

Cultural Victory In The Higher Levels

Published and commented at
<http://forums.civfanatics.com/showthread.php?t=298093>
in November 2008

Author: jesusin
reacheable at the above thread and also at
<http://forums.civfanatics.com/sendmessage.php?do=mailmember&u=61782>

Index

Index	1
Introduction	2
Disclaimer.....	2
Basics about cultural victories.....	3
The best two cultural strategies	4
The main source.....	5
Research.....	5
Efficiency.....	5
The multipliers.....	6
The best two strategies	7
Other strategies I have heard of.....	7
Brief cultural game description	8
Before the game starts	8
4000BC-1000BC	8
1000BC-1AD.....	9
500AD	9
1500AD	9
1700AD	10
City descriptions	10
The capital	10
The cottage city/ies.....	10
The GPFarm	11
The auxiliary cities	12
GA probability.....	12
Some ideas about specialists.....	12
GP usage.....	14
Religions.....	14
Tech trading.....	15
World Wonders	15
Resource trading.....	15
Building culture.....	16
When to revolt to FS.....	16
Resources.....	16
Diplomacy	17
In case of war.....	17
Planning ahead.....	17

Abbreviations	19
Bye bye!.....	19

Introduction

This is a compendium of all I know about cultural victories. It is general enough to be valid for all Vanilla, Warlords and BTS. Most of it is probably valid for intermediate and low levels of difficulty too. I hope you enjoy. I would appreciate any comments or disagreements.

IMO the cultural victory is the most complex and complete one. It requires great skills in research, building, diplomacy and planning ahead. It requires balancing a lot of factors: the 3 cities among them, the research versus the culture, the commerce versus the GA, the army versus the maintenance... I hope you find cultural games as entertaining and enjoyable as I do.

Disclaimer

This is a compendium of all I know about cultural victories. Well, and who am I? I am a simple player who has spent the last 2 years trying to get the best possible cultural strategy (accomplished) and to play the best possible cultural game ever (yet to be done). At the time of writing this, I am the player with the most GOTM cultural Awards and I hold many of the second best Vanilla HOF Deity cultural slots (so if @WastinTime does ever write a guide like this, please go and read his' instead 😊).

Most of my experience comes from games played in this settings: Vanilla, Deity, Quick Speed, Lizzy or Saladin, Standard or Small map, no barbs, Inland Sea, peaceful chosen opponents.

Most of my ideas come from other people. I must mention here at least @WastinTime, @Lexad, @Xin Yu, @bostich, @klarius and of course @Godotnut. Please, if you haven't read it yet, read his guide here

http://www.civfanatics.com/civ4/strategy/peaceful_deity_cultural.php

<http://forums.civfanatics.com/showthread.php?t=171130>

I am probably forgetting many valuable people, since I have had dozens of interesting discussions about cultural games with other civfanatics.

Why I am writing this? Now and then new people come asking for information on cultural victories. Lots of new threads are opened asking for cultural advice. I don't agree with most of what the available information says. So I thought it would be better

to write my own guide. The goal is to show how I approach a cultural game. Maybe it is not the best possible approach, but I hope it will teach how to think for oneself.

The goal of my cultural games is winning asap. I am not interested in points. Points in Civ4 come mainly from population. So if you are interested in winning a cultural game and getting a lot of points, please play a domination game, reduce all your rivals to OCC, stop getting more cities when you are at 50% land domination, research biology and other fat-full techs and wait patiently for your cities to get to Legendary. From now on, I will only talk about winning as fast as possible.

NOTE1: This guide tries to be useful for every game. I won't be discussing the advantages or disadvantages of different setting (speed, map, number of opponents); the idea is, given a particular game, how do I get the earliest cultural victory possible from here? I will usually be talking about Normal Speed, unless stated otherwise, because it is the standard one. Info will come as chapters in spoilers. Skip the first one if you already know what is a Legendary city. The final chapter covers the meaning of the abbreviations I will be using.

NOTE2: I am an analytical person and I love numbers. I will use mathematical operations often. If you hate maths, just skip the numbers and directly read the conclusions. You don't need to do all the calculations I do in my games to get a very similar result.

NOTE3: Why am I posting this now? I should have published this guide before BTS was out in the stores, but I never found the time to finish it properly. In fact, it is not properly finished yet and I doubt I'll ever finish it. Anyway, keeping it to myself would be of no use, so here it is.

Basics about cultural victories

To win a cultural victory all you need is to get 3 cities to Legendary status. In other words, you need to get 50000 culture points (50000 🏛️) or more in three of your cities. The amount of culture needed only depends on game Speed:

- Quick: 25000 🏛️
- Normal: 50000 🏛️
- Epic: 75000 🏛️
- Marathon: 150000 🏛️

If you go into a city, you will see in the lower left the total amount of culture your city has accumulated. In the upper left you will see the culture per turn (cpt) the city is producing.

Culture can come from a number of sources:

- Buildings: every building can have a fixed cpt, for example theaters get 3cpt. This number is doubled 1000 years after the building has been built (except for Academies). WW are the buildings that add the most culture.
- Specialists: If you hire an artist (clicking the + sign in the right of the city screen) he will produce 1bpt and 4cpt. And even more important, he will start to accumulate GPP for your GAs.
- GA: When you reach a certain number of accumulated GPP you get a GL. The GPP numbers for Normal speed are
100,200,300,400,500,600,00,800,900,1000,
1200,1400,1600,1800,2000,2200,2400,2600,2800,3000, 3300,3600...
For other speeds just multiply by 0.67, 1.5 and 3.0. Depending on the sources of GPP, the GL will or won't be a GA. A GA can be used to bulb a tech or to trigger a Golden Age, but in cultural games he will be used either as a superspecialist (adding 3gpt and 12cpt to the city it is settled on) or as a culture bomb or greatworks (adding 4000🏰 to the bombed city, 2680🏰 if Quick, 6000🏰 if Epic, 12000🏰 if Marathon).
- Cultural slider: In the upper left in the main screen there are the science and culture sliders. If you assign some percentage to the culture slider, part of your commerce will be transformed into culture in all your cities. Appart from that, you will get free happiness.
- Building culture: Once you know Music, you can transform your hammers into culture. In Warlords and BTS it is a 1:1 conversion. In Vanilla it works in a different way.

All the sources of culture added together (except the last one in BTS/Warlords) are your raw cpt. The raw cpt is multiplied by the culture multipliers in order to get the final cpt of the city (then, in BTS/Warlords, the building culture is added).

The existing multipliers are:

- FS civic: +100% in every city. Requires Liberalism.
- Cathedrals: I call cathedrals the +50% religious buildings that come with Music, although the game calls some of them cathedrals, some of them pagodas, etc. You can't build a cathedral of a given religion until you have built 3 temples of that religion (less temples per cathedral are needed in small maps, more in bigger maps). You can't have 2 cathedrals of the same religion in the same city. If you want to build 2 cathedrals of the same religion in two different cities, you will need $2 * 3 = 6$ temples of that religion in your empire.
- Hermitage: this NW gives 100% to the city it is built.
- Broadcast Towers
- Late WW like Eiffel Tower

So if you are doing 100 raw cpt in a city that has Hermitage and 1 cathedral and you are running FS, you will be doing 350cpt:

$$100 * (1\text{original} + 1\text{Hermitage} + 0.5\text{cathedral} + 1\text{FS}) = 100 * 3.5 = 350$$

The best two cultural strategies

The main source

Ok, so you want to get a lot of raw culture and a lot of multipliers in three cities in a high difficulty game (Emperor, Immortal or Deity). Where will the raw culture come from?

Buildings? No. How many WW do you think you are going to build, being realistic. 1 early and 2 medieval, maybe? And smaller buildings add simply too little culture. There is a long way to 50000 🏰. It would take too long. (Note: BTS has many more interesting buildings and Sistine's add a great benefit to building temples and monasteries).

Specialists? No. Only 4 culture per artist. 6 if you build the Sistine's. Too slow.

GA? No. You are not going to get more than 20 GL in any game. At least if it doesn't go so late that Deity AI launches their Spaceship. $20 \times 4000 = 80000$, not bad, but you need another 70000 out of somewhere.

Cultural slider? Yes. Here is where culture lies. A city that has built his cottages around 1000BC and worked them will enjoy towns around 1000AD. Since the obvious civic to run is FS, every town is worth at least 7 commerce per turn, which will convert into 7 raw culture if the cultural slider is at 100%. A city can easily get 10 cottages, so we are talking about 70cpt in all three cities. That's superior to any other source.

Ok, so the most important contributor will be the commerce transformed into culture, the second more important contributor will be GAs generated by artists and buildings will add another bit. (In BTS there are many new WW and Sistine's has changed a lot, so the balance has changed a bit).

Research

If you are planning to use 100% culture, you are forced to use 0% research. But you can't do that at the beginning of the game or you won't know how to build cottages. Another important thing to build is cathedrals, so you must research as far as Music. Liberalism brings +100% culture to all cities and +2 commerce for towns and a free tech, which can be Nationalism for the Hermitage. PP is interesting only in some games. Radio, Biology etc are interesting but come too late, it is better not to research so far. So my advice is: stop research after Liberalism, Music and Drama.

So a cultural game has 2 phases,

- Phase1, research as fast as possible towards Liberalism.
- Phase2, set the research slider at 0% and the cultural slider as high as you can afford.


Efficiency

The goal is 50000 🏰 in 3 of your cities. Getting culture in other cities different than the 3 soon-to-be-Legendary ones is useless.

You want to get your 3 cities to Legendary status in the same turn. Not doing so is inefficient. For example, getting a city to Legendary long after the other two results in 110000-90000-50000 culture in the end of the game. There are 100000 useless culture between the three cities. What's the point in accumulating all that culture? You have made your goal much more difficult than it was needed.


The multipliers

In principle, you want as many religions as possible in your empire. If you have 9 or more cities, you will be able to build 9 temples of each religion and, accordingly, 3 cathedrals of every religion, one for each of your soon-to-be-Legendary cities. FS affects all of your cities just the same. But there is a single Hermitage. Where should you build it? Let's make it clear with 2 examples:

Example1: 9 cities, FS, 2 religions, 6 cathedrals built, your 3 cities are doing 150, 100 and 50 raw cpt, they have accumulated already 5000  each, you expect to get zero GAs in the course of the game.

Solution1: This is the worst possible situation. The Hermitage should go in the worst city. The Hermitage will contribute only 50cpt to your victory.

If we don't build the Hermitage, the cities will reach Legendary in 100, 150 and 300 turns respectively. If you build the Hermitage in the first or the second city, you will reach victory in 300 turns. If you build the Hermitage in the third city, you will reach victory in 225 turns ($(50000-5000)/(50*4)$).

Example2: 9 cities, FS, 2 religions, 6 cathedrals built, your 3 cities are doing 150, 100 and 50 raw cpt, they have accumulated already 5000  each, you expect to get 7 GAs in the course of the game.


Solution2: You must build the Hermitage in the second city. The Hermitage will contribute only 100cpt to your victory.

If you build the Hermitage in the first city, the best you can do with your GA is to bomb them 0-1-6, for your cities to reach Legendary in 75-137-140 turns. You win in 140 turns.

If you build the Hermitage in the third city, with the idea of helping the worst one as in example1, the best you can do with your GA is to bomb them 0-2-5, for your cities to reach Legendary in 100-124-125 turns. You win in 125 turns.

If you build the Hermitage in the second city, the best you can do with your GA is to bomb them 0-0-7, for your cities to reach Legendary in 100-113-114 turns. You win in 114 turns.

Are you wondering how I can calculate the best use of the GA so fast (1minute for all 3 examples and all possible GA distributions). Then don't miss the chapter on planning ahead.

Example3: 9 cities, FS, 2 religions, 6 cathedrals built, your 3 cities are doing 150, 100 and 50 raw cpt, they have accumulated already 5000  each, you expect to get 16 GAs in the course of the game.

Solution3: You must build the Hermitage in the first city. You are glad to do so, because that way the Hermitage will contribute the maximum, 150cpt to your victory. By building the Hermitage in the first city and by bombing the GA 1-6-9, your cities to reach Legendary in 69-70-60 turns.

There is not better solution to the problem. Try it out.

What can one conclude from the study of the examples? You want to build the multipliers in the cities with the most raw culture, in order for them to be more useful. If you have enough GAs to bomb the worst cities and balance the finish dates, everything is perfect. If you are short of GA, you are forced to put the multipliers in non-optimal cities, cause you have not other way to balance the finish dates.

Another way of looking at it is this: the more GA you get, the most useful your culture multipliers will be.

Of course a real game is not as simple as this examples. The total number of GA you are going to get is not independent of the finish date, so iterative calculations are needed.

The best two strategies

The strategy I like the best involves building 6 (or 7) cities, cottaging 2 of them (the capital and another one), getting 3 or 4 religions, building the Hermitage in the best cottage city and cathedrals in the 2 cottage cities, using the main GPFarm as the third Legendary city, not building any cathedral there, bombing 9 or 10 GA into the GPFarm in order to get it to Legendary, using some more GA in the second city to balance its finish date with that of the first city, using any remaining GA into the city that will finish the latest.

Advantages: you don't need a lot of land. The culture from the GPFarm artists is not wasted.

The other great strategy involves building 9 (or 10) cities, cottaging 3 of them (the capital and another two), getting 3 or 4 religions, building the Hermitage in the best cottage city and cathedrals in the 3 cottage cities, bombing GAs in order to balance all three cities, using any remaining GA into the city that will finish the latest.

Advantages: you build as many cathedrals as you can. The raw culture of your worst city is better than the raw culture of the GPFarm.

Both strategies require a good main GPFarm and additional cities working as secondary GPFarms.

Other strategies I have heard of

- Pyramids: they can help your research in food rich maps. They are very expensive, so they will hamper your developpement and you will find you have no land to settle all the cities you need. Also they keep you weak and small, calling for an early dow. Getting a GE is not a great thing, you prefer a GA. Use it on Parthenon or Sistine's. Don't use it on GLib!

- Early rush. Great for initial landgrabbing in crowded maps. Handle with care, you could be on the losing side, you could overextend, damaging your economy... After the rush on 1 single AI, that you should kill completely, go back to any of the other strategies.
- WW hoarding. "Look at all those base culture points". In vanilla it is clearly an inferior strategy, even if you were able to build a lot of WW in the higher levels. In BTS and the lower levels of difficulty it could be good.
- Only food. Not a single cottage. A couple of dozens of GA. It can be bad to research. It is an inferior strategy because of the steep GPP cost increase beyond the first 20.
- Sushi Corporation (BTS only). They say it's good. I have no experience.
- "Let's buy all those temples and cathedrals". The game has 3 phases, not 2. Research - accumulate gold and buying hammers - culture. A judicious city-settling or a judicious period of slavery early on are clearly superior to this strategy.
- GS bulbing your way up to Liberalism. A GS for Academy is a good idea if most of your research comes from a single city, as generally happens.
A GS for bulbing Philo can be a good idea, specially if you need another religion and Taoism is available.
A GS for bulbing Education is bad, but is better than losing the Liberalism race. More GS bulbs do not pay off. One turn saved in the research phase is not equal to 1 turn saved at the end of the game (in fact, it is worth 2.5 to 3 times less).
Why? Because the culture you can produce in the first turns after revolting to FS is less than the culture you can produce at the end of the game. As a rule of thumb, a GS saving 6 turns of research is equivalent to a GA saving 2 turns at the end of the game (mind you, 2 turns civ-wide, not 2 turns for that city).

Brief cultural game description

A cultural game has two clear phases, research and culture accumulation.

Before the game starts

You think about your leader strengths and weaknesses. If you are Philosophical, Financial or Spiritual you smile. Otherwise you frown.

You consider the map. The questions you ask yourself are the same as in any other game. Will beelining to Alphabet be advantageous? Can I take a close neighbour with my early unit? Do I need an early exploring Workboat? Is the map crowded?

4000BC-1000BC

It is not very different to any other game. You want to have 4 cities and 5-7 workers at 1000BC. Generally speaking (there are exceptions, but they are just that, exceptions):

Your first build will be a Worker. Then one or several Warriors and a Settler. Your first tech will be a worker tech to improve the best tile available in your FC.

Your first units will explore the surroundings in search of places to settle. Your Settlers will travel escorted to their settling places. You will protect your cities and maybe you will fogbust from protected tiles.

You will maybe try for an early WW, but only if it fits with your strategy and you can afford to delay your expansion. The library in the capital is a priority.

You will have a clear idea of the use you will give to each of your cities. You will use the city with the most available food as a GPFarm. It will build a granary, a library, the NE and probably nothing else at all, since you will stop working the mines to hire specialists.

You will probably use slavery to get a faster developpement.

1000BC-1AD

It is not very different from any other game. You'll have 6 cities and 8-10 workers by 1AD. Your focus will be on research.

Your capital is probably generating more than half of your beakers and it will probably already have had an Academy for a long time.

You will be more or less beelining to Liberalism. Techs like IW, MC, Machinery, etc you will probably get from trades. CS (and Bureaucracy) are a priority.

You will be building some missionaries to spread your religions from a city to another. The cities without any religion you will leave alone, in order to try to catch a new one or at least to save a missionary if an existing religion spreads.

At the end of this period you should be finishing the NE in your GPFarm.

500AD

Around this date (maybe 200AD, maybe 1000AD) you will get Liberalism. If you are first to it, you will get Nationalism as a free tech. Or maybe PP if you have the opportunity to trade it for Nationalism.

As soon as you get Liberalism, revolt to FS. It will be hard to decide if slavery+OR or CS+Pacifism are the civics you need the most.

You will be building lots of temples and missionaries. Maybe you even have a couple of cathedrals up and running.

You won't go 0% research until you have Liberalism, Music and Drama.

1500AD

All your cathedrals are already built, you are running HR or Repre, FS, CS, Merch or FM, Pacifism. You have a bunch of GA waiting to be used. The game is almost over. You carefully consider how you can get another GA. You carefully consider if there is a way to save 1 turn. You make loads and loads of micromanagement in your cities.

1700AD

Congratulations. You have won. Maybe I am wrong and it is 1600AD. Or 1800AD. Or maybe it is one of my many 1355AD HOF games. Or you might even be the one to get the first sub-1000AD Deity cultural victory!

The AI have just built their Apollo programs. If this is BTS, maybe Gandhi has got one of his cities to Legendary.

City descriptions

The capital

The capital main mission is research. It will also be one of the three Legendary cities and it is very likely that, if not for the GA helping other cities, it will be the first city to reach Legendary, mostly due to being the most mature city and being heavily cottaged. The capital has at least 1 food resource, 10 green tiles cottaged and 3 hills mined.

In the BC the capital will be pumping Settlers and Workers. It will probably build an early library and immediately hire 2 scientists for an Academy. A capital with Bureaucracy, Library and Academy accounts for half of the research your civ has to do all game long.

From 500BC to 500AD the capital will be helped by the Bureaucracy hammer bonus to build missionaries, temples and maybe even some cathedral. If there are more hammers available, monasteries can help your research pace. This period, cottages must be worked non-stop.

From 1000AD on it will lose the Bureaucracy bonus and will build mainly cathedrals, Hermitage, etc.

In the endgame it will build small buildings providing culture and will build culture only the very last turns.

The trees in the capital will be all chopped. The best time to chop them is in the early game on Workers and Settlers or in the Bureacracy period.

Improvements in the capital will be: the appropriate on resource tiles, cottages in green tiles, mines in hills, late cottages in plains.

The cottage city/ies

A cottage city mission is take care of itself and reach Legendary status. It will be one of the four first cities settled. It must have at least 10 green cottageable tiles and 3 mines.

In the early game it will build a granary, it will help with Settlers and Workers and it might even try to build a WW. Later, it will take care of the missionaries of one of the religions. Later on, it will build its cathedrals. In the endgame it will build small buildings providing culture and will build culture only the very last turns. It will at all times work all available cottages.

Most of its trees will be chopped. Any time is good to chop its trees.

Improvements in a cottage city will be: the appropriate on resource tiles, cottages in green tiles, mines in hills, late cottages in plains.

The GPFarm

The GPFarm is the single most important city in your empire. Its mission is to produce GA. It will be one of your first 3 cities. It must have at least 2 great food resources (5 or 6 fpt each), 2 3-4 fpt tiles and 2 mines. If it is your second city, it will be able to contribute one single worker or one single Settler. Then it will build a granary and a library. It might pop a GS in the early game, specially if you have built the Oracle and want to avoid the birth of a GPro.

As soon as Literature is researched, it will start building the NE, probably using some hammer overflow from the whipping of the previous building. Very few trees will be chopped in the GPFarm, and all their lumber will go into the NE. Once the NE is built, no citizen will work the mines again. It will build a monastery at 1hpt till the end of the game.

The GPFarm will grow as big as possible. Once the NE is built, preferably in the BC, it will work as much artists as possible without damaging growth. This means that the first priority of a citizen is work 4+ fpt tiles.

Some GPFarms work every available 3fpt tile, while others don't. Follow this simple rule to know how much you should grow your GPFarm:

When the GPFarm has reached its maximum size and its not growing nor starving, it will either

- be unhealthy and not work any 3fpt tiles
- work some 3fpt tiles and be on the brink of being unhealthy

If in this maximum size situation you are not doing +0fpt but +1fpt, alternate the last citizen as an artist sometimes and at the empty tile with the most food sometimes, so that the city never starves nor grows.

In the end game you will hire absolutely every single citizen as an artist, allowing the city to starve and losing 1 pop a turn, in order to get some additional GPP which will provide you another unexpected GA.

Improvements in the GPFarm will be: the appropriate on resource tiles, farms in green tiles, mines in a couple of hills. Most forest will stay all game long.

The auxiliary cities

The mission of the rest of the cities in your empire is more varied: building Workers, building units, building temples, serve as secondary GPFarms to get more GA, build missionaries.

Auxiliary cities built in the BC will provide some Workers and Settlers. I once built an auxiliary city with my first settler, it never grew past pop2, but from very early it worked a plains horses and a grass hill, providing 8hpt for the whole game. It was one of my best games, due to my early REXing.

All auxiliary cities will build temples and granaries. The farthest auxiliary cities will build a Courthouse. An auxiliary city can take charge of all missionaries of a given religion. The most productive auxiliary city should build a barracks and build units most of the time.

Once an auxiliary city has finished its buildings, it can build units or hire specialists. If it is completely impossible that an auxiliary city may pop a GA, it should hire merchants. Otherwise it should hire artists.

It is true that it is more efficient to concentrate your GPP on a single city instead of dividing them between cities. But it is also true that, once you have maxed out your GPFarm, it is better to have other cities generating GA than not.

In the endgame auxiliary cities will build units or gold.

Improvements in all auxiliary cities will be: the appropriate on resource tiles, farms in green tiles, mines in hills.

GA probability

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words:

Keep the generation pool clean (100% artist probability). Learn how this probability is calculated. (BTS allows for a (slightly!) more relaxed management of GP probabilities).

Some ideas about specialists

I have been thinking lately about the value of a specialist. Let's use normal speed conventions and let's think about a cultural game, although the calculations are valid for GS instead of GAs too.

In a normal game I get 15GL. That means that I have transformed 13500 GPP (100+200+300...+1800+2000) into GLs. But at the end of the game there is always some GPP in the cities. Those are wasted. Let's say 2500 wasted GPP at the end of the game. For the sake of simplicity let's say that every GL in my game is a GA and that I use all my GAs as cultural bombs. So I get 60000 culture out of my 15 GA. Of course, in a real game, I can decide to add a GA to a city or to get a GS instead of a GA; if I am not stupid I am doing that in order to get a better result than getting a GA and bombing it. So let's say 64000 culture instead of 60000.

So, I build 16000 GPP and I get 64000 culture in exchange. That means every GPP I generate is worth 4 culture. EDIT: Please note that the culture generated via GPP is not attached to the city that produced it, but can be transported to other cities.

This figure is very important. Let's call it the UAV, Universal Artist Value. $UAV=4$. Please, see the figure at motion in these examples:

Example1: is it better for this city to run Mercantilism or FreeMarket? It can have 3 commerce per turn routes or 2 commerce per turn routes and 1 artist. At 100% cultural slider, if this is a Legendary city, it is $18*4$ cpt (let's imagine culture multipliers are 4 in this city) against $(2+4)*4$ cpt plus 9 GPPpt (I am Philosophical and I run Pacifism), which according to my UAV is 72cpt against $24+9*4=60$ cpt. FM is better! But, what happens if this city is not one of the 3? Then the commerce transformed into culture is useless, while the GPP are useful as long as this city pops a GA eventually. In this case is 0 against $9*4=36$ cpt. If you make this calculation for every city in the empire, you can get to know what is better.

Example2: is it better for this city to work the plains-hill gold or to hire an artist? Food is the same. I will lose some hammers if I choose the artist. The artist will give me 1bpt instead. What about culture? The gold is $7*4=28$ cpt. The artist is $4*4+9*4=52$ cpt. So, if the value of the hammers is not very big, it is better to leave the gold alone!

Ok. You now understand the importance of this figure. But, is it accurate? I have made a lot of assumptions, haven't I? Let's see how the figure changes when the assumed parameters change.

- The optimizer. The optimizer only wastes 1000GPP at the end of the game and knows how to handle his early GLs to get an optimum result, 8000 additional culture. Optimizer's $UAV = 68000/14500 = 4.69$
- The easy going. The easy going never cares to starve his cities in the last turns and doesn't want to calculate the value of a GS compared to the value of a GA, so he wastes 3000GPP and 2000 culture. Easy going's $UAV = 58000/16500 = 3.52$
- The lazy. The lazy wastes 2500GPP and gets 4000 additional culture out of his early GLs, just like me. But he gets only 12 GL per game. Lazy's $UAV = (12*4000+4000)/(8100+2500) = 4.91$
- The farmer of GLs. The farmer wastes 2500GPP and gets 4000 additional culture out of his early GLs, just like me. But he gets 20 GLs per game. Farmer's $UAV = (20*4000+4000)/(26500+2500) = 2.9$

So your UAV depends on your playing style and the way your particular game is developing. Your UAV is a number between 3 and 5. If you optimize a lot and you are going to get few GLs, then it is probably around 5. If you never care about MM and you are getting a lot of GLs, then it is probably around 3.

GP usage

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words about GAs:

Settle the early ones in the city that will have better multipliers, till the point where you would have to bomb zero GA in that city at the end of the game (see "Planning ahead"). The cut off date varies. It depends strongly on cultural multipliers. In most games the cut off date for keeping a GA for the end instead of settling it is between 1AD and 1000AD. Just calculate it on your game.

If you are going to get very few GP (less than 12), keep them all for bombing at the end. If you don't plan ahead, keep them all for bombing at the end.

The city with the less base culture output should have the least culture multipliers and should have zero settled artists, while it should be the one more heavily culture-bombed.

Religions

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words:

Please, realise that getting an early religion will delay your all-urgent worker tasks, setting yourself quite back. There are maps where there is no other way to get enough religions though. Please realise the value of early religion for the first border popping. Please think about the investment needed to build 5 or more cathedrals per religion, 4 religions is probably best. Please realise that it doesn't matter who founded a religion, you will get its benefits anyway if it gets to you.

Please realise that, even though shrines get useful gold, they need valuable GP that could have been a GA instead, providing 4000 🏰 and they also provide GPro points, which you don't want at all. Please learn the difference between natural religion spread and missionary religion spread. Please realise that the closer your city is to the founding city, the most populated it is, same continent and OB all increase the chances of natural spread. Please realise that without a State Religion you don't get the benefits of Pacifism and you'll get very few GA. Please realise the danger of declaring a State Religion very soon if you are weak and the neighbour has a different one.

Tech trading

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words:

Tech trading is key to keep the pace with the AI in a high level of difficulty game. Please, learn what are the rules for monopoly techs. Please learn when an AI will or won't trade a tech. Please understand what the messages for no trading really mean. Please realise that you get a free round of trading if you behave this way: you get a tech nobody has, you trade it to one AI. The following turn he won't have traded it around yet, you can trade it to everyone else.

When picking your free tech from Liberalism, please consider PP and then trading it for Nationalism.

Regarding trading your Alphabet monopoly away, there are two schools of thought. Some people want to delay the AI in order to guaranty both being first to Liberalism and winning the game. Other people think that helping the AI is helping oneself, since you are trading for more techs than you are researching, so accelerating the game's tech pace is accelerating your victory. Both strategies lead to good results, pick your choice.

Regarding early tech trading, be liberal. "Unfair" trades are great in order to get all AIs up to Pleased.

Please remember that you can make tons of money to keep your cultural slider at 100% by sell techs for money. High difficulty level AIs are filthy rich.

World Wonders

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words:

Please realise that WW are not free. Early ones put a dent on your developement. Please realise that you don't want any specialist that is not a GA, appart from the initial 1/few GS, so please don't build WW that don't give GA points. Never, ever, build the GLib. In BTS a single GP can start a Golden Age and Golden Ages include a +100% to GPP generation, so you can be a bit less strict about generation pool purity.

Resource trading

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words:

Please realise that resource trading improves your relationship with the AI to a maximum of +2. The more resources you give the same AI, the sooner he will reach +2.

Please realise that you don't need any happiness resource once you have risen the cultural slider. Sell them all for needed health resources and for gpt.

Building culture

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words:

You won't be building culture till the very end of the game. It works differently in Vanilla than in BTS/Warlords. Please, learn the difference.

When to revolt to FS

The right time to revolt to FS once you get Liberalism is: immediately!

Going to 100% culture before Liberalism is not efficient. Sacrificing a few more turns of research peays off with the +100% culture in every city.

Delaying FS for 1 turns in order to enjoy the Bureaucracy bonus a little longer is a bad idea, unles you are chopping one zillion trees into the capital the very next turn.

Delaying FS to research up to PP is only advisable sometimes. Generally you won't do it and you will wait for the AIs to hand it to you in trades or for your 1 beaker from the artists to bring it just about the end of the game. Ony in situations with more than 40 cottages in the 3 Legendary cities, with lots of culture multipliers (4 cathedrals per city) and with cathedrals not yet built but soon to be built it is better not to go immediately to FS and 100% cultural slider.

Delaying FS to research Rifling or Constitution (for Representation) will always delay your victory date, though it might be advisable sometimes if you are in serious risk of a dow.

Delaying FS to research Radio or MM or Democracy is a mistake. The Broadcast Towers or the SoL won't pay off.

Delaying FS to research Nationalism after having lost the Liberalism race is advisable most of the times. Hermitage will make up for the difference and Drafting is a security measure you want to have at hand.

Resources

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words:

Marble is great: Parthenon, Sistine's, 2 cathedrals can benefit from it. Copper is good for 3 cathedrals. Health resources are always needed in your GPFarm. Happy resources, Iron, Horses and Stone are just so-so.

Diplomacy

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words:

Please realise that a war will damage your early cultural victory. Only exception is an early rush for landgrabbing, which is not so easy in the higher levels. Please understand the mechanics for AI dow. Please learn that several AI won't ever dow when they are Pleased with you. Please understand the risks and benefits of early OB. Please understand what your power rating is.

In case of war

Warning: incomplete chapter

I won't be writing this chapter at the moment. Just a few words:

Please realise that Drafting is in the game to help weak but cultured civilizations to win the game. Please understand the value of the whip. Please realise that you don't need to win the war or to take any cities. Please understand that you are fighting against the clock, not the other civ, and your goal is to keep your 3 Legendary cities a few more turns. Please consider bringing another AI to the war. Please learn the value of the roads in your borders during war time.

Planning ahead

You need to know what turn you are going to win. How on Earth can you decide where to build the Hermitage if you don't know how long the game will last? How on Earth can you decide whether to settle an early GA or keep it for a greatworks at the end if you don't know how many turns the settled GA will be producing culture? How can you choose between Mercantilism and Free Market in your particular game?

If you can estimate your expected victory turn, then you can save hundreds of years out of your victory date. Don't play beyond 500AD (1AD if you have a good game in your hands that can be won before 1400AD) without an estimate of your victory date.

If there were no GA in the game, then estimating the victory turn would be very easy. Just add the culture you have in each city, plus the culture it will produce next turn, plus the culture it will produce the following turn... till all 3 cities go beyond the limit.

If you know the exact number of GA you are going to have at the end of the game, then it is not so difficult either. Repeat several calculations as before, considering different cities for bombing in each try, choose the try that finish the sooner and you are done. Alternatively, consider that one GA will be bombed in the city reaching the limit the last. The look for the new "last city". Assign the next bombed GA to that city, look for the new finish date of that city, look for the new "last city", rinse and repeat till you have used all your GA.

Now, the problem is, the number of GA you are going to get depends on the turns remaining and the number of turns remaining depends on how many GA you have at the end.

So you should first calculate the estimated birth date of the next dozen GA. This is a very fun exercise that I recommend evrybody to do. When 2 cities are about to pop a GA at about the same turn, please consider what hiring more specialist in the slow one for a couple of turns or unhiring in the fast one for a couple of turns would do to the birth date of the twelveth GA. Having less artists hired can lead to a bigger global number of GAs civwide!

Then do the previous exercise of calculating the end date if you have 12 GA available. If the end date is inferior to the birth date of the last GA, then you won't really have so many GA, forget about using the last one, recalculate finish date, look if now it matches with the last birth date.

I generally plan with 1 more GA than I think I'll get. In the last 20 turns I will starve one or ten cities in order to force the birth of an additional GA. Can you beat my record of 4 GA popped in the final 3 turns of a game? 😊

Do all these calculations sound like a hard thing to do? It is not difficult, but it becomes repetitive after the third game. So you will end up creating a spreadsheet to do this all for you.

The first version was so neat and small! (sigh): "let's simplify and assume only my GPFarm will pop GPs, here I'll put the table of GPP needed per GP, I divide by the GPPpt the GPFarm is producing, there are the turns of the following births. It's been quick, now the culture accumulation of the cities, hmmm, what a mess, cottages mature! let's assume that I have 5 more base culture than I have now and let's assume it will never change. Number of tunrs multiplied by culture output, here the limit I want to reach, here the culture I already have, here the number of GAs I plan to use in the city... done!".

My last version is bigger than half a MegaByte and I don't dare to modify parts of it, should I be unable to undo any mistakes!

Whatever your prefered method of estimation is, simple or complex, gross or accurate, please do have an estimated end turn in your games and use it to support your decisions. No other victory condition will reward your planning ahead efforts so much.

Abbreviations

bpt	beakers per turn
c	culture point or 🏛️
Cathedral	cathedral, stupa, academy, mandir, mosque, pagoda, synagogue
cpt	culture per turn
FC	fat cross
fpt	food per turn
GA	great artist
GE	great engineer
GL, GP	great leaders, great people
GPFarm	great people farm, city dedicated to accumulating GPP, normally the city with the most food
GPP	great people points
GPPpt	great people points per turn
GPro	great prophet
GS	great scientist
hpt	hammers per turn
REX	rapid expansion

Bye bye!

Thanks for reading. I'll appreciate your comments, favourable or not.

Now, go and play a cultural game, my friend!

If you happen to get a sub-1000AD Deity victory, don't forget to tell me all your tricks. 😊