Emlia: Community and Imagination, at Any Scale

Welcome, gamers, to the Emlia community. By reading this book, or this website, you become something more than just a player of one mere wargame – you become a part of a system of gamers, developers, and writers of many games built around the Emlia system. Whether the battle is four fierce warriors against a mighty dragon, 300 Spartans against the hordes of the Persian army, or the brave soldiers fighting for freedom on the beaches of Normandy, Emlia will let you fight it. The philosophy of Emlia is made up of three simple things: flexibility – for any scenario, in any setting, in any scale – community – people building a game together – freedom – to produce, distribute, and sell content using an open source philosophy.

Open Source: What it Really Means

Emlia is an open source wargame system. Many of you may have heard of open source software, a concept that has largely been popularized by programs such as the Linux operating system, the Java programming language, and the OpenOffice suite of office utilities. Developing a wargame is in fact very similar to developing software – most famously, *Magic: The Gathering* by Wizards of the Coast uses a development model very similar to software engineering practice. Since such a development model has proven so effective in designing one of the best rule systems in the history of game design, why not take a step further and also adopt a *philosophy* from the software community? That is exactly what happened, and the philosophy of openness and sharing has served the development of Emlia very well.

What Emlia does, by being open source, is it makes the core rules of the entire system free. Core rules additions to the game developed by other producers are added to the main repository of rules on the Emlia site, and may even appear in future versions of this book. You may ask “how can people sell games with this system?” after reading that. The answer is just as simple as “how do you make money with Linux?” - sell your work, while sharing the community's.

Sell Your Product, Share Ours

The core rules of Emlia belong to everyone and no one: they are and will always be a community project, developed and maintained by a large, often-dissociated group of people. As such, the license chosen for Emlia requires all rules development to stay free; new types of unit formations, actions, dice and morale systems must all be publicly released. This does not mean a company cannot package up a game built on Emlia and make good money selling it, however; nowhere in the Emlia license does it specify a need to release setting details, including unit sets and scenarios. These things, plus a good background, are what define any good game in the first place, and by making any new core rules available to the community, they will be very thoroughly evaluated and tested. Having such a group of players and developers at your fingertips, working together to make your game better is, at least to anyone familiar with quality open source software, an excellent trade for releasing core elements back into the community. The benefit of a standard rule set that players already know and understand is another tremendous boon. Besides – the real attraction to your game was really the cyborg amazon warriors fighting space pirates from Pluto, and everyone knows it. Like a movie director, an Emlia developer designs the sets, the costumes, and writes the scripts; he doesn't invent the fog machine or design the lighting circuits.

It Does WHAT?!

This is a question people have sputtered out about Emlia quite often in the last few years, when development took a turn towards what you see released here. Developers were playing with all kinds of ideas using Emlia – role-playing games, wargames, strategic board games, all manner of unexpected ideas came up. The craziest part of it all was that most of them **worked**. So don't limit your thoughts of Emlia to wargaming; deep down, it does whatever you want. Imagination is the only real limit.

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Basic Concepts

Measurements and Scale

Wargames, like real war, occur on many different scales. From small skirmishes involving a handful of fighters on each side to gigantic battles that span continents, players love to play all sorts of different scenarios. Emlia is not specifically designed for any one scale; rather, the rules defined here are scale-independent. Units may be single soldiers or entire armies, or anything in between; the terrain may represent a small villa being raided by special ops, or the entire coast of Normandy on D-Day.

Generally, the scale of a game will be determined by the unit set chosen; that said, the scale of a unit set is merely a suggestion, and reducing it proportionally is very easy to do. The most important concept of scale is the Ground Scale Unit, or GSU – this is the unit chosen for measurement, and is referenced frequently throughout the rules. The most common choice of GSU is centimetres; inches and decimetres (10cm increments) are also common. The choice of GSU is mostly determined by the available play area. Here are some examples of scale selection and conversion:

Battle Scale	Miniature/Terrain Scale	Ground Scale	Ground Scale Unit
Troopers	54mm	1/20	inches
Squads	28mm	1/64	cm
Regiments	Tokens	Roughly 1/64	board hexes
Brigades	1/72	1/72	cm

To convert a scale as it is defined in a unit set to use different miniatures, a different sized board, or from imperial to metric, follow these steps:

- Choose intended scales first. Usually this involves changing the miniature and terrain scale, but sometimes a different ground scale or GSU is desired.
- If the miniature or terrain scale is not being changed, but the ground scale is, determine appropriate miniatures and terrain for the ground scale. Usually this is obvious and can be an exact match, but odd ground scales like 1:20, or even undefined ground scales (like in many fantasy wargames) can pose a problem, in which case choose the one that looks the most right. Using a common gauge such as range for a weapon that exists in the real world or the speed of a human on the march is an excellent measure.
- If the ground scale is being changed, set it to match the scale of the miniatures exactly; there is absolutely no reason not to. If the scale of the miniatures is a rough one, ie 32mm, use a slightly rough ground scale. A 32mm scale roughly means “six feet is 32 mm”, which translates to a ground scale of 1/56. As a side note, 1:50 scale terrain would be perfectly appropriate here.
- Choose a ground scale unit that has been changed about as much as the miniature and ground scale. For example, if going from 54mm using inches to 28mm, consider using cm as a roughly accurate GSU. Going from 1/74 to 1/72 on the other hand does not really require a change in GSU because there is less of a change in ground scale.

The Ground Scale Unit, or GSU, is the unit used for all measurements and position-based information in Emlia. All ranges and movement are measured in GSU in order to be flexible with whatever unit set is in use.

Measuring Distances

Measurements of distances on the field can be made at any time; this is both for ease of play and the avoidance of arguments, plus compatibility with boards that use squares, hexes, or other cells rather than abstract distances.

Dice

Like most wargames, Emlia uses dice to decide the course of many events: the use of skills, the effects of some types of damage, and random events in general. All dice in Emlia are twelve-sided dice (known also as d12s) unless specified otherwise. The general abbreviation for dice is d, followed by the number of sides. The space between how many dice and the type is usually left out, as well. Examples: d12 – twelve-sided die; 2d6: two six-sided dice.

Entities, Characters, and Units

In Emlia, game statistics can be given to anything, from the ground, to the air, to more typical things such as bunkers, sandbags, castle walls, and soldiers. Anything with game statistics is known as an **entity**; if it does not have game statistics, it is simply considered terrain. Note that elements of the terrain can also be entities, and it is considered good practice to simply make all parts of a game entities – sometimes, however, there is no point to making rules for the destruction of the ground.

A **character**, on the other hand, is an entity that is capable of performing actions in some capacity. A cart is not a character, because it cannot do anything. A horse pulling a cart, however, is a character, because the horse can move, attack things, and perform other tasks.

A **unit** is one or more characters with some battlefield role; a single character can be a unit, or it may be part of a unit composed of many other characters. Units may have a single set of attributes representing the entire unit, or multiple sets of attributes in the case of a mixed unit. Note that a unit is still also a single entity, and a single character is also a unit. The characters in a unit are called **unit members** or simply members.

Entity Attributes

Attributes define the basic properties of an entity – for an entity to exist it must have at least have the basic three attributes: a **position**, **hits** and a **damage measure**.

Position, Boundary, and Formation

Position is the simplest of an entity's attributes: it is not a written attribute, but instead described by the entity's location on the board. An entity's position is considered to be all points on the board that it currently occupies, and is therefore dependent on its size. When measuring distance, always take the shortest distance between two entities – generally, this means the closest point on the closest edge.

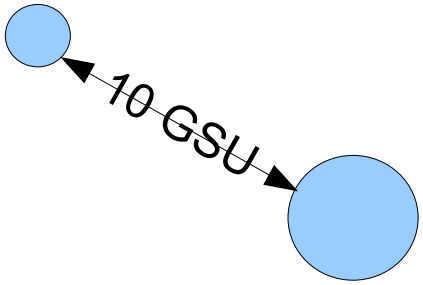

Figure 1: Two Objects 10 GSU Apart. Note that the closest points on each edge are used to measure.

Note that unlike other attributes, position, boundary, and formation do not appear in an entity's statistics; they are always represented on the board.

Boundary

Position for a unit is slightly more complex than position for a single entity. The position of a unit is equal to the position of a single entity with an area equal to the entire area covered by a shape drawn around the unit. This shape is called the unit's **boundary**. An example is shown below. The same case as with entities applies; determine distance by measuring from the closest point on the unit's boundary. Note that for a single entity, its boundary and position are the same. Other entities and members of other units are allowed within other units boundaries, causing them to overlap.

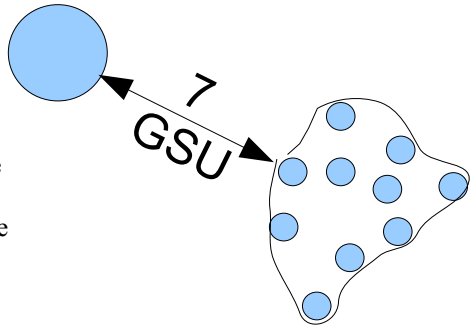

Figure 2: A unit boundary, defined by the positions of its members, and a second object, 7 GSU away. Again, measurement is by edges.

Formation

The one attribute of a unit that is dependent on the individual positions of member characters within it is a unit's **formation**. There are three basic formations in Emlia, though a unit's abilities may grant it additional formations. If a unit's members are arranged in such a position that it could be in multiple formations, it must be explicitly shown which formation the unit is in during its activation. This declaration must be made as soon as the ambiguous position is reached; i.e. immediately after the unit finishes movement. If the unit has been forced into such a position, the controlling player can declare what formation it is in immediately.

Further details on formations, as well as the definitions of some basic formations, can be found under the Formations section, page 21.

Size

An entity's size is a numerical reference to how much space it takes up. Size 1 represents something roughly the size of a large adult human – two metres in height, and with a personal space of about two metres in diameter. The size of any other entity is represented as either a halving or multiple of this: size ½ represents something roughly half of size 1, size ¼ represents half again that. There is no “size 1/3”, for example. Growing larger, size 2, 3, 4, etc. represents that many times bigger in volume. A table of examples follows.

Entity	**Size**
Human Adult	1
Human Child	½
Average Tree	1
Large Tree	2
Wolf	1
Coyote	½
Fox	¼
Ogre	2
Mountain	2000 or more

Size is used in many rules, such as those for awareness and stealth, lines of sight and attack, and attack accuracy. Generally, larger entities are easier to detect, take aim at, and hit, while smaller targets can be challenging to see and fight.

Height

Similar to size, height is a specific measure of the height of an entity – it follows the same scale, but does not consider horizontal measures. Height 1 is about six feet tall by default, and divisions or multiplications of this work exactly like size. Here are a few examples:

Entity	**Height**
Human Adult	1
Human Child	½
Average Tree	2
Large Tree	3
Wolf	½
Coyote	¼
Fox	1/8
Ogre	2
Mountain	2000 or more

Hits and Damage

An entity's **hits** attribute determines how resistant to damage it is. It can represent armour, physical bulk, supernatural powers, or any other means of preventing damage from being incurred. An entity's hits attribute is used whenever attack actions are being taken against it, to determine the damage resulting from the attack.

An entity must also have a **damage measure**; there are several of these, and an entity may have more than one. In the case of multiple damage measures, the effects of all of them apply. For example, if an entity has both a threshold and a damage limit, threshold rolls apply until the damage limit is reached, at which point the entity is destroyed regardless of its state of function. The two damage measures available are:

- Threshold: An entity with a threshold rolls dice on a **vital table** (given in the entity's statistics) every time it reaches a multiple of its threshold in damage.

- Damage Limit: An entity with a damage limit is removed when its total damage reaches the damage limit. For a unit with multiple characters, its damage limit represents the amount of damage it takes to remove one character, not the entire unit.

For more information on taking damage, see Update Damage, page 39.

Character Attributes

Other attributes exist that inanimate entities have no use for. Characters or units, however, require these attributes to function. The following is a list of these attributes and the functions they have in the game:

Timing

Timing is the most important attributes for any character that wants to do anything on its own. A unit with a timing attribute will activate during each timing step, and be able to take actions. See Timing and Turns, page 14 for details on timing.

Movement

Movement is important to most units and characters, as they need a way to get around under their own power. There are many different speeds and types of movement, as described later (see Move Actions). These actions reference the movement attribute of a unit. A unit may have multiple movement attributes, representing different movement modes, such as flight, powered-boat movement, sailboat movement, swimming movement, and of course ground movement. For further information on movement, see Move Actions.

Morale

A unit's **morale** attribute determines which morale state (see Update Morale, in the Resolution Phase) the unit starts the game in. After the game begins, a unit's morale will fluctuate with battle conditions, and become a measure of its current mental state on the battlefield, referenced by initiative conditions as well as the morale rules.

Other Attributes

Some attributes are optional, and may or may not appear in an entity's statistics. These attributes relate to how a character, unit, or entity interacts with the rest of its unit set.

Hire Value

An entity's **hire value** determines how many **army points** it costs to include the unit in a given army. An entity may have many hire values for different conditions, or may be fixed at a single cost. See Army Construction, under Scenarios for more information on hire value.

Army Value

A unit's **army value** determines how valuable the unit is relative to other troops in the army – conscripts are much more expendable than elite special operations troops, after all. A unit's army value affects unit morale when it takes casualties, wins battles, and has other affects applied to it; it also affects the victory conditions of many scenarios.

Facing and Sight Arcs

Many entities have given facing – a direction in which they are oriented. Some, however, are symmetrical, inanimate, or amorphous and do not have this attribute. An entity with a facing will also have defined sight arcs – front, sides (or flanks), and rear. These will be measured in degrees – the front arc is centred around the direction of a unit's facing, with the side arcs touching it, and the rear arc filling remaining space. In some cases, an entity will not have side arcs – only front and rear. A unit generally has line of sight around its entire boundary, rather than just its facing – soldiers rarely march blindly into battle, but rather sweep their vision around to maintain an eye on the battlefield. Rather, facing is used to handle concepts such as ranked combat, awareness, limited arcs of fire for weapons, and large units such as vehicles, that may have different hits attributes or even different vital tables depending on the location in which they are struck.

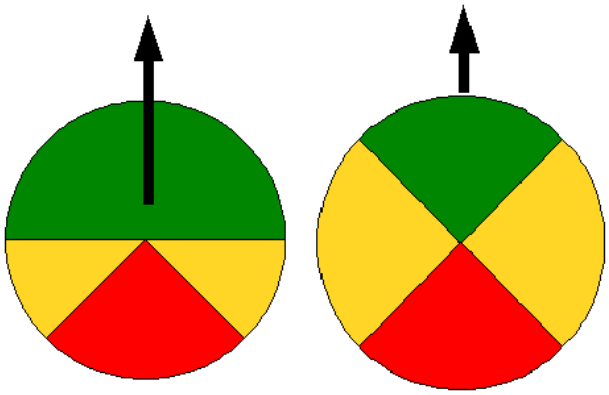

Figure 3: Entities with different arcs of sight; the arrow represents facing, the green front sight arc, the yellow the sides, and the red the rear arc. In the first case, the measures are 180 degrees, 45 degrees, and 90 degrees; In the second case, 90 degrees for each.

Initiative Conditions

A unit may have **initiative conditions**, which can prevent a unit from always acting under a player's control. When one of the conditions in the list of initiative conditions are met, the unit will default to taking the action shown, instead of the player's orders. Certain actions or conditions can eliminate this nuisance, however.

Combat Range

A character's **combat range** supersedes its size when determining the distance from an enemy unit it must be to engage it. For engagements, see Engagement, page 26.

Type

A character's **type** is a set of keywords used to identify it. These may refer to race (such as Human, Elf, Dragon), profession (Commando, Sniper), allegiance (British, High Elven, etc.), or other types. They are referenced by various army construction rules (see Army Construction, page 51) and abilities.

Taking Actions

Actions represent all of the different kinds of activities that units can take in Emlia. Some are very simple, descriptive actions, such as movement, and others are complex and require die rolls – attacking and commanding troops are good examples of these. Unless specified elsewhere, any unit can take any action shown in the core rules – more unusual units may also have special actions, defined in their abilities (see below). Actions are described in an **action block**, as shown below:

Action Name (Action Type)
The description of an action goes in this section

Skill Used: What skill, if any, the action requires a skill check from
Requirements: What requirements exist for the action to be taken
Subject: What the subject of the action is
Modifiers: If the action requires a skill check, the modifiers that apply and the conditions under which they do

Success: If the action requires a skill check, the effects of successes
Failure: If the action requires a skill check, the effects of a failure
Effect: Any other effects of the action, or all effects if the action does not require a skill check.

An example action that does not require a skill check is the Normal Move action:

Normal Move (Move Action)
Skill Used: None

Effect: The unit moves its Movement Speed in one of its movement modes, along any chosen path as restricted by that movement mode (a walking unit may not move through deep water, for example). Terrain effects apply as described in the descriptions of the terrain.

Source and Subject

Two important terms are referred to when taking actions – the **source** of an action refers to the character taking the action. The **subject** of an action refers to the entity being targeted by the action.

Skills and Skill Checks

Skills are the meat and potatoes of the Emlia system – they define the training units have, and what actions they are able to effectively perform. Skill checks are called upon by actions – a sample action that requires a skill check can be seen below:

Close Combat (Primary Action)

Close combat attacks are a simple affair – get up to someone, apply violence. It is an abstract affair – the exact positions of models do not matter, as the units engage in the swirling mess of combat.

Skill Used: Close Combat
Improvised: Yes
Subject: Entity or subunit of an entity in combat range

Environment:

Subject has partial concealment: -1
Subject has total concealment: -2
Subject has partial cover: -1
Subject has total cover: -2
Fighting in rough terrain: -1

Ranked Combat:

Attacking enemies to the flank: -1
Attacking enemies to the rear: -2
Attacking enemies on multiple fronts: -1
Attacking from the flank: +1
Attacking from the rear: +2
Attacking from multiple fronts: +1 per additional front

Other:

Subject is outnumbered*: +1
Subject is outnumbered* 2:1 or worse: +1
Subject is outnumbered* 3:1 or worse: +2
Source *Charged*: +1
Subject *Charged* last activation: +1
Engaged enemy already engaged before this activation phase: +1**
Double Paced: -2
Target has elevation: -1
Elevation over target: +1
Focusing on a subunit: -1
Focusing on a subunit numbering less than 25% of possible targets: -1
Focusing on a subunit numbering less than 10% of possible targets: -1
Free strike against unit leaving engagement: +4
All targets unaware: Automatic success, ignore armour bonus to subject's hits

* Outnumbering only considers elements able to attack; in ranked combat, for example, if a 5x5 block engages a 5x4 block, there is no penalty for outnumbering, as 5 elements fight 5 elements, but a 5x2 block will outnumber a 4x4 block for penalty purposes, because 5 fight 4 – assuming Reach or other combat effects are not involved.
** Only applies on the activation the attacker engages the subject

Success: For every success, the target suffers one hit at the base damage of the weapon used, and the entire engagement is shifted 1 GSU in a direction based on the engagement type.
Failure: No effect.

The first part of an action's entry is its name, followed by the type of action (see Activating a Unit, page 15). Next, it specifies whether or not the skill can be improvised (see below), and what the subject of the action is.

The long part after that is the list of modifiers; modifiers are the effects of various conditions that affect the action's effectiveness. All modifiers that are relevant apply – for example, if the subject is outnumbered 4:1, then the total modifier is +4. The modifiers for outnumbering, 2:1 outnumbering, and 3:1 outnumbering all apply.

Finally, the effects of the action are shown. In this case the effect is simple: successes translate to hits on the target, and failures do nothing.

When making a skill check, one needs two pieces of information: the skill level of the unit performing the action requiring the check, and the modifiers that apply to the check. Modifiers are based on various conditions that may affect the skill check significantly, such as movement, morale, weather, cover, and other factors.

A unit's skills are shown below its attributes in the unit's description, and are shown in a form matching the following examples:

Alertness: 1

This is a simple entry for a skill called Alertness; the number after the colon represents the **skill level**, in this case 1. This unit has been trained in battlefield awareness, but only to the point of basic competence.

Close Combat: 10/1

This is a more complex entry, which has a **diminish value** after the skill level. The diminish value represents the loss of effectiveness with damage or the loss of unit members – the number after the slash is the number of members or damage points that must be lost to reduce the skill by one.

Aimed Fire: 2*

This is another way of representing the skill level of a unit with multiple members. The * following the skill level means “for each member of the unit”. Therefore a unit with five members, and an Aimed Fire skill of 2*, will make an Aimed Fire attack at skill 10. This is effectively interchangeable with the diminish method, but is more often used in trooper-level games, while diminish values are more likely seen in unit sets for larger games.

To make a skill check, roll a number of dice equal to the skill level, and modify each die by the total modifier. To obtain the total modifier, simply look at the entry for the action being taken, and add up every modifier that applies. For each die, after being modified, that equals or exceeds 5, count one success.

Example: A stand of regular infantry with a Close Combat skill of 3/1 is fighting an opposing stand in a bog. The bog provides partial concealment, and is rough terrain, which each add a -1 modifier to the roll. There are no other modifiers, so three dice are rolled, subtracting two from each die. The dice come up 6, 2, 11. This, after modifiers, means one success has been rolled. Looking up the results for Close Combat on a success, it shows that one hit is generated on the defending stand.

Improvising

Improvising is a special case when making a skill check; it represents a unit acting on instinct, and attempting to use a skill in which it has no training at all. When an action entry says it can be improvised, and the unit that wishes to attempt it does not possess the relevant skill, it may make the attempt with one die, at a -4 modifier

Abilities

Many entities cannot be described simply by attributes and skills alone, because they have some unusual defining features. They may have special training, providing modifiers to certain actions; they may be able to take special actions or use different formations than other units. All of these types of special cases are described in an entity's Abilities section, which acts as a catch-all category for miscellaneous rules.

Example: The Abilities section of a unit of renaissance-era city guard has the entry “City Fighters: This unit halves the penalty for moving through any kind of rough urban terrain, such as sewage, building interiors, crowds, or similar terrain.” - this makes the unit more mobile in a city than other units that lack this ability.

Mixed Units

Sometimes a unit is not only composed of multiple characters, but of multiple units in their own right. Such a unit is called a mixed unit, and has some special rules. There are several ways a unit can become a mixed unit:

- start the game as a mixed unit, by having some specialist individual, permanent leader, or other character different from the rest of the unit
- be joined by a character, such as an army officer, messenger, or special weapons trooper
- be joined with another unit through the Join Units action; see Leadership, page 18
- become engaged in skirmish combat; see Skirmish Combat, page 26

A mixed unit moves, is engaged, and is generally handled together, as a single unit. The only time a unit's mixed status comes into play is for initiative conditions, morale effects, and for receiving hits. See Update Damage, page 39, for more information on mixed units and damage, Updating Morale, page 41, for mixed units and morale, and Acting on Orders and Initiative, page 16 for initiative conditions.

Weapons and Equipment

A soldier is little good naked, most of the time (certain Celts notwithstanding), and even then they generally carry some implement of death to help them dispatch their enemies (certain Asians notwithstanding). Equipment is a major part of most units' statistics, and this section will cover the concepts of an equipment entry in detail.

The first type of equipment is the melee weapon; these can be swords, clubs, bare fists, or any other type of close combat weapon. Sometimes a melee weapon entry will represent more than one melee weapon; this is generally the case for weapons used as pairs. These only have one basic attribute: **base damage**. The base damage of an attack determines how effective it is at hurting the target – see Update Damage, page 39, for details on damage. For now, simply remember "higher is better". In addition to base damage, all weapons can have abilities, in the same way other entities can. These can do things such as extend combat range (for weapons such as spears), reduce the effectiveness of armour (estocs and stilettos fall into this category), or deal special types of damage (flaming torches). In general, when looking at a melee weapon, the abilities are what define it.

Examples:

> *Warhammer, Base Damage 1. Abilities: Armour Piercing: Reduces the hits bonus of armour by half.*
>
> *Sword and Dagger: Base Damage 1; Abilities: Parry: Enemies suffer -1 to hit this unit in combat if at least half of the friendly engaged troops have Parry. If not, enemies suffer -1 to hit when focusing on a subunit with Parry.*
>
> *Spear: Base Damage 1; Abilities: Reach 1: extends combat range by 1.*

The second type is the ranged weapon. Ranged weapons have additional attributes: a short, medium, and long range, and which actions can be taken with it. A weapon's range is shown in the form (Short/Medium/Long), and is used when determining the modifiers for ranged attacks. A weapon cannot fire at any target outside of its long range. The numbers shown are the upper limit of the ranges – so for example, a 20/40/60 weapon would be in short range at any distance up to 20GSU, medium range between 21GSU and 40GSU, and long range above 40GSU. The maximum range of the weapon is 60GSU.

Some ranged weapons can only be used for *Aimed Fire* (such as handguns, rifles, shotguns, cannons, and crossbows) while others can effectively be used for *Area Volleys* (bows in groups, mortars, cannons loaded with canister). A weapon designed for *Area Volley* will also have a **coverage** and a **drift** attribute. The equipment entry for the weapon will specify this restriction.

Examples:

Longbow: Base Damage 3, 1 for Area Volley. Range 40/80/120. Coverage 1, Coverage Increment 1, Coverage Limit 1 per weapon in unit, Drift 10. Abilities: Large Falloff 1 (loses 1 base damage at medium range, and 2 at long range).

Crossbow: Base Damage 3. Range 30/60/120. Usable for Aimed Fire. Abilities: Large Falloff 1 (loses 1 base damage at medium range, and 2 at long range)

12-Gauge Shotgun: Base Damage 5. Range 10/30/60. Usable for Aimed Fire. Large Falloff 2. (loses 2 base damage at medium range and 4 at long range)

Laser Rifle: Base Damage 4, Range 40/80/120. Usable for Aimed Fire.

Mortar: Base Damage 5, Range 20/100/250. Usable for Area Volley. Coverage 6, Coverage Increment 6, Coverage Limit 6 per weapon in unit. Drift 20.

*O*ther equipment has no fixed attributes; it generally provides a set of abilities that it conveys to its owner. This includes equipment like armour and shields, which increase hits or provide other defensive bonuses, or special gear like camouflage.

Examples:

Light Armour: +1 hits

Ghille Suit: Treat brush and other wooded terrain as solid rather than sparse for concealment.

The Flow of the Game

Although it is impossible to accurately simulate real-time events on a tabletop, Emlia's rules attempt to make a battle appear to flow smoothly, with units acting simultaneously on both sides, rather than having one side move, then the other. In actual warfare, it is rare that an enemy will stand in place waiting for you to finish firing!

Timing and Turns

The Turn Order

In Emlia, a game turn is divided into a series of **timing steps**, each representing a very small difference in time from one to the next. Actions in one timing step occur “just before” actions in the next – archers loose their arrows just as enemy knights spur their horses to charge the line, who ready themselves for the coming attack, and all of these things happen within a short span of time. The same concept can be applied to larger scales – the time frames are simply larger, and the actions more broad; commanders order their regiments, spotters and field officers manoeuvre into position, and battles rage while others draw to an end. Though a turn at this scale may span hours, it is still very difficult to order the action that happened one by one.

Timing

Timing is a key attribute – every unit in the game possesses it at some value or another. The higher the attribute, the better the unit's sense of tactics and the flow of the battlefield is, and the sooner in the turn the unit gets to act. Each timing step in the turn is given a number, which corresponds to timing attributes. Higher numbers pass first in the turn, and count down to 0 – units with timing 0 always perform their actions last in a turn.

Each timing step is divided into two phases: the **activation phase**, where players take turns making their actions, and the **resolution phase**, where game conditions that have changed during the previous activation phase are updated.

Timing and Mixed Units

A mixed unit may have different Timing scores in some of its subunits. In this case, the unit is treated as having the highest timing score among its subunits for the purpose of activation. This allows, for example, a commanding officer to join a unit to improve its combat awareness.

Order of a Timing Step

1. Begin with the activation phase: Activate the unit with the timing attribute corresponding to the current timing step, or the unit chosen by its controlling player if more than one unit has the highest. That unit may perform its actions, or it may *Delay*, reducing its timing attribute to a lower value, of its controller's choice, until the end of the turn.
    1. In the event of multiple players' units having the relevant timing, the player that activated a unit least recently chooses one of his or her unit with that timing attribute and activates it.
    2. Once one player controls all of the remaining units with the relevant timing attribute, he can simply activate them one by one in whatever order he chooses.
    3. Repeat step 1.1 until all units at that timing step have been activated.
2. Go to the resolution phase: update the game state for the next timing step – remove casualties, apply effects created during this timing step, etc.
3. Repeat the process for the next timing step.

The Activation Phase

The main action on the board takes place in the activation phase. In this phase, each unit or entity activates in turn, and performs one or more actions such as moving, attacking, spotting, giving orders, or casting spells. Both players' units activate in the same phase, in a specific order based on the timing attributes of each unit. Remember that a single independent entity is also a unit.

Activating a Unit

Once a unit has been chosen to activate, it must perform its actions, or *Delay*. Delaying, as was stated above, reduces a unit's timing attribute until end of turn, to a value of its controller's choice. You may not *Delay* to the same timing attribute – you must reduce the unit's Timing by at least one, meaning units that act on timing step 0 cannot delay, even if multiple units are acting on that step. (If a unit could *Delay* to the same step, it is possible for a turn to go on indefinitely, with two units acting on step 0 and each delaying when its turn to activate comes up).

Note: Delaying does count as activating a unit. A unit that delays, and activates later, is considered to have activated twice, but for the purpose of effects, its activation is considered to end when its **actual** activation ends, not the one in which it delays.

Example: A strange mind-eating crystal exists on the battlefield, dealing damage to all units that end their activations within 10GSU of it. If a unit within 10GSU delays, it does not necessarily suffer the damage – it can still avoid the damage by moving away from the crystal during its activation, when it comes up.

If a unit does not *Delay*, then the unit must perform its actions. Broadly, a unit may perform two actions per turn: a **move action** and a **primary action**. Mostly, the difference is that a move action uses the unit's means of locomotion (legs, tracks, tentacles, or however it moves around) and a primary action uses its means of manipulating the environment (arms, machine guns, other tentacles, etc.). It may perform these two actions in any order – move then primary or primary then move. One action may not interrupt the other, however – completely finish one action before performing the next.

The two categories are very broad – in addition, there are sometimes **free actions** a unit may perform, which do not count as either of the two actions it can perform during a turn. Any number of free actions can be performed in a turn, but the same free action cannot be performed more than once.

If an action requires a unit to forfeit its primary action or move action, the unit may not perform that action if the action it needs to forfeit has already been used this turn.

Move Actions

- *Double Pace*: A unit may take a *Normal Move* in addition to any move action other than *Double Pace* (including another *Normal Move*).
- *Normal Move*: The unit moves its given movement speed (in GSU) along a path chosen by its controller. Any of the unit's available movement modes may be chosen.
- *Drop Down*: Mark the unit as being in the **prone** state, reducing its height.
- *Stand Up*: Remove the prone state from the unit.
- *Conceal Self:* Hide from sight
- *Take Cover*: Bunker down behind a defensive obstacle
- *Improve Morale*: Rally a unit's morale back to normal

Primary Actions

- *Aimed Fire*: make direct fire attacks
- *Close Combat*: make melee attacks
- *Disengage/Distract*: distract a unit so that oneself or another unit may escape
- *Area Volley*: Deliver indirect fire over an area
- *Charge*: Move and perform a *Close Combat* action. Cannot be done after Double Pace.
- *Improve Morale*: Rally a unit's morale back to normal
- *Conceal Self:* Hide from sight

Free Actions

- *Ignore Initiative Conditions*: Force a unit to act on orders
- *Ignore Morale Effect*: Convince a unit to ignore poor morale and act on orders
- *Reorder (Ordered Commander Only)*: Reorder a confused unit
- *Take Command*: Take command of a unit
- *Join Units*: Join with another unit
- *Split Unit*: Divides a unit into separate groups
- *Delay*: Reduce the unit's timing score
- *Prepare Action*: Prepare for specific conditions. May be performed once for each action the unit has available.
- *Detect Hidden Entity*: Actively search for hidden objects or enemies

Some units may also have abilities that grant them additional actions. See Skill Checks and Actions, page 10, for how these actions are taken.

Acting on Orders and Initiative

A unit acting directly under a player's control is said to be **acting on orders**. No skill checks or actions are required to make a unit act on orders normally. Sometimes, however, a condition will exist to make a unit's instincts supersede orders. These conditions are called **initiative conditions**, and are listed in a unit's attributes. When one of a unit's initiative conditions are met, the unit will, by default, ignore orders and **act on initiative**, taking the actions described to the right of the condition.

Any unit that has one or more initiative condition met, and has not activated this turn, may activate during any timing step if it only acts on initiative. A unit may not take any actions on orders if it activates this way, and forfeits any actions not specified by initiative conditions.

In the case of initiative actions not consuming all of the unit's available actions, it may act on orders for the remaining actions at the controlling player's discretion. It may do this even if it is unable to act on orders – this is simply a part of acting on initiative. In the case of multiple initiative conditions being simultaneously met for a unit, the order in which they are listed in the unit's attributes represents priority: the unit will first take the actions specified by the first condition in the list that is satisfied. If after resolving those actions, the unit still has the ability to take further actions, continue down the list of initiative conditions, ignoring any actions that cannot be taken due to previous ones. Essentially, the rule is “do as much as possible, then act on orders with anything left”. The *Ignore Initiative Conditions* action, below, is used to prevent a unit from acting on initiative during its activation:

Ignore Initiative Conditions (Free Action)
Skill Used: Leadership
Improvise: Yes
Subject: One friendly unit subject to a morale condition within 20GSU
Check Modifiers:
Morale:
Source morale at -4 or worse: -5
Source morale at -7: -5
Subject morale over starting morale: -5
Subject morale at -4 or worse: -2
Subject morale at -7: -3
Source:
Army value of source lower than subject: -1
Subject unaware of source: -5
Source has partial concealment to subject: -1
Source has total concealment to subject: -3
Source's height is above subject's: +1
Formation:*
Subject is in ranked formation: +1
Subject is unit in open formation more than 20GSU across in any direction: -2
not all members of subject within 20GSU of source: -5
* any bonus or penalty in this category only applies to units with more than one member

Success: If one or more successes are rolled, the unit can act ignoring any morale or initiative conditions.
Failure: No effect

Morale conditions are a special type of initiative condition. They take priority over all other initiative conditions (unless otherwise specified) and may or may not appear in a unit's statistics. By default, every unit uses the morale conditions table found in the Updating Morale section under the Resolution Phase. If a unit has its own set of morale conditions, however, they are used in place of the table.

Example: In a fantasy game, Jack's unit of thieves, a unit specializing in subterfuge and stealth, has the initiative condition "when in sight of an enemy and in the open, move into the nearest concealment, without moving into hindering or damaging effects". Above it, however, they have a second initiative condition: "when within twice the fastest movement speed of an enemy numbering more than this unit, move away from the unit to a distance of at least twice the enemy unit's movement speed". The unit is currently caught in the open, 25 GSU away from an enemy unit of crossbowmen (movement 15), with more men than the thieves have among them. This causes both initiative conditions to trigger: first, moving away from the crossbowmen, then moving towards concealment. In this case, Jack does NOT need to move his thieves into concealment unless he wants to: because the first initiative condition consumes the unit's move action, the second initiative condition cannot affect the unit: they are more concerned with keeping their distance from the enemy.
Example 2: In a far different setting and scale, Jack's star cruiser is in trouble. It has sustained repeated hits and its morale has sunk to -4 from the damage and seeing its fellow ships go down. Overall, morale on the ship works the same as morale for other units, so it does not have any morale conditions in its statistics. Jack therefore consults the morale table, and it shows that -4 corresponds to retreating. The cruiser must now move full-steam towards its own lines, avoiding any enemy. As they say, "those who fight and run away..."

Realistically when faced with an enemy with ranged weapons, staying in the open and backing off is not the best course of action, but initiative conditions are a limited way of representing a unit's own thoughts, hence why they are generally flexible, allowing Jack, in the example, to have them move away AND seek concealment. There are also ways to get around initiative conditions, which are discussed further in the sections on Updating Morale.

Mixed Units and Initiative Conditions

A mixed unit may have different subunits with different initiative conditions. There are two cases of this: the case where part of the unit is acting on orders and part acting on initiative, and the case where a unit is acting on initiative, but different subunits have different conditions. In either case, the *Ignore Initiative Conditions* action, below, will negate all initiative conditions a unit is subject to for that activation.

In the case where part of a unit is able to act on orders, that subunit has the choice to break the mixed unit, or to follow the subunit acting on initiative. If the subunit breaks formation, the two subunits become separate units, and in the next resolution phase, both become disordered.

In the case where two subunits both have initiative conditions to follow, the subunits must break apart if it is required to satisfy their initiative conditions; if they can act together and satisfy them as if they were separate units, then they may retain formation. If they break up, they will become disordered as above, if not already disordered. In most cases, this situation is already the result of a disordered unit running amok.

Leadership

A unit that is acting on orders must have some source of those orders – a leader, somewhere. Specifically, every unit has a member designated the leader of the unit, and the source of all leadership actions for the unit. A unit leader may or may not have the Leadership skill – if it does not, it can still Improvise. A unit's leader is always the character with the highest Leadership skill; in the event of a tie, the character with the highest army value, followed by the choice of the controlling player, is the leader. A unit that loses its leader becomes disordered until a new character takes command, or it is reordered by a commander outside the unit. For more on orders and leaders, see Updating Morale, page 41.

Sometimes a unit will become depleted or disorganized, and need to reunite with ordered friendly troops. The *Join Units* action allows two units to become a single unit, choosing a leader from the best of the two current ones:

Join Units (Free Action)

Skill Used: Leadership
Improvised:Yes
Subject: Two Target Units Within 20 GSU
Check Modifiers:

Morale:

Source morale at -4 or worse: -5
Source morale at -7: -5
Subject morale at -4 or worse: -2
Subject morale at -7: -3

Source:

Army value of source lower than either subject: -1
Either subject unaware of source: -5
Source has partial concealment to subject: -1
Source has total concealment to subject: -3
Source's height is above subject's: +1

Formation:*

One subject is in ranked formation, but not both: -1
Either subject is unit in open formation more than 20GSU across in any direction: -2
Not all members of either subject within 20GSU of source: -5

Success: Source and subject become a single mixed unit. Remainder of source's activation is delayed until subject's timing if lower. If subject has already activated, source's activation immediately ends. The morale of the new unit is equal to the higher of the two units, with a -1 penalty if the other is lower.
Failure: No effect

Sometimes a unit will want to break into two groups, each with a separate leader. To designate the leader of the new group, the current leader must perform a *Split Unit* action:

Split Unit (Free Action)

Skill Used: Leadership
Improvised:Yes
Subject: Friendly Unit within 20GSU
Check Modifiers:

Morale:

Source morale at -4 or worse: -5
Source morale at -7: -5
Subject morale at -4 or worse: -2
Subject morale at -7: -3

Source:

Army value of source lower than subject: -1
Subject unaware of source: -5
Source has partial concealment to subject: -1
Source has total concealment to subject: -3
Source's height is above subject's: +1

Formation:*

Subject is unit in open formation more than 20GSU across in any direction: -2
Not all members of subject within 20GSU of source: -5

Success: Subject becomes two separate units, divided as the controlling player sees fit, with new leaders as normal. The unit that retains the source of the *Split Unit* action continues its activation; the new unit will activate as normal, but forfeits any actions already taken this turn.
Failure: No effect

Move Actions

The concept of a move action is a very simple one – a unit moves, under its own power. Most move actions do not require a skill check, and are instead automatic. The following basic move actions can be taken during an activation – for the others, see their relevant sections, or the abilities of the unit in question for special move actions.

Normal Move (Move Action)
Skill Used: None

Effect: The unit moves its movement speed in GSU, in one of its movement modes, along any chosen path as restricted by that movement mode (a walking unit may not move through deep water, for example). Terrain effects apply as described in the descriptions of the terrain (see: Terrain, page 32). Objects with no terrain effects, but are over one-quarter the unit's size, cannot be moved through (for example, another unit).

Double Pace (Move Action)
Skill Used: None

Effect: The unit performs both a *Normal Move* and any second move action (which may be another *Normal Move*) as part of the *Double Pace* action. ALL skill checks made by the unit are at a -4 penalty, in addition to any specific penalties for *Double Pace*.

Drop Down (Move Action)
Skill Used: None

Effect: The unit drops to the ground, entering the Prone state. When a unit is prone, its Size and Height are halved, as they contemplate their oneness with the ground.

Stand Up (Move Action)
Skill Used: None

Effect: A very simple action, a unit that is Prone uses the *Stand Up* action to return to normal position.

Take Cover (Move Action)
Skill Used: None
Requirement: Must be within 5GSU of an obstacle that could provide it cover (must be at least half the heigh of the source)

Effect: The *Take Cover* action bunkers a unit down into cover – it enters the Taking Cover state, improving its ability to hide. Taking Cover improves the bonuses granted by concealment, and can grant concealment in some cases when none exists. If a unit is both Prone and Taking Cover even in the open, it can be surprisingly hard to hit. A unit in the Taking Cover state loses the state as soon as it moves more than 5 GSU away from an obstacle that could provide cover. A unit moving while Taking Cover moves at half speed.

Leaving the Battle

At any time, a unit capable of moving off of the battlefield may do so. If it leaves the field by a table edge marked as its own lines in the scenario being played (see Scenarios, page 47), then it counts as having retreated the field. If it leaves by any other edge, it is treated as destroyed.

Movement Modes

There are a large number of different movement modes in Emlia; in addition to a unit's movement modes, further limits may be placed on its movement by formation, terrain, and other special effects. In a unit's attributes, its movement modes are described under its Movement attribute, in addition to its various speeds.

Ground Movement(G): A unit has a single speed for ground movement, representing its maximum speed. If given no other restrictions, a unit using ground movement may move up to this speed in a single *Normal Move*, with no minimum speed needed.

Flying Movement(F): A unit with flying movement works just like ground movement, except it moves through the air, ignoring terrain on the ground. Rules for variable altitude affect flying movement.

Example: A unit of magical wisps with movement 15F wish to move at a 45 degree angle downward, 6 GSU forward and 6 GSU down. Ignoring the downward component, it is moving 6 GSU and has 7 GSU of movement left for the rest of the Normal Move.

Boat Movement(B): A unit with boat movement may only move over water, but moves otherwise like a unit with ground movement.

Hover Movement(H): A unit with hover movement moves like a unit with ground movement, but may cross water and ground. It is also affected differently by certain terrain.

Acceleration-based Movement(A): A unit with acceleration-based movement, or A-movement, cannot go from zero to maximum speed within one turn's time. It must instead accelerate and decelerate based on its current facing. A-movement is mostly used for vehicles and large monsters, and is shown after the affected movement mode as a set of “gears”, each representing a top speed. The unit may set its speed to any number less than or equal to its current gear's maximum, and greater than the maximum of the next-lowest gear, freely. It may also freely accelerate to any speed in the next gear, or brake to any speed in the previous gear.

To move in reverse, the same gears are used, but with all numbers halved. The vehicle must begin its action in its lowest gear before it can shift into reverse; it may enter the first reverse gear freely then, or the second as a *Double Pace*.

Vehicles using A-movement may not *Double Pace* normally; instead, taking a *Double Pace* action allows the vehicle to shift its speed two gears in one action, representing all-out acceleration or stomping on the brakes.

Example: A sample tank has a speed of 60G10/20/40/60A. Last action it moved 42 GSU. Taking a normal move action, it may move any speed from 21GSU to 60GSU, by braking or accelerating respectively. If it took a Double Pace action, it could move as slowly as 11GSU. It could not slow down to 10 GSU or slower in a single turn – the tank is just moving too fast! If the tank needed to go in reverse, it would have to spend two turns slowing down before it can start backing up; it would probably be better to slow down, then turn around, than attempt reverse at that speed.

Turn-Limited Movement(T): A unit with turn-limited movement, or T-movement will almost always also have A-movement, becoming a unit with AT-movement. T-movement is represented as a number of GSU required before being able to make a 45-degree turn. Every gear the unit has for A-movement will have a corresponding value to turn for T-movement. This represents how much more difficult it is for the vehicle to turn at high speeds.

Example: *The sample tank has been made more realistic with the addition of T-movement. Its movement code is now 60G 10/20/40/60A 2/5/20/40T. If the tank wishes to move 25GSU this turn, it could make a single 45 degree turn after moving 20 GSU, and no other turns.*

Formations

All units have a **formation** – even units with one member have a formation, and use the rules defined in this section. Remember that units whose members are arranged such that they may be in multiple formations must decide as soon as the ambiguous position is reached; i.e. immediately after the unit finishes movement. If the unit has been forced into such a position, the controlling player can declare what formation it is in immediately.

The following formations are available to all units:

Open Formation: A unit in open formation has no member more than 10 GSU away from every other member of the unit – when a member moves more than 10 GSU away from its unit, this requires a *Split Unit* action (see page 18). A unit that wishes to stay together may not spread itself out farther than 10 GSU between members unless otherwise specified. Large units in open formation are very difficult to lead – it is difficult, after all, to command an unordered mob of troops all spread out across a field. Aside from this, open formation has no special rules.

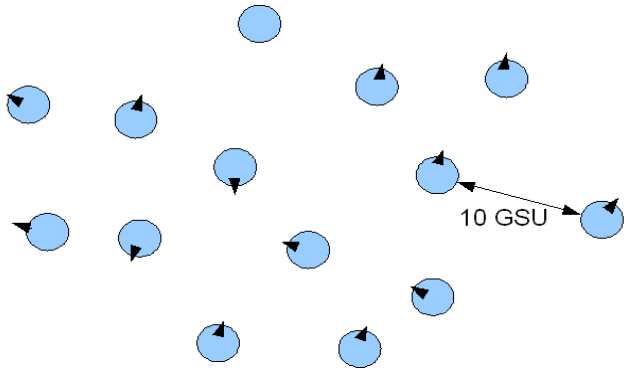

Figure 4: Blue troops in open formation. Arrows show individual facing.

Close Formation: A unit in close formation is packed more tightly together, losing some of its ability to manoeuvre but gaining solidarity among its members. The formation is more effective in close combat, and is better at receiving orders than open formation. When the members of a unit in close formation do not have a common facing in the direction of movement, its speed is reduced by half. Additionally, turning a unit in open formation costs one GSU of movement per 90 degrees turned, though members of the unit may turn independently of one another. Its members must be within 1 GSU of each other to benefit from close formation.

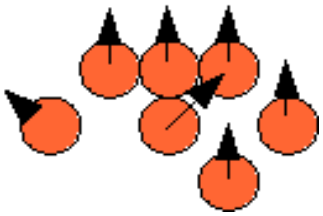

Figure 5: Close Formation (with facing arrows)

Ranked Formation: A unit in ranked formation is neatly arranged into ranks, shoulder-to-shoulder with a common facing. A unit in ranked formation must have all of its members within 1 ground scale unit of one another, arranged in a rectangular block of ranks and files, and move as a tight group. This group is difficult to manoeuvre around compared to open formation groups. A unit in ranked formation has a single facing, represented by the facing of the front line of its boundary (determined by the unit's controller at the start of the game). In order to change facing, the unit must either wheel about, or turn in place. Turning in place consumes one-quarter the unit's speed for every 90-degree turn. Wheeling about is done by "anchoring" one end of the front line, then moving the other end by pivoting it around the front member. To wheel, the unit must move forward along its new heading at least an amount of distance equal to the "depth" of the unit (the distance between the front line and the furthest rearward member).

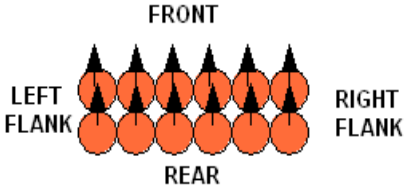

Figure 6: Ranked Formation: note the common facing

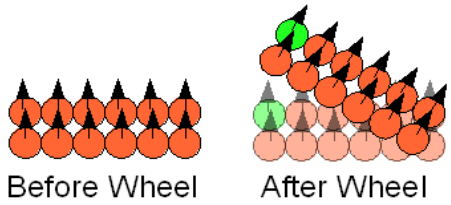

Figure 7: Example of Wheeling - Movement is measured from the highlighted members

Primary Actions

Primary actions are the more complex part of a unit's activation – they almost all involve skill checks, and most of them are combat-related. The basic primary actions are *Aimed Fire*, *Area Volley*, *Charge*, *Close Combat*, and *Disengage/Distract*.

Aimed Fire:

Aimed Fire attacks are the direct means of attacking with projectile weapons: point and shoot. Some angling for distance, wind, etcetera may be made, but the shot is generally horizontal.

Skill Used: Aimed Fire
Default: Yes
Subject: A target entity or subunit within the maximum (long) range of the weapon used and without total cover.
Requirement: Must have a weapon capable of *Aimed Fire* attacks, as indicated in the equipment entry, and must be unengaged.
Modifiers:

Range:
Outside medium range: -2
Outside short range: -2

Cover/Concealment:
Subject has partial concealment: -2
Subject has total concealment: -5
Subject has partial cover: -3
Subject taking cover: -1
Subject taking cover in partial cover: -1

Other:
Forfeit movement: +2
Elevation over target: +1
Target unaware: +1
Double Paced: -2
Firing as a Prepared Action: -2
Focusing on subunit: -2
Focusing on subunit less than 25% of group: -1
Focusing on subunit less than 1/10 of group: -3
Focusing on subunit of skirmish combat: -4

Success: For every success, the target unit suffers one hit at the base damage of the weapon used.
Failure: No effect.

Area Volley (Primary Action)

Area Volley attacks involve indirect weapons – archery, catapult fire, and the like. It covers an area, rather than a specific target entity, and can be used for suppression as well as mowing down swaths of enemies. An area volley attack is directed at a point in space, trying to cover that area with as much suppressive fire as possible.

Skill Used: Volley Fire
Default: No
Subject: A point within the maximum (long) range of the weapon used and without total cover above it
Requirements: Source must be acting on orders, and must forfeit its move action. Must have a weapon capable of area volleys, and must be unengaged.

Environment:
Point has partial concealment: -1
Point has total concealment: -3

Range:
Inside short range: -
Inside medium range: -

Success/Failure: Roll a random direction from the target point, using a die marked with an arrow, a spinner, or the

table below, and move the point an amount equal to the drift attribute of the weapon. The area covered is a circle with diameter equal to the coverage attribute of the weapon. All entities in the area, treated individually, suffer one hit at the base damage the weapon uses for area volleys.

Success: For each success scored, reduce the drift by 1, or increase the coverage by the coverage increment given in the weapon's description, up to the coverage limit.
Failure: The drift does not change.

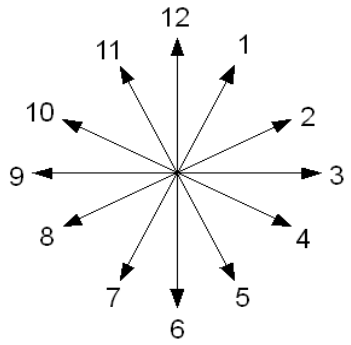

Figure 8: Drift Direction for Area Volley

Concentrated Volley (Primary Action)

Concentrated Volley attacks involve indirect weapons – archery, catapult fire, and the like. A *Concentrated Volley* attack is directed at a specific unit, focusing all shots within that unit's boundary.

Skill Used: Volley Fire
Default: No
Subject: A target entity within the maximum (long) range of the weapon used, and without total cover above it
Requirements: Source must be acting on orders, in close formation, and must forfeit its move action. Must have a weapon capable of concentrated volleys, and must be unengaged.

Environment:
- Subject has partial vertical cover: -2
- Subject has partial concealment: -1
- Subject has total concealment: -3
- Subject taking cover: -1
- Subject taking cover in partial cover: -1

Range:
- Inside short range: -2
- Outside medium range: -5

Other:
- Target unaware: +1
- Elevation over target: +1

Success: For every success, the target unit suffers one hit at the base damage the weapon uses for concentrated volleys.
Failure: No effect.

Close Combat (Primary Action)

Close combat attacks are a simple affair – get up to someone, apply violence. It is an abstract affair – the exact positions of models do not matter, as the units engage in the swirling mess of combat.

Skill Used: Close Combat
Improvised: Yes
Subject: Entity or subunit in combat range

Environment:

Subject has partial concealment: -1
Subject has total concealment: -2
Subject has partial cover: -1
Subject has total cover: -2
Fighting in rough terrain: -1

Ranked Combat:

Attacking enemies to the flank: -1
Attacking enemies to the rear: -2
Attacking enemies on multiple fronts: -1
Attacking from the flank: +1
Attacking from the rear: +2
Attacking from multiple fronts: +1 per additional front

Other:

Subject is outnumbered*: +1
Subject is outnumbered* 2:1 or worse: +1
Subject is outnumbered* 3:1 or worse: +2
Source *Charged*: +1
Subject *Charged* last activation: +1
Engaged enemy already engaged before this activation phase: +1**
Double Paced: -2
Target has elevation: -1
Elevation over target: +1
Focusing on a subunit: -1
Focusing on a subunit numbering less than 25% of possible targets: -1
Focusing on a subunit numbering less than 10% of possible targets: -1
Free strike against unit leaving engagement: +4
All targets unaware: Automatic success, ignore armour bonus to subject's hits

* Outnumbering only considers elements able to attack; in ranked combat, for example, if a 5x5 block engages a 5x4 block, there is no penalty for outnumbering, as 5 elements fight 5 elements, but a 5x2 block will outnumber a 4x4 block for penalty purposes, because 5 fight 4 – assuming Reach or other combat effects are not involved.
** Only applies on the activation the attacker engages the subject

Success: For every success, the target unit or subunit suffers one hit at the base damage of the weapon used, and the entire engagement is shifted 1 GSU in a direction based on the engagement type, if <u>all</u> entities in the combat are units capable of their own movement.
Failure: No effect.

Charge (Primary Action)

A Charge action is an impetuous, headlong rush into the enemy with the intent of bringing them into close combat as fast as possible.

Skill Used: None
Subject: Enemy unit or entity
Requirement: May not have *Double Paced* this activation.

Effect: A charging unit may immediately make a *Normal Move* action directly towards the subject of its charge. Charge movement must be in a straight line, and is affected by terrain as normal. If the unit does not reach melee range with the enemy for some reason, the unit suffers -1 morale, and ends its activation without making an attack.

Disengage/Distract (Primary Action): Sometimes, a unit must extract itself from combat. This does not mean the unit's members have simply all turned tail and started running – such behaviour would likely end in the unit being cut down in a quick flash of blades. A fighting retreat, however, is much more effective, delaying the enemy until the unit can find a getaway. Sometimes the unit will make a disengaging action and not move out of combat; in such a case, it is considered to be distracting the enemy so that another unit may move through, or escape.

Skill Used: Close Combat
Subject: All engaged enemy units
Improvised: No

Environment:

Subject has partial concealment: +1
Subject has total concealment: +2
Subject has partial cover: +2
Subject has total cover: +4
Fighting in rough terrain: -1

Other:

Source c*harged* this turn: -4
Source outnumbered: -1
Source outnumbered 2:1 or worse: -1
Source outnumbered 3:1 or worse: -2
Subject is outnumbered*: +1
Subject is outnumbered* 2:1 or worse: +1
Subject is outnumbered* 3:1 or worse: +2
Target unaware: automatic success

* Outnumbering only considers elements able to attack; in ranked combat, for example, if a 5x5 block engages a 5x4 block, there is no penalty for outnumbering, as 5 elements fight 5 elements, but a 5x2 block will outnumber a 4x4 block for penalty purposes, because 5 fight 4.

Success: For every success, a number of members of an enemy unit equal to the number of members in the disengaging unit may not make free strikes until end of turn, or until it is no longer engaged.

Failure: No effect

Engagements

Engagements are positions where enemy units have come close enough to entangle with one another and restrict each others' movements. It general refers to close combat – controlling and suppressing enemies with other types of attacks is covered under Prepared Actions.

Characters have a **combat range** in GSU equal to their size, unless they possess a combat range attribute – if they do, this attribute is used instead. When an enemy unit is within a unit's combat range, that enemy unit is **engaged** with that unit. If the enemy unit's combat range is shorter, the unit with the longer combat range may not be engaged.

The direction a unit's combat range extends can be restricted by formation. Normally there is no restriction, and a unit's combat range extends all around its boundary. In some special formations, however, there may be a restriction on the direction in which a unit can engage enemies.

Once a group of units becomes engaged, they are considered an **engagement**, and treated as a mixed unit of no side from outside the combat. The type of engagement is dependent on the formations of the units involved – in most cases, however, the engagement type is **skirmish combat**.

Skirmish Combat

In skirmish combat, units of the same side within an engagement are treated a a single mixed unit of their side when attacked – one attacks all of the enemies, not a specific unit. It is a swirling melee, with no clear lines of battle. As such, the combat can move in all directions when *close combat* successes are scored (see the description of the Close Combat skill, page 24). When enemy units are moved as a result of *Close Combat* successes, the entire engagement is moved in the direction chosen by the player inflicting the hits. See Handle Movement Effects, page 38, for special situations regarding this movement.

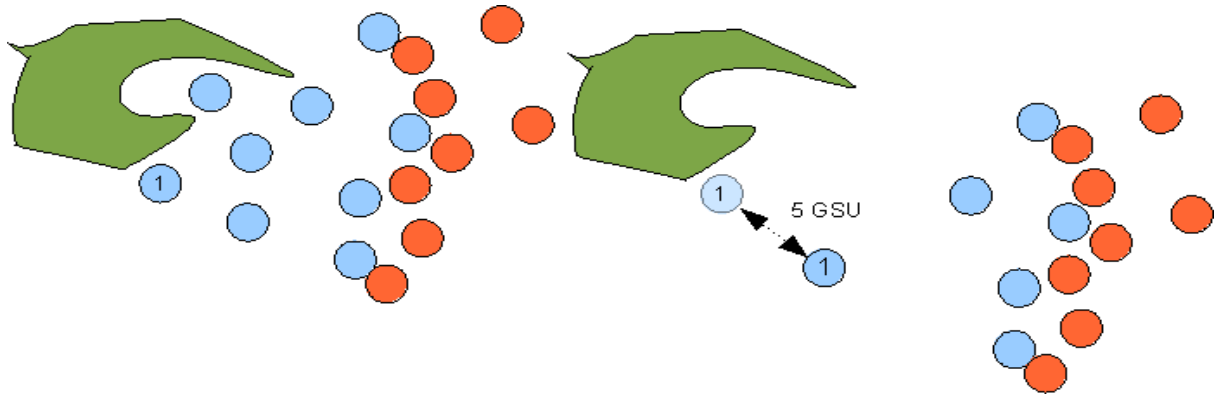

Figure 9: A skirmish combat before, and after resolution, with the orange player moving the combat 5 GSU away from the hill. Notice the blue unit has lost members to the Close Combat attack.

Since a skirmish engagement is treated as a mixed unit from the outside, it is possible for the skirmish to be targeted by a *Charge* action, or similar, in order to join the engagement, without actually contacting the boundary of an enemy unit on the table. This is because of the mobile nature of melee fighting – simply because the models on the table may stand in one place does not mean the combat is actually one side on the other as shown in the picture. More accurately the blue and orange circles would be intermixed as fighters pair off and combat degenerates into a brawl – into which the blue squares then charge.

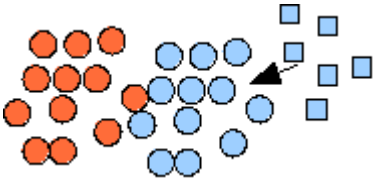

Figure 10: The unit of blue squares charges into the engagement between blue and orange

Additionally, because a skirmish combat is a mixed unit of different sides, no unit is treated as friendly or enemy to a skirmish combat; all units are neutral.

When moving out of a skirmish combat, such as by disengaging (or accepting **free strikes**, see below), a unit may move as though its position were any point within the boundary of the combat.

Ranked Combat

Ranked combat occurs when a unit in ranked formation engages or is engaged by an enemy. In ranked combat, the relative positions of the units are known, and the miniatures represent accurately where they stand and fight. Clear lines of battle are drawn, as the formation of the ranked unit is designed to hold even when its front members are fighting the enemy. Rear-rank fighters support by helping them push back against their foes, and are often equipped with long spears to thrust from the back.

Ranked combat is less chaotic than skirmish combat, and units keep their respective boundaries separate from one another, their positions relatively static. Ranked masses of troops hurl themselves into the press, hoping to find blood as their comrades charge forward behind them.

Aligning: When a ranked unit is engaged by an enemy, it may choose to align its facing to it. The cost of this alignment depends on whether the unit was contacted to the front, flanks, or rear. If a unit was contacted on a corner, use the least penalty. If the unit aligns to a unit attacking the flank, it faces a -1 penalty to all skill checks until the end of its next activation. If it aligns to enemy to the rear, this penalty is doubled. To align to an engaging unit, simply rotate the ranked unit on its centre until it faces the enemy unit. A unit that is already engaged may never choose to align.

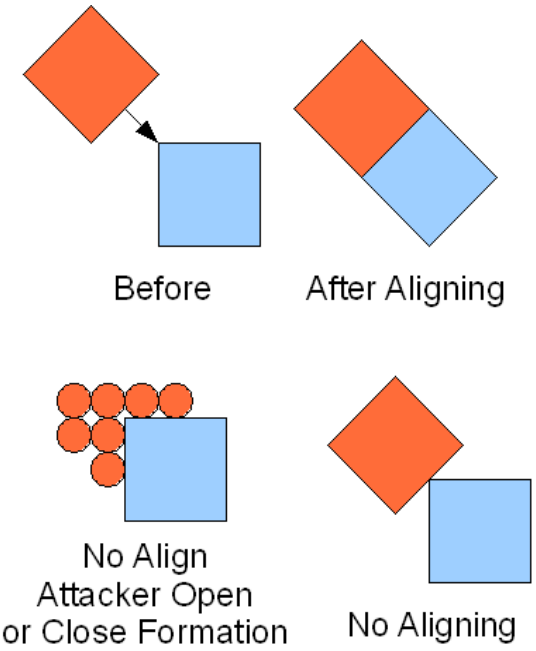

Figure 11: Different ways ranked units can align

If a unit chooses not to align, it can be outflanked and enveloped. The attacker may not be in ranked formation in order to do this, but may change formation immediately to assume close formation. The attacking unit may then move to surround the enemy, using whatever movement it has left. This is advantageous in that more attackers can be brought in against the enemy, as well as forcing the enemy to fight on two fronts, causing further penalties to the enemy.

Attacking: When a ranked unit is in combat, not every member in every unit is able to fight. Its position is known and exact, and the unit does not intermix with the enemy. Units in open or close formation engaging ranked units only consider members individually engaging the ranked unit; the position of the unit is known and fixed. Ranked units attack in the same way, with only members engaging enemies counting as unit members. When a unit is making a skill check, apply the diminish value for members removed from combat by distance (disengagement), in the same way they would be if actually removed by destruction.

For a unit making *Close Combat* actions while in ranked formation, some extra modifiers apply:

Attacking enemies to the flank: -1
Attacking enemies to the rear: -2
Attacking enemies on multiple fronts: -1
Attacking from the flank: +1
Attacking from the rear: +2
Attacking from multiple fronts: +1 per additional front

Fighting to the flank also imposes a cumulative -1 morale penalty, and an additional -2 for the rear, with another -1 penalty if multiple fronts are engaged (so fighting to both flanks and the rear would impose a -5 total). In cases where a unit is enveloped on multiple fronts, it is often advantageous for it to break ranks and assume close formation; this can be done as a move action, which provokes a free strike as normal (see below). As usual, this applies every resolution phase.

Resolving: When a unit in ranked formation is pushed back by C*lose Combat* actions, it is pushed directly along the *opposite* facing from the attacker. If it is forced back by multiple attackers, add the movement together as normal. A unit in ranked formation, however, does not need to give way to enemies forcing it backwards. If it chooses not to, the unit suffers a number of **press hits**, as below, at base damage 0, equal to the distance it would be forced back. If the enemy forcing it back is to the ranked unit's front, it will also receive half of these hits back.

Additionally, it has a third option: break ranks and assume close formation. If it does so, it is forced back normally, but it envelops the enemy – if they are in ranked formation themselves, they must choose to either inflict no press hits, or do so in exchange for breaking ranks, assuming close formation themselves, and engaging in skirmish combat.

When a unit in ranked formation pushes an opponent back using C*lose Combat*, the enemy is also crushed by the press of bodies and trampled by a wave of oncoming men. They suffer press hits, at base damage 0, equal to the number of unengaged unit members behind the engaged unit members, in the front of the unit. When fighting to the flank or rear, a ranked unit does not inflict press hits, but can still receive them. The number of press hits is limited to the lowest number of engaged unit members between the source and the subject of the hits, multiplied by the depth of the unit receiving the hits. Units not in ranked formation are always considered to have a depth of 1, because they are more able to give way to the mass of men crushing through their position.

Pressing to the Flank or Rear

A unit in ranked formation pushing an enemy back may only do so straight ahead. If it is not facing the enemy, instead of pressing them, the controller may choose to push them 1 GSU outside of the ranked unit's combat range. If the ranked unit is not engaged with any other enemy, it may instead choose to make a free turn, changing its facing toward the enemy, and force them back as if they were fighting to the front, but moving them half the distance, and inflicting half the normal number of press hits.

Press Hits and Size

Larger characters can inflict more powerful press hits; smaller ones have difficulty inflicting press damage at all. Press hits cannot be inflicted against an enemy more than four times a unit's own size. Units more than double the size of the enemy inflict press hits at base damage 1, plus 1 for every additional doubling of their size (so against a size 1 enemy, a size 2 enemy would hit at base damage 1, a size 3 enemy at base damage 2, and so on).

Pressing into Terrain

Finally, a unit forced back by a ranked unit will not stop if it hits impassable terrain not physically able to stop it, such as the edge of a river, or a cliff – it will be shoved right off, suffering the perils of the terrain! If such terrain is normally Impassable to all of the unit's movement types, and the terrain rules do not specify otherwise, the unit is destroyed. For normally passable terrain, including difficult terrain, the effects of moving through the terrain apply as normal.

Pressing into Enemy Units

If a ranked unit forces enemy into another enemy ranked unit, the unit being moved will suffer press hits from the new unit as though it had forced it with an equal number of hits, in addition to the normal press hits suffered. If the enemy unit being contacted is not in ranked formation, see Handle Movement Effects, page 38.

Example: Joe gets a crazy idea and lines up his men in a single file in order to generate lots of press hits. He charges them into a block of enemy infantry, all in a row. Joe's troops are normal human infantry (size 1) and 20 deep, so 20 press hits are generated. The problem is, as Joe only has one troop engaging the enemy, the lowest number is 1. The enemy unit is 4 deep, so he generates a whopping 4 press hits. Arranging his unit in a 3 wide, 6 deep formation instead would net him a dozen press hits, the most he could generate with his unit. That said, with only three soldiers engaging the enemy, combat damage will be light!

Ridiculous Example: Jack, Mike, and Roger have a ranked combat that looks like this. Hits inflicted across each front are shown by the numbers. The front of each unit is shown by the arrow. Units with odd shapes or no facing are in close or open formation (irrelevant which). Jack's units are pink, Mike's are blue, and Roger's unit is green. Note that Jack's unit in the bottom left is in close formation, and Mike's on the upper right is in open formation. Let's start by figuring out Mike's upper-right unit, the easiest. It has inflicted 3 hits on Jack's unit, and taken 0 back, so it goes nowhere.

Now let's try something trickier, figuring out where Jack's beleaguered middle unit, beset on all sides, goes. It has inflicted a whopping 11 hits to the front, but it has also taken 8 back, and 3 from the upper-right. It has also inflicted one hit to the left, and taken 3 back. Finally, it has taken 2 from the rear, and inflicted 0 back. Tallying all of this up, it moves 2 forward, 3 back, 3 to the lower-left, and 2 right. This leaves it moving roughly one GSU somewhere south-south-west, causing it to break ranks into both friendlies and enemies, simplifying next turn's combat greatly (likely turning the entire

mess into a skirmish combat).

The process is much simpler for the other units: see if you can figure it out yourself. The answers are: Mike's left unit is forced up 5 GSU. Jack's lower-right unit is forced left 5 GSU. Mike's upper unit is forced up 3 GSU. Only one unit is

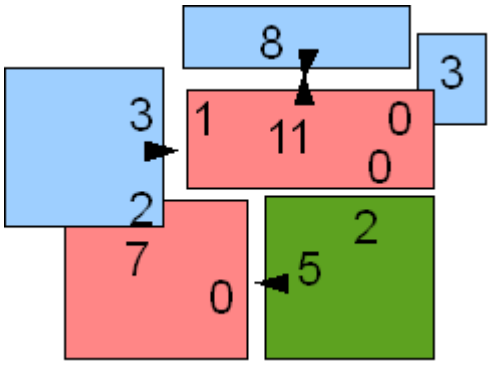

Figure 12: The messiest combat EVER. Confused yet? Luckily these never really happen.

able to follow up: Mike's upper-right unit, which can chase Jack's middle unit into the skirmish combat caused by it being Forced into Roger's unit.

One last note: this would have all had to happen within ONE activation phase for such a mess to occur; otherwise, forcing tends to be a more back-and-forth, attrition-based affair.

Mixed Engagements

Ranked and skirmish combat are simple affairs individually, but sometimes a case occurs where ranked combat and skirmish combat exist. For example, a ranked unit may move into an existing skirmish combat to support its allies. When a ranked unit engages a skirmish like this, or when any other engagement types are mixed, the result is called a **mixed engagement**.

In this type of mixed engagement, a ranked unit effectively becomes part of a skirmish combat. It attacks the skirmish, aiming for enemy targets where possible, like an elephant rampaging through a street fight. The rules for attacking mixed units, under Dealing Damage, are used to resolve attacks. When handling resolution, attacks directed against the ranked unit move it as normal for ranked combat. Attacks from the ranked unit onto the skirmish will also move the skirmish as normal for an opponent in ranked combat; both friendly and enemy units will suffer the press hits as a single mixed unit.

In the case of *Close Combat* attacks moving the skirmish portion of the engagement, it moves as normal, but the ranked unit may follow. If it does, it will do so taking the shortest possible route, but moving according to the rules for moving a ranked unit. It may turn, wheel, or about-face as necessary, but the movement used must be the least possible to keep the ranked unit engaging the skirmish. After making contact, align the ranked unit so that as many members as possible engage the skirmish. A ranked unit engaging the skirmish may not follow it if it is engaged by another unit, including another skirmish.

Other types of mixed engagements will be defined with different combat types; see the rules for other combat types for information on how they interact with these ones in the basic rules.

Free Strikes

Free strikes occur when a unit makes any move action while engaged. When free strikes are provoked, any unit engaging the entity provoking them can make a *Close Combat* action against it, out of turn. If the movement action causes the entity to become disengaged with the unit making the free strike, the attacking unit gains a +4 to the attack. Either way, a unit that makes a free strike forfeits its primary action during its next activation, and cannot make any more free strikes until after that time.

Skill Checks and Mixed Units

In all of these cases, a combat will involve multiple skill levels and possibly equipment sets, on the same side. On offence, this is simple – every subunit will have a given set of equipment, and a given skill level. A subunit uses its own skill to make a check, ignoring that of the rest of the unit. For line of sight purposes, they fire as though part of the main unit; subunits do not provide concealment to the enemy. They also share the awareness of the rest of their unit.

On defence, however, soldiers are fighting for their lives against anything that looks remotely like the enemy, in a swirling dance of weapons and death, or raising their shields to arrows that never discriminate. Enemies are attacked as though they are a single unit. When making a skill check against a mixed unit, perform the following two steps:

- Calculate the total modifier for each subunit individually, and take the one closest to zero. This is the total modifier for the check, until modified by the next step.
- Count the number of subunits that provide a higher or lower total modifier. For each with as many members as the largest subunit with the total modifier from the last step, reduce the total modifier by 1 if the total modifier of that subunit is lower than the starting total modifier, and increase the total modifier by 1 if the total modifier of that subunit is higher.

  Example: Unit A is fighting Units B (10 strong), C (1 strong), D (5 strong) and E (3 strong). Unit B provides a -1 to the Close Combat check; unit C provides a -3, D provides no modifier, and E provides no modifier. The net modifier will be -1, as the 10 strong unit reduces the modifier from Unit D by 1.

-

Allocating Hits

Many of these effects generate hits. In the simplest sense, damage is dealt to a unit by placing hit markers next to it. Each marker represents one hit inflicted on the unit, at a given base damage shown on the marker. During the resolution phase, these markers are cleaned up and the hits translated into damage. Hit markers are placed on a unit regardless of how many subunits it contains; only during the Resolution Phase are hit markers distributed among a unit's subunits.

Sometimes a unit will be able to target a subunit, rather than an entire unit, with an action. Sometimes such an action will also generate hits on that subunit; in such cases, the hits are allocated directly to the subunit being attacked, rather than the main unit. This has no effect on the hit allocation process in the Resolution Phase.

Preparing Actions

As discussed above, units have the option to *Delay* their action instead of acting immediately. Sometimes, though, a unit does not want to simply *Delay* to act later, but ready itself for a specific condition, and take an action. In this case, the unit is preparing an action. A unit may prepare any or all of its actions in a turn, but may only prepare for one condition – when that condition is met, the unit must execute all of its prepared actions.

To prepare an action, the player simply declares the unit is taking a *Prepare Actions* action:

Prepare Actions (Free Action)
Skill Used: None
Requirement: The unit must forfeit the action(s) required to perform the prepared action(s).

Effect: The unit prepares a set of actions. Place a note face-down with each condition and actions being readied. The unit may prepare any number of actions, but must forfeit the required actions to perform all of them. For example, a unit may not prepare two primary actions unless it had two primary actions to forfeit. The actions need not be described, only declared: for example: "Enemy unit within medium range of javelin, *Aimed Fire* then *Normal Move*" is sufficient. Conditions may be more specific, such as specifying one enemy unit to trigger the condition, or even multiple triggers, but beware: prepared actions are not instantaneous.

Once the condition for a prepared action is met, the controlling player reveals the condition and action. Remember, no more than one prepared action may trigger at a time; if somehow multiple conditions are met, the controlling player may choose which action the unit takes. If the conditions are in fact met, then the unit's prepared action resolves immediately after the action that triggered the preparation. If they are not met, the unit will continue to wait for the proper conditions, but its intentions have been revealed to all players.

Example: Riley's unit of Wolfpack mercenaries is holding its ground against the charge of a tremendous ogre warlord! They have an ace in the hole, however; having seen the assault coming, and having a higher Timing due to the Captain among their ranks, they Prepare for the Ogre's movement into position with a Charge action of their own. The ogre activates and moves towards the mercenaries, into range for a Charge action, but Riley reveals his prepared action! The mercenaries spring into action, charging the ogre and skewering it upon their halberds! Regardless of the damage, the ogre then finishes its activation; remember that unit states cannot change during activations, only between them.

The Battlefield – Positions and Visibility

Terrain

Terrain is an important part of any wargame – playing on a flat, featureless battlefield is (usually) tactically uninteresting, and provides for a boring and drab game visually. Adding some scenery to the tabletop can give a battlefield a much more interesting appearance, as well as provide tactical advantages to players who use the terrain in effective ways. Common terrain elements include hills, scrub, buildings, walls, hedges, barricades, fields, streams, and rivers; rules are provided for those and other pieces, such as full forests, villages, fortified buildings, and more.

Terrain uses the usual rules for entities and units, having attributes and abilities to define their role as scenery, rather than characters. Some common terrain abilities follow:

Rough Terrain (movement type): Rough terrain impedes movement of the given type; any unit moving through the boundary of rough terrain does so at half of its normal speed. *Example: Rough Terrain (ground) for an area of scrubland*

Very Rough Terrain (movement type): Very rough terrain is even more difficult to move through, reducing speed to one-quarter for all units moving through its boundary using the given movement type. *Example: Very Rough Terrain (boats) for a stream with thick reeds in it.*

Impassable Terrain (movement type): Units may not move through the boundary of impassable terrain using the given movement type. *Example: A sheer cliff is impassable terrain(ground).*

Visibility-Limiting Terrain(X): This terrain is considered solid for purposes of concealment in parts of the boundary more than X GSU thick. Thinner parts are considered sparse as normal. *Example:Dense woods is visibility-limiting(10).*

Any entity with no such abilities, but is above the ground level (such as another character, a rock, etc.) is impassable if its height is more than one quarter the height of the unit passing over it. This makes units of the same height impassable to each other.

Terrain Size and Height

The size and height of a piece of terrain can be quite important; it affects what is large enough to impede movement, as well as impeding sight and lines of attack. For impeding movement, the terrain type will specify if entities of a certain size are not impeded – generally this is of size relative to the terrain. For example, size ½ scrub only slows entities of size 2 and smaller.

An entity standing on top of a solid terrain element, such as a hill or other elevated ground adds the current height of the terrain to its own. In the case of an entity standing in a depression, the unit reduces its height correspondingly. An entity may have negative height if it is below the map level.

Example Terrain:

Shrub: Sparse, hits 1, size 1, height ½
Tree: Sparse, hits 3, size 2, height 2
Large Tree: Sparse, hits 5, size 3, height 3
Scrub: Unit of shrubs and trees, Rough Terrain to ground; Height 1 or ½, Sparse
Forest: Unit of trees, Very Rough Terrain to ground, Height 2 or 3, Sparse, Visibility Limiting at 10 GSU
Hill: Height 10, Solid
River: Impassable terrain to ground, Very Rough terrain to swimming/boats, Height -2 below tabletop, Sparse
Building: Walls are impassable to ground. Open terrain inside and out. Walls are solid.

Control of an Area

Many times in a scenario, a unit or other entity will need to **control** an area. An area is said to be controlled when it contains the controlling unit and no enemy units. If enemy units are present along with the unit that is attempting control, it is **contested**.

Line of Sight

Sight is the most important sense on the battlefield; sound does not carry nearly as far, and the other senses are largely useless in maintaining one's awareness of combat. As such, rules are needed for determining which entities are visible to which others. Note that this is not the same as awareness; an entity may be within a unit's line of sight, but might not actually be seen by that unit. For example, it could be sneaking behind a hedge, or swimming in a mudhole, or in some other sort of terrain that partly conceals it, offering it enough stealth to stay unseen. On the other hand, sometimes an enitty is close enough that an enemy can be aware of it without in fact seeing it. A good example is two units on opposite sides of the same hedge – they can hear each other and know full well there is an enemy there, but cannot see each other through the dense shrubs.

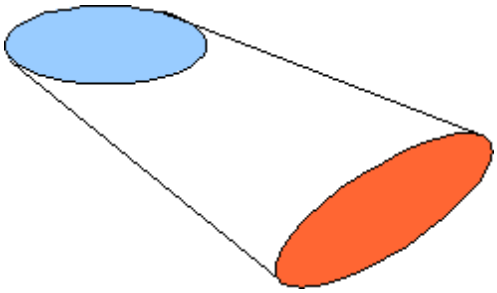

Figure 13: Sight Corridor between two units

Entities in Emlia all have size and height attributes; these attributes play a key role in defining the effects of such concealment and cover. In addition, the concepts of position and boundary are important to determining sight. An entity has line of sight to another if there is at least one line from some point on the boundary of the entity to a point on the boundary of the other entity. If a unit can see, it can be seen, assuming it is not under any effect to reduce its visibility. Total concealment prevents an entity from being seen. Beyond the effects on sight, concealment and cover is referenced by many actions as a modifier.

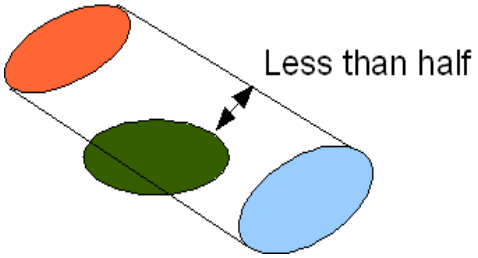

Figure 14: A single intervening entity

Sight Corridor

Between any two entities, there exists a region called a sight corridor – it is the area between the two entities, as defined by the far edges of their boundaries. It is always relative between two entities – the observer (the unit checking for sight) and the observed entity (the one being checked), as shown.

Intervening Entities

An entity, or group of entities, is considered intervening in a sight corridor in one or more of the following cases:

- If the entity covers at least half of the width of the sight corridor, at any point along it
- If when added up, the fractions of the sight corridor taken up by a group of entities is at least one half

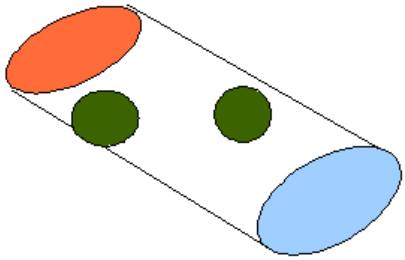

Figure 15: Multiple intervening entities; each takes up about a third of the sight corridor at its point along it.

In the case of a group of intervening entities, when none of them can individually provide concealment, treat the combination as being the same as the least-concealing entity. For example, if a third of the sight corridor is hidden by short bushes, and a third by a boulder, the boulder would be treated as though it were bushes.

Sparse vs. Solid Entity

A sparse entity is one that does not occupy the entire space of its boundary – it has gaps within it. A unit in sparse or open formation, a bush, a copse of trees, or a wire mesh are examples of sparse entities. A solid entity, on the other hand, does not have gaps; a tight group of trees that extends some distance (see visibility-limiting terrain, above), a wall, or a unit in tight formation are all examples of solid entities.

Cover

Cover: Provided by objects that are solid enough to block an attack; an object with a hits attribute higher than the base damage of the attack provides cover equal to its concealment. Anything that provides cover will provide an equal measure of concealment. Note that there is a significant difference between a solid entity and an entity providing cover – a plywood board certainly is solid and provides complete concealment, but doesn't stop bullets!

Concealment

An entity is concealed either partially, representing it being obscured from view but not completely out of sight, or totally, meaning it is hidden from view completely. The following simple cases grant concealment:

If the intervening entity is taller or of equal height to both observer and observed, it provides partial concealment if sparse, or total concealment if solid.

If the intervening entity is of at least half the height of both observer and observed, then it provides partial concealment regardless if it is solid or sparse. If the observer is within its combat range of the intervening entity, it provides no concealment to the observed, unless the observed is also within combat range of the intervening entity. This represents troops peeking over cover to get a better view, and as such, the observed can still be obscured by a different entity.

Additionally, a unit has partial concealment if all of its members, taken as individual characters, would have at least partial concealment. This is a rare case, but represents things such as a unit spreading out and hiding behind pillars, which otherwise would not provide any concealment because of the unit's large boundary.

Finally, the above case extends to state that if all of a unit's members, taken as individual characters, would have total concealment, the unit has total concealment.

Different Heights and Concealment

Elevation and large entities can both play havoc with the basic rules for concealment – hiding in the shadow of a rock from an enemy up on a cliff, for example, is not possible in the basic rules. These rules further extend concealment to handle such occasions. These rules only apply in the cases where one of the observer or observed is taller than the intervening entity, while the other is not.

The term **shadow** will be heavily used here; the shadow of an entity is defined as the area along the sight corridor behind the intervening entity, in the direction of the shorter of the observer and observed. It is specific to a given sight corridor. The length of the shadow is determined as follows:

1. The shadow is initially equal to the distance from the taller entity to the intervening one, in the direction of the shorter entity.
2. If the taller entity is more than twice the size of the intervening entity, halve the shadow length.
3. For every further doubling, (4x, 8x, etc.) of the height of the intervening entity, halve again the shadow.
4. If the distance between the taller entity and the intervening one is less than their difference in height, there is no shadow.

This applies to concealment in several ways. An entity in the shadow of a solid intervening entity has partial concealment An entity further in the shadow of a solid intervening entity has total concealment – the distance from the entity required is based on the relative sizes of the wall and the smaller entity: the length of the shadow, minus the fraction of the distance equal to the size of the smaller entity divided by the height of the intervening entity. An entity in the above position in the shadow of a sparse intervening entity has partial concealment.

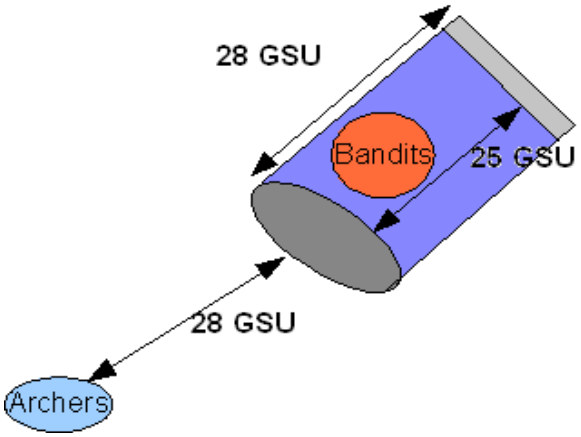

Figure 16: Bandits in the shadow of the rock; the purple area provides full concealment to the height 1/2 bandits, the grey area provides only partial.

Example: A group of archers is trying to target some bandits hiding behind a rock. By taking to higher ground, they hope to get a shot at them without having to flush them out of cover. The bandits are 28GSU away, behind a height 5 rock. The archers manage to find a height 8 elevation, to add to their own height of 1; the bandits, having gone prone, are height ½, and are 2 GSU behind the rock. The shadow of the rock is 28 GSU long, so we know the bandits have at least partial concealment from it. The rock is solid, so to check if they have total concealment, get the ratio of the size of the bandits and the size of the rock; ½ divided by 5 is 1/10, so as long as the bandits are within 25 GSU of the rock, they have total concealment to the archers.

When observing from the shadow of an intervening entity (the shadow is determined in the same way, from larger entity to smaller, and is still specific to the sight corridor) the observed always has partial concealment unless it is standing on another entity, and that other entity would not have total concealment if the intervening entity were solid (if the intervening entity is sparse, consider it solid). The observed entity has total concealment if the observer has total concealment relative to the observed (see above).

Taking Cover

Taking cover can help improve a unit's use of concealment. A unit in the **taking cover** state increases its concealment bonuses, and applies an additional penalty to incoming ranged attacks, as well as making it more difficult to spot. To enter the taking cover state, a unit must simply use the *Take Cover* move action, which requires no skill check to perform – any idiot can duck behind a rock! A unit in the taking cover state loses the state as soon as it moves more than 5 GSU away from an obstacle that could provide cover, or declares it is no longer taking cover.. A unit moving while taking cover moves at half speed.

Elevated Terrain and Ranged Attacks

One thing not covered above is the effects of elevation on ranged attacks. Because it has longer distance to drop, and an increased velocity due to gravity, shots will carry farther when fired downhill. The reverse is true for shots fired uphill – the battle with gravity will cost them some significant energy. Emlia uses a very simple rule to represent this: the difference in Height between two points is added to the distance in the upward direction, in GSU, and added to the maximum range of the weapon in the downward direction.

The reason for the second rule may be less obvious, but simplicity comes through: the other ranges on a weapon's profile represent the accurate range of the weapon. The maximum range, on the other hand, represents the maximum effective range – the range at which it has any real chance of hitting a target for damage. This can be much longer, and is extended by such factors as gravity.

Example: Jack has a unit of dragoons that wants to fire their guns at some artillery on a ridge. The artillery are at height 10; the dragoons stand at height 1, because of being mounted. Therefore, the distance between the dragoons and the artillery is 9 GSU longer than the lateral distance shows.

Awareness

Awareness is a key element of warfare – one cannot fight what one cannot find. As models are static, a player cannot visualize them moving around cover, hiding behind it, and maximizing their available defences. For these reasons, a simple model-to-model line of sight system is weak – a soldier hiding behind a hedge would not be jumping around on top of a rock, waving a huge axe in the air! More realistically, he'd be knelt down behind the hedge, sneaking around and hoping nothing shoots him. This system allows for artistic expression in miniatures, while still keeping a semblance of realism about the game.

By default, a unit is aware of all entities that it can see, i.e. that have less than total concealment. If an entity has total concealment to a unit, that unit is by default unaware of it, just as if it had succeeded at a *Conceal Self* action. A unit may not use any other entity it is not aware of as the subject of any action, unless the action specifies otherwise.

Hiding and Detection

In Emlia, there are two skills that provide for hiding: Stealth and Alertness. Stealth is used when a unit is trying to conceal itself behind cover, to reduce the chances an enemy will detect it. Alertness is used to detect hidden enemies.

Conceal Self (Move Action or Primary Action)
Condition: Source must have at least partial concealment to some entity on the board
Skill Used: Stealth
Subject: Self
Subject takes no actions besides *Conceal Self*: +2
Subject does not forfeit either movement nor primary action: -2

Success: If the source scores at least one success, all units immediately lose awareness of it. *Detect Hidden Entity* actions must be made to restore awareness, unless the source loses all concealment.
Failure: No effect

Detect Hidden Entity (Free Action)
Skill Used: Alertness
Subject: Enemy unit source is unaware of. This action does not require awareness of the subject.
Target's Concealment:
Total: -2*
Range:
Under 20GSU: +1
Over 60GSU: -2*
Size:
Per doubling of source's size: +1
Per halving of source's size: -1
Actions:
Source aware of subject on its last activation: +1**
Subject moved last activation: +2
Subject made an action with a subject the source is aware of last activation: +2**
Subject made an attack against source last activation: +2**
Subject was the subject of an action by a unit the source is aware of: +2
Subject taking cover: -1
Other:
Subject in side arc: -1
Subject in rear arc: -2
Subject unaware of source: +1
*If over 20 GSU away, and in total concealment, no successes are possible, unless at least one condition marked ** is true. (note: some units will have abilities that ignore this, such as super-hearing, ethereal vision, or RADAR).
Success: If more successes are rolled than the subject has scored successes on a *Conceal Self* action taken by the subject on its last activation, plus one if the unit is in total concealment, the source is aware of the subject.
Failure: No effect.

Spotting an Enemy

An enemy caught without concealment is automatically detected, regardless of how skilled at concealing itself it is, without any *Detect Hidden Entity* action needed. Since concealment is relative, only the unit(s) that can see it without any concealment (re)gain awareness of it. A unit may make a *Pass Awareness* action as a move or primary action to make all nearby units within 20GSU aware of the target. It may be made as a free action if the unit targets the enemy unit with any ranged attack action during that activation.

Pass Awareness (Move Action or Primary Action)*

Skill Used: Leadership
Subject: Enemy Unit
Base Difficulty: 5
Success: All friendly units within 20GSU become aware of the subject.
Failure: No effect

* May be used as a free action if the source makes any ranged attack (*Aimed Fire* or *Area Volley*) action against the same subject.

Note that all actions require awareness of their subject, unless specifically excepted.

Resolution – Updating the Game State

During each timing step, various actions will produce changes in the state of entities; they will become damaged, hindered, fatigued, lose members, become emboldened by rousing battle cries and the beating of war drums, and many other things that are part of the nature of battle. Because of the short slice of time that a single timing step represents, and that all of the units acting within it are acting very close to simultaneously, nothing aside from a unit's position from its own move actions changes until the Resolution Phase. Even these changes are considered simultaneous during a timing step, but are handled in order for ease of play. At the end of the timing step, new modifiers are applied, casualties removed, and the like, but not before. The order of the Resolution Phase is:

1. Handle Movement Effects: Move entities moved by effects during the timing step, such as by *Close Combat* successes.
2. Update Damage: Remove unit members that have been lost, add the effects of new damage to damaged entities.
3. Update Morale: Apply all morale changes, and adjust units' morale states appropriately.
4. Update Other Effects: Apply all other effects from this activation phase, such as fires burning or fatigue.
5. Remove Hit and Effect Markers: Remove any leftover hit markers from attacks on the board, they have no further effect. At this step, also remove any other markers for effects that end at this point.
6. Begin Next Timing Step: Move on to the next timing step, repeating the process.

Handle Movement Effects

Certain conditions in Emlia will resolve into an entity being forcibly moved during the resolution phase. Being engaged in close combat is the most common such event; see the *Close Combat* action (page 24) and the Engagements section (page 26) for details. Like activations during a timing step, this extra movement is effectively all happening within the same small slice of time. Therefore, while these moves may be made in any order on the board, they are all considered to be simultaneous.. If the movement of one entity affects the movement of another in any way, this effect will only occur after all movement in this resolution phase is complete, just like any other new effect created this timing step.

In some cases, multiple movement effects will occur on a entity during the same timing step. In this case, unless otherwise stated, these movement effects do not occur in sequence, instead cumulating into a single move. For example, if a n entity is forced by close combat 5 GSU north by player A, and 2 GSU west by player B, its actual path is considered to be in a straight line north-northwest.

When a unit is pushed around, it may suffer some effects depending on what it is pushed into. Terrain effects simply slow or endanger the moving troops as normal; in most cases, impassable terrain stops the unit rather than having it be pushed over a cliff; there are, however, exceptions (such as a unit in ranked formation pushing with press hits), described in the rules for the movement effect. Units may also be forced into friendly or enemy units, which can cause different (equally unpleasant) effects. In addition, this movement can trigger prepared actions as normal.

If a skirmish engagement is being moved, and it moves through any unit or finishes its movement within combat range (for any of the units involved in the skirmish or the new unit), the new unit immediately joins the skirmish.

A unit being forced into another friendly unit will lose its formation and revert to open formation, and become a mixed unit with the friendly unit, which will also be forced into open formation. Both suffer -1 morale penalties, as shown below under Update Morale, and become disordered. If the boundary of the new mixed unit needs to expand to accommodate the new members, it does so in all directions equally, except towards the entity that caused the movement effect in the first place. Remember that when a skirmish combat is moved, this case can never occur, as no unit is friendly to it – the unit will be dragged into the engagement as above instead.

If the unit is forced into an enemy unit's combat range, all hell breaks loose. The unit suffers a -4 morale penalty, and the source of the effect, as well as the unit the moved unit contacts, gain +2 morale. It will not, however, lose its formation; even a ranked unit will hold its ground unless another effect changes its formation. Note that this again does not occur for skirmish combats: even if a side not involved in the combat is brought in, all of the units involved are already embroiled in the fight all around them.

Update Damage

At this step, resolve all of the hits generated by attacks made during that timing step. Add damage to entities, remove fallen unit members and destroyed subunits, and deal with all other damage effects at this step. As has been described in the various damage measures an entity may possess, damage in Emlia is measured in hits. Hits are generated during the Activation Phase, by combat actions such as *Aimed Fire* and *Close Combat*, and are represented by hit markers next to the entity. For most units, damage is represented by the loss of characters from a unit, shown by its vital table, though it may take multiple damage points to do so. An entity's attributes section will show what damage measures it uses.

Mixed Units and Hit Markers

A mixed unit has various subunits that will suffer damage independently. As hit markers are simply allocated to the parent unit, damage to subunits must be worked out in the resolution phase, once all hits during the timing step have been allocated. To allocate hits to the subunits of a mixed unit, first divide the hits into groups separated by base damage. Next, note the size of the smallest subunit in the unit; this is called the **base number**.

Starting with the largest subunit, allocate one hit marker per multiple of the base number of members, rounding up (so if the base number is 3, and the subunit has 10 members, allocate 4 hit markers). Repeat this process for the next largest unit, and so on, down to the smallest, or until all of the hit markers are used. In case of a tie for a unit's position in the order, the unit's controller may choose which subunit is affected first.

When there are multiple groups of hit markers, alternate through each group when placing hit markers, using a similar method to alternating through subunits. First, determine a new base number equal to the size of the smallest group of hit markers. Then when placing hit markers, start with the largest group, and allocate one hit marker for each multiple of the base number in that group. Repeat this process for the next largest group, and so on, finally allocating one hit marker from the smallest group, and starting again with the largest. Again, in case of a tie, the controller of the unit allocating the hit markers chooses.

Examples:

A unit with subunits A, B, and C, with 8, 2, and 1 members respectively, has taken several groups of hits. It has sustained 10 hits at base damage 1, 4 at base damage 5, and one hit at base damage 4. The base number for both subunits and base damage groups is 1, so first, subunit A takes 8 hit markers from the largest group, which is base damage 1. Next, subunit B takes 2 hit markers, still at base damage 1. Subunit C is next, and takes one hit at base damage 5, the next largest group. With every subunit affected, the cycle returns to subunit A, which takes the remaining hits (since fewer than 8 hits remain): 3 hits at base damage 5, and one at base damage 4.

A unit with subunits A and B, each with 4 members, takes 5 hits at base damage 0, 3 at base damage 1, and 3 at base damage 4. The base number for subunits is therefore 4, and the base number for base damage groups is 3. First, subunit A takes one hit marker at base damage 1; then subunit B takes one, and so on until the 5 hit markers are spent, leaving subunit B next. Then the unit's controller chooses whether to do the hits at base damage 1, or base damage 4 first – this decision affects which subunit takes the extra hit at base damage 4. The player chooses to start with the base damage 1 hits, saving some damage on subunit B. The base damage 1 hits are allocated to subunits B, A, and B, then the base damage 4 hits are allocated to subunits A, B, and A.

Resolving Damage

Every attack has a base damage, which is subtracted from the hits attribute of the defending entity before damage is calculated. Then, for every number of hits suffered equal to its modified hits attribute, the defending entity sustains one **damage point**. Units sustaining damage can have one of a few things happen, in the following order:

1. If the unit has a damage limit, this limit represents that of one character in the unit. For every amount of damage equal to the damage limit, one such character is marked as a casualty.

2. If the unit has a Threshold, for each number of damage points taken equal to the threshold value, roll once on the unit's threshold table and immediately apply the results. These results could affect further threshold rolls, and apply to the unit as a whole.

3. If the unit has any other damage measures, see their rules in the unit's attributes.

Examples:

- *A unit of militia has a damage limit of 1. When it suffers damage, its members are removed one by one. Its ability to perform diminishes as members are lost.*
- *A dragon has a damage limit listed, but no threshold. It weakens steadily with damage, until its damage limit is reached, at which point it perishes.*
- *A castle wall has damage points listed, and a threshold attribute. It has no damage limit. It will steadily take damage, causing various effects to reduce its effectiveness and endanger the troops atop it, until it finally collapses into rubble.*

Update Morale

At this step, unit morale changes based on the events of the previous phase. Units may cower in fear at their terrifying enemy, be driven into a frenzy of victory, or be driven back by enemy fire; all such effects happen during this step. A unit's morale is updated according to the following tables:

Negative Modifiers

Condition	Morale Modifier
Attempted to *Charge* but did not reach enemy	-1
Fighting melee combat uphill	-1
Suffered casualties or damage this turn	-1
Suffered a Threshold roll	-1
Suffered 10% casualties or damage this turn	-1
Suffered 25% casualties or damage this turn	-2
Suffered 50% casualties or damage this turn	-2
Suffered 75% casualties or damage this turn	-2
Suffered casualties from an enemy the unit was not aware of, this turn	-1
Unit is outnumbered by enemies in melee with it at the end of its activation	-1
Closest friendly unit in sight at morale -4 (retreating) or lower, when unit activated*	-1
All friendly units in sight at morale -4 (retreating) or lower, when unit activated***	-2
Per friendly unit in sight within 20 GSU taking casualties, when unit activated*	-1
Per friendly unit in sight within 20 GSU wiped out, when unit activated**	-2
Friendly unit at morale -4 (retreating) or lower moves within boundary of unit when it activated*	-2
Unit leader killed	-2
Army general killed in sight	-2
Forced into friendly unit	-1
Friendly unit forced into self	-1
Terrain stops unit from being forced this turn	-1
Forced into enemy unit	-4

* Ignore penalty if unit has lower army value, double it if the unit has double or more army value
** Halve penalty if unit has lower army value, double it if the unit has double or more army value
*** Ignore penalty if all units involved have lower army value, double it if the unit has double or more army value

Positive

Attacked by enemy, but suffered no damage or losses this turn	+1
Unit inflicts casualties or damage	+1
Unit inflicts 10% or more casualties on an enemy	+1
Unit outnumbers enemies in melee with it, at the end of its activation	+1
Unit wipes out an enemy unit	+2
Enemy attacked by unit reaches -4 (retreating) morale or worse	+1
Enemy attacked by unit reaches -7 (routed) morale	+1
Enemy attacked by unit and within 20 GSU wiped out	+1
Forced enemy into another enemy unit	+1
Forced enemy into an ordered friendly unit	+1
Enemy forced into unit, if ordered	+1

For morale effects that reference “this turn”, it means exactly that: these morale effects can only apply once per turn, and afterwards, no longer apply. A reference to a unit's activation refers to the beginning of its activation unless otherwise specified. When determining casualties, consider the amount of members or damage the unit had when the turn began, not its starting number.

Example: Kay has a unit of British regulars that are currently choking on musket fire from four separate regiments. They are cut off from friendlies and it is now the resolution phase. They suffered a total of 25% casualties this turn, for a -4 modifier. They inflicted casualties on the enemy, however, for a +1, on the positive side. They lose 3 morale – they started at a healthy 4, being British regulars, so they hold firm. If this keeps up, however, they certainly won't be!

Effects of Morale

As was described under Initiative Conditions, above, morale is represented by an attribute and a series of conditions, dependent on the morale attribute. The table of morale conditions follows:

Morale	Morale Conditions
7	Victorious: The unit's army value is increased by 2
4 to 6	Eager: The unit's army value is increased by 1
1to 3	Normal: No Effect
0	Shaken: Unit may not move closer to the enemy. When entering this state, the unit becomes disordered.
-1 to -3	Falling Back: Unit must do one of the following: - Move directly towards the nearest cover from the ranged attacker that dealt it the most damage in the last round - Move directly towards a friendly unit - Move by the shortest route towards its own lines Unit may not move closer to the enemy. If the unit cannot move towards the nearest cover without moving closer to the enemy, it will seek other cover. Unit will avoid moving through friendly units where possible. If a point on the board represents the defender's lines (such as a fort), they will act as Shaken after reaching this point. If engaged, the unit will make *Disengage/Distract* actions instead of simply running from battle. When entering this state, the unit becomes disordered.
-4 to -6	Retreating: Unit must move its maximum move distance towards its own lines whenever possible. Unit may not move closer to the enemy; if it is not possible to accomplish both goals, unit moves as though *Falling Back* instead. It will avoid moving through friendly units when possible. If a point on the board represents the defender's lines (such as a fort), they will act as Shaken after reaching this point. If engaged, the unit will make *Disengage/Distract* actions instead of simply running from battle. When entering this state, the unit becomes disordered.
-7	Routed: Unit will move its maximum move distance towards its own lines. It will move through friendly units, move closer to the enemy, and even move through enemy units, provoking free strikes. If a point on the board represents the defender's lines (such as a fort), they will act as Shaken after reaching this point. When entering this state, the unit becomes disordered.

Lines of Retreat

When a unit reaches morale -1 or worse, it is in retreat, and may head towards its own lines. The point on (or off) the board considered a unit's own lines is defined in the scenario being played (see Scenarios, page 47). Retreating units are able to leave the battlefield. If they do so, they are unable to return, like any other unit that leaves the battlefield (see Leaving the Battle, page 32)

These morale conditions, as stated earlier, supersede initiative conditions, but act in the same way: if possible, a unit must still use its actions to satisfy as many conditions as possible.

To avoid a morale condition, an *Ignore Initiative Conditions* action, identical to that used for initiative conditions, is taken:

Ignore Initiative Conditions (Free Action)
Skill Used: Leadership
Improvise: Yes
Subject: One friendly unit subject to a morale condition within 20GSU

Check Modifiers:
Morale:
Source morale at -4 or worse: -5
Source morale at -7: -5
Subject morale over starting morale: -5
Subject morale at -4 or worse: -2
Subject morale at -7: -3
Source:
Army value of source lower than subject: -1
Subject unaware of source: -5
Source has partial concealment to subject: -1
Source has total concealment to subject: -3
Source's height is above subject's: +1
Formation:*
Subject is in ranked formation: +1
Subject is unit in open formation more than 20GSU across in any direction: -2
not all members of subject within 20GSU of source: -5

* any bonus or penalty in this category only applies to units with more than one member

Success: If one or more successes are rolled, the subject can act ignoring any morale or initiative conditions on its current activation if it is currently active, otherwise on its next activation.
Failure: No effect

Additionally, aside from the modifiers listed later in this section, morale can be improved by a rousing speech, a blare of trumpets, or a good beat from a war drum, represented by the *Improve Morale* action below:

Improve Morale (Move Action or Primary Action)
Skill Used: Leadership
Improvise: Yes
Subject: One friendly unit within 20GSU
Check Modifiers:
Morale:
Source morale at -4 or worse: -5
Source morale at -7: -5
Subject morale over starting morale: -5
Subject morale at -4 or worse: -2
Subject morale at -7: -3
Source:
Army value of source lower than subject: -1
Subject unaware of source: -5
Source has partial concealment to subject: -1
Source has total concealment to subject: -3
Source's height is above subject's: +1
Formation:*
Subject is in ranked formation: +1
Subject is unit in open formation more than 20GSU across in any direction: -2
Not all members of subject within 20GSU of source: -5
* any bonus or penalty in this category only applies to units with more than one member

Success: Each success scored improves the morale of the subject by 1. No effect if subject has already been the subject of an *Improve Morale* action since its last activation.
Failure: No Effect

Example: Jack's star cruiser from the earlier example activates. Its morale is at -4, and it has taken fire. Because of its morale condition, which applies first, it must apply maximum burn (double pace) and turn towards its own lines by the shortest course. It also has an initiative condition that can be met, however: it has been fired upon, and by default must return fire if possible against an enemy that targeted it since its last activation. Jack decides there is little point ignoring either condition, and the cruiser makes a fighting retreat.

Disorder

Some morale conditions and other effects can cause a unit to become disordered. A disordered unit is one that has been rendered unable to act on orders; it has been confused, its leader killed, or otherwise separated from the battle plan. Disordered units may not act on orders, only on initiative.

Aside from morale conditions, a unit will become destroyed if its currently leader is lost. A unit can also become disordered due to special effects or abilities.

To restore order, an ordered character with the Leadership skill must move within 20 GSU (command range) of the disorganized unit, and perform a Reorder action to bring the unit back under control. Any ordered commander character (character with the Leadership skill) may perform this action, and it removes the Disordered state from the unit in the Resolution phase as with other effects. In the case of a unit becoming disordered by loss of a unit leader, a *Take Command* action, below, may reorder it. Finally, various special unit abilities, scenario rules, or other conditions could cause a disordered unit to become ordered again.

Take Command (Free Action)
Skill Used: Leadership
Improvise: Yes
Subject: Target friendly unit within 20GSU
Check Modifiers:
Morale:
Source morale at -4 or worse: -5
Source morale at -7: -5
Subject morale at -4 or worse: -2
Subject morale at -7: -3
Source:
Army value of source lower than subject: -4
Subject unaware of source: -5
Source has partial concealment to subject: -1
Source has total concealment to subject: -3
Source's height is above subject's: +1
Formation:*
Subject is in Ranked Formation: +1
Subject is unit in Open Formation more than 20GSU across in any direction: -2
Not all members of subject within 20GSU of source: -5
* any bonus or penalty in this category only applies to units with more than one member

Success: If one or more successes are scored, the unit considers the source character the leader of the unit for all purposes, and the unit immediately becomes ordered. Subject unit is at Timing 0 for one round.
Failure: No effect

Reorder (Free Action)

Skill Used: Leadership
Improvise: Yes
Subject: Target friendly, disordered unit within 20GSU
Check Modifiers:

Morale:

Source morale at -4 or worse: -5
Source morale at -7: -5
Subject morale at -4 or worse: -2
Subject morale at -7: -3

Source:

Army value of source lower than subject: -1
Subject unaware of source: -5
Source has partial concealment to subject: -1
Source has total concealment to subject: -3
Source's height is above subject's: +1

Formation:*

Subject is in ranked formation: +1
Subject is unit in open formation more than 20GSU across in any direction: -2
Not all members of subject within 20GSU of source: -5

* any bonus or penalty in this category only applies to units with more than one member

Success: If one or more successes are scored, target unit becomes ordered.
Failure: No effect

Update Other Effects

At this step, any effects that are not related to morale or damage are updated, as defined by an action, terrain effect, scenario element, or other source. This is the catch-all step that deals with anything not previously caught. Again, the order of effects is applied simultaneously – when applying an effect, do not consider any of the other effects being applied at this step.

Remove Hit and Effect Markers

At this step, remove any hit and effect markers from things applied during the resolution phase; they are no longer needed.

Begin Next Timing Step

Repeat this process for the next timing step, until the turn ends. If the last timing step has just been completed, reset the timing count and begin a new turn; or if this is the last turn, the game is now over.

Scenarios and Objectives

Battles between armies are never about meeting on a field and fighting until everyone is dead. Soldiers fight over something, be it a strategic point of land to launch further operations, the protection of an important meeting, supplies, or other materiel, or an attack on an enemy stronghold. Nothing exists in a vacuum, and this section will show some example scenarios, and how to write a good one for a new game.

Every battle has five things in common: a purpose, the forces involved, the battlefield it is fought on, some limit to the time the game can last, and a set of victory conditions to determine the winner.

Purpose

The first thing to decide when making a scenario is "what is going on here?" Battles never happen for no reason; even the simplest schoolyard fight started over something. The amount of background needed for a specific scenario depends entirely on the writer – some scenarios may be very generic, and need little background because they will be played in many different situations. Other scenarios will be more specific, but their background will be decided by a previous battle – a loss provoking a fighting retreat is an example of such. In the third case, a scenario may have more elaborate background, detailing why the forces have met for battle and the reason for their objectives. In any case, this should be decided before proceeding further.

Forces

The forces involved in a battle are the armies commanded by the number of players. Generally there are two forces engaging each other in battle, each commanded by one player. This is simply one basic type of scenario, however – a player could command multiple forces combining against an enemy (possibly allowing a player to field an army not normally allowed), or multiple players could split up one force and act as joint commanders. In these situations, it is best to assign each player a section of the main force (for example, each player commanding one company of soldiers) and have them try to work together, rather than having some players be subordinate to others. Obviously this convention is flexible, and if players want a chain-of-command style organization for their side in a game, they should be allowed.

Multiplayer games can also be played with more than two sides engaging in a battle; for example, a third force opposed to both sides stumbling into an existing clash. Very rarely will three, four, or more mutual enemies all meet in battle at the same time – this is generally just done to make multiplayer scenarios simpler. With good scenario design, a more interesting game can come about instead of "three armies fight in a field". Generally this will require asymmetrical forces to be done right, though not always.

Symmetrical vs Asymmetrical Warfare

Symmetrical warfare refers to both sides being roughly equal in number and force multipliers (equipment, position, morale, etc.). In most real battles, this is not the case – most commanders wait until they think they have some kind of advantage before attacking. Whether or not the advantage is in fact theirs is sometimes questionable, but the point stands that most of the time, the concept of equal armies facing each other is unrealistic.

Asymmetrical warfare on the other hand is how real battles are fought – one side is fighting against the odds, and both have objectives they need to accomplish. They may have some less-clear advantage in the fight, such as a specific trick with terrain, or they may have lesser victory conditions (such as selling their lives to cover the retreat of their comrades, or blunting the enemy's spearhead by damaging their forces a certain amount). The more powerful force on the other hand may have stricter victory conditions (let none retreat, prevent the loss of specific units or characters), poor conditions (a force with a significant archery advantage caught in the rain), or other disadvantages.

Even if such disadvantages do not exist, and a clear victor exists before the game begins, a battle can still be interesting by having each player fight once with each force involved. Showing who can hold a heroic last stand the longest, or wipe out the enemy the fastest using superior numbers, is an interesting and unique challenge. Swapping sides is also a good way to test a scenario to see if it is the skill of the players or the scenario itself determining the outcome more often.

Battlefield

Battlefields are rarely flat and featureless – there is always something to fight over. Hills, ridges, and other elevated ground are common strategic objectives as they allow armies to communicate more easily using semaphores or even radio. Cities and other populated areas are objectives due to their industrial capacity, ability to support troops with resources, and political landmark value. Obviously, enemy military installations and assets are also commonly chosen objectives, be they a medieval castle, a modern air force base, or a space station in orbit around a faraway planet.

When designing a battlefield for a scenario, one should first consider the rest of the scenario – what is happening here? An ambush won't work on an open plain, a defended castle won't have heavy woods right up to its walls (though an old, abandoned one might), and a cavalry-centric scenario would not want to be set in a city. On a more detailed level, one has to consider the answers to the following questions:

- Does the terrain make sense naturally? Cacti don't grow on snow-capped mountains, people don't build villages in the middle of deserts with no water, rivers don't start and stop out of nowhere. To learn more about natural geography, look at topographical or satellite maps of the Earth, they can provide a wealth of inspiration for sites.
- Does the terrain make sense strategically? Armies fight in specific areas for a reason. Cavern systems in the mountains are a poor choice for a battle in the Napoleonic wars, because of the code armies fought by. For a game about a mercenary company rooting out mountain bandits, however, it can be an excellent choice.
- Does the terrain make sense defensively, if there's anything to protect? Most installations are surrounded by a killing field to allow ranged attackers to fire from their defended position. Often, there will also be secondary fortifications, such as earthworks or trenches. If the position is supposed to have been held for a long time, the area will be more built-up than if the area has been recently taken.
- Where are the different forces going to start the game? Deployment zones are a very important consideration, both when placing terrain, and when placing the zones themselves. Armies should start reasonably far apart unless conditions push them together blindly (smoke and confusion of an ongoing battle, for example). Both sides should have some route that they followed to the battlefield, be it open ground, a road, a forest they used to conceal themselves, or other terrain, but it should make sense. In most cases, the deployment zones are table edges, or sections of table edges, and the terrain should be placed relative to those.
- Where is "home" for these forces? The back edge of deployment zones usually represent a side's own lines, but not always. In some cases a retreating unit may flee back towards a castle or other strongpoint, or towards a different point on the board than it came on from. Be sure to note where a force's lines are, so players know how retreating units move.

Time

When determining how long a battle should run, consider how long a turn with the forces expected on the field will take, and how many turns armies require to accomplish their goals. If the goal for the scenario will take 20 turns for either side to achieve, minimally, then setting the game time at 6 turns is silly. At the same time, if each turn takes an hour, expect a long game in that situation, and consider scaling back the forces and/or victory conditions to allow the game to fit within the time limit.

One thing to consider in addition to designing a good time limit is a **reason** for the time limit. Why is the battle ending at the end of turn six? "The game is over, let's go home" is not much of a reason on the battlefield. Incoming reinforcements, an order to retreat, or even a peace treaty being signed are all reasons to bring the battle to a halt. More mundane reasons include a change in weather, night or day, or the overall fatigue of both sides. One choice that often works well, but is omitted in many cases, is the loss of the reason to fight. The downside to this method, of course, is the fact that the game will continue until one side gains some amount of ground, or takes some amount of losses, or otherwise achieves some victory condition. It is generally sensible to add a turn limit on top of this condition. Some good examples for time limits follow.

1. The game ends after the sixth turn, when tanks the 17th armoured division arrived to reinforce the lost paratroopers.
2. The game ends after the attacker has held the church for three turns, or at the end of any turn after the eighth in which the attackers are not holding the church.
3. The game ends when the supply caravan leaves the board or is destroyed.
4. The game ends when the defending general is destroyed or captured.

One last piece of advice on time limits: in some cases it is better to tailor the victory conditions and forces to the time limit, rather than the other way around – if there are only two hours to play a game, then whatever scenario is designed needs to be playable within those two hours! In such a case, it is very important not only to consider the average time a turn takes to play, but the time it takes a slow player to play the same turn. The amount of time a player takes in the game can vary dramatically, and can make a well-estimated time window for a game draw out far beyond what was wanted.

In addition to time ending the game, time can be used to manipulate the scenario with special events. Artillery bombardments, on-board reinforcements, weather or visibility changes, or even horrible natural disasters like earthquakes and volcanic eruptions can occur during a game. Some examples of how to write timed events are:

1. Artillery will strike the board every odd-numbered turn. Initial placement is always the centre of the table, and it is fired as an Area Volley with a Volley Fire skill of 3, no modifiers for position. The artillery is an ordinary 25pdr shell as found in the British Artillery Regiment unit list.
2. The southern half of the battlefield is struck by the shockwaves of an earthquake; roll a die for every unit within 30 GSU of the southern board edge. On a 1 the unit is knocked prone.
3. A unit of 10 green hoplites armed with spears, shields, and medium armour will arrive down the road at the southern board edge every turn for the first 3 turns. They join the Greek side.

Victory Conditions

The victory conditions for a scenario ultimately reflect what the scenario is about – is an army meeting an enemy on the plains to decide some political course? Are they fighting a retreat against a superior foe? Are they assaulting some sort of fortress? Generally, most of this is carried out in the purpose of the scenario, and this part is for refining those objectives down to exact, specific victory conditions.

The main thing to consider, aside from the obvious part of the victory conditions, is asymmetrical warfare. The exact victory conditions should be weighed against a few things:

- What does each side intend to accomplish? (purpose)
- What does each side have at its disposal? (forces)
- Is there a significant terrain or fortification advantage on one side? (battlefield)
- How long does each side have to accomplish its objectives? (time)

Once all of these are put together, one can establish a set of victory conditions. For example, if an attack on a medieval fortress is being carried out, the attacking side should greatly outnumber the defender, and should have siege engines such as trebuchets and battering rams at its disposal. The defender has the battlefield advantage, but the attacker has an advantage in force. Generally, in such a scenario, time is on the defender's side, rather than on the attacker's in a prolonged siege – perhaps a relief force is on the way and the attacker needs to take the castle, or the defender has outlasted the enemy and the attackers must storm the castle, go home, or starve.

The exact victory conditions are less obvious, though; what does the attacker have to do to claim the fortress? Wipe out the defenders? Force them to surrender by taking some point in the castle? These are good options; in reality it is generally the second that wins the day. What about the defenders? When will the attackers rout? The morale rules are one sure-fire way to handle that – the attacking force retreats the field when it retreats. Most savvy generals, however, will order the retreat long before all of his troops are fleeing the field in terror. A certain number of turns without taking the castle, or an amount of losses, are good measures.

Testing

A scenario will rarely play perfectly the first time it is played. The first few games should be considered testing, to refine the above points of the scenario and make it more playable. For example, the first few games may all end before any victory is achieved. Usually this means the time limit is set too short, or the victory conditions take too long to achieve and should be made easier. Scenarios can also play badly because of the forces or terrain making it too difficult for one side, or too easy. Regardless, testing a scenario is the only way to be certain it works.

Example Generic Scenario

The above siege will be the first example, as it is a common one in wargaming. The purpose of the scenario is simple – play out a classic, generic "storm the castle" style of battle, where defenders try to hold their home castle against invaders. The forces are decided to be uneven, because the defender has a castle and a killing field around it. The attacker will get a 200 hire value force of mercenaries and siege engines, and the defender gets 100 hire value of levy troops, mercenaries, and additional defences. This gives the attacker a significant force advantage, but the force multiplier of the castle and surrounding killing field should make up for it.

Next is the battlefield. Obviously the most prominent feature is the castle itself, which has been decided to be a simple four-wall, four-tower construction with a keep inside the courtyard, attached to the rear wall. In addition, a road comes up the east side of the table, across the south face of the castle, and through the gate. Near the northeastern and southeastern corners of the table, sparse woods, then scrub, are left uncleared. Some fences surrounding fallow fields are added to the southwest side of the table, mostly for character. The defending army will deploy within the castle; the attacking army may deploy on the southern and eastern edges of the battlefield, within 30 GSU of the edge. The defending army's point of retreat is the castle; the attacker's lines are the table edge the attacking army deployed from.

Next is the matter of time; how long do the attackers have to storm the castle, and why? Knowing the unit set and wanting to have the game over within three hours at most, the time limit was chosen as 8 turns. If the attackers do not achieve victory in that time, they cut their losses and retreat the field.

Finally, specific victory conditions must be set out. The attacker must take the castle from its current owner; the defender must hold onto it. Because the battle is timed, a victory condition that sees things to the end may not be for the best – otherwise battles that may quickly turn decisive will end with the attacker running for the hills when time is up. As such, the attacker's victory conditions were chosen to be:

The attacker scores a massacre if the defending army is wiped out.
The attacker scores a major victory if the attacking army controls the castle.
The attacker scores a victory if the attacking army controls the gate and courtyard, or controls the courtyard with the gate unguarded, and outnumbers the defending force the walls.
The attacker scores a victory if the attacking army controls the walls.

The defender's priority, on the other hand, is simply to hold ground. Victory conditions often mirror each other, as is the case here:

The defender scores a massacre if the attacking army is wiped out or routed from the field.
The defender scores a major victory if the defending army controls the castle.
The defender scores a victory if the defending army controls the courtyard, and the attacker does not control the walls.
The defender scores a minor victory if the attacking army controls the courtyard, but the defending army controls the walls.

This completes the definition of the scenario – the next step is simple: set up the board, and play it!

Unit Sets and Army Construction

Every scenario needs forces for players to command, and every setting has its armies for the players to choose from. These army lists are called the **unit set** of the setting, and may be divided into several armies, or all units may be selected openly. Every unit set has a few core elements to it: the **restrictions** and the **unit entries**.

The restrictions on a unit set define how the units in it can be used together. Most unit sets divide units up by the different armies they fight for. For example, in a WW2 setting, there might be one unit set for the British Army, one for the Americans, one for the Germans, and so on. It may be even more detailed, however, with the unit lists being divided into different Armies, Battalions, Regiments, Companies, and Platoons. For example, in a squad-level WW2 game, an American force may consist of an infantry company, which can select mostly infantry platoons with some supporting units, and a mechanized company, which is composed primarily of truck- and halftrack-mounted and motorcycle infantry, supported by jeeps, armoured cars, and tanks.

The unit entries in a unit set define the units themselves. They give the unit's attributes, skills, and abilities as described in the Basic Concepts. It may also contain a unit's equipment, as well as options to modify that unit. Different options will usually modify the unit's hire value, creating a more powerful (and expensive) unit, or a weaker (and less expensive) one. An example unit entry follows:

Green Caveman Infantry
Members: 10
Attributes:
Keywords: Human

Movement: 15G
Timing: 2
Hits: 1
Damage Limit: 1
Morale: 2
Size: 1
Height: 1

Sight Arcs: Front 180, Flanks 45, Rear 90

Initiative Conditions

Attacked by enemy ranged attack with no concealment or cover: move as quickly as possible (including using *Double Pace*) towards the nearest available concealment or cover.

Attacked by enemy ranged attack while in concealment or cover and not taking cover: *Take Cover*

Attacked by an enemy since last activation: make an attack action against one or more of the enemies that attacked

Enemy unit with fewer members and same or lower size within 15gsu: *Charge* that unit.

Skills:
Close Combat 5/2
Aimed Fire 5/2
Volley Fire 5/2

Equipment:
Clubs (Base Damage 1)
Rocks (Base Damage 1, Usable for *Aimed Fire*, Range 5/10/15, Abilities: Falloff – base damage is reduced to 0 at long range)

Army Value: 1
Hire Value: 20

Glossary

Ability: A special property not covered by attributes or skills.

Acting on Initiative: Acting according to the unit's initiative conditions

Acting on Orders: Acting according to the controlling player's wishes

Action: Anything a character or entity does.

Activate: Begin an Activation.

Activation: The time during which a unit or character takes actions.

Activation Phase: Part of a timing step where entities with the relevant timing value activate.

Army Value: The relative value a character or unit has to the rest of its forces.

Attribute: A property common to many units, but not used for skill checks. Examples are movement, hits, and

Awareness: A unit's actual picture of the battle, removing entities that may exist but it does not know about. A unit must be aware of the subject of any action it takes.

Base Damage: The effective power of a weapon.

Battlefield: The limits of the game; a unit may not move off of the battlefield.

Battle Scale: The size of the battle being fought, with regards to what level of organization is in the battle. Examples are brigade-level, platoon-level, or skirmish (trooper-level) games.

Boundary: The space a unit or entity occupies on the battlefield, defined by the area inside the line drawn around it.

Character: An entity that is capable of performing actions on its own.

Charge: A Primary Action that incorporates extra movement to reach combat.

Check Modifier: Any modifier to a skill check.

Close Formation: A tight formation suitable for close combat or keeping better control of troops.

Combat Range: The distance at which a character Engages an enemy.

Concealment: Something that makes an entity less visible.

Cover: Something that makes an entity both less visible, and can stop incoming attacks.

Coverage: The area covered by a ranged weapon when using volley fire.

Coverage Increment: The amount coverage increases with ranged attack successes.

Coverage Limit: The maximum area that can be covered by a ranged weapon when using volley fire.

Damage Limit: The amount of damage a unit can sustain before being destroyed.

Damage Measure: An attribute used in handling damage.

Delay: A free action to temporarily reduce an entity's Timing attribute.

Diminish Value: The amount of damage or members lost an entity or unit must take to reduce a skill level by 1.
Disordered: A state in which a unit cannot act on orders.

Double Pace: An action that allows a unit to move twice, sacrificing the effectiveness of its other actions.

Engagement: A position where one unit has gotten another inside its Combat Range, threatening them with melee combat.
Entity: Anything that exists in the game; the ground, the terrain features, the units, etc.

Facing: The direction an entity is pointed, if it has a given facing.

Failure: A skill check that scores no successes.

Flank: The side facing arcs of an entity or, or the side of a ranked unit.

Force: One side in a scenario. It may belong to one or multiple players, and a player may control multiple forces if the scenario allows.

Formation: The relative positions of a unit's members, and the special effects and rules created by that position. See Open Formation, Close Formation, Ranked Formation.

Ground Scale: The scale of distances along the ground in the game relative to distances along the ground in the real world. For example, 1/20 refers to the real ground being 20 times larger than the ground in the game.

Ground Scale Unit (GSU): The unit chosen for all measurements in the game. The rules reference the ground scale unit, and players translate it to their chosen ground scale.

GSU: Ground Scale Unit

Height: An attribute describing how tall an entity is relative to others.

Hire Value: The cost to include an entity in an army; Hire Value is found in the unit list.

Hits: An attribute that determines how resistant a unit is to damage. A unit sustains damage if it takes a number of hits greater than its hits attribute.

Improvising: Taking an action that would normally require a skill, without actually having that skill.

Initiative Condition: A combination of trigger and required action that makes a unit act on its own.

Intervening Entity: An entity or group of entities blocking a sight corridor enough to possibly cause concealment.

Leader: A designated source of Leadership actions and orders for a unit. A unit is Disordered if its leader is lost.

Long Range: A weapon's maximum effective range, weapons are inaccurate at this distance.

Medium Range: A weapon's accurate range; past medium range, it can be difficult to score hits.

Members: Unit members.

Mixed Unit: A unit that has multiple smaller units within it. See Subunit.

Morale: An attribute that changes throughout a game and defines a character's current mental and emotional state.

Morale Condition: A special Initiative Condition created by Morale, that takes priority over a unit's Initiative Conditions.

Move Action: One of a unit's two actions, primarily used to move a unit.

Movement: The ability for a character to move on its own. Has a movement type and movement speeds.

Movement Mode: A means of movement, such as ground or flying movement, or a special movement rule, such as acceleration-based movement.

Observed: Entity to which line of sight is being checked, from the observer.

Observer: Entity from which line of sight is being checked, to the observed.

Open Formation: A basic formation that allows unit members to be at a considerable distance from each other.

Position: The space an entity occupies on the battlefield.
Prepared Action: An action readied for a specific condition to occur. After the action that meets the condition finishes, the prepared action will be taken out of turn.

Primary Action: The second of two action types a unit takes during its activation, and the one that usually influences its environment and surrounding units, such as attacking.

Range: The distance at which a weapon is effective. See Short Range, Medium Range, and Long Range.

Ranked Combat: A special form of Engagement that involves units in Ranked Formation.

Ranked Formation: A tight formation, shoulder-to-shoulder like an ancient phalanx.

Rear: The back sight arc of an entity, or the back of a ranked unit.

Resolution Phase: The part of a Timing Step where effects such as forced movement, morale, and damage are applied.

Scale: The ratio of a reduced size (such as a model) to actual size. For example a model plane may be 1/72 scale, meaning the real one is 72 times larger than the model.

Scenario: The combination of forces, battlefield, time limit, and victory conditions that define a game.

Shadow: The area near an intervening entity that will provide concealment from a taller entity.

Short Range: A weapon's closest effective range, where it is the most accurate and damaging.

Sight Arcs: The areas around a unit that define its front, sides (flanks), and rear.

Sight Corridor: The area between two units, defined by the far edge of their boundaries.

Size: An attribute describing how large an entity is relative to others.

Skill: A statistic representing a unit's training; used for performing Actions.

Skill Check: A roll of the dice to determine if an action succeeds or fails.

Skill Level: The value of a skill, that determines how many dice are rolled when using it.

Skirmish Combat: An engagement type that represents fluid, swirling melee, where no unit member's position is truly known.

Solid Entity: An entity such as a unit in ranked formation or a wall, that blocks all sight through it.

Sparse Entity: An entity such as a unit in open formation or a bush, that does not completely block sight through it.

Subunit: A unit inside a mixed unit, because of different statistics, equipment, etc.

Success: The case of scoring at least one success on a skill check, or when making a skill check, a die that (after modifiers) rolls equal to or higher than 5.

Taking Cover: A state in which a unit is hunkering down behind cover, moving slowly to keep safe.

Terrain: Entities that are considered “part of the battlefield” such as forests, hills, buildings, the ground, and the like.

Threshold: The amount of damage an entity can take before a special effect occurs. See Vital Table.

Timing: An attribute of units that determines when in a turn it will activate.

Timing Step: A slice of time that makes up a turn. Divided into an Activation Phase and a Resolution Phase.

Unit: An entity that is composed of multiple characters. Can be a unit of one character; means the same as “one or more characters grouped together”.

Unit Members: The characters that compose a unit.

Victory Conditions: The requirements for a side to win a scenario.

Vital Table: A table in a unit's attributes that determines the effects of damage reaching its threshold attribute.