Mythological Meta-Game Theory

by Sven Nilsen, 2024

In this paper I introduce a framework to understand roles of some character archetypes in mythology using properties of meta-game theory. I also discuss some ideas surrounding this field.

Most people are familiar with the following character archetypes in mythology:

- angels
- devils
- demons

Some people believe in the literal existence of such beings in real life. However, there have been no such claims being backed up by scientific evidence, which indicates that these character archetypes are fictional but possibly loosely inspired by other natural phenomena.

Instead of representing these character archetypes in a fictional setting, I will demonstrate them using Game Theory but from a meta-analysis perspective, something I call "Meta-Game Theory". This differs slightly from ordinary meta-game analysis. In order to explain these character archetypes, one must go beyond the level of ordinary Game Theory into the meta-level of game matrices. To distinguish this theory from both ordinary Game Theory and ordinary meta-game analysis, I will use the term "Mythological Meta-Game Theory".

Game Theory is a sub-field of mathematics and economics where the mechanics behind games is abstracted, whether it is for play or in serious social situations, such as war. Game Theory has many applications within economics and strategic decision making, including threats of nuclear war. Instead of modeling a game in full detail, like in a computer or board game, Game Theory can describe common situations across many types of games.

The most studied structure in Game Theory is a 2-player game matrix:

	Player B – Choice 1	Player B – Choice 2
Player A – Choice 1	<reward a="">/<reward b=""></reward></reward>	<reward a="">/<reward b=""></reward></reward>
Player A – Choice 2	<reward a="">/<reward b=""></reward></reward>	<reward a="">/<reward b=""></reward></reward>

One famous example is Prisoner's dilemma. It demonstrates that even though each player is rational, there are games where both players might lose. Despite the simplicity of such 2-player matrices, they can give valuable insights into complex phenomena.

In ordinary Game Theory with games of perfect information, it is assumed that each player either does not control the rewards or fixes their rewards in advance of making their final decision. This is needed to share the knowledge of the rewards with the other player. Both players make their choice knowing how their choice might benefit or disadvantage the other player. If some of the rewards are hidden to the other player, then it is an imperfect information game.

It turns out that using such 2-player matrices is sufficient to explain the character archetypes of angels and devils. However, it is still not within ordinary Game Theory with games of perfect information. The reason is that one player fixes their rewards after the other player have done so.

An angel or devil is a mythological character that reacts to the self-model of human beings. While humans are considered natural, the angel or devil is considered super-natural or paranormal. This is because in mythology, one frequent utility of it by some elite group is to manipulate social behavior of other humans. Mythology is fabricated or altered by somebody for political or economic aims.

The romantic representation of mythology as ancient tribes sitting around the camp fire and bonding socially by story-telling, is often not reflecting historical reality. It is true that a lot of the material comes from popular story-telling, but how it gets modified over time, in particular for literature, is often a result from hidden agendas and political plans. For example, to make people sacrifice themselves in war, to oppress women, or to combat some political opposition.

To understand what e.g. an angel means in a such situation, one can look at it from multiple angles:

- 1. The character acting in the story
- 2. The story teller (motivation for telling the story)
- 3. Stories that are granted higher status than others (e.g. holy scriptures)
- 4. The elite who fabricates or alters existing stories for some purpose

Each of these points involve complex decision making. Humans manipulate the social behavior of other humans by constructing elaborate social games, where the rules are tilted in favor of the ruling elite or a rebel group in opposition to the current power structure. Religious conviction is a result of confirmation bias, where a person is emotionally manipulated to be easier suggestible, kind of like hypnosis, to accept beliefs that other people have constructed or utilizes for some purpose.

There has been no evidence so far found by science that supports the existence of angels. However, there are tons of evidence that humans manipulate the social behavior of other humans using story-telling. The most likely scientific explanation, given the available evidence, is that angels are fictional characters serving a purpose in some story.

The reason one makes up character archetypes in mythology and give them names such as "angel" or "devil", is because by mentioning this word, the listener or reader can immediately understand which role the character plays in the story. By understanding this role across multiple stories, the person being target for this message can get easier manipulated in the future.

There is more than just the label. A person growing up in a such culture expects certain behavior of the character in the story as "proof" that the character is indeed an angel or a devil. So, there is an element of communication efficiency, by establishing commonly agreed upon terms. There is also an element of entertainment by building up anticipations and expectations. These contribute to higher dopamine releases in Cerebellum that can result in addictive behavior and alters brain structure to prioritize alternative goals above personal needs, e.g. for social status or being well fed. For example by sacrificing their best result of labour to the priestly elite group in the name of some deity.

Game Theory is just a tool one can use to explain this complex phenomena. Both angels and devils choose their rewards after the other player, possibly because it gives a un-canny sense of what it means to interact with such fictional beings. It is meant to scare and intimidate people. This technique is in particular effective against children, which have less ability to discern real behavior from fictional behavior. By applying childhood indoctrination, the brain structure has been altered sufficiently in many cases at the time of adulthood to preserve the loyalty of the person under the established social power structure.

This is as far from "cozy story time by the camp fire" as one can get.

People have been genuinely scared of angels and devils throughout history. The fabricated stories about Heaven and Hell are often depicted with angels occupying the Heaven and devils occupying Hell. Without angels or devils as character archetypes, many people would find Heaven and Hell far less intimidating and thus these stories would be less effective at modifying people's brain structure.

In reality, one can easily infer that there is no such thing as an actual angel or devil, simply because no natural life forms exist which behave to a such extreme extent of making their rewards in a given game depend on the other player.

One can summarize the character archetypes of angels and devils the following way, given that they play against a "loyal believer of the authentic faith", usually a human:

- An angel's rewards are copied from the other player, producing a symmetric game matrix
- A devil's rewards are copied and negated from the other player, producing anti-symmetry

This is all what an "angel" or "devil" means in mythology. There is no consensus beyond that, since other properties such as wings or horns could mean both good and evil, depending on time period.

By having the angel or devil pick their rewards depending on the human player, this grounds the gameplay to the decisions of the human. This might give an illusion of free will or divine plan. At the same time, the angel or devil feels more intimidating because it seems to "peer into" the hidden thoughts of the human. Another utility is that the human can not do the same to the angel or devil, who's thoughts or emotions can not be read by face expressions. Whenever an angel or devil is portrayed in a story, the human fails at interacting with it in a sense that is meaningful among humans. This adds another dimension of creepiness which haunts the child in their dreams.

Another aspect is that since the outcome of the game solely depends on the will of the human player, there is nobody but the human player to blame for bad outcomes. All this complex game dynamics is a result that can be understood through constructing 2-player game matrices at the meta-level, where the angel or devil chooses their reward after the human player. The elegance of this technique makes it efficient for story telling, as people can easily recognize the pattern and it also makes it feel as if angels and devils are supposed to exist through their beautiful game theoretic behavior. This means, people fill in the gaps explaining weird coincidences as the result of angels or devils, when there is no actual evidence of this happening in the real world.

Now, if this was where it stopped getting more complex, then it would not seem as much manipulative as actual history occurred. Instead of just making up stories where ordinary people meet angels or devils, the elite group made up stories where elite people meet angels or devils. This is used as an additional technique to teach people how to behave, through using examples of leadership behavior. The elite person makes certain mistakes to show that they learn through the story, but eventually makes the right choice. If there is an ordinary person in the story as main character, then this person is either chosen by some deity, offspring of some deity or an elite person disguised as an ordinary person. The mythology actively erases ordinary people out of the story.

With other words, if the story is like a cake, then it has layers upon layers of obvious social manipulation. If there was just one layer, then one might more easily point out the flaw, but since there are many layers, there is just too much to even react to all of it. The story functions more like a flood of fictional ideas interacting and playing with each other in mathematical harmony.

Think about it. An angel helps some person through a minor climax where the person can not help themselves. It gets the person back on the right track to finish all the other stuff that is required to make a good story. The angel is just there to help. Kind of like a servant, right?

Only rich people had servants, which they often did not care about their names and background but trusted some other person to oversee these details. They failed to interact with the servants in some way that makes sense among humans, such as reading face expressions. The reason Heaven is populated by angels is because the deity or deities is surrounded by loyal servants which they also happen to not need to bond socially with. The angel is both a weapon sent out to destroy enemies opposing the deity. An angel can also be assistance sent out to help the loyal person of faith.

It is not a "cozy story around the camp fire" because it is more or less a direct reflection of a social power structure, where angels are super-natural beings which only common property is that they assist or collaborate with somebody that are the main characters in the narrative. Some angels are given names, but they do not develop characters as the same way humans do in mythology.

The same goes with devils. They are just angels with a minus sign. Mythology usually offers no solid narrative of why some super-natural beings might behave like devils. They are just taken for granted since the purpose of the story is not to convince skeptical grown ups. It is mainly for indoctrinating children to stay loyal and sacrifice personal gains over time. When it comes to explaining the nature of devils in some reasonable detail to justify their existence, it falls short of any scientific standard because people telling these stories are hoping you would be intimidated enough to not start asking questions.

While devils might attract more questions than angels, one often applies the technique that curiosity about this knowledge is supposed to be dangerous. It is seen as a sin of believers to start asking questions about the dark side of the mythology. Similarly, when a cult of believers are opposed by some other group, they often blame it on the work of devils. Every believer can see why, because a devil is by definition somebody that opposes the human player. Therefore, it must be true, by definition. Reality is interpreted through this lens, where some group has to be the authentic source of gameplay with assisting or opposing forces being labeled into angels or devils.

Angels and devils are important in mythology because they connect beliefs in the super-natural with interpretation of real world events. The world is explained through this way of labeling and taken as confirmation and evidence that the faith is correct or heading the wrong direction. There is no actual evidence of interacting directly with a deity, so angels and devils must play the messenger roles between the natural and the completely obscure realm of the super-natural. They are fictional devices that makes absurd beliefs work, through repeated story-telling and obedience. It is kind of like automating the work to maintain a mythology by out-sourcing it to parts that play minor roles.

Now, if angels and devils were sufficient, then one might start to recognize a pattern. This is where demons come in. Demons are used to just throw people off balance once they start questioning. A demon is much more complex than an angel or devil and thus more interesting. While angels and devils can be explained using a 2-player game matrix, a demon requires repeated play. In repeated play might be terminated in addition to setting up rewards for various choices. The purpose of a demon is make something look like a devil under special circumstances, an angel under other but less frequent circumstances, but also give room for doubt. A demon is harder to analyze, which is very convenient e.g. when you want to jail or execute innocent people.

A demon is characterized by avoiding termination in repeated gameplay. So, it keeps changing its rewards arbitrarily to keep the game from stopping and to keep it running for as long as possible. Any kind of obsession is recognizable as being a possible influence of demons. You see, a person is not necessarily guilty by being possessed by a demon. It can merely be an obsessive behavior which the person must be cured from. This opens up the social acceptance of mistreating people who behave in a way that other people find annoying and this general escape clause of social responsibility is blamed on demons. If something bad happens, then just claim you were obsessed!

The demonization process works as a two-edged sword, but mostly in favor of the powerful elite. If a person is causing problems, one can blame it on demons and have them displaced or constrained. If an elite person is doing horrible things, one can also blame it on demons and escape social justice. It both allows mistreating vulnerable people and gives more power to abuse for the elite.

There is no scientific evidence supporting the existence of demons. However, there is tons of evidence how this idea was abused. This suggest demons are completely fictional and made to manipulate, or to provide a mechanism for releasing explosive aggression or desire with less consequences for the established power structure. The amount of crap that was pulled using this technique fills volumes. However, what makes demons even more cruel than angels and devils, is because it is not as clear cut and even harder for children to understand. It makes it possible to abuse people in situations where they are completely innocent. The cruelty and evil use of these characters in stories is to really screw up people's brains, if they have some, so they get emotionally lobotomized down to a level where they can be easier manipulated using angels and devils.

Summary

Mythological Meta-Game Theory explains how angels, devils and demons function in stories. These stories are not for "cozy story time around the camp fire" but for social power structures and to manipulate people's behavior. This involves child indoctrination and emotional abuse.

Angels and devils correspond to symmetric and anti-symmetric 2-player game matrices respectively. They are faceless, expressionless, deadly efficient, kind of like how an elite group wants their servants to be.

Demons correspond to avoiding termination in repeated gameplay. Demons are less decidable and recognizable, which makes them easy to use when blaming victims and also to rationalize horrible behavior by elite groups in order to escape justice.