Gameplay Analysis

"From sticks and stones to an Empire: How to employ a civilization concept for a modern time RTS"

Game: 0 AD

example faction: Athenians

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Introduction

This document aims to summarize the current game mechanics, compare them to the original gameplay/game design concept, identify differences and problems with the current layout and create a solution concept.

As some of the proposed concepts and ideas require quite a bit of restructuring or addition of code this is to be taken as a serious roadmap that can be followed for all civilizations in the future.

If there are technical difficulties are not solvable by volunteers I'd honestly suggest to start another kickstarter campaign to hire a couple of professional coders who are then assigned the tasks that the internal team cannot solve. I know that this has been done in the past and failed, but I think the failure at least partly has to do with the fact that there is no "greater aim" for the game in its current state. There is no direction the game, so there is no amount of code able to finish it, thus the money would have gone to waste anyways (note that this is my personal opinion).

But before doing kickstarters, or hiring coders, artists or whatever there has to be clear in which direction the game is heading, which leads us to this document. I believe there has to be a separate discussion on the kickstarter campaign some other time.

Don't get the wrong idea, I know that the proposed concepts below require extensive work and testing. However, please keep in mind that I've taken the original gameplay document as reference and adjusted my concepts towards implementation of the intended features.

It's just that my personal believe is that 0 AD in its very heart is not intended to be a "mass up an army and throw them into battle" style RTS. And to be honest – why would someone need another macro oriented game? We already have Age of Empires II HD, Stronghold, RUSE, Starcraft II and a couple of other games which already please that kind of player audience. And trying to mess with those games will most likely lead to a defeat since they're made by professionals with years of experience in the game creation and have/had huge budgets available to polish their products.

The result of this should be clear: 0 ad has to follow its own path instead of trying to copy and combine aspects from other games.

So, let's move on and summarize the current status of the game:

General observations:

City Borders

When starting a game, the player base is surrounded by City borders. Inside the borders, construction of buildings is allowed. The border range can be increased by techs, certain buildings and progression in the city phases.

Resource system & starting economy

Basic soldiers, cavalry and women can harvest resources. The earlygame revolves around building basic infantry or women and assigning them to resource spots. The training speed is fast, resulting in high counts of collecting villagers in the earlygame (more than 30 or 40 units with 8 minutes). Resources are used to create more buildings and soldiers and research economic and military technologies.

Houses and other buildings have comparably long construction times. Various economic upgrades can improve different aspects of gathering processes and are fast to research.

Gameflow

Most essential military units are available in the first Phase, allowing very early rushes with a variety of units. Building times are very high for buildings and very low for units. Resource costs are mostly the same for all types of military units.

The available buildings allow defensive gameplay (farms, citizen soldiers, houses can garrison). The capturing mechanic helps raiding by being able to take over enemy buildings. As the game progresses there are more units unlocked to use. Every building is required to tech up. Siege is available very late, until then the mixture of capturing buildings and raiding economy is the way to go.

Synopsis, current faction content:

Buildings:
Phase I:

Agora – main building
House – provides population
Sitobolon – farm tech building and drop off point for food
storehouse – economic tech building and drop off point for minerals, lumber
Agros – unlimited food production
Epaulos – tech building for herdables/huntables/cavalry
Watchtower – scout building
Limen – harbor building
Strategeion – main military building

City Phase II:
Blacksmith – military tech building

Naos – advanced tech building

Emporios – market

Pyrgion – Defense tower

Theilos – defensive walls

Stoa Hellenica – specialist barracks building

Metropolis Phase III:

Epitheikisma – Fortress

Wonder – wonder building

Gymnasion – advanced military building

Theatron – economic civic tech building

Prytaneion – economic military special building

This is the complete building number that is available to a player when choosing the Athenian civilization, 19 buildings. To unlock Higher City phases a number of buildings of the previous phase are required.

Athenean units:

Phase I:

Hoplites (spearmen)

Peltastes Thrax (skirmisher)

Prodromos (ranged spear cavalry)

Psilos (slingers)

Phase II:

Rhomphaiaphoros (heavy melee)

Thyreophoros (heavy skirmisher)

Iatros (healer)

Hippeos (melee cavalry)

Phase III:

Oxybeles (scorpion)

Lithobolos (catapult)

Epilektos (phalanx city guard unit)

Toxotes Skythikos (ranged archer)

Toxotes Kretikos (ranged archer)

Epibatos (naval infantry)

Heroes (Themistokles, Perikles, Iphikrates)

Right now, the player starts off with basic infantry (hoplites), basic cavalry (Prodromos) and a basic ranged attacker (Psilos) without any necessary teching. Building a barracks adds a basic skirmisher (Peltastes) to the mix.

Phase two adds healers, a special infantry and a special skirmisher (Rhomphaia/Threophoros), available through a second barracks and cavalry (Hippeis)

Phase three unlocks siege (Oxybeles/Lithobolos), a City Guard Phalanx (Epilektos), ranged units (Toxotes Kretikos and Skythikos) aswell as naval infantry (Epibatos) and heroes.

Summary of current game mechanic issues
(note: "tier" means tech level)

City Borders

While in theory an interesting concept, the implementation at this stage is limiting the game more than being a useful feature.

- Expansion is hard to do (Agoras require Phase II and lots of resources/time to be built)
- No good options to expand the city borders apart from spamming houses or barracks
- On certain maps it's impossible to place drop off points for lumber and metal near the first major forest, leading to a low efficiency lumbering early on

Results of this feature: Cavalry rushes and booming (don't expand and spam economic units) are the choices to pick when playing the game. As it's hard to work towards resources in the center of the map it's easier to stick to the own borders and produce food with farming and harvest nearby lumber while building more and more economic units. Cavalry is very mobile and useful for harassment. Regular units don't do the job well because it's not possible to chase villagers.

Buildings:

- no interconnection of building types:

    This means that there is no possibility to limit the amount of unit types available to the player. Every unit is trainable quickly, that way there is no interesting unit transition like archers into cavalry into infantry. Of course it's possible to first field archers then cavalry and then infantry, but this doesn't require planning or build orders. Just build a barracks and you're done with your military.

- forced construction of building phase buildings does not allow flexibility, players always have to build everything to get access to higher tier:

    This is an issue for the game duration. There is no possibility to follow a fast tech into a high tier to finish off opponents with superior units, or to deliver a teching advantage. As an example in AoE there are civs which are fit to quickly advance through the ages (like Byzantines, Mongols or Saracens) to field superior units like knights. Combined with the lack of additional military content in phase II the city phase feels dragged out. It takes ages to get through this phase without gaining a significant difference or advantage from phase I.

- Building cost- and tech-requirements are unbalanced, i.e. a fortress only offers two siege weapons while requiring lots of teching to reach and lots or resources to build. This results in unbalanced strategic options for building progression. Players have to build overpriced or underpriced buildings to get benefits that do not match the initial price. The progression should be: the more important the building the higher the cost should be.

Units

- Too many units are available at the start

Overall the game offers a wide number of different units, but the unit arrangement is strange. In a strategy game the unit strength is usually increased over time, either via upgrades for existing units (called scaling) or by giving access to stronger units. A player starts off with his weakest units and as the game progresses he unlocks more and more powerful units, ultimately with some type of specialist unit that offers a very large advantage in one area.

Most units with specific strengths have specific weaknesses which create a so called "rock paper scissor" counter system. The more specialized the unit is the harder the weakness is applied to enable countering it. This is essential for a wellrounded counter system.

- Unit upgrades gives too large gaps between unteched and teched units

    It seems as if the bonuses provided from teching are very large, while unupgraded units are extremely weak, upgraded units almost take no damage compared to them. This is bad, as it requires players to instantly upgrade their units to stand a chance against an opponent, limiting the choice to "mass" weak units instead of choosing to tech up to get a smaller force of more advanced, stronger units.

- Heroes come late and require lots of resources for limited effects

    This is a separate issue and my personal opinion on this matter is that heroes have too little effect on the game. According to the design guide the game takes inspiration from Warcraft III in which heroes have a very large role from the very start of the game. Getting early heroes, leveling them up and fighting the enemy is very important and can decide a match early. The hero system in 0 ad doesn't nearly as much influence the overall game, which makes me question the reason why heroes are in the game in the first place.

- Formations are fiddly and micro intensive

    The Formations are interesting, as they provide tactical options for fighting, like forming a phalanx to attack melee warriors. It's a logical thing that there is a necessary minimum of soldiers to form a formation. The problem with the formations right now is that it's not possible to select units in a formation and ignore units that are not included in the formation. Since units in 0ad are pretty small in a battle there is a constant reforming of formations since new trained units rejoin the formations on double click selection if you reassign the formation.

- Unit training times are too quickly, massing troops early game is absolutely possible. Rushing with units from the town center is possible.

    This dumbs down the game. There is no strategical choice between building a military building path to unlock certain units and an early economic boom defensive playstyle. Instead it's possible to train relatively potent units from the very start and the "man-spam train" is on track. While creating variety in the early training order this dulls down the tradeoffs that have to be made in the earlygame by players. In a good RTS there is a variety of choices to make. Either train melee units early, train

ranged units or try a mobility approach for harassment like cavalry units. Each path means that the other military units are delayed by X amount of time and there is a tradeoff between having more pressure on the enemy or have increased economic power. Since cavalry can also collect food, there is zero disadvantage in training cavalry compared to training economic units.

In 0ad there is no delay for fielding other types of units (except for the time to collect the required resources and building time), so army compositions are very flexible. This renders tactical advantages from training certain units useless as they can immediately be countered. I got the feeling this is why there is so much cavalry rushing going on. A mobile early cavalry army allows to put pressure on an enemy, and can only be countered by other cavalry as regular units are too slow to catch up. The mobility of ranged units is high; most skirmisher cavalry and cavalry archers available to the civs at the start. Ranged cavalry can outrun their counters and pick off single units. In RTS players who can choose their battles are in an advantageous position.

Solution Concept taking Atheneans as example civilization:

Excerpt from design doc:

> "*Developers do not seem to be content to further the traditional RTS in the same vein as Age of Empires, Command and Conquer, Red Alert, and Warcraft II. Though some are fleeing, we are going to stake a claim in the RTS genre. There is still much innovation to be made. This for us means:*
>
> A.   *Less tedious/mindless micro-management*
> B.   *More strategic thinking*
> C.   *Greater stress on planning, formations, and tactics*
> D.   *Choices, Choices, and more Choice* "

Right now, none of this is actually present in the game. 0 AD combines all negative features of the game combined with a broken gatherer concept to make the whole game more "unique". This is a problem and really unfortunate. We have lots and lots of unnecessary micromanagement, almost no strategic depth, no real planning. Only thing already implemented is the use of formations and tactics like flanking of a Phalanx.

My aim is to create gameplay patterns that match the points above:

- removal or repetitive and unnecessary micro management
- employment of battle tactics in conjunction with formations, trampling, surprise attacks, flanking and directional combat. These battle tactics make up for the fact that there are less total units on the field. There is more tactical micro in place than strategical micro
- The fighting duration between units is increased. This reduces the need to permanently replace units lost with the "manspam train" - set the waypoint to the battlefield. Newly produced soldiers move towards the battlefield every couple of seconds and after a while this looks like a train moving along the map.
- Enforcing a teching pattern that allows a greater diversity in army compositions, and to make certain "cookie-cutter" unit combos harder to reach.
- Creating variety in combat. The outcome shouldn't always be the same. This is accomplished by varying weapon damage and directional combat and creating small amounts of luck based chances.

- Making units more durable allows constructive army micro. I.e. more options to heal wounded units. Unit preservation becomes more important and easier. This punishes mindless suicide raids and rewards taking care of units.

General earlygame changes:

1. Remove all units from the Town center except for women and citizens.
2. All units are trained in batches of different sizes (the exact number is up to discussion, I'd say we start with 4 women and 4 citizens per training interval. Training time and resource costs are increased accordingly). Gathering rates are changed, this is covered in a separate point. House pop cap is increased; fewer houses to provide more population.
Reason: less repetitive micro required by lowering the amount of clicks to get the eco going. Increased gathering rates allow less gatherers to get the necessary resources. This is also important since military will not be able to gather, too (see below). Less houses for progress means less spam to build them. House walls are less attractive and palisades become the choice of defensive building at the start of the game.
This all frees up time for the player to think ahead of how he's going to setup the game while maintaining a relatively complex economic system.
I'd strongly suggest of battalions with multiple units in a single entity. This allows less individual micromanagement (-> "clicking speed") and allows a better implementation of formations. Additionally, battalions create a better atmosphere of managing armies and an empire, not a bunch of ravaging soldiers and a couple of farmer's daughters Depending on the eco setup the gathering processes can be tweaked to match the size of women "battalions" and Citizens. I.e. maximum gatherers are 4/8/12 for small/ medium/ large resource spots.
3. Slow down everything. Women speed, soldier speed, cavalry speed. It's pretty obvious that the game runs like a turbo random map game in Age of Empires on double speed. Way too hectic for a game with such a detailed economy and military system. Instead, the focus should go more into automatization of processes to allow more strategical planning. This also makes "fast clicking" less of a requirement to manage the game well. This will improve the game pace massively.
4. Citizens – they do no longer start with their weapons, instead they only work as male collectors. They collect food, wood, metal and stone faster than women, and they can hunt with spears or bows. They have the option to be "called to arms" to receive their weapons but lose their ability to collect resources (in case of Atheneans: Citizens turn into Hoplites). The upgrade is permanent.
Alternative: Citizens "call to arms" is a timed ability. When activated Citizens run towards the Civic Center (or Blacksmith) and receive their weapons. When leaving the city boundaries or after a certain time they drop their weapons and become gatherers again.
Reason: having an army that can collect resources is problematic. As soon as a player decides to attack, the player loses resources from not gathering resources. To limit the negative effects of this the Citizen speed must be high so travelling to the enemy doesn't take too long. This makes units look ridiculous when they sprint across the map.
The amount of units collecting resources makes it necessary to slow down individual gathering rates, so unit massing is important to gain economic bonuses.
The "call to arms" concept allows players to react to early attacks by calling their citizens to defend the city. Raiding economy easier with regular units, as the gatherers cannot fight back

efficiently. There is a tradeoff between military force and economic force. This conceptual change still contains the spirit of "Citizen Soldiers" that the game favors as a core element, but in a less problematic way. Military units should not double as resource gatherers.

5. Women can only collect food, and the efficiency aura is removed from them. Gathering from herdables, fields and berries is significantly more efficient. They cannot hunt efficiently because they are not able to use a bow or spear for a ranged attack. They can still collect from them if a Citizen first kills the animal first. A mix of Citizens and Women early on is more important as both units synergize well. Mindless massing of women is made less attractive, since the amount of herdables or berries is limited early on. On the contrary it's an option to gain an advantage from taking free food on the map with high efficiency by having women collect wild berries and i.e. protect them from raids with male, called to arms citizens. This also allows players to expand early on and increases the necessity to keep scouting the map for assault targets. Being sneaky by collecting hidden resources rewards players with saved resources on early fields.

6. Neutral gaia herdables on the map: herdables can be captured (copy from AoE II, I know. But it's good!) and then fatten over time. They can be moved around and be gathered from citizens and Women.

7. Starting units are reworked: Atheneans/civs in general no longer start with a mixure of units. The starting units are limited to three Women and one Citizen. The citizen either serves as a scout or can help with hunting to improve food gathering. Since Atheneans are a defensive civ a fast ranged cavalry scout and Psilos are unfit as starting units. Atheneans should be slooooow.

Resource layout:

Any good RTS needs a clear role for each type of resource that is available. Example: Company of Heroes features 3 resources – manpower, fuel, munitions. Manpower is used for training new units, teching all kinds of upgrades and reinforcing squads. Fuel is used to bring vehicles on the field and tech global upgrades, for example enable the usage of grenades for Riflemen. Munitions are used for squad specific upgrades like giving an MG gunner to a tank or adding sight scopes, or to give a Panzerschreck to a squad. Munitions also are used for usage of active abilities – artillery strikes, Air raids, smoke barrages, tossing grenades and so on.

Something similar is in place for Warcraft III, too:

Units require gold. Items and combat enhancing features require gold aswell. Teching, buildings and specialized units require lumber as a second resource.

A pattern like this should be enforced for 0 AD. Players need to know that if they want to do X they need resource Y. My proposal would be following:

- Food is used for training gatherers, melee infantry and cavalry. Military techs and combat enhancing techs require food.
- Wood/lumber is used for construction of non-military buildings and required for economic upgrades. Training ranged units requires wood. Wood is also needed to progress city phases.
- Stone is used to create military buildings. Walls, Towers, barracks, Fortresses. The creation of Siege weapons requires stone aswell. Stone is needed to progress in the next city phases.

- Concept proposal : Metal is split up into two resources. One is called Silver, the other Iron. Silver is used to tech economic upgrades and army upgrades. Iron is used for training soldiers. Advantage would be that there are more options to customize the gathering process into "unit massing" or "teching progress". Silver is a teching resource, while Iron is a production resource. Elite units like Chariots, Elephants or mercenaries can require Silver as training resource to mix things up for additional gameplay depth.
- Alternatively, Metal is a combined military production and teching resource. It's used for training every military unit that is fielded. Military techs and combat enhancing techs require metal. Economic techs require metal, too. Upgrading city phases requires metal (or silver).
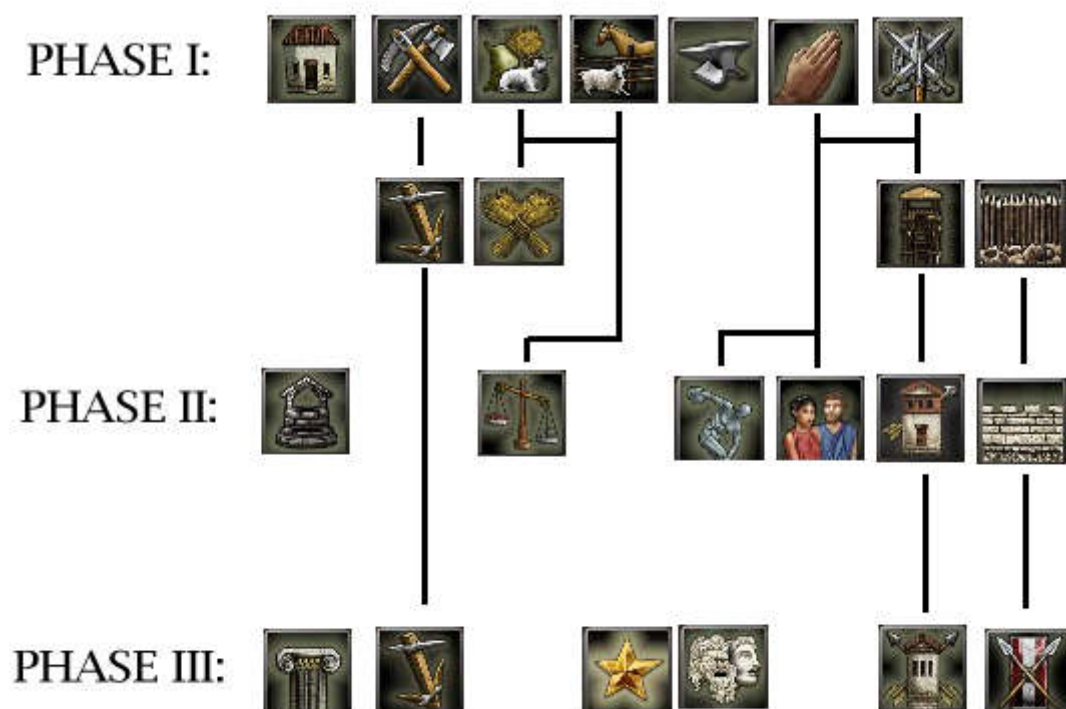
Building layout for Atheneans:

Phase I:

Buildings built by women: houses, farms.

Buildings build by Citizens: Apotheke, Strategeion, Sitobolon, Epaulos, Blacksmith, Naos, Pyrgion, Limen

Proposed building dependencies in a picture:

Conceptual changes:

Apotheke: can be built anywhere, drop off point for lumber, stone and metal
Sitobolon: unlocks the option to build fields, contains economic upgrades for harvesting and gathering berries
Epaulos: this building contains upgrades for hunting and gathering from animals. This building provides upgrades for the overall performance of cavalry units. It no longer trains sheep or goats (the training herdables will be used in a different way in a different civ

concept, will be covered in the future).

Blacksmith: contains military upgrades, and unlocks ranged units.

Limen: a basic shipyard that contains fishing boats and transport ships. Transport ships can be garrisoned by soldiers and then used to capture enemy ships.

Strategeion: by default, it only enables to train Hoplites Athenae. Further contains Peltastes Thrax and Prodromos (require City phase)

Naos: contains healers and heroes. Yes, you read correctly, I'd suggest heroes and healers are put in an earlier stage of the game to increase their influence on the gameprogress. Of course, considering that they join the game earlier they will work in a different manner and have different stats. Hero units will be featured in a separate position below.

Pyrgion and Palisades: defensive buildings for a defensive styled civilization, cheap, fast to build, but easy to destroy

Phase II (600 Wood / 400 Stone/200 metal, requires 3 buildings to be constructed):

(all constructed by Citizens)

Emporios: Market building, contains upgrades that allow trading, increase economic efficiency (that means: upgrades in here allow resources to last longer, especially metal)

Gymnasion: Advanced military building, trains Pikemen and contains upgrades that increase infantry effiency (more hitpoints, better attack, better speed etc.). Also trains Hippeis and thus provides a gameplay focus on infantry units and to make them more versatile. Additionally, cavalry helps out the immobile Phalanx formations by protecting the flanks and applying pressure to the enemy. The disadvantage is that this building does not contain hard counter units, and thus it's necessary to provide the correct army composition to make use of the units from the Gymnasion.

Hellenic Stoa: Advanced military building, contains Rhomphaiaphosos, Thyreophosos and Toxotes Skythikos/Kretikos. This building serves by providing a mixture of dedicated hard counter units that hit hard but are specialized. Also contains upgrades for said units.

Agora: main civil building that expands the command area and creates further colonies. Trains gatherers and allows to advance through city phases (mostly like it is at the moment).

Theikos: improvement of wooden Palisades. Those walls cost stone and have better stats (obviously). Can be built anywhere by default.

Defense Tower: building that shoots arrows (obviously)

Phase III (700 Wood/ 1000 Stone / 500 Metal, require 2 buildings to be constructed):

(all constructed by citizens)

Epistoklisma: Fortress used as ultimate defensive building, contains upgrades for military units in general (i.e. training speed). Furthermore allows construction of various siege weapons.

Theatron: economic boost building. This building increases all gatherer speed and efficiency in the civic center radius (similar to the Wheel technology in Age of Empires)

Prytaneion: Government building, contains techs that affect cavalry units and provide bonuses to general infrastructure: faster construction of buildings, population efficiency, unit costs, ships and so on. It basically boosts the economy indirectly. Example for Athenians:

Reformations of Iphikrates that upgrade regular Hoplites to Naval soldiers and replaces Toxotes Skytikos with Toxotes Kretikos.

Wonder: serves double as a victory condition and boosts all military unit's performance significantly (the wonder is a proud sign of how advanced a civilization is, and thus the population will greatly try to keep it that way)

Limen Megalos (military shipyard): Upgrade for the regular Limen, alternatively an own building that enables construction of large ships.

Military:

After I received the additional information that the current in place pathfinding mostly revolves around single units and still uses workaround solutions I'm creating as some kind of foreword:
The suggestions about battalions are not set as a requirement for the game, instead it would be possible to simply create multiple units with one click. Instead of creating one entity per training cycle the game simply creates like 3, 4, 5, 10, 15 entities at once that can be grouped by the player and immediately use a desired formation as a temporary solution. With increased training times for units in general, this will also make the random "one slinger army against 2 peltastes" engagements less of an issue. It simply looks odd. No civilization would engage another civ with a single soldier.

There's a meme about Age of Empires on the net. While being quite sarcastic this sums up certain aspects that feel weird for a "historical" game about large kingdoms and societies:

Back on track:

General concept:

Units have normalized speed, the better armoured a unit is the slower it moves.

Units have an additional stat, "endurance", which affects speed and combat performance, similar to the endurance system employed by Total War games. Endurance allows units to run or charge until they're exhausted. Exhausted troops fight less efficient and will require to rest to regain back their endurance. The factor how fast a unit can be exhausted is based on two things: 1) the armament, i.e. lightly armoured Peltasts can run longer distances than Pikemen or Hoplites and 2) the experience level a unit has. Veteran troops can march and fight much more efficient than rookie soldiers that have been freshly trained. This makes preserving soldiers with experience rewarding for the player and allows tactical decisions to engage unprepared enemies while risking that own troops might get exhausted while approaching them instead of a slow moving army that allows the enemy to prepare for battle.

Additional stat that is also based on endurance: mounted units have the ability to trample other units with a charge. Units that are able to charge are chariots, light and heavy cavalry and elephants. Those units are intended to cause chaos in enemy formations. Being able to trample allows them to counter units that are isolated or not properly protected. The intention is to make battles more interesting and allow plays by smart usage of cavalry charges to turn the tide of battle.

Units are made more durable. As a workaround I'd go ahead and simply increase the hitpoints significantly, or add a random integer that varies attack damage. I.e. damage for archers ranging between 10-20, and damage of spears 25-40 (Or something similar, these are just examples).

Units have different stats for "frontal" defense and "rear" defense. Soldiers engaging other soldiers frontally have a chance to "deflect" or "block" attacks off. The more experienced a soldier is thee better he can block off attacks. Soldiers with shields have a greater frontal defense against missiles like stones, arrows and spears. A picture illustrating the matter:
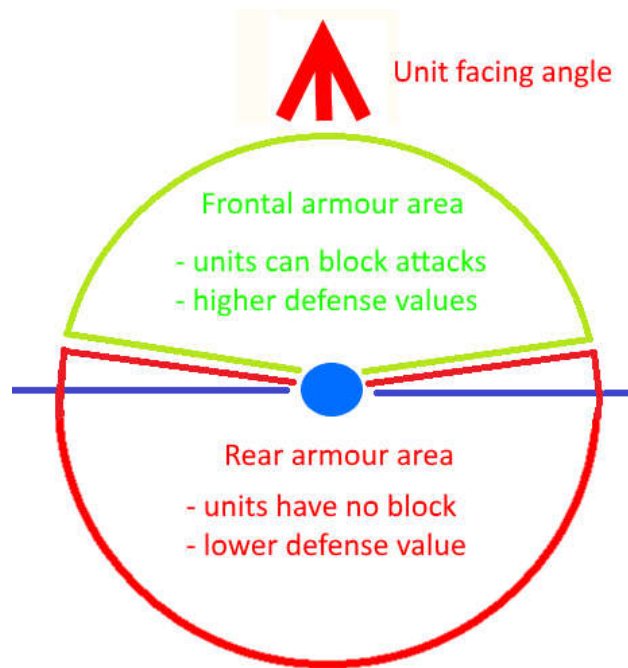
units have an armour penetration value, which allows them to ignore enemy unit's armour to deal full damage. As an example: melee spears have a lower base damage but have a comparably high chance to pierce through armour, making them the choice of action to deal with heavy melee units. Archer arrows have a lower chance to damage heavily armoured targets. Missiles like stones from slingers have a low chance to penetrate armour but deal high damage per missile. As I'm not 100% aware of how the current damage system works there might only be minor tweaks necessary to employ the necessary stats to make this system work.

Varying accuracy for ranged weapons – archers, slingers, peltasts and siege weapons have accuracy values that decrease over the range they're shooting. Accuracy increases with veterancy levels. From my observations this is already implemented.

certain units gain combat bonuses when in or nearby forests, for example against arrows. Or they become invisible to the enemy to allow surprise attacks. This also creates more tactical depth to fights.

units get a dynamic line of sight that is influenced by buildings and other obstacles in their way. This way scouting becomes more important to identify threats aswell as increasing the tactical value of surprise attacks "out of nowhere"

military unit costs are normalized. There needs to be a consistent system to provide a usage of different resources to balance out different types of units and gathering strategies. How exactly the values are setup and which military unit takes which resource is up to a later stage. I'd strongly suggest that food and metal should play the larger role.

Military population costs are based on their size. A regular soldier costs one population point, while a Chariot or cavalry unit requires 2 pop. Elephants and siege would cost 3 pop. Just to state some numbers. In general: the more powerful a unit is the more popcap it uses. This makes accomplishing large forces of elite units harder, and promotes using different types of troops together.

Reasoning: read the design document

- *"**Fastest click wins** - In many RTS games, it isn't the player with the most intelligence or the best strategy that wins, it's the player who A] knows the proper order of actions and B] carries them out the fastest. People that practice a general procedure that is usually rewarding and know keyboard shortcuts should be slightly advantaged, and they will still be required; but, the if the opponent recognises their 'cookie cutter' gameplay, they should easily be able to outwit them by identifying and countering the unoriginal/over-used tactics with an effective counteractive strategy.*
- ***Single path to victory** - It seems to be a trend that games cater to a specific strategy that is frequently used to attain a victory. That could be rushing, turtling, booming, etc. We recognise these are valid ways to win a game, but we will attempt to not favour one over another. Players should be able to successfully use (and adapt/change) any strategy to achieve a victory.*
- ***Sneaky Tricks** - Many games overlook some aspects of gameplay that are unintentionally (by the game designers) used to a player's advantage. Through many hours of gameplay testing, we need to identify and eliminate these tricks.*
- ***Repetition** - If you find yourself doing the same action over and over without thought, then we need to either eliminate or automate such an action. Linear repetitious procedures are meaningless and boring. "*

scout towers can be constructed by military units and create a city border, which allows forward bases and forward gathering.

Military layout for Atheneans

Strategeion: Trained units

- Hoplites Athenae, slow but well armoured soldiers with a bonus damage to cavalry units. Low initial damage and attackspeed, but profit from various upgrades that are present in other buildings.
- Psilos, fast, lightly armoured, ranged slingers with high missile damage, but low accuracy and armour penetration. Mostly useful to counter other lightly armoured units, but comparably cheap and fast to train. Range 30m
- Peltastes Thrax (require Blacksmith), ranged spearthrowers. Medium speed, slow rate of fire (once every 3 or so seconds), high damage, armour piercing spears with a range of ~20 meters. Rookie troops have a chance to miss their spears.
- Prodromoi (requires Epaulos): light spear cavalry, changed to melee instead of throwing spears. The spear throw instead becomes an ability. Due to having spears, their armour penetration is high, making them a good counter to other cavalry units. Due to them being lightly armoured it's important to use their mobility to avoid unnecessary damage. The thrown spear allows to deal with approaching enemies by weakening their hitpoints beforehand.

Limen: Trained units

- Fishing boats and transport ships which serve as troop carriers and allow capturing ships.
- Medium combat ship that is unlocked in Phase II (TBD)

Gymnasion: Trained units

- Epilektos, well armoured, slow Pikemen with high armour armour penetration, especially against cavalry. Can form several special formations which allow to deal their damage.
- Hippei, fast moving medium cavalry with powerful charge, have high attack damage with swords. Their hitpoints are lower than other cavalry units, thus they're required to use flanking to cause the most damage without taking too much damage.

Hellenic Stoa: Trained units

- Threophoros: medium speed, better armoured than Peltastes Thrax, high damage spears with high armour piercing value and decent defense against melee attacks.
- Toxotes Skythikos: Archer with good rate of fire and range, can fire flaming arrows to lower enemie's endurance. Cheap to build and maintain, but low hitpoints, making them vulnerable to cavalry, Range 40m
- Rhomphaiaphoros: medium speed, well armoured with high damaging sword attack, have great endurance.

Epistoklisma: trained units

- Oxybeles, slow moving, long range ballista that shoots bolts in enemy unit formations. It's a supportive weapon that lowers enemy unit's endurance/formation bonuses as they create chaos where they hit, range 60m
- Lithobolos, long range siege weapon that deals high damage to buildings but has to be deployed/undeployed to be used and moved around. Can also fire flaming missiles to either ignite enemy cities or unit formations. By default rather inaccurate, it profits from technologies which increase its accuracy. Siege engineers etc., range 100m

Limen Megalos: trained units

- TBD, as I don't know enough about sea fighting yet and the sea fighting does not seem finished in general yet. Most likely ships like Triremes and siege ships to terrorize the sea. Athen had a scary fleet afterall.

Heroes:

The hero system is changed: Only one hero is available at a time. Each hero provides unique bonuses to the Athenean army. When a hero dies another one can be trained. Heroes get special abilities that allow them to influence the course of the battle.

- Themistokles, focus on navy efficiency and bonuses to soldiers defending territory.
- Perikles, grants economic bonuses like faster building, faster army training speed and cheaper buildings.
- Iphikrates, grants general combat bonuses to formations of soldiers.

The gameplay vision/desired results in a nutshell:

The aim of the proposed gameplay concept is to create a transition of a small civilization that skirmishes its way to an empire. Economy management is shifted from individual micro of lots and lots of gatherers into a system that allows a limited amount of economy units do all the necessary tasks. collecting the correct resources for the planned strategy (rushing/booming/teching) and the buildorder become more important.

Managing armies and gatherers creates a feeling that the player controls a part of an empire instead of a bunch of villagers and soldiers that battle for a random region.

Training various types armies, upgrading them and sending them into micro intensive, tactical battles create excitement for the involved players and random based variances in the battle system allow variety in outcomes of who wins and who does not.

The usage of ambushes, flanks and pinpoint harassment allows comebacks for players who fell behind. There no longer is a need to apply a huge economy and then mass units from dozens of military buildings to simply overrun the enemy.

The game follows an organized structure that allows predicting enemie's plans by scouting carefully and intercepting them by smart usage of information.