

Battle of Origins — Theory Defender

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Figure 1: Battle of Origins | Theory Defender



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1. Game Description

1.1 Storyline

There has always been a fight going on where exactly we come from and how we got to be the way we are today. While most religions teach us that humanity was created the way we are now, evolutionists believe we have started at as a less complex species and evolved over time. Our game should settle this fight once and for all.



1.2 Gameplay

Before the match begins the player may choose a belief. Either ~~religious~~ or evolutionist. The main aim of the game is to convert the entire opposing team to your belief.

The teams will consist of 30 people each. Non-human players will be controlled by an artificial intelligence. Each player is able to blast the players of the other team away, causing them to fly through the air and temporarily take their ability to move. To convert the opposing player to your belief a big wonder must be ~~casted~~. A big wonder can be generated by standing together as a group from the same team. Standing together will fill the big wonder progress bar. While standing together the players have an increased vulnerability. Meaning if an opposing player A is shooting at a player B who is currently praying/studying, player B will be hurled further away than he would have been if he would not have been studying/praying. The speed of the wonder-creation progress is determined by two factors:

1. **The size of the group:**

The more people close to each other, the quicker the progress bar will increase

2. **Wonder Skill:**

The creating-wonder skill of each player that is currently in the group (see subsection 1.4)


Once a big wonder is generated it is indicated by multiple ~~visual~~ representations:

- The progress bar is full (visible to all players)
- One player is now in possession of the big wonder (see subsection 1.5 to see visual representation)
- A sound lets all players know that a big wonder is ready

The player who is in possession of the big wonder can now cast this whenever he wishes. While he is in possession he cannot be converted by a big wonder of the other team. Once the big wonder is casted, the player becomes immune to all types of attacks (main attacks, big wonder conversion) and he is able to control the big wonder's area of effect. Any opposing player who is in the area of effect will be converted to the own team.




1.3 "Death" of players

There is no real death in the game. One can only hurl the other players through the field and making the unable to move for a period of time. If a user-controlled player is converted he takes control of another computer controlled player of the team he originally picked, as long as there still exists one. If no computer controlled player is left in the team the player enters spectator-mode until computer controlled players are available again. This simply allows him to watch the game without having any influence. 

1.3.1 Multiple Targets

During the game the player needs to perform different tasks at the same time. On the one hand the game can only be won when a big wonder is casted and thus, players need to form study or praying groups to fill the big wonder bar. On the other hand players must prevent the other team from filling their big wonder bar. Some players in the other team will also pursue this task of distracting the prayers or the studying. Therefore, in order to win the game players also need to protect the players filling the big wonder bar.

1.4 Evolving Upgrades

Players will evolve on the fly while playing. They will not have the ability to choose an upgrade themselves. The more they perform a specific action, the better they will become at it. Following is a list of automatically evolving skills: 

- Running Speed
- Power of main attack
- Precision of main attack
- Contribution to creating a big wonder
- Immunity against attacks

The visual difference of each upgrade can be seen in subsection 1.5

1.5 Visual Difference

Although each player has the same power and tools, they are visually and audibly different depending on the chosen belief. Here is a table of what each part will look like

1.5.1 Main Game Aspects

See table 1.5.1

1.5.2 Character Upgrades

See table 1.5.2

	Religious	Evolutionist
<i>Main Weapon</i>	Insult	Blast gun
<i>Main Weapon (upgrade)</i>	Curse	Blast cannon
<i>Main attack</i>	Curse	Shoot blast gun/cannon
<i>Big Wonder</i>	Rays of god	Rain of books
<i>Creating Big Wonder</i>	Praying	Studying
<i>Big Wonder finished creating sound</i>	Angels singing "Aaaaah"	Pen on paper scribbling
<i>Possessing wonder</i>	Wings	Carrying big book

Table 1.5.1: Main Game Aspects

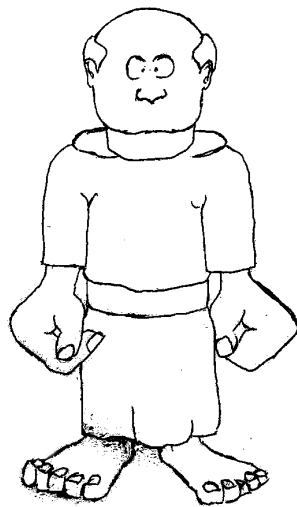


Figure 2: Creationist

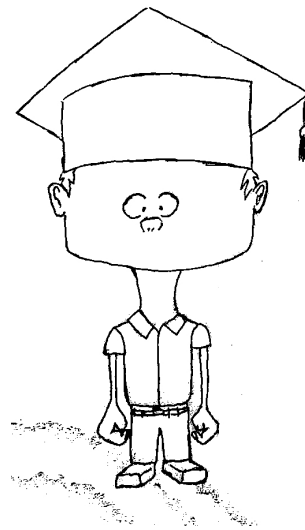


Figure 3: Scientist

	Religious	Evolutionist
<i>Immunity against attacks</i>	Skin color (white → silver)	Skin color (white → silver)
<i>stronger main Weapon (upgrade)</i>	Glove color (white → red)	Gun size (small → big)
<i>Faster Running</i>	Bigger feet	Bigger feet
<i>Big Wonder skill</i>	Size of hands (small → big)	size of head (small → big)

Table 1.5.2: Character Upgrades

1.6 Important Aspects

1. Fair Teams:

We want the teams to be equal in the sense that both possess the same offence/defence. Therefore, winning merely depends on the strategy and the aiming skills of the player

2. Unique Gameplay:

We want our game to be extraordinary, but still playable by common users, without directly fitting into a game category or the need to have long tutorials.

3. **Cartoony/Non-Photorealistic Rendering:**

Since we are touching a controversial topic we blind out some seriousness by making the characters and surroundings cartoony

4. **Visually stunning and self-explanatory:**

A player should be entertained by simply watching the game. Furthermore it should be self-explanatory without the need of long tutorials

2. Technical Achievement

For a game like the one presented in this document the interaction between the players is crucial. Therefore it depends a lot on a rather large group of players, such that the player won't get bored if no one else is around him to interact with. To achieve the player to feel like a part of something big, as well as being attracted by the game by lots of interactions and possibilities to behave is the balance between the board size and the number of numbers on the board.

If the board is very large and there is only a small number of players on the field, everybody is just playing around on his own and not interaction a lot with the other players. It takes a long time to reach the other players to either attack them or to pray or study with them. An experience like this would probably not make the players to feel in love with our game immediately.

If, on the other hand, the board is rather small and there are many players on the field, the player will feel challenged and necessary to help his team win the battle. If he has to deal with lots of enemies before being able to reach his fellow campaigners, he will stay active and motivated throughout the whole game. This is the effect we are aiming for.

Of course it is not always possible to start a game with that many friends who can join. But since the number of players is really crucial to the game, we will provide the possibility to make use of non-player characters (*NPC*), which will be controlled by the computer rather than by some human. The artificial intelligence to make these *NPCs* behave intelligently is the most prominent technical achievement we want to reach. For the player it should not feel different when playing with *NPC* or with fellow human players. Therefore the artificial intelligence should make the *NPC* behave similar to characters controlled by humans. On the other hand the artificial intelligence must not be too good. If an *NPC* is clearly better than the human player, he might feel overchallenged. Therefore we will try to find a good compromise between stupidly behaving *NPCs* and super-soldier *NPC* who are invincible.

3. "Big Idea" Bullseye


Big Idea: Don't Kill, Convert

Technical innovation: Not a standard shooter

4. Development Schedule

4.1 Layered task breakdown

1. Functional Minimum

- Players from two teams running around
- ~~Stunning~~ each other 
- Counting hits

2. Low target

- Creating a wonder by standing together. Will convert entire team after successfully created for now.
- Characters visually recognizable

3. Desired target

- Wonder is possessed by a player
- Wonder can be casted
- Wonder will convert other players when in area of effect
- Wonder visually recognizable

4. High target

- Other players are controlled by an advanced AI
- Player controls free AI when being converted
- Players evolves visually and numerically according to their actions
- Power-ups can be collected during a game session

5. High target

- Online multiplayer
- Procedural, automatic level-design (each level is different)
- Classes of characters (specialized for praying/studying or shooting)

4.2 Task Allocation

See table 4.2

Task	Description	Who	Hrs	Actual
Idea Finding				
2.	Brainstorming Design	All	5	7
3.	Character modelling		5	
Assignments				
5.	Project Proposal Draft	All	5	5
6.	Prototype Chapter	All	5	
7.	Interim Report Chapter	All	5	
8.	Alpha Release Chapter	All	5	
9.	Playtest Chapter	All	5	
10.	Conclusion Chapter	All	5	
11.	Demo Video	All	5	
Presentation and Demos				
13.	Pitch of the Game	All	5	
14.	Formal Game Proposal	All	5	
15.	Paper Prototype	All	5	
16.	First Playable Demo	All	5	
17.	Interim Demo	All	5	
18.	Alpha Release Demo	All	5	
19.	Playtest presentation	All	5	
20.	Final Public Presentation	All	5	
Functional Minimum				
22.	Physics	All	5	
Low Target				
24.	Audio	All	5	
25.	3D character modelling	All	10	
26.	Level design (terrain and obstacles)	All	10	
Desired Target				
28.	Lightning	All	5	
29.	Rendering/Shaders	All	5	
30.	Animation	All	5	
31.	Particle Effects	All	5	
High Target				
33.	Artificial Intelligence	All	5	
34.	Power-ups	All	5	
35.	Player evolving visually	All	5	

Table 4.2: Task allocation

4.3 Timeline

See table 4.3

Task	Wk1	Wk2	Wk3	Wk4	Wk5	Wk6	Wk7	Wk8	Wk9	Wk10	Wk11
Idea Finding											
2.											
3.											
Assignments											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
Presentation and Demos											
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											
Functional Minimum											
22.											
Low Target											
24.											
25.											
26.											
Desired Target											
28.											
29.											
30.											
31.											
High Target											
33.											
34.											
35.											

Table 4.3: Timeline
A = All, P = Patrick, R = Ruben, J = Jacqueline, G = Gregory

5. Assessment

Our game shall stand out in several ways. We want to create a funny, cartoony, visual stunning gaming experience that fascinates someone by only watching another person playing the game. By “funny” we mean that everything from design over physics to sound will be produced with always keeping humour at the back of one’s mind. For example, if a character gets hit by an enemy’s shot, it will fly through the air far away from real-world physics. Also, we want to include a dimension of “cuteness” into our gaming experience by using non-photorealistic rendering and a cartoony overall look. We believe that the combination of cartoony visuals, a camera that shows a wide part of the action and a fast effect-overloaded gameplay will create a special form of appealing that will bring the player in a good mood and provides an experience of fun in every second of playing. By “visual stunning” we want to say that the player will see a battlefield with a lot of characters fighting each other and building pray/study circles, objects that are hit and therefore flying through the air, different looking characters according to their skills and a lot of light and particle effects caused by the weapons, power-ups or the skills of characters. As criteria for success we elaborated our own “big idea bullseye”. On the one hand, our core idea consists of the effect-overloaded non-realistic cartoony styled fight over evolution including the “super-power” of converting enemies. On the other hand, our technical innovation is a shooter where you can’t kill enemies and where team play is crucial to win the game.