flanking while being flanked, standing on even ground with no obstacles with your opponents, or just any situation where the net numbers gained or lost is equal to your opponents are examples of neutral positioning.

Superior Positioning: Superior positioning is any point where your positioning has positive effects for your character and negative effects for your opponent. Essentially any time you are in a position to affect your opponent while not being affected in turn is a superior position. Positioning is such a powerful factor that it's more often than not a determining factor in many combats. Even where a group might lack numbers and actions in comparison to their opponents if they can maintain a superior position they can often render those superior numbers useless.

What this means for the Forge Model: By design the forge model is meant to produce a fairly steady amount of effective actions. Each and every role in the forge model is supposed to be able to do something relatively significant in ending the combat, from dealing lots of damage, to producing positioning and action advantages, and even helping bolster the group's numbers above and beyond the opponents.

However the how's and why's are generally left to individual players to decide for themselves. After all no two groups are ever identical and the way they fight may differ from combat to combat. In addition even abilities that a group may not normally have based purely on class/race/build choices may be supplemented through magic items.

And this is where we get into another aspect of the forge model; resource management. Individual groups but differing values on their resources based on gm quirks, availability and group make up. So, any attempt I make to put a hard value on resources is ultimately futile. However this analysis of combat does give us a good foundation on which groups can determine for themselves when its best to spend uncommon or rare resources in order to make up for a significant disadvantage in one of the three areas. Looking at what your group lacks can also determine what rare or uncommon resources a group should seek in order to answer the possibility of an encounter presenting a situation the group can't handle or did not expect.

Also I would be remiss not to mention initiative. Remember that in the forge model anvils and arms are expected to go first. This is because the advantages they produce significantly add to the hammer's ability to end the fight as quickly as possible with as few resources spent as possible. What this means for the model is that it's best to build your advantages quickly so that the hammers of the group can press those advantages and end the fight. Thus it sometimes becomes advantageous for the hammer to hang back and allow the others to work on building those advantages before pressing the attack even over multiple rounds if necessary. On the flipside, in the latter rounds of combat the arm and the anvil are best hanging back themselves in order to conserve resources once the hammer has begun to significantly affect the opposing sides capabilities (by eliminating one or more opponents) to the point where it is nearly impossible for them to regain any advantage they had. We'll discuss this more once we get into phases of combat.

What this means for individual optimization:

The forge model helps groups determine their overall strategy. However any group is doomed to

failure if they cannot build significant tactical advantages. Hammer's that can't do damage cannot press advantages or give number advantage, anvils that cannot control the fight provide no action or positioning advantages, and of course arms who cannot give significant buffs do not provide any advantages themselves.

Below is a chart with rough ratings for each class in one of the three categories in order to help you understand how a group might do in attempting to build or press one of these advantages. Please keep in mind this is a rough estimation of power. Obviously individual build choices and games will greatly alter how these ratings translate in the wild. It's better to say that these numbers relate how much effort in optimization a player must go through to achieve significant results in the categories listed. Also bear in mind that simply because two characters have the same number in that category does not necessarily mean they are equal in terms of potential. Some characters will be able to push their limits much farther than others in the same level. So keep that in mind and do your homework before using this as a means to pick your next character.

Class	Numbers	Actions	Positioning
Barbarian	3	2	1
Alchemist	2	2	2
Bard	3	2	1
Cavalier	3	2	1
Cleric	3	2	2
Druid	2	3	3
Fighter	3	1	1
Gunslinger	3	2	1
Inquisitor	3	2	1
Magus	2	3	3
Monk	2	2	2
Oracle	3	2	2
Paladin	3	2	1
Ranger	3	2	2

Rogue	2	1	1
Sorcerer	2	3	3
Summoner	3	3	3
Witch	2	3	3
Wizard	2	3	3

What the ratings mean:

3: A three in any category means the class can build and press advantages in this category with relative ease. Usually achieving significant results requires little to no investment beyond normal character building and spell selection to find these advantages in the class and often requires little real investment on part of the player in game.

2: Requires some form of real investment in the way of feats, permanent spell choices, or minor archetype changes. In addition it may require some buffing in game in order to achieve significant results in that category.

1: Requires lots of investment and character mastery in order to achieve results in this category. At the least there are many feat choices outside the character norm or investment in magic items in order to achieve the desired results.

So now that we know what there is to gain and use in the course of combat in order to achieve victory we need to learn when the best time to build and utilize these advantages are. For this we need to analyze the stages of combat in order to determine how to make use of these advantages to their fullest and ensure that the forge model is working as efficiently as possible.

The Setup: The setup for victory starts before combat even begins. Players already instinctively work on this through the use of pre-combat buffs, marching orders, or simply having weapons drawn while walking around. But it doesn't end there. Once initiative is rolled there are a couple of rounds in which each side attempts to maneuver into position, put up buffs, and lay down battlefield control in order to achieve advantages over their opponent. This is likely the two most important rounds in any given combat. In these rounds it becomes imperative for each character to build up the advantages that they can, expend what resources are necessary, and push as fast and as hard towards superior positioning as possible. Any delay at this point means more rounds spent in combat, more resources spent, more damage taken, and more chances an enemy has to defeat you.

One thing worth noting here is the value of resources in these rounds. It's less wasteful to use things like scrolls, potions, and once per day effects in these early rounds than in later ones if they have duration past these first couple of rounds. This is primarily due to the length they will

last versus the length of the actual combat. Using a Scroll of Heroism in the last round of combat is pretty damn wasteful as compared to just casting heroism. While it might not seem as such due to the likely longer length of just casting the spell bear in mind that once cast the scroll is gone forever while simply casting the spell will see the spell returning after the next rest period at no real cost to the group as a whole.

It's these rounds where the anvil and the arm need to be at their most active. Their job is to create advantages, whether in numbers, actions, or positioning, so that the hammers can press them in the following rounds to win the fight. Hammers here try to do damage if possible or at the very least get into a position to start doing damage.

The Swing: The most unpredictable point in combat is the swing. This is the point where the hammers and enemies truly clash putting the advantages built in the early rounds to use. The swing does not necessarily have to last even a round, or even an entire turn. Sometimes even a set up round can turn out so good that the combat ends before there ever is any swing rounds.

We call this the swing due to its chaotic and often dramatic nature. At any point the fight can shift in one direction or the other in terms of who's going to win. So what does this mean for you?

Ultimately it means the hammers have to work at their hardest while everyone else works at their smartest. By now every trick the enemy can pull should be relatively known to you by now so accounting for those and acting accordingly is key to the group's success.

In terms of resource expenditure the only resources that should be spent are those that will have an immediate and sudden impact. Things like charges of *fireball* off staves or wands in order to finish off weakened opponents, virtual save or die spells like hold person, or sudden bursts of damage like a mounted charge. In essence things that will not have a long term impact over a wide area might be the best to use and are not redundant to what's already being used. Instead, powerful short term effects will push the swing in your favor. Why? Mainly because long term effects such as Divine Bond (weapon) or the spell Heroism would be considered woefully inefficient if they lasted only a round or two. However given time these effects easily pay for themselves in terms of opportunity and resource cost making it more efficient to use them in the early rounds. Short term and instant effects are best used in the swing where their impact will be much more sudden and dangerous to an enemy already being affected significantly by actions made during the set up rounds.

Hammer's in particular tend to shine during these rounds since after the setup they should be at or near a positioning where they can deal the most possible damage depending on class and build. In these rounds the anvil and arm tend to play reactionary roles taking the results of the last round and acting accordingly, often many builds are versatile enough to switch to a hammer role in order to quickly end the swing portion of combat and go to the next step...

The Mop Up: The final rounds of combat happen when the fight is all but over. In these rounds one side or the other has all but won.

What happens and what must be accomplished during this final stage of combat depends on what side you are on....

Losing: On the losing end of things you can do one of two things. First you can attempt to use expensive or rare resources in order to push the fight back against the foe and hopefully turn things around. It's at this point where the arm and anvil often have to work desperately to get the hammers back into a position where the fight can be won. Likewise the hammers have to push that much harder, often against key enemies, in order to remove the threats that brought them to this state from the start.

Times like this, where the fight looks to be lost yet still winnable, are rare in the extreme and often it's in the best interest of a group to take the second option; retreat. Often groups will take the idea of retreat bitterly. However consider that the alternative to retreat is death. Death isn't just end combat, it's end game. It's disappointing and sad, and makes a lot of the work put into the game feel pointless even if the death was exciting and funny. So, how best to retreat? Well there's the stupid way and the smart way.

In the stupid way you simply try to exit the fight as best you can attempt to run away from the enemy without any thought of them actually trying to pursue you beyond the battlefield. You don't bother casting more spells or making anymore attack rolls since the battle is all but lost anyway. You compromise positioning and thus more damage is taken that would otherwise be negated just by dint of retreating in a bad way.

In the smart way you retreat in a way that makes pursuing you costly. Laying down more battlefield control, taking opportunities to turn around and trounce lone enemies too far ahead of their brethren, healing when given a moment to breathe, dropping powerful spells on enemies clustered around a point trying to come after you. In a smart retreat it looks less like you're running away and more like you're just backing off to set up devastating ambushes. In the smart retreat an enemy doesn't pursue you because they've lost you, they don't pursue you because you may lead them into a situation where they'll be forced to retreat instead.

It's important to note that certain effects may allow you a faster retreat without having to worry about turning around and fighting back. Teleportation is such an example, as well as escaping to demiplanes, or simply casting haste and running at top speed away from an encounter. These are all equally viable ways to retreat without taking many risks and in some ways more efficient than what I just described. So keep that in mind as I move forward.

The way the forge model handles losing is entirely dependent on group composition, available resources, and general environment. However we can say that generally the arm acts in a reactive role, attempting to heal, mitigate damage, or otherwise prevent death as much as possible while still maintaining a steady pace away from the field of combat. The anvil, likewise attempts to cover the retreat as best as possible whether throwing up summons to distract, tripping bullrushing enemies to slow them down, or putting up obstacles an enemy will have to

spend extra movement and actions on to get around are all easy options to do this with. The hammer's role in this situation is often the most difficult since it's often the hammers unconsciousness or death that triggers the mop up phase of combat. If the hammer is still up their role is primarily defensive, staying near the arm and anvil in order to prevent and hinder enemies from preventing them from doing their work following behind closely and taking out the lone enemy that manages to get through the barrage of control.

But when do you stop retreating? Ultimately the best time to stop is only when you feel secure enough to take the time to rest, recuperate, and rebuild yourselves into a viable fighting force again. Sometimes this means going back to an established base, sometimes it means going to the next room, whatever the case it's important to have a secure location to fall back to. More important than that is being able to escape that location in the off chance that your beliefs about its apparent safety are untrue.

Winning: In terms of winning the situations are reversed. Rather than desperately spending resources just to ensure survival this is a case where it's important for a group to be conservative. By this point victory is all but assured and all that's left is to finish off the remaining enemies and collect whatever spoils might be gained from the battle. The best way to ensure viability for the next combat and to have the highest profit margin in terms of loot is to spend as little as possible only worrying about dealing damage in the most cost effective manner possible.

How you handle retreating enemies is entirely situational upon the foe you are facing. Some intelligent foes will retreat to get help from allies, heal, or otherwise set up for another face to face encounter with you. However this is not always the case. Sometimes enemies might just flee the scene completely abandoning allies. Other times instead of attempting to retreat they may simply be leading you over traps or into other ambushes in order to ensure their escape or otherwise continue the fight on better terms. It's really up to the group, and individuals within it, to determine whether or not it's worth chasing down those who are attempting to retreat. This article cannot cover every situation you will run into. But, it can give some guidelines on how best to approach these situations.

When it's worth chasing

1. There is a strong chance the runner will warn others and prepare an ambush. Just don't chase very far.
2. You have movement enhancing effects in place that make catching the creature easy.
3. The target in question can provide value with it's kill or capture usually information about the area or loot.

When it's not worth chasing

1. If it takes more than two rounds to catch up to it.
2. If the party is too injured to continue a prolonged fight.
3. If the target has nothing of monetary value.
4. If other targets are continuing the fight.

In any case the idea for the mop up part of the fight for the winning side is to finish the fight however possible. Short, brutal fights are often better on resources than long drawn out conflicts so the less time spent in initiative the better.

In terms of the forge model this is the time where resources need to stop being spent altogether and dedicated anvils and arms need to try and take on hammer roles. In cases where it's simply unfeasible due to a lack of damage capability or injury than spending minor resources such as 1st level powers (such as domain, bloodline, or school powers) is entirely doable at any level.

Putting it all Together

Understanding the three stages of combat and the three potential advantages in combat helps us make good decisions on our turns. It doesn't so much tell us *how* to win a fight as much as it allows us to ask the right questions and get the right answers when discussing what we *should* be doing in a fight.

In terms of the forge model I've already discussed much of what should be done in broad terms. On individual terms things can be quite different. Selecting the right spell, the right place to move, or simply the right plan moving forward can make a world's worth of difference between victory and defeat. Of course this is nothing new. For now let's discuss some broad questions that each potential role can ask themselves through each stage of combat.

The Setup:

Anvils:

1. Which enemy is the biggest threat? What do we know about it?
2. What is the environment like? Does it favor my hammer's ability to deal damage?
3. How do I alter the environment or debuff the enemy to a point where the environment and enemy type is more favorable to my group?
4. Is it possible for me to both make the fight more favorable to our hammers and prevent the enemy from building any advantages in this fight?

Arms:

1. Which hammer (if there's more than one) will be most valuable in this fight?
2. What support can I give that will last throughout the fight and give a significant boost in capability to my allies?
3. Is there any environmental effect in place that I can help negate in some way through some boost to my allies capabilities?

Hammers:

1. Which enemy will prove to be the biggest threat?
2. How can I position myself to better be able to eliminate targets either now or during the next stage of combat?
3. Which resources should I spend now to most efficiently defeat this encounter?

The Swing:

Anvils:

1. What can I do to further hinder the enemy and prevent damage to my group?
2. If the hammer is being overwhelmed is there a way to compromise enemy positioning and relieve pressure off them?
3. Do I need to consume any valuable resources at this point of the fight to push events closer to a mop up?

Arms:

1. Is the hammer in a good position to continue eliminating enemies? If not how can I help that?
2. How can I prevent damage to the group through my actions?
3. Is my group supported enough through buffs that I can consider dealing damage myself?

Hammers:

1. Am I doing enough damage? If not how can I do more?
2. Is my positioning good? Can I make it better so that it allows me to do maximum damage without taking too much myself?
3. IS the biggest threat eliminated? If not what can I do to ensure they are eliminated soon?

The Mop Up:

Anvil/Arm/Hammer:

1. Are we winning or losing?
2. If we are winning how do I ensure that I am continuing to do my job without over extending my resources?
3. If we are losing what resources can I spend to ensure we make good on an escape?

Of course questions like these are just the start of real tactical thinking and are narrowly focused on the forge model as presented in the earlier article. Much of what's being said here is already relatively instinctive to many players but for newer players, less tactically minded players, or simply those wishing to put rationality behind their instincts this is a good start.

In conclusion knowing that a fight is more than about raw HP attrition can go a long way towards improving the way a group fights. More than that it allows you to deal with seemingly impossible encounters just from some intelligent thinking. After all CR's matter little if an opponent can take no actions nor put themselves in any kind of positioning where they can utilize either their actions or numbers to ensure your defeat.

Remember combat in pathfinder is all about small unit skirmishes and tactics. These are not armies clashing but highly skilled individuals often against a large number of unskilled individuals or incredibly dangerous monstrosities. At the end of the day it's not just about survival but about victory and continuing to be victorious. By understanding combat at its tactical level we become better at mastering it. And through mastering combat, we master the art of forging victory.