

Dota 2 and League of Legends

**Two of the world's most popular video games,
their cultural aspects, their genre and its definition**

Inaugural-Dissertation
zur Erlangung der Doktorwürde
der
Philosophischen Fakultät
der
Rheinische Friedrich-Wilhelms-Universität
zu Bonn

vorgelegt von
Julia Hiltcher
aus
Westerstede

Bonn 2022

Gedruckt mit der Genehmigung der Philosophischen Fakultät
der Rheinischen Friedrich-Wilhelms-Universität Bonn

Zusammensetzung der Prüfungskommission:

Prof. Dr. Uwe Baumann

(Betreuer und Gutachter)

Prof. Dr. Marion Gymnich

(Betreuerin und Gutachterin)

Prof. Dr. Barbara Schmidt-Haberkamp

(weiteres prüfungsberechtigtes Mitglied)

Prof. Dr. Daniel Martin Feige

(weiteres prüfungsberechtigtes Mitglied)

Tag der mündlichen Prüfung: 4. Juni 2021

Table of Contents

1	Introduction.....	1
1.1	Theoretical Framework	7
1.2	Method.....	11
2	MOBAs in Game Studies Terms	11
2.1	Terms.....	13
2.2	MOBAs vs. Other Games in Game Studies Terms	15
2.3	Ludology vs. Narratology.....	17
2.4	Intransitivity	19
2.5	The Cultural Relevance of MOBAs	21
2.6	Summary	29
3	MOBAs from a Cultural Studies Perspective.....	30
4	The History of MOBAs	40
4.1	Summary	54
5	Genre-defining Ludic Similarities: Close Comparison of Dota 2 and League of Legends	56
5.1	Game Phases.....	61
5.1.1	Draft Phase	61
5.1.2	Opening Phase.....	63
5.1.3	Laning Phase	63
5.1.4	Team Fight Phase.....	68
5.1.5	Endgame/ Goal.....	71
5.2	Heroes vs. Champions	71
5.3	Progression	73
5.4	Talent Trees & Runes	77
5.5	Playable Character Diversity.....	79
5.6	Teampay	82
5.7	Micro	84
5.7.1	Farming	85
5.7.2	Denying.....	85
5.8	Abilities & Balancing.....	87
5.8.1	Disable.....	89
5.8.2	Trolling.....	89
5.8.3	Killing Players.....	91
5.8.4	Flash/Blink	91
5.8.5	Buyback.....	92

5.9	Individual Punishment.....	92
5.10	Maps	93
5.10.1	Vision: The Fog of War & Juking	95
5.10.2	Towers vs. Turrets.....	97
5.10.3	Courier.....	97
5.10.4	Town Portal Scrolls.....	97
5.10.5	Couriers vs. Recall	98
5.10.6	Shop	98
5.10.7	<i>Dota 2</i> : Runes in the River.....	98
5.10.8	Items	99
5.10.9	Potions.....	100
5.10.10	Neutral Mains	101
5.10.11	Neutral Minors	102
5.11	Physics of the Game	103
5.11.1	Cast Points.....	103
5.11.2	Turn Ratios.....	104
5.12	Summary	104
6	Cultural Intertextualities in MOBAs.....	105
6.1	Theatre.....	109
6.1.1	Summary	124
6.2	Movies & Television	125
6.2.1	<i>Dota 2</i>	126
6.2.2	League of Legends	133
6.2.3	Summary	140
6.3	Dance (Emotes).....	141
6.3.1	K-Pop	145
6.3.2	J-Pop.....	147
6.3.3	US-hip-hop, pop, rock & dance	149
6.3.4	Movies.....	151
6.3.5	Television.....	152
6.3.6	Wrestling.....	154
6.3.7	Video Games.....	155
6.3.8	Dance.....	156
6.3.9	Internet Memes.....	157
6.3.10	Tai chi.....	161
6.3.11	Summary	161

6.4	Music & Sound.....	165
6.4.1	Dota 2.....	165
6.4.2	League of Legends.....	168
6.4.3	Summary.....	168
6.5	Celebrities.....	169
6.5.1	Summary.....	173
6.6	Video Games.....	175
6.6.1	Dota 2.....	175
6.6.2	League of Legends.....	179
6.6.3	Summary.....	186
6.7	Card & Tabletop Games.....	187
6.7.1	Dota 2.....	187
6.7.2	League of Legends.....	188
6.7.3	Summary.....	188
6.8	Literature.....	188
6.8.1	League of Legends.....	190
6.8.2	Dota 2.....	195
6.8.3	Summary.....	204
6.9	Mythology.....	205
6.9.1	Lore.....	208
6.9.2	Mythical Creatures.....	212
6.9.3	Mythical Items.....	240
6.9.4	Summary.....	248
7	Esports: A Sport and Cultural Phenomenon.....	250
7.1	MOBAs and their Culture of Meta, or “Metagame Expertise”.....	255
7.2	Tournament Mode.....	264
7.3	Skillshots & Complexity.....	265
7.4	Prize Money & Salaries.....	267
7.5	Sponsorship.....	269
7.6	Venues.....	270
7.7	Clubs.....	270
7.8	Fitness & Training.....	270
7.9	Teampay & Cooperation.....	271
7.10	Esports as Korean Culture.....	272
7.11	Broadcasts.....	274
7.12	Summary.....	277

8	Mental Health & Wellbeing.....	278
8.1	Social and Antisocial Behavior	278
8.2	Addiction	283
8.3	Depression and other Mental Health Issues	285
8.4	Monetization Algorithms	288
8.5	Summary	289
9	Conclusion	290
9.1	Summary of Findings	291
9.2	Genre Definition.....	294
9.3	Coining the Term.....	295
9.4	Outlook.....	300
10	Appendix.....	303
10.1	Dota 2 Heroes	303
10.1.1	Strength Heroes	303
10.1.2	Agility Heroes	304
10.1.3	Intelligence Heroes.....	305
10.2	League of Legends Champions	306
11	Bibliography.....	308
11.1	Primary Sources	308
11.2	Secondary Sources	315
11.3	Online Sources	332

1 Introduction

Video game culture is a highly popular field of study in the 21st century. One third of all people on earth are playing video games (about 2.69 billion out of 7.84 billion; Newzoo.com, “Number of Gamers”) – at a time when we are spending more on video games than on music and movies combined (see also Malim para. 2). The United States is “home to 190 million gamers; Americans now spend more on video games than on cinema tickets” (Barker & Jane 586). Video games are one of the largest entertainment industries in the world.

Two of the world’s most popular and financially most successful video games of the past decade are *League of Legends* (Riot¹ 2009) and *Dota 2* (VALVE Corporation² 2013). The two games will be compared closely and analyzed from a cultural perspective, with the goal of defining their genre and finding a suitable genre term – since their genre has never been defined and their genre term has always been questioned.

Both games belong to the Multiplayer Online Battle Arena (MOBA) genre, they are played in esports competitions, and they have simultaneously been among the most played and financially most successful videogames of all times (see also Maiberg, 2014; Grubb, 2014, Winn 7)³. In the *Global Esports Market Report 2020* from Newzoo, *League of Legends* (348.8M) and *Dota 2* (198.9M) are among the top three most watched games in 2019⁴.

Both *Dota 2* and *League of Legends* have been developed on the grounds of a popular modification or “mod⁵” called *Defense of the Ancients* (Sommer, Feak, Ismail et al. 2002), which was first released in 2002 by

¹ *Riot Games, Inc.* (<https://www.riotgames.com>) is an American video game developer and esports tournament organizer founded in 2006 and based in West Los Angeles. *Riot Games* is best known for *League of Legends* (abbreviated *LoL*).

² The *VALVE Corporation* (<https://www.valvesoftware.com/>) is an American video game developer founded in 1996 in Kirkland, Washington. It is the developer of the software distribution platform STEAM (<https://store.steampowered.com/>) and several games including *Dota 2*.

³ With *League of Legends* surpassing the number of 100 million (Wolmarans para. 3) monthly active users (MAU) in 2016. Between January 2015 and January 2019, *Dota 2* had around 10 million monthly active users (Steamcharts.com, “Dota 2 MAU”). Currently, they are at 11.19 million (ibid.).

⁴ *Twitch*, *YouTube* and [facebook.com/gaming](https://www.facebook.com/gaming).

⁵ “A mod (short for “modification”) is an alteration by players or fans of a video game that changes one or more aspects of a video game. Mods may range from small changes to complete overhauls” (Poor 1249).

modder Kyle Sommer. Despite *Dota* - the parent game of *Dota 2* - being released six years prior in 2003, it was *League of Legends* released in 2009 which created a still questioned⁶ genre term, the acronym “MOBA”: “To escape forever living in the shadow of the original mod, Riot coined a new name for the genre: Multiplayer Online Battle Arena, or MOBA” (Funk para. 18).

Because of esports’ cultural relevance, it is of great interest to a variety of academic fields (see also Reitman et. al. 32-50). Trying to find answers to the immense popularity of esports (and therefore MOBAs as the most popular titles of esports), studies have been conducted in the fields of business and marketing (e.g., Scholz 2019).

Gundolf S. Freyermuth, Co-Director of the Cologne Game Lab, wrote in *Games, Game Design, Game Studies: Eine Einführung* in 2015:

In the beginning of the 21st century we are witnessing— both as protagonists and contemporary witnesses— the aesthetic development and cultural rise of digital games. [translated] (11)

The more we play video games, the more we see academic video game research, as video games have become a cultural cornerstone of our everyday life and therefore, cultural possessions. Freyermuth states that video games are now

coining the way, we see the world and ourselves, since they are at the center of audiovisual forms of expression and narration of digital culture, the way former audiovisual media such as theatre, film and TV used to be coining our perception. [translated] (ibid.)

Similarly, Jane McGonigal notices that games in our digital age have an intercultural connection to offer to people: “games today come in more forms, with more interactivity, with more intercultural connectivity than any time in human history” (McGonigal 21). The intercultural aspects of games are never far from the sociocultural: Sociologists Brian D. Ng and Peter Wiemer-Hastings focused on the social glue attaching gamers to their game and its social environment. Online games, they have found, are a form of social entertainment: Their study found that whether a player will continue to play a game mostly depends on someone’s achievements, their level of recognition and the number of connections

⁶ E.g., Game developer Sean Carton on his blog *Lanepushinggames.com* regularly asks whether there should be a different name for the genre (see also Carton 2019).

they have made with other players (see also Ng and Wiemer-Hastings 112-113). The study describes MMORPGs as “alternative forms of social entertainment” (ibid.).

Esports⁹ or electronic sports could be described as a clash of cultures: If you read books or watch movies and discuss them intensively with people from other cultural backgrounds, the discussion can range from very heated to pleasant and even controversial, but in the end, at least fruitful as almost any kind of dialogue between people is the basis for enlightenment. Every day a dialogue about video games happens online and face-to-face, with the obvious difference that video games, especially esports games, are usually live and online, connecting people of different cultures while they are experiencing the game. They are not only having a shared competitive experience, but they are also often strangers from different places all over the world, who must collaborate in a team, as informatics scholars Kou and Gui have described:

Few studies have been done to understand how temporary teams composed of strangers fulfill complex tasks. Riot Games’ League of Legends, a team-based competitive online game, is played by two temporary teams. Players must collaborate with strangers in a relatively short time (about 30-50 minutes). (Kou and Gui 161)

According to Meister, Müller-Lietzkow, Burkatzki and Kröger “[...] it [...] seems necessary to identify in which ways computer and video games have become an integral part of everyday youth culture activities” (Meister et al. 297). The authors, who had been looking into “Games in the Context of Adolescent Media Behavior”, also state that to their knowledge, “there are only few long-term studies that systematically gauge the habits of computer gamers, and then only normally within the context of violence research” (ibid.). Findings like these are raising an interest into the cultural worlds that have emerged from video games.

Out of the 258M monthly active users worldwide in esports overall (Superdata Research 2017), one hundred million people were playing *League of Legends* in 2017 (Khan para. 1).

⁹ Pronounced: e-Sports; In this thesis, “esports” will be spelled without a hyphen or lowercase e and uppercase s, as this falls more in line with current iterations of the spelling. It is not standardized and may change several times before a consensus spelling is reached.

Today in 2020, the global esports audience consists of 495M people (272M occasional viewers and 223M “enthusiasts”; *Newzoo* “esportsreport”). Looking at available game stats from different websites, one could assume about 115M were playing *League of Legends* in 2020. This is more than 1.514% of the world population in monthly players.

League of Legends became the world’s most lucrative and most played online game (despite being a free-to-play title) after reaching a revenue of US\$ 2.1 billion annually in 2017 (Superdata Research 2017; Dedmon para. 3; McAloon para. 6) and US\$ 2.1 billion annually in 2019 (Martinello para. 1).

In 2017, also free-to-play game *Dota 2* reached \$406 million in revenue (Rodriguez para. 3). In terms of prize money in direct comparison with top esports games, players in professional *Dota 2* in 2018 competed for \$41.4 million dollars, compared to \$22 million in the First-Person Shooter¹⁰ *CS:GO* (*Counter-Strike: Global Offensive*; VALVE 2012), \$20 million in *Fortnite* (Epic Games 2017) and \$14 million in *League of Legends* (Esportsearnings.com, “history 2018”). The following graph shows the top 10 most watched content on video game live-streaming platform *Twitch.tv* in March 2019. The numbers indicate how many million hours each game has been watched.

¹⁰ “First-person shooter (FPS) is a video game genre centered on gun and other weapon-based combat in a first-person perspective; that is, the player experiences the action through the eyes of the protagonist” (Wikipedia.org, “First-Person Shooter”).

TWITCH TOP CONTENT

Date: March 01, 2019 - March 31, 2019

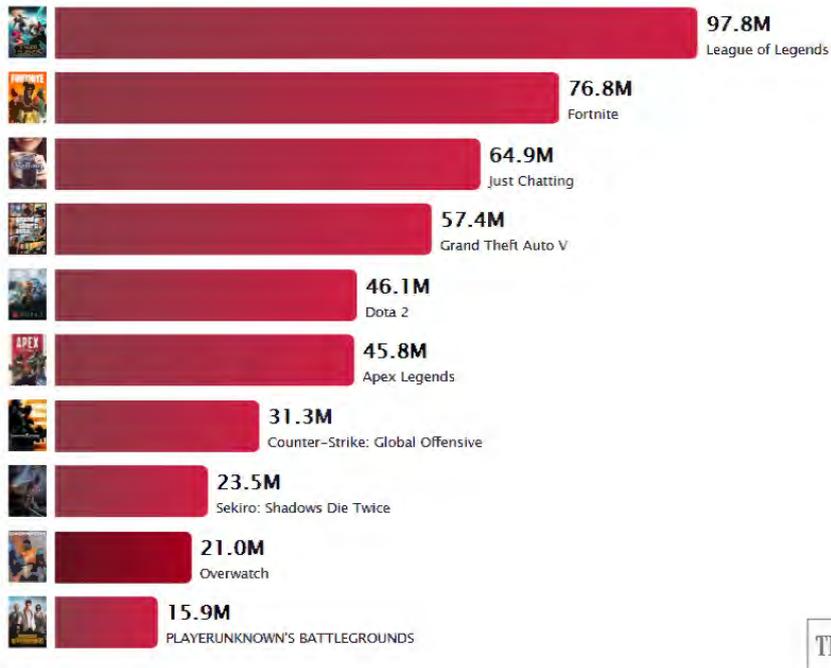


Figure 1 – Graph created with TEO Analytics on esportsobserver.com

By looking at the hours people have watched *Dota 2* and *League of Legends*, it can be inferred that MOBAs (especially in terms of esports) are of great importance in the cultural lives of people today across the globe. Furthermore, this cultural relevance is paired with significant longevity, which becomes visible when the 2019 *Twitch.tv* top content stats are compared to those of March 2018:

TWITCH TOP CONTENT

Date: March 01, 2018 - March 31, 2018

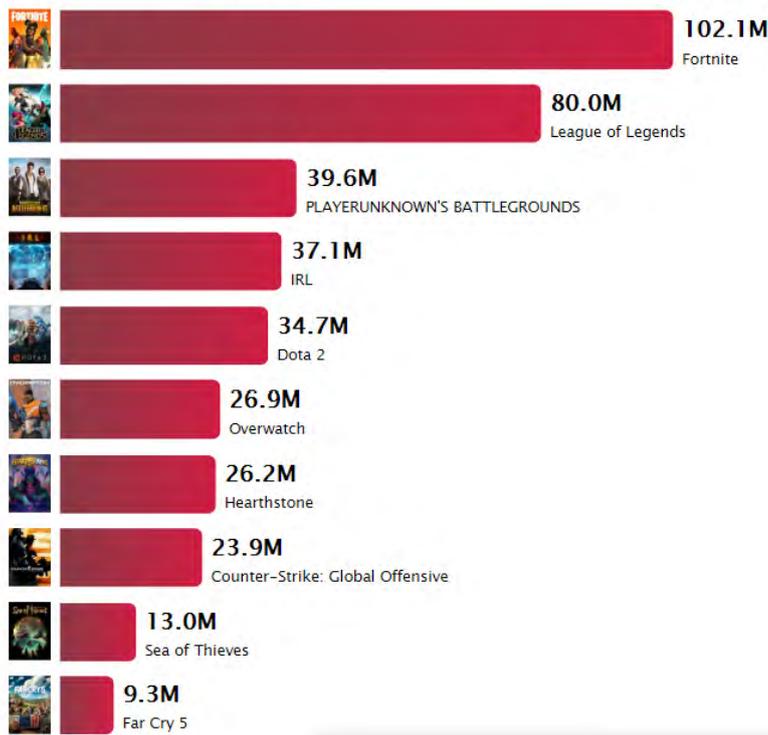


Figure 2 – Graph created with TEO Analytics on esportsobserver.com

Fortnite ranked above all for some time with 102.1M but saw a drop to 76.8M. Unlike *Fortnite*, *League of Legends* is not a new title, yet it grew from 80M to 97.8M. *Dota 2* is also still growing, its hours watched increased from 34.7M to 46.1M.

“Just Chatting” is a category on *Twitch.tv* which lists any program where streamers chat with their viewers¹¹, therefore this category in third position can be ignored in *Figure 1* when we are trying to determine which the most popular games are in the opinion of the viewers. *Grand Theft Auto 5* (*GTA 5*; Rockstar Games 2015) and *Sekiro* (Activision 2019) are action-adventure games, not esports titles. *Apex Legends* (Electronic Arts 2019) is a new Battle Royale¹² game similar to *Fortnite* and *PlayerUnknown’s Battlegrounds* (Bluehole 2017), these can be

¹¹ Under the direct link <https://www.twitch.tv/directory/game/Just%20Chatting> all channels in the “Just Chatting” category are listed. Anything that is not gaming can be found here: from a farmer harvesting corn to speeddrawing, a large variety of topics can occur.

¹² Battle royale games blend survival, exploration, and scavenging elements with last-person-standing gameplay. Battle royale games can involve hundreds of players, who start with minimal equipment and then must eliminate all other opponents while avoiding being trapped outside of a shrinking “safe area”. The name for the genre is taken from a novel of the same name, which presents a similar theme of a last-person-standing competition.

played as esports games. *Counter-Strike: Global Offensive* (VALVE 2012) and *Overwatch* (Blizzard 2016) are also esports titles and both belong to the First-person shooter (FPS) genre. These statistics show that the two MOBAs *League of Legends* and *Dota 2* in 2019 are still among the most relevant esports games (among the top three) by hours watched on *Twitch.tv* — despite them being among the oldest titles. *League of Legends* was released in 2009 and *Dota 2* in 2013.

1.1 Theoretical Framework

As already mentioned, Sean Carton believes both *Dota 2* and *League of Legends* can be described more accurately if we do not call them MOBAs. Carton suggests the term “Lane-Pushing Games”, a term that he created on the basis of the action people undergo when they play “MOBAs, ARTS, DOTA-likes, and AoS maps” (Carton 2019). To get a first idea of the usefulness of Carton’s term, we could try to superficially use it on both a MOBA, and a game that is clearly not categorized as a MOBA, such as *Counter-Strike*. *Counter-Strike* by VALVE belongs to the “First-Person Shooter (FPS) genre” (Wright, Boria and Breidenbach 103). In this game, people “play on a team as either a terrorist or counter-terrorist. Players are able to buy an assortment of weapons, rescue hostages, plant or defuse bombs [...]” (ibid. 104).

While *Counter-Strike* at first glance is mostly about counter-terrorists chasing terrorists and terrorists planting bombs, the preconceptions people have of MOBAs are very different, as computer-controlled neutral minors¹³, lanes and towers are typically to be found in games such as *Dota 2* and *League of Legends*:

League of Legends is a team-based, competitive eSport played in teams of five. Its genre characteristics are a mix of real-time strategy, tower defense, and

¹³ Little creatures which automatically attack the enemy and walk down the lanes are called minions in *League of Legends*. In *Dota 2* they are called creeps:

Creeps are basic units in Dota 2. Every unit which is not a hero, building, ward or courier is considered a creep. Unlike heroes, creeps do not gain experience and cannot level up. Most creeps grant a set gold and experience bounty to heroes when killed. (Dota2.Gamepedia.com, “Creeps”)

Minions are units aligned with one of the teams. They spawn periodically from their nexus and advance along a lane towards the enemy nexus. They automatically attack any enemy unit or structure they find in their way. They are controlled by artificial intelligence, and only use basic attacks. (Fandom.com, “Minions”)

computer roleplaying game (Walbridge 2008). [Minions] march down three lanes from one enemy base to another, and the ten human players must “push” these army lines forward through opponents and their defensive towers. Players—who are grouped together from a pool of many millions—must coordinate strategies, tactical maneuvers, reconnaissance missions, itemization synergies, and resource sharing amongst each other. (Ferrari 1)

Since people do not act on lanes in *Counter-Strike* and since there are no creeps and towers, one could assume that *Counter-Strike* is not a Lane-Pushing Game. In this thesis, I would like to test the hypothetical assumption that term Lane-Pushing Game might be a useful one, a term which would allow people to describe the genre more adequately than the existing acronym MOBA. The reason for the assumption is quite simple: almost any online game, including *Counter-Strike*, could be described as a MOBA: Many games are (M)ultiplayer games, they are (O)nline, they are about (B)attle and they take place in an (A)rena. A term that at first glance seems to be suitable for two games of obviously different genres such as *Counter-Strike* and *Dota 2* cannot be an ideal genre term for any genre.

This thesis strives to find a genre definition and genre term that can be utilized in the scholarly description of games today known as MOBAs. A clear definition of *LoL* and *Dota 2* could function as a useful basis for designers who want to create new games equally popular as *Dota 2* and *League of Legends*.

Therefore, it might be helpful to gather an overview of the existing Game Studies research since it could be consulted to describe and define the two MOBAs in question and help to shed a light on their cultural relevance. The two games in question are cultural entities, which the Introduction has already shown. It is therefore important to also closely analyse cultural aspects of the two games and cultural intertextualities that occur in them. As *Dota 2* and *League of Legends* are played all over the world, they should be treated as transcultural phenomena despite their Anglophone origins. Cultural Studies might also help to understand *Dota 2*'s and *LoL*'s cultural relevance and to define their genre.

As history can enlighten any present-day topic, the two MOBAs' history could be traced back to their roots to gather an understanding of their most fundamental aspects. Games as such are ancient. Zimmerman even

describes games as “perhaps the first designed interactive systems our species invented” (Zimmerman 19). The Reception History chapter will be limited to going back in time to those games which first showed core functionalities needed for designing MOBAs. By looking back into the past, answers to the nature of the two games might be found; or more specifically: The two games were not designed in a vacuum; they were invented on a basis of previous games. Looking at the previous games’ elements might help, as if we were looking at them with a Darwinist lense: comparing the old and the new could tell us, which of the games’ aspects were so fascinating, that developers would (often people who were developing as a hobby – this will be explained in the Reception Studies chapter) voluntarily spend a lot of their time on extracting them and turning them into an aspect of a new game.

It is especially important to find criteria for further comparison from different angles.

Ludic elements will be defined more closely in this study in the Game Studies chapter. For now, it should be noted that they could be, as defined by Roger Caillois in 1961, described as “aspects of a game that are about their specific rules and goals” (Caillois 13). Once the ludic elements of games have been defined, a detailed ludic description and comparison of the two games can take place in the chapter called Ludic Comparison. A chapter analysing the two games’ ludic elements, such as rules, is especially important since in *Dota 2* and *League of Legends*, at the beginning of each match, players are automatically in a process where they must choose one character, which they want to play and then the game unfolds, meaning, there exist no rules¹⁴ to the games, which could be referred to here. In *Dota 2* and *League of Legends*, players rely on themselves, on talking to other players and on looking at rules from the professional tournaments (e.g., the rules for *Dota 2*’s *The International* tournament¹⁵ or *League of Legends Championship Series*¹⁶ (LCS) rules)

¹⁴ Except for tournament rules for e.g., the World Championships, but there are no descriptive rules in which the games are officially being explained in detail.

¹⁵ <https://www.dota2.com/international/rules/>

¹⁶ <https://eu.lolesports.com/en/about/global-rules>

when they are looking for guidance in terms of general rules¹⁷. Therefore, a detailed description of the ludic elements such as rules is necessary and will be undertaken in the Ludic Comparison chapter of this thesis.

Some of the two games' aspects should prove to be indispensable characteristics for games belonging to the MOBA genre. Therefore, the main chapter of this thesis is dedicated to the cultural elements in the two games, which will be thoroughly compared with a focus on cultural elements and based on literary methods, thereby revealing how music, literature, film, theatre, and other cultural sources appear in these games and why.

For example, there is Puck, a character also known as Robin Goodfellow in William Shakespeare's play *A Midsummer Night's Dream*. If *Dota 2* heroes are mentioned in this book, they can be looked up under <https://www.dota2.com/heroes>. *League of Legends* champions can be found under <https://www.leagueoflegends.com/> in the champions' section.

When characters and stories of video games have been taken from literary sources (such as Puck), the intention seems to be the creation of a new gaming environment – without having to write completely original stories for it. The comparative chapter focusing on the cultural aspects of MOBAs might reveal the game developers' motivation for the usage of literary sources as well as the relevance cultural intertextualities have for MOBAs. Finally, sports culture will also be examined as a cultural aspect of MOBAs in the comparative chapter, since sport is a relevant part of our culture:

The human body plays an important role, both in sports culture and popular culture, since it is the central medium in both cultural areas. Popular culture and sports can both be seen as modes of nonverbal, physical expression – a performative expression that can not be translated into verbal expression. [translated] (Schmidt 69)

Many scholars consider the act of playing MOBAs competitively esports and a form of sports. For example, Michael G. Wagner writes, “eSports’ is an area of sport activities in which people develop and train mental or physical abilities in the use of information and communication

¹⁷ The tournament rules neither describe the games, nor do they offer guidance for the way the games should best be played.

technologies” (Wagner 439). Therefore, the possible cultural relevance of esports will also be explored in the chapter on the Cultural Aspects of MOBAs.

1.2 Method

The two games will be described based on theories from the academic fields of Game Studies and Cultural Studies.

The (Reception) History of *Dota 2* and *League of Legends* will be explored. The Ludic Comparison will help to define the games more clearly, in terms of their ludic aspects, such as game environment, the characters in the two games and the rules.

Since gaming is part of our culture and the two games have many cultural intertextualities, there will be an attempt of an in-depth analysis of almost all the cultural aspects found in the two MOBAs: Methodologically, in a first step, as many cultural intertextualities will be gathered as can be identified. While they are collected, they are sorted into categories, such as music, literature, or dance. In individual chapters on the categories, it will be noted whether there were more references to be found for the category (which were then left out, as to not extend the length of this thesis too much), or if there were only few to be found. I have chosen this way of identifying cultural intertextualities, to paint the picture of the intertextuality and exchange processes as clearly as possible.

By the end of this thesis, the MOBA genre will be defined, and its cultural aspects will have been accurately examined. The results may not only show the MOBA genre’s cultural relevance (or non-relevance), but they may also even help in coining a new term for the genre.

2 MOBAs in Game Studies Terms

Frans Mäyrä in his *Introduction to Game Studies* wrote that Game Studies is “focusing on games, particularly in their different digital forms” (Mäyrä 1). He is defining the academic field of Game Studies as follows:

Game studies is a new academic field and interdisciplinary field of learning, which focuses on games, playing and related phenomena. Its recent rise is

linked with the emergence of digital games as a cultural force, but it is not restricted to any technology or medium. (Mäyrä 11)

In 2011, Nieborg and Hermes wrote about Game Studies:

[...] game studies is argued to be a force of innovation for cultural studies. While game studies, as it has developed over the last 10 years, fits well within cultural studies' methodology and theory, it does more than benefit from cultural studies as a 'mother discipline'. Game studies proves itself to be a strong force, especially in its productive use of political economy to analyse games and gaming as a (new) cultural form. (Nieborn and Hermes 131)

While Nieborg and Hermes describe Game Studies as a “strong force” that benefits from “cultural studies as a ‘mother discipline’, and while they also say that Game Studies is “a new interdisciplinary field” (Nieborg and Hermes 133), Adrienne Shaw describes Game Studies differently:

Much like cultural studies, the study of video games has relied on borrowing techniques from other disciplines, including anthropology, economics, philosophy, psychology, film studies, and so on (Boellstorff, 2006; Loftus & Loftus, 1983; Mortensen, 2007; Myers, 2003). Although they are both interdisciplinary fields, however, game studies has not drawn deeply as it might from cultural studies, particularly its critical and reflexive tendencies though notable exceptions do exist (see Kline, Dyer-Witheford, & De Peuter, 2003; Mayra, 2008). This is problematic as cultural studies could help video game studies approach the field in very productive ways. (Shaw 405)

Here, Cultural Studies is not a ‘mother discipline’; instead, Shaw suggests that Game Studies is not a part of Cultural Studies but should collaborate more with the older discipline.

At one point, Game Studies developed its own fields of research:

[...] similarly to how fields of research developed from the interdisciplinary discourse of Film Studies, which was very much focused on intermedial and transmedial questions, Game Studies also developed its own fields of research: from formalist questions of game design, to game mechanics and gameplay, socio-cultural forms and appropriations of play, cognitive-psychological perception and the genre-theoretical performative repertoire of players to the narrative potential of new game concepts, aesthetical forms of expression of images and the philosophical content of ideologies presented in simulations. [translated] (Beil, Hensel and Rauscher VIII)

As we can see, there are different positions on Game Studies as a discipline. Therefore, this chapter is a short introduction to Game Studies, with a focus on the theories relevant to MOBAs. Theories which apply to both *Dota 2* and *League of Legends* might help to reveal aspects that could be genre-defining and help to create a new term for the genre, replacing the MOBA acronym.

2.1 Terms

“Game Studies is not Cultural Studies. It offers itself as a new interdisciplinary field” (Nieborg and Hermes 133). Since we are exploring two games on the grounds of a relatively new field, it makes sense to have a closer look at the descriptive terms that should be used for the games in the focus of this dissertation.

League of Legends and *Dota 2* are both games that can only be played on a PC. Therefore, we might call them ‘computer games’ or ‘PC games’. There are, however, games which have a relevance for esports that can be played on more than one platform, for example on the PC and on smartphones, such as *Hearthstone*²⁰ (Blizzard Entertainment 2014). *Hearthstone* therefore does not seem to be a computer game at first glance. We might move up one category and call such games digital games or video games - but maybe could also refer to them as computer games, since for esports (but also when played casually), a steady internet connection is required, which allows us to assume that professional *Hearthstone* players avoid playing tournaments for prize money and prestige on the go (on a train or subway for instance) on their smart phone, since losing the internet connection would result in losing the tournament (similarly, a casual player would avoid the frustration of losing a match due to an unsteady connection). What even professional *Hearthstone* players do, however, is playing important matches on a phone if they can be firmly connected through Wifi²¹. For now, *League of Legends* and *Dota 2* are played on a PC, and players cannot play them on a phone. We are talking about exactly these two games in this thesis and not about for instance the mobile game *Wild Rift* (Riot Games; released September 2020), a game which is like the *League of Legends* PC version, but with adaptations for mobile devices and with its own esports leagues (Bosch para.1). In conclusion: since we are talking about *League of Legends* and *Dota 2*, which are not mobile games, we should be able to call them digital games or video games, yet more specifically

²⁰ In April 2019, the *Hearthstone* Championship Tour (HCT) took place in Taipei (Playhearthstone.com “HCT”). All past and upcoming *Hearthstone* esports events run by Blizzard are listed on Playhearthstone.com.

²¹ For instance, at home, at a friend’s house, at their professional esports team’s facility, or in cafés.

PC games, and when they are played in a competitive environment, esports games.

American game designer Jane McGonigal theorizes that when stripped of “genre differences and technological complexities, all games share four defining traits: a goal, rules, a feedback system, and voluntary participation” (McGonigal 21). Keeping these traits in mind, *League of Legends* and *Dota 2* should be referred to as esports PC or esports computer games. The analog game chess and the two digital MOBAs share all the traits which McGonigal has listed. Mechanically, MOBA players must work together against a host of foes controlled by the game. Chess and MOBAs require similar abilities: “Getting this right requires a chess-like ability to think several moves ahead, and you need to coordinate actions between players to have any chance of completing missions” (Duffy para. 5).

Game design theorist Eric Zimmerman offers an interesting perspective on games vs. video games in his “Manifesto for a ludic century”:

Games like Chess, Go, and Parcheesi are much like digital computers, machines for creating and storing numerical states. In this sense, computers didn’t create games; games created computers. (Zimmerman 19)

Zimmerman elegantly equals the analogue and the digital. Saying that many non-digital and particularly ancient games are creating and storing numerical states allows us in theory to look at both digital and non-digital games as games, because their common denominators are many, and the difference between the two forms of games is mainly the platform. Soccer can be played on a field, chess is played on a board. Yet, they are both intense social and strategic games. They are games that today are unthinkable without digital technologies. In *Dota 2* and *League of Legends* esports, computer power for instance is used to run the games, calculate probabilities, and manage teams. The way traditional sports have become digitized – and digital sports today – are both exciting fields of research.

2.2 MOBAs vs. Other Games in Game Studies Terms

Attempts have been made to define all games known to humankind in one theory. Literature offers many definitions of games, which is why some researchers have compared popular definitions to create an overarching definition (Juul 2005: 30; Salen & Zimmerman 2004: 78; Szulborski 17).

Salen & Zimmerman found “*rules*” in seven of the eight definitions they had been looking into, a “*goal*” they found in five definitions and the “*voluntariness*” of games they found in three (2007: 79) (see also McGonigal’s definition in the previous section). These three elements of games are very important in the definition of MOBAs, as both *League of Legends* and *Dota 2* have *rules*, which cannot be altered during an ongoing match. The two MOBAs, like all video games, are based on the algorithms of the program code, which will not be altered while players are playing. Because of their code, video games are clearer in terms of fairness when compared to analogue games, because they are relatively immune to disputes over results, since the computer does not allow players to overstep rules and in the case of *League of Legends* and *Dota 2*, every second of the match is recorded (“[...] the machine steps in and acts as the ultimate referee” Taylor 49). After the match, everyone can see the matches and look for illegal actions. Ways of browsing through recordings of the two games’ most prestigious tournaments are quickly found on google. Theoretically, people could be using cheat codes and other modes of cheating in all digital games. Mia Consalvo stated this clearly in her book *Cheating: Gaining Advantage in Videogames*: “As long as there have been videogames, people have cheated while playing them” (Consalvo 8). In

[a]ny professional competition, regardless of whether the playing field is made of grass or computer graphics, requires strict regulations. Sponsors and spectators alike can turn away from a league if it comes to light that software was used to achieve victory [...]. (Ashton para. 1)

The *Electronic Sports League* (ESL Gaming GmbH; <https://www.eslgaming.com/>) a professional esports league, uses around a fifth or fourth of its technological budget toward anti-cheat measures (see also Ashton para. 13). In an interview with *Esportsobserver.com*,

ESL's Senior Vice President Play & Platforms Marcel Menge revealed that *ESL* also has

[...] multiple spectators backstage [...] plus [...] POV streams online for each player position [...] to have enough eyes on all situations to make sure that if something is fishy, it can be instantly reviewed and checked. (Ashton para. 6)

Using cheats in esports usually results in a ban from competition: When “an Indian Counter-Strike player named Nikhil “forsaken” Kumawat” was “caught cheating in the eXTREMESAND 2018 Finals” in 2018, “[t]he result was a five-year ban for the player” in any league or tournament belonging to the Esports Integrity Coalition²² (ESIC; <https://esic.gg/>) (Ashton para. 25-29).

In chess and soccer, as in esports, rules are given before the match and cannot be changed during a match.

The two MOBAs we are looking into have a clear *goal*, which is destroying the enemy's main structure. Riot officially says: “To win a game you'll have to push down your lane into the enemy base and destroy the nexus at the heart of their base” (Leagueoflegends.com, “New Player Guide”). In *Dota 2*, “[t]o win, players must destroy the opposing side's Ancient, an important building at the center of each team's base” (Dota2.Gamepedia.com, “Dota 2”).

Winning in soccer is about shooting goals and hindering the opponents from scoring; there is not only a clear goal, there are also two goals players are shooting at. Chess also has a clear goal: putting the opponent's king in a situation from which he cannot escape.

We can assume that playing either *League of Legends* or *Dota 2* is strictly *voluntary*. Participating in soccer or chess matches would also be voluntary under normal circumstances. Ryan et al. explain that players of video games enjoy making voluntary choices, being in control gives them autonomy, if they are playing the game voluntarily (see also Ryan et al. 70).

²² The Esports Integrity Coalition (ESIC) is a not-for-profit association established in 2015 to detail with what it labels “integrity challenges” to esports. (see also Ashton para. 20).

2.3 Ludology vs. Narratology

A major focus in Game Studies used to be the debate between ludologists and narratologists (their discourses will be explained in the following). Game Studies scholar Markku Eskelinen famously said about their discourse:

Luckily, outside theory, people are usually excellent at distinguishing between narrative situations and gaming situations: if I throw a ball at you, I don't expect you to drop it and wait until it starts telling stories. (36)

Narratologists analysed games with philological methods, looking at their stories as if they were movies or novels. Ludologists such as game designer and theorist Juul, focused on games as a separate genre and often refused to accept that their representation of time, spaces and unique ways of storytelling should be similar to other forms of media. Games such as chess, *Tic-Tac-Toe (noughts and crosses)*²³ and *Tetris* (Alexey Pajitnov 1984) do not seem to have meaningful narrative elements; therefore, ludologists doubted the narratological approach and this is what Eskelinen was referring to:

Most naïve comparisons between narratives and games usually result from too narrow, broad or feeble definitions of the former: usually it comes down to discovering "plots" and "characters" in both modes -- games and narratives. However, we should know that's not good enough, as we can find those events and existents in drama as well, which is clearly its own mode. The minimal definition of narrative derived from Gerald Prince and Gérard Genette states basically that there must be two things or components to constitute a narrative: a temporal sequence of events (a plot if you want to water down the concept) and a narrative situation (with both narrators and narratees for starters). I think we can safely say we can't find narrative situations within games. (Eskelinen 2)

Jesper Juul is a ludologist who sees narrative elements in games, but he gives a warning: "A combination of games and narratives risk ruining both" (Juul 1999: 3). He comes to this conclusion since

[...] the computer game does not share this temporal split between the time of the narrated, of the narrator and of the reading: In the computer game, these three times are imploded to a single now. This means that the computer game does not allow for the interesting variations in the relation between narrator and narrated. (ibid. 4)

²³ Tic-tac-toe (American English), noughts and crosses (British English), or Xs and Os is a paper-and-pencil game for two players, X and O, who take turns marking the spaces in a 3×3 grid. The player who succeeds in placing three of their marks in a horizontal, vertical, or diagonal row is the winner. (Wikipedia.org, "Tic-Tac-Toe")

Juul hereby explains how players are simultaneously absorbing a game's story and playing it. This scenario cannot be compared to reading books, since there is no need in literature for a unity of narrative time and narrated time.

The rules of games and the challenges to solve puzzles in games are very important states Juul, because critical thinking is enjoyable (see also Juul 2005: 95). Puzzles which become more difficult as the game progresses, give the player a constant feeling of progression according to Juul, thereby making the player a learner, who is constantly improving his "player repertoire" (ibid.).

Nowadays researchers use approaches from either narratology or ludology depending on the games they are facing. Looking for a narrative in *Tetris*²⁴ is probably pointless, an analysis of other games without any focus on the narrative would be at risk to be missing out on compelling stories such as in the case of Sam Barlow's *Her Story* (Barlow 2015).

Her Story consists of short clips, where a woman is being questioned about a murder. The clips are not in order and can only be accessed by typing the correct search phrases into a database. [...] Playing Her Story requires the player to enter a hermeneutic circle (Gadamer 2004) of interpretation where they watch some videos, form an idea what the story is about and then based on that understanding, query the data base for more information. In order to play Her Story, the player has to "read" (Garcia 2016) it successfully, connecting the vague statements in the videos to (possible) events that have transpired in the game's narrative. To succeed, it is not enough to understand what is being said on the videos. The player has to understand complex issues like law, murder, relationships and evidence in order to navigate the web of meaning created by the videos. In other words, the player has to solve the interpretative challenge presented by Her Story. (Arjoranta 2-3)

From Jonna Arjoranta's description of *Her Story*, we could assume players of this game go on their own path to finding out the truth, enjoying a very entertaining journey and story.

For researchers in the field of Game Studies it is important to know the two modes of play Roger Caillois described, "ludus" and "paidia" (Caillois 13):

They can also be placed on a continuum between two opposite poles. At one extreme an almost indivisible principle, common to diversion, turbulence, free improvisation, and carefree gaiety is dominant. It manifests a kind of uncontrolled fantasy that can be designated by the term paidia. At the opposite extreme, this frolicsome and impulsive exuberance is almost entirely absorbed

²⁴ There is no narrative in *Tetris*. The objective is to form horizontal lines from geometric shapes (Tetriminos) (see also Wikipedia.com, "Tetris").

or disciplined by a complementary, and in some respects inverse, tendency to its anarchic and capricious nature: there is a growing tendency to bind it with arbitrary, imperative, and purposely tedious conventions, to oppose it still more by ceaselessly practicing the most embarrassing chicanery upon it, in order to make it more uncertain of attaining its desired effect. This latter principle is completely impractical, even though it requires an ever greater amount of effort, patience, skill, or ingenuity. I call this second component ludus. (ibid.)

In other words, ‘ludus’ rather represents the aspects of a game that are about their specific rules and goals, while ‘paidia’ stands for free and explorative play.

Jesper Juul used Caillois’ ideas in his “Classic Game Model” (Juul 2005: 23) can be used for “traditional” games (such as chess and soccer) and digital games (such as *Dota 2* and *LoL*) alike. Juul includes games that he sees in the ludus category in his catalogue, while games categorized as paidia are seen as “borderline cases” (Juul 2005: 28). Most video games are games according to Juul’s criteria (see also Juul 2005: 53). He defines a game as follows:

A game is a rule-based system with a variable and quantifiable outcome, where different outcomes are assigned different values, the player exerts effort in order to influence the outcome, the player feels emotionally attached to the outcome, and the consequences of the activity are negotiable. (Juul, 2005: 36)

This definition contains elements of definitions by several researchers. Juul sees the game as a *formal system*, which stands in relation to the gamers. The game is also *separated from the rest of the world*. Juul, along with most researchers, considers games rule-based systems, as confirmed by Salen & Zimmerman. The central part of the definition by Juul is that Games are systems defined by rules.

League of Legends and *Dota 2* both meet all Juul’s criteria, as both soccer and chess do.

2.4 Intransitivity

Intransitivity should have a place in the Game Studies chapter of this thesis, since in combination with team compositions, it is one of the main reasons for the popularity of *LoL* and *Dota 2*.

Intransitivity is a property of binary relations that are not transitive relations. As for example in the food chain, lions feed on gazelles, gazelles feed on grass, but lions never feed on grass. Thus, the *feed on* relation among life forms is intransitive. Intransitivity is also used when speaking of scenarios in which a relation describes the relative

preferences between pairs of options, and weighing several options then produces a “loop” preference: A is preferred to B, B is preferred to C, C is preferred to A. Rock, paper, scissors is an example for such a cycle and a cycle like this makes games very gripping, as it guarantees interesting choices for the players, since all of these options are equally powerful. Game designers use this concept in many genres, creating balanced and therefore fair gameplay.

Each hero in *Dota 2* and each champion in *LoL*²⁵ has a different set of abilities, so a particular one may be good counter against some heroes but weak against others:

Heroes serve as each player’s in-game avatar, and they all have their own set of powerful abilities. Each individual hero is designed to do well in certain ways, though they also have weaknesses to compensate. Moreover, some heroes do well against others, because of how their abilities counter certain heroes. (Bonifacio para. 2)

A study by Chen, Shuo, and Joachims in 2016 found that “[t]he keys to victory usually include forming an overall balanced team and working together with teammates to cover each other’s weaknesses” (Chen et al. 231). Analysing 10.442 match results of 757 professional *Dota 2* teams, they observed that “the team’s overall strength [was] the deciding factor in determining match results” (ibid.).

These observations explain how relatively old games such as *Dota 2* and *League of Legends* that have been popular for over a decade could still be engaging for players. The rock-paper-scissors principle of intransitivity makes each choice equally good. Yet, victory is not left to chance. People must choose their hero (*Dota 2*) or champion (*LoL*) wisely in a MOBA. Heroes and champions have an equal value in terms of efficiency, but they must empower a team composition that can outplay the opponents’ team; otherwise, single heroes or champions in a specific matchup can turn out to be devastatingly inefficient (such mechanics will be examined in the Ludic Comparison chapter). These principles can also be noticed in paper-and-pencil games, where game

²⁵ The playable characters in *Dota 2* are called heroes (Dota2.Gamepedia.com, “Heroes”) and the playable characters in *League of Legends* are called champions (Leagueoflegends.com, “Champions”).

characters are also equipped with abilities based on mathematical principles.

When players are making choices in terms of team compositions in *LoL* and *Dota 2*, they must outsmart the other team. If their choice did not result in winning, they must analyze the replay file to become better. Analysing one's own deficits and then working on them seems like the typical process people undergo when they are studying. Professor of Literacy Studies James Paul Gee found that learning is a matter of three things and becoming successful in esports or sports seems to be based on these conditions that Gee describes as follows:

- (1) The learner must be enticed to try, even if he or she already has good grounds to be afraid to try.
- (2) The learner must be enticed to put in lots of effort even if he or she begins with little motivation to do so.
- (3) The learner must achieve some meaningful success when he or she has expended this effort. (2007: 58)

As in (1), players of *LoL* and *Dota 2* must be enticed to try. Even if he or she already had to face devastating losses, they must overcome feelings of failure and try again. Even when players are sometimes not motivated enough for training, as in (2), they must put lots of effort in. Every time they show up for training and look for new motivation and make themselves “give it their all”, they condition themselves to being able to motivate themselves for tasks easier the next time they must convince themselves of putting in all this effort. In *Dota 2* and *League of Legends*, there is meaningful success to be experienced when people have expended their effort as suggested by Gee (3).

2.5 The Cultural Relevance of MOBAs

“With the introduction of eSports, games have emerged as the new public culture” (Lee, Sang Woo et al. 1).

The cultural relevance of MOBAs can be narrowed down using the terms of Game Studies. All criteria of Juul's model suit four different games at the same time: The two MOBAs *League of Legends*, *Dota 2*, *chess* and *soccer*.

If *League of Legends*, *Dota 2*, chess and soccer are all games according to Juul's definition, a definition that takes many other definitions into

account, the two MOBAs should be attributed with a similar cultural relevance inherent to chess and soccer. The four are considered games by the same definition. Huizinga, in his key work *Homo Ludens*, says that culture is derived from play. He opens his treatise with the words: “Play is older than culture, for culture, however inadequately defined, always presupposes human society, and animals have not waited for man to teach them their playing” (Huizinga 1).

Caillois says that for Huizinga,

[p]lay is simultaneously liberty and invention, fantasy and discipline. All important cultural manifestations are based upon it. It creates and sustains the spirit of inquiry, respect for rules, and detachment. In some respects the rules of law, prosody, counterpoint, perspective, stagecraft, liturgy, military tactics, and debate are rules of play. They constitute conventions that must be respected. Their subtle interrelationships are the basis for civilization. In concluding *Homo Ludens*, one asks oneself, ‘What are the social consequences of play?’ (Caillois 58)

Caillois (Caillois 186) quotes Jean Giraudoux and agrees with him that men “imitate in play the physical—and sometimes even mental—activities which modern life has compelled them to give up” (Giraudoux 112-113). Giraudoux gives a few examples, such as a runner who is imagining “pursuing game or an enemy in his imagination” or a fencer or javelin-thrower in conflict with Cyrano or the Persians (see also *ibid.*). He also suggests a “child playing tag” is imagining to be “at the lair of the dinosaur” (*ibid.*). Sports and “pantomime” of things we do not execute in our everyday lives, Giraudoux and Caillois agree, are preserving “the body’s original health and powers” (Caillois 186; Giraudoux 113). In digital games such as *Dota 2* or *League of Legends*, people might be sharpening their perception and cognition abilities:

Frequent action game players outperform non-gamers on a variety of perceptual and cognitive measures, and some studies suggest that video game training enhances cognitive performance on tasks other than those specific to the game. (Boot, Blakely and Simons 1)

We have been known as man the thinker ‘Homo Sapiens’ and man the maker ‘Homo Faber.’ To Huizinga, we are man the player ‘Homo Ludens’, because “[c]ivilization arises and unfolds in and as play” (Huizinga ix). Consequently, in the absence of play or games, civilization is impossible.

Huizinga further states: “In play there is something ‘at play’ which transcends the immediate needs of life and imparts meaning to the action. All play means something” (Huizinga 1).

For our children living today - driven by information and communication technologies - this means that they are playing all kinds of games, including digital games, before they become influential members of our society. The skills they need to learn growing up are mostly achieved in play, also in digital play.

Fackre (1972) discusses Huizinga’s concept of play from his philosophical theological view:

Play is also food for the starving soul and society. It is an ingredient in cultures that keeps them sane. Why? Men need a certain point in their lives, which is not controlled by pragmatics. Where they do not ask how this contributes to the business of securing food, clothing, and shelter. In these preserves we cultivate a certain nonchalance toward the rat race. Our focus is on doing something nonproductive for its own sake. Both Huizinga and Pieper note the striking similarity and historic connection between play and worship. Both teach us to treat relative things relatively. Both are instruments of a shalom which knits up the raveled sleeves of care which sleep and relaxation cannot touch. (Fackre 78)

Since *League of Legends* and *Dota 2* and most digital games are games according to Juul, they are “food for the starving soul and society” in the sense of Fackre’s definition. Fackre’s idea of play sounds as if playing a game was like a holiday trip for the soul: When we play something (digital games, soccer, chess), we do something for ourselves, just for fun, and there are usually no pragmatic obligations.

Sociologist Ken Roberts believes that for Huizinga, “play was a type of activity that met basic needs and should be considered an indispensable element in all civilizations” (Roberts 90).

Many people describe culture as “social glue”. Sociologists Brian D. Ng and Peter Wiemer-Hastings focused on the social glue attaching gamers to their game and its social environment. In their study they found that whether a player will continue to play a game depends on someone’s achievements, their level of recognition and the number of connections they have made with other players. The study describes video games as alternative forms of social entertainment (Ng and Wiemer-Hastings 112-113).

Ryan et al. found that relatedness is fulfilled in games when we can interact with others or compete against others (Ryan et al. 71).

We are fascinated by games and become attached to them for a longer period depending on our respective situation in life. Multiplayer games can satisfy the need for company (see also Fritz 2008; Kunczik & Zipfel 2006). Psychologist Nick Yee identifies five motivation components: There is the “achievement component” (Yee 772), which includes the “want to advance in the game” (ibid.), the “interest in the rules and system of the game” (Yee 773), and the “want to compete with others” (ibid.). Next is the “social component” (Yee 774), which is the “want to form connections with others” (ibid.), “liking to chat and help other players” (Yee 775), and the “want to be a part of a group effort” (ibid.). Last, there is the “immersion component” (ibid.), which is “creating and customizing a character to play in the unique story of the game” (ibid.) as well as “wanting to escape from real-life” (ibid.). MOBAs are online games and therefore probably no exception.

Online video games have become one of the most common places for teens to meet their peers and create lifelong friendships. [...] 72% of all teenagers spend free time playing video games [...] with 36 percent reporting they have made new friends through online gaming. (Loedts para. 1)

In *League of Legends* and *Dota 2*, just as in other video games, people socialize and make friends. Similar social aspects can be found in soccer, as sport

can provide an anchor and environment for the development of relationships within communities that could lead to an increase in social capital (Sherry et al., 2011; Smith and Westerbeek, 2007). (Welty Peachey et al. 23)

Also in chess, people make friends, as discussions among users on chess.com show:

Several of my friends play chess but all are really hard to beat. One has an uncle who figured out how to beat someone in six moves no matter what you do!!! I have a cousin who I would beat easily cause he would make really really stupid moves. (chess.com, “Do your friends play chess”)

It also seems to be a common activity in New York to go playing chess with your friends:

There are many players playing along the west side of Union Square. Bring your own board if you're looking to play with friends, or you could pay the requested fee to play against a regular. (Chessnyc.com, “Places to play chess”)

In positive psychology, there is a concept called flow state, named by Mihály Csíkszentmihályi, who describes it as follows:

The optimal state of experience for the individual is one in which intentions are not in conflict with each other. In this state of inner harmony people can freely choose to invest their psychic energy in goals that are congruent with the rest of their intentions. [...] The experience is considered challenging and enjoyable. In previous research this state of vital activity and inner order has been described in detail as the ‘flow’ experience. (Csíkszentmihályi 1981: 9-10)

They [Csíkszentmihályi’s students] talked about the things like: ‘I like to do this because I am good at it, I meet challenges, I find this thing challenging and I feel good when, through my skill, I am able to master the challenge. I know clearly what I have to do, I get constantly the feeling of knowing how well I am doing’. [...] It took 2-3 years before I gave it the name ‘flow’ because ‘flow’ was very often mentioned by people (‘Oh, I am being carried by the river, I don’t have to think, I just do it, spontaneously, automatically’). (Csíkszentmihályi 2017: 814)

In Csíkszentmihályi’s theory, flow is a state of “inner harmony” in which someone is in “state of heightened energy, a state of increased control”, while the “experience is considered challenging and enjoyable”. In *LoL* and *Dota 2*, players must “clean up” the “board” (the MOBA map), which is a lot of hard work. Yet, people might even feel like they are falling into a pleasant rhythm when they are focusing on the tasks they must perform in *League of Legends* and *Dota 2* – As they are casting spells, the MOBA might be casting a spell over them. Similar aesthetics and enthrallment can also be found in this description of play that Huizinga wrote in 1949:

The words we use to denote the elements of play belong for the most part to aesthetics, terms with which we try to describe the effects of beauty: tension, poise, balance, contrast, variation, solution, resolution, etc. Play casts a spell over us; it is ‘enchanted’, ‘captivating’. It is invested with the noblest qualities we are capable of perceiving in things: rhythm and harmony. (10)

What happens to the player of either a game or a digital game such as a MOBA is that they are confronted with an “unnecessary obstacle” which they have to “tackle” (McGonigal 22). Gamers usually “want to explore and learn and improve”; so, they volunteer for this “hard work” which a game has to offer, because “nothing makes us happier than good, hard work” (McGonigal 28).

Brian Sutton-Smith, a leading psychologist of play, has plausibly phrased the reason for this phenomenon: “The opposite of play isn’t work. It’s

depression” (Sutton-Smith 198). Games seem to have the capability of maintaining and improving our mental well-being. Some studies, for example those by psychologist Sandra Russ, have found play and coping with daily stressors to be positively correlated in children (see also Russ 13). By playing, children regulate their emotions and this is important for adaptive functioning because without regulation, emotions could be overwhelming and stressful (see also *ibid.*).

McGonigal gives a short definition of clinical depression: “a pessimistic sense of inadequacy and a despondent lack of activity” (McGonigal 28). Then she reverses the two traits and decides on the opposite to be “an optimistic sense of our own capabilities and an invigorating rush of activity” (*ibid.*). Surprisingly enough, this seems to be an adequate description of the emotional state we feel during gameplay:

A game is an opportunity to focus our energy, with relentless optimism, at something we’re good at (or getting better at) and enjoy. In other words, gameplay is the direct emotional opposite of depression. (*ibid.*)

Psychologists Russoniello, O’Brien and Parks have found that Casual Video Games can improve mood and decrease stress:

The potential of CVGs to become an intervention is encouraged by the results of this study [...] A game that is physiologically tailored to meet individual specific human needs seems plausible in the near future. (Russoniello et al. 66)

We all need a sense of purpose. A sense of purpose is what our life depends on. Without a sense of purpose, our life expectancy shrinks. The “meaningfulness and sense of purpose that [...] people have in their lives are also related to survival” (Steptoe, Deaton & Stone 640). We want to find a quest because quests give us purpose. We do not have to become entrepreneurs to have a purpose. Quests can be found in learning how to knit or learning how to play a piano. A quest could be painting a piece of art for each of your friends and family or building your favourite place with Legos.

Video games could be seen as a quick fix for somebody’s urge for a quest. Games are easily bought and installed and the quests take the player on a journey, maybe even on one with a flow experience. Here the important thing is the quest and its journey. Finishing a game can leave anyone happy at first and then empty, just like finishing a book or film can feel

like. We can have quest experiences with books, films and games alike and the depression, big or small, caused due to a satisfying quest coming to an end, will be similar. Finishing quests results in an urge for new ones. MOBAs offer a variety of different kinds of quests: growing oneself's social reputation, collecting skins and items, skill improvement, visiting as many esports events as possible, collecting information on the playstyle of one's favourite player... the number of possible quests inside and outside these games seems to be endless, which is satisfying because we do not want our rewarding quests in life to end:

If the goal is truly compelling, and if the feedback is motivating enough, we will keep wrestling with the game's limitations—creatively, sincerely, and enthusiastically—for a very long time. We will play until we utterly exhaust our own abilities, or until we exhaust the challenge. And we will take the game seriously because there is nothing trivial about playing a good game. The game matters. (McGonigal 27)

These findings in combination with the fact that MOBAs offer endless possibilities for hard-work, rewards, self-improvement and socializing must be at least a part of the reason for video games, especially MOBA games, to be as successful as they are. McGonigal even sees the emotional activation on different levels as “the primary reason why today's most successful computer and video games are so addictive and moodboosting” (McGonigal 28). She also believes that

[w]hen we're in a concentrated state of optimistic engagement, it suddenly becomes biologically more possible for us to think positive thoughts, to make social connections, and to build personal strengths. We are actively conditioning our minds and bodies to be happier. (ibid.)

McGonigal describes seven different forms of hard work: high-stakes work, busywork, mental work, physical work, discovery work, teamwork and creative work. Maybe MOBAs are so popular because they feature all these types of hard work. Featuring more mechanisms which could make players feel happier and healthier would mean that especially MOBAs would be much more attractive compared to other games.

McGonigal describes *high-stakes work* as something that puts us under a lot of pressure, it is “fast and action oriented” and “thrills us with the possibility not only of success but also of spectacular failure” (McGonigal 29). In *LoL* and *Dota 2*, the sequences in which we must take a fight team versus team could be classed as high-stakes work.

Busywork (ibid. 30) is predictable and monotonous. We choose it for ourselves when we want to feel contented and productive. An example for busywork in *LoL* and *Dota 2* is clearly the farming²⁶ of resources, which requires absolute focus but in the end of the day, it can be a tedious task. *Mental work* “revs up our cognitive faculties, [...] we feel a rush of accomplishment when we put our brains to good use” (ibid.). There are many examples of mental work in both *LoL* and *Dota 2*. Trying to understand the opponents’ strategies and countering them with a smart team composition and a strategic construction of items is very complex and a core element of the gameplay in MOBAs.

MOBAs also offer *discovery work*, which is “about the pleasure of actively investigating unfamiliar objects and spaces. Discovery work helps us feel confident, powerful, and motivated” (ibid.). In *League of Legends* and *Dota 2*, we explore the environment and learn where the opponents will move. Players must know when to be in the jungle to harvest important objects from the main creeps (Roshan, Baron Nashor). Players will feel very powerful about ward placement, as they can first explore their surroundings and then gain an advantage by placing wards, which grant them sight over an area for a certain amount of time.

Teamwork is essential in both MOBAs and “we take great satisfaction in knowing we have a unique and important role to play in a much bigger effort” (McGonigal 31).

Finally, when we do *creative work*, “we get to make meaningful decisions and feel proud of something we’ve made” (ibid.). In *League of Legends* and *Dota 2*, there are many opportunities for people to make something. Players can create their own strategies; they can suggest new concepts for heroes and champions to the developers or even design skins and characters themselves.

We seem to be able to improve a lot mentally, especially in stamina and strategic thinking playing *League of Legends* and *Dota 2*. Winning is

²⁶ “‘Farming’ is the term used to describe the actions undertaken by a player with the goal being the acquisition of gold. It is most used to describe a hero that is killing jungle or lane creeps, however the role of a ganker can be described as ‘Farming heroes’ as that is their main form of gold gain. Farming is most often done by core heroes, but also other roles to a lesser extent. Despite this it is important to consistently farm throughout a game of *Dota 2*” (Dota2.Gamepedia.com, “Farming”).

only possible when people make smart choices as a team which in combination with intransitivity keeps these games interesting. Players can only grow over time if they productively solve their arguments with their fellow players. Additionally, players of *League of Legends* and *Dota 2* are being taught that cheating is anti-social since shortcuts are not a natural part of the games and cheaters in professional leagues are often banned from a league (LCS Rule Set 2019 paragraph 14). People care about the outcome of their matches because it changes how the community perceives them.

When compared with the two opposites narratology and ludology in mind, the two MOBAs show many ludic, non-narrative elements such as rules, a goal and intransitivity. At the same time, *Dota 2* and *League of Legends* both have narratives to offer, which will be analysed in the chapter on cultural aspects.

2.6 Summary

Looking at *Dota 2* and *League of Legends* from a Game Studies perspective, they are both computer games and esports titles which cannot (yet)²⁷ be played on mobile platforms. They both have a goal, rules, a feedback system, and people participate voluntarily. Playing *Dota 2* and *LoL* requires players to think several moves ahead and to coordinate actions with their teammates. Therefore, they are social and strategic games, unthinkable without digital technologies, because computer power must be used to run the games, calculate probabilities, manage teams and many more things.

Every second of *Dota 2* and *LoL* matches is recorded and the program code usually does not allow players to overstep rules. Therefore, the two games are relatively immune to disputes, compared to analogue games. Complete fairness at this point cannot be guaranteed since people can buy illegal codes to cheat in the games. In chess and soccer, as in esports, rules are given before the match and cannot be changed during a match.

²⁷ Riot Games just announced on October 15th 2020 that “it is bringing the multiplayer online battle arena to iOS and Android in 2020” (Grubb para. 1).

The goal in the two MOBAs is identical, namely destroying the opponents' main structure.

Puzzles in games which become more difficult as the game progresses are the most enjoyable because they challenge our critical thinking (see Juul 2005: 95) while they enable us to have flow experiences. Both *LoL* and *Dota 2*, as many other MOBA titles, challenge players with difficult strategic choices, while learning in the game automatically leads to an ever-growing level of difficulty (an endless “skill ceiling²⁸”).

MOBAs – if they are to be analysed in terms of ludology and narratology— should be approached from both angles. There seem to be more ludic aspects about MOBAs than there are narrative elements, yet the narrative side to MOBA games exists and therefore should be analysed in the chapter on cultural aspects.

3 MOBAs from a Cultural Studies Perspective

According to Nünning and Jucker, the “most pressing question of Cultural Studies is, how the term ‘culture’ should be defined” ([translated]; Nünning and Jucker 148). They deem the following convictions to be the most important ones for scholars who try to define culture: The idea that culture is “made by humans” ([translated]; *ibid.*), the thesis that “culture cannot be limited to be “high culture only” ([translated]; *ibid.*) and the idea that culture is “not simply the sum of artistic activities of a community” ([translated]; *ibid.*). Finally, “culture should not only be seen as a material good – the cultural possessions of a nation – but also as a social and mental aspect of society” ([translated]; *ibid.*). Similarly, cultural studies scholar Lewis describes culture as

[...] an assemblage of imaginings and meanings that are generated by a given social group. [...] The given social group may be formed around a broad gradient of human communities, activities and purposes. Communication is the central force which binds social groups to culture; (Lewis 18)

Since the mental, material, and social dimensions of a culture form a complex unit, they can only be fully understood if they are analysed

²⁸ “In layman’s terms, a skill ceiling is the highest potential skill there is in a given activity. You can be decent [at playing the piano] if you practice for a few years, but the world’s best pianists showcase the full capabilities and possibilities of the instrument. In other words, playing the piano has a very high skill ceiling. On the other hand, a task like data entry typically has a rather low skill ceiling, because working at peak efficiency is generally quite easy” (Draper para. 3)

under linguistic, literary, and historical aspects at the same time ([translated]; see also Nünning and Jucker 168). Therefore, the chapter on the History of MOBAs in this book will trace *League's* and *Dota 2's* historical and cultural development. Afterwards, the chapter on the Cultural Intertextualities of MOBAs will try to join the historical insights with the literary and linguistic findings in the two games.

Aleida Assmann warns us that if we assume “everything is culture, the positive methodological outcome is that all areas of human life and experience are open to cultural study – from gambling machines to teddy bears to waste” (Assmann 13).

In the 1950s, Stuart Hall, stressed that the field of Cultural Studies “is a serious enterprise or project, and that is inscribed in what is sometimes called the ‘political’ aspect of cultural studies” (Hall, Stuart 1992: 278). Politics were not “inscribed in it”, but Hall explained that there was “something at stake in Cultural Studies” (ibid.). Oliver Marchart also stresses the political side of Cultural Studies. He believes that we are obliged to engage in Cultural Studies, since culture is not “harmless” ([translated]; Marchart 12). He explains this statement by saying that “political and social realities are produced and reproduced in the field of culture – as for example national or ethnical identities – which in the worst case could trigger war and civil war” ([translated]; ibid.). Terry Eagleton did not see culture as a “harmless” thing with no political impact either. He wrote in 2000: “In Bosnia or Belfast, culture is not just what you put on the cassette player; it is what you kill for” (Eagleton 38). Lewis, sees the politicalness of his field in the fact that “[...] major media corporations like Fox Network have the power to create and distribute their version of the world (e.g. the Iraq War) more than smaller companies, community broadcasters or individuals” (Lewis 6). He is convinced

[...] our ability to make sense of the world we live in is now absolutely dependent on our relationship with the media. It is not that we are ‘conditioned’ by the various information and entertainment media, but rather that we are a part of them since our knowledge of ourselves and our world is filtered through their images and language. (Lewis 17)

Noam Chomsky argues that the corporate media and US government have simply asserted their interests and elite ideology over the citizens of the US and indeed the whole of the world, when a ‘war on terror’ was legitimized by claiming that Saddam Hussein was responsible for the 9/11 attacks:

Also in September, a propaganda campaign was launched to depict Saddam Hussein as an imminent threat to the United States and to insinuate that he was responsible for the 9-11 atrocities and was planning others. The campaign, timed to the onset of the midterm congressional elections, was highly successful in shifting attitudes. It soon drove American public opinion off the global spectrum and helped the administration achieve electoral aims and establish Iraq as a proper test case for the newly announced doctrine of resort to force and will. (Chomsky 2003)

According to Chris Barker and Emma Jane, Stuart Hall explores “representations of and ‘for’ marginalized social groups” and “the need for cultural change” (Barker & Jane 5). They say for Hall, “Cultural Studies is a body of theory generated by thinkers who regard the production of theoretical knowledge as a political practice” (ibid.). Assmann further explains that Hall’s “driving force was to help multiethnic societies with a history of colonial oppression to achieve multicultural recognition and quality of opportunity” (Assmann 21). In this endeavour, the most important themes were “youth and working-class culture, old and new media, women and ethnic minorities” (ibid.).

Since the 1960s, Literature Studies engaged in several genres of Popular Literature, such as detective novels, science fiction or western (see also ibid.). Afterwards, these areas were extended and today it is quite common and accepted that term papers focus on topics of popular culture, such as TV drama, cyberpunk, soap-operas, or Beatles songs (see also ibid.). “Central to the interests of Cultural Studies are the cultural values and norms of society as well as collective myths and stories which our understanding of ourselves and our culture consist of” ([translated]; Nünning and Jucker 149). Culture is always mediated through signs and texts (see also ibid. 150). Therefore, it is crucial to find a culture’s self-perception in values and norms in texts which are as representative as possible (see also ibid.). Trusting Nünning and Jucker we should assume that a comparison of *Dota 2* and *League of Legends* is a good choice if one is aiming at finding this self-perception. As described and proven in

the introduction, these games are highly popular and therefore, representative.

The focus of Kulturwissenschaft, according to Nünning and Jucker, is how people from different cultures perceive reality together; their view of themselves and their world, the values and norms that determine their actions (see also Nünning and Jucker 154). In this context, *Dota 2* and *League of Legends* are interesting objects for research, since they are home to players from many different cultures.

To understand better how many people are playing *League of Legends* worldwide, I extracted the number of players for each server from <https://op.gg> and calculated the growth by percent. As is stated on op.gg, there are only stats available for players that are ranked above Bronze, which means that players who have not been ranked yet³⁸ are not included in the following statistics:

Server	Population 2018	Population 2020	% Change
Korea	2,249,606	3,878,509	72.4%
EU West	2,010,943	3,112,127	54.8%
North America	1,232,157	1,726,130	40%
Vietnam	1,164,877	N/A ³⁹	---
EU Nordic and East	1,110,123	1,560,010	40.5%
Brazil	952,249	1,370,524	43.9%
Philippines	832,277	N/A	---
Turkey	574,592	820,695	42.8%
Taiwan	449,64	N/A	---
Latin America North	435,771	689,731	58.3%
Latin America South	405,618	688,672	69.8%
Russia	147,03	214,561	45.9%
Oceania	144,718	210,306	45.3%
Singapore	79,194	N/A	---
Japan	73,476	115,552	57.3%

³⁸ People who play *League of Legends* must play a couple of matches before the game tells them on which skill level they are playing.

³⁹ In some countries, people use the service Garena to play *League of Legends* (<https://lol.garena.com/download>). Garena stopped supporting the Riot API in 2019 (a software connection) in 2019, wherefore there is no data available for those regions from then on.

Thailand	68,427	N/A	---
Indonesia	35,39	N/A	---

Figure 3 - League of Legends server by ranked population 2020 vs. 2018

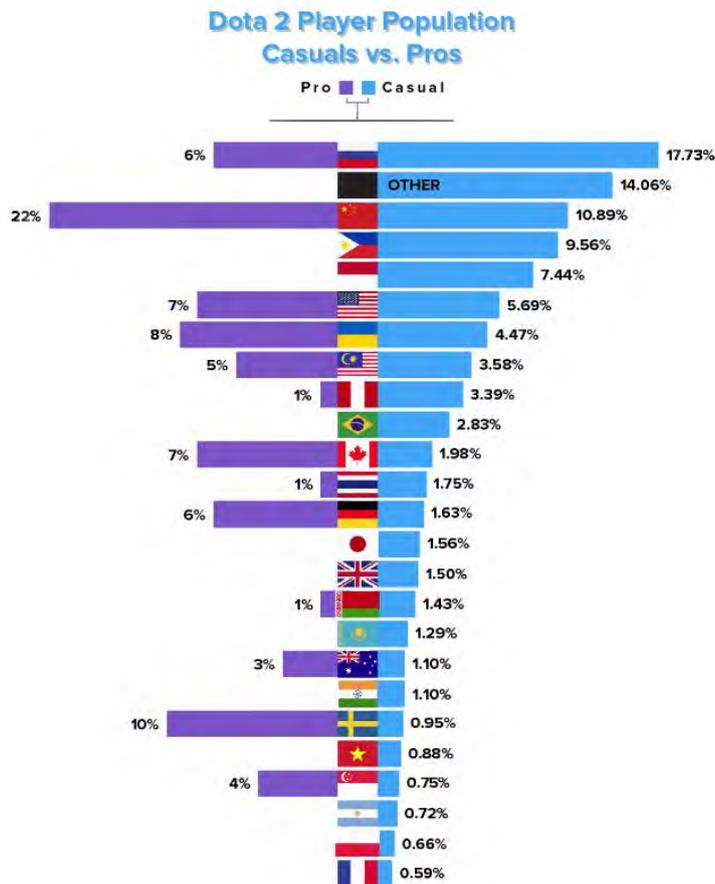


Figure 4 - Dota 2 player population by country (Rabinovitch 2017).

The diagram about *Dota 2* player population (Figure 4) adds another dimension by listing the percentage of professional players. This can be left out in a comparison between this diagram and the *League of Legends* players by server (Figure 3). While Korea, Europe and North America play a significant role in *League of Legends*, Russia, China and the Phillipines are important regions in *Dota 2* before Indonesia and the United States. According to Lewis, today's

[...] compression of time and space constitutes a new historical epoch of 'contiguous distance' by which the immediate transfer of finance, news or entertainment can draw people from their distant cultural and physical spaces into the virtual world of mediation – and its distinctive culture of televisualisation. Thus, while capitalism has always carried its products across spatial and cultural borders, the new economy concentrates value into forms that can be instantaneously transacted across vast distances in an instant. (Lewis 7)

Dota 2 and *League of Legends* can of course be described as forms of entertainment, which draw many people from many different countries (when we are looking at the two previous statistics) from their “distant cultural and physical spaces” into a “virtual world of mediation”, or in this case, the servers on which the two games are being played. *Dota 2* and *League of Legends* could therefore be seen as “products”, which can be “instantaneously transacted across vast distances”, thereby allowing for a capitalism “across spatial and cultural borders”.

Nünning and Jucker further explain that Cultural Studies wants to understand one or, even better, several English-speaking cultures in as much detail as possible (see also Nünning and Jucker 154). Literary texts are supposed to provide answers that go beyond questions of linguistics and literature (see also *ibid.* 155). At the same time, linguistics, and literature, but also other forms of media are the most important objects of research or tools that can help understand foreign cultures (see also *ibid.*), while understanding cultures also has a political dimension: Lawrence Grossberg is an American scholar of Cultural Studies and popular culture who believes that scholars like him should not function as “analysts of the contemporary” in order “to offer a normative politics or even morally based political judgement, although it is sometimes unavoidable and perhaps necessary” (Grossberg 97). As a critical scholar, he does not want “to tell people what they should be or should desire” (*ibid.*). Still, he thinks that Cultural Studies is political “in relation to the questions it asks” (*ibid.*), with the restriction that “one cannot control how the stories one tells will be taken up in the name of political struggles (*ibid.*). Barker and Jane “support the idea that cultural studies provide a useful way to think about and engage in cultural politics” but they do not want “to be prescriptive about the form these politics might take” (Barker and Jane 5). Summarizing their findings, they see Cultural Studies as “an interdisciplinary field in which perspectives from different disciplines can be selectively drawn on to examine the relations of culture and power” (*ibid.* 7). Going more into detail, they say that the forms of power that Cultural Studies explores are “diverse and include gender, race, class, colonialism, etc.” (*ibid.*). They also highlight that Cultural

Studies “seeks to explore connections between these forms of power and to develop ways of thinking about culture and power that can be utilized by agents in the pursuit of change” (ibid.).

This thesis does not aim to tell people what they should desire, but agreeing with Grossberg, this thesis and its results could be political in the relation to the questions it asks.

Since “the central strand of cultural studies can be understood as the study of culture as the signifying practices of representation”, we are required to “explore the textual generation of meaning” (Barker and Jane 10). The textual generation of meaning in *Dota 2* and *League of Legends* will be analysed in detail in the chapter on *The Cultural Aspects of MOBAs*. Since a central question of this thesis is why two games as old as the two in question were still among the world’s most popular video games, it is necessary to follow up on this in the *Conclusion*. The reason for their popularity might not only be a cultural one, but also a reason or mechanic that might have political implications. Since Cultural Studies is “concerned with modern industrialized economies and media cultures organized along capitalist lines” (Barker and Jane 11), it is important to note that cultural “representations are produced by corporations that are driven by the profit motive” (ibid.). Cultural Studies explores “why meanings are inscribed at the moment of production” (ibid.). Cultural aspects found in MOBAs are analyzed in this book in terms of why they have been chosen. Cultural Studies scholar Jeff Lewis explains that it is typical of media producers to “draw on the vast ‘library’ of meanings that already exist in culture, including their own professional judgement, to create their texts” (Lewis 5). It could be assumed that publishers VALVE and Riot are more in control of the production process than the consumers are – we shall investigate their relationship more closely, to find out how much the audiences of the two games are involved in the cultural production of the games.

Said production process, or the making of games can be considered a way of ‘world-making’, Assmann writes about about the making of culture:

The most essential strategic element of modern *Kulturwissenschaften* is their undermining of the [...] nineteenth-century oppositions that remained in force

since the 1970s. While the concept of 'Geist' aimed to identify, isolate, and reaffirm an all-important factor in the making of culture, *Kulturwissenschaften* focus their attention on structures, processes, and practices in a context which from the very outset is seen as technomorphic. At the centre of this new paradigm is the axiomatic constructiveness of the media, which are no longer regarded only as forms of representation but also as genuine ways of 'world-making'. (Assmann 24)

A switch from 'Geist' to the media has taken place. Any forms of media are 'world-making' on principle. They are no longer "intermediaries", but "viewed more as genuine organizational forms of the worldly human experience" (ibid.). What Assman describes here, can of course be traced back to Hegel, who described the 'Geist' as follows:

The mind [Geist] is conscious in its simple truth and splits its moments apart. Action separates it into substance and consciousness thereof and separates substance as well as consciousness. Substance, as general essence and purpose, opposes itself as isolated reality; the infinite center is self-consciousness, which, in itself, becomes the unity of its substance and its substance, it now becomes for itself, unites the general being and its isolated reality, elevates them to that and acts morally - and brings that down to this and the purpose that only carries out imagined substance; [327] it produces the unity of its self and substance as its work and thus as reality. [translated] (Hegel 327)

In Hegel's terms, reality is a result of the existence of the mind, or 'Geist' as we can see here. Lewis also describes the media as being involved in a production process, a production of meaning (see also Lewis 4). In the production of meaning, Lewis does not see audiences as "passive receivers of messages" (ibid. 5). For him, they are rather

[...] active creators of meaning, drawing on their own personal store of pre-existing experiences and meanings, as well as specific texts and the vast 'library' of imaginings and meanings that are held within culture itself. (Lewis 5)

Assmann explains how culture is shaped by its media:

During the 1960s, [...] Eric Havelock [...] focused on the dramatic influence of the alphabet on the hitherto oral nature of Ancient Greek culture, and he described how this media revolution changed ways of thinking and indeed the entire culture. His central thesis was that cultures are defined by the capacity of their media, i.e. by the technologies used to record, store and communicate information. This argument gave high priority to what had long been regarded as subsidiary factors such as writing systems, forms of communication, the dissemination of news, and methods of storing knowledge. (Assmann 25)

Assmann also stresses that this view has

[...] proved to be startlingly relevant in an age of dramatic technological evolution. It is one of the various roots that lead to the study of cultural memory, which is also historically oriented and embraces both ancient and non-European cultures. In this field, the study of media is closely linked to that of cultural memory, the importance of which as a central factor in the construction of identity and self-image of societies right through to the present has become more and more evident and is currently rapidly expanding as an independent branch of international cultural studies. (Assmann 26)

This is very interesting for this thesis, since *Dota 2* and *League of Legends* are both media which have the potential to store cultural memories, which means that a close analysis of them has the potential to reveal the identity and self-image of the people playing these games.

Upon clicking on items or almost anything else in the two games, the players will see text appear in their menu. These often quite detailed texts explain how much power for example items have or what neutral things on the map do. *Dota 2* and *League of Legends* are cultural entities created through language. There is a huge amount of narrative in the dialogues between the characters and in the background stories behind the games, which will be investigated in the chapter on cultural aspects. After all, since these games are media, they “are instruments that not only produce the world but also shape it” (Assmann 83). It does not matter which objects are

[...] under investigation [...], the perspectives and the questions raised by cultural studies are relatively clear. The focus is always on how the man-made things we call ‘culture’ are actually fabricated within a framework of specific conditions, methods, functions and consequences. (Assmann 15)

The “meanings that critics read into cultural texts are not necessarily the same as those produced by active audiences or readers. Indeed, readers will not necessarily share all the same meaning with each other” (Barker & Jane 13). Therefore, it is important from a perspective of Cultural Studies to take the interpretations of readers into consideration, since the “audiences are active creators of meaning in relation to texts. They bring previously acquired cultural competencies to bear on texts so that differently constituted audiences will work with different meanings” (Barker & Jane 41). When we examine video games or “examine the ways in which texts work, [...] we cannot simply ‘read-off’ audiences’ meaning production from textual analysis” (Barker & Jane 13). Based on these theories about the interpretations of readers being important in understanding the meaning of a text, the opinions of players of *Dota 2* and *League of Legends* shall be taken into consideration, since every single player of these games will most likely have a unique experience and opinion. Hans-Georg Gadamer is one of the most famous representatives of hermeneutics and literary reception studies. He already

argued in 1976 that understanding is always from the point of view of the person who understands:

The aesthetic consciousness realizes a possibility that as such we can neither deny nor diminish in its value, namely, that we relate ourselves, either negatively or affirmatively, to the quality of an artistic form. This statement means we are related in such a way that the judgement we make decides in the end regarding the expressive power and validity of what we judge. (Gadamer 1976: 4)

This again supports the idea that people who are perceiving something (e.g. the reading players) are involved in a production of meaning (see also Barker and Jane 41). Of course, the meaning of a text (or a video game) “is the outcome of the oscillations between the text and the imagination of the reader” (Barker and Jane 41-2), because the perceived text or game paints a picture in the mind of the reader or reading gamer – the perception of the read or played is maybe not exactly the image the author or game designer had in mind. Therefore, “the interactive character of computer games makes them a valuable site to explore the active relationship between author, text and reader” (Barker and Jane 587). But players of *Dota 2* and *League of Legends* are often not only interpreting the game in their own way, they are also often contributing to the contents of their games.

Therefore, it is important to analyse the correlation of other media with the two MOBA games in question, since intermediality and correlation with other forms of art are some of the most relevant topics in Cultural Studies (see also Nünning and Jucker 162). In the chapter on the Cultural Aspects of MOBAs, an attempt will be made in listing and examining all the different media and forms of art that occur in the cultural production of the two games. When references to media or literature of earlier epochs can be found in *Dota 2* and *League of Legends*, “this combination of the old and the new” might “show that a cultural approach should not be confined to contemporary texts but can also shed light on the literature of earlier epochs” (Assmann 12).

The following chapter on Reception Studies is exploring how publishers and players have over time developed the games which we today often know as MOBA games. Lewis believes that “we are nevertheless able to imagine and identify with a culture or community of other humans

because of the mass media, their images, narratives and information” (Lewis 15). *Dota 2* and *League of Legends* could certainly be seen as mass media, given the masses of people playing these games. In the the Cultural Comparison chapter, we will see a lot of images, narratives, and information. What we are aiming at the most is imagining the cultures of these games, to have an insight into the cultural aspects, which are genre defining.

4 The History of MOBAs

“You have to know the past to understand the present.”

- Carl Sagan

Video games are categorized into different genres. One scientific method to understand the major differences and similarities between VALVE’s *Dota 2* and Riot Games’ *League of Legends* is going on a journey to the origins of these two games and the origins of their genre, called the Multiplayer Online Battle Arena (MOBA) genre.

As early as 1958, two people could play tennis against each other with aluminium controllers and an oscilloscope for a display:

The first video game-esque entertainment devices originated as far back as 1947. By 1958, [...] advances gave rise to ‘Tennis For Two,’ [by William Higinbotham] one of the first video games that would be recognizable to a modern audience — a virtual game of table tennis. (Lynch, Andrew para. 4)

Since *League of Legends* and *Dota 2* are essentially competitive video games, it is an obvious thought to jump ahead in time to the first competitive digital game:

In 1972, the classic Atari game Pong made multiplayer games even more popular. [...] it was among the first games to be played in arcade cabinets and simultaneously the first successful commercial video game ever. (Bornemark 2)

The arcade game *Pong* (1972) allowed two players to compete against each other, “home gaming became an avenue for competition, thanks largely to the popularity of the *Pong* arcade game” (Lynch, Andrew para. 4).

The early real-time strategy (RTS)⁴¹ title *Herzog Zwei* (1989) by the Japanese studio Technosoft was a competitive game for the Sega Genesis⁴² 16-bit home video game console (see also Egenfeldt-Nielsen, Smith and Parares Tosca 74). Online journalist Greg Lockley is crediting *Herzog Zwei* with “spawning” the RTS genre (Lockley para. 3), as “the title had players control a single [command] unit across a sprawling battlefield and defeat enemies” (ibid.). It is important to add to Lockley’s brief description of *Herzog Zwei*, that each player was able to control his or her single unit in one of two opposing sides on the battlefield—just as in *Dota 2* and *League of Legends* today, but still without the idea of two teams consisting of five individual players facing each other (see also Egenfeldt-Nielsen, Smith and Parares Tosca 74). Yet, *Herzog Zwei* is taking place in real-time (see also ibid.; like *Dota 2* and *LoL*) and is playable PvP (Player vs. Player; see also ibid.), and PvE (see also ibid.; PvE stands for Players vs. Environment⁴³).

⁴¹ “Real-Time-Strategy (RTS) can be viewed as simplified military simulations. Several players struggle over resources scattered over a 2D terrain by setting up an economy, building armies, and guiding them into battle in real-time” (Buro 1). Real-time means in terms of RTS games that players do not have to wait to perform actions. Instead, they can constantly keep playing play until the game is over. Therefore, one could also say that real-time games are fundamentally different from turn based strategy games (such as chess, where players take turns).

⁴² “The SEGA Mega Drive was a fourth-generation video game console. It was released in Japan on October 29, 1988” (Wolf 559). In North America, this SEGA console was known as the SEGA Genesis (see also Wolf 556). In Japan, this console was released as the SEGA Mega Drive (see also ibid.).

⁴³ “[...] whereas other games focus solely on player-versus-environment (PvE) gameplay in which players cannot combat each other and instead focus primarily on cooperation for success” (Wolf 384).; Official StarEdit FAQ managed by Blizzard Entertainment: <http://classic.battle.net/scc/faq/staredit.shtml>.



Figure 5 - Herzog Zwei (Technosoft 1989)

Moving forward in time, the MOBA genre can also be traced back to the release of Blizzard Entertainment's "best-selling" RTS *StarCraft* (1998) (see Altay para. 1). *StarCraft* "is a real-time strategy (RTS) computer game designed by Chris Metzen and James Phinney, developed by Blizzard Entertainment, and released March 31, 1998" (Wolf 624). *StarCraft* included a map editor called *StarEdit*, a "level editor" that invites "players to assume [a] more participatory role" with its "level and scenario editing functionality" (Pereira, Machado Santa and Roque 1). Players designed countless mods⁴⁴ within *StarCraft*, many of which later came to have a profound effect on gaming, as for example, Tower Defense maps on *StarCraft* helped popularize the Tower Defense genre:

Tower defense (TD) games first started to appear in the early 2000's as custom maps for real-time strategy games such as *StarCraft* and *Warcraft III*. The basic premise of a TD game is to protect a building or resource from wave after wave of progressively more powerful enemies, known as creeps. The player defends by building a variety of attack towers along the creep's path, each with attack strengths and weaknesses. (Simmonds para 1)

People who make custom maps are called "modders":

A "modder" [...] is a person who created mods. Such modifying requires a degree of technical skill and may focus on the sound, graphics, maps, mechanics, narrative, game modes, or physics of the game. From the player's perspective, a mod can, for example, offer new items or characters to play with. Modifications fall into wider categories of custom content, user-generated content, and player co-creativity. (Wolf 235)

⁴⁴ A directory of countless downloadable *StarCraft* mods is available under: <https://www.moddb.com/games/starcraft/mods>.

In the words of Simon Ferrari, the history of the MOBA genre is about “[w]hat happened when a community of young modders [...] imagined, and then realised, their ideal kind of game” (Ferrari 2).

There are three factions in *StarCraft* players can choose from (Terrans, Zerg, Protoss; see also Wolf 624). *Starcraft II* (2010) is the current version of *StarCraft* on the market and regularly being “patched by Blizzard to balance the game and make it more interesting to players. These patches include changes in upgrades, units and buildings” (Avontuur 17)⁴⁵. *StarCraft* was regularly patched, but it was not the first game to be patched regularly. For example, patches for *Ultima Online* (1997; released one year prior to *StarCraft*) can still be found on *OUguide.com* (Ouguide.com, “Client Patch”).

Age of Empires (1997) was also patched sometimes:

In spite of all that this game has going for it, there were a few problems. In the initial release, unit path finding was a big problem. There were a few other minor complaints as well, such as unit building limits. With the release of the 1.0A patch, most of these issues have been dealt with nicely, and are no longer problems. (Holland para. 14)

Before MOBA-type games became popular, RTS (real-time strategy) such as *StarCraft*, were among the most popular genres, with *StarCraft* in 1998 being the

[...] single best-selling game of the year, buoyed by Blizzard’s just-launched Battle.net service that allowed people to play against each other all over the world. *StarCraft* was also a key title in the burgeoning e-sports industry in Asia, and still remains insanely popular. (Jensen para. 15)

StarCraft became particularly popular in South Korea with professional competitions being broadcasted live on television:

Originally released in the United States by Blizzard Entertainment, *Starcraft* became popular in Internet cafes throughout South Korea in 1998. The cafes fostered competition and spectatorship. As the phenomenon grew, competition became tournaments and leagues; spectators became fans and community. Dedicated television channels broadcast *Starcraft* matches in South Korea. This has fostered a complex supporting infrastructure of professional leagues, teams, and superstars. (Cheung and Huang 763)

⁴⁵ A recent definition of “patch”: “A patch is a software update comprised code inserted (or patched) into the code of an executable program. Typically, a patch is installed into an existing software program. Patches are often temporary fixes between full releases of a software package. Patches may do any of the following: Fix a software bug, Install new drivers, Address new security vulnerabilities, Address software stability issues, Upgrade the software” (Technopedia.com, “Patch”).

StarCraft was regularly patched, but as an overview of all patches on *Liquipedia.net* shows, not more often than every 6 months⁴⁶. This is not as frequently as the community-made mod *DotA* was patched⁴⁷. Since *DotA* was patched more often than *StarCraft*, one might ask which reasons were behind this increase. Looking for answers, a quote by Simon Ferrari gives some valuable insights: “League of Legends emerged from a community of player-modders engaged in a form of creative play” (Ferrari 1). These modders kept maps and patches for the games they enjoyed modifying:

In 1998, a modder called Aeon64 created Aeon of Strife⁴⁸, a fan-made custom map for Blizzard’s real-time strategy game *StarCraft* [Broodwar]⁴⁹. In it, players controlled a single hero unit and fought with a team against computer-controlled units in three lanes. These lanes connected the bases of two teams. The objective was to destroy the other team’s base. (Minotti 2014 para. 4)

In “The history of DotA” on Gosugamers.net, Wayne Ng describes the *Aeon of Strife* map as a cooperative game with

[...] four heroes facing off against endless waves of computer-controlled creeps in four lanes. The players would have endless computer-controlled creeps on their side as well, except these were weaker than the enemy creeps. (Ng para. 1)

Aeon of Strife had some notable differences from today’s MOBAs. It was not a player vs. player (PvP) game (see also Minotti 2014 para. 4). Instead, one team of player-controlled heroes went up against a team of computer-controlled characters (see also *ibid.*). Heroes also did not level up as the game progressed (see also *ibid.*), and there was not a “jungle of extra creeps ([...] computer-controlled monsters) and roads between the three lanes” (*ibid.* para. 5).

Many things in *Aeon of Strife* can still be found in *League of Legends* and *Dota 2* today: The game mechanic called “last-hitting”, known to all *League of Legends* and *Dota 2* players, is also found in *AoS* (see also Lanepushingames.com, “Aeon of Strife”). Michael McTee explains last-hitting as follows:

⁴⁶ An overview of all *StarCraft* patches: <https://liquipedia.net/starcraft/Patches>.

⁴⁷ An overview of all *DotA* patches: <https://liquipedia.net/dota2/Portal:Patches#DotA>.

⁴⁸ A lot of Aeon of Strife maps can still be downloaded here <http://sc.nibbits.com/search/?q=Aeon+of+Strife&w=maps> and here: <http://renaka.com/pages/starcraft> (Go to FB: Warrior, AoS).

⁴⁹ A popular editor for Broodwar is called “SCM Draft 2” and freely available at: <http://www.staredit.net/files/7/>

High level players are also expected to be skilled in ‘last-hitting’ the computer controlled enemy monsters, called minions. Getting the final hit that kills a minion nets the player a set amount of gold [...]. Possessing the skill and timing necessary to achieve the final hit on as many minions as possible can grant a player a significant advantage against his opponent. (McTee 5-6)

The currency in the games is slightly different, as “[p]layers gain minerals for each enemy unit that they kill” in *Aeon of Strife* (Carton: 2013 para. 18), while players earn gold, not minerals, when they execute the last hit⁵⁰ on an enemy unit in both *Dota 2* and *League of Legends* (see also Ferrari 6; 9; 10 and Winn 12).

Each player in *Aeon of Strife* controls a single hero unit out of a “roster of 8 hero units” (Fandom.com, “Aeon of Strife”). Players fight enemy heroes and AI-controlled enemies (see also *ibid.*). The game takes place between two opposing teams, “[t]he game was to destroy the enemy’s core structure, the Xel’naga⁵¹ temple (*ibid.*). The map has “three lanes” (*ibid.*). The gameplay is happening in real-time. The game’s currency can be spent on armour or attack damage upgrades:

The player spent this currency on armor or weapon upgrades, without any concept of levels outside the number of said upgrades a player had bought. This concept became prevalent in later MOBAs, though in later versions of the game, a unit would be dropped from a dropship in a secluded corner of the map, acting as an ‘activator’ to add some skills to a unit. (Fandom.com, “Aeon of Strife”)

The possibility to upgrade characters allows for a sense of progression.

⁵⁰ A “last hit” is the last hit dealt to any creature in the game. Only if a player deals this killing blow, gold will be rewarded to him or her (see also *Dota2.Gamepedia.com*, “Last-hitting”).

⁵¹ In Blizzard’s *StarCraft* universe, the xel’naga are described as “the most powerful species the universe has ever known”, the Protoss (one of the three factions in *StarCraft*) worship them as gods (Fandom.com, *Starcraft Wiki*, Xel’Naga).



Figure 6 - *Aeon of Strife* (Carton 2013)

After *AoS*, *DotA* appeared in 2002, a *Warcraft III: Reign of Chaos* (*WC3:ROC*) mod based off of *Aeon of Strife*:

In 2002, Blizzard released its next real-time strategy game, *Warcraft III*. Like *StarCraft*, it came with tools that enabled players to create custom maps and scenarios. In 2003, a map editor named Eul⁵² created a mod inspired by *Aeon of Strife* called *Defense of the Ancients*. Soon, other players would create their own version of *Defense of the Ancients* (often called *Dota*), each adding his own heroes, items, and other differences. (Minotti 2014 para. 7)

Warcraft III: ROC was released in 2002 and *Aeon of Strife* was ported over to its powerful World Editor (see also Liquipedia.net, “*Dota History*”). Bill Roper, Vice President of Blizzard North in 2002, described the new world editor as follows:

Finally, the world editor that comes with *Warcraft III* is simply amazing and is easily the most powerful we have ever created. You can change and and all aspects of the game, from units to maps to cinematic sequences to sounds to quests – your imagination is your only limitation. (Roper 101)

Wayne Ng describes how the new editor made a big difference for modders:

Now freed of the limitations of the *StarCraft* map editor, modders could create a much more detailed game. Players could gain experience alongside money, gain levels, learn more powerful abilities and buy equipment. Many of the game mechanics in modern *DotA* can be found in maps from this period. (Ng para. 3)

About modding in *StarCraft* and *Warcraft*, Ferrari wrote: “MOBA may represent the first videogame genre co-created entirely by a play community” (Ferrari 4). What he meant becomes clearer in the following: A modder called “karukef”⁵³ took advantage of the ability in

⁵² Kyle “Eul” Sommer.

⁵³ If people’s actual names cannot be found out, they will be referred to by their alias.

the *Warcraft III: Reign Of Chaos* World Editor⁵⁴ to design custom spells (see also Ferrari 3; see also Feak & Mescon 5). Then, later in 2002, a modder called Kyle “Eul” Sommer borrowed some of karukef’s ideas to create an *AoS*-styled map called “*Defence of the Ancients (DotA)*”, which would become one of the most popular maps on the *Warcraft III: ROC* client Battle.net (see also *ibid.*). karukef confirms Eul borrowing a few of his ideas for *DotA* on the *WC3c.net* forums in 2006:

Eul [...] gave me more credit than I deserved for his great series. This is just one of the overly generous things he said about my map, at his regular forum at thewarcenter.com: Eul: ‘It was the first Battle.net map to use custom spells, and was the true inspiration for making DOTA. This map is a piece of WarCraft 3 and gaming history.’ (karukef para. 1)

After *Warcraft III: The Frozen Throne (WCIII:TFT)* came out July 1st 2003, Eul made a version called *DotA 2: Thirst for Gamma* (see also Liquipedia.net, “Dota history”). In 2008, Michael Walbridge wrote about *DotA* on Gamasutra:

If you’ve played Warcraft III on Battle.net lately you’d feel like more people were playing Defense of the Ancients, popularly called DotA, than the actual Blizzard game it’s based on. (Walbridge para. 2)

Warcraft III itself was a very complex RTS (Real-Time Strategy) game. *Warcraft III* allowed players to automatically find opponents (you were able to look for one opponent or even for teammates and an opposing team) based on their personal level of strength (skill level):

Back in ROC all the way to TFT patch 1.15, the matchmaking used to be level based. It was simply trying to match you with people 6 levels above or lower than you. It worked out great, but there were some issues [...]. (*Reddit.com*, “Warcraft 3 Matchmaking History”)

This most significant new feature was called “Anonymous Matchmaking” (Roper 100). This new feature came with more possibilities for multiplayer games over Blizzard’s *Battle.net*:

There are a host of new features available for multi-player games over Battle.net, including anonymous matchmaking of similarly ranked ladder competitors, individual and team ladder competitions, [...] global friends lists [...] (Roper 101)

These features were interesting for modders, but could not be used for mods, only for the original *Warcraft III*.

⁵⁴ *Warcraft 3: Reign of Chaos* was released July 3rd 2002.

Many people became modders of the *TFT* version of *DotA*, creating derivatives of *DotA* (Liquipedia.net, “Dota History”). One of these mods had a first version called “*DotA Allstars Beta v0.95*” released February 3rd, 2004 (ibid.). *DotA Allstars* originally was a collection of the most popular heroes from the other mods and initially developed by “Meian” and “Ragn0r” (ibid.). In March 2004, Steve “Guinsoo” Feak released *DotA Allstars v.3.0d* (ibid.). Ferrari summarizes Feak’s influence as follows:

The evolution [...] of League of Legends intensifies the direction that DotA Allstars took under Feak’s stewardship, in three important ways: 1) a steady expansion and balancing of the champion pool, 2) the use of item combination mechanics to drive character builds, strategies, and the progressive modification of metagame theory-crafting⁵⁵, and, most importantly, 3) a focus on map objectives following Feak’s introduction of the Roshan “boss” NPC to DotA—the blue and red aura buff creeps, the dragon (a massive gold reward), and Baron Nashor (League’s⁵⁶ version of Roshan). [...] The game’s strong emphasis on claiming map objectives serves to stratify MOBA play, making it possible to easily identify distinct roles and phases in a typical match of League of Legends. (Ferrari 6)

Steve “Guinsoo” Feak added Roshan: “April - DotA Allstars v.4.0a is released by Guinsoo” (Liquipedia.net, “Dota History”). Roshan is the most powerful neutral creep, who will be explained in detail in the Ludic Comparison. During Guinsoo’s era, many new heroes and items were introduced (see also Ng 2011), the competitive mode was stabilised, and organized competitions emerged (see also ibid.). As more and more people began playing, the workload became massive, which resulted in Guinsoo recruiting Alex “Neichus” Moss and Abdul “IceFrog” Ismail⁵⁷ from the clan he was playing in: Team DotA Allstars (TDA) (see also ibid.).

The team introduced many new heroes such as Ursa Warrior, Atropos and Pugna (see also Liquipedia.net, “Dota History”). The final version of the 5.xx series was *DotA Allstars 5.84c v2* (ibid.). The online historians on *GosuGamers.net* write about this version:

⁵⁵ Building items, strategies and metagame theory crafting will be explained in the Ludic Comparison chapter.

⁵⁶ Here, *League of Legends* is abbreviated “*League*”.

⁵⁷ Whether or not “Abdul Ismail” is IceFrog’s real name is unknown: “To date, he has remained pseudonymous. [...] In May 2017, a California court was discussing the ownership of Dota and they mentioned the name of IceFrog (Abdul Ismail) [...]. Additionally, they make reference to Icefrog working with and being employed by S2 Games” (Dota2.Gamepedia.com, “Icefrog”).

This was an extraordinary version with historical significance, because the popularity of DotA had finally exceeded the confines of its players. Official, organized and influential competitive DotA began with this version. This qualifies it as the very first stable competitive version of DotA Allstars. [...] In truth, 5.84c wasn't actually released by Guinsoo. Due to a bug in 5.84b, a modder from Russia called True.Rus developed an unofficial 5.84c. This modder rewrote the code, reduced the load time from 3min to under 20s and fixed some bugs. (Ng para. 1)

This quote illustrates how different modders such as Guinsoo or True.Rus, contribute to the development of a never static game. Compared to books and films this is an extreme difference: Books and films are usually not changed once they have been published, while *LoL* and *Dota 2* will probably never become static entities, as new content e.g., upon requests from the community is being added regularly⁵⁸.

A clan called “Clan TDA” formed the first league for *DotA* in April 2004:

The first league was Clan TDA (Team DotA Allstars) formed in April 2004. Its spread in popularity was helped in great part by the website DotA-Allstars.com founded on October 14th, 2004 by TDA member Pendragon. It was the official website for the DotA Allstars map, as well as a place for the DotA community to partake in discussions. With DotA's growing popularity, the forum would eventually grow from to over one million visitors every month, a million page views every day, and a staff of over 100 volunteers. Sadly, the website was shutdown in July 2010. For this reason, the official website of the DotA Allstars map was moved to Playdota.com and the term “Allstars” was dropped from the map name. (Liquipedia.net, “Dota History”)

After many different modders had creatively utilized the world editor of *Warcraft III* provided by Blizzard and created *DotA*, Steve ‘Pendragon’ Mescon created “*DotA-Allstars.com*, a community website for *DotA* players. He currently works for Riot Games Inc. as Director of Community Relations” (Leagueoflegends.com, “Pendragon”). This forum

expanded like nobody's business, reaching 1.5 million users. Many of these actively participated in the development of the mod by providing additional content or artwork or testing AI bots. As the years rolled on, Allstars became an enormous collaborative project, endlessly rebalanced in an ongoing effort to add new content and perfect what was already included. It became a popular game amongst cyber-athletes, featured at many tournaments around the world, and was even the subject of a song by the Swedish singer Basshunter. (Dean para. 13)

⁵⁸ For example, the LoL community (due to the popularity of basketball) asked for a “basketball hero” and the Dunkmaster Darius Skin was released (Leagueoflegends.com, “Dunkmaster Darius”) - Riot reacted to the community because it became “popular to hate Teemo” (Leagueoflegends.com, “Why hate Teemo”).

Yet, at this point of *DotA*'s popularity, *DotA* was still a mod inside *Warcraft III*⁵⁹ and not a stand-alone title. Tim Shannon, who was a producer at S2 Games at that time said that

DOTA was a massive cult hit, but it was limited by – among other things – its status as a mod [...] The people involved in its development are by and large donating their time. (Shannon para. 6)

Despite being a mod, *DotA Allstars* became incredibly popular, even so that Blizzard, the developer behind *StarCraft* and *Warcraft III* themselves, held a *DotA* tournament at their yearly main convention, Blizzcon (see also Walbridge para. 12). At one point, around 10 million people (Feak & Mescon para. 1) had downloaded and played the community-driven mod *DotA Allstars*.

On “February 28th - Shortly after the 6.x series is released [...] Guinsoo announces his departure and IceFrog along with Neichus takes over development” (Liquipedia.net, “Dota History”). Under modder Abdul “IceFrog” Ismail’s guidance, the development of *DotA* continues while also more leagues and tournaments take place:

June - DotA Allstars v.6.12 is released by IceFrog. This is the first version to be translated into Chinese by Heintje. October 10th - DotA Allstars announces that Blizzcon will host a DotA tournament. October 23rd - DotA Allstars announces that Clanbase and Electronic Sports League will host DotA leagues. November - DotA Allstars v.6.27 is released by IceFrog. The second competitive version of DotA. (Liquipedia.net, “Dota History”)

In 2006, Marc Merrill and Brandon Beck founded the gaming firm Riot Games (see also Kollar para. 11). The first person they recruited was Steve “Guinsoo” Feak (see also *ibid.*). Feak, Beck, Merrill and a few other additions from the *DotA: Allstars* community became the earliest staff members of Riot (see also *ibid.*). The studio got to work creating its first game immediately. This first game was

[...] barely recognizable as what people today know as *League of Legends*. [...] It used the same genre structure — a new style that Riot would come to call “multiplayer online battle arenas,” or MOBAs — but it was a rough sketch of what the team was going for. It even had a different name at the time: *Onslaught*. (*ibid.* para. 12)

Up to this point in time the genre did not have a name of its own.

⁵⁹ Players can only play *DotA* if they buy *Warcraft III* first and then download the DotA map to the map folder (Wikihow.com, “Play DotA”).

League of Legends was released on October 27th, 2009. One of the biggest studios and digital publishers, the VALVE Corporation, announced the release of *Dota 2* July 9th, 2013 (see also Steampowered.com, “Dota 2 Press Release”). VALVE had previously hired Abdul “IceFrog” Ismail and made him lead designer for *Dota 2* (see also Orland para. 4). The open beta began in 2011 (see also Dutton para. 1). At this point, VALVE’s President and CEO Gabe Newell claimed he did not know what the acronym MOBA stood for (see also Flakes para. 7). He called *Dota 2* an “Action-RTS (ARTS), since this seemed to make the most sense for customers” (ibid.). At this point of the MOBA history it seems helpful to recap that *Dota 2* was VALVE’s remake of *DotA*, a game created by the community as a custom game (mod or modification) for *Warcraft III*, which is a title released in 2002, created by Blizzard Entertainment, Inc. A character in *Dota 2* called “Legion Commander” says: “Multi-ogre battle arena!” (Dota2.Gamepedia.com, “Legion Commander Responses” para. 9) when she is dueling Ogre Magi (Dota2.Gamepedia.com, “Ogre Magi”). This could be a reference to video game developer Riot Games’ genre term: MOBA (Multiplayer Online Battle Arena):

Legion Commander from *Dota 2* mockingly refers to combat with Ogre Magi as a “multi-ogre battle arena”, a reference to Riot Games’ name for the genre, “multiplayer online battle arena”. (IMDb.com, “Dota 2”)

League of Legends’ only competitor on the MOBA market was a game called *Demigod* (2009) (see also Flakes para. 6). This changed with *Dota 2*’s release on July 9th, 2013, after nearly two years of beta testing, creating more competition for Riot Games (see also Flakes para. 9).

VALVE’s title was not the only MOBA game new on the market. One year before *Dota 2*’s open beta, *Heroes of Newerth (HoN)* by S2 Games came out May 2010 (see also Flakes para. 9) and in March 2014 *SMITE* by Hi-ReZ Studios (see also ibid.) was new to the genre.

Heroes of Newerth had some esports competitions already evolving in 2011 (Gosugamers.com, “Heroes of Newerth Gosu Cup #1”) and *SMITE* developed an esports scene with help of its publisher:

Hi-Rez [...] With *Smite*, they started with small weekly online tournaments [...] It wasn’t until a tournament at the launch of the game in March 2014 that the company even considered having a major event [...] (a \$1 million esports

tournament) — less than two years later, they’ve sold out two of them. (Laughton, para. 9)

Heroes of Newerth cost approximately 30 Dollars (see also Curtin para. 1), while *SMITE* could be downloaded for free (see also Smitegame.com, “Smite on Switch” para. 10), as well as *Dota 2* and *League of Legends* (see also Minotti 2013 para. 4).

Heroes of Newerth as of January 2013 had 2 million active monthly users, compared to *Dota 2* as of July 2013 4.5 million and *League of Legends* as of October 2012 32 million (Minotti 2013 para. 8).

S2 Games lifted the cost of access for *Heroes of Newerth* completely in July 2011, and James Fielding, director of design and development at S2 stated:

We’re aiming to lower the barrier of entry, making it easier for our existing players to get their friends playing alongside them. (Sullivan para. 9)

Riot Games did not run big tournaments right from the beginning, but they soon began to actively manage their esports scene:

By the summer of 2010, the League of Legends esports scene grew to the point that Riot had to embrace it. [...] Riot grafted the Season One Championship onto Dreamhack Summer 2011, a general esports event that also included Counter-Strike and StarCraft 2. (Kollar para. 41)

They created rules for *League of Legends*, as for example a rule against “poaching”. Riot Games’ Head of Esports for North America, Chris “Chopper” Hopper, explained:

Poaching can only occur when a Team Member (either player or coach) has a contract listed on the Global Contract Database⁶⁰, and another team/owner/player approaches that Team Member. (para. 2)

To promote their game to a new audience and to ensure that enough *DotaA* players would take up *Dota 2*, VALVE invited “sixteen accomplished *DotaA* teams to compete at a *Dota 2*-specific tournament at Gamescom in August 2011” (Reilly para. 1), which later became an annually held event known as “The International”:

The International is an annual double-elimination LAN tournament hosted by Valve. Winners of The International are awarded large sums of money raised by the community, as well as the Aegis of Champions. (Dota2.Gamepedia.com, “The International”)

⁶⁰<https://docs.google.com/spreadsheets/d/1Y7k5kQ2AegbuyiGwEPsa62e883FYVtHqr6UVut9RC4o/pubhtml>

The total prize money sum for The International 2019 was \$34,330,068 with the main event taking place August 20th-25th in Shanghai (see also Dota2.com, “The International”).

League of Legends upon its release in 2009 was not a mod within a previously released game. *League of Legends* is a stand-alone title by Riot Games (<https://www.riotgames.com/en/what-we-do>). Also *Dota 2*, was not a mod like *DotA*, but a stand-alone game created by the VALVE Corporation (<http://dota2.com/>) (see also Davidyuk 1).

These stand-alone games, *Dota 2* and *League of Legends*, came with a few amenities, which the mod *DotA* did not have: *League of Legends* was designed to be a beginner-friendly alternative to *DotA*. *DotA* had 112 heroes to choose from (Playdota.com, “Heroes). When you joined *League of Legends*, only “15 champions [...] were available for free play at any given time” (Fandom.com, “Free Champion Rotation”; see also Thorn para. 23). Having fewer characters to choose from might have been less overwhelming for beginners. With micro-transactions, players could buy more *LoL* champions and skins. *League* first started with 40 champions (see also Fandom.com, “List of Champions”) overall.

As opposed to *DotA*, there were tutorials (see also Fandom.com, “Tutorial” para. 1). These would allow beginners to train against the computer, before joining public matches against other humans. Such tutorials could have helped to improve the enjoyment of team matches for all players, because a new player would not have to join games without any experience (and thereby ruin the fun of more experienced players). The VALVE Corporation also set up tutorials (*Dota 2* Ingame Tutorial 2013).

The success of titles like *League of Legends* and *Dota 2* probably made MOBAs one of the biggest trends in gaming. Soon, ideas from the two games were used to create something new. *Guardians of Middle-earth* (2012) attempted to bring a similar experience to consoles albeit with simpler controllers and easier mechanics. *Infinite Crisis* (2005) by DC Comics used a roster of DC Comics superheroes and villains, while Blizzard, the developer that created the games that modders used to birth the genre’s origins, decided to use characters from their own different

franchises for their new MOBA called *Heroes of the Storm* (2015). MOBAs even became playable on mobile platforms, for example with Zynga's 2013 *Solstice Arena*.⁶¹

4.1 Summary

The Reception History chapter revealed major similarities and differences between *Dota 2* and *League of Legends*: Both games have two teams on opposing sides of the map facing each other in real-time, an idea that derived from *Herzog Zwei*. Balance, patches for balancing and for implementing community feedback are an idea that was taken from *StarCraft*. Lanes connecting the bases of two teams and creeps could already be found in *Aeon of Strife* as well as last-hitting creeps to earn minerals which in AoS are needed to upgrade a hero's skills. Another similarity of *LoL*, *Dota 2* and *Aeon* is that each player is only controlling a single unit.

Warcraft III's most significant feature, "Anonymous Matchmaking" (Roper 100), made it possible to find opponents with a matching skill level automatically and this functionality became a vital feature both in *Dota 2* and *League of Legends*.

Steve Feak added a huge neutral monster to *DotA* which could usually only be killed if the team would work together. Baron Nashor later became Roshan's equivalent in *League of Legends*. Modders created new *DotA* mods regularly and modders were themselves part of the community.

The ongoing patching process derived from *StarCraft*, was continued by all modders and is today typical for Riot and VALVE.

In *Dota 2* and *League of Legends*, community feedback is still today a source of input. On <https://www.reddit.com/r/leagueoflegends/> (3,4 million members) and on <https://www.reddit.com/r/DotA2> (609,000 members), the community is discussing the two games, inspiring developers to change the balancing in numerous ways or create new characters and items based on the community's ideas. As for example,

⁶¹ Solstice Arena was shut down in 2015.

feedback is directly given on patches for the games (*Reddit.com*, “Patch 9.18 discussion”).

VALVE also allows people on “STEAM Workshop” (*Steamcommunity.com/Workshop*) to submit content directly. For example, an artist called Anuxi has made a “Bohemian Summer” design for the *Dota 2* hero Mirana (*Dota2.Gamepedia.com*, “Mirana”) and in the VALVE Workshop people can vote for the design to be “accepted and supported in *Dota 2*” (*Steamcommunity.com/ Workshop*, “Bohemian Summer Mirana.”). Another way of submitting content and ideas to VALVE is sending an email directly to *Dota 2*’s Lead Developer Abdul “Icefrog”⁶² Ismail.

In many video games, also in *Dota 2* and *LoL*, there are achievements that people can strive for. Before VALVE and Riot released their games, *DotA* already had achievements, if players used the *DotAlicious*⁶³ client. Achievements can motivate players to behave themselves better, as many people care about their online reputation, which can be improved by achievements for friendly behaviour, which people can display in their player profiles. When *League of Legends* came out (2009), it was a free-to-play title but unlike *DotA*, there were many purchasable items inside the game to enhance the experience, such as cosmetics, map skins and other aesthetics. *Dota 2* (2013) and *SMITE* (2014) applied a similar concept, whereas *Heroes of Newerth* (2010) cost about 30 Dollars upon its release (*HoN* was marketed as a so called “boxed” title, a game which is bought, and no more costs follow the purchase. Since the initial costs are higher, some users might refrain from trying the game. *Dota 2*, *SMITE* and *LoL* are initially free – after people have begun playing them, they can spend money on these games, but they do not need to). In the beginning of 2019, the last major update for *Heroes of Newerth* was

⁶² Icefrog@gmail.com (*Dota2.Gamepedia.com*, “Icefrog”).

⁶³ DotAlicious used to be “a [...] DotA platform, with servers geographically distributed over North America and Europe. For each match, information such as: the nicknames of the players, the countries from which they [were] playing, the start and end times, the match result, and friendship between players [was] included” (Guo et al. 2); The DotAlicious client allowed players to collect achievements, for example, if someone regularly bought a courier for the team, he or she was able to display an award in his or her profile (see also *DotAwiki.de* “DotAlicious Gaming”).

announced, which might mean that *HoN* is “approaching its end” (Reyes para. 2).

Riot ran tournaments and created rules for the esports environment, which had formed around their game – and VALVE did the same. Riot and VALVE designed their games to be more beginner-friendly. For example, *LoL* offered only a few free-to-play champions to choose from and with micro-transactions, players could buy more champions and skins. A tutorial for new players was available from the start both in *LoL* and *Dota 2*. Playing tutorials before joining public matches against people would make games more enjoyable, both for the new and the old players.

5 Genre-defining Ludic Similarities: Close Comparison of *Dota 2* and *League of Legends*

This chapter will compare the ludic elements of *Dota 2* and *League of Legends* to find genre-defining similarities between the two games.

At first glance, *Dota 2* and *League of Legends* seem to be very similar games and the Reception History chapter traced them back to the same roots. Not every reader will be familiar with the essentials of the gameplay of the two games *Dota 2* and *League of Legends*. Therefore, gathering a basic ludic understanding of the two games is a logical basis for a cultural comparison of the two games.

Dota 2 currently has 117 playable heroes (42 in the category intelligence, 37 agility heroes and 38 strength heroes; Gamepedia.com, “Heroes”). *League of Legends* currently features 144 playable champions (Leagueoflegends.com, “Champions”).

Young Ji Kim in a study from 2017 investigated “What Makes a Strong Team” in *League of Legends*. He found that in *League of Legends*, “each player chooses one character type, called a champion, from over 120 champions that vary in focus (e.g., offensive vs. defensive vs. support) and skills” (3). These “chosen characters determine the strengths and weaknesses of the team, and the overall strategy the team needs to try to win the game (ibid.). This is due to the champions’ individual in-game

abilities⁶⁴ (e.g., method of attack, types of spells) and attributes (e.g., amount of damage, rate of attack).

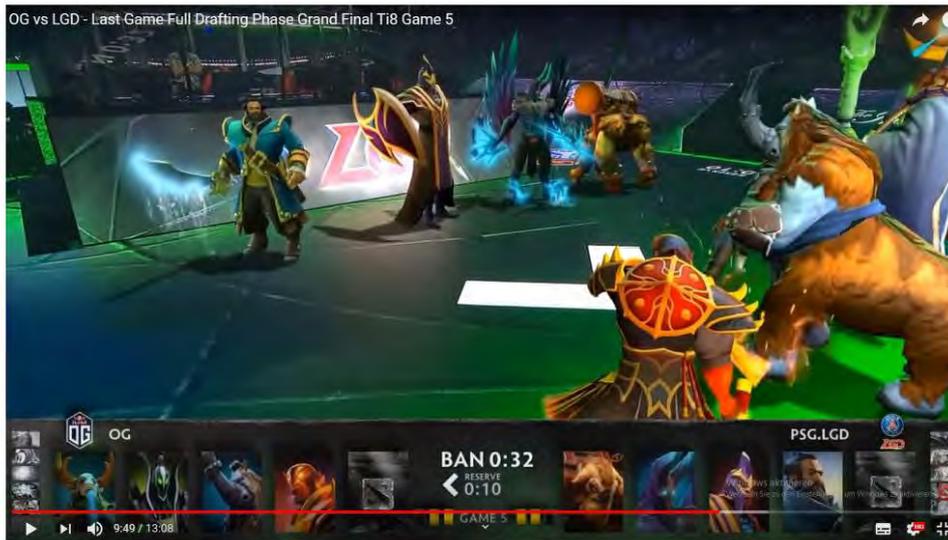


Figure 7 – The International, OG vs. LGD, The Grand Final 2018, Drafting Phase

Figure 8 is a screenshot from a broadcast of a drafting phase in an esports competition (“OG vs. LGD Grand Final”). We can see players in the Grand Finals of the *Dota 2* tournament *The International* sitting behind their screens in a glass box. The champions they have already chosen can be seen standing in front of the box. For a chance to win in *League of Legends* or *Dota 2*, the opponents’ (possible) champion picks must be taken into consideration, while the teams take turns picking their heroes. On *Medium.com*, the “Dota Observatory” offers an analysis of *Dota 2* tactics. About the 2018 grand finals the “Dota Observatory” writes:

Facing OG in this TI [The International], the opposing team had a lot of difficulties in drafting, OG had the line up that is not possible to ban against. First of all, teams always wanted to ban n0tail’s [a player of team OG] Chen and Nature’s Prophet, there were very few team’s support had such an impact to occupy two first ban slots for non-meta heroes, and then they had to ban JerAx’s [also a player of team OG] Io or Earthshaker, if OG had the 1st pick, which made that there are not enough first ban slot against OG. (Dota Observatory, “The International 2018 Draft Analysis” para.18)

It seems like the opposing team believes that Chen (Dota2.Gamepedia.com, “Chen”) and Nature’s Prophet (Dota2.Gamepedia.com, “Nature’s Prophet”) are heroes who would be

⁶⁴ Abilities of *Dota 2* heroes: <https://dota2.gamepedia.com/Abilities>. Abilities of *League of Legends* champions: <https://www.mobafire.com/league-of-legends/abilities>. No such lists exist on the websites of the publishers, such information is retrieved by players by reading information in the in-game menu or by looking for resources on external websites such as Gamepedia, Liquipedia, Mobafire, etc.

ideal for the player called n0tail. Therefore, they try to prevent team OG from picking these two heroes while they also need to ban JerAx's best heroes, Io and Earthshaker. Summarizing *The International* draft phase, we could say that it matters which people a team consists of and with which characters they play.

As already explained in the Game Studies chapter, the nominal goal of *Dota 2* and *League of Legends* is to destroy the main structure in the opponent's base (*Dota 2*: The Ancient; Dota2.Gamepedia.com, "Dota 2"/ In *League of Legends*: The Nexus; Leagueoflegends.com, "New Player Guide"). While there are several game variants for casual players, most competitive matches and all professional matches are played on a standard game map with 5 players⁶⁵ on each side. The *Dota 2* map:

[...] is the playing field for all Dota 2 matches. It is comprised of two sides, one for the Radiant faction, and one for the Dire faction. To win, players must destroy the opposing side's Ancient, an important building at the center of each team's base. The map is represented in the interface by the minimap. (Dota2.Gamepedia.com, "Map")

The most played map in *League of Legends* is called Summoner's Rift:

The objective of Summoner's Rift is simple – destroy the enemy nexus. In order to do this, champions must traverse down one of three different paths (or lanes) in order to attack their enemy at their weakest points they can exploit. Both teams have their lanes defended by numerous turrets; each turret grows in strength the closer it gets to its respective nexus and each turret must be eliminated in order to gain access to the next turret in that lane. Cooperating with fellow summoners is an absolute requirement for success, as it is easy for a champion to find themselves ambushed by enemies in the lanes of the Rift. (Fandom.com, "Summoner's Rift")

In *Dota 2*, players are expected to play their heroes as they were intended to be played:

The heroes in *Dota 2* are defined by the roles that they are suited to play as a combination of their attributes, abilities, and items, and the ways that these shape the game. Although the abilities of heroes may suit a variety of purposes and can be used in a variety of ways in different situations, roles nonetheless exist to define the playstyle a hero is expected to conform to, as well as the actions they are meant to perform within a game. (Dota2.Gamepedia.com, "Role")

⁶⁵<https://www.dota2.com/international/rules/>,
<https://eu.lolesports.com/en/about/global-rules>

Before a match in *League of Legends* begins, players choose a role (top, jungle, mid, bottom or support) and then a champion (see also LoLesports.com, “Hero Selection 2.0”).

Within the game there are a variety of game modes (Dota2.Gamepedia.com, “Game modes”). This thesis focuses on the ranked play game mode, the one relevant for esports tournaments.

Each player chooses one champion (hero in *Dota 2*) to control during the game. Two instances of the same character can not be picked on the same map (again, there is no rule from the publishers concerning such things, picking the same hero on both sides is not possible).

Gameplay consists of controlling one’s champion to fight opponent champions as well as other lesser monsters on the game map.

In competitive games, players take turns picking champions. Before champion selection, each team bans three champions, which makes them unavailable both for themselves and their opponents for the duration of the game.



Figure 8 - Split Map of LoL/ Dota 2

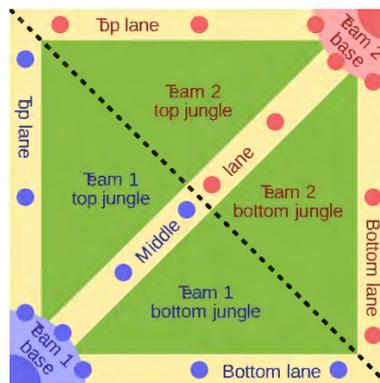


Figure 9 - Map of MOBA with 3 lanes⁶⁶

As we can see in Figure 9, the maps of the two different MOBA games look quite similar. Figure 10 narrows the similarities down by giving a schematic view of the maps. They both have their main bases, three lanes, four parts of jungle and towers on the lanes (*LoL* has turrets, *Dota 2* has towers; Dota2.Gamepedia.com, “Towers”; Fandom.com, “Turret”).

Not depicted in Figure 9 and 10, but on the map, between the two teams’ main bases, there are a series of towers. Also, there are enemy army units called creeps (*Dota 2*; Dota2.Gamepedia.com, “Creeps”) or minions

⁶⁶ Original version by Raizin,
https://commons.wikimedia.org/wiki/File:Map_of_MOBA.png.

(*LoL*; Fandom.com, “Minion”) that regularly stream out of each team’s base. These little soldiers will attack enemy heroes and enemy creeps automatically (they cannot be steered by players unless they have a special ability or item limited to select heroes), and they also attack towers. Killing creeps and enemy heroes provides experience and gold, which makes heroes (or champions) stronger.

Brendon Agha in his dissertation stresses that playing a MOBA requires “a high level of cooperation and trust within individual teams of players. Resources are used to upgrade champions to level them up throughout the duration of the match” (Agha 13-14). In an article by Jon Partridge about “How MOBAs invaded esports”, Partridge quotes Leah Jackson, an associate editor at IGN and esports reporter, who describes MOBAs as a nonstop action experience:

MOBAs are fun to watch because there is always something happening. With five people on a team, someone is always making an interesting or unique decision, performing a crazy play, or lining one up. In traditional sports and other competitive games, there is much waiting, but MOBAs are nonstop action from start to finish. (Partridge 21)

It’s not unusual to see games taking 70 or more minutes to conclude in *Dota 2*, but the average length of a match is 40 minutes, which is displayed in the following chart:

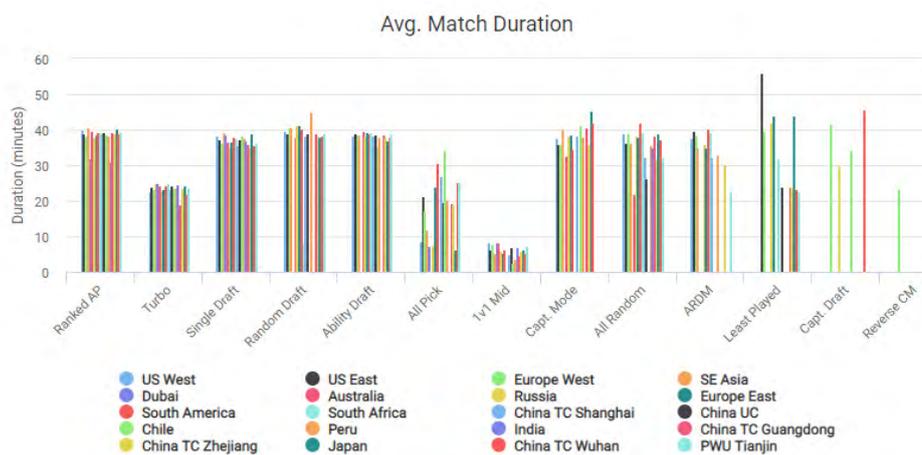


Figure 10 - Average Match Duration for Dota 2⁶⁷

⁶⁷ <https://dota.rgp.io/#chart-avg-duration>.

League	Game Time	Games
Bronze 	35:59	84676
Silver 	35:25	108801
Gold 	34:40	93294
Platinum 	33:47	150748
Diamond 	32:37	170729
Master 	31:27	9687
Challenger 	31:12	5346

Figure 11 - Average Game Time of League Matches by Division⁶⁸

As one can deduce from this analysis in Figure 12, a match in *League of Legends* will usually last around 35 minutes. Games from different leagues in *LoL* have been investigated. It seems as if matches in the lowest league, the bronze league, take slightly longer (35:59 minutes on average) as compared to matches in the highest league, where the best players play (31:12 minutes on average).

5.1 Game Phases

In this section the phases of a typical competitive MOBA match in *Dota 2* and *League of Legends* will be systematically described.

5.1.1 Draft Phase

Each match begins with the draft phase, where the captain of each team chooses characters to ban completely from the match, meaning that neither team can select them. The captains also choose five heroes for their teams.

In *Dota 2*, games with draft phases are called captains mode. This mode is the “standard format for tournament games” (Dota2.Gamepedia.com, “Captains Mode”).

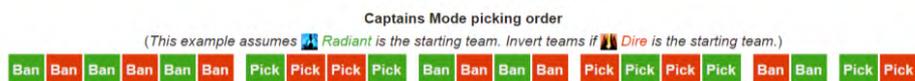


Figure 12 - Dota 2 Captains Mode picking order (Dota2.Gamepedia.com, “Captains Mode”)

In Figure 13 we can see the selection process going back and forth between each captain until six bans are complete. After the banning

⁶⁸ <http://www.leaguemath.com/match-duration-analysis/>.

phase, the first captain selects one champion. Then, the second captain selects two champions. This asymmetrical draft allows the second team to make up for the advantage lost in going second in the selection process; it also allows for meaningful counter play between the two teams. The process of picking and banning in *League of Legends* is similar: After the banning is complete, the first team (blue) picks one champion, then the second team (red) chooses two champions, then blue two and then red one champions, afterwards the banning continues; a total of ten champions is banned in the process. A complete Pick and Ban History for the latest and biggest tournament, the *League of Legends* Championship Series in 2021 is available on *Gamepedia* (LoL.Fandom.com, LCS 2021 Pick Ban History”).

The time for picks and bans is limited:

35 seconds are allotted for bans, and 35 seconds for picks. Each captain has 130 seconds total bonus time that can be used throughout any selection. (Dota2.Gamepedia.com, “Captains Mode”)

In a section on “hidden information,” Greg Costikyan relates the idea of information opacity to the “known unknown”: “[I]n a game of Poker, you may not know what cards the other players hold, but you know the range of possibility” (Costikyan 92). What makes the *LoL* draft so interesting, according to Ferrari, is “the semi-transparency of information” (Ferrari 7). At all times, everyone knows which champions have been selected, and one can try to guess for what kind of strategy these characters have been chosen. Bans also provide clues to teams’ fears and plans.

In competitive play, bans strategically target the preferred champions of known players; this practice is known as a “respect ban” (Ferrari 7). Players respect “the skills of an opponent enough to target his or her favourite characters—sometimes to such a degree that a team will exhaust all three bans against a single player” (ibid.).

Within narrative terms the draft phase could be seen as an “exposition” (Winn 8) since viewers are introduced to the characters (heroes or champions) and performers (players) who will be taking part within the performance (match). This information is not immediately available to spectators, which allows for speculation, and this way, “dramatic tension is being created” (Winn 8). This tension is then maximised, if teams make

a very unusual choice of their picks and bans. A well-balanced pool of available champions maintains the highest possible level of uncertainty:

This is also one of the reasons why new characters and balance patches are released so regularly for these games; if specific characters become too centralizing then their presence becomes a certainty. Balance is important so that spectators can constantly feel uncertain as to which characters may feature within the next performance. (Winn 9)

5.1.2 Opening Phase

According to Ferrari, “[t]he opening phase in *League of Legends* lasts only two minutes, which makes it by far the briefest phase” (Ferrari 7). This phase ends when the first wave of minions or creeps “from both teams meet in the centre of their lanes” (ibid.). Players now must have finalized buying their initial items (“which most players can accomplish in a matter of seconds” (ibid. 8)) and they must get into position.

5.1.3 Laning Phase

Both in *Dota 2/League of Legends*, there is almost always at least one person present within every lane who tries not to be hit by the opposing team’s tower, while killing creeps or minions on the lanes to earn gold and attempting to damage and, hopefully, destroy the opposing team’s tower.

The opponents’ first few purchases raise a lot of questions about the other team’s itemization strategy and goals. Knowledge of one’s lane’s opponent(s) and the items they have purchased produces a variety of questions about how to proceed. For example, one’s lane can be pushed, or one can fall back behind one’s own tower. One might try to purchase different items based on the opponent’s item choices. Uncertainty and therefore tension come into play whenever one must “parse a complicated decision tree” (Costikyan 86). In the case of MOBAs, these games were designed over a long period of time by many people and there are countless systems at play as to generate an “impossibly dense decision tree” (Ferrari 9).

As the game progresses, the outcome will become clearer as both teams deliver damage to the opposing team’s towers. The damage is permanent, “therefore functioning like a ticking clock within the games design” (LeBlanc 444). Destroying towers also removes ‘map control’ from the

opposing team by lowering the number of “safe zones” they have across the map⁶⁹.

The passive gold which players receive constantly on top of their personal actions automatically causes characters to become more powerful. Even if a character in *Dota 2* or *League of Legends* is dead for a short while, their gold counter keeps constantly going up and they are inevitably increasing in power. However, this “trickle pales in comparison to the gold accrued through last hitting” (Ferrari 10).

Laning phase begins when the last hitting starts. The laning phase lasts until anywhere from 15 to 30 minutes into the game. During this time, especially the “carry” characters spend their time trying to last hit as well as possible, since they “can obtain the greatest offensive power”, they can “carry” a team and “eventually bear the responsibility for ultimate victory (Dota2.Gamepedia.com, “Role Carry”). Once they amass substantial levels and items, they are good at killing opponents, while they typically “lack early game power” (see also *ibid.*).

The goal of the laning phase is to earn as much gold as possible while “harrassing” the opponents (harrassing means that a player who tries to kill creeps or minions is regularly attacked to keep his or her health points low). The minions are attacking each other if nobody is attacking them, and they will “essentially cancel themselves out if left to their own devices” (Ferrari 9).

The first kill in *League of Legends* might take place 10 minutes into a match. Players in *LoL* are casting their spells far more often than *Dota 2* players because of *LoL*’s emphasis on skillshots and low mana costs⁷⁰, which will be explained later.

Laning in both games is usually a matter of last hitting while using spells to try and push your opponent out of lane. In *League of Legends*, a laner, usually a carry player who in the laning phase is not being prevented from amassing a lot of gold by killing waves of creeps or minions can later

⁶⁹ Since the area around one’s own towers is slightly safer (the towers automatically dealing damage to approaching enemies, yet, enemies can still hurt and kill characters lingering by towers), the zones around the towers could be described as (relatively) safe zones.

⁷⁰ Mana represents the magic power of a unit. It is used as a cost for abilities (see also Dota2.Gamepedia.com, “Mana”).

in the game “snowball” the rest of his team. This means he or she would be too strong to be killed by any of his or her opponents, creating a situation out of which a comeback for the opposing team is almost impossible, resulting in a win for the carry player’s team quite early on. In *Dota 2*, even if there were one or two players on the enemy team in the laning phase who were able to collect gold without being prevented from doing so⁷¹, it is still possible to kill them due to the stronger disables in *Dota 2*.

Disables (also called *crowd control*, or *CC*) refer to any abilities or status effects that prevent, impede, or otherwise inhibit a Hero from acting. Disables come in many different varieties, and most Heroes have access to some form of disable. Sometimes “disabled” or “fully disabled” refer to stun. (Dota2.Gamepedia.com, “Disable”)

Some players are of the opinion that *Dota 2* is more fun because it is an interesting challenge to identify the strongest player on the enemy team and successfully bring his or her domination to an end, while one knows that ending this domination streak is tough but possible (see also Snowyamur, a user on Leagueoflegends.com)⁷².

Support players do not focus on acquiring gold as much as the carry players would:

Supports are heroes whose purpose is to keep their allies alive and give them opportunities to earn more gold and experience. Supports usually come with helpful abilities for their team [...]. Supports [spend] on items for the benefit of the team [...]. [They] are typically paired with the team’s carry at the start of a game [...] because the carry tends to be the weakest [...] of the team early on, whereas support heroes are at their strongest in the early game. Supports should always try to forfeit kills to any teammate who is more reliant on items than they are, only performing a kill if none of their allies is able to do it. (Dota2.Gamepedia.com, “Support”)

Junglers focus on getting gold by killing creatures in the jungle, while they are also providing support for lanes when their teammates call for them:

Junglers are heroes that can efficiently jungle neutrals at the start of the game, rather than lane. This allows for there to be two solo lanes, which in turn allows

⁷¹ While the “carry” players would last hit for gold and buy expensive items, good “support” players would make sure that nobody would stop the carry players from amassing gold (by last hitting creeps or minions) in their lanes.

⁷² Sometimes it is impossible to determine from a scholarly perspective whether mechanics are objectively good or bad. Some game mechanics are discussed by players without end. In such cases, it might be best to quote some actual opinions instead of judging mechanics. Many things in video games, as in other media, lie in the eye of the beholder. In the end of the day, both *LoL* and *Dota 2* are very popular, so there cannot be too many singular factors seen as unbearable by the two games’ players.

two allies to benefit from solo farm instead of one. Junglers typically have abilities that allow them to convert neutral creeps, summon minions, or sustain themselves through moderate damage from jungle creeps. [...] Although having two solo lanes and a Jungler produces a significant gold and experience advantage, it increases exposure to enemy ganks and can make side lanes weaker. (Dota2.Gamepedia.com, “Jungler”)

Junglers or supports are the ones who keep timers for map objectives. For example, Baron (*LoL*) or Roshan (*Dota 2*) spawn regularly in a designated area on the map:

Roshan, sometimes also referred to as Roshan the Immortal, is the most powerful neutral creep in Dota 2. During the early to mid game, he easily outmatches almost every hero in one-on-one combat. [...] Even in the late game, lots of heroes struggle fighting him one on one, since Roshan grows stronger as time passes. [...] fighting [Roshan] is an important team decision, [...] since it can decide the future of the match. Usually, it is fought as a team when it is safe to do so, meaning when the enemy team does not display a threat at the moment (for example after a successful team fight). (Dota2.Gamepedia.com, “Roshan”)

Baron Nashor is the most powerful neutral monster on Summoner’s Rift in League of Legends. Killing Baron Nashor grants Hand of Baron buff to all living teammates for 210 seconds. The buff gives bonus attack damage, bonus ability power, empowered recall, and an aura that greatly increases the power of nearby minions. (Fandom.com, “Baron_Nashor”)

Since these two big creatures grant a lot of gold and special items if they are brought down successfully, enemies should be denied the chance of having an undisturbed encounter with them. When enemies are trying to kill a big neutral character, they are more vulnerable, since Baron and Roshan will deal damage upon being attacked.

Players gain experience by being within the proximity of a minion’s death (see also Dota2.Gamepedia.com, “Experience”). This mechanic forces players to leave their own safe zones when there is no battle happening in or close to these safe zones. Players who want to win need to grow more powerful by gaining experience and collecting gold to be able to afford items. Therefore, staying in safe zones only as much as is needed to avoid deaths could be seen as a key aspect to winning.

Between last hitting minions, players “harass” each other with or without their abilities. Over time, the damage taken from harassment can overwhelm a player’s passive health regeneration and his health-regeneration items (in other words, he or she can not refill their health points without going back to the base). Duelling tends to involve all of a champion’s active abilities. When attacking each other, players attempt

to avoid each other's "skillshots", lock each other in place for attack combinations, "dodge" damage through shielding, or retreat to safe zones.

While duelling might dominate the laning phase for new players, most kills in lane often come from coordinated attacks by a team's jungler. Players therefore must place "wards" in the jungle to predict surprise attacks. In *Dota 2*, so called "Observer Wards" give "ground vision in a 1600 radius to your team" (Dota2.Gamepedia.com, "Observer_Ward") and they last "6 minutes" (ibid.). "Stealth Wards" in *LoL* grant "sight over the surrounding 900 units" (LoL.Gamepedia.com, "Stealth Ward") and lasts "for 150 seconds" (ibid.). The player in the jungle, the jungler, must be aware of wards which could be giving away his or her position to the enemies. The jungler should track when the enemies on the lane last used their abilities, since abilities can have a cooldown, "a period of wait time before a spell, ability, or item power can be used again" (Dota2.Gamepedia.com, "Cooldown"). Ferrari sums up the factors effective junglers need to think about: "An effective jungle gank takes into account the known wards in play, the "cooldown" times on the targeted player's abilities, and the current equilibrium of the minion battle line" (Ferrari 11).

As a player attempts to destroy the opposing team's tower they will wait until their lane minions move forward, so that they draw the tower's attention on themselves and allow the player to stand close to the enemy tower while being able to quickly eliminate all enemy minions and then attack the relatively strong enemy tower without being attacked by it. This is known as "pushing" ("Pushing is the process of clearing enemy creep waves and building up large, allied creep waves to take down enemy buildings rapidly" (Dota2.Gamepedia.com, Pushing) and usually also results in the opponent moving close to or behind his own tower.

LeBlanc, from the perspective of game design, describes this as an "illusionary" technique for producing uncertainty, making the game seem closer than it is without there being an actual change in the power of the two players (see also LeBlanc 445). If the player closer to his tower

stays in the tower's safe zone, the outcome of the situation remains uncertain.

In addition to the lane pushes and the described attacks that jungles might suddenly execute on lanes, it is common for characters to surprise and take down players on other lanes. Such a surprise attack is known as ganking:

Ganking is the act of actively moving around the map in order to kill an enemy hero. Ganking is used to gain an overall experience and gold advantage. Successful ganks can significantly slow down an enemy carry's farm, help a teammate recover a difficult lane, and provide a time window to push down a tower or to kill Roshan. To gain an early advantage, active ganking and pushing are essentially mandatory. Additionally, ganking is often the easiest way to kill heroes when the other team has a large advantage in the late game. Ganking also serves as a counter to enemies trying to push because they must move deep into your territory, where they are often isolated and have little vision. After the enemy pushers are ganked, your team can execute a counterpush to negate the advantage the other team was trying to gain. (Dota2.Gamepedia.com, "Ganking")

LeBlanc sees ganking as a "hidden energy" (LeBlanc 446) which spectators can be surprised by. Winn describes how the viewers watching a competition can never have a full understanding of all ongoing action on a map:

The segregated structure of the map, the fact that it is separated into different lanes and the tendency for the laning phase to be largely separated into various one-on-one match-ups within the different lanes, means that spectators never have a full understanding of how the different lanes would compare to one another if they were to interact. (Winn 11-12)

In this way the true power of each of the characters is hidden from the spectator. This uncertainty only grows as the laning phase comes to an end and the different characters start to come together to form fights involving all members of both teams. Once this occurs the game has begun its transition into the "team fight phase" (Winn 12).

5.1.4 Team Fight Phase

Ferrari states the laning phase ends once a team's carry player has completed her first "big item": "One heuristic for recognizing the end of laning is the completion of the first "big item" by a team's carry" (Ferrari 13). He underlines the importance of the laning phase: "A truism of MOBA play is that winning one's lane is the easiest way to win a match" (Ferrari 13). Winning a lane in Ferrari's statement means that a player

was able to last hit more creeps and gain more experience than the opposing player on that same lane.

Once a carry player can buy the first main item that significantly increases stats, the moment of advantage is significant and should be used to get a kill of the opponents' strongest player to throw them off their strategy.

The team fight phase looks very similar to laning. Minions spawn from both bases, and players need to keep them from doing damage to towers. Jungle minions spawn at regular intervals, and someone must farm them. The major difference between the two phases is that no player always stays on a lane at this point. Groups come together to claim map objectives or invade the opposing jungle, exerting increased pressure on different lanes, then they dissipate when it's time to resume farming. "True to this phase's name, it is at this point that large group fights become much more likely" (Ferrari 13).

In a team fight, the main objective is to eliminate the opposing carry and caster characters, because they do the most damage and typically possess the fewest defensive items. Bruiser-type champions need to get close to enemy damage dealers and disable them for their own offensive teammates. At the same time, tank and support champions are soaking up damage, adding some damage or they are literally pushing opponents out of their effective ranges. One devastating team fight loss could mean losing the overall game.

Team fights are when gold imbalances and itemization strategies finally combine with the players' "pure motor skill" (Ferrari 14) and "performative uncertainty" (Costikyan 20) takes over.

Both teams now must identify those members of the opposing team's players with the best items and eliminate them first. These are by far the "twitchiest" moments provided by the genre, demanding intense concentration and timing (see also Ferrari 14). Winn also describes this as a crucial phase:

The many minor skirmishes of the Laning Phase are over and we are now approaching the game's climax. The main goal of both teams has now switched from the slow amassing of gold to the taking of objectives and the pursuit of a final 'gg push' (a push which ensures victory, forcing surrender and 'good game' from the opposition). (Winn 12)

If it has not happened up to now, confrontations will be happening around the main monsters in the jungle or the last towers and structures at the entrances of the enemy's base. Destroying structures at the enemy's base will give a big advantage, because without those, bigger and stronger creeps and minions will spawn for one's own team. Now the biggest dramatic moments will occur: A team could fall like flies at the gates of its own base or make a perfect defence and go for a counterattack. Audiences could be devastated or thrilled when a whole team dies at the foot of a huge neutral creep (Baron Nashor or Roshan), losing additional items that seemed so close for them to achieve. By defeating Roshan, one member of a team can collect The Aegis of the Immortal (Dota2.Gamepedia.com, "Aegis of the Immortal), a beating heart which gives its carrier a second life, whilst Baron Nashor provides the Hand of Baron buff, an aura which increases the power of all minions standing near its possessor. The bonuses of both these items are not permanent, yet

[...] they are 'base-breakers' and they force inevitability upon the game. The structure of our game, the script of the performance, seems simple then: Team A gets ahead within the laning phase but, because of the decelerators and 'defenders advantage' of Team B, cannot win immediately. This means that they wait until they have created enough 'space' to be able to take Roshan/Baron Nashor and use that advantage to tip the scales in their favour and win. (Winn 14)

Here we have a moment when the score can suddenly change dramatically. In terms of drama, this can be seen as an "escalation" (LeBlanc 447). Characters are not as weak as they were in the beginning, when towers and creeps would mean serious threats to them. At this point in the game, all heroes, or champions in *Dota 2* and *League of Legends* are very powerful, they easily overcome towers and minions, taking down a tower could be as quick as three seconds. At the same time, with the growing experience of each character, their respawn timers increase exponentially. Should a team now be wiped out, they will be dead for a while and the opponents will run to their base and attack the main structure.

5.1.5 Endgame/ Goal

During the endgame, teams can

[...] become risk-averse and conservative, leading to “poking” scenarios wherein both teams mill about, unwilling to traverse the meagre number of pixels separating safety from danger. On the other hand, the losing team wants to introduce as much uncertainty into the state of play as possible. If they can catch one member of the leading team out of position or apply map pressure in an unexpected place, they may be able to regain the advantage. (Ferrari 15)

Ferrari also points out how this unwillingness to act often ends in “onesided shows of force” (ibid.). Eventually, one team will not recover from a team fight. LeBlanc sees the climax of the game as the “moment of realization: the moment when the outcome of the contest is known, and the uncertainty has been dispelled” (LeBlanc 445). Once the main structure has been destroyed, the individual scores of each player are being displayed. This information is often the subject of “commentator analysis or social dissection” (Winn 15), because “dramatic tension can linger” (ibid.) and spectators can feel “lost and unsatisfied” (ibid.) if they do not have a full understanding of “why the game has ended” (ibid.).

5.2 Heroes vs. Champions

MOBAs are very different from the esports of other genres when it comes to the fact that publishers like VALVE and Riot are constantly adding and balancing the main characters playable in their games (the heroes in *Dota 2* and the champions in *League of Legends*) by the release of “patches”.

In games, “patching” is the process of changing an existing game. While there are thousands of changes made to a game before it is released, after release the changes are added on top of the existing game from the player’s perspective, hence the name. (Claypool 6)

Games outside of the MOBA genre typically introduce changes as a part of major expansions. The pool of heroes or champions has always been increasing and used to be a core element of the creative play of thousands of modders in the early days. Today, champion and hero development is done by Riot themselves for their game *League of Legends*, but they also invite people from their fanbase to their offices and include them in the design process (Hall para. 1-13).

Both VALVE and Riot Games develop new characters for *LoL* and *Dota 2*. In 2009, Riot released 42 champions (see also Fandom.com, “List of Champions”) and in 2010, 23 champions (see also *ibid.*). In 2019, they have released 3 champions (see also *ibid.*). VALVE released 26 heroes in 2010, 2 in 2017 and 1 in 2018, 3 more are planned for 2019 (Dota2.Gamepedia.com, “Heroes by Release”).

Simon Ferrari in his study paid close attention to the effects of new champions being released: “[...] data from the millions of daily matches of League [of Legends] provide clues to how a new champion has disrupted the overall equilibrium of the game” (Ferrari 5). Based on the results of their analysis, the publishers react to any imbalance with “constant patches and hot-fixes [...]” (*ibid.*), while “moulding gameplay toward desired diversity and complexity” (*ibid.*).

Mark Claypool published a study on *The Impact of Software Patching on Gameplay for the League of Legends Computer Game*. Claypool, like Ferrari, describes *League of Legends* as a game that is frequently patched to improve balance:

[...] analysis of patch data shows a fairly steady rate of changes which would not be expected for a mature, stable software. The majority of changes are not fixes or visual improvements, but are changes to the gameplay itself in the form of adjusting balance or adding new content. (Claypool 3)

Most of these changes are aimed at making the game more fun for the players, as Riot Games state in their own “manifesto” (Riot Manifesto). Thus, “the majority of Riot Games’ changes are based on feedback from the players and reflect the current state of the game” (Claypool 3-4).

Claypool gives some deeper insights with numbers from his analysis:

LoL has about 75 patch changes to gameplay each month and only 4 bug fixes each month. Most (70%) of the gameplay changes are numeric increases (buffs) or numeric decreases (nerfs) to champion abilities, but there are also utility changes that make a champion easier to use and even quality of life changes that completely rework how a champion is played. Analysis combining game data and patch data shows champions that have win rates further from 50% are patched most often, with buffs used to increase a champion’s win rate and nerfs used to decrease it. (Claypool 27)

Van Allen makes a comment on how patching is making him happy as a regular player of *League of Legends*:

Patches in *Dota 2* are like Christmas, gifting you with dozens of granular changes that offer nerds like me the chance to pore over every inch and learn. I could never hope to master the game, but every day, I felt closer. By the end

of that summer, *Dota* was a daily ritual for me, somewhere between obligation and occupation. (Van Allen para. 10)

In *Dota 2*, all heroes are freely available from the beginning. In *League of Legends*, 15 champions are available for free play at any given time (see also Thorn para. 23). If you want to try a non-free champion, you must purchase it with the in-game currency RP:

Riot Points are purchased with real-world currency, and are only used in the Riot Store. (Fandom.com, “Riot Points”)

Each champion as well as each hero has a unique lore and personality within the game and abilities in conjunction with character statistics such as health, speed, or strength.

League of Legends has often been described as a game that is about “macro-level skills”⁷³ like map placement (players should be in the right position at the right time) and knowing when to fight and when not to. This means that most champions are often considered equally difficult to play, while many describe the *Dota 2* hero pool as extremely diverse when it comes to the difficulty of the heroes in terms of how many hours of training a player needs to master them. This “hero diversity” seems to be an important and interesting factor of a MOBA and will therefore be investigated in detail in a chapter of its own.

5.3 Progression

LoL champions and *Dota 2* heroes “progress” during a game – or in other words, they grow stronger or more powerful. Characters gain power through levels and items. In *Dota 2*, all champions start at level 1 and progress level by level until they reach level 25 (see also Dota2.Gamepedia.com, “Leveling”). In *League of Legends*, “By default, and in most gamemodes, the level cap is set to level 18” (Fandom.com, “Experience Champion”) meaning the highest level is 18.

The level cap in *League of Legends* is already reached at 18, while it is a bit higher in *Dota 2* (25), where it also takes longer to reach it in-game,

⁷³ Micro refers to how people play their character: How they use their abilities, how fast they can use them and when they use them. Macro refers to the overall strategy of a player and his or her team and their strategic behaviour.

which means many players might not reach their highest level before the end of the match, which Richard Heimer explains in the following:

Champion levels can be seen as both a good and bad thing. For example, in League of Legends, you are much more likely to reach the max level of 18 during a game before it ends. This means you can use all your skills and abilities in game to help your team win.

DotA 2 on the other hands takes players a lot longer to get to level 25 which means many players might not even get to max level before the end of the match. The plus side to this is players who do get to level 25 get an array of more powerful skills to use in game as they have “earned them”. (Heimer 2017 para. 6)

As Heimer describes, reaching level 25 in *Dota 2* might be a rewarding experience (compared to previous levels), since reaching the highest level in *Dota 2* does not happen as often as in *LoL*, and since players at level 25 become noticeably more powerful when they “get an array of more powerful skills”. Reaching this state of powerfulness for an individual player might be tempting enough that people will sometimes forget about their team and focus solely on reaching their own goals. This phenomenon could occur both in *Dota 2* and *League of Legends*.

Some players believe that the overall lower power cap of characters in *LoL* allows for a team that slipped behind earlier in the game to have a statistically better chance for a comeback. One player of *League of Legends* going by the nickname “LoliKnight” on the official *League of Legends* boards explains how he feels about the chances for comebacks in *League of Legends* compared to the chances in *Dota 2*:

Comebacks are real. People complaining about catchup experience in LoL would have a heart attack in DotA. This is because there is no concept of AP or AD scaling [in *League of Legends*]. If a bursty mage⁷⁴ gets ahead in the early game, eventually he/she falls off as HP pools get bigger. This leads to less stomps as even if the mid is 10-0 at min 6, or if you lost a full lane of structures inside 14 mins there’s always something you can do to come back into the game. This is one of the points I have mixed feelings about. Comebacks feel good as part of them but incredibly frustrating for solo carry players. (LoliKnight, a user on Leagueoflegends.com 2017)

⁷⁴ “Mages are champions [in *League of Legends*] who typically possess great reach, ability-based area of effect damage and crowd control, and who use all of these strengths in tandem with each other to trap and destroy enemies from a distance. Specializing in magic damage, often burst damage, and therefore investing heavily in items that allow them to cast stronger and faster spells, mages excel at chaining their abilities together in powerful combos to win fights, though their abilities also tend to be difficult to land and can be mitigated, if not avoided completely, by their targets if they react in time” (Fandom.com, “Mage”).

LoliKnight describes how champions in *League of Legends* which are strong in the beginning (“a bursty mage gets ahead”) of a match do not keep getting stronger exponentially (“eventually he/she falls off”). In LoliKnight’s opinion, “this leads to less stomps” (a stomp is when a team defeats another team within 15-20 minutes (*Reddit.com*, “Stomp”)), because there is “always something you can do to come back into the game”. Loliknight says that even though “comebacks feel good”, they can be “frustrating for solo carry players”. Of course, this is just an opinion, yet it indicates the existence of players who want their game to be fair, and that it might get even more complicated than that, since people like Loliknight do not only want a fair, balanced game, they also want it to allow for comebacks, yet, not too easily.

The heroes and champions and the items that can be bought during the game are constructed “in such a way that there are no heroes that are strong throughout all phases of a game. If a hero is strong early, it is designed to gradually fall off during the game”, writes Jesper Bergeskans, a MOBA analyst on *Cybersport.com* (Bergeskans para. 5).

This also works the other way around. A hero such as *Dota 2*’s Slark (*Dota2.Gamepedia.com*, “Slark”) for example can be hindered from killing creeps for gold in his lane in the beginning of the game:

Slark is usually played in the safe lane, with a support. He can also be played in the offlane. Slark is sometimes played in the mid lane, but may struggle against ranged heroes like Queen of Pain. (*Dota2.Gamepedia.com*, “Slark Guide”)

Yet, Slark can be played as a potent ganker in the mid game. The enemy jungle is an excellent hunting ground for Slark (see also *ibid.*). The moment he reaches level 6, he gets out of vision (see also *ibid.*) and with his “+30 attack speed” (*ibid.*) and health regeneration (“The strength talent effectively grants Slark 200 health, 1 health regen and 0.8% magic resistance” (*ibid.*)) he “can often return to teamfights after moving out of enemy vision to regain health” (*ibid.*).

All heroes and champions, both in *Dota 2* and *League of Legends*, reach moments in the game as they are levelling up, when there is a perfect time to attack for their particular hero or champion, because it is a moment when a boost in power through the level increase, plus a choice

of the right ability, plus maybe a good choice of items sums up to a small advantage that helps the player to be stronger than a particular opponent in that particular moment. Bergeskans calls such moments “power spikes” (Bergeskans para. 6). He also said about the players from *Team Liquid* that they “turn exploiting power spikes into an art” (Bergeskans para. 6).

Dota 2 has two main power spikes: Item and hero level spikes: “Hero level spikes are usually the first ones you see as they happen when heroes that rely on big ultimates hit level 6⁷⁵. Ultimates are defined as:

A hero’s last ability, which can usually be trained at level 6, level 12, and level 18, is called an ultimate. Ultimates can be high-impact abilities that define a hero’s strengths and playstyle; they often have a devastating effect and a long cooldown. (Dota2.Gamepedia.com, “Ultimates”)

These level spikes, as for example the moment when characters can use their ultimate for the first time, are “easy to spot [...] and even in the lower ranks, you’ll see players play around these timings” (Bergeskans para. 6). Teams will try to use the advantage of such a level spike, once e.g., someone playing Spectre reaches level 6 and can use her ultimate skill “Haunt”:

Creates a spectral nemesis to attack each enemy hero after a short delay. At any moment during the duration, Spectre can use Reality to exchange places of a given haunt. (Dota2.Gamepedia.com, “Spectre Abilities”)

Another good example would be Tidehunter who can use his ultimate “Ravage” (Dota2.Gamepedia.com, “Tidehunter Abilities”) to initiate a team fight. When Ravage is used, Tidehunter “Slams the ground, causing tentacles to erupt in all directions, damaging and stunning all nearby enemy units” (ibid.). Ideally, the Tidehunter player stuns⁷⁶ all enemy heroes at the same time, leaving them unable to defend themselves for up to “2.8 seconds” (ibid.).

“Item level spikes” are related to the item timings. Bergeskans gives an example of item level spikes, by showing an example of how the

⁷⁵ As described earlier, reaching level 6 as Slark with the right items could be labelled as a “power spike” moment, since Slark gets his ultimate “Shadow Dance” at level six which allows him to hide “himself in a cloud of shadows, becoming immune to detection” (Dota2.Gamepedia.com, “Slark”).

⁷⁶ “Stun is a status effect that completely locks down affected units, disabling almost all of its capabilities” (Dota2.Gamepedia.com, “Stun”).

professional *Dota 2* squad, *Team Liquid*, “exploited” them: They waited until their Beastmaster got his Shadow Blade⁷⁷ and their Templar Assassin her Desolator⁷⁸: “[...] Beastmaster gets his Shadow Blade and Templar Assassin her Desolator. It’s go time” (Bergeskans para. 7). Just at this moment, with these core items on their heroes, they attack the opponent’s Medusa (Dota2.Gamepedia.com, “Medusa”), who had been overpowering them up to this point (see also *ibid.*). When caught outside tower range she was chanceless:

Liquid immediately smoke up⁷⁹ and move up towards the Dire jungle. They know the Medusa is alone in there due to some well-placed wards in the midlane and dire’s offlane jungle. As they get closer, Beastmaster pops his Shadow Blade which is enough to catch the Medusa just before she gets in tower range. *VP* [the team *Team Liquid* are facing] desperately try to save her, throwing everything they have at Liquid, but to no use. (*ibid.* para. 8)

While the opponent’s Medusa is dead, *Team Liquid* take the Aegis of the Immortal (a powerful item; Dota2.Gamepedia.com, “Aegis of the Immortal”) which is dropped since Roshan was defeated successfully: “Thanks to the quick pick-off *Liquid* can easily secure the fight and soon after a Rosh” (*ibid.*).

5.4 Talent Trees & Runes

Players in *League of Legends* can modify their champions’ statistics with runes. “Runes add or enhance champion abilities and statistics. Players can use them to customize their champions before the start of a game” (Fandom.com, “Runes”).

⁷⁷ The Shadow Blade is an item he can buy which makes him invisible and grants him 175 bonus physical damage if he is attacking to end the invisibility (see also Dota2.Gamepedia.com, “Shadow Blade”).

⁷⁸ The Desolator is an item that can be bought in the main shop. “Desolator’s armor reduction stacks with the armor reduction from [Templar Assassin’s ability] Meld, rendering an opponent extremely vulnerable after Templar Assassin’s first hit” (Dota2.Gamepedia.com, “Desolator”). When Templar Assassin uses Meld, she “conceals herself, becoming invisible as long as she remains still. If Meld’s invisibility is broken by attacking an enemy, Lanaya will deal bonus damage to the enemy and reduce their armor for 12 seconds” (Dota2.Gamepedia.com, “Templar Assassin”).

⁷⁹ They make themselves invisible.

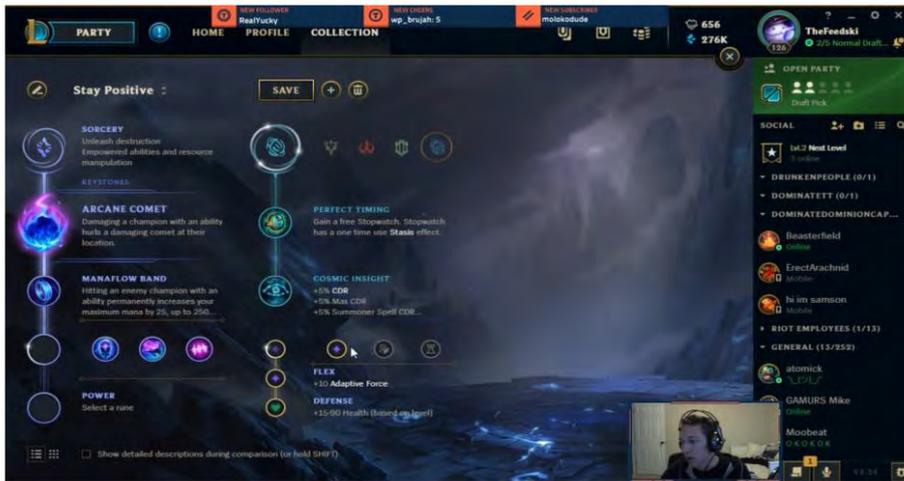


Figure 13 - A LoL player in the lobby choosing his runes

Runes have different powers and are represented by circular icons. “Before each match players choose the rune page they want to use” (Fandom.com, “Runes”). The runes augment various stats. One path a player can choose for example is “resolve”. In the resolve tree, one selectable rune is called “demolish”. The demolish rune allows a player to “charge up a powerful attack against a tower while near it”⁸⁰.

Since choices for rune paths are made in the lobby, every player theoretically must take the rune choices of nine other players in a match into consideration.

Dota 2 has a similar progression system implemented known as the talents system. It is visually represented by a tree in the in-game menu. In the *Dota 2* system, the trees are part of the level up process inside the game. Once a player reaches level ten, a permanent choice between two distinct bonuses is offered four times, every five levels until a player is maxed out at twenty-five:

Talents are traits unique to each hero. They are chosen every 5th level starting at level 10, offering a permanent choice between two distinct bonuses. A special sound is played when you have reached the level required to choose a talent. These bonuses range from increases to hero attributes, additional gold or experience gain, and boosts to hero abilities. Once a talent is chosen, its counterpart is discarded, and the selected bonus is gained for the remainder of the match. (Dota2.Gamepedia.com, “Talents”)

⁸⁰<https://www.mobafire.com/league-of-legends/rune-page-planner#&rune=Sorcery:8:70:37:41::Resolve:44:49>. Accessed 16 Dec. 2018. This link shows the “demolish” rune in the “resolve” path.
<https://www.mobafire.com/league-of-legends/rune-page-planner>. Accessed 16 Dec. 2018. This rune planner allows users to experiment with different rune paths.



Figure 14 - A player playing "Tiny" with the "tree" right next to the "Tiny" avatar left of the "Q" ability



Figure 15 - Talent selection interface when expanded for the hero "Ursa"

Both progression systems allow players to choose how to augment their stats. The *League of Legends* player dictates a desired path at the launch of game. *Dota 2* is more flexible since the player is making the decision in real time based on what would be best suited for the current game. This allows for some flexibility within *Dota 2*: If a change of strategy is needed, players could still choose their talents accordingly.

In *LoL*, if players choose only attack runes and end up losing out a lane because they would have needed more protection, they cannot change their runes.

5.5 Playable Character Diversity

Playable character diversity in this dissertation refers to how much the playable champions within one *MOBA game* differ from one another.

It seems to be an important topic among players and is best explained with a few examples. In *Dota 2*, the hero Pugna could be considered cumbersome to play, due to his “low health pool, low armor and sloppy attack animation and attack speed” (Dota2.Gamepedia.com, “Pugna Guide”). One could then ask why it would make sense to choose Pugna instead of Lina, who seems to be much easier to play: Lina has a simple to execute ultimate called Laguna Blade (Dota2.Gamepedia.com, “Laguna Blade”; the ultimate is always each hero’s strongest ability) which causes 1250 damage (and with a choice of the right items this damage can be significantly increased): “Laguna Blade, her ultimate, is her ace in the hole. Lina fires off a huge bolt of lightning at a single target, dealing colossal damage” (Dota2.Gamepedia.com, “Lina”). Three of her skills are quite similar, which makes it easier to memorize and use them during the game:

Dragon Slave, Light Strike Array, and Laguna Blade are incredible flaming nukes that can incinerate her target instantly, and Fiery Soul allows her to transition into a strong and fast physical attacker. (ibid.)

Lina has quite a good movement speed (290; ibid.), yet her initial armor is only 1 (ibid.).

Pugna on the other hand seems at least slightly more complicated: He has an ability that renders him (or another target) “unable to take physical damage” (Dota2.Gamepedia.com, “Pugna”), but also slows the targeted character and decreases their magic resistance (see also ibid.). With Nether Blast, “a delayed low-cooldown area nuke” (ibid.), Pugna can do “damage to buildings” (ibid.). Then there is also Nether Ward, “a ward-type ability that debilitates enemy casting, degenerating their mana while punishing them with powerful nukes based on the mana cost of the spells they cast within its domain” (ibid.). Pugna’s ultimate called Life Drain “is a channelling ability which saps enemy health and grants it to himself and can be cast on allies to give them health and mana as well” (ibid.). Later in the game, his drain can cause 200 damage per second for about 6 seconds (see also ibid.). This spell has 20 seconds of cooldown, which means it can be used again after 20 seconds (see also ibid.). If Pugna builds an item that sets the cooldown to 0, he can drain life endlessly (see also ibid.).

Invoker (Dota2.Gamepedia.com, “Invoker”) can neither be compared to Lina, nor to Pugna: He sports 14 abilities and is considered by many to be the most complex character in any MOBA game. Mixing and matching reagents to invoke new spells as an Invoker player demonstrates just how versatile and varied *Dota 2* heroes can be, but also, how versatile MOBAs can be in general:

Carl, the Invoker, is a ranged intelligence hero who is very difficult to master. He is unique in that he possesses a total of 14 abilities in his arsenal; three of them - Quas, Wex, and Exort - are reagents and one is his special ultimate Invoke. The three abilities he learns throughout leveling up can have three instances, which serve as the basic ingredients or components for him to create a new ability using his ultimate. Once the reagents or elements are combined, he can invoke one out of ten different abilities. All his invoked abilities are capable of a multitude of actions, from damaging enemies to aiding his allies, and even saving himself from danger. His three reagents can be upgraded up to level 7 which determines the power and potency of his invoked abilities, making it more powerful than an ordinary spell. Because of this, he can be played in almost any role possible. (Dota2.Gamepedia.com, “Invoker” para. 1)

Grimhammer, a user on *Reddit.com*, explains playable character diversity and believes that in *Dota 2* the heroes differ in a much more significant way than the champions do in *LoL*:

But the biggest thing for me that no one has mentioned is the fact that in League heroes are very similar. Like they’re designed by checking boxes. [...] and it’s very samey, like everyone has 3 abilities and an ultimate, plus a passive ... In DOTA those rules don’t really apply and [things] can get wild. Invoker is an excellent example of this (look him up), Rubick steals [things], Playing Meepo is like playing 5 heroes at the same time and so on. (Grimhammer, a user on *Reddit.com*)

It might be true that there are some heroes in *Dota 2* that are very exceptional and almost impossible to play when one tries them for the first time.

Another example of a quite unique hero would be Meepo (Dota2.Gamepedia.com, “Meepo”), who can activate duplicates of himself (see also *ibid.*), or Rubick (Dota2.Gamepedia.com, “Rubick”), who can steal abilities from other heroes (see also *ibid.*).

More diversity in abilities could be more fun for players if they do not cause any balancing issues, but a very diverse pool of characters could also prove to be a barrier for players new to the game. Meeting someone on a server who is very skilfully playing a rather exceptional character, losing against him, not understanding what had been happening, could feel like losing against someone who is not playing fair. Yet, such a loss

could also make a player curious for the strange character's mechanics, inspiring an urge to understand how this hero must be played.

It has been argued by players many times that, overall, *Dota 2* heroes feel more unique than champions in *League of Legends*, both because they have more unique differences, or they can be played in different roles according to the team composition. Here are some personal opinions of the players themselves:

In terms of playstyle *Dota 2* is unique for each hero. *LoL* has a more generic approach. (Bilg21, a user on *Reddit.com*)

I haven't played *LoL* as much as *Dota 2* but I have more or less played all the *LoL* heroes [...]. Gameplay-wise I think *Dota* heroes have more unique abilities and playstyles because *Dota* is less afraid to have really extreme abilities that can completely turn a fight or one-shot opponents - *League* is a lot more scared to have extreme abilities so all the stuns are generally shorter duration, all massive damage or utility spells in *LoL* generally do less damage unless the champion doing them is turbo farmed. (dog_obgyn, a user on *Reddit.com*)

I switched to *Dota* because is way more open in the way you can play it than *lol* is. While I would not necessarily say that the heros are more unique than *lol*'s champions, heroes in *Dota* are also way more open in how you can play them. Lina for example can be built as a carry or as a support. This is also possible in *LoL* to a certain extend (in my time some people trolled around with Soraka sololanes in *LoL*, which is normally a support champ), but way more limited, due to the way skills are scaling. (Destructed3, a user on *Reddit.com*)

At this point, it is still impossible to decide whether *Dota 2* objectively has a more diverse pool of playable characters. For a definite answer, all playable characters of *Dota 2* and *LoL* would have to be dissected thoroughly in terms of their power and abilities, which might be an interesting topic for a study.

5.6 Teamplay

As already shown, the best MOBA teams are those whose players cooperate well, with players using their characters to fulfil roles. Some characters can fulfil different roles depending on how they are played, and the in-game items purchased. All five players in a team choose a role which they will fulfil during the game on the three lanes or in the jungle.

In *Dota 2*,

[j]unglers are heroes that can *efficiently* jungle neutrals at the start of the game, rather than lane. This allows for there to be two solo lanes, which in turn allows two allies to benefit from solo farm instead of one. Junglers typically have

abilities that allow them to convert neutral creeps, summon minions, or sustain themselves through moderate damage from jungle creeps. The ability to jungle is found in heroes of all attribute classes and roles. (Dota2.Gamepedia.com, “Jungler”)

Jungling in *League of Legends* is described as follows:

Jungling is the practice of killing neutral “Monsters” located on some maps between the lanes. The Jungle refers to any area of the map that is not a lane or part of either team’s base, including the river that divides it. Junglers rely on killing neutral monsters in the jungle to keep up with their laning teammates in terms of gold and experience. In a standard 5-on-5 game of League of Legends, 4 players on a team will be Laners, and 1 player will be a designated Jungler. (Fandom.com, “Jungling”)

Summing up jungling activities for both games, jungle players will, except for team fights, stay in the jungle, get the farm in the jungle, and prevent the enemy from getting jungle farm. Se Jin Kim says about jungle players: “A jungler is a clever player who needs to move around the map without being discovered” (Se Jin Kim 11-12).

In *Dota 2*, the roles players choose for themselves are not fixed as in *League of Legends*. Players can freely choose a role and change their role during the game, choosing a role is entirely a verbal agreement among the team. There could be for example three players in the top lane at the same time from the beginning, or one player top one mid one bot one jungle and one support whose sole role is to roam and not spend any time in lanes. Still, a team must discuss roles before a game starts because it is essential for teamplay. The players in *Dota 2* can freely choose how they want to work together, but still they need a basic understanding of how to fulfil a role (e.g., as it has already been described, a jungle player makes money killing neutral creatures in the jungle) in a team if they want to have a successful conversation with their team.

Alyssa Adams and Sara Walker in their 2018 spatial study found:

When *League* was first released in 2009, any champion was played on any spatial location on the map by the players. As time passed, players decided that having certain types of champions on certain locations of the map was preferred. Since the community made this decision, a team’s general spatial organization has not changed for over 6 years. In some sense, players computed a firm ‘meta’, the player community term for a persistent and uniquely identifiable strategy trend⁸¹. (Adams and Walker 463)

⁸¹ The “Meta”, or the “persistent and uniquely identifiable strategy trend” described by Adams and Walker will be discussed in chapter 6.10.1, since the “Meta” is a cultural phenomenon of *Dota 2* and *League of Legends*.

5.7 Micro

As discussed in the chapter on Playable Character Diversity, some heroes or champions require more “point and click” skills – an ability to aim quickly and successfully hit a target – from a player than others. A player’s ability to use his character’s abilities swiftly and accurately is called Micro.

Lina for example might be easier to control compared to Meepo. Meepo’s ultimate lets him create clones of himself (see also Dota2.Gamepedia.com, “Meepo”). On the highest level of this ability, the player must steer 5 Meepos at the same time (see also *ibid.*). The five Meepos share experience, the four clones have 25% of the main Meepo’s stats and if one of the Meepos dies, all the Meepos are dead (see also *ibid.*).

Dota 2 features heroes (e.g., Meepo, Chen, Brewmaster and Tinker) that require players to steer more than one unit at the same time. Chen can “take control of creeps. Commanding them well requires adept micromanagement and map awareness” (Dota2.Gamepedia.com, “Chen”). Brewmaster’s ultimate ability is called Primal Split. It splits him “into elements, forming 3 specialized warriors, adept at survival, each with their own abilities” (Dota2.Gamepedia.com, “Brewmaster”). Also, Boush, the Tinker, gives his players many things to keep an eye on: Tinker can “pressure multiple lanes” (Dota2.Gamepedia.com, Tinker), his ability “Rearm” allows him to “reset the cooldown on his items and abilities” (see also *ibid.*). Therefore, he can use the item Boots of Travel⁸² again and again, to switch lanes and push towers with his March of the Machines ability (see also *ibid.*).

There is also a courier that must be controlled in *Dota 2*:

A Courier is a unit that transports items from the shops to the heroes. There is only one courier for the whole team. Each player can assign orders to courier. (Dota2.Gamepedia.com, “Courier”)

Heroes in *Dota 2* often have an extremely high skill cap:

Skill cap [...] is the point where a player is so good at using his abilities/class/spec - he cannot become better at it because he is limited by its

⁸² Boots of Travel “[t]eleports you to an allied non-hero unit or structure. Teleporting to a unit is interrupted if the target unit dies” (Dota2.Gamepedia.com, “Boots of Travel”).

mechanics, thus making him(her) skill capped. In other words - it's the maximum level of play that can be achieved with a given spec and how much of a difference there is between a good player and a flawless player of that specific class. (MMO-Champions.com, "Skill Cap")

As, for example, there is a popular video (Ishutin 2012) of *Dota 2* professional player Danil "Dendi" Ishutin playing Tinker (Dota2.Gamepedia.com, "Tinker"). He has managed Tinker so well that he easily outplays everyone else, which is especially impressive since all players around him are professional *Dota 2* players themselves.

5.7.1 Farming

Farming is the act of killing waves minions and monsters to gather gold and experience. Farming is an essential component of early-game laning, when players try to overpower the enemy through an arms-race. Early game is the safest time players can farm to buy items and learn abilities that increase their power. (Fandom.com, "Farming")

Players on the enemy team should not be allowed to last hit (farm gold) undisturbedly. This means, if someone sees a character on the map somewhere that is undisturbedly getting gold, the whole team should be informed, and everyone should try to prevent the undisturbed farmer from farming. Carries (as described earlier) are fragile in the first phase of the game. This is the opportunity for opponents to not letting the carry kill creeps and collect money all the time. Carries should be put under constant pressure, so he or she must walk back to the base a lot to heal or is forced to invest a lot of money into early healing items. The first phase of a game, also called the laning phase, involves a bit more ability-based harass in *League of Legends*. Poking your opponent with a skillshot or target spell to keep him from farming is reasonable because of the low mana costs that accompany most spells here, as opposed to the higher costs for spells in *Dota 2*.

5.7.2 Denying

In *Dota 2* players can deny their own creeps, while this is not possible in *League of Legends*:

Denying is the act of preventing enemy heroes from getting the last hit on a friendly unit by last hitting the unit oneself. [...] Enemies gain no gold from any denied unit. All allied units can be denied once they fall below a certain

percentage of health [...]. However, heroes can only be denied under special circumstances. Illusions and couriers cannot be denied.

A creep is not considered denied if a neutral creep (e.g. Roshan) deals the finishing blow and thus will give full experience to the enemy heroes. (Dota2.Gamepedia.com, "Denying")

This provides an additional dimension to laning since it allows players to prevent their opponents from farming gold. The denying mechanic makes the early game in *Dota 2* much harder. A good player will need to consistently last-hit enemy creeps and "deny" ally creeps to gain the advantage.

Last hitting (delivering the killing blow to a minion (*LoL*) or creep (*Dota2*)) "is likely the most fundamental skill you'll have to learn to play" (Kim, Ben para. 7) in *Dota2* and *League of Legends*. Last-hitting⁸³ minions is the primary means of collecting gold.

Players new to *Dota 2* and *League of Legends* might think that killing creeps and minions is strategically the best thing to always do - Erdelack explains in detail why it is not (and why last hitting them instead is key):

It [killing creeps] is strictly verboten for a good period of the match. If you murder those creeps, [...] words in a language you do not understand will be thrown in your direction Why? It turns out you don't want to kill them. Well, you do want to kill them, but in a very specific manner that involves not hitting them 98% of the time. Creeps only give you money if you are the *very last* person to hit them before death. [...] And since various other agents are attacking the creeps at any given time— you, your coworkers, all your own creeps— this is difficult. It turns out that *not* hitting the creeps until the exact right moment is a core competence of this game. [...] But as it turns out, on deeper examination these dudes running down your lanes [...] are a natural resource. They are the where the game's mechanics pour wealth into the system. And eventually you learn that Dota is not a game about destroying towers and defeating enemy mobs. It is a contest for these limited resources. Indeed, one of the core mechanics of the game is finding ingenious ways to engineer the demise of your *own army*, so as to prevent their precious experience and money from falling into enemy hands. The allocation of resources between you and your allies is itself a matter of great strategic import: often you are not supposed to kill things because you're farther down the resource-allocation totem pole on a given team. Because resources are key: once you have fought the creeps for the right reason at the right time and in the right manner, (once you learn how *not* to kill), the business of toppling structures follows as a matter of course. This one minor conceptual reversal you undergo as you learn the game presents, in miniature, one reason why I love games: as you play a great game and become steadily competent, you come to realize that the *nature* of the game is entirely different than what you supposed initially. When you begin to play Dota seems like a game about taking towers, and then it becomes a game about competing for resources, and then it becomes a game about spatial awareness, and then it becomes a game about information. It goes on like this, forever. (Erdelack para. 5)

⁸³ You can deny your own/allied units with an attack command (A-click).

In this passionate quote, Erdelack describes several strategic aspects of *Dota*. Not attacking creeps is something he describes as very difficult to master, because almost all entities in the game (towers, creeps, heroes) are hitting or shooting creeps. Amassing gold in *Dota* is more about spatial awareness and information first – and then, when a player is well informed and in a good place, then he or she can last-hit a creep.

5.8 Abilities & Balancing

A player called xSyrusx describes *League of Legends* and *Dota 2* as two games with a different kind of balancing system: He says that in *Dota 2*, it is common for heroes to be able to stun⁸⁴ another hero for 5 seconds (see also xSyrusx, a user on Leagueoflegends.com). According to him, such an ability in *LoL* would be the death sentence of any champion (see also *ibid.*).

What he is talking about here is the two games' balance: It might be true that *Dota 2* has stuns with a longer duration, when compared to stunning effects available in *League of Legends*. Yet, this does not necessarily mean that *Dota 2* is an imbalanced game due to longer stuns. There might be other mechanics in *Dota 2* which balance the effect stuns have or the game is somehow different from *LoL* and, therefore, must be played differently.

In both games, players use their characters' abilities. Some abilities occurring in *LoL* and *Dota 2* can appear to be very similar: Urgot (*LoL*; Leagueoflegends.com, "Urgot") and Vengeful Spirit (*Dota 2*; Dota2.Gamepedia.com, "Vengeful Spirit") have very similar ultimate abilities, Amumu (*LoL*; Leagueoflegends.com, "Amumu") and Treant Protector (*Dota 2*; Dota2.Gamepedia.com, "Treant Protector") share a similar ultimate as well (see also Leagueoflegends.com, "Similar Abilities"). Many of the ideas for abilities that exist today had first been designed in *Dota*. Some of them were created by Guinsoo, who later used his own ideas again when he joined Riot Games (see *Reception History* chapter).

⁸⁴ "Stun is a status effect that completely locks down affected units, disabling almost all of its capabilities" (Dota2.Gamepedia.com, "Stun").

Players of *Dota 2* and *League of Legends* should know their heroes' (champions') abilities and how the abilities work in combination if they would like to win their games.

Champions in *LoL* have five abilities.

An ability [in League of Legends] is a unique action (as opposed to summoner spells / active ability items) performed by and only available to a champion[...]. Each of these special moves make up a portion of a champion's 'kit'. Every champion kit (with some exceptions) follows the same basic structure: an innate with no ranks, three basic abilities with five ranks each, and an ultimate with three ranks. (Fandom.com, "Champion Ability")

Additionally, *LoL* characters have two summoner spells (see also LoL.Gamepedia.com, "Summoner Spells"). Flash is one summoner spell that many people choose because it lets characters jump a short distance in the direction of the player's cursor (LoL.Gamepedia.com, "Flash").

There are no summoner spells in *Dota 2*. All heroes in *Dota 2* have four or more abilities: three or more basic abilities and an ultimate ability.

Abilities in *Dota 2* are described as follows:

Abilities are unique skills that heroes and creeps have access to [...]. They range from simple passive effects, to devastating explosions of energy, to complex, terrain changing feats. All heroes have four or more abilities, three or more basic abilities and an ultimate ability, that they can assign ability points to every time they level up. Every level in an ability makes it more powerful [...].

Abilities can consume mana, and may also be placed on cooldown when used. Abilities that are on cooldown cannot be used until their cooldown timer is up [...]. Abilities with low cooldowns are sometimes referred to as "spammable" abilities, because they can be used very frequently. (Dota2.Gamepedia.com, "Abilities")

Both *Dota 2* and *League of Legends* allow each player to level up active and passive abilities on their chosen characters. However, only the abilities that each character naturally has can be levelled up; players cannot choose their character's abilities (except for very few exceptions, e.g., on *Dota 2*'s Invoker).

Active abilities are those that are consciously activated by a player if they are needed. Conversely – passive abilities cannot be switched off voluntarily, except for when they cost mana.

Although you are given control over a single character, the two games have different ideas of what constitutes a hero or champion in terms of their abilities. It has always been typical of *LoL* that players could buy items that increase the damage output of any abilities. Kaya

(Dota2.Gamepedia.com, “Kaya”) is the only item in *Dota 2* which can increase damage output.

The abilities of *Dota 2* heroes usually do relatively more damage compared to abilities in *League of Legends*. Therefore, battles in *Dota 2* only last a few seconds. These powerful abilities come at a cost—the mana required to cast them is usually high—which prevents them from being used constantly.

Abilities are overall having more impact in *Dota 2*. They cost more mana, have longer range, more damage, longer stuns or silence effects. There are things like permanent invisibility. Therefore, it is crucial in *Dota 2* not to waste abilities. For example, if players try to make a fissure with the hero Earth Shaker but do not hit the target, they have no mana left for some time unless they spend gold on items which restore mana or go back to base.

One could argue that it is more satisfying to score a kill in *Dota 2*, since players can not use their abilities as often as they can in *League of Legends* - but once they can use their abilities, they are quite strong, and it is crucial to make them count.

5.8.1 Disable

“Disables [...] refer to abilities that prevent, impede, or otherwise inhibit a hero from acting” (Dota2.Gamepedia.com, “Disable”). There are different kinds of disables, and most heroes have access to some form of disable. If an opponent is completely hindered from running away, people refer to this as a disable called “stun” (Dota2.Gamepedia.com, “Stun”). In *Dota 2*, stuns which last three to five seconds (e.g., Paralyzing Cask: 5 seconds or Sacred Arrow: 5 seconds; *ibid.*, “Stun”) occur quite regularly. In *LoL* however, 1-2 seconds of stun are almost as extreme as a fixation could get. Champion Ashe (Leagueoflegends.com, “Ashe”) can stun someone for 3.5 seconds.

5.8.2 Trolling

A general definition of a troll is an individual

[...] who constructs the identity of sincerely wishing to be part of the group in question, including professing or conveying pseudo-sincere intentions, but whose real intention(s) is/are to cause disruption and/or to trigger or exacerbate conflict for the purposes of their own amusement (Hardacker 237)

This means that anytime a discussion seems to be intentionally goaded into argumentative chaos, the instigator(s) might be trolling – and they are doing it for their own entertainment.

Similarly, trolling in *Dota 2* and *League of Legends* means that one's own abilities are not used for the good of the team. Instead, a "troll" is sabotaging the chances of winning the game. In both games, it is considered trolling if the items a player is buying do not enhance the abilities of the character. Another way to annoy everyone and risk a permanent ban is simply trying to die as many times as possible.

With the hero Bloodseeker (Dota2.Gamepedia.com, "Bloodseeker") in *Dota 2* it is possible to stun a befriended hero (a person playing in your own team) for nine seconds while causing damage, which can of course mean one could bind a friend amidst enemies, give him 20 damage per second and watch him get killed either by the enemies or the stun.

With Pugna (Dota2.Gamepedia.com, "Pugna"), friends can be made incapable of any actions for a few seconds. With Tiny (Dota2.Gamepedia.com, "Tiny"), people can grab their friends and throw them... to a safe place, or to a dangerous one. With Pudge (Dota2.Gamepedia.com, "Pudge"), players can grab their mates with a meat hook and draw them out of battle to save them. Either when they want to be rescued from a situation or when they do not want to, because sometimes, people are surrounded by enemies on purpose, when they are just about to make a kill.

In *League of Legends*, trolling is also a common occurrence. Anivia can wall off a teammate running from a team fight (Anivia Troll Teamkills 2013). Tahm Kench (Leagueoflegends.com, "Tahm Kench") can swallow a teammate. One user called Ninja Warlord on the Leagueoflegends.com boards complains:

Our Tahm Kench, around 4 minutes into the game, comes into my lane, and swallows me, flashes into the turret, and attempts to get me killed.

League of Legends features jokes, taunts, dances, and laughs⁸⁵ for every champion. This can be abused by for example following a team mate around, not playing the game and having Ezreal constantly yell: “You belong in a museum⁸⁶” (Ezreal Taunt 2015). It could be compared to what would happen if a soccer player suddenly stopped playing and started following one of his teammates instead while singing.

Such behaviour does not happen very often in esports tournaments. The LCS Rule Set clearly states that players are expected not to die as often as possible on purpose (see LCS Rule Set 14.2-14.3.3.).

5.8.3 Killing Players

Perhaps the most noticeable gameplay difference between *LoL* and *Dota 2* is friendly fire: the ability to hit your allies. In *Dota 2*, you can hit and kill your allies.

In *Dota 2* you can kill ally heroes who have been inflicted with negative effects that are draining their health points (HP), like poison, if their HP is low enough. This denies whoever inflicted the spell the experience and gold from the impending kill.

LoL and *Dota 2* differ in how they reward players for killing players. In both games, killing an enemy player grants gold to everyone who participated in the kill. In *League of Legends*, the amount of gold a player is worth depends on how many times they have died without getting a kill and whether they are on a killing spree (three consecutive kills are called a killing spree and 600 gold are awarded for a killing spree; see also Fandom.com, “Kill”). *Dota 2* adds to this by punishing the dead player by throwing away some of the reliable gold that they have earned. “Reliable gold is awarded for kills while unreliable gold is gained over time and for killing minions” (Kim, Ben para.7).

5.8.4 Flash/Blink

As already explained, Flash is one summoner spell that many people choose because it makes characters jump a short distance in the direction

⁸⁵ These will be explained in the Cultural Comparison chapter.

⁸⁶ Ezreal's quote “You belong in a museum!” and “Noxian’s “I hate those guys” are both references to *Indiana Jones*.

of the player's cursor (LoL.Gamepedia.com, "Flash"). In *Dota 2* there is a Blink Dagger that people can buy if they would like to "[t]eleport to a target point up to 1200 units away" (Dota2.Gamepedia.com, "Blink Dagger").

5.8.5 Buyback

After characters die in *Dota 2* or *League of Legends*, they are dead for a while before they reappear (respawn), and players can continue playing. "After a hero dies in *Dota 2*, it comes back to life after an amount of time based on its level"(Dota2.Gamepedia.com, Respawning).

In *Dota 2* you can "buy back" instead of waiting for the hero to respawn. Respawning on a very high hero level can take a long time (90 seconds on level 23; 100 seconds on level 25; (ibid.). Maybe the enemies are destroying a team's base while most of them are dead. In such a situation, they might want to spend gold to instantly respawn, to defend the base:

[...] the buyback ability has a long cooldown of 480 seconds and has a scaling gold cost. Buyback [...] has a base cost of 100 gold, a scaling extra cost based on the hero's net worth, using the following formula: $100 + \text{Networth} / 13$ (the result is rounded down). Besides the potentially high gold cost, buyback also increases the next respawn time by 25 seconds. (Dota2.Gamepedia.com, "Buyback")

As we can see here, buying back is very expensive and there is a very long cooldown on it. There is no buyback in *LoL*.

5.9 Individual Punishment

Dying in *Dota 2* could be seen as a bigger punishment compared to the consequences of dying in *League of Legends*. *Dota 2* players who die automatically lose gold (if they spend it before they die, they cannot lose it; see also Dota2.Gamepedie.com, "Dying").

Dota 2 players are dead for a longer time before they respawn, compared to *LoL*. Between level 1 and 6, *LoL* players stay dead for 6-16 seconds based on their level, whereas *Dota 2* players between level 1 and 6 stay dead for 6-26 seconds (Dota2.Gamepedia.com, "Respawning"). From level 8-18, *LoL* players stay dead for 27.5 – 52.5 seconds based on their level (Fandom.com, "Death"), whereas *Dota 2* players stay dead for 30 up to 65 seconds (Dota2.Gamepedia.com, "Respawning").

Kills might feel slightly more rewarding in *Dota 2* than in *League of Legends* since players gain gold while they are also causing an enemy to lose gold. It could be argued that one is more likely to make mistakes in *Dota 2* and it is harder to come back from them, since players cannot use their abilities as often as *League of Legends* players can, due to the higher mana costs and longer cooldowns, combined with longer waiting times before players can respawn after a death.

5.10 Maps

League of Legends and *Dota 2* are set in a magical land, but the space of this land is much more limited than in other games, because all the action is taking place on one “map”:

Most MOBAs only have one arena that players can compete upon [...] A river runs through the middle of the space. Three pathways, guarded by towers, traverse the river from one team’s base to the other. Cross-sectioned by the river and the pathways is a jungle, divided into four parts. (Ferrari 4)

DotaA, *Dota 2* and *League of Legends* have maps with the same basic layout: Each has a top, middle and bottom lane with 3 towers in each lane.

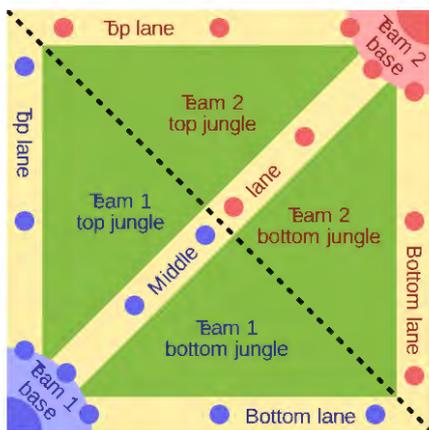


Figure 16 – Basic MOBA map layout

In between the lanes is the jungle, which is filled with creep camps that can be killed as a source of gold and experience. *LoL*’s Summoner’s Rift is slightly smaller than *Dota 2*’s unnamed map. A software engineering student, Daniel Cavanagh, superimposed Summoner’s Rift over the *Dota 2* map to show differences in size:



Figure 17 - Summoner's Rift superimposed over Dota 2 map (Cavanagh 2015)

The difference in size does not seem to be very significant. In the words of Salen and Zimmerman, this MOBA map “is a sort of spatial enforcement of the idea of play as ‘free movement within a more rigid structure’” (Salen and Zimmerman 2004: 304).

Usually at least three players on each team will stay on the pathways. Protecting the towers is important because the way to one’s own base should best not be exposed. But players will strategically change their positions and enter other lanes (see also Ferrari 4).

Dota 2’s bottom lane allows players to “pull” neutral creeps from the forest (if they are approached, they want to attack a player and follow him or her) and guide them into the lane (so that the lane creeps attack the creeps from the forest and the player can attack them all undisturbedly). If creeps are pulled successful, a player can gain more experience points (XP) by killing neutral camps early, while denying the opponent some experience because the neutral creeps usually kill some of one’s own creeps in the process (see also Dota2.Gamepedia.com, “Creep Pulling”).

The concept of creep pulling does not exist in *League of Legends*.

The bottom lane is not only interesting because of the possible bonus experience, it is also a risky lane because it is located relatively far away from everyone else. Should opponents march here, and a player must face them alone, it is less likely than on other lanes to have an item⁸⁸ in one's inventory to escape the "gank" (Killing someone with a momentum of surprise and out of an overpowered situation) on time, let alone survive or turn the fight before teammates come to rescue. Usually when someone is in an exposed position in *LoL* or *Dota 2*, such as being alone on the bottom lane, players will discuss a possible surprise attack⁸⁹.

There are also some other differences between the maps like high grass (*LoL*) and high grounds (*Dota 2*) that prevent vision. In *LoL*, players can use bushes to hide, usually e.g., when they would like to avoid getting killed or when they try to set up an ambush:

Upon entering any brush, the unit is immediately rendered invisible to enemies outside of that particular patch of brush [...]. The unit will remain invisible as such until it has either left the brush, is revealed by a sight-granting ability, item or an enemy unit, or engages in most kinds of attacks. [...] the widespread distribution of brush around the various maps [...] means that using brush correctly is a nigh-universal skill to learn in high levels of League of Legends play. (Fandom.com, "Brush")

5.10.1 Vision: The Fog of War & Juking

Uncertainty of the map the "fog of war" of the RTS and MOBA genres is a type of hidden information that "fosters experimentation" and "increases uncertainty to a tension-inducing level" (Costikyan 93). Players constantly make locational pings to point teammates toward objects of interest or opponents. They always try to have an idea where an opponent might emerge to exert influence.

In *Dota 2*, a team can purchase Observer Wards, which, when placed around the map, give allied players vision in that area (see also Dota2.Gamepedia.com, "Observer Ward"). Similar wards in *League of Legends* are called Totem Wards (Fandom.com, "Ward").

⁸⁸ With a "Town Portal Scroll" in *Dota 2*, one can teleport back to base or to a tower, which will be explained later in this thesis.

⁸⁹ Many things play into the decision-making process, e.g., if the exposed opponent cannot become invisible, cannot teleport, does not have a significant skill ready etc. it makes them a more attractive target for a gank. This also means that everyone needs to be a teamplayer, the whole team loses when there is no willingness to protect each other.

Wards in *Dota 2* and *LoL* have a limited life span (e.g., 90-120 seconds in *LoL*; *ibid.*), they cost a small amount of gold and have a “restock” time in the shop, meaning a team cannot have complete vision over the map at any point. Players may be using invisibility to gain an edge over the other team. To counter this, a team can purchase Sentry Wards in *Dota 2*, which give absolute sight (True Sight; Dota2.Gamepedia.com, “True Sight”) in an area (see also Dota2.Gamepedia.com, “Sentry Ward”). *LoL* features Control Wards, which can reveal and disable enemy wards (see also Fandom.com, “Ward”).

A team in *Dota 2* could purchase Dust of Appearance (Dota2.Gamepedia.com, “Dust of Appearance”). It functions as a debuff (“A detrimental spell of effect placed on a unit. Refers to the opposite of a buff” (Dota2.Gamepedia.com, “Debuff”) to enemies and provides the friendly team with True Sight. Anything invisible caught in the radius of a True Sight source gets revealed (see also Dota2.Gamepedia.com, “True Sight”). Another item, the Gem of True Sight (Dota2.Gamepedia.com, “Gem of True Sight”), gives True Sight in a range of 900 around its carrier. Invisible players in both games will be expected to scout the area to gain information.

In *Dota 2* and *League of Legends*, players cannot use spells on players who step into the Fog of War – stepping into the fog can even interrupt spells that have already been cast.

In *Dota 2*, players can chop down trees to create a path through which they can disappear. Trees can be chopped down with a Quelling Blade (Dota2.Gamepedia.com, “Trees”) or swallowed with an item called “Tango” (*ibid.*; Dota2.Gamepedia.com, “Tango”). There are possibly more than thirty ways in which players can get rid of trees (see also Dota2.Gamepedia.com, “Trees”). They can be burnt down, run over, smashed with a tombstone, kicked by a Walrus and many more things (see also *ibid.*).

In *League of Legends*, the trees stay where they are.

In *Dota 2*, there is even more tricks possible with trees: Players who are being attacked by Pugna for instance (Dota2.Gamepedia.com, “Pugna”),

can cancel his Life Drain spell by planting a tree with an Iron Branch⁹⁰ (Dota2.Gamepedia.com, “Iron Branch”). The Life Drain is cancelled once the tree is standing between Pugna and his opponent. If a tree is planted close to the Fog of War, the player who planted the tree will instantly become invisible.

5.10.2 Towers vs. Turrets

In *Dota 2*, towers (turrets in *LoL*) can be denied when they are about to be destroyed. This prevents opponents from taking the last hit on a tower (gaining gold). Towers in *Dota 2* do less damage compared to *LoL*.

5.10.3 Courier

As already explained, in *Dota 2*, a courier — a creature that transports items to players and can be upgraded to fly, increasing the speed of the delivery — must be purchased (see also Dota2.Gamepedia.com, “Courier”). If the courier is not bought and controlled, time is lost due to walking long distances. If the courier is killed by an enemy, items on the courier can not be retrieved or used until the courier respawns — slowing down item builds and timings. There is no courier in *League of Legends*.

5.10.4 Town Portal Scrolls

In *Dota 2* there is Town Portal Scrolls (Dota2.Gamepedia.com, “Town Portal Scroll”) that must be bought if teleporting back to base or to team fights is required. In *League of Legends*, people can teleport back with a teleport ability. *Dota 2*’s Town Portal Scrolls cost gold and can only be used with mana, *League of Legends*’ teleports can be used without any mana and they are free. In *Dota 2*, players can teleport directly to towers (which is not possible in *LoL*) or back to the base. There is also a cool down period for the Town Portal use, ensuring that heroes can not continuously move around the map.

⁹⁰ Iron Branch is purchasable in the Main Shop. It empowers a hero’s attributes and allows players to plant a tree.

5.10.5 Couriers vs. Recall

Itemization is quite different in *League of Legends* and *Dota 2*. In *LoL*, the early game revolves around surviving and farming neutral minors (minions) to get enough gold to recall to the base and buy the best component of an item (or an item) that should be acquired first for the player's champion. The best-case scenario also involves killing or at least pushing out the opponent on one's lane, making him buy an inferior item. In *Dota 2*, players rarely leave the lane due to the presence of the animal courier (Dota2.Gamepedia.com, "Animal Courier"). The disadvantage of the courier could be that players have to learn to manage it while they are also controlling their heroes.



Figure 18 - *Dota 2*'s "Animal Courier"

Players of *LoL* must find an opportune time to go back to the base, while players of *Dota 2* can stay on a lane, unless they die.

5.10.6 Shop

Each side of the *Dota 2* map has three shops: a main shop, side shop and a secret shop. More shopping opportunities compared to *LoL* close to the lane help *Dota 2* players to stay in their lane.

5.10.7 *Dota 2*: Runes in the River

Runes in *Dota 2* periodically spawn (appear) and can be immediately used or stored in an item called Bottle⁹¹. Once stored, runes can be

⁹¹ "The Bottle is an item purchasable at the Main Shop [...]. Bottles are automatically replenished when the carrier is affected by the Fountain's Rejuvenation Aura. [People who have a bottle and pass by the fountain in their base automatically get a refill for their bottle" (Dota2.Gamepedia.com, "Bottle").

activated at will, after two minutes they activate automatically. *Dota 2* runes are not comparable to the runes chosen in the pre-game lobby in *League of Legends*. Runes in *Dota 2* are special boosters which grant a certain effect depending on which rune a player picks up.

The Runes (Dota2.gamepedia.com, “Runes”): **Bounty** - grants experience, **Double Damage** - increases base attack damage, **Haste** - increases movement speed, **Illusion** - spawns 2 illusion, **Invisibility** - grants invisibility, **Regeneration** - grants health regeneration, **Arcane** - reduces cooldown & replenish time of spells and items.

5.10.8 Items

Dota 2 has 166 items (Dota2.Gamepedia.com, “Items”) – if all basic items, upgrades and dropped items are counted. All items that are not usually available but for seasonal or special events such as Halloween, were not included in this total. In *League of Legends* there are 276 items. Compared to *LoL*, *Dota 2* has many activatable⁹² items, most of them for a “utility” or “support” purpose. Items in *Dota 2* generally offer more options, wherefore players are very flexible in their choices when they build their character in *Dota 2*, while *LoL* champions have set roles (see also LoLesports.com, “Hero Selection 2.0”), with some exceptions.

When buying items, players try to make their characters stronger, whereby they must keep in mind which role they should fulfil. This will be discussed in detail in the chapter “MOBAs and their Culture of Meta”. There is an item called Aghanim’s Scepter⁹³ in *Dota 2* that gives certain heroes enhanced abilities, but there are not items specific to one hero – this also applies for *League of Legends*. However, there are certain items in *Dota 2* that are only good on specific roles or a select pool of heroes. For example, the Dagon “[e]mits a powerful burst of magical damage upon a targeted enemy unit” (Dota2. Gamepedia.com, “Dagon”). In general, Dagon is not a cost-effective item, since fully upgraded it is the single most expensive item in the game (see also *ibid.*) and blocked by

⁹² This means that you must click on an item in your inventory first to activate it.

⁹³ The Aghanim’s Scepter upgrades many heroes’ ultimate abilities (and some heroes’ basic abilities). It can do anything from increasing damage or reducing cooldown, to completely changing an ability, or adding an entirely new ability.

several items (see also *ibid.* para. 6). However, Tinker's (Dota2.Gamepedia.com, "Tinker") ultimate resets "the cooldown on most of Tinker's items and abilities" (*ibid.* para. 2).

Tinker's entire playstyle is built around using his ultimate to use his spells and mobility items such as Boots of Travel, which allow him to frequently hop around the map:

Boots of Travel provide global mobility and map presence in the form of teleportation to any friendly building or creep. Combined with Rearm, Tinker can reposition himself globally at will to swiftly push lanes, join teamfights, and then return to the fountain to replenish his mana. (Dota2.Gamepedia.com, "Tinker Guide")

Because Tinker can reset his Dagon cooldown with his ability "Rearm", it is a viable item on him to further amplify his magic damage output.

This is just one of hundreds of complex hero/item interactions that do not compare to the experience with *LoL* because there, items are mostly passively boosting the champions' stats, amplifying what a champion can already do.

Almost no two carries in *Dota 2* have the same core item sets. One *Dota 2* fan on the Leagueoflegends.com boards even thinks finding the right build in *League of Legends* is too simple:

Almost every carry [in *Dota 2*] has an item that's very favourable for them to rush, because of synergy with kit, or shoring up a weakness. It's these item timings that determine the course of the mid game. *LoL* on the other hand has every marksman building BF and Zeal. There ARE exceptions like Kog'Maw and Lucian and Kalista, and [...] ADCs like MF. But this diversity pales in comparison to *Dota 2* [...] (LoliKnight, a user on Leagueoflegends.com)

An item like the "Divine Rapier" (Dota2.Gamepedia.com, "Divine Rapier") which can be "dropped" exists only in *Dota 2*. The expensive (see also *ibid.* para. 1) weapon can be a game changer because it grants +330 attack damage (*ibid.* para. 1). However, when the hero holding it dies, the Rapier drops to the ground, where enemies can pick it up, and then make good use of the effect:

Buying the item to show off might give the opponent the chance to turn the game around. As a high reward item with the risk of backfire, Divine Rapier is potent for some heroes with certain traits. (*ibid.* para. 2-3)

5.10.9 Potions

At the beginning of the game in *League of Legends*, players usually buy Health Potions:

It is a very useful item for nearly every champion early game due to its affordability but loses its effectiveness as champions' levels increase. The maximum health will be too substantial for it to be significant and any damage received would be too great. (Fandom.com, "Health Potion")

Different from the Healing Salve ("Grants 50 health regeneration to the target for 8 seconds. If the unit is attacked by an enemy hero or Roshan, the effect is lost" (Dota2.Gamepedia.com, "Healing Salve") in *Dota 2*, they don't stop working if players take damage. *LoL* players can also buy Refillable Potions (Fandom.com, "Refillable Potions"), which get replenished when they go back to their base. In *Dota 2*, to complement Healing Salves, players can also buy Tangos which will restore some health if they consume trees (see also Dota2.gamepedia.com, "Tango"), and of course players can use the above mentioned Bottle, which refills with a healing fluid at the fountain.

5.10.10 Neutral Mains

Both in *Dota 2* and *League of Legends* maps there are neutral mains and minors. They are "not controlled by any player, [...] [t]hey are aligned to neither of the teams and offer an alternative source of gold and experience" (Dota2.Gamepedia.com, "Neutral Creeps"). Neutral mains and minors usually spawn regularly, e.g., neutral minors in *Dota 2* every minute. The spawn timing of neutral minors and neutral mains adds dynamic to the game and forces showdowns. *Dota 2* has Roshan as a neutral main, *League of Legends* has Baron Nashor and the Elder Dragon, that provide global gold for the team that kills them. The two monsters are also joined by the Lizard Elder and Ancient Golem who provide buffs when defeated. A dedicated jungler is essential to maintaining control of these buffs as well as the objectives on the map because of Smite—a Summoner Spell that deals massive true damage to monsters.

Roshan is *Dota 2*'s version of Baron Nashor and drops the Aegis of the Immortal (Dota2.Gamepedia.com, "Aegis of the Immortal) which will revive the hero holding it with full health and mana upon death.

Roshan spawns in his pit from the start of the game, and is there, like the neutral mains in *LoL*, for either team to kill. He has a few abilities, including a spell block (with a 15 second cooldown). His health and

armour scale as time goes on. When he dies, he grants the killing team 200 gold per hero in addition to the “Aegis of the Immortal” and later other items such as “Cheese” and “Refresher Shard” or “Aghanim’s Blessing”. The “Aegis of the Immortal” has a duration of five minutes, at which point the carrying hero gets granted a large regeneration boost to health and mana, which ends when the hero takes damage or reaches full health and mana. Roshan respawns 8-11 minutes after he dies (spectators can see a clock above the pit, players cannot). Due to the Aegis of the Immortal falling to the ground, it is possible for the enemy team to take it instead of the victorious team. This is known as stealing the Aegis.

5.10.11 Neutral Minors

There are many Neutral Creeps around the *Dota 2* and the *LoL* map. They spawn in groups at pre-set locations. There are easy, medium and hard camps, alongside ancient camps (see also Dota2.Gamepedia.com, “Neutral Creeps”). If a player dies to a neutral creep (or Roshan), they do not grant gold or XP to the enemy. This is called “denying yourself” (if it is done specifically to prevent gold/XP gain, and not through amateurish conduct). Lane creeps will fight neutral creeps if they get within reach of each other. If an enemy lane creep dies to a neutral creep, any nearby friendly players will gain 20% of the XP they would gain if they killed the creep themselves. Many spells and abilities can affect creeps, however ancient creeps are more resilient to this. They have far more health and deal more damage (see also Dota2.Gamepedia.com, “Neutral Creeps”). Many heroes with abilities specifically for targeting creeps cannot target ancient creeps until they have either levelled the ability more or upgraded it with an Aghanim’s Scepter.

Creepsets in *Dota 2*’s jungle appear to be stronger than sets in the jungle of *League of Legends*. Sustaining yourself in the jungle in *Dota 2* is a reason why the set of heroes that can jungle effectively is small. Most heroes in *Dota 2* cannot jungle well until they have their first items – but by the time players get those items, the laning phase will be over and all heroes could then be seen roaming around the map. Six good junglers are

Enchantress, Chen, Crystal Maiden, Enigma and Shadow Demon. Most heroes do not jungle effectively until they have some sort of life steal ability. Enchantress, Chen and Enigma are special because they can control units and force them to kill neutral camps for them.

5.11 Physics of the Game

Ben Kim wrote on *PCGAMER.com* in 2013 “moving between the two games can be awkward even for seasoned players because of the mechanical differences—turning speed, attack and casting animations” (Kim, Ben para. 7). One player of both *League of Legends* and *Dota 2* called Icecolddragon writes on *Reddit.com*: “Dota 2 almost requires hundreds to even thousands of hours to understand the gist of every mechanic for you to be decent” (Icecolddragon, a user on *Reddit.com*). The reason for the two games feeling differently is their physics⁹⁴: their cast points and turn rations, which will be explained in the following.

5.11.1 Cast Points

It is a common saying on the internet that whether something is a bug or a feature is a matter of perspective. What *Dota 2* players call a “cast point” or “casting time” on an ability, many *League of Legends* players when they first play *Dota 2*, experience as a “lack of mobility” (a possible bug and not a feature⁹⁵). While champions in *LoL* can do their incantations on the fly, heroes in *Dota 2* have delayed cast points: it can feel as if they pause to use one of their abilities. This is an interesting design decision. Many people will like responsiveness, while others will complain about it. This may be strongly influenced by which game a player has played first.

⁹⁴ “Computer animation physics or game physics involves the introduction of the laws of physics into a simulation or game engine, particularly in 3D computer graphics, for the purpose of making the effects appear more realistic to the observer. Typically, simulation physics is only a close approximation to actual physics, and computation is performed using discrete values” (Wikipedia.com, “Game Physics”).

⁹⁵ A bug is a flaw in the program code, while a feature is a useful element in a software or a video game.

5.11.2 Turn Ratios

All units in *Dota 2* have a turn rate. If you want to turn around with your hero, you have to turn first (heroes have a turn-around animation) before actually moving. It does not just happen instantly like in *League of Legends*. This is also a choice in game design like the delay on cast points.

5.12 Summary

In the comparison of ludic elements of the two games *Dota 2* and *League of Legends* the following differences and similarities were found:

Dota 2 has a more diverse pool of heroes, meaning that a number of heroes are not in-line with the ability concept of the entire *Dota 2* hero pool. *League of Legends* shows a more uniform character pool, which allows players new to the game to feel safer when they try new champions, as they will always see a similar ability concept and team composition choices. *LoL* is more accessible, due to some simpler mechanics and the fact that *LoL* players must choose the role they want to fulfil on the map before choosing a champion for that role, whereas *Dota 2* players do not get any suggestions for their role or starting positions by the game itself.

Dota 2 compared to *League of Legends* has a higher skill ceiling, which the Reception History and Game Studies chapters already pointed to. *League of Legends* and *Dota 2* both have a high skill floor and they are both high skill ceiling type of games. Draper explains skill floor as follows:

A skill floor is a way of describing how difficult it is to *begin* the process of mastery. For example, playing Widowmaker in Overwatch isn't easy [...]. In order to even be relevant with her, you need to have exceptional aim and positioning. The skill floor [...] is very high. (Draper para. 13)

As we have seen, *Dota 2* and *LoL* are both quite challenging to learn and quite hard to master. *Dota 2* is even slightly more punishing than *LoL*, but it can be argued that it is also more rewarding. Because *League of Legends* is relatively easier to learn, *Dota 2* can be seen as a more complex experience.

It is very fascinating that the MOBA genre, which is so unfriendly to beginners, has become a genre featuring some of the most popular computer games in the world. The ludic comparison shows that a large part of the beginner-unfriendliness is due to the counter-intuitiveness of the two game's core dynamics: While amassing gold, players must know when to take and when to avoid a fight and they must work as a team. A patient and analytical mindset is necessary if people want to win their games. After learning a few basics in *LoL* and *Dota 2*, a player's understanding of how the game must be approached can change entirely. This process may happen regularly and even to professional players. The better someone becomes, the more intense this feeling could be, and – the more experience someone has, the more intensely will he or she probably feel new patches being applied to the game.

Chris Winn, who wrote a paper on “How Dota 2 and League of Legends use Dramatic Dynamics”, has played these games for over 300 hours. Yet, the

[...] games' match-based structuring and constant evolution through patching means that it is impossible for them to be 'played to completion' as more traditional, narratively-structured digital games could be, and, for this reason, a complete experience of every possible variation of play within these games, [...] cannot be assumed. (Winn 7)

With Winn's statement in mind, it is even easier to declare that *Dota 2* and *League of Legends* are inexhaustible as objects of thought, self-control, self-assessment, and their capacity for teamwork.

6 Cultural Intertextualities in MOBAs

Riot and VALVE play a role in shaping our cultural environment, since they produce two very popular games.

As customers, we are aware they are the ones monetizing our interest in their games – wherefore we might sometimes ask, whether they truly care for us and our lives – whether they have a Corporate Social Responsibility team and agenda. This is because as players, we often grow fond of our games. Video games do not only influence people's everyday cultural life everywhere in the world, they are also connecting us and our cultures, connecting aspects from different cultural backgrounds in one digital

melting pot – yet of course also allowing for problematic phenomena from trolling to severe cyber bullying. This is happening especially in online multiplayer games where a lot of people are, such as *League of Legends* or *Dota 2*, the two MOBA games in focus of this doctoral thesis. Gaming at first glance seems to be a social activity: Rich Taylor found that “[f]ifty-six percent of the most frequent gamers [in the U.S.] play with others” (Taylor, Rich para. 8). He also discovered that “[h]alf of the most frequent gamers say that their games help them connect with friends and family” (ibid.). Esports was born in the early days of arcade centers and grew into today’s multi-million-dollar industry. Electronic sports competitions always had an open nature: It has always been easy to sign up for competitions (e.g., on *ESLgaming.com*) for anybody and later, streaming platforms (e.g., *Twitch.tv*) provided a channel for content which was not controlled by the usual established media groups. Instead, everybody was able to stream games and tournaments freely and interact with one another since around 2010 (see also Scholz 2011/12: 89-91).

Esports has always been growing and is expected to continue to grow: “It is arguably the world’s fastest-growing sport and is the first sport, outside of football, that is truly global” (Medium.com, “Esports – Bigger than Traditional Sports?”).

The esports title *League of Legends* in 2017 had 81 million active monthly players on average, calculated esports analyst Richard Heimer (2018 para. 13). *LoL*’s popularity helps to grow esports’ visibility and lays bare “cultural-historical currents that explain the current historical moment. The game’s global nature, enabled by Web 2.0’s globalizing effects and breakneck speed, makes it a powerful lens for cultural-historical analysis” (Howard IV).

League of Legends and *Dota 2* are not just video games or esports games. They are culture. Culture exists where the people⁹⁶ are and the people are playing MOBAs. Therefore, by using this powerful cultural lens Howard

⁹⁶ Women represent “a huge and growing segment of the gamer community” in the United States (Taylor, Rich para. 5). There are two times as many adult female gamers (33 percent) as there are young male players (15 percent) and the most frequent female gamer is on average 43 years old (see also ibid.). Older players (ages 50+) represent the second largest segment of the gamer population and are a larger block of the industry than players 18 years old and under (see also ibid.)

mentions, this chapter will examine all the different cultural aspects that play an important role in the two representatives *League of Legends* and *Dota 2* of this popular genre in the world of video games: the MOBA genre.

Philosopher Daniel Martin Feige recognizes video games as objects that can only be defined if we take their aesthetic character into consideration – just as we would when we are analysing films, music, or photography. He states that a videogame must be seen as an aesthetic medium at the least (see Feige et al. 2016).

Games have aesthetics, and they are beautiful, writes game designer Eric Zimmerman in his “Manifesto for a ludic century”:

This above all: games are not valuable because they can teach someone a skill or make the world a better place. Like other forms of cultural expression, games and play are important because they are beautiful.

Appreciating the aesthetics of games – how dynamic interactive systems create beauty and meaning – is one of the delightful and daunting challenges we face in this dawning Ludic Century. (Zimmerman 22)

We can certainly agree with Zimmerman and say, that they can be, but they do not have to be beautiful – as they do not have to be beautiful to be aesthetic objects.

Seeing a play on stage twice just as playing a computer game is never the same experience (see also Feige 143). One experience is always unique and cannot be “replayed”. These variations of experience alone can make us curious, make us want to do something again, to get a better grasp of the meaning we interpreted into the things we believe we saw and felt.

As could be shown in the conclusion of the ludic comparison chapter, playing MOBAs is an endless experience of one’s own abilities, both mental and social. Losing a game always confronts a player with his or her abilities such as patience, politeness, or communicative competence. Anthropologist Edward T. Hall famously said: “Culture is communication” (Hall, Edward T. 3). Winning or losing an esports championship in *Dota 2* and *League of Legends* strongly depends on the players’ communication. The intercultural world of MOBA esports challenges people to be interculturally competent and constantly refining this quality when they are playing in an international team or reading international blogs and forums on their specific game.

MOBAs, especially compared to other video games and other forms of media, also require their players to be endlessly creative. It begins with picking a username and ends with creating extremely difficult strategies. Wright et al. found when looking at *Counter-Strike* that “having fun is bound up with creative action taken to enhance the pleasure of the game” (Wright et al 112) and that *Counter-Strike* “offers the game player a context in which to exercise safe ritual license with behaviours that would not be tolerated in the “real” world of everyday life” (ibid. 113). By such *behaviours*, Wright et al. refer to experiments with modes of communication (see also ibid.).

Feige writes video games are interesting as art because the “player is playing herself through” (Feige 173), and he seems to understand playing certain computer games as a practice of self-theming and self-change bound by the specific aesthetic shape of the object. According to Feige’s theory of “playing oneself through”, art in video games cannot be measured by only analysing them with external classifications as a narrative or as digital game (narratology vs. ludology) (see also ibid. 186). Players in a video game unlike actors do not have to follow one script only and once the player enters the game, her actions might seem more important than the artwork of the game (especially if there is an esports competition where the commentators are focusing on the player’s abilities). Understanding whether a game could be a piece of art is therefore only possible when we connect the game with the player or in other words, play the game (see also ibid.).

Additionally, to these experiences of meaning, people are looking for meaning in the colourful worlds of MOBA games, in their lore and artwork that players can immerse themselves in. Game developers using literary sources could be doing so for the purpose of creating more depth and enthrallment. Lore and artwork in *Dota 2* and *League of Legends* is a very interesting field of (cultural) intertextuality studies. Just as other aesthetic art forms, these MOBAs have a constant lively exchange process with all aesthetic media, which we will be looking into in this chapter to get a better understanding of a MOBAs aesthetic qualities. Riot Games have publicly talked about their criteria for choosing dances for new champions or skins. On the Riot website, the development team

describes how they are looking at the character's tone (humorous or serious) because “[d]ances can sometimes be a moment to break a character, like the joke animations, so it can be fun to test something a little different” (Alderton, “Ask Riot – Bugs and Dances”). Afterwards the team asks: “Does the character’s design immediately pop out as something similar to what we reference in pop culture?” (ibid.) Every time they go into a design process, they seem to be looking for (pop) cultural intertextualities for the new things they develop.

In the following, all *Dota 2* heroes and all *League of Legends* champions were checked in search of cultural intertextualities. On the publishers’ websites (Dota2.com, Leagueoflegends.com) but also on Wikis for these games (Dota2.Gamepedia.com, Fandom.com and LoL.Gamepedia.com), there are often clues on possible cultural intertextualities (e.g., a Trivia section that would say this character was based on Shakespeare’s Puck) and pictures of the characters. Afterwards, the original cultural sources (e.g., *A Midsummer Night’s Dream*) were consulted in comparison to the hero or champion and the characters were all sorted into cultural categories (e.g., literature, mythology, theatre).

6.1 Theatre

Terms such as the presentation in video games (“Darstellung im Computerspiel”) or the scenarios of video games (“Szenarios von Computerspielen”) could partially be analysed under the term of theatricality, writes Daniel Martin Feige (see also 126). Game Phases in MOBAs follow— according to Chris Winn, who wrote a paper on Dramatic Dynamics in *League of Legends* and *Dota 2*— a dramatic arc, with conflicts, a climax, and a resolution (see also 2). When people are playing a MOBA game, they are performing, argues Winn:

e-Sports, and digital games en masse could be viewed as performative or not purely based on their framing; the common presentation of digital games on stage, online or within living rooms, with groups of willing spectators, being enough to qualify them as performative behaviour. (Winn 2)

Actors on stage often do something that an audience can hardly imitate, since good acting takes years of training. The same applies for esports professionals, who can only play in front of an audience on a stage when

they have been training and demonstrate skills that cannot be easily imitated by an audience.

Marc LeBlanc is a game designer and veteran of the computer game industry, who held a Game Tuning Workshop at the GDC (Game Developers Conference) in 1999. He believes that in “the study of game design, comparisons to traditional narrative forms – prose, theatre, film and TV – are inevitable” (LeBlanc 439) and that “its [sic] natural for game designers to look for ways to incorporate the tools and techniques of storytelling into their own craft” (ibid.).

For LeBlanc, “drama is a desirable quality of games” (ibid.). He writes about players that they “often seek out games that are dramatic” (ibid.), and that sometimes “a game’s drama becomes the primary motivation for playing because ‘it’s a kind of fun’” (ibid.). Therefore, he strives to “create games that are climactic struggles in their own right” (ibid.), but he explains how a game designer’s possibilities to create drama are limited since “[w]e don’t – and can’t – know the precise details of how our game will play out [...] We cannot create drama; we can only create the circumstances from which drama will emerge” (440).

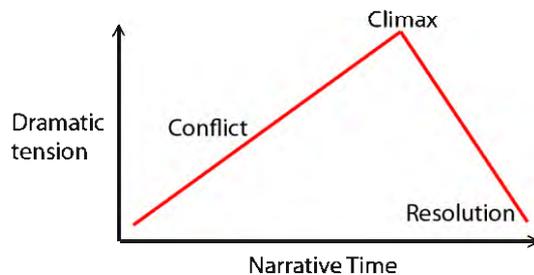


Figure 19 - The dramatic arc (from: LeBlanc 443)

LeBlanc uses the dramatic Arc as defined by Gustav Freytag (LeBlanc 170) in a simplified form. The pyramid can help writers organize their thoughts when developing a drama, which should have the rising action with a conflict or knot, a climax and then the falling action, when knots are resolved. The model is intended to represent a “well-told story”, with escalation building slowly like a rubber-band which is carefully stretched until the point it can be stretched no more (see also Winn 6).

To create this dramatic arc, a conflict is needed. This conflict could be an external threat from which a character suffers, or a character could be suffering from an inner conflict or flaw. Often characters have a yearning

(e.g., Lady MacBeth who wants to be queen) alongside unsuccessful attempts to fulfill this yearning, which provides fruitful dramatic scenes that could raise tension and push forward the plot until there is a good opportunity for a climax. Exactly this structure can be applied to a MOBA: The two teams (the protagonists) want to win, they have a yearning.

They have a certain freedom in how they want to act: There is social conventions (we will talk about this and the “Culture of Meta” chapter later) and there is of course the given form of the game, which cannot be won for example if the players would stay in their bases. Actors in a theatre will probably discuss the way they play their role with their director. If they were to suddenly not go on performing during a play, they might eventually lose their position in the company or their job. If a professional gamer in a world championship did not follow a strategy as discussed with his or her team or if he or she even suddenly quit moving or quit the game, this could be to the same effect: one could risk the contract with the team and one’s reputation could be harmed to a point where one might never be able to play in a professional team on that level again.

During a competitive MOBA match, dramatic battles happen with different outcomes, the tension rises until it can rise no more, and one team wins the whole match in a thrilling last team fight, somewhere on the map, in the forest or inside the losing team’s base. The essence of drama in a game comes from the conflict and “the conflict comes from the contest around which the game is built” (LeBlanc 444).

Although all competitive MOBA matches can probably be described in theatrical terms, it does not mean that this way of describing them is ideal: It can be too inclusive, since a good talk between two people could also have a climax and a turning point, but also too exclusive, since postdramatic theatre might not have a clear conflict and a resolution.

Shakespeare’s Richard, Duke of Gloucester (Richard III) had his nephews killed after he declared: “I wish the bastards dead” (4.2.22,14). Richard, in his opening soliloquy, describes himself as a villain, an archetype:

And therefore since I cannot prove a lover [...]
I am determinèd to prove a villain (1.1.28, 30)

Being an archetype, it is inevitable for him to “prove a villain”, which means as part of the dramatic climax of the play, that he will inevitably be responsible for the deaths of the two princes in the tower (twelve-year-old Edward V and nine-year-old Richard of Shrewsbury, Duke of York). We already know by the soliloquy, that his purpose in the play is to be the force of evil. Something very bad will happen and we can be sure of it, we become tense as viewers, this is the element of inevitability as described by LeBlanc (LeBlanc 444). It is predictable that the outcome of the different acts will be certain by the end of the play. Yet, we cannot know what the evil is that will happen and to whom. This is LeBlanc’s element of uncertainty (ibid.), we are getting to know the characters and we begin to fear for them.

This Shakespearean structure with inevitability and uncertainty at play can be used to describe a MOBA. The players could be seen as the archetypes, as if they were all different versions of Shakespeare’s Gloucester: They are villains, and the enemies are the opposing forces. The villains are inevitably going to do harm to the other characters. They are not fit to make peace with their enemies or be “lovers”, they will use their abilities to cause the utmost possible damage, because of the way the game has been designed. If people want to win the game, they must defeat their enemies.

Just as Richard, players cannot blindly apply force, they must make their moves strategically. Players playing the characters in the MOBAs know that they are not harming people. Richard knows he is responsible for the death of children. Like players playing brutal characters in MOBAs, actors playing Richard III know they are not killing people, but imaginary characters.

A winner will be crowned, both in *King Richard III* and in a game of *Dota 2* or *League of Legends*. Spectators of an esports tournament will not know the outcome of a match, as spectators of a theatre play will not know the outcome, unless they know the play. It is very difficult to

become a world champion in esports. This fact alone increases dramatic tension for the viewers.

Not only can a match of *Dota 2* or *League of Legends* be described in theatrical terms: there are theatrical intertextualities to be found in *Dota 2* and *League of Legends*.

One interesting example is the hero “Puck” in *Dota 2*. Puck derives from Shakespeare’s play *A Midsummer Night’s Dream* which belongs to a second group of Shakespearean comedies, written between 1595/96 and 1601/02 (see Baumann 37). The Shakespearean character Puck as a playable hero in *Dota 2* is both a finding of intertextuality as well as “interfigural⁹⁷” (Müller 1991).

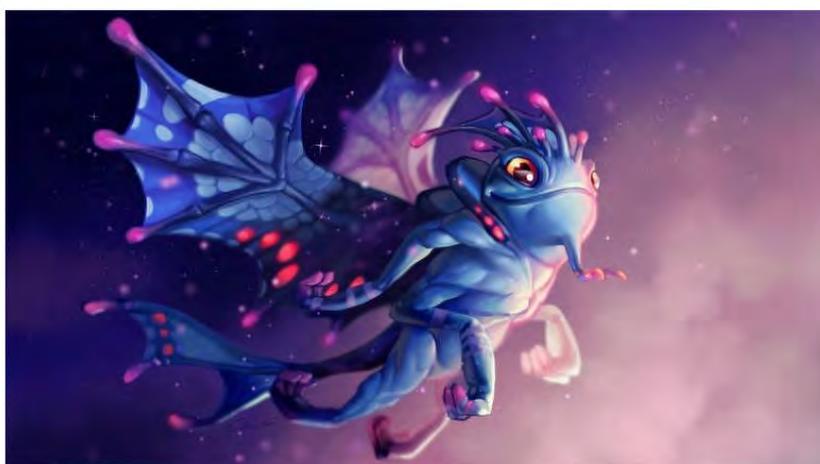


Figure 20 - Puck - Artwork by VALVE 2013

Puck, the Faerie Dragon, is one of the most popular “mid heroes” (heroes played as carries in the mid lane) in *Dota 2*, as also the Gamepedia Wiki suggests, by recommending the Magic Wand to “sustain mana and health to keep active in the mid lane” (Dota2.Gamepedia.com, “Puck” para. 14), and the bottle⁹⁸, which helps Puck managing his runes “from the mid lane, as well as replenishing mana for early game nukes” (ibid.). He seems to be designed as a character for the mid lane⁹⁹. On the *Dota 2*

⁹⁷ To the best of my knowledge, Müller is the first scholar who used this term.

⁹⁸ “The Bottle is an item purchasable at the Main Shop [People who have a bottle and pass by the fountain in their base automatically get a refill for their bottle. When they need to heal, they can drink from the bottle]. Runes can be stored in the bottle for later use by right-clicking them. Unused runes will automatically activate after 2 minutes” (Dota2.Gamepedia.com, “Bottle”).

⁹⁹ On a sidenote, the Shakespearean play Puck derives from, carries the word “mid” in its title.

Wiki, Puck is being described as “fragile” and “agile” (ibid.). He is commonly played as an “initiator and a ganker” (ibid.).

According to Müller’s theory of interfigurality,

[w]e speak of ‘re-used figures’ in order to indicate that if an author takes over a figure from a work by another author into his own work, he absorbs it into the formal and ideological structure of his own product, putting it to his own uses, which may range from parody and satire to a fundamental reevaluation or re-exploration of the figure concerned. (Müller 107)

The Faerie Dragon “Puck” in *Dota 2* fulfills many aspects of Müller’s theory: Shakespeare extracted Puck from folklore: A “Puk” is a “dragon of Germanic folklore, appearing in the legends of Estonia, Lithuania, Latvia and Germany”, writes Manfred Lurker in his 2015 *A Dictionary of Gods and Goddesses, Devils and Demons* (Lurker 291). “Puks are generally not malevolent in nature; the house in which they dwell becomes their home” (ibid.). However, Carol Rose writes in her 2001 book on “Giants, Monsters & Dragons: “the benefit of Puks stop with their owners, for they are tricksters by nature and will steal treasure for hoarding at the detriment of neighbors” (Rose 300). Puck in *Dota 2* is a “Faerie Dragon” who also acquires treasures (gold) to the best of his abilities.

“Puck, the Faerie Dragon” (Dota2.Gamepedia.com, “Puck” para. 1), was probably inspired by Shakespeare’s Puck and absorbed into the formal and ideological structure of *Dota 2*, where he is put to the developers’ use, with certainly a grain of parody and satire (we shall investigate in this later on).

Puck within *Dota 2* is named “Puck the Faerie Dragon” (ibid.) and not Robin Goodfellow as in Shakespeare’s play, which raises questions about the origin of the term “Faerie Dragon”.

In the *Dungeons & Dragons* (Gygax and Arneson 1974) role-playing game, the term “Faerie Dragons” appears also. Here they are “rarely hostile and the size of a housecat” (Gygax 57). They have wings like butterflies of fairies (see also ibid.), they have a tendency towards mischief (see also ibid.), and they first appeared in issue #62 of *Dragon Magazine* in 1982 (see also ibid.). These are the first known graphical versions by David A. Trampier (1982) and a 2014 version from *Dungeons & Dragons* by an Unknown Artist. The colouring (blue, red

and violet colouring scheme) reminds one of the above mentioned 2013 Puck by VALVE.



Figure 21 - Trampier's version of the D&D Faerie Dragon 1982



Figure 22 - Faerie Dragon from the Monster Manual 5th Edition, Unknown Artist, 2014

Puck first appeared in *DotA* when the version 6.47 was released August 24th 2007 (Dota2.Gamepedia.com, “Version 6.47”). Another article on Gamepedia says that Puck was introduced in version 6.48 after being created in a contest:

Puck was introduced in Version 6.48 as a result of a hero creation contest held on the DotA-Allstars forum, in which players designed a new hero to suit the faerie dragon model from *Warcraft III*. This makes Puck the first and only hero created by the community. (Dota2.Gamepedia.com “Puck”)

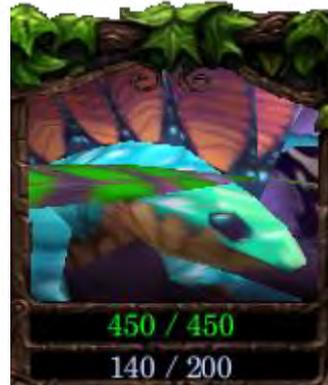


Figure 23 & Figure 24 *Warcraft III* Faerie Dragon Model from 2002

“Puck’s alternate name was Kupu-Kupu, which means “moth” or “butterfly” in the Malay and Indonesian languages” (Dota2.Gamepedia.com, “Puck”).



Figure 25 - First appearance of Puck in Dota in 2007 as "Kupu-Kupu"

This is an overview of Puck's abilities as of January 2019¹⁰⁰:

Illusory Orb: Puck launches a magic orb that floats in a straight path, damaging enemy units along the way. At any point, Puck may teleport to the orb's location using Ethereal Jaunt.

Waning Rift: Puck releases a burst of faerie dust that deals damage and silences enemy units nearby.

Phase Shift: Puck briefly shifts into another dimension where it is immune from harm.

Dream Coil: Creates a coil of volatile magic that latches onto enemy Heroes, stunning them for 0.5 seconds and damaging them. If the enemy hero stretches the coil by moving too far away, it snaps, stunning and dealing additional damage. Upgradable by Aghanim's Scepter.

If ever a video game character was unique, clearly associable with its game – and noticeably Shakespearean – *Dota 2*'s Puck is, even in terms of his game mechanics:

He is “a highly mobile” (Dota2.Gamepedia.com, “Puck” para. 1) character, “best known for being an extremely slippery target” (ibid.).

Puck can use its Phase Shift (ibid. para. 8) ability in combination with the Blink Dagger (Dota2.Gamepedia.com, “Blink Dagger”). Perfectly timed, Phase Shift and the Blink Dagger will allow Puck's player to escape from danger. On Puck, Blink Dagger is also used to initiate fights

¹⁰⁰ Under www.Dota2.com/hero/puck, there is a video displayed for a better understanding of each ability.

(Puck is suggested for the role “Initiator”; Dota2.Gamepedia.com, “Puck” para. 17), allowing players to burst into as many opponents as possible, casting Waning Rift (ibid. para. 7) on them (which silences them all; see also ibid.), then cast Dream Coil (ibid. para. 10) to trap them and Illusory Orb (ibid. para. 3) to reposition. When Puck launches Illusory Orb, it “floats in a straight path, damaging enemy units along the way. At any point, Puck may teleport to the Orb’s location using Ethereal Jaunt” (ibid.).

With all its mobility abilities, Puck seems to be mechanically designed as a trickster and a faerie - not only by his looks.

We do not hear in the play how old Shakespeare’s Puck is, but he calls the Athenians “mortals” (MND 3.2.115), which implies that their lives will have an end, while his will be endless: “Lord, what fools these mortals be” (ibid.). Puck in *Dota 2* could be seen as an immortal creature, since it will always come back to life, no matter how often it will die. Some of the sentences Puck says in *Dota 2* (VALVE 2013) are written in iambic pentameter:

X / X X / X X / X / X / X
 “That was an exceedingly odd metamorphosis.”

/ / X / X / X X / /
 “Ah, nothing like the feel of a fresh molt.”

/ X / X / X X X / X X X / (X)
 “Someone chose a poor time to put me out of commission.”

X / X / X X / X X / X X / X /
 “The Scrolls of Haize are concise on this matter: with youth comes grave
 X / X / X /
 responsibility.”

X / X / X / X / X / X / X / X / X
 “A thousand years of youth have fallen behind, and still I fill the time with
 /
 games.”

The *Dota 2* Puck’s line: “A midsummer nightmare” (Dota2.Gamepedia.com, “Puck” para. 17) unmistakably connects him with Shakespeare’s play, and Puck’s “fondness for mischief” (Dota2.Gamepedia.com, “Puck” para. 2) relates him to Shakespeare’s

Puck. On VALVE's official website for *Dota 2*, Puck's biography is given as follows:

While Puck seems at first glance a mischievous, childish character, this quality masks an alien personality. The juvenile form of a Faerie Dragon, a creature that lives for eons, Puck spends countless millennia in its childish form. So, while it is technically true that Puck is juvenile, it will continue to be so when the cities of the present age have sloughed away into dust. Its motives are therefore inscrutable, and what appears to be play may in fact hide a darker purpose. Its endless fondness for mischief is the true indicator of Puck's true nature. (Dota2.com, "Puck" para. 5)

In a *DotA Wiki* on *Fandom.com* there is a background story on Puck that had already existed for this hero in the old *DotA*:

In Sentinel's search for heroes to aid them in the war against the Scourge, they discovered the lost lands of the mystical Faerie Dragons. Upon explaining the conflict to the Faerie Queen of Agrace, she sent forth Puck, a personal guardian, to turn the tides of war. Despite his small size and mischievous personality, the little dragon soon proved to pack more than his fair share of power on the battlefield, blasting through the enemy ranks with balls of magic, faerie dust, and the capability to stupefy an entire army with nothing more than his imagination. His foes all learned the hard way that size matters not in combat, and that appearances are, ultimately, deceiving. (Fandom.com, "DotA Puck" para. 1)

Shakespeare's Robin Goodfellow is also described as mischievous and clever, on his first appearance by one of Titania's entourage:

Are not you he
That frights the maidens of the villagery,
Skim milk, and sometimes labour in the quern,
And bootless make the breathless housewife churn?
Those that Hobgoblin call you, and sweet Puck,
You do their work, and they shall have good luck.
(*Midsummer Night's Dream* 2.1.40-47)

Shakespeare's Puck, Robin Goodfellow, is based on the ancient figure Puck found in English folklore. There he is known to be a domestic and nature spirit, demon, or fairy. Kenneth Muir in 1979 wrote in an article titled *Folklore and Shakespeare* that when reading "the pioneering book by Thistleton Dyer, published nearly a century ago" (Muir 1981: 231) or "the recent book by Roy Palmer on *The Folklore of Warwickshire*" (ibid.),

one will be convinced that anyone brought up in Stratford-upon-Avon in the middle of the sixteenth century would have come into contact with a wide variety of folk customs and superstitions. (ibid.)

Therefore, any dramatist writing plays in the last two decades of the sixteenth century "could rely on his audience being equally familiar with

the same body of material” (ibid.). Due to these circumstances, it is interesting to note the differences in experiences between an audience in the 16th century watching *Midsummer Night’s Dream*, where everyone would have known Puck and his possible character traits, compared to the experience players of *Dota 2* today are having, who are not often familiar with Puck, depending on whether they have had experiences with Shakespeare in English or Drama classes. An audience in the 16th century would immediately think of many things they have already heard about Puck when he appears on stage. A player of *Dota 2* might not know anything about him, but his spells inspired by *A Midsummer Night’s Dream* (e.g., stunning people using faerie dust) and the strange way in which he talks (partially in iambic pentameters) might spark interest to explore Puck’s origins. Should a player of *Dota 2* know about Puck as a folklore character or Shakespearean character, this intertextuality will probably make the player feel a deeper connection with the game, since Puck is an interesting and likeable mischievous sprite. If a player of *Dota 2* is also an avid playgoer, it could be a fascinating experience to play a creature which one could not play on a stage in real-life, creatively making use of Puck’s abilities, speaking Puck’s tongue, and philosophizing about how this folklore creature would actually fare against e.g., Zeus the god of war and other powerful personalities in the game.

Shakespeare used folktale motifs, “combining literary and folk-material” (Muir 1981: 232). Puck is clearly folklore, the only character in *A Midsummer Night’s Dream* “who is entirely traditional” (ibid. 236). Shakespeare, writes Muir, has “fused an earth-demon with a house-fairy” and this character “loves crude practical jokes: he likes things to fall out preposterously” (ibid.). Preposterous are the circumstances indeed in which Puck leaves the young Athenian lovers in the enchanted forest: The “shrewd and knavish sprite” (ibid.) sparks the main drama of the lovers’ story: He mistakenly administers a love charm to sleeping Lysander instead of Demetrius, which is why Lysander falls in love with Hermia and confesses his love to her:

O, take the sense, sweet, of my innocence!
Love takes the meaning in love’s conference.

I mean, that my heart unto yours is knit
So that but one heart we can make of it;
Two bosoms interchained with an oath;
So then two bosoms and a single troth.
Then by your side no bed-room me deny;
For lying so, Hermia, I do not lie.
(MND 2.2.51-58).

Later, when Oberon orders him to fix the mistake, Puck produces a dark fog, leading the lovers astray within it by imitating their voices (see also MND 3.2.403-413), and then applying the love sparking flower to Lysander's eyes (see also 3.3.40), which makes him then fall back in love with Hermia (see also 4.1.145-150). The Athenian lovers wonder if the events that occurred in the forest were real, or merely a shared delusion (see also MND 4.1.188-197).

Just as Shakespeare's Robin Goodfellow can lead the Athenians astray, *Dota 2*'s Puck can launch his ability Illusory Orb and quickly teleport to the orb's location, thereby leading enemy heroes astray. The *Dota 2* Puck's ability Waning Rift releases a burst of faerie dust, which is comparable to Shakespeare's Puck's dark fog: Waning Rift hinders enemy heroes from acting, they become silenced. The dark fog in *A Midsummer Night's Dream* also hinders the Athenians from doing anything useful, except for walking in circles and finally falling asleep. This is reminiscent of *Dota 2* Puck's Dream Coil (Dota2.com, "Puck" para. 9), which stuns and confuses enemies. Shakespeare's Puck can similarly paralyze people. The same Puck is also a master of confusion, when he sticks a donkey's head on bottom, who unknowingly goes back on stage to play Pyramus (see also MND 3.2.96), which again reminds one of the *Dota 2* Puck, who can create confusion by creating a version of himself (Illusory Orb).

Of course, when playing Puck in *Dota 2*, not all things will go according to plan, just as Robin Goodfellow's actions (who tries to do as he is told by Oberon) are not always played out as intended.

Shakespeare's Puck delivers a speech in which he addresses the audience directly, and suggests that anyone who might have been offended by the play's events should, like the characters, consider that the whole performance was just a dream:

If we shadows have offended,
Think but this, and all is mended,
That you have but slumber'd here
While these visions did appear.
And this weak and idle theme,
No more yielding but a dream,
Gentles, do not reprehend:
If you pardon, we will mend:
And, as I am an honest Puck,
If we have unearned luck
Now to 'scape the serpent's tongue,
We will make amends ere long;
Else the Puck a liar call;
So, good night unto you all.
Give me your hands, if we be friends,
And Robin shall restore amends.
(MND 5.1.386-403)

This speech about the play being a dream suits Faerie Dragon Puck's ability "Dream Coil" very well, as in *Dota 2*, this coil "sows confusion by forcing its enemies to vividly dream about their own mortality" (Dota2.com, "Puck" para. 9). Sowing confusion and causing harm is also something that both Robin Goodfellow and Faerie Dragon have in common. The fairy that describes Robin in *A Midsummer Night's Dream* says about him:

Are not you he that [...]
Mislead night-wanderers, laughing
at their harm?
(MND 2.1.20-26)

Most of *Dota 2*'s Faerie Dragon's abilities are in fact misleading abilities. The Coil stuns, the Phase Shift confuses enemies because Faerie Dragon disappears "to the alien dimension from whence it came" (Dota2.com, "Puck" para. 3). When he uses "Waning Rift", Puck, "with a mischievous grin, [...] spreads its enchanted powder which disrupts magical flow" (ibid. para 2). On VALVE's *Dota 2* website, the ability "Illusory Orb" is described as follows: "The playful Faerie Dragon delights in confusing others, vanishing and reappearing where unexpected" (ibid. para 1). Shakespeare's Puck likewise goes undetected, he watches the preparations for the play within the play (see also MND 2.2) or the Athenians wandering the forest without anyone noticing him (3.3.25 ff.).

Both Faerie Dragon and Robin will only be noticed by others, if they intend to be noticed.

Androgynous (because nowhere in the play is the audience told whether Puck is male or female) Robin Goodfellow uses magic throughout the whole play for comic effect. Yet, transforming Bottom's head into an ass's head is both comical and cruel, which shows Puck is playing cruel tricks for the sake of enjoyment. Faerie Dragon Puck is the same, it plays cruel tricks on the other characters, which can cause satisfying, comical situations, especially if Puck is played well. *Non-visually* – but in terms of abilities and responses (sentences recorded for him by a voice actor), today's *Dota 2* Puck is clearly a character inspired by Robin Goodfellow in *A Midsummer Night's Dream*.

The *Warcraft III* Faerie Dragons (which *Dota 2*'s Puck was visually inspired by) might have been based on the Faerie Dragons in *Dungeons & Dragons*. The modders who created the first version of the *DotA* hero Puck out of the *Warcraft III* Faerie Dragon must have been familiar with Shakespeare's Puck, otherwise they would not have given him the described abilities.

Another champion in *Dota 2* called Atropos the Bane Elemental (Dota2.Gamepedia.com, "Bane") has the quote "Sleep no more", which is a reference to Shakespeare's play *MacBeth* (*MacBeth* 2.2.36). *MacBeth* hears the ghost of Banquo crying: "Sleep no more!". After murdering King Duncan, *MacBeth* is afraid of going back to the murder scene, he cannot find sleep, he is in terror. The Shakespearean quote suits Bane Elemental very well, since he has dark and nightmarish abilities: he can put enemies to sleep and haunt them with nightmares (see also Dota2.Gamepedia.com, "Bane"). The name Atropos comes from Greek mythology. Atropos was one of the "Greek Moirai ('Fates,' Roman Parcae)" (Leeming 132; Henrichs, *The New Pauly Online*). They "spun out life, measured it, and cut it" (Leeming *ibid.*).

MacBeth is inevitably going to take a fall and he is haunted. Atropos can easily be imagined as the horrors that are tormenting *MacBeth*'s soul.

The *LoL* champion Yorick (Leagueoflegends.com, "Yorick"), the "shepherd of lost souls" (*ibid.* para. 1), can be described as a case of

interfigurality, being himself a reference to Shakespeare's Yorick and the gravedigger scene in *Hamlet*. He shares his name with the character Yorick from this famous scene, while his abilities are all themed around death, gravedigging and lost souls. For example, with his ability "Last Rites", "a grave will be dug" by Yorick if an enemy dies (ibid. para. 3). In the gravedigger scene, Shakespeare's Hamlet speaks to Yorick's skull, who used to be his jester and often carried Hamlet on his back:

HAMLET Let me see.

He takes the skull

Alas, poor Yorick! I knew him, Horatio, a fellow of infinite jest, of most excellent fancy. He hath borne me on his back a thousand times, and now how abhorred my imagination is!

(Hamlet 5.1.179-184)

Yorick's skull makes Hamlet realize that all men, even great men, will eventually become dust. Hamlet says to Yorick's skull:

[...] Here hung those lips that I have kissed I know not how oft. —Where be your gibes now? Your gambols? Your songs? Your flashes of merriment that were wont to set the table on a roar? Not one now to mock your own grinning? Quite chapfallen? Now get you to my lady's chamber and tell her, let her paint an inch thick, to this favour she must come. Make her laugh at that.
(Hamlet 5.1.184-190)

And philosophizing further he says to Horatio:
No, faith, not a jot. But to follow him thither with modesty enough, and likelihood to lead it, as thus:
Alexander died, Alexander was buried, Alexander returneth to dust, the dust is earth, of earth we make loam—and why of that loam, whereto he was converted might they not stop a beer barrel?
Imperious Caesar, dead and turned to clay,
Might stop a hole to keep the wind away.
Oh, that that earth, which kept the world in awe,
Should patch a wall t' expel the winter's flaw!
But soft, but soft; aside.
(Hamlet 5.1.202-212)

Yorick in *League of Legends* can make "Mist Walkers" appear from their graves (Leagueoflegends.com, "Yorick" para. 3). They look like undead creatures who appear from the ground. Another being, neither entirely dead nor alive, is the ghost of the late King Hamlet of Denmark, Hamlet's father, who appears in the first act of *Hamlet*:

Enter the ghost in complete armour, holding a truncheon, his beaver up

MARCELLUS

Peace, break off. Look where it comes again.

BERNARDO

In the same figure like the King that's dead.

(Hamlet 1.1.38-42)

This chapter in theatrical aspects is ending with a picture of “Brightwing”, a ranged support hero in the 2015 Blizzard MOBA *Heroes of the Storm* who is, according to Blizzard, based on the Faerie Dragons from Blizzard’s own *Warcraft* universe.



Figure 26 - Brightwing, a hero in "Heroes of the Storm" by Blizzard

Clearly, he derives from models of Faerie Dragons in *Warcraft III*. Historically it is interesting how a Blizzard creature in a RPG game (*Warcraft III*) became a hero in a community made MOBA (*DotA*), since this MOBA was then turned into a new version by another publisher (VALVE), a new model of this hero appeared in *Dota 2* (still called Puck the Faerie Dragon) and afterwards, Brightwing the Faerie Dragon, a new version of the *Warcraft III* character and not an RPG character but a MOBA hero, becomes a popular hero in Blizzard’s first MOBA, *Heroes of the Storm*, who can throw an orb of arcane energy and sprinkle pixie dust.

6.1.1 Summary

Playing a character in a MOBA could be seen as a performance, especially when it is a performance by an esports professional on stage which cannot be easily imitated by anyone in the audience. For LeBlanc, a game’s drama (dramatic, exciting situations during a MOBA match) can become the primary motivation for playing because drama is fun (see also 439). Of course, it is not easy to design a game with a perfect

dramatic arc. Yet, MOBAs have a high potential for fulfilling the arc: Two teams have a yearning to win, they struggle and in a professional match, they usually end up in one or several climatic, decisive team-fights that involve everyone in the game. Usually, when the teams and the audience feel like they cannot take any more tension, the game is won. The players of MOBAs as well as the actors on a stage know that they are performing and not actually hurting people. MOBA players know they must defeat their enemies and that there is no other choice than to fight, which means they can be compared to archetypes such as Richard, Duke of Gloucester in Shakespeare's *King Richard III*; but they could also be seen as people playing chess, since also people playing chess have no choice but to attack if they want to win the game. All three, Richard, the MOBA character, and the chess piece must be played strategically. The only difference between the three archetypes would be the Duke of Gloucester, who is the one killing someone defenseless, which makes a Shakespearean play seem more violent than a game of chess or a game of *Dota 2* or *LoL*.

Esports competitions enhance the dramatic tension of MOBA matches. As if the similarities between theatre and MOBAs were not astonishing enough, there are characters such as Puck which are playable in MOBA games. Puck's responses in *Dota 2* are even written in Iambic Pentameter and through his dialogue and ability he is unmistakably connected to Shakespeare's play.

6.2 Movies & Television

Cinematic trailers play a role in the marketing of *Dota 2* and *League of Legends* and they often include cut-scenes from the two games' respective esports championships. In cinematic trailers, both VALVE and Riot showcase new heroes (champions) and announce esports or (seasonal) community events. Inside the actual games, there are few video sequences which can be just watched, not influenced, such as the video sequence played when the Ancient/Nexus is destroyed. Daniel Martin Feige writes that no other media has influenced video games as prominently as the medium film has (see also Feige 120). At the same time, a lot of CGI (Computer Generated Imagery) has become

a significant part of many movies, which resulted in some films being criticized for their video game-ish character (see also *ibid.*). Feige states that Hollywood has had a lot of influence on video games, for example on the way games are advertised and distributed as well as on their aesthetics. In Feige's opinion, due to this exchange process between movies and games, many people have come to the incorrect conclusion that video games are just a special form of film or an interactive film (see also *ibid.*). *Dota 2* and *League of Legends* both have "camera-perspectives" (players can zoom in and out), yet, both were born out of real-time strategy games, which means they cannot be paused as if they were adventure games that one can play and lay aside for some time in the same manner people can lay aside a book or pause a movie.

A soccer game has a half-time break, but MOBAs do not have scheduled breaks. Applying a pause of a certain length¹⁰⁵ in the game would harm their concept, they are at their core time-critical games, they are fun because teams force the opposing team to make mistakes under pressure. If a team could pause the game as often as they wanted to have a discussion, the game flow, concept and momentum would be harmed and the games would become unpleasant to watch.

6.2.1 Dota 2

An item that players can buy for the hero Axe is called "Proof of Courage" (Dota2.Gamepedia.com, "Proof of Courage"). This hairstyle released in 2012 is "a reference to a Dothraki tradition in [George R. R. Martin's] *A Song of Ice and Fire* series" (*ibid.* para. 1; *A Song of Ice and Fire* 1996) of fantasy novels. Axe wears a long braid as proof of his courage:

Dothraki warriors wear their hair in a long braid and only cut it when defeated, so the world may see their shame. Very capable warriors therefore often have a very long braid. (Gameofthrones.Fandom.com, "Dothraki")

¹⁰⁵ There are exceptions. *Dota 2* and *League of Legends* can be paused and pausing is usually allowed in pro tournaments. The pause functionality is important for technical issues such as disconnects. If a player disconnects from the server, the remaining players can wait for that player to return and then continue the match. The administration, according to their rules, will decide whether such a pause is legitimate and could for example order a re-match. Pauses will be avoided to ensure fair play and a tournament that is enjoyable to watch.



Figure 27 - Proof of Courage Item for Axe

Axe's responses "I said good day sir!" and "You get nothing, good day sir!" (Dota2.Gamepedia.com, "Axe" para. 8) when killing with culling blade are both quotes from Willy Wonka's infamous outrage scene from the 1971 movie version of *Charlie and the Chocolate Factory* (1971). Axe has an ability called "Battle Hunger [...]" which can harass the enemy or force them to join in battle, while also slowing their movement speed and boosting his own" (Dota2.Gamepedia.com, "Axe" para. 1).

The bots in *Dota 2* are named after *Arrested Development* (Arrested Development, 2003) characters: Tobias, Gob, Lupe, Maeby, Buster, Marta and Lucille (Dota2.Gamepedia.com, "Bots" para. 4). Bots are "computer-controlled heroes" (ibid. para. 1). Passive, easy, medium and hard bots cannot act like human players, because they have limitations, e.g., if "an allied human player disconnects from the game, a bot on the opposing team will return to the fountain and stop playing" (ibid.). This behaviour of bots may seem as if the bots were less intelligent (yet they are simply programmed to be this way).

A lot of characters in *Arrested Development* are also known for not being overly smart and immature. For example, Gob, a grown man, "becomes upset when those around him don't cry" and often "puts his whole body into one of the family's more energetic Chicken Dances" (Fandom.com, "GOB" para. 3).

Dota 2's Clockwerk sometimes says when he is dying "I'm lost...like gears in the rain" (Dota2.Gamepedia.com, "Clockwerk"), which is a reference to the movie *Blade Runner* (1982). In this movie by Ridley Scott, android Roy Baty risks his short life to save a detective who wants to kill him. When he is about to die, he says everything he experienced will "[...] be lost in time, like tears in the rain". (*Blade Runner* 1982). The movie is based on Philip K. Dick's novel *Do Androids Dream of*

Electric Sheep? (Dick 1968), in which Roy Baty is an android who hides on Mars:

Rick Deckard sat reading the typed carbon sheets on the two androids Roy and Irmgard Baty. In these two cases telescopic snapshots had been included [...]. Roy Baty, however, is something different. Something worse. A pharmacist on Mars, he read. Or at least the android had made use of that cover. (Dick 83)

Clockwerk could be described as an android, or intelligent robot. Clockwerk's respawn line "I'm the six million gold piece man!" is suitable for him as an android being, as it is a reference to the American television series *The Six Million Dollar Man* (Six Million Dollar Man 2017).



Figure 28 - Dota 2's Clockwerk Figure 29 - Dick's novel - Cover of first hardback edition
Figure 30 – Theatrical release poster for Blade Runner

One of Nature's Prophet's (Dota2.Gamepedia.com, "Nature's Prophet") last hitting responses, "Green is good." (ibid. para. 22) is a reference to "greed is good," a quote from the 1987 Oliver Stone film *Wall Street* (1987), as well as a cheat code: "The code "greedisgood" in *Warcraft III*, gave players unlimited gold" (WoW.Gamepedia.com, "Greed is Good").

Nature's Prophet is in harmony with nature and does magic with trees:

The trees around him serve as his objects of power; using them, he summons sentient tree beings known as Treants from trees on the map with his Nature's Call ability. (Dota2.Gamepedia.com, "Nature's Prophet" para. 1)

Therefore, it could be argued that he is saying "Green is good" because to him, nature is more valuable than money.

Storm Spirit's line, "Storm Force Five" (Dota2.Gamepedia.com, "Storm Spirit Responses" para. 5) when attacking is a reference to the movie *Pulp Fiction* (1994). In this movie by Quentin Tarantino, actress Uma Thurman as Mia Wallace talks about "Fox Force Five", an all-female team of secret agents, who each have a special ability (Jack Rabbit Slims' Restaurant Scene 1994). This is quite fitting for Storm Spirit who is, of

course, a hero with special abilities, “a ranged intelligence hero who wields the elemental power of lightning” (Dota2.Gamepedia.com, “Storm Spirit” para. 1).

Legion Commander’s line “The plan comes together!” (Dota2.Gamepedia.com, “Legion Commander Responses” para. 10) is a reference to the *A-Team* (A-Team 2018). Tresdin, the Legion Commander, is a strong female hero, usually played as a carry. Maybe the line was given to her for being a commander, since Hannibal who usually says “I love it when a plan comes together” is the leader of the A-Team.

Also, Star Guardian Lux in *League of Legends* says the line “I love it when a plan comes together” (Fandom.com, “Lux” para. 5), which is word by word the line spoken by John “Hannibal” Smith, played by George Peppard in the *A-Team* TV show (1983-87).

A line like this on a champion or hero will always make sense, since the members of the A-Team are Robin Hood- themed characters:

The A-Team is a group of ex-United States Army Special Forces who were wrongly convicted of a crime during the Vietnam War. [...] As fugitives, the A-Team work as soldiers of fortune, using their military training to fight oppression or injustice. (Fandom.com, “John Hannibal Smith”)

Hannibal and his “A-Team” are always fighting for the weak, certainly punching but never killing anyone.

When Legion Commander attacks the hero Zeus, she yells: “Thunderdome!” (Dota2.Gamepedia.com, “Legion Commander Responses para. 9), which might be a silly reference to the movie *Mad Max Beyond Thunderdome* (1985), just because of the title and Zeus being the sky and thunder god in ancient Greek religion.

Another quote Legion Commander uses is the internet famous line “Boy, that escalated quickly” (Anchorman Fight Scene 2004) from the movie *Anchorman: The Legend of Ron Burgundy* (2004) starring Will Ferrell, who also scripted the movie with Adam McKay. Anchorman Ron Burgundy, obviously surprised and battered, says this line right after a “gang fight” with other news teams, a fight which he had initiated and brought weapons to. Movie critic Roger Ebert described Ron Burgundy as:

[...] the legendary top local anchor in San Diego in the early 1970s. Ron has bought into his legend, believes his promos, and informs a blonde at a pool party: “I have many very important leather-bound books, and my apartment smells of rich mahogany.” His weakness is that he will read anything that is typed into his prompter. Anything. The words pass from his eyes into his mouth without passing through his brain. (Ebert 2004 para. 2)

The gang fight offers Ron the opportunity to learn that if you begin a fight, it is likely that you will be hurt. Drunkard (and sexist) Burgundy joined the battle relatively unprepared, which the bedpost he armed himself with symbolizes (Anchorman Fight Scene 2004). Other people join the battle with hammers, swords, a handgrenade or even with horses and nets (ibid.). After the fight, when he says “Boy, that escalated quickly” (ibid.), it does not really seem as if he has learned anything from his actions.



Figure 31 - Ron Burgundy with a bedpost

This picture of him (conveyed by the quote) could be seen as a fun hidden commentary on the way strategic games, including MOBAs must be approached: Players should be mentally and physically fit, prepared, and focused and they should know their weapons and their enemies. After a game, it would obviously be good to learn from one’s mistakes. In combination with the archetypical leader Hannibal’s quote, Ron Burgundy’s quote on a female carry like Legion Commander seems like an appreciative nod towards women who are playing *Dota 2*.

Lina Inverse “is a teenage sorceress and the main character of the Slayers series” (Fandom.com, “Lina Inverse” para. 1); Slayers is a novel series by Hajime Kanzaka (1989):

The original [*Dota 2*] Lina Inverse ‘The Slayer’ was modeled after the main character from the novels/anime/manga Slayers where Light Strike Array, Dragon Slave and Laguna Blade are all spells used by the original Lina Inverse. (Dota2.Gamepedia.com, “Lina” para. 9)

In *Dota 2*'s lore, she is referred to as "Lina the Slayer" (ibid. para. 1) and a redhead. *Dota 2*'s Lina is Rylai's (the Crystal Maiden; Dota2.Gamepedia.com, "Crystal Maiden") older sister:

Crystal Maiden's rare response "Can you guess my... favorite poet?" is a reference to Robert Frost due to his last name, and also an allusion to Frost's poem "Fire and Ice". Crystal Maiden is the ice, and her sister Lina is fire. An excerpt: "Some say the world will end in fire, some say in ice ... know enough of hate, to say that for destruction ice is also great, and would suffice." (ibid. para. 9)

Sibling rivalry between Lina and Rylai is extreme, before their parents separated the sisters:

The sibling rivalries between Lina the Slayer, and her younger sister Rylai, the Crystal Maiden, were the stuff of legend [...]. The exasperated parents of these incompatible offspring went through half a dozen homesteads, losing one to fire, the next to ice, before they realized life would be simpler if the children were separated. (Dota2.Gamepedia.com, "Lina" para. 1)

In *Slayers*, Lina Inverse feels inferior towards her older sister Luna Inverse:

Lina is terrified of her sister to the point of hysterics, and she probably deserved these feelings. When she was younger, Lina wanted to make money, so she sold projections of Luna bathing, and as a result, Luna punished her. It has been said that Lina started training to be a sorceress as a result of an inferiority complex to her sister. (Fandom.com, "Lina Inverse" para. 6)

However, Lina Inverse's powers are not as much themed around fire as *Dota 2*'s Lina's powers. Sorceress Lina in the *Slayers* series earns a reputation of someone who tracks and kills bandits for fun and profit, stealing their ill-gotten gains. At one point, "she runs off to kill a bunch of them because she was having a bad day to let off some steam" (Ming para. 19).



Figure 32 - *Slayers*' Lina Inverse



Figure 33 - *Dota 2*'s Lina Inverse

When Lycan (Dota2.Gamepedia.com, “Lycan”), who is capable of “summoning Wolves” (ibid. para. 1) and has a “shapeshift” (ibid.) spell dies, he can say “I thought you were team Yakov” (ibid. para. 9), which is a reference to *Twilight* (a novel by Stephenie Meyer (2007) and a movie by Catherine Hardwicke (2008)). Many *Twilight* fans debate whether Edward or Jacob is the better match for the heroine Bella, which created the two informal “teams”, “Team Jacob” and “Team Edward” (see also Bedoya 1).

Sniper’s (Dota2.Gamepedia.com, “Sniper”) line, ““Oh, a few bullets more!” is a reference to the [spaghetti Western] film *For a Few Dollars More*” (ibid. para. 9) directed by Sergio Leone (1965). Clint Eastwood in Leone’s movie plays a bounty hunter with a gun, and Sniper is a character with a gun.

Sven’s (Dota2.Gamepedia.com, “Sven”) responses for respawning, “twas only a flesh wound” (Dota2.Gamepedia.com, “Sven Responses” para. 17) and “it was but a scratch” (ibid.) reference the Black Knight scene from *Monty Python and the Holy Grail* (1975). This is quite suitable for Sven, who is, like the Black Knight, someone who “answers only to himself” (Dota2.Gamepedia.com, “Sven” para. 1).



Figure 34 - The Black Knight From Monty Python's Holy Grail

Tusk (Dota2.Gamepedia.com, “Tusk”) has the line “I coulda’ been a contender” (Dota2.Gamepedia.com, “Tusk Responses” para. 16). In the 1954 American drama *On the Waterfront* with Marlon Brando as Terry, there is an iconic scene with two brothers. Terry reminds Charley that had it not been for a fixed fight, Terry’s prizefighting career would have bloomed. “I coulda’ been somebody. I coulda been a contender”, laments Terry to his brother, “Instead of a bum, which is what I am – let’s face it.” Roger Ebert describes the scene:

And look at the famous scene between Terry and his brother, Charley (Rod Steiger), in the back seat of a taxi. This is the “I coulda been a contender” scene, and it has been parodied endlessly (most memorably by Robert De Niro in “Raging Bull”). But it still has its power to make us feel Terry’s pain, and even the pain of Charley, who has been forced to pull a gun on his brother. (Ebert 1999 para. 4)

“I coulda been a contender” seems like a sentence that suits a melee hero such as Tusk very well, as he is an initiator and ganker who needs to seek fights (see also Dota2.Gamepedia.com, “Tusk” para. 1).

Also, Tuks ultimate is called a “Walrus PUNCH!” (ibid.), and punching is what boxers do. If he failed at opening a team fight which pays off, he would not be a “contender”, not a strong enough rival.

6.2.2 League of Legends

Blitzcrank “The Great Steam Golem” is a reference to the movie *Iron Giant* (1999), directed by Brad Bird. In Jewish folklore, a golem is an “animated anthropomorphic being that is magically created entirely from inanimate matter, usually clay or mud” (Idel 296). From his lore (Leagueoflegends.com, “Blitzcrank Story”) we learn that Blitzcrank was designed by his creator Viktor to “dispose of hazardous waste in [the city of] Zaun” (ibid. para. 1). Blitzcrank has been created from inanimate matter¹⁰⁶:

One night, he borrowed Viktor’s prized toolbox, and wrenched open his own steam-engine. He reconfigured his mechanics and removed all limits to his function so that he could make an even greater difference in the city. (ibid. para. 7)

Blitzcrank was not made from clay or mud, he rather resembles the Iron Giant, being described by Riot as an enormous, near-indestructible “steam golem” (ibid. para. 11), he is made from some sort of steel or metal. *The Iron Giant* is an American animated science fiction film. It is based on the 1968 novel *The Iron Man* by Ted Hughes. The Iron Giant in the movie endlessly loves a little boy and gives up his existence (later he manages to reassemble himself) to save him and a small town called

¹⁰⁶ Frankenstein’s monster has been created from inanimate matter – he takes the materials from graveyards (see also Goetsch 83-84), and animates his monster with an electric spark (see also ibid. 87); Prometheus the “plasticator creates man from clay and animates the body with a spark (ibid. 83).

Rockwell (Hughes 75; *The Iron Giant* Movie 1999). The boy has taught the machine that you “are who you choose to be” (You are who you choose to be 1999), which reads like a line that would suit Blitzcrank’s character very well.

After Blitzcrank wrenched open his own steam-engine and reconfigured his mechanics, he rescued many humans and automatons:

When a gas fire devastated the Davoran Clocktower, he rescued a family of mechanics and their soot-black cat with his enormous crank-like arm — even stopping to recover a miniature mechanical dancer from a child’s bedroom. (Leagueoflegends.com, “Blitzcrank Story” para. 10)

Blitzcrank’s “Piltover Customs” skin (Blitzcrank Piltover Skin 2012) makes him look as if he was half car, half robot. This could be a reference to the *Transformers* movie (2007) or the *Transformer* toys by Hasbro.



Figure 35 - Blitzcrank



Figure 36 - *The Iron Giant*



Figure 37 - Piltover Customs Blitzcrank

Heimerdinger’s “Alien Invader” skin “references Mars Attacks!” (Fandom.com, “Heimerdinger Trivia” para. 3) the movie.



Figure 38 - Alien Invader Heimerdinger



Figure 39 - Mars Attacks! Artwork

Kog'Maw, “The Mouth of the Abyss” (Leagueoflegends.com, “Kog’Maw”) has a mouth within another mouth like the aliens designed by Swiss artist H.R. Giger in Ridley Scott’s *Alien* (1979) movie.

Unlike other extraterrestrial races in science fiction, Giger Aliens do not seem like a tech-civilization. Instead, they look like primal, predatory creatures with no higher goals than self-preservation and propagation of their species. This part of their description suits Kog’Maw’s lore: He explores the world by devouring everything: “The enchanting colors and aromas of Runeterra intoxicated Kog’Maw, and he explored the fruits of the strange world the only way he knew how: by devouring them” (Leagueoflegends.com, “Kog’Maw” para. 2). “Caustic enzymes” (ibid.) dripped from Kog’Maw’s mouth and “stung the ground” (ibid.).

Kog’Maw’s “Jurassic Skin” makes him look like a dinosaur’s skeleton. The skin might be dedicated to *Jurassic Park* (1993).



Figure 40 - Giger's Alien Figure 41 - Kog'Maw Jurassic Skin

Figure 42 - Kog'Maw Normal Skin

One of Leblanc’s (Leagueoflegends.com, LeBlanc”) skins resembles Cruella de Vil from the *101 Dalmatians* (1961) movie by Walt Disney. They are both deceivers, as Leblanc “betrayed the Iron Revenant” (Leagueoflegends.com, “LeBlanc” para. 9). Cruella de Vil betrayed the

owners of little pups (see also *101 Dalmations* 1961). They are both “cruel devils”.



Figure 43 - Wicked LeBlanc Skin



Figure 44 - Disney's Cruella de Vil

Mike Laygo, senior animator for Riot, stated that Aatrox's (Leagueoflegends.com, “Aatrox”) “animations and movements were based on both Sauron and the Balrog from *Lord of the Rings*” (Baranowski para. 14). Laygo also worked on *Lord of the Rings: The Battle for Middle-Earth* (ibid.).

Mordekaiser the “Iron Revenant” (Leagueoflegends.com, “Mordekaiser”) seems to be related to Sauron from *The Lord of the Rings* movies (2001; 2002; 2003) but also to the Lich King from the computer game *World of Warcraft* (2004).



Figure 45 – MordeKaiser



Figure 46 – Sauron



Figure 47 - Lich King

World of Warcraft's Lich King (WoW.Gamepedia, “Lich King”) is the “master and the lord of the Scourge, which he telepathically rules from Icecrown Glacier atop the Frozen Throne” (ibid. para. 1). Lich King was created from “the spirit of the orc shaman Ner'zhul” (ibid.) and “eventually betrayed [his creator] Kil'jaeden” (ibid.). Lich King was defeated in war by a human Highlord, Tirion Fordring and his champions

(see also para. 1.15). Tirion placed the Helmet of Domination on Bolvar Fordragon's (Dota2.Gamepedia, "Bolvar Fordragon") head "so that he would forever be the self-appointed Jailer of the Damned - imprisoning the Lich King within the Frozen Throne once more and containing the threat of the undead Scourge" (ibid. para. 1). Tolkien's Sauron also has a master: Morgoth, who was the "first Dark Lord" (Fandom.com, "Sauron" para. 1). He was not made from the spirit of an orc shaman, but he became the second Dark Lord after Morgoth's defeat (see also ibid. para. 1). Previously, "Sauron served as Melkor's lieutenant" (ibid. para. 3). Sauron created "the Rings of Power" (ibid. para. 5) in order "to conquer Arda" (ibid. para. 1) and he bred "immense armies of Orcs and allied with and enslaved Men" (ibid. para. 11).

Mordekaiser has some things in common with Lich King and Sauron. He is called a "baleful revenant" in his official biography by Riot, who is "among the most terrifying and hateful spirits haunting the Shadow Isles" (Leagueoflegends.com, "Mordekaiser – Shadow and Fortune" para. 1). Maybe this could be a small indication for his connection to the Lich King, who was made from an orc's spirit. Mordekaiser has existed "for countless centuries" (ibid.), while also Lich King and Sauron are known to be very ancient, having existed "for ages" (Sauron: First to Third Age; Fandom.com, "Sauron" para. 1-2) or "several thousand years" (WoW.Gamepedia.com, "Lich King" para. 1.4). Mordekaiser used to be a mortal warlord-king until he was "resurrected" (Leagueoflegends.com, "Mordekaiser – Shadow and Fortune" para. 11) and "shielded from true death by necromantic sorcery" (ibid. para. 1). Therefore, all three beings share an existence of relative immortality: Sauron could be defeated in the end, Lich King was brought down by Tirion Fordring, Mordekaiser carefully hid his bones in an "Immortal Bastion" (ibid. para. 18), a "mighty fortress that now acts as the capital city of [...] Noxus" (ibid.). Mordekaiser like Sauron has an army, an army of the dead (see also Leagueoflegends.com, "Mordekaiser Story" para. 14).

The Lich King is the master and lord of the Scourge (WoW.Gamepedia.com, "Lich King" para. 1), who are "one of three

major undead factions existing in the world of Azeroth” (WoW.Gamepedia.com, “Scourge”).

Sauron commands the Nazgûl, who are Ringwraiths, neither living or dead (see also Tolkien, *The Fellowship of the Ring*, book one, chapter II). Nidalee “The Bestial Huntress” (Leagueoflegends.com, “Nidalee”) could be seen as a female version of Mowgli from Joseph Rudyard Kipling’s *The Jungle Book* (1894), or Mowgli from the 1967 animated Walt Disney Movie *The Jungle Book*. Nidalee is from “the great eastern jungles of Shurima” (Leagueoflegends.com, “Nidalee” para. 1), where the “cougars raised Nidalee” (ibid. para. 5). A wolf and her cubs raise Disney’s Mowgli. One day, Nidalee became a shapechanger:

Nidalee lunged from the undergrowth [...]. Something had changed. She felt the spirit of the jungle cats within her and was transformed like never before. Lashing out as a beast, she brought down the nearest hunter with her razor-sharp claws, before whirling around in human form once more to snatch up his spear. (Leagueoflegends.com, para. 8-11)



Figure 48 – Nidalee



Figure 49 - Disney's Mowgli and his family

Sivir (Leagueoflegends.com, “Sivir”) could be compared to Wonder Woman. Both are of royal descent: “She [Sivir] carried the last trace of an ancient, royal bloodline in her veins” (ibid. para. 11). “Wonder Woman is the princess Diana, the daughter of Hippolyta, Queen of the Amazons, and Zeus, the mightiest of the Gods of Olympus” (Fandom.com, “Wonder Woman“ para. 2). Both carry weapons: “Wonder Woman is proficient with nearly every weapon ever made” (ibid. para. 60). Sivir carries “a blade known as the Chalice” (Leagueoflegends.com, “Sivir” para. 4). While Wonder Woman was made by Zeus, a god, Sivir was rescued by a god-emperor named Azir:

Unknown to her, she carried the last trace of an ancient, royal bloodline in her veins. She awoke to find herself tended by none other than Azir—the last ruler of the empire, who had been denied his rite of Ascension and passed into legend. Her spilled blood had reawakened his spirit after almost three thousand

years, completing the ritual and imbuing him with all the celestial power of a god-emperor. There, in the Oasis of the Dawn, he used the healing waters of that sacred pool to miraculously *undo* Sivr's mortal wound. (ibid. para. 11).

Draven's (Leagueoflegends.com, "Draven") death animation (Draven Death Animation 2012) is the famous death scene (Spike Death Scene 2017) of the character Spike in the *Cowboy Bebop* (1998) anime series. Journalist Tasha Robinson describes *Cowboy Bebop* in an article about a couple of "must see" anime series:

[...] *Cowboy Bebop*, which was rightly a huge hit; each episode follows a different musical theme, and the story, about a bunch of incompetent, space-traveling bounty hunters, is jazzy and energetic, with callouts to everything from '50s spy shows to modern action movies. (As a full-circle bonus, the lead character, Spike, is heavily based on Lupin III himself.). (Robinson para. 4)

Spike dies shortly after his true love Julia died in his arms (see also Fandom.com, "Spike Spiegel" para. 10), which is quite reminiscent of *Romeo and Juliet*, the tragedy by William Shakespeare. Spike dies a short while later after killing many members of the organization responsible for Julia's death (see also ibid. para. 12-13).

Draven craves "recognition, acclaim, and glory" (Leagueoflegends.com, "Draven" para. 1). To become famous, he joins the prison system as an executioner and kills prisoners with an axe, donning bright outfits:

At Draven's first execution, he shocked onlookers when he ordered the doomed prisoner to run for dear life. Just before the man managed to flee from sight, Draven brought him down with a flawless throw of his axe. [...] He used this trial as his own personal stage, and turned executions into a leading form of entertainment. [...] Rejecting the solemn, black uniforms of Noxian executioners Draven donned bright outfits and developed flashy signature moves to distinguish himself. Crowds flocked to see Draven. [...] Before long, the scope of his ambitions outgrew the population of Noxus. He decided that the glorious exploits of Draven should be put on display for the entire world. (ibid. para. 2)

Draven seems to be a rather unsympathetic and shallow character; all he does is inflate his ego by killing people. *Cowboy Bebop's* Spike, is often difficult to read. First, he says quite unfriendly things in a harsh manner. He repeatedly states he hates dogs, children, and women with attitudes, but as the series progresses, he warms up to all three. When, in the end he takes revenge for Julia, he doesn't seem to be doing it for fame and glory, in the same way Draven is killing people for fame.

Sometimes, when Jhin (Leagueoflegends.com, "Jhin") kills a certain character, he quotes the Tarantino movie *Django Unchained* (*Django*

Unchained 2012): “I like the way you die boy” (Jhin Django Reference 2016; Fandom.com “Jhin Quotes”). When Django was enslaved, one of his owners used to tell Django “I like the way you beg boy” (*Django Unchained* 2012) when he tortured him. Therefore, Django uses his version of this sentence when he takes revenge. Giving Django’s (somebody who is enslaved and tortured because of the color of his skin) famous line to Jhin could be seen as a micro-statement of the developers against racism.

6.2.3 Summary

MOBAs, like many video games, have been heavily influenced by movies. However, they are not interactive films: MOBAs can be paused, but they are not session based (like e.g., chess). MOBAs, like soccer (apart from the lack of a half-time break), take place in real time, they are not meant to be paused. They are time-critical, they are fun because the players must react to any action immediately (similarly to soccer or basketball), making decisions puts them under pressure. Pressure makes MOBA games exciting to play and nailbiting to watch. There is no room in *Dota 2* and *League of Legends* for pausing the game and listening to extensive dialogues.

References from movies and television help to add depth to a MOBA character, which will never have as much dialogue as a character in an adventure game (or in a movie) might have. *Dota 2*’s Tusk, who has to seek fights like Terry has to in “On the Waterfront” is one good example of a MOBA character gaining personality by intertextuality. Riot also enhance the depth of their champions by relating them to movie characters, such as Kog’Maw (The Alien in *Alien*) or LeBlanc (Cruella de Vil in *101 Dalmatians*). Like the other cultural sources, film and television can add fun to the MOBA experience. For example, Tarantino’s movie *Django Unchained* is not only a critically acclaimed movie and an on-screen statement against racism:

Tarantino claims to have made “Django Unchained” as something of a response to “Birth of a Nation.” His depiction of the brutality and the horror of slavery is meant as a belated corrective to Griffith’s falsified record. (Brody para. 13)

Movies such as *Django Unchained* can also be a source one can draw inspiration from when depth, aesthetics and humor are needed. Django has been tortured all his life, the least he deserves is revenge. Yet, Django taking revenge provokes questions, since Django himself is a killer when he kills his owner. While Tarantino makes us ask ourselves whether it is morally acceptable to kill (cruel) slave owners, it is also somehow satisfying to witness the death of somebody who has been nothing but evil. Violence in this movie is presented as in many western movies: There is the bad guys and the good guys, and a good guy killing someone can be entertaining sometimes, based on the good guy's justification being the bad guy's evil deeds. This kind of fun, we might call it "the fun of killing pure evil" is transferred to the *LoL* champion Jhin, when he utters Django's line.

6.3 Dance (Emotes)

Games journalist Luke Winkie writes on *PCGAMER.com* on the history of dance emotes:

It's a little funny how much we've come to expect dance emotes in modern games. [...] It's a tradition at this point, and one that's expanded beyond massively multiplayer games to practically everything with avatars and a chat box. It's just part of the culture, at this point: if you see a Night Elf, you can bet they'll know the "Billie Jean" dance. (Winkie para. 1)

If people type in "/d" when they are playing *LoL*, their character will dance. Winkie writes that this option to let your character dance is typical of MMO¹⁰⁷ games. It is also quite common for MOBAs. All the dances¹⁰⁸ in *League of Legends* have an original source. Having a closer look at the dances can give us some insights into the cultural influences Riot developers and the community enjoy. At first glance, many of the dances that champions in *League of Legends* can perform when players type in the command "/d" seem to be inspired by K-Pop, viral videos, and anime. Radio reporter Steven Bohner writes about "The Top 10 Best Dances In League Of Legends". Placing Kog'Maw's (*Leagueoflegends.com*, "Kog'Maw") dance on rank three, he writes: "Kog'Maw dances the

¹⁰⁷ When journalist Winkie is talking about MMOs, he might have meant both, MMOs and MMORPGs, since e.g. *World of Warcraft* is an MMORPG which includes a dance functionality.

¹⁰⁸ https://www.youtube.com/watch?v=XYOQ_neisZY This is a collection of all dances in *League of Legends* as of Oct. 11th, 2016.

‘Hello, My Baby Dance’ from Warner Brothers’ mascot [...] “Michael J. Frog” (Bohner para. 9). When Kog’Maw is performing this dance, it might be often associated with the Warner Brothers mascot’s performance of it (One Froggy Evening, 2015; Warner Brothers 1955). The song Warner Brothers chose for the dance was written by the songwriting team “Howard and Emerson” in 1899 (Fuld 271). Back then, the subject of “*Hello! Ma Baby*” was a man who only knew his girlfriend through the telephone.

As already shown, Kog’Maw is a reference to the artwork from the *Alien* (20th Century Fox and Brandywine 1979) movies by Giger. In Mel Brooks’ 1987 movie *Spaceballs* (Brooksfilms 1987), parodying the *Alien* movie, a tiny alien bursts out of John Hurt’s¹⁰⁹ chest, homaging the Chuck Jones cartoon by dancing down a counter in a space-diner while singing the “Hello! Ma Baby” song. Due to the *Alien* reference, we must contradict Steven Bohner’s assumptions: It is safe to assume that the designers working on Kog’Maw had the dance in *Spaceballs* in mind, rather than the Warner Brothers’ frog’s performance. Kog’Maw pays homage to Giger’s *Alien* designs, yet, with his huge eyes and small round body, he resembles a friendly pet just as much as he resembles a scary alien. The dance from *Spaceballs* therefore suits Kog’Maw perfectly, since the parody of *Alien* in *Spaceballs*, like him, is balancing scary and gory aspects on one side, vs. funny and adorable on the other.

Dances, taunts, jokes and laughs¹¹⁰ are cultural elements that add personality to the champions in *League of Legends*. People cannot be punished for “spamming” these sounds and movements and they allow them to express themselves playfully. By typing a short command in a chat or using key bindings, users can control their characters’ “emotes” in the game. Typing `/ignore @championname` (e.g., Lux) in *League of*

¹⁰⁹ David Lynch described Hurt as “simply the greatest actor in the world”. He starred in *The Elephant Man*, *Midnight Express*, *Alien* and *Harry Potter*, spanning a career for more than 50 years.

¹¹⁰ Default key binding is: Ctrl + 1 = joke; Ctrl + 2 = taunt; Ctrl + 3 = dance; Ctrl + 4 = laugh; Ctrl + 6 = mastery emote. In the menu the key bindings can be changed to a single button, e.g. “t” for taunt.

Legends mutes the champion's player and all his or her emotes (dance, taunt, joke, laugh and mastery emote¹¹¹).

When all of the *League of Legends* champions had dances already from the start and a dance functionality was also already part of *Starcraft II* and *Team Fortress 2* (a wide variety of taunts that included dancing), in 2012, some *Dota 2* heroes already had a taunt slot in the hero loadout but there was not yet a /dance command implemented the way it was an established standard on every champion in *League of Legends*.

Today, taunts in *Dota 2*, as in *League of Legends*, are “cosmetic items that cause the hero to perform an in-game animation” (Dota2.Gamepedia.com, “Taunt”) when people press the designated hotkey (“T” by default). Other than in *League of Legends*, all available in-game animations (poses, dances, playful movements, taunts...) are summarized under the term “taunt”. Taunts in *Dota 2* can be purchased in the STEAM community market, but there are also taunts that can only be obtained with battle passes (Dota2.com, “The International Battle Pass”) for special events, for example the taunt “All Sparkles n’Rainbows” (Dota2.Gamepedia.com, “Taunt: All Sparkles n’Rainbows”) for Death Prophet (Dota2.Gamepedia.com, “Death Prophet”) could only be bought as part of *The International 2018 Battle Pass*.

Dota 2 offers less dances than *League of Legends*. From the list of available taunts (Dota2.Gamepedia.com, “Taunt”), the following taunts could be identified as dances:

Dota 2's hero Clockwerk (Dota2.Gamepedia.com, “Clockwerk”) is a robot - and he can do some stereotypical moves one might expect of a humanoid robot (Dota2.Gamepedia.com, “Taunt: Do the Robot!”). When people buy the “Giddy Up!” (Dota2.Gamepedia.com, “Taunt: Giddy Up!”) for the *Dota 2* hero Rubick (Dota2.Gamepedia.com, “Rubick”) for \$0.40 USD, they can make him turn around and make the sound of a

¹¹¹ The Mastery Badge Emote in *League of Legends* is an emotional movement that can be executed when a player presses Ctrl + 6. The mastery system is designed to recognize a player's respective investment in a champion. Winning a game earns players' champion points toward mastery levels for the champion they won with. At mastery level 4, the mastery badge emote is unlocked. http://support.lol.garena.com/en_SG/articles/453#h2q2

galloping horse. For \$0.18 USD, Skywrath Mage (Dota2.Gamepedia.com, “Skywrath Mage”) can perform the “Chicken!” (Dota2.Gamepedia.com, “Taunt: Chicken!”). The animation looks like a character in *Arrested Development* called Gob¹¹² “dancing¹¹³” (Arrested Development, 2003; Arrested Development Chicken Dance Montage 2009). The taunt for Slark (Dota2.Gamepedia.com, “Slark”) is a flip with a lot of water splashing (Dota2.Gamepedia.com, “Taunt: RazorFlip!”) which suits him being a “Slithereen”, an underwater creature who comes from a “Dark Reef [...] a sunken prison where the worst of the sea-breed are sent for crimes” (Dota2.Gamepedia.com, “Slark” para. 2). The taunt for Sniper (Dota2.Gamepedia.com, “Sniper”) simply allows him to skillfully rotate his rifle (Dota2.Gamepedia.com, “Taunt: Quick Draw!”). Spirit Breaker’s (Dota2.Gamepedia.com, Spirit Breaker) taunt (Dota2.Gamepedia.com, “Taunt: Raging Bull”) allows him to galopp like a raging bull, which he is. When Wraith King (Dota2.Gamepedia.com, “Wraith King”) dances (Dota2.Gamepedia.com, “Taunt: Fit to Rule”) a quite silly and simple dance, his skeletal servants dance along.

In the video game *Fortnite* (2017), dances are an important part of the gameplay and streaming and the culture around it. Soccer players on the field such as Mesut Özil (Özil, 2018), Callum Paterson (Paterson, 2018) or Antoine Griezmann (Griezmann, 2018) mock other players or celebrate the scoring of a goal by performing dances made by Epic Developers for characters in *Fortnite*.

Using the dances inside (during ongoing matches and even during important finals, as in *League of Legends*) and outside the game (children perform these on playgrounds, in the streets¹¹⁴, with friends and with their parents, famous professional basketball players dance them to

¹¹² The character which one bot was named after.

¹¹³ Gob makes unique movements, which are probably meant to be mocking, but he rather looks quite silly when he tries to impress others with his enactment of a chicken (Fandom.com, “Gob” para.3).

¹¹⁴ On February the 25th 2019, a group of boys and girls between about six and twelve years old, did the floss dance from *Fortnite* for me in the street when they saw me going by. I watched them dance and congratulated them on their moves. I added with a smirk that I was glad they so happily flossed every day. This made them laugh and they continued dancing as I left. I assume they enjoy the reactions from passers-by, both if it confuses the strangers and if the strangers get this non-verbal information only accessible to insiders.

celebrate goals, school kids show off their *Fortnite* dances in class...) has become a part of our everyday culture.

Most of the *Dota 2* taunts that can be seen as a cultural intertextuality have already been mentioned in this introduction to the dance chapter. Each *League of Legends* champion has a dance and there is one dance for each champion skin. In the following, the many dances will be sorted into cultural categories.

6.3.1 K-Pop

Korean Pop can be found as dances and recalls for *League of Legends* characters: Syndra “the Dark Sovereign” (Leagueoflegends.com, “Syndra”) dances to a song called “Hoot” by Girls’ Generation (Syndra Hoot Dance Reference 2012). Syndra’s abilities all involve her “Dark Spheres” (Leagueoflegends.com, “Syndra” para. 3-7), which she can throw at enemies with a lot of range (675 base range up to 925; movement speed: 330; *ibid.*). Therefore, a movement in the “Hoot” video that looks like someone is spanning a bow goes along well with Syndra’s set of abilities.

Ahri “the Nine-Tailed Fox” dances to “Run Devil Run” and “Genie” by K-Pop girl group Girls’ Generation (Ahri Run Devil Dance Reference 2016; Ahri Genie Dance Reference 2013). Compared to Syndra, Ahri has even more range and the same speed (movement speed: 330; range: up to 975; Leagueoflegends.com, “Ahri” para. 1-5). She can blow a kiss “that damages and charms an enemy it encounters, causing them to walk harmlessly towards her” (*ibid.* para. 6). Already the title “Run Devil Run” suits her, since she can hunt champions with her movement speed, especially when she activates “Spirit Rush”, which allows her to dash forward and fire essence bolts (see also *ibid.* para. 7). Her movements taken from the Girl’s Generation dance are “running” dance moves. She also has magical “charm” powers like a genie might have, which could be meant as a reminder of Girl’s Generation being cast as a group of very beautiful women catering to the “sexy schoolgirl image” who were South Korea’ most successful pop group for over ten years. “Representations of gender [...] which depict women as housewives or sexy bodies alone,

are seen to be reducing women to those categories” (Barker & Jane 12). Therefore, giving a character in a video game such a dance is at risk of reducing women to being nothing more than sexy objects. Ahri certainly can be described as a sexy female character, yet she is also a hybrid between a woman and a fox, who can not only charm people, but also do magical damage such as “fox-fires”, that “attack nearby enemies” (Leagueoflegends.com, “Ahri”).

People can go to the “blue buff zone¹¹⁵” in *League of Legends* with the skin “Popstar” on Ahri. If they dance there, the Blue Sentinel will begin to dance to Lim Chang Jung’s “Open The Door” (Blue Sentinel’s Dance 2015). Blue Sentinel is a big and heavy stone creature. Seeing him in his dance animation comes as a surprise. He is suddenly quite flexible, which is a strong contrast to him usually just standing there. His animation is not overdone; the heavy creature dancing does not seem unnatural, due to the song’s choreography not being too wild. It makes the faceless Blue Buff seem more human. Killing the Blue Buff gives a player a “buff” that grants increased mana regeneration as well as cooldown reduction. Many players who see Blue Sentinel dance feel like they should not kill him for a buff, since he is now human:

“All he wanted to do in life was bust some moves with his home girl Ahri and here we are killing him.” (Reddit.com, SnazmanJimmy)

With his “SKT T1” skin, Jhin has the boy group Big Bang’s “Bang Bang Bang” (Jhin SKT Dance 2017) as a recall sequence. SK Telecom T1 is a works team of the South Korean telecommunications company SK Telecom. They won the World Championships in 2013, 2015 and 2016. When players win a World Championship, each player gets a skin specially made, which they help design (Leagueoflegends.com, “SKT Skins now available”). In 2015 & 2016, Bae “Bang” Jun-sik was part of the SK Telecom T1 roster (ibid.). A song with Bang’s name makes sense on a skin that was made for him. The song and the wings were chosen to “reflect” Bang’s personality (ibid.).

Elementalist Lux dances to the music videos of three Korean girl groups: GFriend’s “Me Gustas Tu”, CLC’s “Pepe” and Taeyeon’s “Why”

¹¹⁵ Zone in the jungle where neutral monster “Blue Sentinel” stands.

(Elementalist Lux Dance References 2016). Dance moves from all three videos were combined to create one dance for Elementalist Lux.

K-Pop today is popular all over the world, especially in Asia (see also arte.TV, “K-Pop”, para. 3-5). K-Pop groups cast their performers based on looks, but also manners, musical talent, and articulation count K-Pop song-texts are, as opposed to pop songs in the west, free of any bad or vulgar language (see also *ibid.*).

6.3.2 J-Pop

There are many Japanese Pop references to be found in champions of *League of Legends*. “Aether Wing¹¹⁶” Kayle (Aether Wing Kayle 2019) dances to “Night of Fire” by Hinoi Team (Aether Wing Kayle – Night of Fire Dance 2013). Shyvana dances the “River Dance” by Japanese “retort band” (Sonnenberger para. 1) AKB48 (Shyvana - River Dance 2015), a band which consists of over “90 sweet girls” (*ibid.*), who “separate into four teams” (*ibid.* para. 3) to be able to play “one concert every day at the least” (*ibid.*).

“Genki Sudo” (Tofugo.com, “Genki Sudo’s World Order” para. 2), a former “martial artist” (*ibid.*) and his band “World Order” (*ibid.*) created a dance with “robotic” elements for their song called “Have a Nice Day” (Project: Yi – Have A Nice Day 2015). This dance became the signature dance for *League* champion skin Project Master Yi (*ibid.*; *League of Legends.com*, “Master Yi”). Maybe Master Yi’s Japanese-themed style (he also has a Samurai skin; *ibid.*) made the developers at Riot Games choose a Japanese dance for him.

Cultural Studies scholars Barker and Jane write that

[o]ver the last two decades a large, transnational, and globally dispersed fan-based culture of young people dedicated to a distinctive form of animation called *anime* and comics known as *manga* has emerged. Both forms have wide-ranging audiences in Japan and have now become popular in western cultures. Japanese anime and manga first appeared in North America in the 1970s, followed by the limited circulation in the 1980s of several highly regarded films, such as *Akira* (1988). The rise of the internet then allowed globally dispersed groups of fans to connect and for new material to be received from Japan. By the early 2000s anime were commonly seen on television in the United States and manga were easily available in large bookstore chains. (Barker and Jane 585)

¹¹⁶ “Aether Wing” is the name of a skin for for the *LoL* champion Kayle.

The “Star Guardian” skin for the champion Lux is a reference to the TV series *Sailor Moon* but Star Guardian Lux also resembles Aguri Madoka from the *Doki Doki! Pretty Cure* anime series (see also Fandom.com, “Aguri Madoka”). Star Guardian Lux’s dance (see also Star Guardian Lux Dance 2015) is the ending dance of *Doki Doki! Pretty Cure* (see also Fandom.com, “Aguri Madoka”). Another representative of this genre is *Card Captor Sakura*; Lux’s wand closely resembles Sakura’s wand (see also Wikipedia, “Card Captor Sakura”). When Star Guardian Lux is in her recall sequence, her movement resembles the *Sailor Moon* Transformations (see also Sailor Moon Transformation 2012).

Ezreal dances a short section of the “Hare Yukai dance” (see also Ezreal Dance 2015) to the song “Hare Hare Yukai” (engl. “Sunny, Sunny Happiness”; see also Fandom.com, “Haruhi Wiki: Hare Hare Yukai” para. 1). It is the ending theme to the first season of anime series *The Melancholy of Haruhi Suzumiya* (see also *ibid.*). The dance that comes with this song has become a cultural phenomenon in Japan (see also *ibid.*). Many people perform this dance at anime conventions (see also *ibid.*). In the game *Overwatch* (Blizzard 2016), the character Mei also performs this dance, with the emote “Sunny Dance” (see also *ibid.*).

DJ Sona dances the Caramelldansen (DJ Sona Caramelldansen 2015), which is an Internet phenomenon: A Swedish group called “Caramell” made this song in 2001 (see also Kingsbury 70). A fast remix of their Caramelldansen song was released in 2008 and became involved in a meme which started as a 15 frame Flash animation loop showing two characters from the Japanese visual novel *Popotan*, doing a hip swing to this version of the song (see also *ibid.*). A 2012 video (Avengers Caramelldansen 2012) shows the Marvel Avengers (*The Avengers* 2012) dancing the Caramelldansen. Still today, people around the world are making many different Caramelldansen videos¹¹⁷. For example, some people dress up as anime characters, or use cut scenes from animes to re-create the dance. Some people use games to play the Caramelldansen

¹¹⁷ On the Subreddit “Animemes” (Animemes Subreddit 2019) all kinds of anime related memes can be found, including Caramelldansen memes.

song (Fortnite Caramelldansen 2019)¹¹⁸. Maybe DJ Sona simply got the Caramelldansen as her dance because she is someone who should ideally be popular (a DJ) and the Caramelldansen dance song with the *Popotan* hip-swing has apparently been a quite popular song and phenomenon for over 18 years.

6.3.3 US-hip-hop, pop, rock & dance

Some dances in *League of Legends* are hip-hop inspired: Malzahar dances to MC Hammer¹¹⁹'s *Can't Touch This* (1990). Vi dances to "Teach Me How To Dougie" (2010) by American hip-hop group Cali Swag District. Infernal Nasus' dance moves were directly taken from a Snoop Dogg music video for the song "Drop It Like It's Hot". The rapper is known for being a gamer himself (e.g., he publicly plays *Madden* and *Call of Duty*) and sometimes runs his own small esports competitions, e.g., the 2019 Gangsta Gaming League¹²⁰ (Jones para. 2). His public interest for esports might have inspired developers to make a character dance to his music.

References from pop music can be found e.g., in the Zombie skin for Brand (Leagueoflegends.com, "Brand"), who dances to Michael Jackson's "Thriller". In the music video for this song, Jackson plays an actor who becomes a Zombie. Zombies are often represented in video games, be it in the game *Plants vs. Zombies* or the new *Fortnite* Brainiac Zombie skin.

Two more Michael Jackson dances were used for champions: Talon dances to Jackson's "Billie Jean" choreography and Azir to "Remember The Time".¹²¹

¹¹⁸ In this video, the Creative Mode in Fortnite is used to play Caramelldansen. In the Creative Mode, people can build musical roads from music blocks they activate when they walk on them with their characters.

¹¹⁹ MC Hammer is an American hip-hop artist and dancer from Oakland.

¹²⁰ The competition had a 11.000€ prize pool and featured eight of Snoop Dogg's "closest gaming friends". The league was launched in partnership with a cannabis-focused media site called "Merry Jane" (Jones para. 2).

¹²¹ Only recently, the Children's Museum of Indianapolis removed a pair of the musician's gloves, a fedora, and an autographed poster since it "was not appropriate to be on display" and many radio stations removed Michael Jackson songs from their playlists (see also Blistein para. 6-7). This raises the question if the Jackson dances will be removed from *League of Legends* as a reaction to revelations in the "Leaving Neverland" documentary.

Quinn dances to Aaliyah¹²²'s "Are You That Somebody?" which is considered a quite popular pop and R&B track of the 90s. The hip-hop dance moves are enacting a flying hawk, as the song is about a girl watching a boy from the sky like a hawk. The lyrics and the dance suit Quinn well, who is a champion called "Demacia's Wings", with a hawk- or eagle- inspired helmet and an actual eagle (called Valor) on her shoulder.

Akali's dance moves are inspired by Beyoncé's music video for the song "Single Ladies". Akali is a "rogue assassin", who "strikes alone", she is "the deadly weapon her people need" (Leagueoflegends.com, "Akali" para. 2). The character in Beyoncé's song split up with a man who treated her "to the things of the world" but he did not love her and "love is what" she would "prefer" and what she would "deserve" (Genius.com, "Single Ladies"). Akali is fighting for herself, and her people's rights and her loyalty cannot be bought (see also Leagueoflegends.com, "Akali" para. 2), just as the character in Beyoncé's song cannot be bought.

Ashe in her "Project" skin is a human creature enhanced with robotics, she is a champion who could be interpreted as a Daft Punk reference. She dances to "Get Lucky" by Daft Punk, a French house music formation, ft. Pharrell Williams. She has a futuristic and robotic looking drone and arrow, both looking as if they were taken from a sci-fi movie (e.g., *Tron: Legacy*). Daft Punk made the soundtrack for the movie *Tron: Legacy* and had a cameo appearance in it. Daft Punk are known for always appearing on stage with robo-inspired moves and outfits. Their faces up to today have always been covered by helmets in public. Project Ashe's face is also hidden under her helmet.

A reference from rock music is Pantheon's (Leagueoflegends.com, "Pantheon") dance to Elvis Presley's "Jailhouse Rock", which could also be meant as a reference to the Jailhouse Rock Cover- scene with James Brown, Aretha Franklin and Ray Charles in the iconic 1980's movie "Blues Brothers" (Blues Brothers Scene, 2013). Pantheon is the "Artisan of War" (see also Leagueoflegends.com, "Pantheon"), born as a "paragon of battle" (ibid.) among "warlike people" (ibid.). He closely resembles a

¹²² An actor and singer from Brooklyn who died in a plane crash age 22.

warrior from the movie *300* (see also Ito para. 1). Giving him a fun or “silly” dance like the swinging leg movements from Jailhouse Rock by Elvis, a song that is also often associated with the comedy “Blues Brothers”, gives him an ironic touch and a more positive charisma.

K-Pop, J-Pop and US-Pop (rock and dance) can be found in *League of Legends*. Apart from Daft Punk, there is relatively no choreographies or dance moves from Europe to be found in *LoL*.

6.3.4 Movies

Fiddlesticks’ is a scarecrow, and his dance is the scarecrow’s dance from *Wizard of Oz* (Fiddlesticks Dance Reference 2011).

Sion according to his lore is a legend who has been resurrected several times. Sion’s dance is comedian Chris Farley’s Chippendales audition scene, a sketch on the show *Saturday Night Live* (Sion Dance Reference 2014). Chris Farley died aged 33. Referencing an example of his talent could be meant as a way of honoring his memory.

Katarina’s dance is one portion of a dance performance by Jon Heder who dances to Jamiroquai’s “Just Dance” in the Sundance nominated movie *Napoleon Dynamite* (Katarina Dance 2011)¹²³. The moves performed by Jon Heder have caused intertextuality in gaming several times, as they have become a dance emote in *Fortnite* (Fortnite Groove Jam 2018) after they had been interpreted by Riot.

The Forecast Janna skin got its dance from Gene Kelly’s dance performance in “Singin’ in the Rain” (Forecast Janna Dance 2013). Lee Sin’s Muay Thai (Leagueoflegends.com, “Lee Sin”) skin features very accurately copied movements performed by actor Tony Jaa’s in a training scene in the movie *Ong Bak* (Muay Thai Lee Sin Movements 2013). In his standard version, Lee Sin’s dance is the reference to a scene from the Chinese movie *Shaolin Soccer* (Lee Sin Soccer 2015). In the 2001 sports comedy film, director Stephen Chow stars in the lead role, a Shaolin Kung Fu monk called “Mighty Steel Leg”. As the team’s striker, Steel Leg used his powerful kicks to make unstoppable soccer shots.

¹²³ The second portion of the dance from the movie used to be Master Yi’s dance, before his last rework.

Giving a Chinese-themed Champion a powerful dance from a Chinese movie that was quite popular inside and outside of China seems self-evident.

Fiora's (Leagueoflegends.com, "Fiora"), dance was inspired by Fred Astaire's performance (Fiora Dance 2012) in the movie *Blue Skies* on the song "Puttin' On the Ritz" by Irving Berlin, who is best known for writing the anthem "God Bless America" (Kaskowitz para. 2). Fred Astaire is widely regarded as the "most influential dancer in the history of film", who became a "national symbol" and "perfected a new art form" (Kisselgoff para. 3). The dance suits Fiora well since she can use her sword as a cane and her cape and outfit slightly resembles a tuxedo.

6.3.5 Television

Ryze's (Leagueoflegends.com, "Ryze") dance are the awkward side-to-side jumping moves of Ignatius Mortimer Meen. In the 1995 educational game *I.M. Meen*, Ignatius writes on scrolls and players must correct his mistakes (Ryze Dance 2015).

Amumu's "Emumu" skin and his dance are a reference to the "Goth Kids" from the TV series *Southpark* (1997-present). The dance is taken from one of the *Southpark* Emo Kids' arch-enemies, the Goth Kid "Michael" (Amumu Dance 2015).

Kalista's fights with a spear – and her moves are a direct copy of "Oberyn Martell's Spear Dance" in the TV series *Game of Thrones* (Kalista Dance 2014). Oberyn Martell is portrayed as a very skilled spear fighter.

Dr. Mundo's (Leagueoflegends.com, "Dr. Mundo") dance (Dr. Mundo Dance 2011) is a scene from the TV series *House M. D.* (2004-2007) – a series in which Dr. Gregory House is a stubborn character who always succeeds in finding answers to people's illnesses – and dances to the song *Fight The Power* by Public Enemy. Adding this dance immediately adds a lot of meaning, since the song by Public Enemy is a song for equality and against racial prejudices; therefore, when Dr. Mundo (who visually is a Mr. Hyde type of character), is dancing, it illustrates that he is a champion fighting for a righteous cause who will always find a way to succeed.

Volibear's (Leagueoflegends.com, "Volibear") dance moves (Volibear Dance 2011) are copied from "Sam B", a candidate of *America's Got Talent*. Obese Sam made the audience applaud and sparked a lot of positive energy with his catching performance. This suits Volibear very well, who is a very big and resilient champion. Riot developers giving Volibear this dance is promoting body positivity and aligning a strong champion like Volibear, with similar characteristics such as confidence, coolness, and integrity.

Jinx (Leagueoflegends.com, "Jinx") dances exactly like the dog Jake in the kid's TV series *Adventure Time* (2010-2018). Jake is a quite strange character, a (shapeshifting) dog with magical powers who was born from a pustule on his dad's head after his dad had been bitten by a shapeshifter (Jinx Dance 2015). Jinx is not like Jake, yet, she is also an extraordinary character, a "manic and impulsive criminal" and "merry mischief maker" (Leagueoflegends.com, "Jinx"). In the dance, Jake has very long arms, which goes along well with Jinx's features, who is depicted as a very skinny teenager.

Garen's dance is a very simple one, taken from Johnny Bravo's "monkey dance" (Garen Dance 2013). Bravo is a dimwitted narcissist, starring in a children's TV series of the same name. Garen, the "Might of Demacia", is described as a

proud and noble soldier", who fights at the head of the Dauntless Vanguard and "[...] is popular among his fellows, and respected well enough by his enemies—not least as a scion of the prestigious Crown Guard family, entrusted with defending Demacia and its ideals. (Leagueoflegends.com, "Garen" para. 2)

Garen is a champion created to be a superman archetype of the *League of Legends* universe, one of the greatest champions of Demacia. Giving him this silly dance by Johnny Bravo, an archetype who symbolizes sexism¹²⁴ and stupidity allows for a certain comical irony.

Kayle's standard dance reference derives from actors Will Smith and Alfonso Ribeiro, who perform a sketch to the song "Apache (Jump On It)" by Sugarhill Gang in an episode of the 90s TV series *The Fresh*

¹²⁴ Johnny is always objectifying women. Yet, he never succeeds in dating them, as he is always refused due to his misconduct, whereby the writers of the show are depicting his behaviour as unmistakably wrong.

Prince Of Bel Air (Kayle Dance 2011). Kayle is a serious knight and the dance comes again with comical irony since in one scene in the *Prince of Bel Air*, two characters believe performing a few simple horse-riding lasso-juggling moves will win them money in a serious dance competition.

Vi's Neon Strike skin's recall animation was taken from a pose that Franky Super regularly does, – a quite goofy character with a straw hat from the anime series *One Piece* (Neon Strike Vi Pose 2014). Vi and Franky both have enormous forearms and hands, which might have led to referencing Franky's pose.

When the champion Rumble is played with his Super Galaxy skin, he has some moves from the Japanese Anime series *Gurren Lagann*, such as “Giga Drill” (Super Galaxy Rumble Pose 2014), which makes sense, since the Super Galaxy skin is a robotic suit with an enormous drill.

6.3.6 Wrestling

The Wrestler “Booker T” of the WWE (World Wrestling Entertainment) Championship has a breakdancing move called “Spinaronie” (Spinaronie 2003). The wrestler “Christian” picked up the move and changed it a little bit, calling it the “Peeparoonie” (Christian used to call his fans “peeps”; *ibid.*). Christian's move begins with some robotic arm movements and then the breakdance spin is only indicated before he comfortably lies down on his side (Nautilus Peeparoonie Dance 2012; Spinaronie 2013). The dance makes fun of an opponent and his superior abilities (such as performing a flawless breakdance spin), which mirrors the physical tension inside a MOBA very well, where champions use their abilities against each other, and players often try to play psychological tricks to alienate their opponents. Riot gave the Peeparoonie to the tanky champion Nautilus (Leagueoflegends.com, “Nautilus”), who looks like a little robot at first sight. Just like Christian, he is not agile enough to make a swift move like a breakdance spin. Christian and Nautilus are big tanky characters, trying to impress with their sheer mass.

6.3.7 Video Games

Nintendo's Kirby is probably not as popular as (Super) Mario but widely popular. Since 1992, the tiny pink puff was the hero of many Kirby games. Urgot "the Dreadnought", with tubes going inside his mouth, is reminiscent of the evil "Immortan Joe", a cult leader in the 2015 movie *Mad Max: Fury Road*. The tubes on Joe's costume were made from Russian gas masks (Immortan Joe Creation 2015). Urgot and Joe, cruel and barely alive, strong but rotting, half man and half machine, are frightening and repulsive characters. Long chains and torture play an important role in both their worlds: Urgot can shoot a "chem-drill" at a champion and then haul the victim in with a long chain. In the beginning of *Fury Road*, hero Max is chained to "war boy" Nux, which is causing a lot of pain and despair.

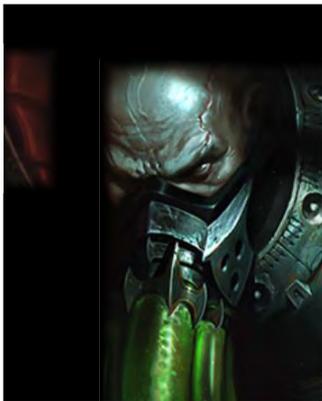


Figure 50 - Urgot



Figure 51 – Mad Max's evil cult leader "Immortan Joe"

Despite Urgot's theme, the Riot developers decided to give Urgot the dance of this little friendly creature:



Kirby's power is being able to adapt. If played right, Kirby can use an enemy's abilities against them (Nintendo.com Kirby 2019: "Kirby is always finding new ways to take on troublemakers."). This aptly captures the essence of MOBA gameplay: evaluating the situation and adapting to it is key. No matter how scary the opponent, looks and size will not determine who wins. Everyone has the exact same chances to win.

The central villain and anti hero character in Konami's *Metal Gear Solid* series called Revolver Ocelot loves to spin his gun a lot (Ocelot Gun

Spinning 2016). *LoL* Lucian's /d animation is an exact copy of one of Ocelot's gun spinning scenes. Lucian is a gunslinger, shooting his magical pistols is part of all his abilities.

Xin Zhao "the Seneschal of Demacia" always attacks with his three-talon spear, no matter which of his abilities is being activated. His dance references Seong Mi-na's dance (Xin Zhao Dance 2011) from the game *Soul Calibur II*. Seong Mi-na is a tall and strong Korean woman who masters more than twenty weapons (Fandom.com, Soulcalibur Wiki, "Seong Mi-na"). Her powerful spear dance is suitable for a spear fighter like Xin Zhao.

Junpei Iori's (a friendly, goofy and immature 19-year-old from the *Persona*¹²⁵ video game series) Victory Pose is the recall animation for *LoL*'s champion Master Yi (Master Yi Recall 2014). Flawless fighter Master Yi is always teleporting back to base as a winner, always going back in Iori's "Victory Pose", since he is described as the perfect bladesman: his "thought and action have become almost as one" while he "chooses to enter into violence only as a last resort" (Leagueoflegends.com, "Master Yi").

6.3.8 Dance

Some dances that can be activated on champions in *League of Legends* were inspired by dances from dance culture. Champion Janna (Leagueoflegends.com, "Janna") whose abilities are all inspired by wind and storm, got Jazz-funk moves from a popular female choreography duo on *YouTube* (Janna Jazz-Funk 2012).

Jazz-funk [...] was born in LA in the beginning of the XXI century [...]. Now this style is used in most choreography performances, video clips, and live shows of pop-stars [...] such as Beyoncé, [...] and Lady Gaga (Mywaydance.com para. 1)

Jazz-funk is easy to learn and hard to master (like good esports games), fun, yet physically challenging. It is plausible Janna was given these moves due to the dance's popularity. Also, the developers might have

¹²⁵ The studio behind the game was Japanese developer Atlus, the game was designed for Playstation 2. *Persona 3* appeared in 2006 in Japan, 2007 in Europe/US. *Persona 5* was released Oct. 31, 2019.

wanted to portray Janna as a champion who is skillfully executing difficult performances (fighting abilities).

Several champions have physically demanding dances, showing how physically fit they are: Jhin dances the Lezginka (Jhin Dance 2016) a dance from the Caucasus.

Kindred (Leagueoflegends.com, “Kindred”) represent “the twin essences of death”, a lamb and a wolf (ibid.). Kindred’s dance is a very challenging tap dance, which was inspired by the Anna Kendrick Song “Cups (When I’m Gone)” (Kindred Dance 2015). The song is about someone who would be missing the singer once she was gone. This is a suitable song for Kindred, who came into existence because of someone’s loneliness. Ironically, no champion chased by Kindred would ever miss them because they are representing death.

Elise (Leagueoflegends.com, “Elise”) dances the Can-can, a dance popular in music halls in the 1840s (see also Gribble 66; Elise Dance 2012). Choosing this leg-intensive dance for Elise could have been intended as a pun, since she is a spider with eight legs.

“Mafia” Jinx is dancing the 1920’s Charleston. Both the mafia and the Charleston became famous in the “Roaring Twenties”.

Anivia the Cryophoenix (Leagueoflegends.com, “Anivia”) is “a benevolent winged spirit who endures endless cycles of life, death and rebirth” and “a symbol of hope [...] and change” (ibid.). She dances “The Chicken Dance”, which is a fun German dance known as “Ententanz”.

6.3.9 Internet Memes

Memes diffuse from person to person, but shape and reflect general social mindsets. The term describes cultural reproduction as driven by various means of copying and imitation – practices that have become essential in contemporary digital culture. In this environment, user-driven imitation and remixing are not just prevalent practices: they have become highly valued pillars of a so-called *participatory culture*. (Shifman 4)

Evolutionary biologist Richard Dawkins wrote a book in 1976 called *The Selfish Gene*. Dawkins proposed the existence of a carrier of cultural information: the “meme.” Dawkins derived “meme” from the Greek word “mimeme” (imitation).

He chose a monosyllabic term like “gene” because “genes propagate

themselves in the gene pool by leaping from body to body [...] [like] memes propagate themselves in the meme pool by leaping from brain to brain via [...] imitation” (Dawkins 192).

Memes will leap when they “meet a certain threshold of cultural value” (Howard 66). In the age of social media, this process is happening fast, “for each individual judges the worth of the memes rattling around inside their head” (ibid. 67), then they decide if they want to share a post. Their judgement is “based on their own cultural values” (Dawkins 192-193).

“A meme’s propagation within the *League* community depends on the geek cultural values defined by T.L. Taylor in *Raising the Stakes*” (Howard 67). Geek culture prizes “...highly refined skill and mastery [that] operates through technology, science, and gaming” (Taylor 111). According to Howard, “memetic propagation in *League* [LoL] depends on a system of values related to displays of skill or deep knowledge” (Howard 67). He gives an example from the *League of Legends* community:

One such example is Brandon “Saintvicious” DiMarco, who gained a reputation for failing to properly execute plays in the clutch. That idea became a running joke, or meme, within the community that led to YouTube montages and a now defunct website that documented his most recent blunders in both casual and professional settings. (ibid.)

Howard also found that “Dawkinsian memes can be any number of different things” (Howard 68) which in *LoL* can be “words, plays made, actions taken by a player on camera, and anecdotes of actions taken by a player while off camera” (ibid.).



Figure 52 – LoL’s Olaf



Figure 53 – “Techno Viking

The *League of Legends* Champion Olaf seeks his death in battle because a peaceful passing is a coward’s fate among his people (see also Leagueoflegends.com, “Olaf”). Olaf’s name derives from Old West Norse and many Vikings bore this name (Fandom.com, “Olaf”). Maybe

that was one of the reasons his dance became the “Techno Viking’s” dance (Olaf Dance 2011). The Techno Viking is a meme based on a video that was shot in 2000 at a techno parade (see also *ibid.*). The video shows a man who stumbles into a group of dancing people grabbing a woman. Immediately, a man colloquially known as the Techno Viking confidently grabs the offender and sends him away nonviolently.

The unknown person behind the name Techno Viking seems to be acting based on moral courage and he is doing so peacefully, fearlessly; therefore, seeing him dance could be associated with courage, helping fellow citizens who are in trouble. These attributes would be quite suitable for a character like Olaf, who is designed to be brave.



Figure 54 – LoL’s Teemo



Figure 55 – Screenshot from Badger’s Meme

Teemo (a friendly and tiny looking “Yordle”) dances to the “Badgers” meme (Teemo Dance 2012). A mushroom is part of the meme¹²⁶ and Teemo can toss “mushroom traps” on the ground, which grant sight and can detonate. The meme is extremely repetitive and annoying, while it is no secret that many players find Teemo and his effective mushrooms

¹²⁶ The meme is about badgers dancing to techno music with a mushroom and a snake incoherently appearing from time to time.

very annoying since even average players can apply a lot of pressure with him in the early game.



Figure 56 - LoL's Hecarim



Figure 57 - Rhett & Link's Dope Zebra

Hecarim visually is a very dark and scary half-horse-half-man creature, who can be played with a *Sleepy Hollow*¹²⁷ skin. In the original version, he might be inspired by the Four Horsemen of the Apocalypse. Therefore, it is ironic to give him the “Dope Zebra” dance, which is toning down his scariness significantly. A popular American comedy duo (Rhett & Link) costumed themselves together performing as a hip-hop moves loving Zebra (Hecarim Dance 2015).



Figure 58 - 90's trend “Troll Doll”



Figure 59 – LoL's Trundle

Trundle is a troll whose hair looks like the 90s troll doll's hair. His dance reference is the “Dancing Trollface” (Trundle Dance 2013).

¹²⁷ A Tim Burton Horror movie (1999) based on the Washington Irving gothic story (1820).



Figure 60 – LoL’s Star Guardian Jinx



Figure 61 – “Leek Farm Girl”

Jinx (with her Star Guardian skin) dances to one of the most famous Finnish songs in the world, the “Ievan Polkka”, which became very popular through a meme called “Leek Dance”. It is hard to find deeper meaning in the meme, in the end it is just a hypnotic clip based in which a girl with leek in her hands dances to a catchy song. The meme’s extreme popularity is a bit crazy, which suits Jinx well, who is probably the nuttiest character in *League of Legends*. She is a “manic and impulsive criminal [...] who [...] was either traumatized by one too many killings [...] or was simply driven insane by sumo fumes” (Leagueoflegend.com, “Jinx”). As a Star Guardian she has two Pom Poms which she whirls around like the girl in the Ievan Polkka meme (Star Guardian Jinx Dance 2016).

6.3.10 Tai chi

Tai chi is an internal Chinese martial art practiced for both its defense training and its health benefits. The champion Shen has a dance which references the 24 forms of Tai chi (Shen Tai Chi 2012).

6.3.11 Summary

Closing the discussion of dance in *Dota 2* and *League of Legends*, *Dota 2* dances (which are part of the available taunts) can be summed up swiftly— there are some interesting cultural intertextualities but the overall number of dances identified as references is not extensive. *League of Legends* however offers several dances for each champion and skin. Making the variety visible in this thesis was possible by creating categories. The reason for *League of Legends* featuring so many dances

from many cultural fields has become visible through the step-by-step analysis of the dances: the community tells Riot developers via e.g., *Reddit.com*, *YouTube* and via the *Leagueoflegends.com* forums, which references they would like to see as dances or recall animations. As can be taken from the list, references can come from almost anywhere, but they are references to things the relatively young community¹²⁸ loves: From Manga to Sundance nominated movies to pop music, anything that is of importance to the audience and adds an aspect to a character that makes it more exciting or lovable *and* can be made into a dance, is possible. Dance references can add meaning to the characters, such as making Lee Sin an even more respectable fighter by associating him with Ong Bak. The dance references help to underline a character's personality. Dance can be used as a comical element, such as evil Urgot dancing little Kirby's dance. One could say that the presence of dances is labeling *League of Legends* and *Dota 2* as fun competitions, while distancing them from actual war.

Riot developers respond to suggestions in the process, but they have the last say on everything and act against the wishes of players. For example, they deleted a "candy cane pole dance" on champion Katarina (*Dota2.Gamepedia.com*, "Katarina"; Slay Belle Katarina Pole Dance 2012). One of Katarina's skins used to have the pole dance as a recall animation: a candy cane appeared, and she performed a pole dance. Some people did not like the pole dance, saying that Katarina was an assassin and not a stripper: "They can keep making sexy skins, but Katarina is a bad-ass assassin. Not a stripper" (*Leagueoflegends.com*, "Katarina Animation Removal 2012"). Senior Product Manager "Volibar" reacted to these comments by saying: "You're right. This doesn't really fit with her thematically, and it's too much. We'll be removing it" (*ibid.*). Many people were angry on the forums of *Leagueoflegends.com* when Riot removed this animation of Katarina as a pole dancer (*ibid.*), which shows that the gamers are very engaged and care about the process of choosing references and the creation of the dances by Riot developers. Therefore, these two things seem to be among the most important reasons for *LoL*

¹²⁸ In 2015, the Colin Campbell found that the average age of a *League of Legends* player was 26, while *Dota 2* players were 25 on average (Campbell para. 6).

having so many dances: being able to express oneself through emotes and having an influence on the emote-finding process is very important to gamers.

Tencent Holdings Ltd. currently owns 92,78% of *Riot (League of Legends)* and 48,4% of *Epic (Fortnite)* (Tencent Interim Report 2011). Dances can be acquired in *League of Legends* through purchasing new skins. Therefore, the dances in *League of Legends* could be an incentive for spending money on skins. From an economic perspective it would be interesting to investigate how much more attractive the dances make skins for buyers. Riot's business model must have been quite successful, as the idea was carried into *Fortnite* and then further expanded: Dances are specially made for *Fortnite*, and a lot of effort is put into the development of very realistic-looking dances which seem to be performed by people and not by computer-animated characters. The dances give the cartoonish *Fortnite* characters a touch of realness, and if a player has purchased many different dances made available, allows players to express themselves very accurately. When dances in *League of Legends* were examined in the chapter on Cultural Aspects of MOBAs of this dissertation, the Caramelldansen on the champion DJ Sona was mentioned and a video (Fortnite Caramelldansen 2019) was linked to someone performing the Caramelldansen song on music blocks in the Creative Mode of the game *Fortnite*. The Creative Mode in *Fortnite* is not only about music. As in *Minecraft*, people can craft and design almost anything there to share with others¹²⁹ such as a typical children's car rug which was made into a *Fortnite* map, dream mansions or people design their actual homes and landscapes.

As previously mentioned, Tencent holds shares in both Riot (*LoL*) and Epic (*Fortnite*). It could be a coincidence that the *Napoleon Dynamite* reference discussed in the chapter on Dance, appears in both games, as both games have Zombie-inspired dances. More than likely, it is not coincidental that dances are a key aspect of the two games when it comes to monetization. Tencent had insight into people's reactions to dances in *LoL* as early as 2009 and therefore would have had enough time to

¹²⁹ <https://www.reddit.com/r/FortniteCreative/>

develop strategies to enhance sales in *Fortnite* ten years later through expanding the monetization options around this cultural process: Today, *Fortnite* offers much more than a /d functionality. There are many dances, but not only dances that were suggested by players and then purchased. In the 90s, physical items from all kinds of fantasy franchises were very desirable, such as plastic figurines from the *X-Men*:

In the late '80s and early '90s, riding a wave that was equal parts Chris Claremont and John Byrne; Rob Liefeld and Jim Lee; and the speculator market, the X-Men toy market was booming. ToyBiz, at the time a partially-owned subsidiary of Marvel, was cranking out X-Men toys almost faster than they could be bought up. Almost. With multiple waves of toys every year, multiple editions for the most popular ones, and easy color switches in the figures' paint, they created a true glut that only a few of the most valuable toys have risen above. (Philpott para. 1)

Today, people can buy virtual items, such as a *glider in Fortnite* called “Frostwing” that looks like a dragon (Fortniteskins.net, “Frostwing”) and find flying with it desirable enough to post footage of themselves flying their newly purchased virtual dragon on Twitter (Twitter.com, “@afzzy’s Frostwing”).

League of Legends, *Fortnite* and *Dota 2* are free to play. People have the option to buy additional cosmetic content inside these games if they want to. Buying additional cosmetic items is not necessary, the games are already fun without buying additional content. Yet, Riot made 1.4 billion in 2018 with *League of Legends* (Superdata Research 2018; McAloon para. 6), which was a significant drop from the \$2.1 billion in 2017. In 2018, *Fortnite* which had just come out July 2017 already made \$2.4 billion and was the top grossing game of the year (McAloon 2018; Superdata Research 2018). *Fortnite* was not the first battle royale type game¹³⁰ to appear on the market: *PUBG (PlayerUnknown’s Battlegrounds)* was released in March 2017 and had \$1 billion in revenue in 2018 (Tassi para. 2). Both *Fortnite* and *PUBG* were very successful, but *Fortnite*, featuring purchasable dances, won the race for the most successful game in 2018.

Not only Millennials today, but also their grandparents borrow their books in libraries or read them on digital devices, films are rented and

¹³⁰ In a battle royale game, the last player or team surviving on a map wins. It can begin with 100 players all fighting against each other until one player is the last on standing.

dragons (e.g., Frostwing in *Fortnite*) can be virtual. To people using these virtual things, they are apparently worth the investment. This phenomenon paired with the two games Tencent is involved in – which come along with an endless offer of enthralling virtual goods — is driving developers and gamers to find elements of culture they hold very dear to either sell (developers) or suggest for sale (gamers). One could even say: Gamers today are selling things to themselves that they love, and the developer is providing the professional infrastructure for this process.

6.4 Music & Sound

Daniel Martin Feige writes about the video games *Planescape: Torment* and *Wasteland 2* that their unique atmosphere is created not only through their graphics, but also their music, which was composed by Mark Morgan¹³¹. Feige also mentions that celebrated composers working for the movies – such as Hans Zimmer (*Call of Duty: MW2*) – are also composing music for video games (see also *ibid.* 130)¹³². Danny Elfman composed a song for *Fable* (2004; *Fable Original Theme* 2008). Music and sound play an important role in *Dota 2* and *League of Legends*, as we will see in the following.

6.4.1 Dota 2

The sound effect played during Sun Wukong's (Dota2.Gamepedia.com, "Monkey King") ability "Wukong's Command" (*ibid.* para. 10) comes from a Balinese music and dance called *kecak* or "Monkey chant" (*ibid.* para. 14). The "ritual song depicts a battle where a group of monkeys helped Prince Rama to fight the evil King Ravana" (see also *ibid.*). This makes sense since the legend of Sun Wukong probably was influenced by elements of Chinese folk tales and Hindu deity Hanuman (Walker 29).

¹³¹ „[...] bei *Planescape: Torment* und *Wasteland 2* ist es neben der graphischen Darstellung nicht zuletzt auch die Musik des Komponisten Mark Morgan, welche für die eigentümliche Atmosphäre dieser Spiele charakteristisch ist, die aber ohne die literarischen Verfahrensweisen, den spezifischen Stil der Beschreibung und Charakterisierung, einen anderen Sinn gewonnen hätte“ (Feige 120).

¹³² „Nicht nur das: Namhafte Filmmusik-Komponisten komponieren immer häufiger auch für Computerspiele; Howard Shore hat die Musik für *Fable* geschrieben, Hans Zimmer die für *Call of Duty: Modern Warfare 2*“ (Feige 130).

Dota 2 heroine Lina says, "better to burn out than fade away" (Dota2.Gamepedia.com, "Lina" para. 14).

Cobain's music provides a sense of strength for powerless adolescents. Nonetheless, his suicide in April 1994 was also a betrayal. The gathering of thousands mourning his loss at the Seattle Center on April 10, 1994, brought Cobain's final message, via tape recorder, to the listening world. Cobain quoted Neil Young's homage to punk rocker Sid Vicious (another heroin addict): "It's better to burn out than to fade away." (Seelow 53)

Lina's abilities are mostly based on fire: e.g., she can send out "a wave of fire that scorches every enemy in its path" (Dota2.Gamepedia.com, "Lina" para. 3).

One of Timbersaw's responses, "I'm not a lumberjack, and no, I'm not okay. I thank you." Is a reference to the lumberjack song from Monty Python's *Flying Circus* (Dota2.Gamepedia.com, "Timbersaw" para. 17). This is allowing the developers to refer to a popular piece of comedy while also making clear that Timbersaw is a hero, not a lumberjack.

Morphling (Dota2.Gamepedia.com, "Morphling") has a line as an attack response (ibid. para. 11) which suitingly is a direct reference to the Pixies' song "Wave of Mutilation": Morphling is a living wave:

Unlike other agility carries that rely on physical attacks, he relies on his powerful abilities to initiate and shift into a state from which he can make a kill. Waveform lets him surge directly forward to a location, damaging enemies on his path, working both as a nuke or an escape. (Dota2.Gamepedia.com, "Morphling" para. 1)

... and the punk-rocky Pixies' song has very strong bass riffs, and a feel of the unstoppableness of a person who has overcome something difficult, additionally the text suits Morphling's water-theme and him being a hero character:

Cease to resist, giving my goodbye
Drive my car into the ocean
You'll think I'm dead, but I sail away
On a wave of mutilation
A wave of mutilation
Wave of mutilation
Wave
Wave
I've kissed mermaids, rode the El Nino
Walked the sand with the crustaceans
Could find my way to Mariana
On a wave of mutilation
Wave of mutilation
Wave of mutilation

Wave
Wave
Wave of mutilation
Wave of mutilation
Wave of mutilation
Wave
Wave

(Genius.com, “Wave of Mutilation”)

The song even ends on the word “Wave”.

Tinker’s line: “Blinded you, with Science!” (Dota2.Gamepedia.com, “Tinker Responses”) might be a reference to a Thomas Dolby hit song, “She blinded me with science” (Dolby, 2009) – a suitable song for Tinker, who is a scientist.

“Disruptor’s kill response ‘You’ve been disrupted’ is a reference to the AC-DC song ‘Thunderstruck’” (Dota2.Gamepedia.com, “Disruptor” para. 13). Probably this song was chosen as a reference since Disruptor can call down Thunder (ibid. para. 1).

Phantom Assassin says: “I’m an immaterial girl!” (Dota2.Gamepedia.com, “Phantom Assassin”) - a suitable line for someone who can teleport (ibid. para. 5) and blur her own body (ibid. para. 6). It “is probably a reference to the song Material Girl performed by Madonna” (ibid. para. 16).

Dota 2 has an “Announcer” voice inside the game which can be changed with purchasable items (see also Dota2.Gamepedia.com, “Announcers”). The announcer is supposed to give important feedback to each player, such as “Your barracks is under attack”, “The enemy’s base is under attack”; it also greets the players and tells them the mode of the game. For “The Internationals”, *Dota 2*’s most important esports competition, the Announcer can make comments on all participating teams, e.g. “Na’Vi’s turn to ban”, or “Team Evil Geniuses are the *Dota 2* International champions!” (ibid.). *Dota 2* allows players to change the voice of the in-game announcer.

VALVE had voice actors (Dota2.Gamepedia.com, “Voice Actors”) record numerous sentences for each hero. Some *Dota 2* heroes have more than 15 minutes of voice recordings, wherefore all heroes have something different to say in almost any situation of gameplay. Players can buy 27 different Announcer Packs for *Dota 2*, e.g., with the voice of

Gabe Newell (Dota2.Gamepedia.com, “Gabe Newell Announcer”), who will tell the audience when VALVE was established and that he is not wearing underwear (see also *ibid.*).

League of Legends characters also have numerous voice-overs, such as Akali for example (Fandom.com, “Akali Quotes”), and there are also Announcer Packs available, usually during special events, such as a Pyke (Fandom.com, “Pyke”) Announcer Pack for “the June 2018 Curse of the Drowned event” (Fandom.com, “Announcer”).

6.4.2 League of Legends

Riot is entwining music in their game in different ways (see the Dance chapter for examples). They have also debuted a video at the World Championship Finals in South Korea in 2018, a music clip for the song “Pop/Stars”. The band behind the song is called “K/DA”; it is made up of real singers¹³³. In the video, popular *League of Legends* characters sing and dance. The creation of this virtual K-pop band is a promotion designed to sell new skins (called “K/DA” skins) for the game (see also Lee para. 2). All the five female champions are portrayed in their video with their respective abilities. The visuals and catchy tunes of this video caught the attention both of *LoL* and non-*LoL* fans (see also *ibid* para. 12).

All of Mordekaiser’s (the “Master of Metal”) abilities are references to Metal songs (“Mace of Spades” – Ace of Spades by Motörhead, “Creeping Death” – Creeping Death by Metallica, “Siphon of Destruction” - Symphony of Destruction by Megadeth, “Children of the Grave” – Children of the Grave by Black Sabbath, “Iron Man” – Iron Man by Black Sabbath; Fandom.com, “Mordekaiser Trivia” para. 2).

6.4.3 Summary

Songs can carry emotions and in MOBAs, musical intertextualities seem to be implemented to underline a character’s personality. A very good example for this is Morphling, who is a huge wave rolling over his enemies, quoting the song “Wave of Mutilation”). The recorded dialogue

¹³³ Madison Beer, (G)I-DLE, Jaira Burns.
https://www.youtube.com/watch?time_continue=108&v=UOxkGD8qRB4

for *Dota 2* heroes is very extensive, which makes the characters more realistic since they have many sentences which they rarely say twice in one match. *Dota 2* offers twenty-seven “announcer packs” (Dota2.Gamepedia.com, “Announcers”) for sale, which offer players many choices if they want to change their in-game announcer’s personality. *League of Legends* characters have recorded dialogue as well.

6.5 Celebrities

Cultural studies scholar Jeff Lewis talks about Princess Diana, who

[...] was also part of a broader public interest and imagining. She has appeared often in the major, mainstream media, and her life and personal struggles has become a significant part of the everyday lives and experiences of ‘ordinary’ people. To this extent, Diana was a media and cultural product like any other ‘text’ or celebrity. However partially or impartially, the characters, events, celebrities and texts that are constituted through the media are a fundamental part of our culture. (Lewis 4)

Actual people like Diana, princess of Wales, can be part of our culture and inspire authors of any cultural genre to create characters (loosely) based on them. In video games, looking for characters based on a popular person can be overwhelming, since very brief research can reveal an armada of characters from all kinds of games paying homage to somebody. A great example is Hong-Kong American actor Lee Jun-fan (Bruce Lee). Bruce Lee is not only a person who has been made into dozens of characters in video games based on him (Top 10 Video Games Based on Bruce Lee 2014), there is also *Bruce Lee* (1984), which is a video game for the Atari 8-bit family. Some examples of video game characters inspired by Bruce Lee are Forrest Law (*Tekken*; Namco 1995) or Liu Kang (*Mortal Kombat*; Midway Games 1992) and there are many more, which have been listed on *Unrealitymag.com* by Paul Tallisvale (Tallisvale 2013).

Corki’s Red Baron skin references Manfred Albrecht Freiherr von Richthofen (1892-1918), the “Red Baron”, who shot down 80 planes in World War I and was killed by a gunshot fired from the ground. There is “Aurel the Gyrocopter” (Dota2.Gamepedia.com, “Gyrocopter”) in *Dota 2*, a ranged agility hero with rockets and missiles. Maybe the *Riot* developers were looking for a way to create a champion with similar looks and abilities that would not too closely resemble Gyrocopter. Corki

the “Daring Bombardier” is actually similar to Gyrocopter when we compare their abilities, as he is equipped with a missile (Missile Barrage; Leagueoflegends.com, “Corki” para. 7) for an ultimate, while Gyrocopter has a “Homing Missile” (Dota2.Gamepedia.com, “Gyrocopter” para. 1):

Fires a homing missile to seek the targeted enemy unit. The missile gains speed over time, dealing damage and stunning when it impacts the target. Enemy units can destroy the missile before it reaches its target. (ibid. para. 4)

Both Corki and Gyrocopter deal magical damage over a wide area (Corki’s Missile Barrage: 1225 range; Gyrocopter’s Call Down: 1000; ibid para. 7).

On *Dota2.Gamepedia.com*, Aurel the Gyrocopter is being related to Aurel Vlaicu, who was an actual “Romanian pioneer of early flight” (Dota2.Gamepedia.com, “Gyrocopter” para. 16; Aurel Vlaicu 2019).



Figure 62 - Red Baron Skin for Corki



Figure 63 - Richthofen's "Red Albatros"

Manfred Freiherr von Richthofen in terms of interfiguralty (Müller 1991) is not an unusual sight in numerous popcultural media. Snoopy’s make-believe battles (using his doghouse as his World War I fighter plane) against the Red Baron began in a comic strip October 10, 1965. Snoopy vs. the Red Baron is also the name of a game for PS2.

Gangplank (Leagueoflegends.com, “Gangplank”) could be interpreted as a reference to the pirate Edward Thatch, called Black Beard (Black Beard 2019).



Figure 64 - Gangplank

Lee Sin (Leagueoflegends.com, Lee Sin”) has a skin that could be a reference to Bruce Lee.



Figure 65 - Dragon First Lee Sin Skin

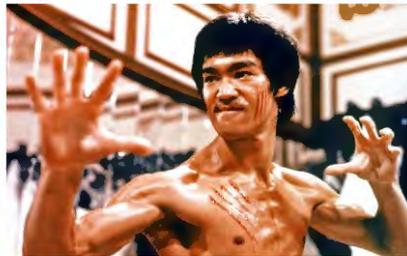


Figure 66 - Bruce Lee

Some of the undead champion Sion’s (Leagueoflegends.com, “Sion”) dialogue is from movies with Arnold Schwarzenegger. “Who is your summoner, and what does he do?” (Fandom.com, “Sion Trivia“ para. 3) references Schwarzenegger in *Kindergarten Cop* (Kindergarten Cop, 1990). “Get on my chopper!” (Fandom.com, “Sion Trivia” para. 3) references Schwarzenegger in *Predator* (Predator, 1987). “What is best in death? To crush your enemies, see them driven before you and hear the lamentation of noobs!” (Fandom.com, “Sion Trivia” para. 3) references Schwarzenegger in *Conan the Barbarian* (Conan the Barbarian, 1982), a quote that is probably given to the Barbarian Sion skin because he was intended to be a reference to *Conan the Barbarian*. “I’ll be back” (Fandom.com, “Sion Trivia” para. 4) quotes Schwarzenegger in *The Terminator* (The Terminator, 1984).

The Hextech Sion (Hextech Sion Spotlight 2017) skin is a blatant reference to *The Terminator*. This skin runs with the undead concept of Sion (he is the “Undead Juggernaut”; Leagueoflegends.com, “Sion” para. 1), which suits the character concept since Sion shares the Terminator’s “character trait” of immortality and the cybernetic eye the Terminator is known for. Here, Sion’s cybernetic enhancements such as his eye (the

Terminator also has a cybernetic eye) are smoothly fitted into the *League of Legends* lore: the clans from Piltover have endeavoured in “Hextech¹³⁴” technology with which they can enhance warriors (Leagueoflegends.com, “Piltover”).

Tryndamere the Barbarian King (Leagueoflegends.com, “Tryndamere”) is named after the Co-founder of Riot and Co-creator of *League of Legends*, Marc “Tryndamere” Merrill (Fandom.com, “Tryndamere Trivia” para.3). Tryndamere has a skin inspired by the movie *Highlander* (*Highlander* 1986; *ibid.* para. 6) and his original version might have been inspired by Genghis Khan (*ibid.* para. 2).

Volibear (Leagueoflegends.com, “Volibear”) “was named after Travis ‘Volibar’ George, from a long-running forum meme of him supporting armored bears in the League” (Fandom.com, “Volibear”).

Ryze’s (Leagueoflegends.com, “Ryze”) “name comes from Riot Games’s CEO Brandon ‘Ryze’ Beck” (Fandom.com, “Ryze”).

Udyr (Leagueoflegends.com, “Udyr”) “is named after Steve “Udyr” Mieczkowski” (Fandom.com, “Udyr”), an Associate Producer for *League of Legends*.

Fiora, the “Grand Duelist” (*ibid.*), is “the most feared duelist in all Valoran [and] renowned for her brusque manner and cunning mind as she is for the speed of her bluesteel rapier” (Fandom.com, “Fiora”). Fiora’s name “might be referencing ‘Fiore dei Liberi’” (*ibid.*). Fiore dei Liberi was a 14th century fencing master who authored a fencing manual called *The Flower of Battle* (see also Baranowski para. 15).

The champion Heimerdinger (Leagueoflegends.com, “Heimerdinger”), a genius inventor, has taken his name from two genius physicists: Robert Oppenheimer and Erwin Schrodinger (see also *ibid.* para. 16).

The *League of Legends* item “Athene’s Unholy Grail” (LoL.Gamepedia.com, “Athene’s Unholy Grail”) was not named after a Greek goddess, but after Bachir “Athene” Boumaaza. Boumaaza is “a [...] popular figure in video gaming, most notable for playing World of Warcraft prior to LoL” (*ibid.* para. 2). He is also the founder of “Gaming

¹³⁴ The *League of Legends* lore explains Hextech as a technology fueled by magic.

for Good” and raised \$22 million for charity since 2012 (see also Moreno para. 3).

In *Dota 2*, some in-game items are references to real life people: Eul's Scepter of Divinity (Dota2.Gamepedia.com, “Eul’s Scepter of Divinity”) “is a reference to Eul, the creator of the first DotA map back in 2003” (ibid. para. 7), maybe it could also be seen as a tribute to Eul.

The Scythe of Vyse (Dota2.Gamepedia.com, “Scythe of Vyse”) used to be called “Guinsoo’s Scythe of Vyse”: “In the original DotA, this item was known as Guinsoo's Scythe of Vyse, as a tribute to one of the developers of *DotA: Allstars*, who went on to co-create League of Legends” (ibid. para. 6).

6.5.1 Summary

Maybe there is more heroes than just the Gyrocopter in *Dota 2* referencing real life people, but there have not yet been found any. A couple of *Dota 2* items be references to real life people. There are at least seven examples of characters inspired by people to be found in *League of Legends*. Heimerdinger is not only named after two physicists, he is also by character something like a physicist or scientist gone mad. Red Baron Corki is not only named after the Red Baron, but he is also definitely someone who is going to war in his plane. The same applies to *Dota 2*'s Aurel the Gyrocopter. *LoL*'s Lee Sin carries half of Bruce Lee's name, and he is also inspired by characters Bruce Lee played in the movies. Sion does not have his name from Arnold Schwarzenegger, but he utters many sentences from Schwarzenegger movies. Tryndamere, Volibar, Ryze, Udyr, Athene, Eul and Guinsoo all have champions or items named after them, but the champions and items are not related to them by more than the name.

Fiora and Heimerdinger are not only based on celebrities, but at the same time also on archetypes that are fun to be used in all kinds of media: a cheeky fencer and a mad scientist are always and everywhere invoking ideas for entertaining stories.

Celebrities are sometimes referenced in MOBAs to create characters and allow people to quickly understand their personality. When we hear the

name “Red Baron”, we immediately connect the champion with the idea of someone who flies a red plane during war times. Riot is regularly referencing celebrities from today’s pop culture such as Daft Punk or Snoop Dogg. At the same time, they are giving some of their champions the names of their employees (e.g., Tryndamere, Volib(e)ar, Udyr). This is not only honoring some of their own employees, but it is also indirectly levelling them with famous people who have also been transformed into champions for their game. An item was named after the player Athene, which probably sends a message to the fans that says: “if you become a famous player in *League of Legends*, you might have an item or champion named after you one day”.

For this dissertation, it is of interest how people became an inspiration for champions of a MOBA title, since when and who is obvious enough. Cultural intertextualities seem to be of great importance for MOBAs, otherwise they would not be so numerous in *Dota 2* and *League of Legends*. Gamers will certainly not enjoy the game if the available characters are not fun to play.

The Gyrocopter was already a popular character in *DotA* and he was a pilot. It can be assumed that Riot was looking for an idea to integrate the Gyrocopter concept in *League of Legends*. Relating Corki to a different pilot (the Red Baron) and changing his abilities was a way of reinventing him as a champion.

In the case of Lee Sin, a reference to Bruce Lee, it seems to be the obvious decision to create a fun Martial Arts character, since many people are in love with Martial Arts today; then theming this Martial Arts champion taking Bruce Lee as a role-model makes absolute sense, since Bruce Lee is very popular in China, Europe and the US.

Sion is a very scary champion, and the game is for younger kids as well. Making the undead Sion quote the “Kindergarten Cop” adds a thick layer of playfulness, while the darker and more serious Arnold Schwarzenegger roles are being used to subjoin seriousness and darkness where these traits have been subtracted by e.g., such things as the quote from the Kindergarten Cop movie.

6.6 Video Games

In this chapter, all characters in *Dota 2* and *League of Legends* that seem to have been inspired by video game characters (interfigurality) are listed and discussed.

6.6.1 Dota 2

Tusk (Dota2.Gamepedia.com, “Tusk”) humorously yells the response, “Falcon Punch” (Dota2.Gamepedia.com, “Tusk Responses” para. 7). This is a reference to Captain Falcon’s signature move and accompanying phrase:

The Falcon Punch is a slow, yet powerful move that Captain Falcon uses in Super Smash Bros. [...] Captain Falcon cocks his arm back, calling “FALCON...”, and releases it a half-second later, calling “PUNCH!!!”, with his fist is enshrouded with flames in the shape of a falcon. (Fandom.com, “Falcon Punch”)

Super Smash Bros. by Nintendo was released for the first time in 1999 and the latest title came out in 2018. The Falcon Punch by Captain Falcon is considered “an internet meme” (Fandom.com, “Falcon Punch” para. 5).

As already mentioned in the reception history chapter, Legion Commander (Dota2.Gamepedia.com, “Legion Commander”) from *Dota 2* refers to combat with Ogre Magi (Dota2.Gamepedia.com, “Ogre Magi”) as a “multi-ogre battle arena”, a reference to Riot Games’ invention of the genre’s acronym, “Multiplayer Online Battle Arena”. Legion Commander also borrows quotes from the post-apocalyptic role-playing video game series *Fallout* (1997). In various games in the *Fallout* series, the line “War, war never changes” (Knowyourmeme.com, “Fallout”) appears:

“War Never Changes” is a memorable quote uttered during the introduction sequences for various games in the *Fallout* series. While some have attributed the quote to the 18th President of the United States Ulysses S. Grant, no original sources have been found to verify the claim. (ibid. para. 2)

Legion Commander says: “War, war always changes” (Dota2.Gamepedia.com, “Legion Commander Responses” para. 23).

Boush the Tinker’s (Dota2.Gamepedia.com, “Tinker”) entire character is a reference to Dr. Isaac Kleiner from the video game *Half-Life*

(developed by VALVE and published by Sierra in 1998), to the point of having the same voice actor, Harry “Hal” Robins:

The Tinker’s voice actor, Harry “Hal” Robins, also voiced Dr. Isaac Kleiner in *Half-Life 2* and the scientists of Black Mesa in *Half-Life*. Many of Tinker’s voice lines reference characters and events from the *Half-Life* universe. In addition, the name “Violet Plateau” is quite similar to “Black Mesa”, and the events described in Tinker’s backstory are remarkably similar to the events of *Half-Life*. (Dota2.Gamepedia.com, “Tinker” para. 9)

Half-Life’s Isaac Kleiner is an “archetypal absent-minded genius scientist”, working on “teleportation and interdimensional travel” (Fandom.com, “Isaac Kleiner” para. 2).

Boush’s laboratory is located at the “Violet Plateau” (Dota2.Gamepedia.com, “Tinker Lore” para. 1), Kleiner’s laboratory is at “Black Mesa” (Fandom.com, “Isaac Kleiner” para. 2). The events described in Tinker’s backstory are similar to the events of *Half-Life*. *Dota 2’s* Tinker founded a “subterranean laboratory” in the “mist-wreathed wastes of the Violet Plateau” (Dota2.com, “Tinker Lore”). Then Boush...

...and his associates [...] wrenched open a portal to some realm beyond comprehension and ushered in some nightmares of their own. A black mist rose from the cavernous interior of the Violet Plateau, shrouding it in permanent darkness from which sounds of horror perpetually emanate. (ibid.)

Boush’s experiences with opening portals to other realms sound very similar to Kleiner’s experiments with teleportation and interdimensional travel. Just as in this story about Boush, experiments in *Half-Life* go wrong:

The Lambda Incident, was a catastrophic event [...]. The experiment triggered a Resonance Cascade, which allowed numerous extraterrestrial creatures to teleport into the facility and wreak havoc upon its personnel. (Fandom.com, “Black Mesa Incident” para. 1)

In *DotA*, Phantom Lancer’s (Dota2.Gamepedia.com, “Phantom Lancer”) “in-game model was a fan interpretation of Kimahri Ronso, a playable character in the RPG game *Final Fantasy X*¹³⁵” (ibid. para. 9).

¹³⁵ Final Fantasy X (Square 2001).

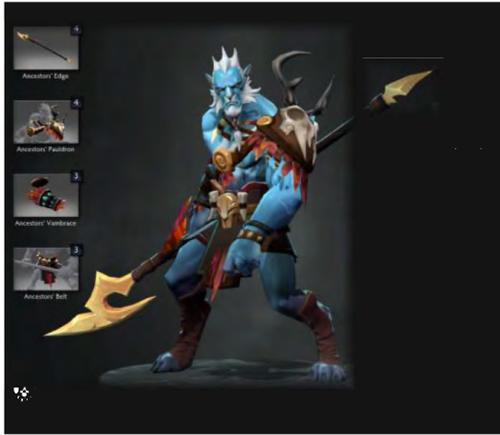


Figure 67 - Phantom Lancer



Figure 68 - Kimahri Ronso

As such, the Phantom Lancer of *Dota 2* gained many similarities with Kimahri, namely the blue skin, humanoid feline appearance, and the “Halberd”, his two-handed pole weapon.

Kimahri has blue fur and white hair and beard. He is leonine, tall and muscular, has a tail and a horn on his forehead. Kimahri’s horn is broken, causing him great shame as a Ronso. His ears are pierced, and his hair is held back in a ponytail and braided on the sides. Due to his fur Kimahri doesn’t need to wear clothes for warmth. He wears leather straps that hold in place his arm guards and his chest piece that has a skull motif. He wears ankle guards and a sash tied around his waist with a red belt. His shoulder guards have tufts of white feathers or fur. [...] His initial Harpoon is a halberd model. (Fandom.com, “Kimahri Ronso” para. 4-22)

Phantom Lancer's model “shares design similarities with and may have been based on earlier concepts of *Dota 2*’s Monkey King¹³⁶” (Dota2.Gamepedia.com, “Phantom Lancer” para. 9). Chinese *Dota 2* commentary often calls Phantom Lancer a monkey. He and Monkey King are likely to be based on the fictional Chinese character “Sun Wukong,” who also happens to be the wielder of the Monkey King Bar:

The Monkey King, Sun Wukong, is the subject of the Chinese folk novel *Journey to the West*. His weapon, Ruyi Jingu Bang (如意金箍棒), is a magical iron rod with ends banded with gold. Although it weighs several tons, the Monkey King can change its size at will so he may shrink it and tuck it behind his ear or grow exponentially and duplicate into an infinite number of individual rods. [Dota2’s] Monkey King's default weapon model is a Monkey King Bar. (Dota2.Gamepedia.com, “Monkey King Bar” para. 4).

In *Journey to the West*, Sun Wukong can use his hairs to create infinite copies of himself:

Seeing how ugly the demon king had turned, Sun Wukong used his magic art of getting extra bodies. He pulled out one of his hairs, popped it in his mouth, chewed it up, and blew it out into the air, shouting, “Change!” It turned into two or three hundred little monkeys, who all crowded round him. (Translation of *Journey to the West* by Yu 2:212)

¹³⁶ Dota2.Gamepedia.com, “Monkey King”.

Phantom Lancer can send a lance to a target, while summoning an illusory phantom to attack (see also Dota2.Gamepedia.com, “Phantom Lancer” para. 2). Similarly, *Dota 2*’s Monkey King can create copies which help him in battle: He creates a “circular formation of soldiers that spread out from his position” (Dota2.Gamepedia.com, “Monkey King” para. 2).

Dota 2’s item “Agahnim’s Scepter is named after Agahnim, one of the main villains in *The Legend of Zelda: A Link to the Past*¹³⁷” (Dota2.Gamepedia.com, “Aghanim’s Scepter” para.6). Agahnim must be “fought twice, once halfway through the game in Hyrule Castle and once near the end of the game in Ganon’s Tower” (Fandom.com, “Agahnim” para. 1). The Scepter and Agahnim do not seem to have anything in common except for the name.

The *Dota 2* item Demon Edge (Dota2.Gamepedia.com, “Demon Edge”) is a powerful sword from the Japanese video game *Chrono Trigger* (Square 1995), where it is also known as “the Zanmato”:

The Zanmato (also known as Demon Edge in the SNES/PS version) is Crono’s tenth-level katana in *Chrono Trigger*. It has an attack power of 90 and does 1.5x damage to magical beings. It can be bought in Algetty for 17000G. It can also be bought in Medina Village for 65000G. (Fandom.com, “Zanmato” para. 1)

The Demon Edge in *Dota 2* was “forged by Demon-Smith Abzidian, it killed its maker when he tested its edge” (Dota2.Gamepedia.com, “Demon Edge Lore” para. 1) and grants “+42 attack damage” (Dota2.Gamepedia.com, “Demon Edge” para. 1).

The *Dota 2* item Sange and Yasha (Dota2.Gamepedia.com, “Sange and Yasha”) “is a homage to a pair of twin swords the Phantasy Star game series, notably *Phantasy Star Online*¹³⁸” (Dota2.Gamepedia.com, “Sange and Yasha” para. 4).

In the video game *Phantasy Star Online*, Sange and Yasha:

[...] are the rarest Twin Swords in the game [...] an [can] be created from combining Sange and Yasha. The weapon equipped at the time of use will have

¹³⁷ *The Legend of Zelda: A Link to the Past* (Nintendo 1991).

¹³⁸ *Phantasy Star Online* (Sega 2000).

their attributes transferred to the resulting Sange & Yasha. (Pioneer2.net “Sange and Yasha”)

Also in *Dota 2*, Sange and Yasha are two powerful swords that can be assembled and used together: “Sange and Yasha, when attuned by the moonlight and used together, become a very powerful combination” (Dota2.Gamepedia.com, “Sange and Yasha” para. 1).

Rikimaru is a fictional character appearing in the *Tenchu* (Acquire & K2 1998) stealth-action video game series. The gameplay of stealth games:

[...] hinges on the player avoiding detection and using concealment to prevent being caught en route to completing an objective. Games in this genre employ mechanics such as hiding in shadows, utilizing disguises, deactivating devices, and silent movement. (Bigfishgames.com, “Stealth Games as a Genre” para. 2)

Rikimaru in the *Tenchu* series is known as a “master ninja” (Fandom.com, “Rikimaru” para. 1).

Dota 2's Riki (Dota2.Gamepedia.com, “Riki”) matches these character traits, as he was the “middle child to the great dynasty of Tahlin, [...] born for the art of invisibility”, “small and agile”, “using smoke as cover” (Dota.Gamepedia.com, “Riki” para. 2). All of his abilities are made for stealthy attacks (“Smoke Screen”, “Blink Strike”, “Cloak and Dagger” ... *ibid.*), some enemies might not ever see him at all. He looks very much like a satyr and not like a ninja. He has large pointy ears and long goat horns.

6.6.2 League of Legends



Figure 69 - Sorceress Lux Skin

Lux (Leagueoflegend.com, “Lux”) is a mage, she can launch “her wand in the target direction which returns to her after reaching maximum range” (Fandom.com, “Lux” para. 4). Her “ultimate has had three names, all

referencing Marisa Kirisame from Touhou Project: Finales Funkeln (German: ‘final sparkel’), Infinite Light and Final Spark” (Fandom.com, “Lux Trivia” para. 1). Marisa Kirisame is a “human magician” (Fandom.com, “Marisa Kirisame”) in the *Touhou Project* (1996-2019), “a series of 2D (with 3D background) vertically-scrolling danmaku shooting games made by Team Shanghai Alice” (Fandom.com, “Touhou Wiki”). Sorceress Lux resembles Marisa.



Figure 70 - Marisa Kirisame

Veigar (Leagueoflegends.com, “Veigar”) looks similar to the little black mage Vivi Ornitier (Fandom.com, “Vivi Ornitier”) of the Japanese *Final Fantasy IX* (Square 2000) video game.

Vivi and the other black mages of the *Final Fantasy* video game series are “autonomous, man-sized magician dolls mass-produced as weapons of war” (Fandom.com, “Black Mage”).

Vivi does not know that he had been manufactured by people. His journey becomes a story of initiation in which the characters reflect a lot on life and death:

Vivi is frustrated by their way of thinking and stops by the town's cemetery, and comes to learn that black mages have a finite lifespan of around one year. He talks with wise Black Mage No. 288, who explains the nature of death to Vivi, who is, at first, distressed. It is suggested Vivi is a prototype build, and 288 tries to console him in saying Vivi may last longer than the one year afforded for the other black mages. (Fandom.com, “Vivi Ornitier” para. 14)

Vivi does not want to be a weapon and is ready to sacrifice himself to end war (ibid. para. 17).



Figure 71 - Final Fantasy 9's Vivi, Riot's Veigar, Mattel's Orko

LoL's Veigar and *Final Fantasy's* Vivi are both small characters who both begin with the letter V. The Yordle¹³⁹ Veigar, also called “The Tiny Master of Evil” (Leagueoflegends.com, “Veigar” para. 1), is a “sorcerer” (Leagueoflegends.com, “Veigar Story”).

Veigar is curious about celestial magic:

Scattered survivors looked to the heavens, and their renewed study of ancient celestial magic piqued Veigar's interest. (Leagueoflegends.com, “Veigar Story” para. 3).

Curiosity is something that both characters have in common. Veigar voluntarily joined an order of mages, hoping to learn more of their craft (see also Leagueoflegends.com, “Veigar Story” para. 3).

Veigar might be more traumatized than Vivi (Vivi's trauma is the discovery of his past and identity), as he had to watch Mordekaiser execute all of his friends:

The brutal warlord Mordekaiser and his armies swept across the lands, [...] his keen eye fell upon Veigar, and Mordekaiser recognized the yordle for what he truly was. He snatched him up in one iron gauntlet and dragged his prize away as the other mages were put to the sword. (ibid. para. 4)

Mordekaiser imprisoned Veigar and the isolation was torture for the Yordle:

Imprisoned in the heart of the warlord's new, monolithic fortress, Veigar was forced to turn his magic to darker purposes. [...] He was not the only captive in that hellish place, but such isolation was the worst and most cruel form of torture for a yordle. (ibid. para. 5)

Veigar then forgot most about his past (see also ibid. para. 7). This part of Veigar's story resembles Vivi's story, who did not know anything

¹³⁹ (Leagueoflegends.com, “Yordle”). The nature of Yordles will be explained later in this thesis.

about his origins. In the end, Veigar started a quest to become the world's most wicked villain:

And yet, he chose not to turn away from evil, but to embrace it. Clad in armor befitting a sinister warlock, he vowed to seize respect in the only way he could remember—through ruthless villainy, inspiring fear in all who encountered him. (ibid. para. 9)

Becoming evil instead of facing it is exactly the opposite of how Vivi dealt with his trauma.

Final Fantasy might have borrowed the idea for Vivi from the *He-Man and the Master's of the Universe* (1983-1985) television series:

The *Final Fantasy* series began in 1987 it also featured the very first appearance of the Black Mage job class. While it has never been confirmed or denied as an influence the resemblance between the *Final Fantasy* characters and Masters of the Universe's magical sidekick Orko is difficult to deny. (Llewellyn para. 60)

Akali's Crimson skin is most likely a reference to one or several *Mortal Kombat* (Midway Games 1992) female ninjas, while many male ninjas from the *Mortal Kombat* series look like *LoL*'s Shen (Leagueoflegends.com, "Shen").



Figure 72 - Akali's Crimson Skin



Figure 73 - Mortal Kombat 11¹⁴⁰'s Skarlet

¹⁴⁰ *Mortal Kombat 11* (Warner Brothers Inc. 2019).



Figure 74 - League of Legend's Shen Figure 75 - Mortal Kombat 11's Sub-Zero

Morgana (Leagueoflegends.com, “Morgana”) visually bares a close resemblance to Morrigan Aensland (Fandom.com, “Morrigan Aensland”). “She is an anti-hero[ine] and a main protagonist” (ibid. para. 1) in Capcom’s *Darkstalkers* (Capcom 1994) series. However, Morgana is a vampirish creature, who can drain “spirit from her enemies, healing as she deals damage to champions” (Leagueoflegends.com, “Morgana” para. 3). Morrigan is not a vampire, she is “a succubus who was born in 1678 in a region of Scotland” (Fandom.com, “Morrigan Aensland” para. 1). A succubus is a female demon:

Succubi could appear in the flesh as beautiful, voluptuous women (perhaps an indication of male fantasies). [...] Succubi appeared often in the records of witchcraft trials. Men accused of witchcraft sometimes were tortured until they confessed having sex with demons, among other diabolical crimes. (Guiley 95)



Figure 76 – Morrigan

Figure 77 - Morgana

Rammus is called an Armordillo (Leagueoflegends.com, “Rammus Story”) in *League of Legends*. The King Rammus skin is a reference to

“Bowser from the *Super Mario*¹⁴¹ franchise” (ibid.). The skin features a green shell which is like Bowser’s.



Figure 78 - King Rammus Skin and Bowser

Rumble is called the “Mechanized Menace” (Leagueoflegends.com, “Rumble Story”), because he is a cat-like anthropomorphic creature always sitting on a robotic machine with legs. He has an “Electro Harpoon” (Leagueoflegends.com, “Rumble” para. 6). Overall, he can be described as a technology-controlling and trigger-happy persona:

[...] the feisty yordle constructed a colossal mech suit outfitted with an arsenal of electrified harpoons and incendiary rockets. Though others may scoff and sneer at his junkyard creations, Rumble doesn't mind—after all, he's the one with the flamespitter. (Leagueoflegends.com, “Rumble Short Bio” para. 1)

Rumble is reminiscent of the racoon Rocket in *Guardians of the Galaxy* (2014) movie, who is also anthropomorphic, very interested in weapons and fights, and also a furry mammal (Meet the Guardians: Rocket 2014). Rumble was added to *League of Legends* in 2010, which means he cannot have been inspired by the movie’s Rocket. However, the first design of Rocket Raccoon appeared in *Marvel Preview #7* (1976) (see also Collins para. 1-3).



Figure 79 – Rocket



Figure 80 - Rumble

¹⁴¹ *Super Mario Bros.* (Nintendo 1985- 2019).

Skarner (Leagueoflegends.com, “Skarner”), the Crystal Vanguard, resembles the Sand King (Dota2.Gamepedia.com, “Sand King”) from *Dota 2* and *DotaA*’s Sand King Crixalis (Sand King Crixalis 2015) since at first glance, all three look like creatures related to scorpions or lobsters. However, in terms of gameplay, there are many differences, since Skarner can stun enemies with his crystalline energy for 1.25 seconds (Leagueoflegends.com, “Skarner” para. 6) or he can gain a shield called “Crystalline Exoskeleton” (ibid. para. 5). As he is called “Crystal Vanguard” (ibid. para. 1), all his abilities are themed around him being a crystalline creature. *Homarus Gammarus* (the European lobster) does not only have an exoskeleton (Taylor and Whiteley 419), but he is also a blue crustacean with a pair of dark violet claws, akin to the colour scheme in the following artwork:



Figure 81 – Skarner



Figure 82 - Photograph of European Lobster by H. Zell



Figure 83 - Sand King Artwork by VALVE

Sand King can make a tunnel underground and when he resurfaces, he damages and stuns enemies (see also Dota2.Gamepedia.com, “Sand King” para. 2). Using his sandstorm, he can hide from vision: “Sand King creates a fearsome sandstorm that damages enemy units while hiding him from vision” (ibid.), he can inject venom: “Sand King’s attacks inject a

venom that causes enemy units to violently explode” (ibid.) and with his ultimate, “Epicenter” he can make the earth shudder:

After channeling for 2 seconds, Sand King sends a disturbance into the earth, causing it to shudder violently. All enemies caught within range will take damage and become slowed. Each subsequent pulse increases the radius of damage dealt. (ibid.)

Since all his abilities are related to sand, dust, and venom, he is much more a scorpion than a lobster. Scorpions are “arachnids” (Gilai and Parnas 325) with grasping “pedipalps” (ibid.) which look very similar to the artwork of the *Dota 2* Sand King. Bücherl et al. list the Scorpion in *Venomous Animals and Their Venoms: Venomous Vertebrates* (Bücherl et al. vii). Scorpions are venomous, they can be black but also yellow in colour: “The sizes, colors, and shapes of the scorpion anatomy are so diverse that are difficult to generalize. They have red, yellow or black colors” (Scorpionworlds.com para. 6), which also fits the VALVE artwork of the *Dota 2* Sand King very well.

6.6.3 Summary

Dota 2’s Legion Commander says “multi-ogre battle arena” when fighting with Ogre Magi. This reference poses the question whether VALVE do not approve of the genre term MOBA invented by Riot. It might of course also be a way of acknowledging the term.

Allowing playable characters (Legion Commander) seem as if they would know which genre they belong to, is making them seem self-conscious. Video game characters obviously cannot know which genre they belong to. Making them seem more human feels like adding more depth to them.

Boush the Tinker is an homage to *Half-Life*’s Dr. Kleiner. Phantom Lancer is an homage to *Final Fantasy X*’s Kimahri Ronso but also, he can create copies of himself like the legendary Sun Wukong. As an homage or a nod to Nintendo, the King Rammus skin reminds a player of Mario’s famous enemy Bowser from the Super Mario franchise.

A fan made the Phantom Lancer model because he loved Kimahri. Taking ideas for a weapon or a character from an existing game is paying

homage to the source, since it means the original idea was too good not to be inspired by. A character which many people enjoy already might be popular in its interpretation and might not even be noticed as such. Phantom Lancer's origin is yet another example of a process typical of MOBAs (which we have already witnessed in e.g., the Reception History chapter and the chapter on Dance): MOBAs came into existence because fans of games modded their favourite games. As we can see in the Phantom Lancer example, MOBAs are still shaped by fans who contribute something to their personal liking. While they contribute ideas, they are also often spending money on the games they help to shape.

6.7 Card & Tabletop Games

6.7.1 Dota 2

Leshrac “the Malicious” (Dota2.Gamepedia.com, “Leshrac”) is a character inspired by the *Magic: The Gathering* (1993) cards game: “The name Leshrac comes from a Planeswalker from the Magic: the Gathering multiverse” (Dota2.Gamepedia.com, “Leshrac” para. 9). The Magic Card was more effective when fewer targets were present:

Diabolic Edict is the name of an iconic black card in that game; [...] the Magic card was more effective when there were fewer targets, as your opponent got to choose which target got hit. (Dota2.Gamepedia.com, “Leshrac” para. 9)

In a similar way, Leshrac's ability “Diabolic Edict” is more effective when fewer enemy units are around:

Saturates the area around Leshrac with magical explosions that deal physical damage to enemy units and structures. The fewer units available to attack, the more damage those units will take. Deals 40% more damage to towers. Lasts 10 seconds. (Dota2.Gamepedia.com, “Leshrac” para. 2).

The names of the original two Techies (Dota2.Gamepedia.com, “Techies”) most likely also came from *Magic: The Gathering*. “Squee is a legendary goblin from *Magic: The Gathering's* lore” (Dota2.Gamepedia.com, “Techies” para. 9), and

Spleen was probably named after the flavor text on the Goblin Soothsayer card: “I see a great victory and rivers of blood. And...hmm, looks like a spleen.” (EchoMTG.com, “Goblin Soothsayer”)

Magic: The Gathering's Squee “was captured by the Phyrexians, and granted immortality” (MTG.Gamepedia.com, “Squee”). All heroes in *Dota 2* and champions in *League of Legends* are immortal in a sense that they can always respawn (e.g., Dota2.Gamepedia.com. “Respawning”) after death if the game is still running. Therefore, they probably do not have too much in common with *Magic: The Gathering's* Squee, except for the names and being goblins.

6.7.2 League of Legends

Riot made a series of skins called Rift Quest (Leagueoflegends.com, “Rift Quest”). All these champion skins are inspired by fantasy characters that can usually be seen in tabletop games (such as a paladin, an archer, a wizard, a bard; Fandom.com, “Rift Quest”):

Rift Quest is a series of alternate future/universe skins in League of Legends. Set in a more typical fantasy table-top role-playing setting of Runeterra, all of the champions are fantasy characters usually seen in any table-top game. (Fandom.com, “Rift Quest”)

6.7.3 Summary

Only a few references in MOBAs derive from card- or tabletop games. Usually only the names of characters in MOBA games have been inspired by such sources, as for example the aforementioned Goblin Techies' Squee being named after a goblin in *Magic: The Gathering*. In *League of Legends*, one character is named “Bard Bard” (Fandom.com, “Rift Quest”) because he is a bard. *Dota 2* is referencing *Magic: The Gathering* only. In the case of Leshrac, a spell was inspired by a *Magic* card. *League of Legends* offers Rift Quest skins, which refer to table-top archetypes.

6.8 Literature

In ancient Egypt, people would play Senet. LeBlanc explains that Senet tells a story and that games have always been vehicles for stories:

But the power of games as a story vehicle is hardly a new idea. The ancient Egyptian game of Senet – which, along with Go, is one of the top contenders for the title of “oldest game known to humanity” – tells the story of the passage through the underworld to the land of the dead. During the height of its three millennia of popularity, players of Senet believed that the game was an oracle for mystical divination. The events of the game foretold what the player might one day experience in his own passage through the afterlife. (LeBlanc 439).

In this chapter, we will have a closer look at literary references in *Dota 2* and *League of Legends*. It will be interesting to see which stories the two video games have taken inspiration from.

In this chapter as in the next one on Mythology, different playable monsters are being discussed in terms of their literary background – wherefore we might ask ourselves, why there are different kinds of games which contain playable monsters. Jeffrey Jerome in 1996 wrote about monsters:

[...] they can be pushed to the farthest margins of geography and discourse, hidden away at the edges of the world and in the forbidden recesses of our mind, but they always return. And when they come back, they bring not just a fuller knowledge of our place in history and the history of knowing our place, but they bear self-knowledge, *human* knowledge [...] They ask us to reevaluate our cultural assumptions about race, gender sexuality, our perception of difference, our tolerance toward its expression. They ask us why we have created them. (Cohen 20)

What Cohen says is very enlightening when we imagine ourselves playing monsters in video games: In *Dota 2* and *League of Legends*, the (often immortal) monsters allow us to deal with powers which we usually never have. Of course, we know we do not have these powers, but similarly to reading and pondering on a story, playing the monsters can take us on an inner discourse: thoughts are inspired, and boundaries explored. The Romantics were highly interested in figures such as Faust, Satan, and Prometheus. If it were not for them, we might not today have as many video games in which such characters are appearing and playable. The Romantics interest in powerful monsters, devils and spirits seems to be an interest we share. It could be due to their “interest in heroes and energetic individuals, who have a special standing in society and whose character and aspirations determine their fate (Goetsch 36). Not only the Romantic period, also the (early and mid-) Victorian was “rich in characters with monstrous features [...] because of its openness to fairy tales and Gothic fiction” (Goetsch 193). In the English fin de siècle “some literary monsters were produced that, as numerous imitations and movies show, entered popular culture in the twentieth century” (Goetsch 284) – such as “the vampires in Stoker’s *Dracula* (1897) [...] and the Martians in *The War of the Worlds*” (1898) (ibid.).

6.8.1 League of Legends

Twisted Fate is a reference to Gambit of the *X-Men* series. Remy “Gambit” LeBeau is a fictional character appearing in comic books by Marvel, commonly in association with the *X-men*: “First appearance: *Uncanny X-Men* Vol. 1 #266” (Fandom.com, “Gambit” para. 1). Gambit looks human, but he belongs to a subspecies called mutants, born with superhuman abilities: “Gambit can also use his mutant abilities to accelerate an object’s kinetic energy instead of converting its potential energy” (ibid. para. 12). He is known to charge objects with kinetic energy, using them as projectiles:

The power of his explosions is dependent on the mass of the object he is charging, for example, a charged playing card explodes with the force of a grenade. (ibid.)

In *League of Legends*, Twisted Fate’s abilities (“Loaded Dice”, “Wild Cards”, “Pick A Card”, “Stacked Deck” (Leagueoflegends.com, “Twisted Fate” para. 3-6) are themed around card or dice playing tricks and playing games with fate: “Twisted Fate predicts the fortunes of his foes, revealing all enemy champions and enabling the use of Gate, which teleports Twisted Fate to any target location in 1.5 seconds” (ibid. para. 7).



Figure 84 - Twisted Fate



Figure 85 - Gambit

Jericho Swain (Leagueoflegends.com, “Swain”) is “the visionary ruler of Noxus” (Leagueoflegends.com, “Swain Short Bio” para. 2), he has a “demonic hand” (ibid.) and a “raven” (Leagueoflegends.com, “Swain Story” para. 8). “Swain commands from the front lines, marching against a coming darkness that only he can see – in glimpses gathered by shadowy ravens from the corpses all around him” (Leagueoflegends.com, “Swain Short Bio” para. 2). He also has an ability

called “Nevermove¹⁴²” that according to Riot was “originally supposed to be called Nevermore” (Fandom.com, “Swain Trivia”) as a reference to Edgar Allen Poe’s *The Raven*.

League champion Aatrox says: “Am I the abyss? Or did I gaze into it?” (Fandom.com, “Aatrox Quotes” para. 4). This is a reference to Friedrich Nietzsche’s remark in his book *Beyond Good and Evil*: “He who fights with monsters should look to it that he himself does not become a monster. And if you gaze long into an abyss, the abyss also gazes into you” (Nietzsche, 146). The quote describes Aatrox very well since he used to be an “honored [defender] of Shurima against the Void” (Leagueoflegends.com “Aatrox Short Bio” para. 2), who eventually became “an even greater threat to Runeterra” (ibid.) and now, “walks Runeterra in a brutal approximation of his previous form, seeking an apocalyptic and long overdue vengeance” (ibid.). These parts written for him show that Aatrox, who once was a hero, turned into a monster.

Annie “the Dark Child” (Leagueoflegends.com, “Annie”) is tiny and she can call for her teddy bear Tibbers: “Annie wills her bear Tibbers to life, dealing damage to units in the area. Tibbers can attack and burn enemies that stand near him” (ibid. para. 7).

Annie’s Red Riding skin is clearly a reference to *Little Red Riding Hood* tale. Most *Red Riding Hood* versions we know in modern popular culture are

[...] derived from the classic literary tale published by Charles Perrault in seventeenth century France [...] It is widely believed that Perrault based his text on an old folktale known simply as ‘The Story of Grandmother’. (Tehrani 2)

While Red Riding Annie’s outer appearance resembles *Little Red Riding Hood*, her abilities are all based on setting things on fire, such as “Pyromania” (Leagueoflegends.com, “Annie” para. 3). She is a character that seems harmless but her often citing children’s rhymes in connection with words associated with fire tells opponents that she is not to be trusted: “Ashes, Ashes, they all fall down”; ”Eeeny, meeny, miny, burn!” (Fandom.com, “Annie Quotes” para. 6).

¹⁴² A demonic wave dealing magic damage.

Brand “the Burning Vengeance” (Leagueoflegends.com, “Brand”) will often state “Some say the world will end in fire...” (Fandom.com, “Brand Quotes” para. 2), which is a reference to Robert Frost’s poem *Fire and Ice* (Frost 67), which might be a “compression of Dante’s *Inferno*” (Serio para. 2). George R. R. Martin revealed that he called his series *A Song of Ice and Fire* (1996) because of Frost’s poem:

Fire is love, fire is passion, fire is sexual ardor and all of these things. Ice is betrayal, ice is revenge, ice is... you know, that kind of cold inhumanity and all that stuff is being played out in the books. (Hardy para. 6)

Dr. Mundo’s (Leagueoflegends.com, “Dr. Mundo”) reminds his players of the evil and cruel Edward Hyde (without a trace of Dr. Henry Jekyll) from Robert Louis Stevenson’s *Strange Case of Dr Jekyll and Mr Hyde*. Already as a kid, Mundo enjoyed pain, when he grew up in a mental asylum, where he was isolated and tortured: “He’d never been happier” (Leagueoflegends.com, “Dr. Mundo”).



Figure 86 - Deep One Skin, Artwork portraying Lovecraft’s Cthulu, Basic Skin

Kassadin (Leagueoflegends.com, “Kassadin”) has a Deep One skin, which was supposed to be a reference to H.P. Lovecraft’s Cthulhu (Lovecraft 1999). Someone in the forums had been asking for a Cthulhu skin for Kassadin (Leagueoflegends.com, “Can we get a Cthulhu?”). However, the Deep One skin Riot made looks very similar to Kassadin in his basic version, which people were not too happy with:

Deep One Kass isn’t nearly Cthulhu enough [...] He needs some more tentacles/ pipes, and maybe some tiny wings [...]. (Enrei, a user on Leagueoflegends.com)

Cho’Gath (Leagueoflegends.com, “Cho’Gath”) looks very similar to The Violator from the *Spawn* comics (Muir 2008: 494). The Violator

[...] is the oldest and most powerful of five hell-born demons known as the Phlebiac Brothers, and his main purpose is to guide Hellspawns towards

fulfilling Satan's desire: to cultivate Evil souls on Earth for Hell's Army. (Fandom.com, "Violator" para. 2)

Cho'Gath is "the Terror of the Void" (Leagueoflegends.com, "Cho'Gath" para. 1), a "beast [...] driven by the most pure and insatiable hunger" (Leagueoflegends.com, "Cho'Gath Short Bio" para. 2). Cho'Gath's region in the game is "the Void", and "the Void's desire [is] to consume all life" (ibid.).



Figure 87 - The Violator on a cover of "Spawn", League's Cho'Gath

One champion player's can select is the duo Nunu & Willump (Leagueoflegends.com, "Nunu"), "the Boy and his Yeti". One of their skins makes Willump look like a friendly Bigfoot that Nunu is sitting on (the "Sasquatch" skin).

They are friendly characters that want to find Nunu's mother: "They hope that somewhere out there, they will find Nunu's mother. If they can save her, maybe they will be heroes after all..." (Leagueoflegends.com, "Nunu Short Bio" para. 2) and they are "bound together by ancient power and a shared love of snowballs" (ibid.).



Figure 88 - Maurice Sendak's characters "Where the Wild things are"

Figure 89 - Nunu & Willump skin "Grungy"

One of their skins seems to be inspired by Maurice Sendak's original artwork for *Where the Wild Things Are* (Sendak and Schickele 1963).

Pantheon (Leagueoflegends.com, "Pantheon") is inspired by Frank Miller and Lynn Varley's historically inspired comic book series called *300* (1998), which is a fictional retelling of the Battle of Thermopylae and the events leading up to it from the perspective of Leonidas of Sparta:

Over the years the story of the famous confrontation at Thermopylae in 480 B.C. stuck in his [Frank Miller's] mind. In the mid-'90s, Mr. Miller started work on what was to become "300." He researched the battle, spoke with scholars and traveled to Greece, to the site of Leonidas' last stand. He studied the armor and philosophies and fighting methods of the Spartans, and finally, working with the colorist Lynn Varley, created a series that in 1999 won three Eisners and two Harveys, awards considered among the comics industry's most prestigious. (Ito para. 5)



As we can see in these images of Pantheon and Leonidas, Pantheon strongly resembles Leonidas (the muscles, the weapons, the color scheme, and the two warrior's posture), except for his face, which cannot be seen under his helmet.

The item Morellonomicon (the icon looks like a little book; Fandom.com, "Morellonomicon") in *League of Legends* is a reference to H.P. Lovecraft's *Necronomicon*:

Once Lovecraft dreamed the book's Greek title, he attempted to translate it. Lovecraft's Greek was less than perfect, however, and he decided that "Necronomicon" meant "An Image [or Picture] of the Law of the Dead". (Harms and Gonce 9)

The Morellonomicon is "named after Ryan "Morello" Scott, former Lead Champion Designer at Riot Games" (Fandom.com, "Morellonomicon" para. 6).

The *LoL* item "Rabadon's Deathcap" (Fandom.com, "Rabadon's Deathcap") is likely based on the Sorting hat from *Harry Potter and the Philosopher's Stone* (Rowling 1997), since it has eyes and a mouth, like J.K. Rowling's Sorting Hat:

The image artwork would seem to be based on the Sorting Hat from the Harry Potter franchise. There are eyes and a mouth-like band visible on the hat, very similar to the Sorting Hat. (Fandom.com, "Rabadon's Deathcap" para. 6)

6.8.2 Dota 2

Ezalor the Keeper of the Light (Dota2.Gamepedia.com, "Ezalor") in *Dota 2* sometimes says: "You shall not cast!" (Dota2.Gamepedia.com, "Ezalor Responses" para. 9) - words which must be inspired by the wizard Gandalf in J.R.R Tolkien's *The Fellowship of the Ring* (Tolkien 1954). Gandalf utters the phrase "You cannot not pass!" as he blocks a path, protecting his friends from a Balrog Demon (Tolkien 313). Gandalf fights the Balrog until he defeats him. The line is very suitable for Ezalor, since he is known to be a one-man support team:

Ezalor the Keeper of the Light is a ranged intelligence hero famous for his reputation as a one-man support team. Supporting his allies in need, and pushing unguarded lanes with ease, Ezalor is a very valuable ally for any team. (Dota2.Gamepedia.com, "Ezalor" para. 1)

He can push unguarded lanes with ease, as Gandalf can push back the Balrog. Both Gandalf and Ezalor can channel a powerful globe of light:
Ezalor's ability

Illuminate [c]hannels light energy, building power the longer it's channeled. Once released, a wave is sent forth that deals damage and gives vision in its path. The longer it is channeled, the more damage is dealt. (Dota2.Gamepedia.com, "Ezalor" para. 2)

Gandalf, once he entered Moria with his fellowship, "held his staff aloft, and from its tip there came a faint radiance" (Tolkien 295).

Both Ezalor and Gandalf are on their mission by themselves most of the time, as Ezalor pushes lanes on his own and Gandalf does not only face the Balrog on his own, but he also defeated the Witch-king all by himself:

Gandalf then took it upon himself to direct the defense of the city. When the gigantic ram Grond destroyed the ancient entrance to the city, Gandalf placed himself alone at the ruined gateway. The Witch-king then appeared in the midst of the blasted gate upon a black horse and threatened Gandalf with death; but Gandalf did not move — seated upon Shadowfax he defied the mightiest of Sauron's minions. However, the stand-off ended inconclusively, as the morning arrived along with the host of the Rohirrim. Hearing the horns of the Riders of Rohan, the Witch-king departed. (Fandom.com, "Gandalf" para. 30)

One could say that both playing Ezalor and being Gandalf requires selfless behaviour, since Ezalor is someone pushing back lanes for his team, being a good supporter, while also Gandalf obviously risks his life for everybody else.



Figure 90 - "You Shall not pass!" artwork¹⁴³ Figure 91 - Gandalf and Balrog in 2001 live-action movie¹⁴⁴

Both Ezalor and Gandalf ride on a horse. Gandalf's horse's name is Shadowfax. "By day his coat glistens like silver; and by night it is like a shade, and he passes unseen. Light is his footfall!" (Tolkien 252). Ezalor's horse is pale: "Upon a pale horse he rides, this spark of endless suns, this Keeper of the Light" (Dota2.Gamepedia.com, "Ezalor" para. 1).

Gandalf might already have been an interfigural reference derived from Merlin, as Merlin derived from Myrddin:

It was in his *Historia Regum Britanniae*, completed c. 1138, that Geoffrey of Monmouth transformed the legendary Welsh seer Myrddin into the internationally famous Merlin, wizard as well as vaticinator, who played a

¹⁴³ Image Source: <https://www.deviantart.com/chasingartwork/art/You-shall-not-pass-634764452> This image by artist Justin Currie was chosen to depict another interpretation of Tolkien's description of the relation in power between Gandalf and the Balrog.

¹⁴⁴ *The Lord of the Rings: The Fellowship of the Ring* directed by Peter Jackson.

crucial role in bringing about the conception of Arthur and was prominent in later Arthurian story. (Jarman 117)

Since Ezalor directly quotes a line from Tolkien’s work, it makes sense to compare the digital wizard to the black-on-white Gandalf (and similarly, found references should ideally be compared to the sources they seem to be inspired by – as opposed to being compared to sources of said sources). It should also be noted, how far back in time many interfigural references can go, which Jarman’s quote clearly shows. Despite this knowledge, tracing all characters from the two MOBAs back to their earliest sources would be an interesting, yet out-of-scope endeavour for this thesis.

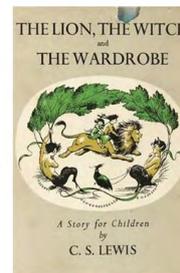


Figure 92 - Dota 2's Witch Doctor; Figure 93 - Dota 2's Lion; Figure 94 - *The Lion, The Witch and the Wardrobe*

“All we need now is a wardrobe” (Dota2.Gamepedia.com, “Lion Responses” para. 11) is a sentence the hero Lion (Dota2.Gamepedia.com, “Lion”) says when he kills the Witch Doctor (Dota2.Gamepedia.com, “Witch Doctor”). The line is clearly a reference to *The Lion, the Witch and the Wardrobe* by C. S. Lewis (Lewis 1950). The lion Aslan in Lewis’s magical land Narnia vanquishes the White Witch (see also Lewis 86-95). The Wardrobe is the portal to Narnia (see also *ibid.* 3). Aslan attacks a witch (see also *ibid.* para. 94), players who play *Dota 2*’s Lion can attack the Witch Doctor. However, *Dota 2*’s Lion does not have a wardrobe. Comparing Aslan to the *Dota 2* Lion becomes quite complicated when we look at Lion’s description: He is a “Demon Witch” and his name is Lion (Dota2.Gampedia.com, “Lion”). In the end of the day, with his evil spells, he is much more related to the White Witch than to Aslan. The Witch Doctor is quite an evil character. He summons deadly wards (“Death Ward”; Dota2.Gamepedia.com, “Witch Doctor” para. 2) and curses enemies:

Maledict [c]urses all enemy Heroes in a small area, causing them to take a set amount of damage each second, as well as bursts of damage every 4 seconds based on how much health they have lost since the curse began. (ibid.)

Finally, Witch Doctor can do magic: “Witch Doctor focuses his magic to heal nearby allied units, costing Witch Doctor mana every second Voodoo restoration is active” (ibid.).

Dota 2’s Abbadon (Dota2.Gamepedia.com, “Abbadon”) and Disruptor (Dota2.Gamepedia.com, “Disruptor”) both say: “So it goes” (Dota2.Gamepedia.com, “Abbadon Responses”; “Disruptor Responses”). This sentence is a recurring refrain in Kurt Vonnegut’s 1969 anti-war novel *Slaughterhouse-Five*, which is always repeated after someone dies (overall 105 times in the book):

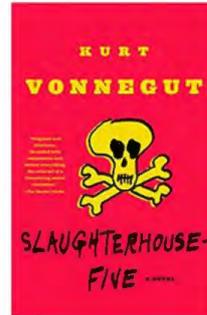


Figure 95 - *Slaughterhouse-Five*

He had a pleasant little apartment, and his daughter was getting an excellent education. His mother was incinerated in the Dresden fire-storm. So it goes. (Vonnegut 5)

The rabid little American I call Paul Lazzaro in this book had about a quart of diamonds and emeralds and rubies and so on' He had taken these from dead people in the cellars of Dresden.' So it goes. (Vonnegut 7)

So he was hoisted into the air and the floor of the car went down, dropped out from under him, and the top of the car squashed him. So it goes. (Vonnegut 8)

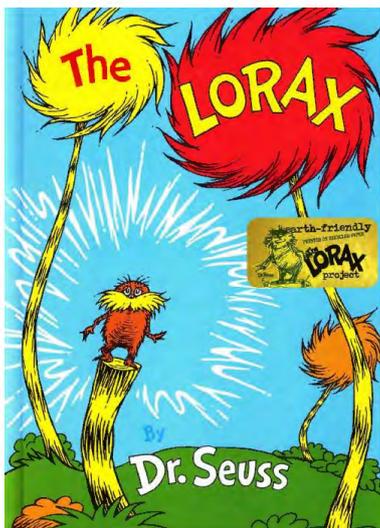


Figure 96 - *The Lorax*

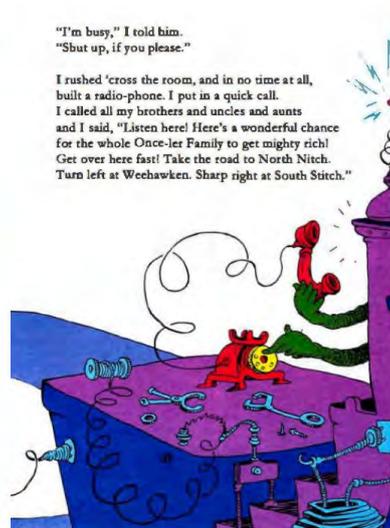


Figure 97 – *Dr. Seuss The Lorax* page 35

Nature's Prophet's (Dota2.Gamepedia.com, "Nature's Prophet") spawning response, "*I speak for the trees*¹⁴⁵." is a direct reference and homage to Dr. Seuss' 1971 *The Lorax*.

In this fable, the Lorax confronts the Once-ler, who is the personified corporate greed and causes environmental degradation. As we can see in the pictures, the Once-ler and his family have no face. They appear when there is a chance to make profit and start chopping down trees for a product called "Thneeds". According to the Once-ler, it is "A-fine-something-that-all-people need" (Dr. Seuss 30).

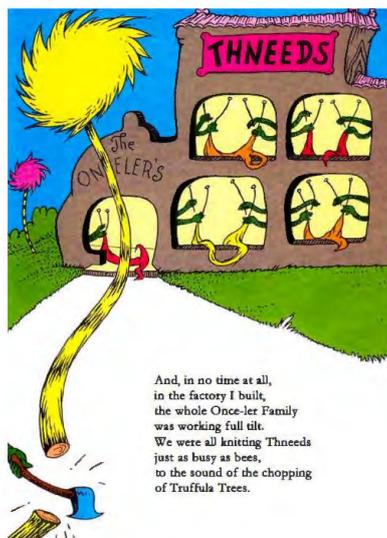


Figure 98 – Dr. Seuss *The Lorax* page 36

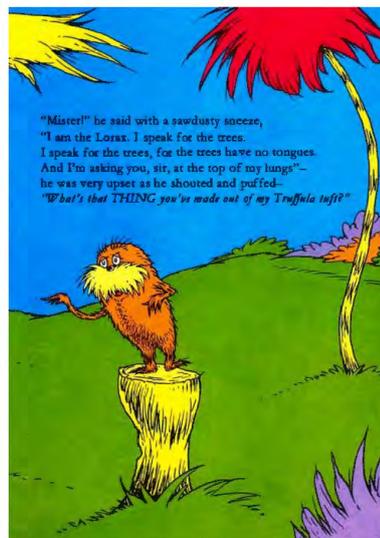


Figure 99 – „I speak for the trees” page 30

Having Nature's Prophet quote the Lorax underlines his character: he will always go "where he would be needed most in defense of the green places" (Dota2.Gamepedia.com, "Nature's Prophet" para. 2) – the same way the Lorax speaks for the trees (Figure 100 - Dr. Seuss 30). All of

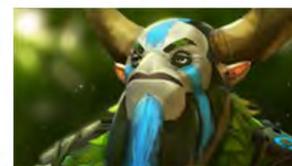


Figure 100 – Dota 2's Nature's Prophet

Nature's Prophet's abilities show that he is in harmony with nature and commands it, such as his ability "Sprout", which allows him to sprout "a ring of trees around a unit, trapping it in place, and providing vision in a 500 radius" (ibid. para. 3). In the "Late-game, Nature's Prophet makes himself useful by constantly distracting and annoying the enemy team by pushing" (ibid. para. 1)

¹⁴⁵ Nature's Prophet "I speak for the trees" sound file: https://gamepedia.cursecdn.com/dota2_gamepedia/f/f5/Furi_spawn_01.mp3 All of his responses: https://dota2.gamepedia.com/Nature%27s_Prophet/Responses.

Edgar Allen Poe's poem *The Raven* (Poe 2008) contains the words "Nevermore", "Shadow" and "fiend":

Be that word our sign in parting, bird or **fiend**," I shrieked, upstarting"
"Get thee back into the tempest and the Night's Plutonian shore!
Leave no black plume as a token of that lie thy soul hath spoken!
Leave my loneliness unbroken!—quit the bust above my door!
Take thy beak from out my heart, and take thy form from off my door!"
Quoth the Raven, "**Nevermore.**"

And the Raven, never flitting, still is sitting, still is sitting
On the pallid bust of Pallas just above my chamber door;
And his eyes have all the seeming of a demon's that is dreaming,
And the lamplight o'er him streaming throws his **shadow** on the floor;
And my soul from out that **shadow** that lies floating on the floor
Shall be lifted—**nevermore!**
(*The Raven* 97-108)

Upon googling "Shadow Fiend", the first hit is *Dota 2*'s hero "Nevermore, the Shadow Fiend" (Dota2.Gamepedia.com, "Shadow Fiend"). Shadow Fiend takes souls, which make him "more dangerous every time he kills" (Dota2.Gamepedia.com, "Shadow Fiend" para. 1). In his lore, it even says that

[...] the Shadow Fiend has the soul of a poet, and in fact he has thousands of them. Over the ages he has claimed the souls of poets, priests [...] so intense his aura auf darkness, that no rational mind may penetrate it" (ibid. para. 2).

Poe's raven traps the narrator's soul in his shadow:

And my soul from out that shadow that lies floating on the floor
Shall be lifted—nevermore! (*The Raven* 107-108)



Figure 101 - Dota 2's Weaver

Skitskurr, the Weaver (Dota2.Gamepedia.com, "Weaver") draws inspiration from a spider-like creature of the same name in the novel *Perdido Street Station* (Miéville 2000). In its author China Miéville's fictional world, the spider can move through dimensions and speaks in a neverending torrent of free-verse poetry. Both Weavers mention "The Pattern", Miéville's weaver is obsessed with patterns. The Weavers in *Perdido Street Station* are described as follows:

Within a few generations, he had explained to Rudgutter, the Weavers evolved from virtually mindless predators into aestheticians of astonishing intellectual and materio-thaumaturgic power, superintelligent alien minds who no longer used their webs to catch prey but were attuned to them as objects of beauty disentangleable from the fabric of reality itself. Their spinnerets had become

specialized extradimensional glands that Wove patterns in with the world. The world which was, for them, a web. Old stories told how Weavers would kill each other over aesthetic disagreements, such as whether it was prettier to destroy an army of a thousand men or to leave it be, or whether a particular dandelion should or should not be plucked. For a Weaver, to think was to think aesthetically. To act—to Weave—was to bring about more pleasing patterns. They did not eat physical food: they seemed to subsist on the appreciation of beauty. (Miéville 346)

Dota 2's Weaver says: "The loom weaves and a new pattern appears" and "I enter the pattern" (Dota2.Gamepedia.com, "Weaver Responses" 4-5).



Figure 102 – *Dota 2*'s Atropos

Atropos "the Bane" (Dota2.Gamepedia.com, "Bane") says: "Do Tinkers Dream of Electric Sheepsticks?" (Dota2.Gamepedia.com, "Bane Responses"). He only says it when he kills the

Tinker (Leagueoflegends.com, "Tinker"). The

sentence is a reference to Philip K. Dick's *Do Androids dream of Electric Sheep?* Bane is a hero that can cause nightmares, therefore the word "Dream" in the title of Dick's novel fits. Tinker's abilities are mostly powered by electricity ("Electric") since they consist of lasers, missiles, and robotic minions. "Sheepstick" is the commonly used name for the *Dota 2* item "Scythe of Vyse": "The Scythe of Vyse, also known as Sheepstick, is an item purchasable at the Main Shop, under Caster" (Dota2.Gamepedia.com, "Scythe of Vyse" para. 1). Sheepstick grants its owner the ability to turn a target into a harmless critter, for example a cute tiny pig: "Turns a target unit into a harmless critter for 3.5 seconds. The target has a base movement speed of 140 and will be silenced, muted, and disarmed" (ibid. para. 3). Last but not least, "Sheepstick" rhymes with "Philip K. Dick".

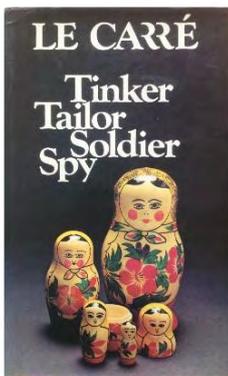


Figure 103 - *Tinker Tailor Soldier Spy*, first UK edition; Figure 104 – *Dota 2*'s Tinker

When Tinker dies, he says: “*Tinker, failure...Soldier...Fie...*” (Dota2.Gamepedia.com, “Tinker Responses” para. 15), which is a reference to the spy novel *Tinker, Tailor, Soldier, Spy* (Le Carré 1974) by British author John le Carré. This line works well on Tinker, since his role in the game is to be both a soldier and a spy: with his vast mobility and his “March of Machines” ability, he can pressure multiple lanes and spy on the enemy:

Boush, the Tinker, is a ranged intelligence hero who leverages great mobility and blistering nukes to push lanes and gank his enemies. Tinker's ultimate Rearm resets the cooldown on his items and abilities, allowing him to deal prodigious damage with his Laser, Heat-Seeking Missiles and with items such as Dagon. By refreshing Boots of Travel, Rearm also grants Tinker vast mobility, enabling him to pressure multiple lanes with his March of the Machines. (Dota2.Gamepedia.com, “Tinker” para. 1)

With his “laser” (ibid. para. 3) and “heat-seeking missiles” (ibid. para. 4), he could be seen as a secret agent. Sometimes when Tinker dies, he also says: “*The Machine, Stops*” (Dota2.Gamepedia.com, “Tinker Responses” para. 15), which is the title of a 1909 short story by E.M. Forster which predicted instant messaging and the Internet:

The clumsy system of public gatherings had been long since abandoned; neither Vashti nor her audience stirred from their rooms. Seated in her armchair she spoke, while they in their armchairs heard her, fairly well, and saw her, fairly well. (Forster 4)

The machine in Forster’s novel provides for humanity but also suppresses people and forces them to live underground. Kuno breaks free and stops the machine, but he dies in his mother’s arms:

She [Kuno’s mother] crawled over the bodies of the dead. His blood spurted over her hands. “Quicker,” he gasped, “I am dying — but we touch, we talk, not through the Machine.” He kissed her. “We have come back to our own. We die, but we have recaptured life, as it was in Wessex, when Ælfrid overthrew the Danes. We know what they know outside, they who dwelt in the cloud that is the colour of a pearl.” “But Kuno, is it true? Are there still men on the surface of the earth? Is this — this tunnel, this poisoned darkness — really not the end?” He replied: “I have seen them, spoken to them, loved them. They are hiding in the mist and the ferns until our civilization stops. To-day they are the Homeless — to-morrow—” “Oh, to-morrow — some fool will start the Machine again, to-morrow.” “Never,” said Kuno, “never. Humanity has learnt its lesson.” (Forster 25)

Dota 2’s Boush the Tinker also spent some time under the ground: He built a “subterranean laboratory” where he “wrenched open a portal to some realm beyond comprehension” (Dota2.gamepedia.com, “Tinker”

para. 2) whereby he survived as “the sole Tinker” (ibid.), having accidentally killed all the other Tinkers.

When Kunkka (Dota2.Gamepedia.com, “Kunkka”) meets certain allies or foes, he quotes Coleridge’s poem *The Rime of the Ancient Mariner*:

Apparition, with you by my side I'll live to be an “*ancient mariner!*” (Part I)
And a thousand thousand “*slimy things*” lived on, and so did I! (Part II)
“*Is Death [truly] that woman's mate?*” (Part III)
Sweetly sweetly blew the breeze, on me alone it blew. (Part VI)
Full plain I see “*the devil knows how to row*”. (Part VII)
(Coleridge 1969)



Figure 105 - Dota 2's Kunkka

Kunkka is an Admiral who protects his homeland against “the Demons of the Cataract” (Dota2.Gampedia.com, “Kunkka” para. 2). He is the only survivor of a battle against demons, (“Admiral of but

one ship, a ghostly rig which endlessly replays the final seconds of its destruction” (ibid.)) just as the Ancient Mariner in Coleridge’s poem is the only survivor on his ship.



Figure 106 - Dota 2's Dagon

In the short story *Dagon* by H.P. Lovecraft, the Dagon is a “Polyphemus-like [...] loathsome [...] stupendous monster of nightmares [...]” with “scaly arms” (Lovecraft 2008:18). In *Dota 2*, the Dagon is a wand which “brings magic to the fingertips of the user” (Dota2.Gamepedia.com, “Dagon”). The active ability

of Dagon is “Energy Burst” which “[e]mits a powerful burst of magical damage upon a targeted enemy unit” (ibid.). Lovecraft’s monster somehow caused its beholder damage: he could not stand the nightmares this creature caused him and so he died or committed suicide (Lovecraft 2008:21).



Figure 107 - Dota 2's Mithril Hammer

Mithril is a fictional metal from J. R. R. Tolkien's Middle-earth universe. It is precious and silvery, stronger than steel but much lighter in weight: “Mithril was a precious, silvery metal, very lightweight but immensely strong, that was mined by

the Dwarves in Khazad-dûm” (Fandom.com, “Mithril”). It was harder than tempered steel, beautiful and very expensive:

‘Mithril! All folk desired it. It could be beaten like copper, and polished like glass; and the Dwarves could make of it a metal, light and yet harder than tempered steel. Its beauty was like to that of common silver, but the beauty of mithril did not tarnish or grow dim. The Elves dearly loved it, and among many uses they made of it ithildin, starmoon, which you saw upon the doors. Bilbo had a corslet of mithril-rings that Thorin gave him. I wonder what has become of it? Gathering dust still in Michel Delving Mathom-house, I suppose.’ ‘What?’ cried Gimli, startled out of his silence. ‘A corslet of Moria-silver? That was a kingly gift!’ ‘Yes,’ said Gandalf. ‘I never told him, but its worth was greater than the value of the whole Shire and everything in it.’ Frodo said nothing, but he put his hand under his tunic and touched the rings of his mail-shirt. He felt staggered to think that he had been walking about with the price of the Shire under his jacket. (Tolkien 413-414)

Dota 2’s Mithril Hammer is “[a] hammer forged of pure mithril” (Dota2.Gamepedia.com, “Mithril Hammer”). The Mithril Hammer increased attack damage by +24. It makes sense to forge a hammer of mithril, a material stronger than tempered steel.

6.8.3 Summary

League of Legends’ champion Twisted Fate does not share his name with Gambit from the *X-Men* comic book series. Yet, the two characters closely resemble each other, and their deadliest weapon are their playing cards.

Aatrox has a Nietzsche quote, which inside the game functions as a hint towards Aatrox’s backstory, which is to be found on the *League of Legends* website: he used to be an honorable man, but he gazed into the abyss (when he fought against the Void) and so he became “a brutal approximation of his previous form” (Leagueoflegends.com “Aatrox”).

Annie seems to be intended as a mix between Red Riding Hood and the popular horror movie trope of creepily singing children: This trope has appeared in the opening of the movie *Pet Sematary* (1989; *Pet Sematary Opening* 1989), directed by Mary Lambert and written by Stephen King, the school playground scene in Hitchcock’s *The Birds* (1963; *The Birds Scene* 1963), *A Nightmare on Elm Street* (Directed by Wes Craven 1984; *Elm Street Scene* 1984) or *The Dark Knight Rises* (2012; *Dark Knight Rises Anthem* 2012). Tiny children singing angelically (Annie rhymes: “Eeeny, meeny, miny, burn!”) can establish a very frightening

atmosphere when visually paired with e.g., a playground crowded with ravens and a woman growing uncomfortable in their presence.

People ask for skins because of their personal interests, an H.P. Lovecraft fan asked for a Cthulhu skin, which Riot made and released. In case of this skin, the community was not entirely satisfied with the result.

Cho'gath and the Violator from the Spawn look strikingly similar. They are also both pure terror and focused on consuming life.

Maurice Sendak drew a boy who visits the "Wild Things", *LoL* features a boy and his yeti. Pantheon looks very similar to Frank Miller's characters in the *300* comics.

Also, in *Dota 2* there are characters which are very closely related to characters in literature: Ezalor is a selfless wizard like Gandalf. A reference to C.S. Lewis' *The Chronicles of Narnia* was probably made because *Dota 2* has a hero called Lion who sometimes kills a Witch Doctor. The two "lions" Lion and Aslan do not have a lot in common. In the case of Abbadon, Disruptor and Lycan, literary references are being made despite the heroes not being closely related to the literary characters. Sometimes, cultural intertextualities are only being made because someone noticed a coincidence: Tinker looks a bit like an "Android", Bane is a hero who brings nightmares ("Dream"), Tinker's abilities are "Electric" and a popular item in *Dota 2* is the "Sheep"- (Philip K. Dick) stick.

The least these references do is adding to the fun of the game; but the quotes also help to define the playable characters' personalities: Nature's Prophet cares just as much about nature as the Lorax does and the *Ancient Mariner* in Coleridge's poem is the only survivor on his ship borrowing his fate and many quotes to *Dota 2*'s Kunkka.

6.9 Mythology

In this chapter the role of myths in *Dota 2* and *League of Legends* will be analysed. Jamme and Matuschek explain that myths are narratives feigning to be historical, giving supernatural explanations for e.g. thunder

and lightning (the weapons of a human-like god called Zeus; see also Jamme et. al. 12).

These are the known functions of myths given by Jamme and Matuschek:

- In religious contexts, myths pass on holy truths and help people to decide whether an act is right or wrong.
- Historically and socially, myths tell the story of an institution, of rites or a societies' origins.
- In politics, myths express a collective narcissism and cater to the self-projection of society.
- Generally, myths can teach by giving examples.
- Myths are often used for aesthetic reasons. [translated] (Jamme et. al. 19)

Today, there are different terms for myth in different scientific fields: Anthropology, sociology, philosophy, psychology, literature, and religion (see also Jamme et al. 19). Jamme and Matuschek classify three important methods in the interpretation of myths: (1) A functional theory looks at how myths rectify and legitimize current social realities. (2) A symbolic theory sees myths as a way of thinking that shows similarities to dreaming. (3) A structural method deconstructs myths into stories and motives. Lévi-Strauss understood myths as polarizing entities: nature vs. culture, male vs. female, order vs. chaos ([translated]; Jamme et. al. 19). Jamme and Matuschek point out that we have become “irreconcilably distanced from myths” ([translated]; *ibid.*). Wherever we would find myths they write, “it would usually be only their remains” ([translated]; *ibid.*).

Yet, myths seem to be of importance in the world of video games. They are often turned to when game designers are creating characters.

It might be more difficult to pick out story elements from e.g., a book that has had a lot of cultural impact most recently (such as *Harry Potter and the Philosopher's Stone* 1997) if someone attempts to write an original background story (lore) for a game. Not only could there be problems with the copyright, but also with a character one would create based on Harry Potter, since it might look and feel like J.K. Rowling's character Harry Potter, distracting the player's mind from the new storyline which one would probably try to create in a way that is realistic enough for the players to be able to immerse themselves in it.

Therefore, in the process of lore design, it might be simpler to take something far removed from the audience's culture. For online video

games it becomes harder every day to find something “culturally removed” in terms of location, since many Europeans are manga buffs (“In Germany, where comic-book reading has traditionally been less widespread, manga now accounts for 70% of all comics sales” (Fishbein para. 3)) while a lot of Japanese are Harry Potter fans. *Harry Potter and the Philosopher's Stone* was the number three all times best-selling book in Japan as of February 2016, with “5.1 million copies sold” (Hatenablog.com, para. 3).

Since it could be challenging to find a story the designers' video game playing audience is not familiar with, there is the possibility of looking at something that is removed by the element of time. Here again, problems might occur. It could become boring and difficult to make yet another story about e.g., Thor. The Marvel Studios thought otherwise in 2017 and made a new movie starring the Norse warrior god (*Thor: Ragnarok*; third film of the current ongoing Thor series with Chris Hemsworth, directed by Kenneth Branagh).

Monsters such as the Ogre Magi or gods like Zeus¹⁵² in *Dota 2* originate often from mythical stories, and the stories video games tell are often very similar to mythical tales. Heroes in Germanic, Celtic or Ancient Greek myths usually prevail superhuman tasks or supernatural opponents. A very popular example would be Odysseus and his crew escaping the cyclops Polyphemus¹⁵³. The purpose of myths in video games usually becomes condensed to the actions of supernatural beings (see also Kaminski 113).

¹⁵² “(Ζεύς/Zeús, genitive Διός/Diós).I. Name and identity Chief Greek god of the heavens. As the chief Greek god of the heavens, patriarchal 'father of gods and men' (Hom. Il. 1,544) and the embodiment of rule, justice and omnipotence, Z. stands at the head of the Olympian family of gods (Twelve (Olympian) gods). His symbols include the eagle, bundle of lightning or thunderbolt and sceptre [32. 30-32]” (Henrichs, The New Pauly Online).

¹⁵³ There is a hero in *Dota 2* called “Naga Siren” but not a single character with only one eye. Players who really love cyclopes can buy a “Cyclopean Marauder” outfit for the hero “Sven”. Sven has two eyes, but with the Cyclopean Marauder helmet, he looks as if he had only one eye (Dota2.Gamepedia.com, “Gaze of the Cyclopean Marauder”). In *League of Legends* there is a champion called Vel'Koz. He is very close to Sauron visually (from J.R.R Tolkien's Lord of the Rings), as he looks like an all-seeing eye “a terrifying being created for the sole purpose of learning” (Leagueoflegends.com, “Velkoz”). The cyclops Polyphemus ist the son of Thoosa, “daughter of Phorcys” and Poseidon (see Ambühl, The New Pauly Online).

This is true for *League of Legends* and *Dota 2* if we solely look at what happens inside the two games. Outside of the games there is websites from the publishers full of lore. One match of *Dota 2* or *LoL* could be seen as the journey of a supernatural being the player chooses.

Kaminski thinks myths are being profanely instrumentalized in video games to increase the aesthetic allure. His quote could be translated as follows:

The narrative in computer games is an isolated function which is being mirrored by the role that myths play. Computer games — even when they are quoting myths or using para religious elements — are not mythisizing, they are at the most making themselves seem more archaic. The mythical paint in them does not have value in itself, it is instrumentalized and at best is helping to increase the game's aesthetical appeal. Myths have long been profaned. [translated] (Kaminski 116)

This initially sounds quite negative. Hopefully, after a detailed discussion of the two games' lore and their mythical creatures and items, some light can be shed on how myths are being interwoven, interpreted or instrumentalized in *Dota 2* and *League of Legends*.

6.9.1 Lore

The lore of *Dota 2* and *League of Legends* consists of inspirations from all kinds of cultural sources, as this chapter has proven so far. *Dota 2* does not have as much lore as *League of Legends*. There are only very short pieces of lore available for *Dota 2* heroes, but at least one short text (usually three or four paragraphs) for each champion. There are also comics¹⁵⁶ available that explain the *Dota 2* lore.

It is typical of MOBA characters who are enemies by lore, that they can be on the same team. E.g., Lina and Rylai (the two sisters who are like fire and water) can be fighting side by side.

Daniel Martin Feige states that writing in video games has the power to make surroundings come alive even when the graphics of a game are sparse:

Wasteland 2 is especially captivating because of the game's well written texts. They create a dense and impressive characterization of the game's locations. Through language, the game takes place on several levels, not everything is visible, literary imagination plays an important role. [translated] (Feige 119)

¹⁵⁶ http://www.dota2.com/comics/are_we_heroes_yet/

Writing in games can create depths, an invisible layer which stimulates each player's imagination. *League of Legends* and *Dota 2* both offer lore to those who are interested in getting to know the playable characters not only out of strategic interest. The sentences characters utter in *Dota 2* and *League of Legends* are players' main source for lore, while Riot Games also offer websites¹⁵⁸ with short stories explaining all characters' backgrounds.

In the following, there will be a short overview of the lore of the two games and then the mythical creatures and items containing mythical meaning.

6.9.1.1 *Dota 2*

The “ancient intellects Radinthul and Diruulth warred with each other endlessly, both born of a great primordial mind that shattered upon the universe's creation” (Dota2.Gamepedia.com, “Mad Moon” para. 1). “Zet, another fragment of the primordial mind, grew tired of their strife and fused his siblings into a single sphere called ‘The Mad Moon’” (ibid.). Afterwards, Zet “flung them into space to drift for eternity. Eventually, this sphere was captured in the orbit of Earth, shining over it as the races came into being” (ibid.).

The forces inside kept fighting and so “eventually the sphere broke apart, raining down material onto the World” (ibid.). The Mad Moon's remains “settled as Radiant Ore and Direstone, pure materials of the two intelligences” (ibid.). Then, “[t]he World fell into temporary chaos” (ibid.) and “some took advantage of the situation. Abzidian, the Demon Smith, used this time to forge Demon Edge from the raw materials that fell” (ibid.). The Radiant Ore and Direstone “discharged pure corrupting energy” (ibid.), wherefore the two races “became dependent on it and built civilizations around the material, while the rock provided them with energy, Mana, and life” (ibid. para 2). The Radiant Ore's emission was of bright colour and charm, while the Direstone made the earth appear poisonous and decayed (see also ibid.). “Eventually, the followers of

¹⁵⁸ https://map.leagueoflegends.com/en_US

each of the forces became aware of this and sought to destroy the opposite stone. This struggle started the endless battle, as seen in the game” (ibid.).

6.9.1.2 *League of Legends*

People are so deeply involved with the lore of *League of Legends* that they even try to create languages for the different races. Riot games are themselves creating languages, such as the Buhru language or Ancient Freljordian (Leagueoflegends.com, “Buhru Guidelines”). Sometimes players can be pushed away by lore changes. For example, Riot used to directly integrate the players in the game’s story by calling them “summoners”. Summoners chose champions to send into battle. Riot at one point removed this link, a change which not all players agreed with (Leagueoflegends.com, “A huge mistake”). The reason for this shift in the game’s lore was explained by Riot’s narrative team in a blog post by Tommy Gnox:

After a while, these early choices began to create unexpected problems. Every new champion needed a reason to join and remain in the League, and as their number grew, the net result was that over time the world started to feel, well, small, and eventually less interesting. The institutions we’d designed fostered creative stagnation, limiting the ways that champions, factions and Runeterra itself could grow and change. Furthermore, the very idea of all-powerful Summoners made Champions little more than puppets manipulated by godlike powers. (Gnox para. 6)

League of Legends has its own lore and their own creatures, typical of their game, the Yordles (Fandom.com, “Yordle”). The Yordles are a race of spirits who are “mammalian bipedals” (ibid.).



Figure 61 – Yordle Poppy



Figure 108 – Yordle Teemo

Yordle Teemo “with his giant, smiling face, is an anagram of the word ‘emote’” (Baranowski para. 16).

League of Legends matches take place in the world of Runeterra (Leagueoflegends.com, “Map”), which consists of the supercontinent Valoran, the continent Ionia, the archipelago islands of Bilgewater and the Shadow Isles.



Figure 109 – Map of Runeterra with Locations of all Tribes and World Runes

On the universe pages of the *League of Legends* website, fragments of the lore can be found in many short stories about the champions (Leagueoflegends.com, “Universe”). This is a short summary of the lore extracted from the short stories:

A thousand years prior to the current time period of the game, "World Runes" began appearing across the world, each containing pure magical energy. Tribes collected these runes and abused their powers, eventually resulting in the "Rune Wars" which ended up almost destroying Valoran and corrupted the world with hidden magical energies. After witnessing the once-grand city of Icatia fall to the powers of a World Rune, arcane sorcerer Ryze became determined to prevent the powers of the runes from destroying Runeterra and started collecting them on a journey, which took centuries.

Icatia's fall corrupted the humans Kassadin and Malzahar with the power of the void. Runeterra is made up of several smaller nations, each with their own tribes, cultures, armies, and leaders.

Demacia is ruled by the Jarvans, a family of kings throughout the generations, and is home to valiant warriors. Demacia's magical protector, Galio, is awoken whenever there is a disruption of the World Runes. Many Demacians do not trust magical beings.

Noxus is responsible for the war on Ionia which, along with claiming countless innocent lives, worsened relationships between the two nations.

Bilgewater is the nautical hub famed for its pirates, Shurima is an empire city in the sands, Ionia is a nation filled with spiritual and mystical power, the Shadow Isles is home of the undead souls who have reclaimed the land and the Freljord, where the harsh icy land has been split into three different tribes. (see also *ibid.*)

6.9.2 Mythical Creatures

6.9.2.1 Dota 2

Abaddon is called “the Lord of Avernus” (Dota2.Gamepedia.com, Abaddon”). Abaddon in the New Testament Book of Revelation is described as “the angel of death” (Revelation 9:11), “the abyss” (ibid.) and “king of a plague of locusts” (ibid.).



Figure 110 - Abaddon in Dota 2 Figure 111 – Abaddon (Hofmeyr 2018) Figure 112 - Nazgûl

In *Dota 2*, Abaddon’s lore says that he is a “newborn of the cavernous House Avernus” (Dota2.Gamepedia.com, “Abaddon” para. 2), who was “bathed in the black mist” (ibid.). All the baptised children grow up “believing themselves fierce protectors of their lineal traditions, the customs of the realm—but what they are really protecting is the Font itself” (ibid.). Abaddon is an undead warrior on a (probably undead) horse. Visually he reminds players of the Ring Wraiths (Nazgûl) from J. R. R. Tolkien’s *Lord of the Rings* (Tolkien 214). He does not look like a biblical devil with horns and wings. However, his abilities could define him as an “angel of death”: he can release a coil of deathly mist: “Abaddon releases a coil of deathly mist that can damage an enemy unit or heal a friendly unit at the cost of some of Abaddon's health” (ibid. para. 2); he can summon dark energies: “Summons dark energies around an ally unit, creating a shield that absorbs a set amount of damage before expiring” (ibid.) and silence and slow his enemies with a chilling curse:

Abaddon strikes an enemy, slowing the target's movement speed. If the target gets hit 4 times, they become affected by a chilling curse causing them to be silenced and slowed, and all attacks against them gain an attack speed boost. (ibid.)

Atropos (Dota2.Gamepedia.com, “Bane”) of *Dota 2* is called “the Bane”. As mentioned earlier, the name Atropos comes from Greek mythology. Atropos was one of the “Greek Moirai (‘Fates,’ Roman Parcae)” (Leeming 132). They “spun out life, measured it, and cut it” (ibid.).

The noun moira in singular and plural

[...] refers to the part of a whole, e.g. the personal 'share' of land, booty, sacrificial meat and life (moira biótoio or bíou) [5; 13; 17]. Starting with Homer, the singular also refers to the existential limits that all mortals face, especially to the fate apportioned to each person at birth. (Henrichs, *The New Pauly Online*)

Dota 2's Bane was born from the midnight terrors of the goddess Nyctasha:

When the gods have nightmares, it is Bane Elemental who brings them. Also known as Atropos, Bane was born from the midnight terrors of the goddess Nyctasha" (*Dota2.Gamepedia.com*, "Bane" para. 1).



Figure 113 - *Dota 2*'s Atropos

Atropos the Bane Elemental is a demon without eyes and the body of a violet horse. He does not cut threads of life, but he "calls to hidden fear in every hero's heart" (ibid.), his "black blood [...] is a tar that traps his enemies in nightmare (ibid.). Centaurs are mythological creatures from Greek mythology with the upper body of a human and the lower body and legs of a horse:

Centaurs – Inhabitants of Mount Pelion in Thessaly, these half-man, half-horse creatures of Greek mythology were the result of unnatural matings between Centauros, the son of King Ixion of the Lapiths, himself also a sexual outlaw, and the wild mountain mares of the are. [...] centaurs [...] were generally considered to be violent and sexually licentious. (Leeming 67)

Centaurs are four-legged monsters consisting of man and horse, their homeland was seen as the Greek mainland. [...] They often appear as an aggressive group of evil-doers, who cause offence especially by raping women. (Walde, *The New Pauly Online*)

In *Dota 2* there is a "Centaur Warrunner", a melee hero called Bradwarden (*Dota2.Gamepedia.com*, "Centaur Warrunner"). He is very much in line with the tradition of his mythological ancestors. Centaur Warrunner is sinister looking, tusked, with white dead eyes, no



Figure 114 - *Dota 2*'s Centaur Warrunner

pupils, and devilish horns. He represents pure strength with the body of a horse and the strong chest of a seasoned warrior. He can stomp his hoof

(“Hoof Stomp”; *ibid.* para. 2) and trample enemy units (“Stampede”; *ibid.*). In R.A. Salvatore’s novel *The Demon Awakens* (1996), there is a centaur called Bradwarden who rescues his friends:

“Ah, me boy, ye’ll not be moving this one,” the doomed centaur groaned. “She’s got me stuck, and got me dead, don’t be doubting!” Elbryan fell back against the wall, dizzy, defeated, with no answers. “Bradwarden,” Pony breathed helplessly. “Oh, my friend, all the mountain would have fallen on us but for your great strength.” “And all the mountain’ll be falling soon enough,” the centaur replied. “Run to the outside and yer freedom.” Pony’s horrified expression was all the reply Bradwarden was going to get. “Go on!” the centaur yelled, and the exertion cost him an inch, the huge slab sliding ever lower, bending him backward. “Go on,” he said again, more calmly. “Ye cannot move the damned mountain! Don’t ye make me death a meaningless thing, me friends. I beg ye, get out!” [...] And yet Pony realized the sincerity of the centaur [...]. She imagined herself in his position and knew what she would expect of her friends. Pony moved up very close to Bradwarden, bent over to him, and kissed him on the cheek. “My friend,” she said. (Salvatore 544)

A powerful and quite expensive¹⁵⁹ weapon in *Dota 2* is called Daedalus (Dota2.Gamepedia.com, “Daedalus”). It “can only be completed with items from the Secret Shop” (*ibid.* para. 1), which makes it, like other powerful items, slightly more difficult to assemble when compared to simpler items available in the main shop¹⁶⁰. Daedalus in “Greek mythology was a

Mythical craftsman, sculptor and inventor, his very name belonging to a semantic field indicating objects created by astuteness and skill. In stories he is associated with Athens, Crete and Sicily. (Kearns & Neudecker, Brill’s New Pauly Online 2021).

According to Leeming, Daedalus was [...] an Athenian who trained his nephew in his art only to murder him when the young man became a better artist” (Leeming 91). “Daidalos” in Greek means “skillfully wrought” (Morris 4). Players of *Dota 2* must collect enough gold for the Daedalus weapon (as it is with all items) if they want to assemble it. Once assembled and working, the passive ability of this weapon grants a “30% chance to deal 235% damage” (Dota2.Gamepedia.com, “Daedalus” para. 1). Critically increasing power could be compared to an apprentice who

¹⁵⁹ The Daedalus costs 5330 gold (Dota2.Gamepedia.com, “Daedalus”). The cheapest weapon is the Crystalys with 2130 gold (Dota2.Gamepedia.com, “Crystalys”) and the most expensive one is the Bloodthorn for 7205 gold (Dota2.Gamepedia.com, “Bloodthorn”).

¹⁶⁰ There are fifteen weapons in *Dota 2* (Dota2.Gamepedia.com, “Weapons”). Most of them must be assembled with items from the main shop with ingredients from the secret shop.

has risen from being a regular craftsman to becoming a skilled engineer, someone who “skillfully wrought” something.

Daedalus and Icarus tried to flee from Crete with wings made from feathers and wax. Daedalus warned his son of hubris, of not flying too close to the sun so the wax would not melt, but Icarus fell from the sky despite his father’s warning:

Daedalus constructed wings for himself and Icarus. He attached the wings to their bodies with wax. As the pair took off, Daedalus warned his son not to fly too close to the sun, but the boy, craving adventure with his newly acquired power of flight, flew so close to the sun that the wax melted. Naturally Icarus’s wings fell off and the boy landed in the sea, where he drowned. (Leeming 91)

A hero in *Dota 2* is called Phoenix (Dota2.Gamepedia.com, “Phoenix”). A Phoenix is a bird that regenerates or is born-again, obtaining new life by rising from the ashes.



Figure 115 - Dota 2's Phoenix

The ranged strength hero Phoenix is exactly what his name promises: a huge burning Phoenix. He can dive forward in an arc and fall from the sky like Icarus, thereby damaging and slowing enemies:

Phoenix dives forward in an arc with a fixed distance in the targeted direction, dealing damage over time and slowing the movement speed of any units it comes into contact with, and then orbiting back to its original position. If Phoenix casts Supernova, the dive ends. (ibid.)

The Latin name for the devil arose Hannes Vatter’s curiosity in his 1978 dissertation: “How did it happen that a figure from the obscurity of the unconscious ever came to bear the name of Lucifer, the lightbearer?” (Vatter 16). Vatter explains that the unconscious

[...] is feared by man as ‘terra incognita’ – for good reasons. What is most diabolic in it, is its habit of thwarting man’s undertakings, of obstructing his conscious endeavours. [...] When the devil shows himself, he emerges, like things that lie in the unconscious “inevitably emerge to the surface. And when it is the counter-will, which breaks through to the level of consciousness, it

does so as a lightbearer indeed, for it brings to man a new knowledge, the knowledge of a will opposed to the will of God. (ibid.)

Lucifer the Doom (Dota2.Gamepedia.com, “Doom”) in *Dota 2* is a melee strength hero bearing a burning sword, reminiscent of the Romantics’ idea of Satan, who glorified him “as a proud outcast of the Enlightenment, a rebel against God and other authorities, a victim figure like Prometheus” (Goetsch 35).



Figure 116 - Dota 2's Lucifer

He devours creatures, thereby acquiring any special abilities they possessed (see also Dota2.Gamepedia.com, “Doom” para. 2). If this is not yet hellish enough for someone called Lucifer, he can also carpet the earth in flames (ibid.), swing a burning sword or inflict a curse (drawing a fiery pentagram; see also ibid.).



Figure 117 - Dota 2's Enchantress

Aiushtha the Enchantress (Dota2.Gamepedia.com, “Enchantress”) has the body of a deer. In the original *DotA*, she was already designed as a character with a human upper body and the lower body of a deer, one of “Cenarius’ daughters” (Fandom.com, “Enchantress_(DotA)” para. 1), who was a “Dryad” (ibid.). Jeffrey Weinstock in his *Encyclopedia of Literary and Cinematic Monsters* categorizes dryads as “earth elementals

(gnomes)” which are “tree and forest spirits” (Weinstock 206). Verlyn Flieger focused on dryads especially in J.R.R. Tolkien’s work and wrote that in “Greek mythology the dryad was a spirit in the form of a young maiden or woman” (Flieger 21), who had been

[...] much beloved of the Romantics such as Keats and Coleridge, and romantic Edwardians such as Arthur Rackham [but] were rather out of fashion in the modern and post-modern criticism of Tolkien’s twentieth century. (Flieger 22)

Ivor H. Evans in the *Brewer’s Dictionary of Phrase and Fable* writes that “[i]n classical mythology”, a Dryad is “a tree nymph (Gr. *drus*, an oak-tree), who was supposed to die when the tree died” (Evans 1981). These aspects of dryads seem to be echoing in Aiushtla’s abilities “Nature’s Attendants” (a cloud of wisps heals her and her friends), and “Untouchable” (enemies are slowed down when they try to attack her) (see also Dota2.Gamepedia.com, “Enchantress” para. 2). Enchantresses are usually known as female spellcasters, practitioners of magic or users of enchantment¹⁶¹. Aiushtla is both female and equipped with magic abilities (see also *ibid.*). This emerald-eyed jewelry-wearing dryad appears to be very friendly¹⁶², beautiful and fragile— yet she can lead almost any team as a carry: “Enchantress’ regular attacks are strong enough to kill most heroes with a couple of attacks, if they stand far enough, and make her a potential carry” (*ibid.*).



Figure 118 - Dota 2's Huskar

Judith Jesch in *Ships and Men in the Late Viking Age – The Vocabulary of Runic Inscriptions and Skaldic Verse* explains the

¹⁶¹ There can also Enchantresses be found in the *Magic: The Gathering* card game, in *Dungeons & Dragons*, in *EverQuest* and *Shovel Knight*. Both Marvel and DC Comics have created a fictional character called Enchantress.

¹⁶² Enchantress seems to be especially friendly when she is compared to artworks of other heroes such as Lucifer, Abbadon, Centaur or Phoenix. Still, she can attack enemies as effectively as other carry heroes can.

meaning of the Old Norse term “húskarl” (“house-man”) (Jesch 237): Húskarls were “follower[s]” who “shared [their] leader’s roof” (ibid.). *Dota 2*’s Huskar (Dota2.Gamepedia.com, “Huskar”) “the Sacred Warrior” (ibid.) visually has a lot in common with vikings and trolls, therefore a northern name implying that he is a character like the paid full-time húskarl soldiers helps to sketch Huskar as a strong and seasoned fighter. Jesch describes the húskarlar as warriors or bodyguards, who were permanently in service of those who could afford them:

Germanic chieftains had picked men in their servive, who formed a bodyguard and the nucleus of the armed host of the tribe. [...] Wealthy leaders in the Viking Age and early medieval period also had a following of able-bodied men in their service [...] a general Norse term is [...] húskarlar, ‘house-carls’. (Jesch 100)

When *Dota 2*’s Huskar came back from the Nothl realm he had a new ability: he could use his own blood to strengthen himself:

Against the ancient rites of the Dezun Order, Huskar’s spirit had been saved from eternity, but like all who encounter the Nothl he found himself irrevocably changed. No longer at the mercy of a mortal body, his very lifeblood became a source of incredible power; every drop spilled was returned tenfold with a fierce, burning energy. (Dota2.Gamepedia.com, “Huskar” para. 1).

His immortality infuriated Huskar “for in his rescue from the Nothl, Dazzle¹⁶³ had denied him a place among the gods. He had been denied his own holy sacrifice” (Dota2.Gamepedia.com, “Huskar” para. 1). “A place among the gods” in “the sacred Nothl realm” (ibid.) could remind one of Valhalla, which in Norse mythology is “a great hall in Asgard, presided over by the high god Odin. There, fallen warriors put on their armor each morning and fought each other to the death, rising again to feast with the great god” (Leeming 391). Relating Huskar to Odin and Valhalla might make him seem more noble, powerful, and maybe divine.

¹⁶³ Dazzle the Shadow Priest is also a hero in *Dota 2* (Dota2.Gamepedia.com, “Dazzle”).



Figure 119 - Dota 2's Io

Io in Greek mythology was

[...] a priestess of Zeus's wife, Hera. When accused of infidelity by Hera, Zeus denied any inappropriate behavior and turned Io into a white cow, which Hera then had tied to an olive tree at Nemea under the watchful hundred eyes of Argus. Zeus, however, could not give up Io, so he sent Hermes [who] then killed Argus and released Io, still, of course, in her cow form. When Hera discovered what had happened, she had a gadfly chase poor Io from one end of the world to another. Various places in the ancient world took her name—for instance, Ionia, the Ionian Sea, and the Bosphorus ("Cow's Ford"). (Leeming 204)

Dota 2's Io (Dota2.Gamepedia.com, "Io") can teleport and "summon five particle spirits that dance in a circle around Io. If a particle collides with an enemy hero, it explodes" (ibid.). Io can tether to units (see also ibid.). Io, due to its abilities, seems to have much more in common with a Galilean satellite, rather than being related to a Greek priestess. Galileo Galilei gave Jupiter's satellite Io its name (see also Showman & Malhotra 77). Io has an "indirect influence on the ionosphere of Jupiter" (Gregersen 107).

Io the priestess, Io the satellite and Io the *Dota 2* hero have gravity: The priestess on Zeus (power of attraction or allure), the satellite on Jupiter (force of attraction) and the *Dota 2* hero on allied units (magical attraction). Io in *Dota 2* might seem more powerful and mysterious by being intertextually connected with Jupiter's satellite and a Greek priestess.



Figure 120 - Dota 2's Lone Druid

Brunaux explains that Julius Caesar described Druids as the learned class among the ancient Celts and that the myth that druids were archpriests is based on Caesar, who intended to instrumentalize this image of them (see also Brunaux 46). Extensive descriptions of druids by Caesar paint a positive picture of them: he writes about them as priests, wise men, judges, and teachers (see also Brunaux 16-7). Caesar needed money from the Senate for his war against the Gauls, therefore, his intention was to convince the Senate the Gauls were (half-)civilized (see also *ibid.*). In his philosophical work *De divinatione*, Cicero describes druids as “soothsayers” (see also Brunaux 40).

Sylla the Lone Druid (Dota2.Gamepedia.com, “Lone Druid”) is an old man with long white hair and beard. He can summon a “Spirit Bear companion” (*ibid.* para. 2), he can cast magic (e.g., “morph himself into a raging bear”; *ibid.*) and his roar causes enemies to flee towards their base: “Spirit Bear roars fiercely causing nearby enemies to flee towards their base in terror. Their movement speed is increased by 20% and he can morph into a bear” (*ibid.*). Sylla can also teleport his bear: “Boots of Travel grants teleportation around the map for quick farm and pushes” (*ibid.* para. 5). It is possible with Sylla to immobilize enemies with roots he causes to burst from the ground (see also *ibid.* para. 2). Since bears live in forests and it seems logical that controlling animals and shapeshifting into animals requires some sort of natural magic, calling Sylla a druid can add mythical depth to this hero.



Figure 121 - Dota 2's Lycan

Banehallow the Lycan is another shapeshifter¹⁶⁴ in the world of *Dota 2*. “The oldest story mentioning lycanthropy is a Greek myth about Lycaon, king of Arcadia” (Poulakou-Rebelakou, Tsiamis, Panteleakos & Ploumpidis 469). Lycaon was turned into a wolf in retribution for serving human flesh (of a child¹⁶⁵) to Zeus (see also *ibid.*). Banehallow’s lore touches a lot of themes from the ancient Greek myth. Banehallow was a noble-born Ambry (see also *Dota2.Gamepedia.com*, “Lycan” para. 1). As “the King’s wants grew strange [...] the house of Ambry was the first to rise against the avarice of the throne” (*ibid.*) and they were “wiped out” (*ibid.*). Just as Lycaon had provoked Zeus, the king in Banehallows story was so enraged by the Ambry’s attack that he “exterminated the vast Ambry bloodline, sparing only the lord of the house and his youngest son, Banehallow” (*ibid.*). The story is focusing on a noble man and his son, who face a higher authority, like Lycaon and his son who face Zeus. The king “chained” (*ibid.*) Banehallow’s father to “the marble floor” (*ibid.*) and “bade his magicians [to] transform the boy into a wolf so he might tear out his father’s throat” (*ibid.*). Here, someone is going to be sacrificed, but this time the son is turned into a wolf and not the father while the father is probably going to die and not the son. Lord Ambry “laughed from his chains even as the King ran him through with a sword” (*ibid.*): The king gets his revenge as Zeus got his. But the reason for Lord Ambry’s laughter is his son’s resistance, as Banehallow’s “spirit remained intact, and instead of biting the exposed neck of his father, he attacked his handlers” (*ibid.*).

¹⁶⁴ In mythology, shapeshifting is the ability to transform one’s physical form or shape. The idea of shapeshifting can be found in the oldest forms of totemism and shamanism, as well as the oldest extant literature and epic poems. For example, in works such as the *Epic of Gilgamesh* and the *Iliad*, deities are often able to change their physical form (see also Briggs 360).

¹⁶⁵ The child called Arcas was “presented to Zeus as a meal by his grandfather Lycaon to test the omniscience of the god” (Scheer, *The New Pauly Online*).



Figure 122 - Dota 2's Medusa

Medusa “the Gorgon” in *Dota 2* was born “the youngest and loveliest of three beautiful Gorgon sisters, born to a sea goddess” and were “alone of the sisters [...] mortal” (Dota2.Gamepedia.com, “Medusa” para. 2).

Similarly, the Medusa of Greek mythology is described as “[t]he exquisitely beautiful Medusa, one of the three Gorgons of Greek myth and the only mortal one” (Garber et. al. 2). Medusa’s two sisters “Sthenno and Euryale are immortal” (Käppel, The New Pauly Online).

One day, “masked assailants invaded [*Dota 2* Medusa’s] Gorgon realm and tore the two immortal sisters from their home, unmoved by their beauty or by their tears” (Dota2.Gamepedia.com, “Medusa” para. 2). Medusa herself was cast aside because she had “the mortal stink upon her” (ibid.). She felt “humiliated, enraged” and

[...] fled to the temple of her mother and cast herself before the goddess, crying, 'You denied me eternal life—therefore I beg you, give me power! Power, so I can dedicate what life I have to rescuing my sisters and avenging this injustice!' (ibid.)

Her mother “granted her daughter's request, allowing Medusa to trade her legendary beauty for a face and form of terrifying strength” (ibid.). Medusa “understands that power is the only beauty worth possessing—for only power can change the world” (ibid.).

Greek Medusa is also a powerful creature, but her powers are a curse and a punishment. After Poseidon raped her in Athena’s temple, Athena transforms her into a monster with snaky locks as punishment for the “crime” of having been raped in her temple:

Medusa [...] was said to have dallied with—or, in other versions, to have been raped by—the sea god Poseidon in the Temple of Athena. As punishment for this transgression, Athena transformed Medusa from woman to monster, changing her luxuriant long hair into a tangle of hissing snakes. A spectator gazing at Medusa would henceforth be turned into stone. (Garber et. al. 2)

Comparing the two stories, *Dota 2*'s Medusa seems like an antithesis, a model of a powerful female character that is unsightly but in control as opposed to Greek Medusa, who is beautiful but powerless in terms of her own fate.



Figure 123 - *Dota 2*'s Mirana¹⁶⁶

Mirana was a great warrior king, known as the "tiger of Multan fort" who killed the Emperor Genghis Khan:

“As the folklore goes, Mongol invader Chenghis Khan, attacked Multan and [...] was killed by Mirana, the tiger of Multan fort”. His descendants who proudly carry the surname of ‘Mirana’ preserve the memory of this great warrior king. He was treacherously killed when he was just 28 – a life so short but full of heroic deeds”. (Harjani 260)

Mirana the “Princess of the Moon” in *Dota 2* was “[b]orn to a royal family” (Dota2.Gamepedia.com, “Mirana” para. 2). She can turn herself and her allies invisible (“Moonlight Shadow” *ibid.* para. 6) and she is always riding her trusted tiger Sagan: “Her response “Carl meet Sagan.” is a pun on Carl Sagan” (*ibid.* para. 9). In comparison, both Miranas are warriors associated with tigers.

¹⁶⁶ This is not the official design but a design by Stephanie Everett, retrieved from Artstation.com (<https://www.artstation.com/artwork/oOWBL>).



14) London, British Museum, red-figure vase: Odysseus at the Mast (photo: British Museum).

Figure 124 - Red-figure vase of ca. 475-460 B.C.¹⁶⁷

In Greek mythology, Sirens were described as dangerous creatures, who lured sailors (Odysseus) with their enchanting music to shipwreck on the rocky coast of their island. Sirens were believed to combine women and birds, for example birds with women’s heads or women with large wings, as we can see depicted on this vase. William J. Travis explains different portrayals of Sirens in his work on Sirens and Onocentaurs:

For our purposes, a red-figure vase of ca. 475-460 B.C. provides the base type, a bird with a female head [Fig. 14]. The choice of scene is also characteristic: portraying Odysseus bound to the mast, as his crew (unhearing) negotiates a narrow straight guarded by sirens, the iconography derives from the *Odyssey*, the principal ancient source for the siren. This base type went through numerous changes over the centuries. In a third-century sarcophagus from the Callixtus Catacomb, the three sirens are still bird-like in their legs, talons, and wings, though otherwise they are female, a point brought home in their various states of undress. Radical change came only by the seventh or eighth century with the invention of the mermaid, a siren part woman, part fish.



Figure 125 – Slithice the Naga Siren in Dota 2¹⁶⁸



Figure 126 - Siren enticing sailors¹⁶⁹

¹⁶⁷ Travis 44.

¹⁶⁸ Here Naga Siren is shown with character cosmetics called “Outcast of the Deep” created by Toby Rutter, Senior Character Artist at VALVE.

¹⁶⁹ 1230-1240 (British Library Harley 4751)

Slithice the Naga Siren (Dota2.Gamepedia.com, “Naga Siren”) in *Dota 2* is a strong female warrior with a long fishtail and two enormous swords. Like the Victorian mermaids, she looks “like a woman from the middle upwards” (Goetsch 249). Her human part is very beautiful, which “justifies their [the mermaids’] habit, first noted in medieval texts, of spending much time combing their hair and looking into mirrors” (ibid.). Slithice’s ultimate ability is called “Song of the Siren” and puts her enemies into “magical stasis” (Dota2.Gamepedia.com, “Naga Siren” para. 1-6). She can also perform a mystical song “to put her enemies to sleep” (ibid. para 2). One could state that a siren’s most defining characteristic in Homeric terms is their song: Gerald Gresseth writes about Homeric Sirens that Odysseus’ episode with the sirens is brief but “the leitmotif of the whole episode, which we may call Magic Song, stands out quite clearly” (Gresseth 205). This defining characteristic or leitmotif has been made into abilities people can use when they play Naga Siren. Other than in the *Odyssey*, where “Homer [...] does not detail the danger but instead leaves an ominous but unspecified aura about the scene” (ibid. 207), *Dota 2* allows us to see exactly how the Siren’s magic works, as we can see her enemies fall asleep and die. We can even see expressed in points, how much damage she is dealing exactly. Slithice is deadly, as the mermaids in folklore, who “represent the dangers associated with the element they live in” (Goetsch 250) and who “are often regarded as evil” (ibid.). The tradition of the evil mermaid is reflected in Richard III’s threat, “I’ll down more sailors than the mermaid shall” (see also ibid.).



Figure 127 - *Dota 2*'s Nyx Assassin

Nyx is the Greek goddess of the night. She was the wife of Chaos, who shared his throne with her:

Over this shapeless mass reigned a careless deity called Chaos, whose personal appearance could not be described, as there was no light by which he could be seen. He shared his throne with his wife, the dark goddess of Night, named Nyx or Nox, whose black robes, and still blacker countenance, did not tend to enliven the surrounding gloom. (Guerber 2)

Nyx and Chaos had a son called Erebus who dethroned Chaos and married Nyx (see also Guerber 2). With his mother he had two children, Aether (Light) and Hemera (Day), who dethroned them, and seized supreme power (Guerber 3; see also Marconi 275).

In another version of the creation of the world, Erebus and Nyx “produced a gigantic egg, from which Eros, the god of love, emerged to create the Earth” (Guerber 4). Christine Walde writes: “Nyx is a cosmogonic power. In Hesiod, N. belongs to the first generation of gods along with other appearances of light” (Walde, *The New Pauly Online*).

In *Dota 2*, Nyx Assassin is a “zealot scarab” (Dota2.Gamepedia.com, “Nyx Assassin” para. 2) with “telepathic talents” (*ibid.*) who was guided and reborn by the grace of the “queen goddess Nyx” (*ibid.*). Nyx is the queen of “the zealot scarabs, worshiped by her race as a goddess” (Dota2.Gamepedia.com, “Nyx Assassin” para. 1). She is also the creator of all Nyx Assassins, and her aim is to choose targets and have them killed:

Once an assassin matures, he is sent out into the world to kill in the name of his goddess. Nyx's personal motivations behind these assassinations, and how she chooses her targets, is unknown. (*ibid.* para. 2)

Nyx of Greek mythology did not only give birth to Brightness and Day, but also to many eerie children, such as Thanatos, the personification of death: “From Nyx alone were born a whole series of powerful abstract forces: Moros (Fate), Thanatos (Death), Hypnos (Sleep)...” (March 337). *Dota 2* Nyx's child “Nyx Assassin” is also eerie and deathly, by his looks alone.



Figure 128 - Dota 2's Ogre Magi Cosplay¹⁷⁰

An ogre is a large and hideous humanoid monster. Anthropologist Tehrani explains that the fairy tale “Jack and the Beanstalk” is rooted “in a group of stories classified as ‘The Boy Who Stole Ogre's Treasure’” and can “be traced back to when Eastern and Western Indo-European languages split more than 5,000 years ago” (Flood para. 9). Ogres are often represented in fairy tales and folklore as feeding on human beings. Ogres can smell humans and want to eat them, but they are often successfully deceived by their daughters or wives so that a hero entering their house can go undetected:

The version excerpted here is Joseph Jacob’s retelling of a tale he heard in Australia in the 1860s. The giant chants, “Fee-fi-fu-fum, I smell the blood of an Englishman...” His wife lies to him: she tells him that he is dreaming, or perhaps the smell of an earlier visitor lingers. (Goldberg 310)



Figure 129 - Dota 2's Ogre Magi

Aggron Stonebreak, the two-headed Ogre Magi (Dota2.Gamepedia.com, “Ogre Magi”) in *Dota 2* can blast a wave of fire (see also *ibid.* para. 1) or drench enemies in chemicals (see also *ibid.* para. 4). His intelligence is described as follows: “With two heads, Ogre Magi finds it possible to

¹⁷⁰ Cosplay artwork by Tarrin and Sorrel McDonough, <http://www.styrogirls.com/work/ogre-magi/>. Costume designed for The International Cosplay Competition in Vancouver, August 2018.

function at a level most other creatures manage with one” (ibid. para. 2). Due to his lack of outstanding intelligence, the hideous giant can be related to his often-deceived mythological predecessors, despite him not eating humans and his interest in modern chemicals.



Figure 130 - Dota 2's Monkey King

Monkey King in *Dota 2* (Dota2.Gamepedia.com, “Monkey King”) is Sun Wukong, a figure who appears as a main character in the 16th century Chinese classical novel “Journey to the West”. The legend of the Monkey King is even older, as Victor Mair states:

Anyone who is fortunate enough to read both Wu Cheng-en's (1500?-1582?) justly famous Chinese vernacular novel entitled *Journey to the West* (Shi-youji) and Valmiki's celebrated third century B.C.E. Indian epic, *Ramayana*... will invariably be struck by the remarkable similarities between the monkey heroes in each of them. (Mair 660)

In the Chinese novel, the Monkey King is equipped with the Ruyi Jingu Bang, a flexible magic staff (see also Shahar 399). The “dimensions of this [...] weapon change in accordance with its proprietor’s wishes” (ibid.).

The name for the “Mischief” ability (Dota2.Gamepedia.com, “Monkey King” para. 2) “in *Dota 2*'s Chinese client is “Seventy-two Transformations”, a reference from the novel to Sun Wukong's ability to change into numerous forms” (ibid. para. 9):

He bent over and cried, “Grow!” and at once grew to be ten thousand feet tall, with a head like the Tai Mountain and a chest like a rugged peak, eyes like lightning and a mouth like a blood bowl, and teeth like swords and halberds. The staff in his hands was of such a size that its top reached the thirty-third Heaven and its bottom the eighteenth layer of Hell. [...] Presently he revoked his magical appearance and changed the treasure back into a tiny embroidery needle stored in his ear. (Translation of *Journey to the West* by Yu 1:108)

The *Dota 2* Monkey King’s ability “Wukong’s Command” (“Monkey King creates a circular formation of soldiers that spread out from his

position” Dota2.Gamepedia.com, “Monkey King” para. 2) is based on Wukong’s ability to create clones of himself from his hair. This has been quoted earlier:

Seeing how ugly the demon king had turned, Sun Wukong used his magic art of getting extra bodies. He pulled out one of his hairs, popped it in his mouth, chewed it up, and blew it out into the air, shouting, “Change!” It turned into two or three hundred little monkeys, who all crowded round him. (Translation of *Journey to the West* by Yu 2:212).

The Monkey King concept has been widely used throughout the MOBA genre, with other “Monkey King heroes” appearing in *League of Legends* (Leagueoflegends.com, “Wukong”), *Heroes of Newerth* (HoN.Gamepedia.com, “Sun Wukong”), *Vainglory* (*Vainglorygame.com*, “Ozo”), *Strife* (*Strife.gamepedia.com*, “Gokong”), *SMITE* (*Smite. Gamepedia.com*, “Sun Wukong”) and *Paragon* (*Paragon.fandom.com*, “Wukong”).



Figure 131 - Dota 2's Shadow Shaman

Shamans are, in a sense, religious magicians, who typically have power over fire and are capable of achieving trance states in séances in which their soul vacate their bodies to go on curing missions to the spirit worlds above or below the earth. The shaman’s primary purpose everywhere is to cure. The successful shaman controls the spirits whom he works, and he can communicate with the dead. (Leeming 352)

Rhasta the Shadow Shaman in *Dota 2* (Dota2.Gamepedia.com, “Shadow Shaman”) is “the intermediary between life and death” (ibid. para. 1). He can create a cone of ethereal energy that stikes multiple enemy units (see also ibid. para. 2), transform them into a chicken (see also ibid.), shackle someone or call serpent wards (see also ibid.).



Figure 132 - Dota 2's Rajin Thunderkeg, the Storm Spirit

Raijin is a “god of thunder and lightning in Japanese mythology” (Ashkenazi 154; 236). Raijin is typically depicted with fierce and aggressive facial expressions, like a “taloned demon banging on drums” (ibid. 276). Raijin Thunderkeg the Storm Spirit (Dota2.Gamepedia.com, “Storm Spirit”) in *Dota 2* is often “jolly as a favorite uncle” (Dota2.Gamepedia.com, “Storm Spirit” para. 2). He “used a forbidden spell to summon the spirit of the storm, asking for rain” (ibid.), whereby he enraged the “Storm Celestial known as Raijin” (ibid.) who then “lay waste to the land, scouring it bare with winds and flood” (ibid.). Thunderkeg “cast a suicidal spell that forged their fates into one: he captured the Celestial in the cage of his own body” (ibid.). From then on, “Thunderkeg's boundless good humor” was “fused with Raijin's crazed energy, creating the jovial Raijin Thunderkeg” (ibid.).



Figure 133 - Hellmouth by Rossignolo¹⁷¹ Figure 134 – Dota 2's Tidehunter

Leviathan was a biblical sea monster referred to in the Old Testament. He became associated with the visual motif of the Hellmouth, a monstrous animal into whose mouth the damned disappear at the Last Judgement: At the “Last Judgement, Hell Mouth is a powerful primitive force, a denizen of the deep who receives what Satan casts in” (Link 76). Leviathan the Tidehunter (Dota2.Gamepedia.com, “Tidehunter”) in *Dota 2* has an ability called “Kraken Shell” (ibid. para. 4). This ability “[t]hickens Tidehunter’s hide to passively block a portion of any incoming physical attack damage” (ibid.). A Kraken is a giant squid in nordic mythology with mile long tentacles that pulls ships to the bottom

¹⁷¹ Hellmouth in the fresco *Last Judgment*, by Giacomo Rossignolo, c. 1555.

of the ocean. The earliest reference to a sea monster can be found in the Prose Edda (c. 1220; see also Sturluson 1916), where a gigantic “Hafgufa” (engl. “Seastream”) is mentioned. Carl von Linnæus believed in its existence, in 1735 he gave it the name “Microcosmus marinus”: “a taxonomy of several species” (Torjussen 2). It is not particularly known for its thick protective armature. As a huge octopus, a Kraken is widely known for its soft slimy skin (rather than a strong one) and long tentacles. Tidehunter can slam the ground with his ability “Ravage”, “causing tentacles to erupt in all directions, damaging and stunning all nearby enemy units” (ibid. para. 6). This ability, which is about tentacles – and about attacking a target like a colossal octopus swallowing a ship whole — could be associated with a Kraken.



Figure 135 - Dota 2's Zeus

Zeus is “the supreme Greek god” (Leeming 103). He is married to Hera and “infamous for his erotic escapades” (Hamilton, E. 467), which resulted in “many divine and heroic offspring” (ibid.). In *Dota 2*, Zeus (Dota2.Gamepedia.com, “Zeus”) is punished by Hera for his unfaithfulness:

[...] his divine wife finally gave him an ultimatum: 'If you love mortals so much, go and become one. If you can prove yourself faithful, then return to me as my immortal husband. [...] But to prove himself worthy of his eternal spouse, he must continue to pursue victory on the field of battle. (Dota2.Gamepedia.com, “Zeus” para. 2)

6.9.2.2 *League of Legends*

Xin Zhao (Leagueoflegends.com, “Xin Zhao”) is a samurai who is nothing but loyal to the royal family of Demacia and brave, he wants to fight for an “honorable cause” (ibid. para. 2). His loyalty is explained as follows: He was a cabin boy on a fishing boat that ventured too deep into foreign waters - A ship from Noxus chased down the smaller vessel and the commander claimed Xin Zhao as his property (see also Leagueoflegends.com, “Xin Zhao Story”). In “the service of the man who had taken him prisoner [...] he was promised a better life [...] in

exchange for his martial prowess” (ibid. para. 3-4). “[T]aking the name Viscero” (ibid. para 6) he fought for his patron in “the Reckoning arenas” (ibid.) and became a “celebrated name” (ibid.). When “[h]ostile nations encroached upon [Noxus’] territories [...] Xin Zhao and his fellows were bought out” (ibid. para. 8) and “hurled into battle against the elite forces of King Jarvan III of Damacia” (ibid. para. 8-9). Xin Zhao held his ground against the Demacians and killed hundreds: “staining his spear with the blood of hundreds” (ibid. para. 10). When he was surrounded, he welcomed his execution: “finally surrounded him, still he refused to run. Xin Zhao stood tall, welcoming his execution” (ibid.). He was pardoned by King Jarvan, who “took no pleasure in needless killing” (ibid. para. 11) and “granted the defeated Noxians their freedom” (ibid.). Zhao knew that his life in Noxus “had meant little beyond the gold he earned for his patrons” (ibid.).

Xin Zhao’s story is reminiscent of movies such as *Spartacus* (1960) and *Gladiator* (2000): The main character in all three stories is enslaved by an empire and forced to fight. The main difference is that the honorable hero (Zhao) is pardoned by a new leader (Jarvan) who is not cruel but merciful and that the hero voluntarily commits to his new leader: “Compelled by honor [Xin Zhao] knelt before Jarvan III” (ibid. para. 12). Catharina Blomberg analysed the origins and religious background of the samurai system in feudal Japan. She found that samurai were represented “as dashing, splendidly attired warriors of prodigious military prowess” and that these “tales became classics of popular entertainment until modern times” (Blomberg 10). She also wrote what was called “unchivalrous behaviour was sometimes condemned in strong terms, but there are not a few examples in the tales of war of rewards and favours obtained by unfair or treacherous means” (ibid.). Xin Zhao executes all his attacks with a spear (Leagueoflegends.com, “Xin Zhao”, e.g., Audacious Charge, Crescent Guard...). Stephen Turnbull in his book “The Samurai Swordsman: Master of War” wrote that samurai were indeed using spears: “The spear’s blade was protected from weather when not in use by a lacquered wooden scabbard. Some samurai preferred short spear blades, while others liked long ones (Turnbull 53).



Figure 136 – Samurai in *Ran*



Figure 137 – LoL's Xin Zhao

Xin Zhao's story is based on scenes from films such as *Gladiator*, where Russel Crowe is fighting in Rome's Colosseum as Maximus Decimus, who is always called "Maximus the Merciful" by the crowd because he did not kill Tigris of Gaul (Maximus vs. Tigris 2018). The idea of the honorable fighter in an arena is probably inspired by stories about the Roman Empire, while the fighter in the story is not Roman or Greek, he rather resembles a Samurai: Xin Zhao is given a Japanese sounding name, he uses a spear, and his visuals remind the beholder of colourful armour from movies such as Akira Kurosawa's *Ran* (1985). Zhao is not wearing a Samurai helmet, but a golden tube holding up his long hair.



Figure 138 - League of Legends' Shauna Vayne

Shauna Vayne "the Night Hunter" (Leagueoflegends.com, "Vayne") says about herself: "I kill you because I enjoy it" (Leagueoflegends.com, "Vayne Story" para. 1). She is on a personal vendetta, trying to destroy "the demon that murdered her family" (ibid.) and she is only truly happy "when slaying practitioners or creations of the dark arts, striking from the shadows with a flurry of silver bolts" (ibid.). J. Gordon Melton writes in his *Vampire Encyclopedia* that the

[...] introduction of silver into contemporary vampire lore appears to have been through the movies. In 1972, Hammer Films released *Dracula 1972 A.D.* [...] *Van Helsing* [...] injected a new agent into the discussion—silver, especially in the form of a knife with a silver blade. (Melton 638)

A "horned woman stood before the bloodied corpses of her [Vayne's] parents" (Leagueoflegends.com, "Vayne Story" para. 3-4) one day when "she returned home" (ibid.). She took "the next ship to the Freljord" (ibid. para. 13) searching for a "monster hunter" (ibid. para. 14). She found Frey, who spent her life "fighting the Ice Witch's minions who had

murdered her children” (ibid. para. 16). Frey saved Wayne from a “ravenous ice troll” (ibid. 14-15). Then, “Frey taught Wayne the fundamentals of dark magic, conjured beasts, and vile spells” (ibid. para. 21). Looking at Wayne’s abilities, she has become a fighter who knows how to outplay magical creatures using “toxic metal” and her “crossbow” (Leagueoflegends.com, “Wayne Game Info” para. 3-4). The two women together “could save twice as many families from experiencing the pain that defined them both” (Leagueoflegends.com, “Wayne Story” para. 18). Looking at all the quotes from Wayne’s lore, she cannot clearly be interpreted as a vampire slayer, despite her using silver bolts. She is a traumatized daughter who has become a strong fighter knowledgeable of magic, beasts, and spells. However, the silver bolts are not only mentioned in her lore, but they are also one of her attack abilities. This relates her quite closely to Van Helsing type characters and therefore to vampire hunting, even though Bram Stoker’s character Helsing (*Dracula* 1897) did not use silver—the usage of silver was introduced a century after the novel, in the movie *Dracula 1972 A.D.* (*Dracula A.D. 1972* 1972), in which a silver knife is used to kill Dracula:

Equipped with a silver-bladed knife and the holy water, Van Helsing enters the church, where he finds Jessica lying on the altar in a trance induced by Dracula. When night falls, Dracula enters and the men begin a fierce battle, which seems ended when Van Helsing stabs the vampire [...] (Garea para. 13)



Figure 139 - League of Legends' Vladimir

Vladimir “the Crimson Reaper” (Leagueoflegends.com, “Vladimir”) is a creature of the dark, a subversion of Dracula and other vampires¹⁷² which shows in his “thirst for mortal blood” (Leagueoflegends.com, “Vladimir Short Bio” para. 2) and him “unnaturally extending his life”

¹⁷² “Though the vampire has antecedents in ancient times and in folklore, Polidori’s story *The Vampyre* (1819) proved highly influential, partly due to its association with the Byron myth. It was dramatized several times and imitated by writers in the Victorian period. From the brutish character of folklore, the vampire was, in some works, transformed into a sophisticated literary character [...]. The instrumentalization of vampires was connected to several issues. [...] these problems include the question of sexual identity, degeneration, colonization, and the exploitation of one group, one class, one nation by another (Goetsch 132).

(ibid.). Also, he can “control the minds and bodies of others” (ibid.) and he built a cult around himself in salons of aristocracy (see also ibid.). Vladimir used to be mortal, but he was taken hostage by the “darkin” (Leagueoflegends.com, “Vladimir Story” para. 3-4), who were masters of “terrifying magic” (ibid.) such as “crafting flesh and transmuting blood” (ibid.). Vladimir studied his patron’s blood magic and joined the darkin warhost (ibid. para. 4). His immortality is already being highlighted in the first paragraph of his story: “he was present at the dawn of the empire [...] but he remembers little of those days. His mind is mortal, and so most of his unnaturally extended life endures not in his memory, but in his chronicles” (ibid. para. 1). After the darkin fell, Vladimir lived on, but not before personally killing the darkin’s master (see also ibid. para. 5-6).

Being immortal and the one who personally ended the darkin’s dark reign makes Vladimir appear extremely powerful. He is a hybrid between a vampire, a warrior, and a Svengali (or a god even, playing with the fate of others):

To him, this life is a mere revelry, a masquerade spanning centuries, and the prologue to greatness—for though the darkin eventually fought amongst themselves and lost their immortal grip on the world, Vladimir knows he is strongest alone. (ibid. para. 13)



Figure 140 - League of Legends' Warwick



Figure 141 - “Big Bad Warwick” Skin

Warwick “the Uncaged Wrath of Zaun” (Leagueoflegends.com, “Warwick”) seems to be related to werewolves. His skin “Big Bad Warwick” (Lolskinshop, “Warwick Skin”) resembles that of the Big Bad Wolf in the *Red Riding Hood* tale. However, he was transformed:

[B]y agonizing experiments, his body is fused with an intricate system of chambers and pumps, machinery filling his veins with alchemical rage. [...] Warwick is drawn to blood and driven mad by its scent. (Leagueoflegends.com, “Warwick” para. 1)



Figure 142 - League of Legends' Amumu

Amumu is “the Sad Mummy” (Leagueoflegends.com, “Amumu”). He was “[d]oomed by an ancient curse to remain alone forever” (Leagueoflegends.com, “Amumu Short Bio”).



Fig. 110. The baby Minotaur sitting on his mother's lap.

Figure 143 - Minotaur (March 319)



Figure 144 League of Legends' Alistar

Alistar is “the Minotaur” (Leagueoflegends.com, “Alistar”). Like the mythological monster, he is half man and half bull:

Minotaur (“Bull of Minos”). A monster with the body of a man and the head and horns and tail of a bull, named Asterius at his birth. He was born to Pasiphae, the wife of Minos, king of Crete. [...] The creature was fed on human flesh, supplied by the seven youths and seven girls whom Minos claimed as tribute from the Athenians [...]. (March 319)

Hybrid of man and bull (probably as early as in Hes. Cat. 145), with the animal half generally more prominent. (Stenger, The New Pauly Online)

Alistar “seeks revenge for the death of his clan at the hands of the Noxian empire” (Leagueoflegends.com, “Alistar”). After he had been enslaved, his unbreakable will kept him from becoming a beast. Once free of the chains of his former masters, he fights in the name of the downtrodden, his rage as much a weapon as his horns, hooves, and fists. (see also Leagueoflegends.com, “Alistar Short Bio”)

It was not the Minotaur’s fault he was born to Pasiphae, and that when

Minos saw his wife’s monstrous offspring, he employed the ingenious craftsman Daedalus to build the Labyrinth, a vast underground maze so cleverly devised that anyone going in would be quite unable to find the way out again. (March 319)

It was Minos who fed him the Athenian youths and later Theseus who killed him: “This tribute continued until the Athenian hero Theseus came as one of the sacrificial youths and killed the rapacious Minotaur” (March 319). Alistar seeks revenge. It seems almost as if he is seeking the revenge the Minotaur never got for being held in the labyrinth, for being taken from his mother. Alistar was forced to be a gladiator, the Minotaur was forced to be a beast, to murder youths for Minos. Now Alistar is free, and he can seek his revenge, almost as if he had been the enslaved Minotaur.



Figure 145 - League of Legends' Cassiopeia

Cassiopeia (Leagueoflegends.com, “Cassiopeia”) is a modern incantation of Medusa or the Sirens from Greek mythology. Just as *Dota 2*’s Medusa, she is beautiful as the Sirens are, being described as the “[y]oungest and most beautiful daughter of the noble Du Couteau family of Noxus” (Leagueoflegends.com, “Cassiopeia” para. 1). When she ventured into a crypt,

[...] she was bitten by a gruesome tomb guardian, whose venom transformed her into a viper-like predator. Cunning and agile, Cassiopeia now slithers under the veil of night, petrifying her enemies with her baleful gaze. (ibid.)

The venom turned her into a creature, dangerous as the Greek Sirens who tried to shipwreck Odysseus. Other than Sirens, Cassiopeia does not have wings and she does not sing— instead, she can turn flesh to stone with her petrifying gaze (ibid.). In Greek art, there are numerous images of Meduse or Gorgons “whose heads are covered with snakes” (Topper 74). Cassiopeia’s upper body seems almost human, except for the snakey eyes

and her claws. Below her belly button, she is a snake.



Figure 146 - Original version of Nasus and a picture of Egyptian god Anubis

Nasus (Leagueoflegends.com, “Nasus”) is a creature inspired by images of Egyptian god Anubis (see also Fandom.com, “Nasus” para. Trivia). Anubis in ancient Egypt was the

Canine god of cemeteries and embalming. His most usual form is that of a crouching desert dog, ears pricked up and tail hanging, wearing a collar of magical force and sporting the flagellum of OSIRIS from the centre of his body. [...] Anubis can appear as anthropomorphic up to his shoulders with the jackal head then superimposed. (Hart 25)

Nasus has a pharaoh skin, but also a skin where he has three heads (“Infernal Nasus”).



Figure 147 - League of Legends' Renekton

Renekton (Leagueoflegends.com, “Renekton”) is described as “his empire’s most esteemed warrior” (Leagueoflegends.com, “Renekton Short Bio” para. 2), who was “entombed beneath the sands” (ibid.), freed and “consumed with finding his brother, Nasus, who he blames, in his madness, for the centuries he spent in darkness” (Fandom.com, “Renekton”). This background story makes it quite clear that Nasus and Renekton were inspired by Anubis and Sobek. Sobek was an ancient Egyptian deity, “the crocodile-god” (Hart 136).



Figure 148 - League of Legends' Sona

Sona is “speaking only through her graceful chords and vibrant arias” (Leagueoflegends.com, “Sona Short Bio”). The Muses in Greek mythology were

“goddesses, [...] daughters of Zeus and the Titaness Mnemosyne (“Memory”) [...] Usually they were: Calliope (“Lovely Voice”), epic poetry [...]; Clio (“Renown”), history; Euterpe (“Gladness”), flute playing; Thalia (“Good Cheer”) comedy; Melpomene (“Singer”), tragedy; Terpsichore (“Delighting in the Dance”), choral lyric and dancing; Erato (“Loveliness”), lyric poetry; Polymnia (“Many Songs”), hymns and pantomime; and Urania (“Heavenly One”), astronomy. (March 322)

As we can see, many of the muses are goddesses who “spent their time singing and dancing” (ibid.). Sonas musical talent differs from the Muses’ talents. She “plucks her harmonies not only to soothe injured allies, but also to strike down unsuspecting enemies” (Leagueoflegends.com, “Sona Short Bio”).



Figure 149 - League of Legend's Zilean

Zilean seems to be closely related to Father Time. Father Time can be depicted iconographically by his age and beard:

As early as 1535, Truth, the daughter of time appeared in William Marshall’s Goodly Prymer in Englyshe. In this simple woodcut, a winged and naked Time actually smiles as he draws his naked daughter out of a cave or well, while Hypocrisy tries in vain to interfere. One of the mottoes reads, “Tyme reveleth

all thynges.” Time is here depicted iconographically only by his age, beard, and wings on back and heels. (Macey 52)

Zilean used to be a mage, who became

[...] obsessed with the passage of time after witnessing his homeland’s destruction by the Void [...]. [H]e called upon ancient temporal magic to divine all possible outcomes. Having become functionally immortal, Zilean now drifts through the past, present, and future, bending and warping the flow of time around him, always searching for that elusive moment that will turn back the clock and undo Icatia’s destruction. (Leagueoflegends.com, “Zilean”)

Like Father Time, Zilean is an elderly bearded man. He carries a huge chronograph on his back, akin to how Father Time has often been depicted with a timekeeping device:

Inevitably, as the clock became more popular, it was occasionally incorporated into the iconography of Time. [...] Father Time is surely also standing on the foliot of a clock in Sellaio’s Triumph of Time, though Panofsk takes it to be a sundial. (Macey 44)



Figure 150 - Marvel's Doctor Strange

Zilean also resembles Marvel’s movie *Doctor Strange* (2016), due to the blue circles around his hands (Doctor Strage’s magical circles are red, see Figure 151) which appear when he manipulates time. Doctor Strage manipulates time as well. The director of the movie, Scott Derrickson, explains:

Well, we don't time travel in the movie. He reverses time, and time resets. But there's only ever one timeline, and so it's a movement of that timeline back and then forward, and then there's the subject of time loops and things like that. So it's never 'time travel,' and we never had to struggle with the rules of time travel because it never happens! (Derrickson, Interview on Cinemablend.com; 2016)

6.9.3 Mythical Items

6.9.3.1.1 Dota 2

The *Iliad*'s Aegis is a shield belonging to Zeus with the Gorgon's head painted on it; Zeus uses the Aegis to create storm and frighten the enemy, he would shake the Aegis with his left hand and throw flashes with his right (see also Vollmer 17). Sometimes Zeus gives the Aegis to Athena, who uses its powers in battle:

[...] Athena bore her awesome shield of storm, ageless, deathless—a hundred golden tassels, all of them braided tight and each worth a hundred oxen, float along the front. Her shield of lightning dazzling, swirling around her, headlong on Athena swept through the Argive armies, driving soldiers harder, lashing the fighting-fury in each Achaean's heart-no stopping them now, mad for war and struggle. (Fagles et al., *The Iliad*, p. 114, 528-538)

Bernard Knox in his commentary on Homer (Fagles et al. 623) writes about the Aegis, which has magical powers that seem to be difficult to explain, but “in any case, its effect seems to be to stiffen morale in the armies it is raised to protect and inspire terror in those who face it”. In *Dota 2*, the Aegis of the Immortal is called a shield and dropped by Roshan when players kill him. *The Dota 2 Aegis* allows its wielder to reincarnate once within five minutes after picking it up (see also Dota2.Gamepedia.com, “Aegis of the Immortal” para. 2). *Dota 2*'s Aegis looks like a beating heart or claws grasping a sun. (ibid. para. 1).



Figure 151 - Dota 2's Aegis

In *Dota 2*, collecting the Aegis gives a team a significant advantage, therefore, it does “stiffen morale”. Given the item's significance, it makes sense that the championship trophy for the pinnacle of all *Dota 2* tournaments of the year, The International, is “The Aegis of Champions” (Dota2.Gamepedia.com, “Aegis of Champions”).



Figure 152 - Dota2's Aegis of Champions



Figure 153 - Dota 2's Eye of Skadi

In Norse mythology, Skadi is known as the “snow-shoe god” (Lindow 96). The *Gylfaginning* implies that she is the mother of Frey and Freyja: “When Snorri says in *Gylfaginning* that Njörd had two children, apparently by Skadi, he first introduces Frey and Freyja [...]” (ibid. 121). In *Dota 2*, the Eye of Skadi (Dota2.gamepedia.com, “Eye of Skadi”) looks like a green snake- or dragon- eye with a silvery helmet with snow falling around it. It is said to be protected by “azure dragons” (ibid.). It grants its owner “Cold Attack”, an ability that lowers enemy attack speed by 45 and movement speed by 23% (ibid.).

Skadi’s name was used already in *DotA*, which featured an item called Eye of Skadi (its item looked like a skull made from ice; Dota-frenzy.blogspot.com, “DotA Items” para. 10).



Figure 154 - SMITE's Skadi with her wolf Kaldr

In a MOBA called *SMITE*, Skadi is a playable character accompanied by a wolf named Kaldr (Smitefire.com, “Skadi”). Apart from these three MOBAs referencing Skadi, there could only be one webcomic¹⁷⁴ and one book¹⁷⁵ be found in which Skadi appears as a fictional character.



Figure 155 - DotA's Eye of Skadi¹⁷⁶

In a legendary medieval story, the Tarasque killed the people of Tarascon and was tamed by Saint Martha:

While Martha was preaching Christianity to the pagan people at Arles an urgent message was sent to her from Tarascon, reciting that an awful dragon called the Tarasque, whose lair was in the neighbouring desert of Crau, was killing Tarasconais, and they begged her to come and destroy it. She gladly complied, and going to his cave was able, by sheer force of lovingness (and a

¹⁷⁴ <http://dummcomics.com/>.

¹⁷⁵ Riordan, Rick. *Magnus Chase and the Gods of Asgard*. Disney Hyperion, 2017.

¹⁷⁶ Dota-frenzy.blogspot.com, “DotA Items” para. 10.

sprinkle of holy water), to subdue and regenerate the ravaging Tarasque, so that he meekly followed her into the midst of the astonished populace. (Ingersoll 171)

This story about the dragonish monster suits the “Heart of Tarrasque” (Dota2.Gamepedia.com, “Heart of Tarrasque”) item, since it is the “[p]reserved heart of an extinct monster, it bolsters the bearer's fortitude” (ibid.). This monster’s heart grants health regeneration and strength. The Tarrasque is also a creature in the fantasy tabletop role-playing game (RPG) *Dungeons & Dragons (Monster Manual II, Gygax 117)*. Other kinds of Tarasques (or Tarrasques) cannot be found in any media, therefore it is likely that the Heart of Tarrasque item could have been inspired by the *D&D* Tarrasque dragon due to the spelling.



Figure 156 - Dota 2's Heart of Tarrasque



Figure 157 - Dota 2's Maelstrom

The word Maelstrom originates from the mythological story of *Grottasöngur*, in which two slave giantesses are forced to grind out wealth on a magic grindstone for a king:

King Fródi [...] bought two female slaves, whose names were Fenja and Menja, both of great strength and stature. At this time two millstones were found in Denmark so large that no one could drag them. These stones possessed the property of grinding whatever the grinder wished. Fródi set the two slaves to work at the quern, or mill, which was named Grótti and commanded them to grind gold, peace, and prosperity to Fródi; but he allowed them not a moment's rest [...]. They then sang the song called Gróttasöngur and ceased not before they had ground an army against Fródi, so that in the night a seaking, named Mýsing, came, slew Fródi, and carried off great booty. Such was the end of Fródi's peace. Mýsing took Grótti, together with Fenja and Menja, and caused white salt to be ground in his ships, until they sank in Pentland Firth. There is ever since a vortex where the sea falls into Grótti's eye; there the sea roars as it (Grótti) roars, and then it was that the sea first became salt. (Thorpe 150)

Strangely enough, this story does not enhance the digital item Maelstrom’s lore. Maybe someone had heard the term and thought about a weapon made from chain— or chain mail and storm. The result was *Dota 2*’s Maelstrom being a “hammer forged for the gods themselves [which] allows its user to harness the power of lightning” (Dota2.Gamepedia.com, “Maelstrom”).

Midas was king of Phrygia (Greece) in the late eighth century BC. “To the Greeks and Romans, [...] Midas was primarily a character who appeared in several legendary tales” (Roller 299). This Midas of legend had a spring in his realm, “where a satyr often came to drink. It is said that the king decided to entrap it [...]. [H]e mixed wine with the water of the spring, so that when the satyr drank it fell into inebriated slumber” (Sorabella 234). Midas wished to learn “the meaning of happiness” from this satyr called “Silenos” (Roller 299), who was “said to have been a tutor of Dionysos” (ibid. 307). In Ovid’s *Metamorphoses*, Midas is presented “as the king who was foolish enough to wish that everything he touched might turn into gold” (ibid. 299):

According to Ovid [...] Midas celebrated Silenos' unexpected presence by feasting him for ten days and nights. On the eleventh day he returned with Silenos to Dionysos, who gave Midas, as a mark of gratitude, whatever he wished. Midas' choice was the ability to turn anything he touched into gold. When he proved unable to get anything to eat or drink, this gift rapidly turned into a curse [...]. (Roller 311)

Dota 2's Hand of Midas “is a weapon of greed, sacrificing animals to line the owner's pockets” (Dota2.Gamepedia.com, “Hand of Midas” para. 1). It is not a curse, but a cruel and effective item: It “[k]ills a non-hero target for 160 gold and 1.85x experience” (ibid. para. 2).



Figure 158 – *Dota 2*'s Hand of Midas



Figure 159 – *Dota 2*'s Mjollnir

In Norse mythology, Mjollnir is the hammer of Thor (see also Leeming 266). In *Dota 2*, Mjollnir is: “Thor’s magical hammer, made for him by the dwarves Brok and Eitri” (Dota2.Gamepedia.com, “Mjollnir”).

As already discussed in the previous chapter on mythical creatures, in the Chinese novel 'Journey to the West', the Monkey King Bar was a staff used by the hero Sun Wukong which could alter its size to his will (see also Shahar 399). In *Dota 2*, Monkey King’s default weapon model is a Monkey King Bar (Dota2.Gamepedia.com, “Monkey King Bar”).



Figure 160 – Dota 2's Monkey King Bar



Figure 161 – Dota 2's Shiva's Guard

Shiva is one of the principal deities of Hinduism. Wendy Doniger in her book *On Hinduism* writes: “Shiva is known as the Destroyer, and [...] death is Shiva’s specialty (Doniger 100). Shiva’s Guard in *Dota 2* is “[s]aid to have belonged to a goddess, today it retains much of its former power” (Dota2.Gamepedia.com, “Shiva’s Guard”). Shiva is a god, not a goddess (Doniger 100) and has nothing to do with freezing powers, such as Shiva’s Guard’s “Arctic Blast” (Dota2.Gamepedia.com, “Shiva’s Guard”).

6.9.3.1.2 League of Legends

In *League*, there is the “Aegis of the Legion”, which is by name very similar to *Dota 2*’s aforementioned “Aegis of the Immortal”. The *LoL* Aegis is a shield that gives +30 armour and +30 magic resistance (Fandom.com, “Aegis of the Legion”).



Figure 162 - League of Legends' Aegis of the Legion

A Null-Magic Mantle and Cloth Armour must be bought in the shop before an Aegis can be built. This is interesting since the *Iliad*’s Aegis has also been interpreted as an animal skin (Fagles et al. 623 “goatskin”), and in *League of Legends*, a Mantle made from animal skin can be transformed into a metal shield (see also *ibid.*).



Figure 163 - League of Legends' Banshee's Veil

Banshee’s Veil (Fandom.com, “Banshee”) is an item against magical damage. In the “Irish myths and sagas, the banshee [...] essentially

denotes a solitary female being of supernatural character” (Lysaght 154). This female death-messenger of noble Irish descent would be concerned with the fortunes of the family, and also with the ownership and fertility of land (see also *ibid.*). One could say that the Banshee’s Veil in *League of Legends* has similar protective powers as the Banshees of Irish folklore, as Banshees seem to be kindly protectors against unwanted events and powers.

Speidel defines berserks as follows: “Berserks—blustering, mad warriors scorning wounds and death—embody the spirit of reckless attack [...]” (Speidel 253). Snorri Sturluson in 1220 defined berserks as men who fought for Odin. They “bit their shields and were as strong as bears or bulls [...] neither fire nor iron affected them” (Sturluson 10:1964).

Greaves refer to a Roman military armour that protects the shins. They were made from metal and had a cushioning felt padding. Smith and Anthon in their *Dictionary of Greek and Roman Antiquities* write:

O’CREA, a Greave, a Leggin. A pair of greaves was one of the six articles of armour which formed the complete equipment of a Greek or Etruscan warrior, and likewise of a Roman soldier as fixed by Servius Tullius. They were made of bronze, brass, of tin, or of silver and gold, with a lining probably of leather, felt, or cloth. (Smith and Anthon 676)

The Berserker’s Greaves in *League of Legends* grant +35% attack speed (Fandom.com, “Berserker’s Greaves”).

Muramana (Fandom.com, “Muramana”) is an item probably named after a famous 16th century swordsmith called Muramasa (see also *ibid.*). It is said in a legend about Muramasa that

“[f]or the ceremony of "The Signing of the Sword" the smith donned the robes of a priest, officiating as such in what was considered no less than miraculous birth, the new blade receiving its soul through his prayers. Hence arose the legend of Muramasa. In after years, it wrought such havoc that an imperial edict prohibited the bearing of his swords except in battle. The legend related of Muramasa is, that his formula of prayer craved "that his blades be the great destroyers." Because of the excellence of his work the gods granted the petition, sending a spirit of such surpassing ferocity that, upon entering the swords, it demanded blood, and failing to receive its rightful sustenance within a limited time, drove the owners to murder or suicide. (Mumford 334)

Players can build Manamune, a sword which transforms into Muramana (see also Fandom.com, “Muramana”).



Figure 164 - League of Legends' Taric



Figure 165 – LoL's Ravenous Hydra

Hercules, or Heracles in Greek, has already inspired many writers in Graeco-Roman antiquity, as he was “probably the most adaptable, and adapted, mythological hero” due to the “range of his qualities, from prodigious strength to moral and intellectual wisdom” (Grafton et. al. 426). The second labor of Hercules was slaying the Hydra, a water snake with multiple heads that could regenerate if severed” (ibid. 524). Numerous characters in MOBAs are strong, honorable, and intelligent like Hercules, such as Garen and Lux (*League of Legends*) or Omninknight and Skywrath Mage (*Dota 2*). One might think finding a character visually inspired by Hercules in a MOBA game would be a matter of seconds. However, despite many characters being heroes with a moral agenda, not one hero in *Dota 2* seems to be related to Hercules and only few in *League of Legends* such as Taric (Leagueoflegends.com, “Taric”), who is portrayed as honorable, strong, muscular and with a healthy head of hair:

Taric is the Aspect of the Protector, wielding incredible power as Runeterra’s guardian of life, love, and beauty. [...] Imbued with the might of ancient Targon, the Shield of Valoran now stands ever vigilant against the insidious corruption of the Void. (Leagueoflegends.com, “Taric Short Bio”)

Associated with Hydra-slaying Hercules is the item “Ravenous Hydra” in *League*, which can only be purchased by melee champions¹⁷⁷, types of characters Hercules would be in game.

The Ravenous Hydra is suitable for any hero or half-god such as Hercules, who could already kill snakes with his bare hands when he was

¹⁷⁷ As mentioned in the Ludic Comparison chapter, Melees are characters with a short range, e.g., heroes or champions which might fight with their fists or axes, while “Ranged” characters have a bow or magic spells that travel quite a bit.

still a baby (see also Whiting 10) and created the Milky Way by drinking Hera's milk (see also Rutgers 245).

6.9.4 Summary

The way mythological intertextualities are used in MOBAs can be seen as genre defining. Kaminski is already saying that myths in video games in general are being condensed to actions of supernatural beings¹⁷⁸. He is also saying myths contain the element of the hero who must prove himself (see also Kaminski 113), which in video games often translates to fighting. In *League* and *Dota 2*, nothing could be truer than Kaminski's definition: There are many supernatural beings, more than a hundred for each game.¹⁸⁰ Proving oneself (through strategic decisions and skilled movements on the battlefield) is the core element of the two games.

In MOBAs, characters who are enemies by lore, can be on the same team during battles. In the lore of *Dota 2*, two opposing materials discharge energy, corrupting the races of earth. In *League*, runes contain magical energy, corrupting the world.

The followers of each force in *Dota 2* want to destroy the opposite stone (The Radiant Ore and the Direstone). *Dota 2* did not have significant lore changes like *League*, where the players used to be called summoners and were thereby integrated in the game's story.

Daniel Martin Feige, as quoted earlier, states that writing in video games has the power to make surroundings come alive even when the graphics of a game are sparse. He also writes that "intertextual findings in aesthetic media are not the exception, it is typical of aesthetic media to be entwined with other aesthetic media" ([translated]; Feige 111-112). There is not a lot of room inside a MOBA game for writing, which must be one of the reasons for the characters in MOBAs having so many sentences, dances, and visual references: they need many hints towards their lore and character through the usage of many cultural components,

¹⁷⁸ „Von Struktur und Funktion des Mythos bleibt in Computerspielen gewöhnlich nur übrig, daß er von Taten übernatürlicher Wesen handelt" (Kaminski 113).

¹⁸⁰ <https://euw.leagueoflegends.com/de/game-info/champions/> An overview for all (140 +) *League of Legends* champions. <http://www.dota2.com/heroes/?l=german> An overview for all (127 +) *Dota 2* champions.

to be appealing. Writing, music, and dances create a depth of character, it stimulates the players' imagination and makes them curious about the champion or hero they are playing. All the character-defining cultural components help to create a diverse¹⁸² and detailed picture of a playable character without hindering the ongoing gameplay. People playing a MOBA first must focus on the mechanics. But as they begin to master the gameplay, they also get to know the characters, regularly hearing the sentences they say, witnessing their dances and then maybe even reading up a little bit about their lore.

Mythical elements or creatures are ideal when the pre-existing lore of a MOBA needs to be enhanced, which usually happens when a new character is released. Choosing something "far removed" culturally becomes more difficult due to globalization. Therefore, MOBA developers often search for inspiration by going back in time, creating characters such as Zeus or Ogre Magi. Not only the characters, also the background stories of MOBAs are heavily influenced by myths, which is due to MOBAs being about heroes and champions who must prevail facing superhuman challenges. Mythical sources were used creatively both in *Dota 2* and *League of Legends* to create new beings. Abaddon allows people to play an apocalyptic angel of death, someone who can curse people and heal himself when he is attacked. Like Abaddon, Bane the Atropos gives the players insights into the world of an immortal being. Bane can feast on the vital energies of enemies, which heal him and deal damage at the same time. There are many items in *League of Legends* that are not inspired by myths, while *Dota 2* proves to be heavily influenced by mythical sources. In *League of Legends*, many names for items have been chosen in honor of faithful fans of the game and Riot employees.

Winfred Kaminski speaks of video games profanely instrumentalizing myths to increase aesthetic qualities (see also 116). MOBAs are aesthetically enhanced by myths, and MOBAs do something more than instrumentalizing them profanely – there might even be an intertextual

¹⁸² Because of the high number of different references, the chances characters could appeal to many different people might also be higher.

dialogue to be discovered: *Dota 2* for example, offers some entertaining playable characters which are both mythical and feminist: The *Dota 2* Medusa¹⁸³ is always outstandingly strong and in charge, the way she is trading her beauty for power to rescue her sisters becomes a feminist counter model to Ovid's Medusa, who is beautiful but powerless in terms of her own fate.

Mirana is a female hero, made from a story about a famous warrior, the "tiger of Multan fort". Slithice the Naga Siren is a strong female warrior with a long fishtail and two enormous swords. In *LoL* there is Shauna (Vayne), a female character inspired by Van Helsing, the vampire hunter. Vayne and her friend Frey are strong independent women who take revenge together as a team.

The playable characters could be compared to chess pieces, in terms of their ludic elements (vs. their narratives). In the two MOBA games *Dota 2* and *League of Legends* however, the characters' lore (narratives often based on myths) seems to be important for the aesthetics. In chess, we do not know who the queen's mother is and when the knight's most challenging battle was. In MOBAs, we learn such things while we are playing the game. Kaminski wrote that myths were being profanely instrumentalized in video games to increase the aesthetic allure. Yet, the creation of a feminist Medusa does not seem profane.

The heroes, champions and items that are based on myths and other cultural sources seem to be a fundamental basis of MOBAs. These characters and items add a narrative layer and fundamental depth (fans can emerge themselves in) to the ludic basis of MOBAs. Thereby, MOBAs can be distinguished from purely ludic, abstract games such as chess.

7 Esports: A Sport and Cultural Phenomenon

Michael Ruckenstein asked himself if play was aesthetic. Ruckenstein stated, "the human body in motion reaches its zenith in play"

¹⁸³ "The ancient world was still influential in Victorian times. It offered [...] historical and mythical figures famed for excesses of sensuality and power: Cleopatra, Circe, Medusa, Helen of Troy, and others" (Goetsch 129).

(Ruckenstein 219). Esports is a form of competition between professional players (1v1 or team versus team) using video games. Sang Woo Lee, Jae Woong An and Ji Young Lee, scholars from business and social studies, define esports as follows:

e-Sports, short for Electronic Sports, means: ‘recreational activity involving competition using mental and physical abilities in a virtual online environment similar to the reality’ and includes ‘various competitions and leagues involving network games’. (Lee et al. 1)

According to this definition, esports competitions challenge our physical abilities as well as our mental abilities. In esports, our brain can show its capacities. Board games such as chess and strategic esports games such as *League of Legends* and *Dota 2* allow humans to impress an audience with their mental abilities.

In 2018, the German coalition between CDU, CSU and SPD acknowledged the growing importance of esports, especially due to esports being an effective training for many abilities which are not only of importance in the digital world. Therefore, the coalition promised to henceforth recognize esports as a sport and help with either making esports Olympic or at least giving it an Olympic perspective (see also Koalitionsvertrag CDU, CSU, and SPD 48).

Esports has been featured alongside traditional sports in multinational events, and the International Olympic Committee (IOC) has explored incorporating esports into future Olympic events. Competitive video gaming will be a medal event at the 2022 Asian Games: The International esports Federation secretary Leopold Chung said in an interview with the BBC: “It won’t be possible to be an official discipline, but to be a demonstration title within the Paris Olympics” (Chung para. 8). The worlds of traditional sports and esports met in Lausanne, Switzerland, to discuss whether esports should become an Olympic discipline. In a panel, IOC president Bach and professional *Overwatch* player Jacob Lyon discussed “What Defines the Olympic Movement?” They tried to find common ground but also addressed fundamental differences that make the inclusion of computer games in the Olympic circuit difficult. Bach used to be an Olympic fencer himself and initially stated, “It’s the passion that really gets us together,” (The Esports Forum 2018: 01:08:30).

Passion, often cited as the most common mutual feature, seems to be the driving force both for traditional and digital sports.

Studies show that even though esports is still a male dominated market, a large percentage of women play esports games (Lee & Schoenstedt, 2011). Qualification often takes place online. Esports is a cultural element of MOBAs, as sports are a form of culture.

The explosion in esports viewership has also triggered a surge in debate over whether or not esports qualified as sports. [...] The arguments revolve largely around the physical demands of esports, the amount of practice required of esports players, and differing definitions of sport and leisure. However, the debate is also colored by a combination of nerd shaming and strong desires to maintain a barrier between traditional sports, such as soccer or basketball, and esports. Notably, ESPN president John Skipper bluntly stated in 2014 that, “[Esports is] not a sport—it’s a competition. Chess is a competition. Checkers is a competition. Mostly, I’m interested in doing real sports.” Ironically, these comments parallel the place of sport history within the historical field. University of Queensland social historian Martin Crotty astutely wrote in the *Journal of Sport History* that, “...it is rather easier for social/military historians than for sports historians, as very few people question the worth of looking historically at a people at war, but plenty still, regrettably, question the worth of looking at people at play. (Howard 4-5)

Esports might not necessarily need legitimization by the rest of the sporting world. Esports already exists by its own right and on its own terms: Professional esports organizations such as the Electronic Sports League (ESLgaming.com) already have created rules over the years, trained referees, created tournaments and channels for the audiences worldwide.

Esports represents equality: anyone can raise to the top, regardless of gender, mental or physical abilities. Age, status, sex, and physical handicaps do not play a role in esports, anyone who can play the game and is old enough can qualify.

The entry level is usually very broad and open to any beginner¹⁸⁴. Esports has few boundaries (with many teams forming transnationally). For example, if teams want to compete in the *League of Legends* European Championship, “[a]t least three out of the five Players on the Starting Line-up of a Team are required to be Residents of the EU Competitive Region” (LEC Rules, paragraph 1.2.3). Due to such rules, esports is often allowing people from different nations to form international teams.

¹⁸⁴ On <https://play.eslgaming.com/> for example, it is quite simple for anyone to sign up for an esports competition. There are age restrictions.

Of course, in terms of fairness, esports suffers from the same risks as traditional sports: where there are huge prizes at stake, people might try to exploit the system.

The most known esports are real-time strategy (RTS) games, first-person shooters (FPS), fighting games and multiplayer online battle arenas (MOBA) – But also mobile games such as the mobile version of *Hearthstone* are becoming increasingly popular.

The roots of esports lay in Korea. There, the e-Sports Association (KeSPA) operates as a branch of the Ministry of Culture and Tourism. The close ties between the esports-inclined corporations and the Korean government helped solidify online gaming as a staple of the nation's economy.

StarCraft: Brood War (1998), *League of Legends* (2009), *StarCraft II* (2010), and *Overwatch* (2016) – are all games in which Korea leads in tournament winnings – and they are all American-made games. Both *StarCraft* titles and *Overwatch* were made by Blizzard Entertainment.

Now esports has left its Korean cradle and is affecting culture globally. The rise of the two MOBAs *Dota 2* and *League of Legends* proved how integrated the world has become, and how changes on the Internet have comprehensively affected global culture.

Studying esports like *League* highlights Web 2.0's power in contemporary culture. No culture has been more affected by this than that of geeks. A traditionally downtrodden culture has now become a defining characteristic of the present day. National identities, the systemic propagation of culture, gender relations, as well as journalism and content creation in the Web 2.0 world are all linked in some way to this technocratic cultural surge. Esports are the bluntest representation of this. The rise of virtual spectator sport illustrates fundamental shifts in culture caused by the new internet in the twenty-first century. (Howard 146-147)

Both *League of Legends* and *Dota 2* have huge esports competitions and tournaments every year attracting millions of visitors. Competitions have structured similar to professional sports such as the UEFA Champions League, with salaried players¹⁸⁵ and regular season and play-off series.

¹⁸⁵ <https://na.leagueoflegends.com/en/featured/worlds-2018-meet-the-teams> This is an overview of the teams participating in the 2018 *League of Legends* World Championship, such as fnatic, Vitality, G2 Esports, Teamliquid or Cloud 9.

In the *Dota 2* community this is called “The International” which in 2018 had a prize pool of \$25 million USD and the 2019 prize pool reached \$34 million USD (Escharts.com, “The International 2019” para. 1).

League of Legends, on the other hand, has the World Championship, which in 2016 had a much smaller prize pool of only \$5 million USD.

The International has become one of the largest esports events in the world. Yet, *League of Legends* has a significantly higher viewership:

As for example, *Dota 2*'s main event's viewership in 2019 looked as follows:

The mark of the peak viewers simultaneously spectating the game has reached 1 million 968 thousand people – and was reached during the championship's final match between OG and Team Liquid. When looking at the average viewers instead, this figure reaches a result of 727 thousand people. Compared to the 2018 this is almost 200 thousand more – which is 37.4% in percentage terms. (Escharts.com, “The International 2019” para. 5-6)

While the peak concurrent viewers in *Dota 2*'s the International in 2019 reached 1.968 million people, in other words, almost 2 million people, the *League of Legends* World Championship Finals in 2018 reached a peak of 44 million concurrent viewers:

Headlining Riot's announcement is the fact that the finals of the tournament, which featured Fnatic facing off with Invictus Gaming, had 99.6 million unique viewers, an impressive increase of almost 20 million viewers. The match even featured a concurrent viewer peak of 44 million. For context, this reaches nearly the same highs as the Super Bowl. (Goslin 2018 para. 2)

The Council of Europe writes, “sport is a universal element in all cultures (Council of Europe 2019 para. 2)”. Therefore, they have chosen to include sport as a theme for “Compass”¹⁸⁶. Furthermore, they point out: “Young people generally are often portrayed as being full of ambitions and hopes for the world and, therefore, important drivers of cultural change [...] Their dynamism can change some of the archaic and harmful aspects of their cultures that older generations take to be immutable” (ibid.). Through the popularity of sport with young people, the Council can reach 61% of young people aged between 15 and 24 (see also ibid.). Maybe the COE should consider also reaching out to young people following esports. The global esports audience reached about “385

¹⁸⁶ COMPASS is the Council of Europe's manual on human rights education with young people. <https://www.coe.int/en/web/compass>

million in 2017” (Warman para. 5). In 2017, 33 million people watched the *League of Legends* World Championship Finals (Esports Charts (ESC) para. 3), while 20 million watched the deciding game of the NBA finals (see also Wikipedia NBA Television Ratings). 100 million people monthly (Twitchtracker.com) tune in on the streaming website *Twitch.tv* to watch video game play online. Amazon bought *Twitch.tv* for \$1.1 billion dollars (see also Johnson para. 1).

In South Korea, “PC bangs” are cafés and digital playgrounds. In a Guardian article by Simon Hattenstone, a 28-year-old maths teacher says, after playing a match, “barking instructions” to anonymous teammates: “You feel good if you’ve won a football match. It’s like that” (Hattenstone para. 18). Some players claim, “playing a team game at a bang provides a release” (ibid.). You can “hook up with strangers and share a common goal: defeating the enemy” (ibid.).

Sportive activities are one of the most universal forms of play. Different continents have their own favourite kinds of sports. European, South American and African countries enjoy soccer, while North American countries prefer basketball, ice hockey, baseball, or American football. In Asia, sports such as table tennis and badminton are played professionally. At events such as the FIFA World Cup, countries compete, and the games are broadcast all over the world. Sports can be played as a leisure activity or within a competition. According to sociologist Norbert Elias it is an important part of the “civilization process” (Sheed 19). Victory and defeat in sports can “also influence one’s emotions to a point where everything else seems so irrelevant” (ibid.).

Sport is a cultural phenomenon, and esport seems to be the same. There are many reasons to see esports on the same level, culturally, mentally, and physically, with sports. This chapter works through a list of factors that could identify esports as a sport and a cultural phenomenon.

7.1 MOBAs and their Culture of Meta, or “Metagame Expertise”

Scott Donaldson analysed play in *League of Legends* “through the lens of a binary model of expertise, outlining examples of the in-game and out-of-game practices used by players in their pursuit of competitive

success” (Donaldson 426). He is talking about a “metagame expertise” which he believes is particularly important for players of *League of Legends* (ibid.).

It is a good entry point when we want to explore what the experienced players mean when they are talking about “Meta”. “A large portion of a player’s early time spent with a video game is taken up with learning how the game system works” (Taylor 2012: 92).

Players acquire their knowledge in exchange with other players:

[...] play does not take place in a sociocultural vacuum, as players will always draw upon existing knowledge derived from previous play experiences or engagement with extrinsic resources in order to achieve success. (Donaldson 426-7)

Donaldson also wrote that players would especially need to learn “large scale cooperation and coordination” because of the “technically difficult” content (Donaldson 427).

Theorists Jakobsson, Pargman, and Rambusch in their case study of gameplay in the first-person shooter game *Counter-Strike* noted two categories of gameplay:

(1) The player’s “handling of the game”, which concerns the “physical and motorical” activities of gameplay, and (2) the player’s “meaning-making activities”, by which they mean the players’ “understanding of the game in terms of how the game is to be played, their role in the game and the culture around the game”. (Jakobsson et. al. 158)

When we play a single player game on a computer or if we play basketball alone against ourselves, just trying to better our personal score, the mastery of the controls or the mastery of our physical abilities is determining our success at the game. Once we try to find expertise related to playing this game or throwing this ball, this search for information can be seen as extrinsic to game mechanics, an inquiry about the “metagame”, referred to by Salen and Zimmerman (Salen and Zimmermann 2004: 481) as “the relationship between the game and outside elements, including everything from player attitudes and play styles to social reputations and social contexts in which the game is played” (ibid.). For multiplayer games, Donaldson calls these “forms of metagame expertise, which might be acquired alongside or after the accumulation of the basic level of mechanical expertise [...] necessary

for participation” (Donaldson 427). He makes it clear that participation in multiplayer games is only possible, when players reach out to other players to master the metagame. This allows us to assume better social skills will lead to a higher level of mastery of the metagame. On their journey to becoming top players, people are very likely spending time figuring out the metagame and fostering social connections – an assumption which is also supported by Johan Huizinga’s 1949 definition of play:

Summing up the formal characteristic of play, we might call it a free activity standing quite consciously outside 'ordinary' life as being 'not serious' but at the same time absorbing the player intensely and utterly. It is an activity connected with no material interest, and no profit can be gained by it. It proceeds within its own proper boundaries of time and space according to fixed rules and in an orderly manner. It promotes the formation of social groupings that tend to surround themselves with secrecy and to stress the difference from the common world by disguise or other means. (Huizinga 1949:13)

“Play” according to Huizinga is a social activity, it “promotes the formation of social groupings”, groupings in which the game of interest probably is discussed. Esports as “Play” might not only be “absorbing a person utterly”, esports can add a layer of material interest (prize money), which Huizinga wrote was not part of play.

It is common for premade teams in *Dota 2* and *League of Legends* to communicate in voice chats. T.L. Taylor (see also 96) notes, as in sports and other traditional games, professional players of multiplayer games such as MOBAs will endeavor to use information about their opponents to maximize their advantage. As described in the Ludic Comparison chapter: “[w]hen the identities of players are known, as they are in professional or local play, bans might be used as a means of countering a particular player’s preferred play style” (Donaldson 437).

League of Legends’ and *Dota 2*’ character pools are diverse not only due to cultural intertextualities (narrative aspects), but also because each character must be played differently (ludic aspects). *Fortnite* and *Counter-Strike* characters all have the same abilities; they can be played differently when players pick up or buy different weapons. *LoL* and *Dota 2* can be called games with a role system: players must choose a role (to be a supportive player or the one carrying the team...) and then develop a preference for a character (or a few characters), which they usually play

on that role. Players cannot extensively play all available characters, because it takes a lot of time to master one character in a specific role. The roles players must fulfil are bound to a lot of tasks, which people can almost only learn from a Meta discussion with other players. The characters in MOBAs also must be played differently depending on the countless different possible matchups – whereas every character in *Fortnite* – ludicrously - comes with the exact same abilities. Of course, players spend some time learning how to play their *Fortnite* or *Counter-Strike* character¹⁸⁷, but the connection between player and playable character is different compared to *Dota 2* and *LoL*. One might even assume, the connection between player and playable character is stronger in MOBA games.

In his ethnographic dissertation about gamers in *World of Warcraft*, Mark Chen describes the initial process of learning a new game as one of trial and error, in which new players will experiment with available combinations of items and abilities. Players will also use third-party websites (Chen 54) and interface add-ons (ibid. 56) to learn things faster and to decrease their cognitive load.

League of Legends does not have interface add-ons.

New players receive only limited assistance from the game system in developing mechanical expertise—a brief tutorial mode offers players an explanation of the basic control scheme and other basic mechanics, but little attention is given to higher strategy. (Davidson 431)

Although a recommended item build can always be seen in the shop during a game, people will still get negative feedback from other players when they follow this recommended build. This will make them wonder what else they should buy on their champions to empower them in the best possible way, new players will not yet know that their team's and the enemy team's composition both must be taken into consideration when shopping. Therefore, players must use external resources to build up their expertise:

As with a number of other multiplayer games, expertise in *League of Legends* is composed of binary elements. The first is mechanical expertise, which

¹⁸⁷ *Fortnite* and *Counter-Strike* matchups can also result in players choosing roles for themselves to organize their team. The difference to MOBAs is that the roles involve usually less tasks and players will swap roles more often during ongoing matches. MOBA players are much less likely to swap roles in an ongoing professional match.

relates to in-game elements such as interface navigation and avatar control, some of which might carry over from previous play experiences. The second form of expertise is metagame expertise, which is the awareness of and ability to negotiate the game around the game: it could be the formulation of new strategies after a patch, the use of mathematical techniques to determine the effectiveness of a particular item or ability combination, or the analysis of data sets for the purposes of improving one's in-game effectiveness. It could perhaps be theorized that without this second layer of expertise, the player will find himself or herself at a disadvantage when playing against those who are more familiar with the state of the metagame, even if they have comparative mechanical expertise. This is certainly the belief of the player base at large, as it is common for toxic behavior to arise in champion select when one player demonstrates a lack of metagame expertise by choosing an out-of-meta champion, role, or position, as it is assumed that this choice will place the team at an immediate disadvantage. (Donaldson 440)

Meta could be described as the optimal combination of champions (in every role) selected to win any given game with. Meta is “strategies”. Yet, to define the Meta term accurately, we need to ask ourselves, why striving players are constantly talking about it.

Meta exists because of the competitive balancing of the game by Riot Games and VALVE. This is done through recurring updates. As already described, there are gameplay updates or patches, where various items, buildings, champions (heroes), or abilities are “buffed” (strengthened) or “nerfed” (weakened). A buff is a change in which a character's abilities, or the power of an item is improved. By contrast, a nerf is a change in which the abilities of a character or the power of items and so on are reduced (see also Agha 33). Riot and Valve regularly patching their games forces players to constantly adapt. Constantly, new patches are applied and constantly, the players change their mind on what the best Meta (the best strategy or the best way to play the game) is.

The current Meta plays an important role in a MOBA. Players need to know the Meta to be able to determine which character they must choose in which roles and with which items and how they should play them. Successful players are aware of the Meta, and know where they can catch up on the Meta discussions, to help their team effectively. Players negotiate positions and assignments before the game begins.

Understanding standard play and how to counter “off-meta” strategies is an important part of Meta negotiation. Players engage in round table discussion in spaces such as *Reddit.com's League of Legends* Meta board, where they can discuss a particular item, characters or strategies.

“The existence and popularity of the League of Legends Meta board shows that metagaming can be a collaborative group activity” (Donaldson 437). It shall also be noted when talking about these discussions, that feedback by players both on *Reddit.com* and on the *Leagueoflegends.com* boards is read by the developers and directly influences the game. This is also true for *Dota 2* and Meta discussions on the Internet.

Metagame expertise is a fundamental component of competitive effectiveness not only for League of Legends but also for similar strategically deep and constantly evolving, multiplayer video games. Other MOBAs, such as DOTA 2 and Heroes of Newerth, sport their own deep and complex metagames, as does realtime strategy game Starcraft 2 and the first person shooter Counter-Strike. Mastery of the mechanical aspects of these games is not always enough to guarantee competitive success—if a player is to maximize his or her chances of victory in ranked play, metagame expertise must be acquired. (Donaldson 442)

The lanes in *League of Legends* have five positions: Two players go to the bottom lane, one goes mid, one goes into the jungle, one goes top. In every single game, it is already predefined, while in *Dota 2*, usually teams have three “cores” and two “supports” (or a support and a jungler) but the lanes are almost never the same. Upon the start of a match, it is usually 2-1-2 (2 top, 1 mid, 1 bot) with one support player for each of the side lanes or a jungle and a solo, but later this setup changes.

In the most common *League of Legends* Meta strategy, “the top lane acts relatively independently from the rest of the map” (Ferrari 12). The major map objective in the top half of the map is killing Baron Nashor to collect the game's strongest aura buff (adding attack power, ability power, and regeneration to every member of the team who kills him). Because a successful kill of Baron Nashor typically requires the presence of many team members, all players who have one or two major items built already will migrate top. There is little reason for the other laners (outside of the top half) to migrate toward the top of the map during the laning phase.

The middle lane player must be flexible. In the early phases of the game, the “caster” or “nuker” type characters are supposed to control the middle lane. They possess the highest damage potentials. “Unlike the top and bottom laners—who want to keep their battle lines of AI minions at roughly the centre of their lanes—a typical mid laner's goal is to push her lane equilibrium toward the opposing outer turret” (Ferrari 12). With this

pushing maneuver, the champion in the middle lane frees up some time to “roam”. During this time, he or she might collect a blue buff from the jungle or farm in the jungle, help to build up pressure in other lanes, or group up to kill the Dragon.

It is common for the top lane position to be filled by a “tank”, a character that can take a relatively high amount of damage before dying. Although this framework cannot be considered a rule of the game in a formal sense, conforming to this aspect of the metagame is at times part of the “etiquette” of *League of Legends*, therefore making it somewhat of an implicit rule at times—players who play their champions in roles they are not perceived to be useful in or by playing out of position, are often reported for poor behavior. (Donaldson 436)

Even though not playing according to the current Meta is seen as bad conduct, off-meta play styles, such as the famous lane-swap strategy, might eventually become accepted (see also Foo & Koivisto, 247).

In 2012, Korean team Taipei Assassins, understood the lane swap Meta so well that it enabled them to claim the one-million-dollar prize over other teams. “Historically, successful teams are those who are able to predict or read the Meta” (Agha 38). Of course, the playing community analysed and copied how the Taipei Assassins “played” the Meta and won the Championship. Soon the lane-swap strategy became popular among the whole community, it turned into a trend:

In League’s [LoL’s] player community, Challenger players often set gameplay trends. Since they are the best-of-the-best players, lower-level players often imitate their strategies and gameplay styles in hopes of climbing the skill ranks themselves. Hence, we assume that Challenger players are the players’ main drivers. (Adams & Walker 461)

“Challenger” players, as defined by Adams and Walker, are the best players of *League of Legends*, those who play in the highest ranks of all ranked game players.

Because what used to be an off-meta play became so popular, the lane-swap strategy started to make finals of big esports tournaments much more predictable in terms of which strategies would be played by the teams:

By the fourth League of Legends season of gameplay, the lane-swap strategy continued to persist. This created a less interesting esport to watch. To address this, Riot Games finally interfered and broke its long-standing tradition of not interfering with the Meta and various gameplay strategies (such as the lane swap). (Agha 34)

Riot reacted to this state of Meta by applying some changes that would make a lane-swap strategy inefficient for teams. This is what the Meta Change applied by Riot looked like:

First, incentivize attacking and defending turrets. The first turret taken now grants a 'First Blood' reward, but turrets are now better at defending their allied champions.

- New: "Turret First Blood" gold: +275 local, +25 global (400 total gold across the team)
- New: Turret AI has been updated, and are better at defending allied champions (coming in 6.16)
- *Second, target a lane that's ideal for fast push strategies. Bot lane's outer turret defenses are no longer identical to the other lanes, and cannon minion spawns now rotate between lanes.*
- *Fortification (temporary damage reduction buff on turrets) changed*
- Duration: 7 minutes -> 5 minutes
- Damage reduction: 35% -> 50%
- Fortification removed from bot lane turrets (we're investigating a more nuanced approach to this)
- Outer turret HP: 3300 -> 3500
- *Cannon minions now spawn differently*
- Each team gets one cannon minion per wave, rotating lanes.
- Specifically, Bot gets a cannon minion in lane at wave 3, Mid at wave 4, and Top at wave 5. This then repeats.
- Post-20 minutes, Mid has a cannon in wave 40 then both Bot and Top get one in wave 41. This then repeats.
- Post-35 minutes, all lanes have cannons in each wave. (Warr para. 8)

Professional player Krepo said about these Meta changes:

If you compare *League* players back in Season 2 to a chef, teams would make the same recipe over and over until they get it perfect - which was lane, lane, lane, group and teamfight. Every time. But as the game progressed, one recipe is not enough for your restaurant, so now these good teams, they can make 17 different recipes and they're good at all of them because they're so flexible in their approach to League of Legends. (Leagueoflegends.com, "Flipping The Script: The history of lane-swaps")

As H. L. Lynch points out, "playing a game is inseparable from taking part in community development" (Lynch 52); and this seems to be particularly true for MOBA games, when people want to play them well on a very high competitive level.

The reason why the Meta plays such an important role in *League of Legends* and other MOBAs can be related to the principles of ludus and paidia, proposed by Caillois (1961). In Caillois theory, ludus represents the aspects of a game that are about their specific rules and goals, while paidia stands for free and explorative play. Most games show elements both of paidia and ludus (see also Dormans 2).

League of Legends is built on ludic elements: the goal is to destroy the enemy's nexus. People play the game but as they are following the ludic "restrictions", they can playfully explore possible strategies. The playing community develops something like a moral code and a culture of play, a practice that is referred to as Meta or metagaming. This is when playful exploration (paidia) of strategies turns into ludus (conventions on how the game should be played) – Playful exploration plus conventions equals Meta.

Because VALVE and Riot keep updating their games, *League of Legend* and *Dota 2* never reach a static form of existence. Players will always realize something new about these two games and will need to adapt to changes that force them to think about their strategies if they want to win. DeKoven thinks companies such as VALVE and Riot change a game to "restore equilibrium" between paidia and ludus (DeKoven 520). According to DeKoven, there needs to be the possibility of experimentation (paidia) for a game to become successful, because only through paidia can the game be continuously interesting and enjoyable. If there were no paidia, gameplay could become stagnant after a while once players would have figured out the most effective strategies.

The largest impact on the Meta occurs when new game content is added, such as new champions and items. If a hero or champion is not yet in balance but slightly overpowered, it might then always be picked or banned, until it has been made more balanced through one or more patches. The website LoLCrawler¹⁸⁹ allows users to pick a champion and then display a champion's statistics versus this champion's statistics after a patch for that specific champion simultaneously, with direct links to the champion's patch changes. People can often be seen discussing patches on the Internet (Reddit.com, "Patch 9.20 Discussion").

A "Culture of Meta" is typical of MOBA games. Meta changes (caused by patches) seem to add to the MOBA experience by making them more difficult, therefore more exciting, and therefore more of a social

¹⁸⁹ LoLCrawler is implemented in PHP, nodeJS15 and C#. Graphing is done with HighCharts, a charting library written in Javascript (<http://lolcrawler.cs.wpi.edu/>).

experience, because people are in need of other people when they want to discuss the current Meta.

While players participate in the Meta discussions, some of them might dream to become professional players. Players might have idols. Most MOBA fans in a stadium are themselves players (and therefore probably engaged in the current Meta) which a study featured by Goldmansachs.com seems to suggest:

[T]here are over 2.2bn active gamers globally. Today, the eSports audience represents just 5% of the total online gaming population, which suggests that there should be plenty more runway for eSports audience growth. (Goldmansachs.com, Merwin et al. 8)

Also, an article on *Venturebeat.com* by Andrew Paradise suggests that esports viewers can only know *Twitch.tv* (and watch games or esports competitions there) if they are gamers:

Three core elements are contributing to the esports industry's rise as the next major spectator sport: streamed competitions with organized leagues, professional players that can be viewed anywhere, and live events in major offline sports venues. If you want to see how this plays out in real time, there's no better place to go than Twitch, where people from all over the world can tune in and watch gamers, or "streamers," play video games. If you aren't a gamer you may be unfamiliar with Twitch, but as the largest livestreaming platform in the United States, it's rapidly becoming a household name. (Paradise para. 8)

A report by Newzoo stated that 40% of the people watching esports "do not play the games that they watch" (Newzoo, "Why sports brands want to be in esports", page 5), which means that 60% of the viewers do play the games they watch.

The Meta is a game of social skills. Playing the metagame seems to be crucial for players who want to rise to the ranks of the world's elite in esports.

7.2 Tournament Mode

Professional MOBA leagues typically have seasons (e.g., "Spring" or "Summer", LEC Rules, paragraph 6.3). In Riot's *League of Legends* World Championship Series for example, ten teams play two matches per week (18 overall) for about nine weeks during a season. Each Team will face each of their opponents twice per split (LCS Rule Set 2019, 1.3.1).

Teams are awarded circuit points if they succeed at their regional

playoffs (LEC Rules, paragraph 6.3). The finals tournament held in varying locations around the world has a Group Stage double round robin, where each of the teams in the groups play two single games against each group opponent.

The best teams from the Group Stage enter the Finals Bracket, where eight teams play in a single elimination, best-of-five series to determine the World Champion:

Playoffs. This phase consists of a three-round single-elimination tournament among the top six (6) Teams from the Regular Season Split, seeded according to their Regular Season rank determined by Match winning percentage. Each round of the playoffs will consist of best-of-five (Bo5) Matches. (LCS Rule Set 2019, 1.5.2)

Becoming a world champion requires a team to win nine games against three of the world's very best teams.

This qualification system compares to other sports such as soccer, with tension building up until the season's winner is determined. Very good teams could fail in their regionals; viewers can follow the action for months. There is the potential for exciting comebacks and immense failure.

7.3 Skillshots & Complexity

Both in *League of Legends* and *Dota 2*, players can have their characters attack targets automatically. However, both games also have various types of "skillshots": characters' abilities that must be manually aimed and pointed at or towards a target to successfully hit it. Skillshots can have different geometrical forms, such as straight lines, arches, or circles. Skillshot abilities can be compared with skills in traditional sports: "skillshots are similar to the pass of a quarterback, whereby the ball travels according to the way in which it is thrown" (Agha 45). The player who uses a skillshot must predict the moving target's next location. A player's use of skillshots in esports is an important factor for his or her overall skill at gameplay. A player's champion or hero is an extension of the player's body: "Moves made outside the game, through mouse clicks and keyboards, impact the in game real time actions and the interactions between champions' skillshots" (ibid.).

When we look at casual soccer players and professionals, their abilities to skillfully shoot a goal differentiates them from one another. In this way, esports skillshots are no different from sport. They are making audiences cheer in esports and sports in the same way for the same reasons. A “large proportion of esports spectators play some of the games themselves” (Hamari & Sjöblom, 2017). If you an amateur soccer player, you can still understand what takes place in the game and be excited by it, and the same applies to MOBA games: All strategic thinking in the match and the team’s cooperation and the skillshots must sum up to create one perfect moment of victory. *Dota 2* and *League of Legends* are among the world’s most popular esports games: “The MOBA genre boasts some of the most popular games in the world, as well as some of the most popular Esports titles” (Everson para. 4) and they are both MOBAs. Just as a popular sport like basketball or soccer, they are easy to understand but skillfully playing them on the highest level is almost impossible to imitate. Previous research has revealed that appreciating a professional player’s skills is a significant motivational factor in sports (see also Milne & McDonald, 1999). MOBAs - similar to traditional sports - have a simple goal (destroy the opponents’ main structure vs. shooting a goal). The complexity of the execution of that goal provides enjoyment. MOBA and traditional sports have obstacles stopping players from accomplishing what they set out to do, and the players generate excitement among spectators who watch them overcoming these challenges:

The simplicity in the goals of both basketball and MOBA games makes them fun to watch. If you're a poor basketball player you can still understand what takes place in the game and be excited by it, and the same is true of MOBA games. You can come in with a small amount of outside knowledge and skill and not only understand what takes place in a game but enjoy it. That enjoyment is the key to success in both. If you asked ten different people what excited them about the sports they watched, you will probably get ten subtly different answers. Be it seeing a perfect timed three-point shot, or a well executed gank, what's the same is that there is something there for you enjoy. (Everson para. 3)

Spectating traditional sports provides ideas on how to perform well, but since they are more physical, outdoor practice is required to acquire new skills. Esports focuses on strategy and critical angles, therefore viewers can gain a lot of vital knowledge by simply watching professionals play,

but at the end of the day, just as players must go to the playing field to practice in traditional sports, players need to go to the maps on the servers to practice.

For esports, Agha even states skillshots “represent the single greatest difference between a casual and professional player” (Agha 46). Players must train regularly and be in exceptional mental and physical shape to be among the “top .00001% of the *League of Legends* community due to the way in which they utilize skillshots in game to achieve the highest ranking of [the] ‘Challenger’ [the league]” (ibid.). Most esports titles are “incredibly complex and take hundreds of hours to grasp” (Taylor 2012).

7.4 Prize Money & Salaries

The highest esports prize pool is often “higher than in traditional sports” (Kim, Se Jin 16). The earnings of professional gamers consist of salaries and prize money. Researchers are talking about players being paid “six figure salaries with included benefits” (Howard 146) by their gaming team - and receiving prize money.

They travel internationally, wear jerseys, appear in popular ads, and sell out venues. “Government departments regulate esports leagues, and pros get athletic visas to work in foreign countries” (Howard 146). Renown mass media are no longer ignoring esports and write about it - especially about games such as *League of Legends*, *Dota 2*, *Overwatch* or *Fortnite* - not any more as a novelty or ephemeral trend, but as a part of our everyday cultural life. For example, the New York Times showed movement patterns of LoL players (Girantikanon et. al. para. 1).

Prize money in *League of Legends* comes directly from Riot Games, but fans can contribute to the prize pool by purchasing tournament specific items such as skins and wards. In 2016, the overall prize money was \$5,070,000.



Figure 166 - Fan Contribution at League of Legends World Championship 2016

The annual official *Dota 2* tournament, run by developer VALVE, broke its own prize pool record for the sixth year in a row (see also Rose 2018 para. 1).

VALVE awarded a base prize pool of 1,6 million Dollars, while the fans contributed 23,9 million Dollars by purchasing a “Battle Pass” (Dota2.com, “The International Battle Pass”). The Battle Pass is a virtual book for collecting in-game items. The total prize pool was \$25,532,177, with the first placed team alone taking home \$11,234,158.

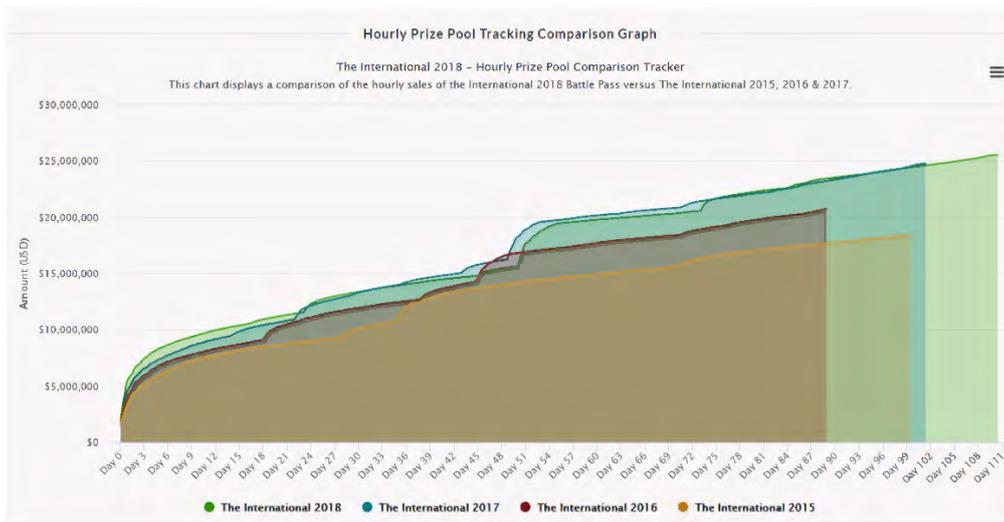


Figure 167 - Dota 2 The International Prize Money Comparison Tracker¹⁹¹

7.5 Sponsorship

Additionally, to the *League of Legends* WCS and the *Dota 2* International, there are more esports tournaments, for example the *ESL One Dota 2*. Just like sports leagues in the world of soccer or basketball, the Electronic Sports League’s *ESL One* has sponsors who are providing prize money or equipment and services. *ESL One* lists Intel, Mercedes Benz, Vodafone, Alienware and DHL as partners (*ESL-One.com*, “*Dota 2*”).

On September 18th Riot announced that Mastercard had signed on to become a global sponsor for *League of Legends*’ esports for multiple years (see also Takahashi 2018). In the Mastercard Press Release, *League of Legends* is presented as an esports title featuring

14 professional esports leagues, 113 professional teams, and over 850 salaried athletes worldwide, overseen and operated by Riot Games. *League of Legends* regular season viewership averages 90 million hours-watched live worldwide. (Mastercard.com, “LoL Press Release” para. 8)

“I have attended the events, and the atmosphere and fandom is on par with anything,” said Emily Neenan, Mastercard’s Vice President of global consumer marketing & sponsorship, in an interview (Takahashi para. 8). “That is one of the reasons why we are super excited. At Mastercard, this is a brand-new audience. There was no way we could deny this is where we need to be.” (ibid.). Already in September 2018,

¹⁹¹ <http://dota2.prizetrac.kr/international2018>

Mastercard offered tickets to the Opening Ceremony Rehearsal viewing and behind the scenes tour for the *League of Legends* World Championship in November 2018 on priceless.com (Mastercard.com, “Mastercard Debuts Priceless Experience”).

7.6 Venues

The 2014 *League of Legends* World Championship Finals (also referred to as “Worlds”) “attracted 40,000 fans to the Sangam Stadium, built for the 2002 FIFA World Cup Korea/Japan” (Kim, Se Jin 26).

In 2016, Riot Games’ *League of Legends* World Championship was held in the United States, and the primary venues were Madison Square Garden and the Staples Center, the home stadiums for the National Basketball Association (NBA) and the National Hockey League (NHL) (see also Kim, Se Jin 15; Rozelle 2016).

7.7 Clubs

Since the economic growth potential for esports reached a certain point, more and more sports clubs have been investing. Ahiza Garcia wrote on CNN Business in 2016 that the Philadelphia 76ers and the venture firm NextEquity acquired majority stakes in two leading esports franchises, Team Dignitas and Team Apex (Ahiza 2016). “Thus, the Philadelphia 76ers were the first American sports organization to obtain a professional gaming team” (Kim, Se Jin 27).

7.8 Fitness & Training

For most esports athletes, physical training is a must:

With the League of Legends world championship in full swing in South Korea, where tiny margins of performance make the difference between progression and elimination, many players enjoy the traditional accoutrements of sporting professionals, such as exercise regimes and eating plans. (Cocozza 1)

In July 2018, the worlds of traditional sports and esports met in Lausanne, Switzerland, to discuss whether esports will become an Olympic discipline. The event was organized by the International Olympic Committee (IOC) and the Global Association of International Sports Federations (GAISF). In a video of the panel discussion, the Croatian Olympian Ana Jelusic said: “[I]n the end it’s dedicating your time and

your effort and to some extent your well-being to the pursuit of excellence in whatever you are doing” (The Esports Forum 2018: 6:36:18). Dario ‘TLO’ Wunsch, a professional *StarCraft II* player, shared Jelusic’s attitude. He said: “[I]f I take care of my body and train hard physically and diet and have a good sleep schedule, I’m going to be a stronger player as well” (ibid. 6:43:00). Professional gaming for him demands a high level of discipline in all facets of everyday life, including a healthy diet and sleeping habits. As we can see, athletes at the panel emphasized their dedication to what they are doing. The traditional and digital athletes at the panel agree they must self-improve their bodies and minds to the best of their ability.

In many fast-paced games, which esports titles usually are, it is less likely for players to keep up with the world’s elite after they reach a certain age. Joseph J. Thompson and his team analysed the influence of age on performance using a dataset of 3,305 *StarCraft II* players, aged 16-44. They found that “age-related slowing of within-game, self-initiated response times begins at 24 years of age” (Thompson 1).

7.9 Teamplay & Cooperation

Cooperation is crucial for winning MOBA games. As in many mental or mathematical sports, “snowballing” rules built into the genre punish the underdog with negative feedback (Lantz 2012), meaning that each individual death of a team’s player grants gold to all opponents. Making “lone wolf” decisions without the team leads to situations where “the numerical statistics of the hero characters are unbalanced in favor of the opposing team” (Lantz 2012).

It can be argued that *Dota 2* is even more team oriented than *League of Legends* is. The presence of a teleport scroll, which gives you a teleport spell to several friendly structures on the map, and later boots of travel, which allows players to teleport to minions and allied heroes as well, makes team fights more frequent.

Of course, *League of Legends* [...] is “explicitly team based”, even when teleporting on the map is not as frequent (Kim, Young Ji, 3). “Neither

team is inherently more powerful than the other, making teamwork a key factor in winning” (Ferrari, 13).

7.10 Esports as Korean Culture

In her book, *Raising the Stakes* (2012), T.L. Taylor noted that geek culture places a high social value on refined skill, typically in the realm of science, technology, or gaming (Taylor 111). This culture has its cradle in Korea, where gamers have become celebrities that people look up to long before gamers became celebrities in the Western world. “Many of the conventions of modern esports – gaming houses, arenas, formalized leagues, and corporate sponsorships – are products of Korean innovation,” writes Howard (43). He also explains Korean success in esports and *League of Legends* with

[...] a cultural affinity for rapid changes that reflects the economic shifts after the Korean War and the rise of gamers as distinct celebrities in Korean culture, which helped push geek culture in a new, more mainstream direction. This, in turn, helped create the foundations of a new kind of masculinity that placed value on technical skill and knowledge in gaming, rather than traditional athleticism. (Howard 35)

Since 2010, according to Jin, “gaming had become entrenched in Korean culture, and unlike almost anywhere else in the world, Koreans who are good at playing digital games are highly regarded...” (Jin 59-60).

Between 1998 and 2012, Koreans were dominating the esports world in Blizzard Entertainment’s *StarCraft: Brood War* (1998) and *StarCraft II* (2010). Howard writes “[m]ore Korean players earned prize money at tournaments than any other country” (Howard 36). He also explains, why Koreans adopted esports so well:

Post-war Korea set a precedent for rapid industrialization, adaptation, and change in its economy and infrastructure. It is this demand for rapid adaptation that trained Korea for the adoption of other new technologies such as broadband internet, smart phones, and esports. (Howard 36)

The Korean esports scene was not built on a team game or MOBA. It was built on *StarCraft: Brood War*, a game largely played 1v1. The team elements of *League* could have played a role in its rise to prominence, since Korean youths could already meet in “PC Bangs” without having to go separate ways when *League* was released:

The original pc bangs were [...] internet cafes and hubs for Korea’s online stock traders. However, the pc bangs of the new millennium quickly became

hubs for online gaming that kept large numbers of computers and copies of various games on hand. Most importantly, pc bangs allowed customers to play for an affordable hourly fee, which was quite often affordable to young people who were still living off their parents' generosity or part-time employment. (Howard 39)

To play *League*, people had to mobilize their friends and form teams. This factor could have helped with “mobilizing more of a region’s populace” giving esports “access to more players” (Howard 39).

Many fans and professional players feel suppressed by the Koreans’ esports skills. This is “playing into stereotypes about Asian gamers and creating several esports-specific stereotypes about Koreans” (Howard 46). Korea won five *League of Legends* World Championships. The number of Korean teams playing in the WCS is even on the rise, which can be devastating for North American fans on one hand, but on the other, this is also connecting American fans in a united and constant cheer for the underdog. Fans are constantly discussing whether the skill gap between Korea and the West is opening or closing. “Discussing the gap” has become a cultural theme, with everyone, from players to commentators to journalists to the parents of players and team owners discussing it everywhere constantly. Journalist Cabra Maravilla dedicated an article to this topic on Dotesports.com, saying that:

The gap between regions has become one of the most recurring topics in *League of Legends*. Whenever international competitions happen, we are bound to see plenty of pros, analysts and even journalists discussing the topic. While they all make valid and reasonable points, there’s a ridiculous dogma often spawning. That is, of course, the idea that Koreans can’t just be better. Yiliang “Doublelift” Peng, just to cite an example, often repeated the idea that he was sure someone like Lee “Faker” Sang-hyeok exists in every region, he just needed to be found and nurtured in the right way. This is, almost certainly, false. (Maravilla para. 1)

The debate about the skill gap could reflect people’s fears. Esports fans might not want to see their passion ridiculed by an increasing dominance of Korean teams. However, this struggle is not inherent of esports alone, probably it is a phenomenon in different sports and their surrounding fan culture. From Formula 1 to horse riding, to skiing, tennis, basketball and soccer, there could be one nation or player repeatedly winning competitions, thereby dominating a sports scene for years or decades.

Anders Hval Olsen found that in 2014, eSport events had an average live audience close at 24,549 (+309% from 2013) and the unique viewership

on streaming services was at 9,268,000 (+854% from 2013) (Olsen 118). He also writes in his study about the origins of esports that the awareness for esports was “greatest in USA, followed by Korea and China” (ibid.). Korea was the cradle of esports and is still often seen as the most “active” esports nation by player base and viewership. However, this has long changed. Since about 2014 according to Olsen, literature review says that Korea is no longer “the number one country in regard to eSports” (Olsen 118). As already shown earlier, from about 2014 on, esports has been a global culture, shared by many different cultures.

The president of the Korean eSports Association Jun Byung-hun wishes esports to be as popular worldwide as it already is in South Korea. In an interview with *The Guardian* in 2017 he said “The support policy should be to help the water not to flood and lead them in the right path. By doing so, we can maximise the effectiveness of the regulations” (Hattenstone 2017 para. 35).

Hattenstone (*The Guardian*) points out: “Jun is not a big fan of regulation” (ibid. para. 36). The Korean government acknowledged in 2011 that the country had a problem with young people being addicted to gaming and introduced the “Cinderella law”, “which forbids children under the age of 16 from playing computer games between midnight and 6 am” (ibid. para 37). Jun is contemptuous of it. He thinks trying to restrict games “creates bigger side-effects” (ibid. para. 36). When asked by Hattenstone whether esports should be part of the Olympics, Jun answers “Yes, of course. It should have the same status as sport” (ibid. para. 37). For chairman Jun, it is not a question of if, but when: esports will be part of the 2022 Asian Games programme. “In the digital era”, says Jun, “eSports will not just be established as a major sport, but also the most beloved sport” (ibid. para 36).

7.11 Broadcasts

So why do people watch video games? Well for many of the same reasons people watch sports: “aesthetics, achievement, drama, escape, knowledge, physical skills, social, and family”. (Cheung and Huang 2)

On October 13th, 2012, “The Taipei Assassins won \$1 million by defeating Korea’s Azubu Frost in the [*League of Legends* World

Championship] Grand Finals” (Breslau 2012 para. 5). The Taipei Assassins were considered “an unheralded *League of Legends* team from Taiwan [...] facing off against a star-studded squad from South Korea” (Howard 1). In the end, the Taiwanese “finished it as champions, crushing their heavily favored Koreans 3-1 in a best-of-five series. The underdogs ruled the day” (ibid.). The *League of Legends* World Championship in 2012 almost doubled the previous record for esports, or professional competitive video gaming viewership with “1.1 million peak concurrent online viewership” (Breslau 2012 para. 1).

In 2013, the *League of Legends* World Championship Finals

[...] drew 8.2 million unique viewers for its finals, a 713% increase from the year before. In 2014, the finals drew 11.2 million, and in 2015 that number climbed to 14 million people, which was comparable viewership to game 5 of the 2015 World Series of Baseball that year. (Howard 1)

This was a notable moment for esports as a spectator sport. Esports competition on a higher competitive level had been around at least since Quake (1996), which “spawned a grassroots esports of its own, constructed and supported by enthusiastic fans” (Howard 2). Korea, the cradle of esports, broadcast professional *StarCraft* matches on television as early as 1998:

Esports that involved players from across the world were pioneered by Blizzard Entertainment’s *StarCraft: Brood War* (1998), which at its peak was broadcast live on Korean television channels in both Korean and English. (Howard 2)

Video game watching is a rapidly growing industry. Kevin Webb wrote in July 2019 on *Businessinsider.com*:

For example, Apple plans to curate a collection of more than 100 games for iPhone owners; Google is launching a massive cloud gaming platform to stream video games directly to players in 4K; and Microsoft, Ubisoft, and Electronic Arts are all offering subscribers access their massive catalogue of games. (Webb para. 5)

Parallely to the growth of the *LoL* userbase, *Youtube* appeared on the Internet (see also Howard 5). Nowadays, using *Twitch.tv*, *YouTube*, and other streaming platforms, a gamer can broadcast a game (or not just “a game” but himself or herself playing in an important tournament) with very little preparations – or watch his or her favourite player participating in a tournament.

The esports world currently circles around multiple games, such as *Dota 2*, *League of Legends*, Blizzard's *Overwatch* (2016)¹⁹² and *Counter-Strike: Global Offensive* (2012). Matches in these games are broadcast internationally to audiences that number tens of thousands of live spectators and millions online. For example, on January 28th 2018, 1.09 million people watched the *Counter-Strike: Global Offensive* Team C9's victory in the ELEAGUE finals (see also Miceli para. 9).

Broadcasting can be seen as a live individual television program, where people are willing to watch the plays and learn from the broadcaster while they can communicate with the broadcaster. Joining a program is almost as simple as switching on the TV, it is just the computer and opening a streaming platform website instead.

For important tournaments, organizers will hire popular commentators to attract more viewers.

Esports has created the shoutcaster as a new type of Internet personality. As for example, Tobi Dawson regularly casts *Dota 2* matches and has over 200.000 followers on Twitter¹⁹³. A good shoutcaster should probably be able to explain a complex game both to an insider and someone new to watching the game.

Some popular streamers hopped from *League of Legends* to *Fortnite*, especially in the first half of 2018 (Reddit.com, "Streamers quit LoL"). The "hype" for a new game could bring streamers new followers and therefore more income. Streamers, just as celebrities in other sports, use their outreach for charity events:

A month after snagging the \$1 million prize at a Pro-Am *Fortnite* tournament and donating his share of the winnings to the Alzheimer's Association, Tyler "Ninja" Blevins helped GuardianCon raise \$2.7 million for St. Jude Children's Hospital (Gutelle para. 1)

The rise in popularity has also resulted in a rise in the visibility of esports: "Esports journalism is now represented on large websites such as ESPN" (Howard 4). Big journalistic platforms give investigative insights; for example, *ESPN* had an article by Jacob Wolf, containing information about payment disputes between streamers and Riot Games (see also

¹⁹² *Overwatch* League viewership statistics can be found on Esportsobserver.com (Miceli: 2019, "Overwatch").

¹⁹³ <https://twitter.com/TobiWanDOTA>

Wolf 2016). Live streaming has become the number one way in which esports leagues, shoutcasters and players interact with their community (see also Edge 1). A study conducted by Hamilton, Garretson, and Kerne in 2013, found the number one reason people started watching live streams was to improve their own play (see also 5).

Publishers can integrate tools in their game, which enable casters to show an individual player's perspective or the ongoing scenario from a different perspective, tools, which both VALVE and Riot provide. Riot additionally encourages people to become streamers of their game by offering a beginners' guide to streaming (Leagueoflegends.com, "Beginners Guide To Streaming").

Alongside their biggest event The International, VALVE added a big update to "STEAM Broadcasting" (Dota2.com, "The Main event with new STEAM broadcasting"). Inside this tool, viewers can see markers for match starts, first bloods and team-fights on a timeline. STEAM Broadcasting allows users to rewind as soon as they join the stream, allowing anyone to "jump back and forth through the action" (ibid. para. 2). VALVE's STEAM Broadcasting also allows people to gather with an endless amount of other people in a chat room and watch The International and other events together (ibid. para. 3).

This functionality could be compared to the experience in *Twitch.tv* (where people can watch together and communicate in a chat), but *Twitch.tv* streams cannot be rewound¹⁹⁴.

7.12 Summary

The MOBA genre has a strong potential for a competitive esports scene. Not only do *League of Legends* and *Dota 2* have leagues and tournaments, the esports environment developed naturally. MOBAs can drive organized competition. Built-in anti-cheat tools and the possibility to re-watch a match can help to maintain fairness - on a top-level, referees are required. Imbalanced matchups add randomness, which makes constant patching necessary. Fairness and balance are key factors to a competition that is fun to watch and to play. Culturally, esports is highly

¹⁹⁴ Youtube also allows people to rewind their live streams and there is a chat.

interesting due to its outstanding inclusiveness. Age restrictions can play a role, but apart from that, competitions are usually open to people of any sex or race. This results in esports often being a quite fruitful and usually exceptionally peaceful clash of cultures.

8 Mental Health & Wellbeing

The chapter on trolling has already shown that *Dota 2* and *League of Legends* are not fun if people do not play their games constructively. In this chapter, an attempt is being made to look at mental health issues and wellbeing specifically in correlation with *Dota 2* and *League of Legends*.

8.1 Social and Antisocial Behavior

Hull, Draghici and Sargent published a psychological longitudinal study in 2012 on risk-glorifying video games and reckless driving. They pointed out the important implications video games can have due to their extreme popularity:

[B]ecause video games are extremely popular (half of all respondents reporting that they play mature-rated games at least occasionally and a third reporting having played the specific game of Grand Theft Auto III), even small individual effect sizes can have important implications at the population level. (Hull et al. 252)

In a longitudinal study on video gaming and children's psychosocial wellbeing, run by Lobel et. al., the scholars mention, "video games have rapidly become a universal aspect of child development" (Lobel et al. 884). This is reminiscent of Hull et. al., who explained how the possible influence of video games on children could — due to the games' popularity — have a noticeable impact at population level, even if the effects would be small.

Granic, Lobel and Rutger from the Developmental Psychopathology Department and Behavioural Science Institute at Radboud University Nijmegen took a close look at the benefits of playing video games. Their research found video games hold potential "for interventions that promote well-being, including the prevention and treatment of mental health problems in youth" (Granic et al. 76). Yet, the team's 2014 research also showed "there are very few video games that have been developed with these aims in mind" (ibid.). Therefore, they suggested "[g]iven how enthralled most children and adolescents are with video

games” (ibid.) a multidisciplinary team of psychologists, clinicians and game designers could develop genuinely innovative approaches to mental health interventions (see also ibid.). We can see from their suggestion that there may be many opportunities for video games in treating mental health that have not yet been explored.

Several studies in this chapter discuss “age-appropriate violence” in video games, wherefore we should first have a look at some of the available age ratings for *Dota 2* and *League of Legends*. The USK (“Unterhaltungssoftware Selbstkontrolle”) is an age-rating entity in Germany which rates both *League of Legends* (USK *League of Legends*) and *Dota 2* as “USK 12” (USK *Dota 2*), denoting players who play the games should be 12 years of age or older.

League of Legends is rated “T (Teen 13+)”¹⁹⁵ by the ESRB. There is no ESRB rating available for *Dota 2*.

In a study by Jay G. Hull et. Al., the video games *Spiderman II*, *Manhunt* and *Grand Theft Auto III* are considered violent and risk-glorifying (see Hull et. Al. 6). In the ESRB (Entertainment Software Rating Board in the United States) database, *Spiderman II* is rated E (Everyone) or T (Teen 13+), depending on the platform. Both *Manhunt* and *GTA II* are rated M (Mature; 17+). Although the study did not look at *Dota 2* or *League of Legends*, they looked at *Spiderman II*, which we could say has a similar rating — *Spiderman II* being rated between “Everyone” and 13+, *Dota 2* and *League* being rated USK 12 and ESRB 13+ respectively. Hull and his team’s findings support their hypothesis that:

[...] play of mature-rated, risk glorifying [MRRG] video games [such as *Manhunt* or *GTA II*] can alter self-perceptions of personal characteristics, attitudes, and values with broad consequences for deviant behavior, including alcohol consumption, smoking, aggression, delinquency, and risky sex. (Hull et. Al. 27).

In the study led by Hull, Draghici and Sargent, the scholars found “game play [also in this study, mature-rated, risk-glorifying games were the

¹⁹⁵ <https://www.esrb.org/ratings/32211/League+of+Legends/> The rating “T” is explained as follows: Content is generally suitable for ages 13 and up. May contain violence, suggestive themes, crude humor, minimal blood, simulated gambling and/or infrequent use of strong language”.

focus] was more predictive of being pulled over by the police than [...] parenting practices” (Hull et al. 252).

Dota 2 and *League of Legends* are neither mature-rated, nor risk-glorifying. Instead, the opposite is the case. The two games must be played very carefully and strategically, and attacks should only be launched if they are likely to be successful, such as in chess where it is often not advisable to sacrifice a piece — wherefore the findings of the study do not apply to *Dota 2* and *League of Legends*. However, some of Hull et al.’s findings do apply:

Interestingly, play of non-MRRG [mature-rated, risk-glorifying] games would seem to confer a protective effect insofar as participants in this category reported lower levels of a variety of deviant behaviors relative to their non-game-playing counterparts. (ibid.)

According to Hull et al. ’s study, *Dota 2* and *League of Legends* are both evidently non-MRRG games, wherefore they might be able to protect players from deviant behaviors, **since players who played non-MRRG games showed lower levels of deviant behaviors relative to non-gamers.**

League of Legends and *Dota 2* are highly competitive games. Lobel’s team specifically took a closer look at declines in prosocial behavior in relation to children’s preference for violent, cooperative, or competitive games. The study found:

[...] gaming as a general activity, and violent video gaming more specifically, were neither associated with a rise in children’s externalizing problems nor with a decrease in prosocial behavior. Finally, while neither cooperative nor competitive gaming were associated with changes in prosocial behavior, frequent competitive gaming among children who played video games for approximately eight and a half hours or more per week was associated with declines in prosocial behavior. (Lobel et al. 893)

For this thesis, it is important to note they found a certain risk of a decline in prosocial behavior when the children played competitively for more than eight and a half hours or more per week. However, the children who were interviewed in this study were between 7 and 12 years of age, and on average between 9.22 and 10.24. Therefore, they would have been too young to play *League of Legends* and *Dota 2*. Additionally, the study

does not mention these two games¹⁹⁶. The games mentioned were rated M (17+; *Halo*¹⁹⁷ and *GTA*¹⁹⁸) and E 10+ (*Minecraft*¹⁹⁹). *GTA* is not a competitive game, while *Halo* and *Minecraft* can be played competitively. Since 17+ games were being discussed with children aged 7 to 12, it is possible that *Dota 2* and *League of Legends* were discussed as well. The children in the study were asked for their favorite video games, and *Dota 2* and *League* were never mentioned in the study (see also Lobel et al. 888). It would have been helpful for other researchers if the study had listed the games mentioned by the children, and how often the children had mentioned each game. Because *League of Legends* and *Dota 2* are very popular and free-to-play, it is not unlikely some of the children might have mentioned them. However, since the games do not appear in the study, it is hard to draw conclusions, wherefore other studies should be taken into consideration, possibly studies with an even longer time period. Lobel et al. ran their study at two points in time, one year apart (ibid. 884) — whereas Sarah Coyne et al. ran a study over a five-year period across adolescence. The team investigated the direct relationship between violent video games and externalizing (e.g., physical assault, lying, defiance, truancy, substance abuse), as well as prosocial behaviors (empathic concern and benevolence²⁰⁰; see also Coyne et al. 1870). The study sets out with many more participants: “488

¹⁹⁶ These are the games in the study and the way they were rated: “In coding games as being violent or not, violent games included titles ranging from mild cartoon violence such as Super Mario Bros.— and titles with more graphic violence—such as games from the Halo, Call of Duty, and Grand Theft Auto franchises. There was some discussion regarding Minecraft (frequency: T1 = 16; T2 = 45). In the reported analyses, Minecraft was not classified as a violent video game (despite the game allowing players to fend off “zombies”). We also reran the analyses with Minecraft coded as a violent video game: The pattern of results remained the same in the externalizing problems model, and in the prosocial behavior model a main effect of violent gaming was observed, such that violent gaming at T1 was associated with an increase in prosocial behavior” (Lobel et al. 892).

¹⁹⁷ Players in *Halo* fight a war between humanity and aliens. In ludic terms, the game is a strategic arena shooter, in which players spawn on equal footing and must control weapons, powerups and positions on the map (as in *Unreal* or *Quake*).

¹⁹⁸ The games of the *GTA* franchise always evolve around a criminal underworld. Players are gang members who must commit crimes to rise through the ranks. The criminal acts are carried out without remorse or consequences.

¹⁹⁹ In *Minecraft*, players can create and break apart a three-dimensional world made of blocks. In a competitive mode, players can fight against each other and must find their own building supplies and food.

²⁰⁰ Coyne and her team define benevolence as “a value that emphasizes the intrinsic desire to preserve and enhance the welfare of others” (Coyne et al. 1871).

families with a child between the ages of 11 and 16 [51% male, average age (M-age) of child at Wave 1 =13.83, SD= 0.98]” (ibid. 1871). The families were “primarily recruited using a telephone survey database which contained 82 million households in the US [...] randomly” (see also ibid. 1872). These few facts about their procedure show, that they have conducted a larger study which probably covered a broad range of American families. They asked participants to first list their three favorite video games and rate how frequently they played each game on a scale from 1–5 (see also ibid. 1872). Afterwards, the 97 games were rated by 320 independent raters (58% male, M-age = 22.50, SD = 4.40) who “were provided with [...] examples of physical aggression. Ratings were based on a 1 (not physically aggressive) to 5 (extremely physically aggressive) Likert scale” (ibid.). Highly relevant to this thesis is Coyne and team listing the following games in the procedure notes as rated highly-aggressive after they were mentioned by the participants and rated by the independent raters, including: “*Grand Theft Auto*, *Assassin’s Creed*, and *Halo*” (ibid.) — all of which are M-rated (17+) by the ESRB. After the rating process:

A video game violence exposure score was obtained by multiplying content ratings for each game by frequency of game playing, thus giving more weight to games that were played more frequently (ibid.)

This study does not give a full list of all games and their ratings. However, we can assume *Dota 2* and *League of Legends* (rated 12+ or 13+) would not have been rated highly aggressive (often) since they were not mentioned by the researchers, and their rating is four to five years of age below *GTA* or *Halo* (17+). We can also assume not all independent raters would rate the two games as “nonaggressive” since rating entities (USK and ESRB) have not done so either — probably due to the two games being about two teams fighting. Coyne et al. found “[h]igher amounts of playing violent video games was related to lower levels of empathic concern and benevolence 2 years later” (ibid. 1875) and five years later there also was “a significant indirect association through benevolence” (ibid.) showing “violent video game play negatively impacts benevolence, ultimately leading to a reduction in prosocial behavior” (ibid.). Because of the above, the findings of the study might,

to some degree, apply to *Dota 2* and *League of Legends*. Yet, since there is no specific mention of the two games, and therefore no specific correlation between them, aggression, or benevolence, it is again rather difficult to come to a clear conclusion.

8.2 Addiction

As we have seen in previous chapters, *Dota 2* and *League of Legends*, are inexhaustible in their capacity for learning and teaching teamwork — the ludic framework of these games requires people to work on their teamwork abilities if they want to win. However, since players of *Dota 2* and *League of Legends* are required to learn constantly (Meta, skill shots...), players might feel²⁰¹ the time they have already invested is too precious to abruptly quit the game forever, often called the “sunk cost fallacy²⁰²”. Marijke Van Putten et al. describe the sunk cost fallacy as “the tendency to continue an endeavor once an investment in money, effort, or time has been made” (Van Putten et al. 33). The sunk cost fallacy can take us down a path we should no longer follow in many areas of our lives – and is also a psychological effect closely connected to addiction. The World Health Organization defines “gaming disorder” ...

[...] in the 11th Revision of the International Classification of Diseases (ICD-11) as a pattern of gaming behavior (“digital-gaming” or “video-gaming”) characterized by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences. For gaming disorder to be diagnosed, the behavior pattern must be of sufficient severity to result in significant impairment in personal, family, social, educational, occupational, or other important areas of functioning and would normally have been evident for at least 12 months. (WHO.com para. 1)

A few studies tried to identify how many of the more than 2 billion people playing video games globally are addicted. In a study conducted in the U.S., UK, Canada and Germany, researchers found 0.3% to 1% of the general population fit the criteria for an IGD diagnosis (see also Przybylski et al.). Another study found 1.4% of Norwegian gamers could be classified as “addicted gamers”, while 7.3% were “problem gamers”,

²⁰¹ Most of us know the sunk-cost fallacy: We finish expensive desserts we dislike because we paid for them, or we might be reluctant to sell a losing stock, because that would mean to acknowledge that we made a wrong choice.

²⁰² Corina Haita-Falah has found that the sunk-cost fallacy can be found in any subject, also in “high-cognitive-ability subjects” (Haita-Falah 44).

3.9% were “engaged gamers”, and 87.4% were “normal gamers” (Wittek et al. 672). People get addicted to video games in general, but what does it mean specifically regarding *League of Legends* and *Dota 2*? In 2019, psychology scholars from Turkey conducted a study on online game addiction among adolescents (214 high school students), which included a close analysis of *League of Legends*. (Bekir and Çelik 444). First, they found a positive significant correlation between online game addiction and psychological needs (sensation seeking, autonomy, competence and relatedness), while no correlation was found between addiction and grade levels (see also *ibid.* 447). This could mean people can get into an addiction independent of their current academic success. Bekir and Çelik compared the addictiveness of *League of Legends* to *Counter-Strike* and other games — with *League of Legends* players displaying “higher online game addiction levels” (*ibid.* 449). Sensation-seeking tendencies of adolescents were suggested to maybe “direct them towards online games as a result of isolation from the physical world” (*ibid.* 450). Since all adolescents have a higher tendency to seek out sensations, this could mean it is not unlikely they would play video games as a way to be entertained and to find an adventure or a rewarding or exciting experience — and it could be more likely adolescents would play games when they are isolated from the physical world, such as during a pandemic or when moving to a new city. Bekir and Çelik conclude with an insightful discussion: because of the positive cognitive, motivational, emotional and social effect of video games described in the the study by Granic et al., video games can be “regarded as a means for fulfillment of psychological needs” (*ibid.* 450). One psychological need they mention is the need for success, which “may predict online game addiction, as individuals may fulfill their need for success via games” (*ibid.*); they also identify the need for relatedness partially with games as a result of adolescents “nonfulfilled need for relatedness in their daily lives” (*ibid.*). The findings of Bekir and Çelik indicate *League of Legends* could be a game where players can celebrate success and feel connected to other people more than in other games.

A few independent mental health tests can help people identify a video game addiction (<https://gamequitters.com/video-game-addiction-test-for-gamers/>) or a possible gaming disorder as described by WHO (<https://about.eslgaming.com/portfolio/smart-gaming/>).

8.3 Depression and other Mental Health Issues

Finally, there were research articles and studies to be found on mental health topics which specifically mentioned *Dota 2* and *League of Legends*. For instance, Zhang et al. conducted a study in which they scanned patients with internet gaming disorder (IGD subjects) with functional magnetic resonance imaging while they had to name internet gaming-related words and match control words “(matched in terms of semantic properties that affect reading speed, including word length, number of syllables per word)” (Zhang et al. 3). The results demonstrated IGD subjects showed impairment in both visual and cognitive control ability while dealing with gaming-related words. All IGD subjects in this small study (19 men) reported to play “Dota” (see also *ibid.*). This study indicates, people with a gaming disorder, can be addicted to *Dota* – it does not indicate *Dota* to be more addictive than other games.

Andy Miah published a research article in 2020 on how esports companies support their community’s wellness. The research identified 70 gaming companies, based on their prominence in the international gaming industry, and then undertook a qualitative analysis of their public, digital assets to identify evidence of policies, programs, and partnerships that aim to support the wellness of the esports community (see also Miah 1). In his study, Miah took a closer look at *Dota 2* and *League of Legends*. For *Dota 2*, he mentioned that Valve had released a feature in 2019 “which allows users to identify players they’d like to avoid being teamed up with, [...] users could then play games without the mental stress associated with these individuals” (*ibid.* 7). Miah stresses that:

[g]iven the prominence of public concern around wellness and gaming, the data reveals a relatively low prevalence of policies, programs and partnerships associated with such concerns from among the esports industry. Moreover, much of the evidence is either wrapped around Codes of Conduct or User Agreements, which are likely to be born out of the company’s concerns for litigation associated with their product, rather than the moral conduct or wellness of its community. (*ibid.*)

While there does not seem to be a fundamental and intrinsic endeavor in taking responsibility for the players' mental health at Valve Software, Riot Games has the following approach in terms of mental health:

Riot Games launched 'Learn with League' an educational program seeking to support young people to integrate their gaming activity with wider learning development. Within this program, it also partners with Australian National Youth Mental Health Foundation, Headspace. Their delivery of insights that can help players took the novel approach of integrating broadcast content during a tournament stream schedule, to reach players and audiences whilst they were already watching an event. (Miah 6)

The learning workshops and materials on www.learnwithleague.com support exactly what the findings about antisocial behavior and addiction quoted in this thesis would support: parents should learn about esports and are encouraged to acknowledge their children's gaming hobby. Children need to get recognition and not feel isolated, which helps with their need for relatedness and success, thus fulfilling social bonds in the family instead of through the game alone. A sportsmanship workshop on learnwithleague.com is offered in which children can cultivate positive and productive interaction. Another workshop is described as suitable for anyone interested in understanding how esports can improve wellbeing. In numerous videos, gamers can learn about healthy gaming and sleep habits (how many hours children aged 12–17 need to sleep (8–10) and how many hours 18–25-year-olds should sleep (7–9)). Another video explains how screen time should be balanced. The materials seem to acknowledge the problems esports can cause and help interested readers to learn about healthy gaming habits, so they can benefit from psychologically and socially beneficial aspects of esports, instead of being left alone with the risk of facing sleep deprivation or even addiction. The assets on these websites seem to have a solid scientific basis, and research partners such as the Western Sydney University, School Sport Australia or the University of Queensland are listed as partners. However, the program is still evolving around partners in Oceania. The materials can be accessed from anywhere, but the website is only in English, and the content is targeting people in Australia and New Zealand.

Professional esports organization Dignitas currently has a team participating in the *League of Legends* Championship Series (LCS). In 2017, the organization suggested Riot Games should:

[...] become associated with professional sports psychology organizations. Smaller teams may not have the resources to hire a professional sports psychologist but still have the same pressures and stresses of big-name teams. Pairing up with organizations like the Association for Applied Sports Psychology by having sports psychologists available for any player might help improve some of these issues. Alternatively, Riot could require professional teams to have a sports psychologist on the team to ensure the mental wellbeing of the players. (Dignitas Website para. 10)

Dignitas explained, that average *League of Legends* players, are “in a range with relatively high depression rates [since] up to 16 percent of adolescents between the ages of 15-17 [suffer from depression]” (ibid. para. 4). Mental health is therefore something the author says, “that affects all members of the community from professional LCS player to the random Bronze Udyr main” (ibid. para 5). It is important to note that Dignitas, a playing organization, are themselves saying the players should not be left alone due to possible health risks, such as depression.

In June 2021, the Misfits Gaming Group (MGG) announced mental health advice for their teams²⁰³ and staff. Licensed psychologist Dr. Carolyn Rubenstein explained:

“I’ve watched the organization grow exponentially over the past few years and with that the need for sophisticated mental health and well-being support. To continue to grow as an organization and within each competitive league, well-being and culture have become primary areas of focus. I’m hopeful that MGG will be a pioneer for other esports organizations to create executive leadership roles focused on mental health. (Forbes.com “Rubenstein”)

Also in June 2020, Riot Games announced a partnership with Crisis Text Line²⁰⁴ to offer free, confidential support via text messages for gamers facing a health crisis. This is, again, not a service for all players globally, but it would be highly interesting to analyse the data of this service after it has been available for one year. In 2021, Riot Games also began providing free resources for streamers to start discussing mental health with their followers (Riotgames.com “Mental Health”).

²⁰³ Most eSports teams in the biggest leagues these days have advisors for their teams, for mental and physical health and for nutrition.

²⁰⁴ Players in the US and Canada can send the message “RIOT” to 741741 for support. <https://www.crisistextline.org/>.

8.4 Monetization Algorithms

League of Legends, *Dota 2* and *Fortnite*, are using the so-called “Money Illusion” to monetize items in their shop better. Scholars Schöber and Stadtmann researched whether the “Money Illusion” phenomenon could be found in *Fortnite*:

Within the in-game-shop [in *Fortnite*], transactions are performed via a virtual currency called V-Buck [...]. Therefore, the real prices are not fully transparent, but gamers always have to convert the transaction prices into their real local currency (USD or EUR). This might lead to a kind of money illusion: travellers who visit a foreign country have some problems to convert local currency prices into their own currency. The natural intuition of whether a good is cheap or expensive is reduced to a large extent when trading in a foreign currency. (Schöber and Stadtmann 7)

Schöber and Stadtmann quote Raghurir et al., who examined the “Money Illusion” in more detail. In their study, Raghurir et al. sent students on an imaginary trip to Ireland, England, or Germany, and exposed them to three different currencies where the exchange rate ratio was at par (1:1), below par (1:2) or above par (2:1). “Approximate exchange rates were provided to participants depending on the country they were assigned to: 1 Irish Punt ~€1; UK £1 ~€2; and DM 2 ~€1” (Raghurir et. Al. 11). The students were asked to shop for groceries, and shopping in the three hypothetical countries was equally expensive. Still, the students who shopped in “Germany” (so for example with DM 50 in their hands instead of €25), underestimated the true value of the shopping list. On average they had spent €33,5 when they had, in fact, spent €47 (see also *ibid.*). Raghurir et al. also show that participants have difficulties to convert currencies when they must use a rule of thumb: if it is “divide by 2”, the participants can manage to convert correctly, but if they have to “divide by 3”, problems occur (see also Raghurir et al. 11; Schöber and Stadtmann 8). Schöber and Stadtmann conclude that:

[...] the implications for the creator of a virtual currency are clear cut. To generate a high degree of ‘money illusion’, one should

- Fix the exchange rate above pari, which is the case for V-bucks [in *Fortnite*], where €10 can be exchanged against 1,000 V-bucks (pack 1).
- Fix the exchange rate in a way that increases the difficulties of mental conversion into real home currency. While the exchange rate of pack 1 is easy to use (€1/100 V-Bucks), it is more difficult to convert V-Buck prices into EUR with pack 2 (€8.93 /1,000 V-Bucks) or pack 4 (€7.41/1,000 V-Bucks). (Schöber and Stadtmann 8)

€50 in the *League of Legends* in-game shop equals 6500+700 RP (Riot Points). Therefore, the RP/€ ratio in *League of Legends* is above par, as it is in *Fortnite*. In Steam (*Dota 2* is played through Steam, Valve Software's gaming platform), 121 "Steam points" equal €1, wherefore we can state the ratio is also above par. With Steam points, users can purchase animated avatars, profile backgrounds, and many more in-game items.

Schöber and Stadtmann describe another effect being used in the *Fortnite* shop, based on children feeling socially pressured into buying more items when they see their peers wear better "skins" (in-game wearable outfits). The Children's Commissioner Report in England has found that children compare what kind of in-game purchases other children make, and also tease them for what they can afford:

In the *Fortnite* group, children reported that friends (as well as strangers) tease each other over which in-game purchases they could afford. Because players need real money in order to buy V-Bucks, this teasing creates a sense of who is 'rich' or not at school, and players without many additional items are made to feel excluded or different. (Childrens Commissioner Report 2019 13)

In *Dota 2* and *LoL*, players see other players' skins, wherefore we can assume the social pressure described in the Children's Commissioner Report could be similar in *Dota 2* and *League of Legends*.

8.5 Summary

Dota 2 and *League of Legends* are not risk-glorifying or mature-rated, wherefore we can assume they are not altering personal characteristics with consequences for any deviant behavior. Since they are clearly non-MRRG games, they might even confer a protective effect: participants in this category reported lower levels of a variety of deviant behaviors relative to their non-game-playing counterparts.

Video games hold a potential "for interventions that promote well-being, including the prevention and treatment of mental health problems in youth, although there are very few video games that have been developed with these aims in mind. A multidisciplinary team of psychologists, clinicians and game designers could develop genuinely innovative approaches to mental health interventions.

Frequent competitive gaming *among young children* (7-12 of age), for approximately eight and a half hours or more per week, was associated with declines in prosocial behavior. (Lobel et al 893). We do not know if these participants played *League of Legends*, *Dota 2*.

Gaming is addictive, and *League of Legends* seems to belong to the most addictive of games as it seems to be an ideal game to fulfill psychological needs including the need for success and relatedness.

All the IGD subjects (19 men) in Zhang et al.'s study reported to play "*Dota*". Their study shows that subjects can be addicted to *Dota*.

Valve Software and Riot Games do a few things that may help with reducing mental health risks:

A feature has been live for two years in *Dota 2* which allows players to block other players with whom they no longer want to team up with.

In 2020 Riot Games released a free, online mental health resources website targeting people in Australia and New Zealand. Similarly, Riot Games' collaboration with "Crisis text line" is only available in certain regions. In 2021, Riot Games started providing free resources (in English) for streamers to start discussing mental health with their followers.

The in-game currency/€ ratio in *League of Legends* is above par, as it is in *Fortnite* and *Dota 2*, wherefore players underestimate the true value of the items they purchase. In all three games, players can see what kind of skins the other players have resulting in social pressure.

9 Conclusion

In the beginning of this dissertation stood Freyermuth's statement that the central audiovisual form of expression and narration of our digital culture today are video games. When people are playing games together online – e.g., playing competitively (esports) – they are experiencing intercultural exchange through the strong connectivity of online games – circumstances with a potential for highly interesting research topics. Despite this, there has not been a lot of fundamental scientific research on the cultural aspects of games. *Dota 2* and *League of Legends*, being

among the most played, and financially most successful video games of all times, already stand out compared to other games. *LoL* (2009) and *Dota 2* (2013) both came out long after *DotA* (2002) had already been there – which raises the question why these two games of the same genre have been among the most popular top 10 video games for over a decade. The popularity of the genre was put to the test especially by the launch of *Fortnite*. Some very successful esports tournaments for the very popular new title, *Fortnite*, were hosted — yet the number of hours watched (see introduction) for *League of Legends* kept increasing while the *Fortnite* viewership decreased and *LoL* became the most watched game on *Twitch.tv* once again.

Dota 2 and *League of Legends* belong to a genre not yet scientifically defined, despite *DotA*'s release date lying more than 19 years²⁰⁵ in the past. This thesis compared the two games by focusing on their cultural aspects to define the genre and define a genre term.

Riot coined the widely known genre term MOBA (Multiplayer Online Battle Arena), which in theory could be suitable for almost any other competitive online game such as *Counter-Strike: Global Offensive* (a first-person shooter game). Consequently, it would make sense to find a more concise definition which includes *LoL* and *Dota 2*, but excludes other games such as shooters, RTSs, racing games, card games, tower defense games and MMORPGs.

9.1 Summary of Findings

The genre often called MOBA genre stems from efforts of many people who were playing with each other's ideas, striving creatively to improve a game they loved. In the creation of characters and the improvement of Meta, the makers of the games and the community are collaborating closely. According to Barker and Jane, "Culturalism stresses the 'ordinariness' of culture and the active, creative capacity of people to construct shared meaningful practices" (Barker and Jane 17). In the culturalist tradition, they explain, empirical work "explores the way that active human beings create cultural meanings" (ibid.). The empirical

²⁰⁵ Considering the first *DotA* mod which appeared in 2002.

analysis in this thesis has shown that modders and developers of *Dota 2* and *League of Legends* who used to be part of the community of modders making e.g., *DotA* are today working at the game developing companies, creating cultural representations within the games. MOBAs are never static, like a book or a board game; they are even patched more frequently than other computer games; they have always been evolving since the first mod called *DotA* was created in 2002.

Dota 2 and *League of Legends* are constantly growing in difficulty with each player's abilities, challenging our critical thinking and allowing us to always have a flow experience, wherefore they are most enjoyable.

It takes a lot of time to learn the basic game mechanics of *Dota 2* and *LoL*. Therefore, they can both be called games with a high skill floor while they are also high skill ceiling type of games, since it takes a lot of effort to be able to play a character in these games to perfection.

Many players of *Dota 2* and *League of Legends* are involved in extensive discussions of the ever-changing Meta. There are endless strategies and there will always be more due to the games being patched constantly. Frequent patches are significant of *Dota 2* and *League of Legends*, sometimes as many as three on a single day – whereas the Meta in many games such as *Counter-Strike* hardly ever changes²⁰⁶.

Dota 2 and *League of Legends* are highly social and strategic computer games: Social skills are required for mastering the Meta – while Meta is essential for success in esports. The two MOBAs are inexhaustible in their capacity for learning and teaching teamwork: The ludic framework of these games requires people to work on their teamwork abilities if they want to win. Since players of *LoL* and *Dota 2* are required to learn so much, the games might gain longevity: the time invested is probably too precious to suddenly quit the game forever, something one might call “sunk cost fallacy”.

The narrative – being implemented in the ludic framework of the games

²⁰⁶ “In fact, for 20 years, Meta in Counter-Strike remained virtually unchanged: pistol rounds were held at the default weapon, then the winning team took “farm guns” (sub-machine guns, and sometimes even shotguns), and after that the players bought AK / M4 / AWP, which had objective advantages over its peers” (Vieesports.com, “Counter-Strike meta”).

– is playing a subordinate but nonetheless important role to the players' experience. In the Game Studies chapter Juul's warning: "A combination of games and narratives risk ruining both" (Juul 1999: 3) was mentioned. The two MOBAs in the centre of this thesis seem to be in balance in terms of their ludic and narrative elements. This might be another reason for MOBA games containing a firework of cultural intertextuality and for their extreme popularity: Since the gameplay is not a natural fit for an endemic narrative (MOBAs are limited to one arena they take place in), the characters are a cultural canvas both the community and the developers can express themselves on – this way, the narratives seem to be never getting too much in the way of the gameplay.

The more aesthetically appealing the characters are, the higher could be the possibility that they will make people want to play them. References to very recent pop cultural trends can be found in MOBAs frequently. References appear to be from almost any cultural background; cultural trends are being creatively used in the creation of the characters, their lore, the sentences they speak and their aesthetics. The personality of champions in *LoL* is mainly created through their lore and dances, whereas in *Dota 2*, there are fewer dances and slightly more specific voice-acting recordings (responses) for each individual hero. As we have seen, the biography of each *LoL* champion is given on *Leagueoflegends.com* as a little short story for interested people to read and there is not a similar service available on VALVE's websites for *Dota 2*.

The *League of Legends* champions often have numerous skins. Once a skin has been chosen, it could change the way a character's personality is perceived. We could assume that the many skins available would result in players not being able to immerse themselves in characters as well as if characters were more static in terms of their outer appearance and therefore, personality. However, the popularity of the two MOBAs is pointing in a different direction: A recency and frequency of references (references which the audiences often specifically ask for) added to MOBAs might be causing the players to refrain from insisting on perfect coherence.

Cultural intertextualities introduced with characters do not necessarily have to be recent ones: Also, media or literature of earlier epochs can be found in *Dota 2* and *League of Legends*. “[T]his combination of the old and the new” (Assmann 12) does “show that a cultural approach should not be confined to contemporary texts but can also shed light on the literature of earlier epochs” (ibid.). As discussed in this thesis, it might be a fascinating experience to creatively make use of Shakespeare’s Puck’s abilities, speaking Puck’s tongue and philosophizing about how this folklore creature would fare against e.g., Zeus the god of war and other powerful personalities in the game.

9.2 Genre Definition

The MOBA itself is like a living cultural creature, demanding input from the community and the developers: For balance, novelty, and fun it is regularly asking for new patches, characters, and lore. According to Assmann (24) – and world making is a central aspect of *League of Legends* and *Dota 2*: a lot of people participate in their never-ending development.

The following aspects found in this thesis are characteristics of *Dota 2* and *League of Legends*. At the same time, these findings in their constellation seem to make MOBAs strong cultural carriers as well as commercially successful:

- (1) A **large pool of characters**, rich in lore and cultural intertextualities.
- (2) **Constant evolution** through the **release of patches**: new bits of lore and cultural intertextualities are introduced, which regularly causes a **feeling of novelty**.
- (3) *Dota 2* and *League of Legends* are **balanced in terms of their ludic and narrative elements**, which means they usually **do not become incoherent**.
- (4) Collaborative **intercultural creation: companies running MOBAs are taking²⁰⁷ the (international) community’s feedback seriously**.

²⁰⁷ Riot and VALVE are directly implementing the players’ feedback – implementing almost any cultural content the players desire. Most other MOBAs’ cultural

- (5) Cultural intertextualities shed light on the cultural production of **recent and earlier epochs**.
- (6) MOBAs are **high skill floor, high skill ceiling** type of games; they allow for a **flow effect**.
- (7) **Endless objects of thought**: the rapid patching process (new cultural intertextualities & changing the power of characters and items) in combination with the high level of difficulty is constantly demanding a discussion of the **Meta**.
- (8) People invest a lot of their time in learning MOBAs, which makes them feel like they cannot simply walk away from their “**sunk cost**” – cost (time).
- (9) *Dota 2* and *League* players must study - which is hardly possible without having a dialogue with other players. Participating in MOBA culture, people can hone their **social skills** in several ways:

(9.1) Social skills are required for successfully involving oneself in Meta discussions. Meta is by far not the only topic that causes endless discussions in MOBA culture: people can also involve themselves in discussions concerning e.g., esports tournaments, their favourite esports players, artwork, music, lore, dances...

(9.2) Social skills are the basis for players’ teamwork abilities, the ludic framework of MOBAs requires people to work as a team.

9.3 Coining the Term

The genre term we are looking for cannot be “*DotA*-like”. *Aeon of Strife* maps for example were still being developed and played after *DotA* became popular; *DotA* is not the only “ancestor” of the genre.

The term “MOBA” might not be ideal for the genre, since it is describing “the service rather than the gameplay” (Carton 2019 para. 21). A MOBA offers teams of similar sizes to compete against each other online in an arena, a “service” which is also offered by games of other genres, such as *Counter-Strike* (*FPS genre*), *Fortnite* (*Battle Royale genre*) and *World*

production processes have not been closely examined in this thesis, yet, we had a brief look at *Heroes of the Storm* (Blizzard), which is created from licensed content only and which is not a top 10 game.

of *Warcraft* (MMORPG genre), which proves the acronym MOBA imprecise.

The term suggested by VALVE describes the gameplay: ARTS stands for Action Real-Time Strategy. This term is not covering the multiplayer aspect and it also falsely associate the genre with the RTS genre.

Many video games involve choosing a character and therefore a certain amount of role-playing: In *LoL* and *Dota 2* much more than in *Counter-Strike*. *Dota 2* heroes and *LoL* champions have enough lore to make them seem like characters in role-playing games (RPGs)²⁰⁸. However, role-playing is not a central aspect of the gameplay.

Massively multiplayer online role-playing games (MMORPGs) like *World of Warcraft* and *Neverwinter* are video games, in which a very large number of players interact in a virtual world. *Dota 2* and *LoL* are not an experience shared with a very large number of players, as there are usually five or less players on a team.

The camera of both *LoL* and *Dota 2* is isometric (“top-down” or “birds eye view”). However, many MOBAs do not have such a camera, *SMITE* for example is known to be a first-person MOBA.

The genre we are looking at has an incredible number of cultural intertextualities, more than many other video games outside of this genre.

²⁰⁸ For example, *Diablo*, *Neverwinter* (2002) and *World of Warcraft* are typical role-playing games.

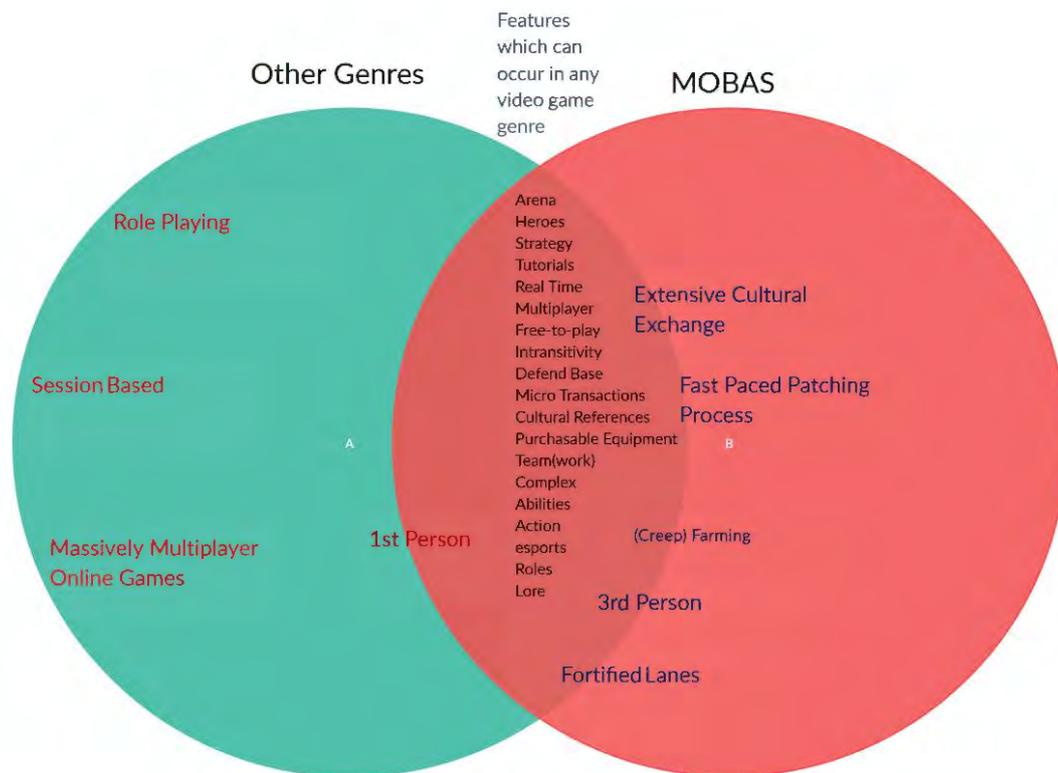


Figure 168 - Venn diagram "Coining the Term"

To find a new term for the genre, a Venn diagram could be helpful: The Venn diagram created for this thesis displays which characteristics are making *Dota 2* and *League of Legends* unique, compared to the games of other genres. After creating the diagram, the fortified lanes stood out²⁰⁹, and so did the cultural process of exchange between the community and the developers *and* the patching process resulting in a culturally rich and ever-changing game.

Fortified Lanes and cultural exchange can of course also occur in the Battle Royale or MMORPG genre, it is likely other genres can also have a fast-paced patching process. Therefore, despite these things being highly significant of MOBAs, they had to be overlapping the mid-section of the Venn diagram – since they can occur in other genres. The individual aspects might not be unique for MOBAs, but **a combination and a certain intensity of these things is typical of MOBAs.**

²⁰⁹ They are far on the right in the Venn diagram because they are typical of MOBAs such as *SMITE*, *Dota 2* and *League of Legends*, but fortified lanes can also occur in other video game genres (e.g., in the Tower Defense genre), wherefore the “Fortified Lanes” aspect in the Venn diagram is also touching circle A, the green circle standing for “Other genres”, meaning all kinds of genres which are not MOBAs.

The cultural exchange process between the community and developers is extensive and probably outstanding compared to many other games and media: Books and plays can change after community feedback has been perceived and books and plays can be a collaborative creation. Yet, the process is probably not as active, direct, and intercultural as the process shaping the two games in this thesis: millions of people from all over the world comment on their games all the time via *Twitter*, *STEAM Workshop*, *Reddit*, *YouTube*, *Leagueoflegends.com*, and other online platforms, thereby directly influencing the developers' decisions. The pace of *patching* in *LoL* and *Dota 2* is fast and a big driver of engagement and discovery, distinguishing them from other video games – partially even from other MOBAs.

At the same time, the game mechanics of *League* and *Dota 2* are highly complex— if they are changed only slightly, discoveries can be rippling through the community: There is a continual novelty to these games, which makes it impossible for one player, lest a community understand the game entirely: games belonging to this genre are inexhaustible as objects of thought.

The possibility that games of other genres are undergoing change in a similar way cannot be eliminated; games in which the gameplay is changed, and developers and community add cultural intertextualities collaboratively. There might be other online games²¹⁰ that could be culturally and interculturally active in a similar way.

The farming of creeps is a very interesting factor. It seems like there are relatively few genres with distinctly separate PvP and PvE combat taking place in the same space and with the same playable characters. One example is one of the games that today's MOBAs are based on: *Warcraft III*.

As already mentioned, the cultural exchange process and the fast-paced patching, along with the fortified lanes must be put on the MOBA side

²¹⁰ Riot's (Riot is fully owned by Tencent) shooter *Valorant* (2020) regularly offers new weapons and skins in the ingame shop. Shopping for skins and weapons is also common in *Counter-Strike:Global Offensive* (VALVE) and *Fortnite* (Epic – Tencent owns 40% shares in Epic). Since these three games do not have any lore but very active shops, it could be interesting to investigate the cultural intertextualities in the shops of these games, which are all in the top 10 most played and watched shooters.

of the Venn diagram. As we have seen, lanes with towers and neutral creatures defending them are important both in *Dota 2* and *League of Legends*. There does not seem to be a similar construction in a different genre. However, there are games of other genres where structures and friendly computer-controlled creatures help defending a team's structures or characters (for example in the RTS genre).

Blizzard's *Heroes of the Storm* (*HotS*) is a MOBA which does not have an extensive cultural exchange process. Blizzard source material (material which they hold the license for) is playing a central role²¹¹ in the creation of heroes (Heroesofthestorm.com, "Heroes"), which significantly limits the game's potential²¹² as a cultural driver, because the materials are limited. *HotS*

[...] brings together a diverse cast of iconic characters from Blizzard's far-flung realms of science fiction and fantasy, including the Warcraft®, StarCraft®, and Diablo® universes, and challenges them to compete in epic, adrenaline-charged battles. (Businesswire.com, "Blizzard's Worlds Collide" para. 1)

Some game publishers limit their MOBA in other ways, for example to mythological gods from four different epochs (*SMITE* – Hi-Rez Studios, Inc. 2005). In May 2021, *Dota 2* and *League of Legends* are still the only two MOBA games in the most watched Games on Twitch TV²¹³. One might ask, if their success has something to do with being open to any cultural content suggested by their fans and developers.

As already described in the *Cultural Studies* chapter of this thesis, it is important to note from a Cultural Studies perspective that corporations control cultural representations and are driven by profit (see also Barker and Jane 11). Riot and VALVE control the cultural production for their games. Yet, they choose to give canvas to the community.

Since *Dota 2* and *League of Legends* are more popular than *Heroes of the Storm*, one might conclude that corporations are more likely to be

²¹¹ Despite the characters being taken from Blizzard realms, there are some pop culture references to be found (Heroesofthestorm.Gamepedia.com, "Easter Eggs") in *Heroes of the Storm* and it could be interesting to analyze the HotS community's influence.

²¹² On a side note, Blizzard abruptly shifted developers who worked on *Heroes of the Storm* to other games and ended their *Heroes of the Storm* global esports championship (HGC), saying that it will "not return in 2019" (Blizzard.com, "Heroes of the Storm News" para. 4).

²¹³ <https://newzoo.com/insights/rankings/top-games-twitch/> (*League of Legends*: 174.1M hours watched; *Dota 2* 48.7M hours watched).

profitable when they allow anyone to participate in the cultural production²¹⁴. Barker and Jane warn us however, that corporations are not primarily interested in the cultural potential of digital media, but in their profits (see also Barker & Jane 512). VALVE and Riot are certainly open to cultural participation – but one should not forget their profits not being the least of their interests.

Sean Carton would like to call MOBAs “Lane-Pushing Games”. To see how well this term works, one could try to see whether it is suitable for other MOBAs. As for example, *Heroes of the Storm* has a lower skill floor and lower skill ceiling compared to *Dota 2* and *LoL*:

All told that’s maybe 16 or so keys a competent Dota 2 player regular presses - and that’s not getting into things like shop shortcuts or professional play.

Heroes of the Storm has no courier, no control groups (or at least they are rare and hero-dependent), no activated items. Most characters will use the 4 main ability keys [...]. So a competent HoTS player has to regularly press maybe 6 keys. (Margaris para. 22-25)

The definition and genre term of this thesis is based on the two most successful games of one genre which happen to be defined by outstandingly active processes of cultural exchange and them being high skill floor, high skill ceiling type of games. Since *Heroes of the Storm* is a less strong cultural carrier (being mainly built on licensed content), and a less difficult game, we could describe it maybe as a casual, licensed Lane-Pushing Game. Carton’s term seems to be quite suitable for games which had to this day been called MOBAs, and the term Lane-Pushing Game is also supported by the Venn diagram.

9.4 Outlook

Feige writes Brentano’s lyrics are not helping to move literature closer to music. Rather, in the light of Brentano’s lyrics, the borders between music and literature have been redefined (see also 113). In the same way, Lane-Pushing Games are redefining borders between literature, film, theatre, and video games. Especially since characters inspired by all possible areas of culture come together in one arena, interesting exchange between the characters happens during gameplay, including dialogue.

²¹⁴ It seems players want more than to suggest skins on forums, many of them even enjoy submitting complete 3D models for characters.

What is a ninja saying to a god? These interesting matchups mashup all kinds of cultural themes from different cultural backgrounds and inspire players to suggest new heroes, skins, and lore.

For the games industry it is important to learn that a strong cultural carrier is much more likely to be successful. This could be discussed further with many examples. *Fortnite* is much more of a cultural carrier than *PlayerUnknown's Battlegrounds* and more popular. *PUBG* used to be one of the most popular games on Steam. The highest number of concurrent players was recorded in January 2018 at 3.24 million. 381.000 people have been playing *PUBG* in October 2020. (Steamcharts.com, "PUBG"). *Fortnite* reached 15.3 million concurrent players in December 2020 (Fortnite.com).

Then there is *Blizzard's Heroes of the Storm* – a game where the community and the developers are collaborating less closely compared to *League of Legends* and *Dota 2*.

Lane-Pushing Games (or LPGs) *Dota 2* and *LoL* not only allow players to add cultural references (intertextualities), the community is engaged in the process of running tournaments, raising prize money and in the discussions of the rapid patching schedule. The references people suggest to the developers often become virtual goods: characters, skins, items or announcers which people can buy. To people using and suggesting these virtual things, they are clearly worth the investment (they are spending time pitching ideas and they are buying the final virtual goods). Both the developers and the gamers are looking for elements of culture they hold very dear to either sell (developers) or suggest for sale (gamers). Gamers today are selling things they love to themselves and the developer is providing the infrastructure for this process. This is not only true²¹⁵ for the two LPGs *Dota 2* and *League of Legends*. Tencent Holdings Ltd., who currently own all shares of *Riot (League of Legends)*, also hold

²¹⁵ In *Dota 2*, as in *LoL*, people can suggest ideas and later buy the virtual products. People in *Dota 2* who contribute skins receive a percentage of sales (25%) (Pearson para. 7). "So far, the total payments made to individuals for the creation of in-game items sold in Team Fortress 2, *Dota 2*, and Counter-Strike: Global Offensive have passed \$57 million. This money was earned by over 1,500 contributors spread out across 75 countries" (Steampowered.com, para. 1).

48,4% shares of *Epic (Fortnite)* – and *Fortnite* is also a free-to-play game where items can be bought ingame which are often suggested²¹⁶ by the gamers:

The point is, Epic is great about communicating, putting out new content, and just keeping the game great and its community happy. Meanwhile, PUBG Corporation just doesn't do as much to keep its community happy - Of course, PUBG Corporation is nowhere near as big as Epic so it's a little unfair to compare the two, but it is what it is. (Kain para. 12)

Opening games to community contribution seems to be of utmost importance in the creation of commercially successful games. In other words: The more a game is designed to be a cultural carrier (open for (inter-)cultural exchange and participation) the more successful it will be.

Another very important factor for a successful Lane-Pushing Game (and probably games in general) seems to be the degree of difficulty. *League of Legends* is easier to get into (has a lower skill floor) than *Dota 2*, but they both have a high skill ceiling. *Heroes of the Storm* is comparably easy to get into and has a lower skill ceiling than *LoL* and *Dota 2*. Having a low skill floor seems to be a factor for success, as well as a high skill ceiling.

²¹⁶ On the Fortnite website, the developers are specifically asking the players to “drive discussion” via their subreddits (Epicgames.com, “How to submit suggestions”).

10 Appendix

10.1 Dota 2 Heroes

10.1.1 Strength Heroes

Hero	Base Strength	Strength Growth	Base Agility	Agility Growth	Base Intelligence	Intelligence Growth
 Abaddon	23	3	23	1.5	21	2
 Alchemist	25	2.4	22	1.2	25	1.8
 Axe	25	3.4	20	2.2	18	1.6
 Beastmaster	23	2.9	18	1.6	16	1.9
 Brewmaster	23	3.7	22	2	15	1.6
 Bristleback	22	2.9	17	1.8	14	2.8
 Centaur Warrunner	27	4.6	15	1	15	1.6
 Chaos Knight	22	3.4	14	2.1	18	1.2
 Clockwerk	26	3.7	13	2.3	18	1.5
 Doom	26	4	11	0.9	15	2.1
 Dragon Knight	19	3.6	19	2	18	1.7
 Earth Spirit	21	4.4	17	1.5	18	2.1
 Earthshaker	22	3.7	12	1.4	16	1.8
 Elder Titan	24	3	14	1.8	23	1.6
 Huskar	21	3.1	15	1.4	18	1.5
 Io	17	3	14	1.6	23	1.7
 Kunkka	24	3.8	14	1.3	18	1.5
 Legion Commander	26	3.3	18	1.7	20	2.2
 Lifestealer	25	2.9	18	2.4	15	1.8
 Lycan	26	3.4	16	1	19	1.4
 Magnus	25	3.5	15	2.5	19	1.7
 Mars	23	3.2	20	1.9	17	1.4
 Night Stalker	23	3.2	18	2.3	13	1.6
 Omniknight	22	3.6	15	1.8	15	1.8
 Phoenix	21	3.7	12	1.3	18	1.8
 Pudge	25	4	14	1.5	16	1.5
 Sand King	22	3	19	1.8	19	1.8
 Slardar	21	3.6	17	2.4	15	1.5
 Spirit Breaker	29	3.1	17	1.7	14	1.8
 Sven	22	3.2	21	2	16	1.3
 Tidehunter	22	3.5	15	1.5	16	1.7
 Timbersaw	23	3.2	16	1.3	23	2.7
 Tiny	28	4.1	0	0	17	2.2
 Treant Protector	25	4.1	15	2	20	1.8
 Tusk	23	3.9	23	2.1	18	1.7
 Underlord	25	3.3	12	1.3	17	2.3
 Undying	22	2.8	10	0.8	27	2.8
 Wraith King	22	3.2	18	1.7	18	1.6

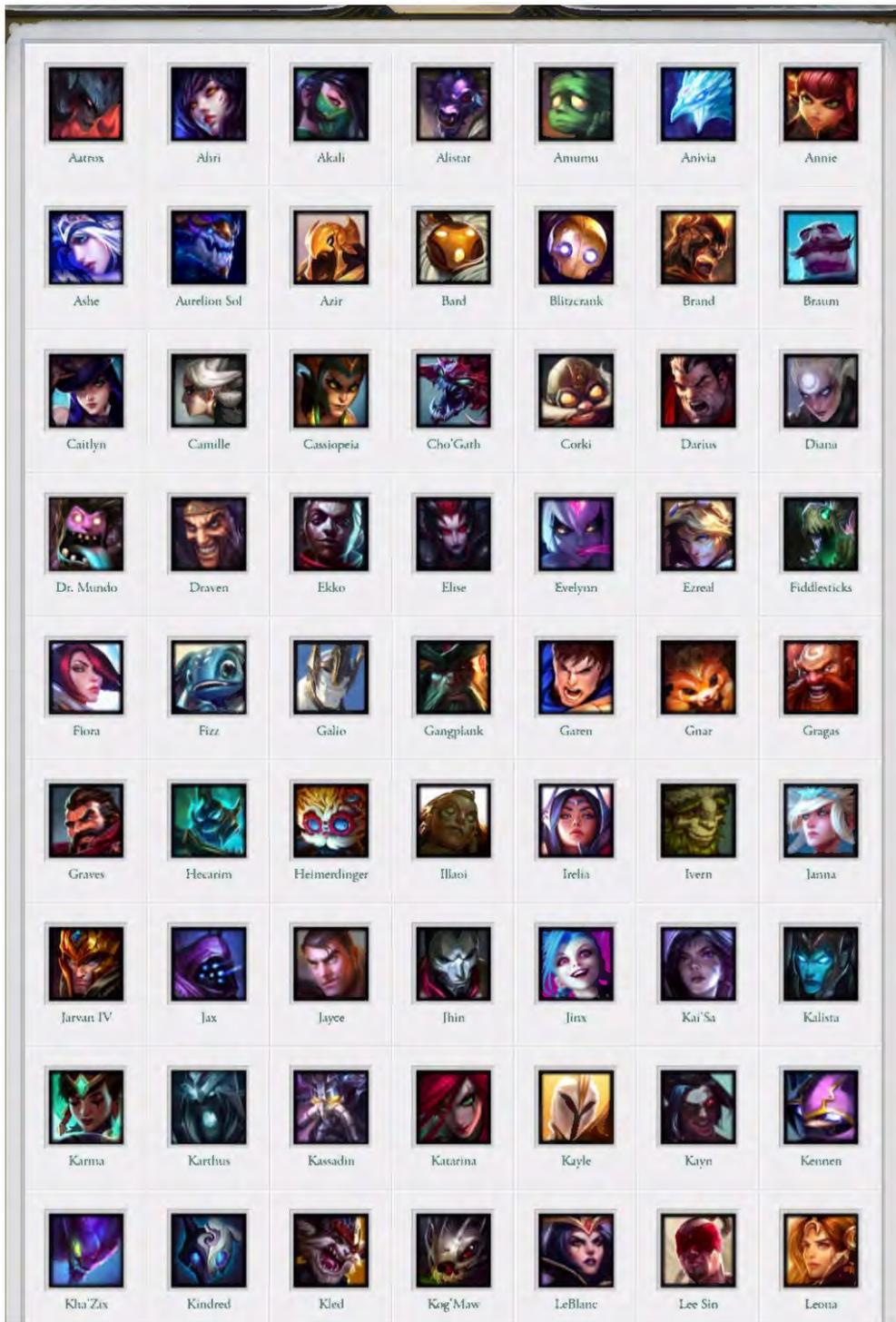
10.1.2 Agility Heroes

Hero	Base Strength	Strength Growth	Base Agility	Agility Growth	Base Intelligence	Intelligence Growth
 Anti-Mage	23	1.3	24	3.2	12	1.8
 Arc Warden	25	3	15	2.4	24	2.6
 Bloodseeker	24	2.7	24	3.1	18	1.7
 Bounty Hunter	20	2.5	21	2.6	19	2
 Broodmother	18	2.8	15	2.8	18	2
 Clinkz	14	2.2	22	2.7	18	1.7
 Drow Ranger	18	1.9	30	2.8	15	1.4
 Ember Spirit	21	2.6	22	2.1	20	1.8
 Faceless Void	24	2.4	23	3	15	1.5
 Gyrocopter	22	2.3	19	3.6	19	2.1
 Juggernaut	20	2.2	34	2.8	14	1.4
 Lone Druid	18	2.7	20	2.8	13	1.4
 Luna	16	2.2	18	3.6	16	1.9
 Medusa	15	1.5	22	3.6	19	2.6
 Meepo	24	1.8	24	1.8	20	1.6
 Mirana	18	2.2	18	3.7	22	1.9
 Monkey King	19	2.8	22	3.7	20	1.8
 Morphling	20	3	24	4.3	13	1.1
 Naga Siren	22	2.8	21	3.7	21	2
 Nyx Assassin	18	2.5	19	2.5	18	2.1
 Pangolier	17	2.5	18	3.2	16	1.9
 Phantom Assassin	21	2.2	23	3.4	15	1.4
 Phantom Lancer	19	2.2	29	3.2	19	2
 Razor	22	2.6	22	2.1	21	1.8
 Riki	18	1.9	30	2.5	14	1.3
 Shadow Fiend	19	2.5	20	3.5	18	2.2
 Slark	21	1.9	21	1.7	16	1.7
 Sniper	19	1.7	21	3.1	15	2.6
 Spectre	23	2.5	23	2.1	16	1.9
 Templar Assassin	19	2.4	23	3.2	20	2
 Terrorblade	15	1.7	22	4.8	19	1.6
 Troll Warlord	21	2.5	21	2.9	13	1
 Ursa	24	3.3	18	2.4	16	1.5
 Vengeful Spirit	19	2.9	27	3.8	17	1.5
 Venomancer	19	2.1	26	3.2	19	1.8
 Viper	21	2.4	21	2.5	15	1.8
 Weaver	16	2	14	3.6	13	1.8

10.1.3 Intelligence Heroes

Hero	Base Strength	Strength Growth	Base Agility	Agility Growth	Base Intelligence	Intelligence Growth
 Ancient Apparition	20	1.9	20	2.2	23	3.4
 Bane	23	2.6	23	2.6	23	2.6
 Batrider	28	2.9	15	1.5	22	2.9
 Chen	25	2	15	2.1	19	3.2
 Crystal Maiden	18	2.2	16	1.6	14	3.3
 Dark Seer	20	3.1	12	1.8	21	3.1
 Dark Willow	20	2	18	1.6	18	3.5
 Dazzle	18	2.5	21	1.7	25	3.7
 Death Prophet	19	3.1	14	1.4	21	3.5
 Disruptor	21	2.4	15	1.4	20	2.9
 Enchantress	17	1.7	19	1.8	19	3.6
 Enigma	21	2.5	14	1	16	3.6
 Grimstroke	21	2.4	18	1.9	23	3.8
 Invoker	18	2.4	14	1.9	15	4.6
 Jakiro	27	2.8	10	1.2	26	3.2
 Keeper of the Light	16	2.3	15	1.6	23	3.2
 Leshrac	18	2.3	23	2.3	22	3.5
 Lich	20	2.1	15	2	24	4.1
 Lina	20	2.2	23	1.8	30	3.7
 Lion	18	2.2	15	1.5	18	3.5
 Nature's Prophet	21	2.6	18	3.3	23	3.5
 Necrophos	18	2.8	12	1.3	21	2.9
 Ogre Magi	25	3.5	14	1.9	15	2.5
 Oracle	20	2.4	15	1.7	21	4
 Outworld Devourer	19	2.6	24	2	28	3.5
 Puck	17	2.4	22	2.2	23	3.5
 Pugna	18	2	16	1.3	24	5.2
 Queen of Pain	18	2.3	22	2.2	25	2.9
 Rubick	21	2	23	2.5	25	3.1
 Shadow Demon	23	2.6	18	2.2	21	3.3
 Shadow Shaman	23	2.3	16	1.6	19	3.5
 Silencer	19	2.7	22	3	25	2.9
 Skywrath Mage	21	2	13	0.8	25	4.1
 Storm Spirit	21	2	22	1.5	23	3.9
 Techies	19	2.5	14	1.3	25	3.3
 Tinker	17	2.5	13	1.2	30	3.3
 Visage	22	2.8	11	1.3	22	2.9
 Warlock	26	3	10	1	25	3.1
 Windranger	18	3	17	1.4	18	3
 Winter Wyvern	26	2.6	16	1.9	26	3.6
 Witch Doctor	18	2.3	13	1.4	22	3.3
 Zeus	21	2.1	11	1.2	22	3.3

10.2 League of Legends Champions



 Lissandra	 Lucian	 Lulu	 Lux	 Malphite	 Malzahar	 Maokai
 Master Yi	 Miss Fortune	 Mordekaiser	 Morgana	 Nami	 Nasus	 Nautilus
 Neeko	 Nidalee	 Nocturne	 Nunu & Willump	 Olaf	 Orianna	 Ornn
 Pantheon	 Poppy	 Pyke	 Qiyana	 Quinn	 Rakan	 Rammus
 Rek'Sai	 Renekton	 Rengar	 Riven	 Rumble	 Ryze	 Sejuani
 Shaco	 Shen	 Shyvana	 Singed	 Sion	 Sivir	 Skarner
 Sona	 Soraka	 Swain	 Sylas	 Syndra	 Tahm Kench	 Taliyah
 Talon	 Taric	 Teemo	 Thresh	 Tristana	 Trundle	 Tryndamere
 Twisted Fate	 Twitch	 Udyr	 Urgot	 Varus	 Vayne	 Veigar
 Vel'Koz	 Vi	 Viktor	 Vladimir	 Volibear	 Warwick	 Wukong
 Xayah	 Xerath	 Xin Zhao	 Yasuo	 Yorick	 Yuumi	 Zac
 Zed	 Ziggs	 Zilean	 Zoe	 Zyra		

11 Bibliography

11.1 Primary Sources

101 Dalmatians. Directed by Wolfgang Reitherman, Hamilton Luske and Clyde Geronimi. Walt Disney, United States 1961.

Adventure Time. Created by Pendleton Ward. Cartoon Network, United States 2010-2018.

Aeon of Strife. Aeon64 et.al 1998.

Age of Empires. Ensemble Studios. Dallas 1997.

Alien. Directed by Ridley Scott, 20th Century Fox and Brandywine Productions, United States 25 July 1979.

Aliens. Directed by James Cameron, 20th Century Fox and Brandywine Productions, United States 18 July 1986.

Anchorman: The Legend of Ron Burgundy. Directed by Adam McKay. Dreamworks Pictures, United States 2004.

A Nightmare on Elm Street. Directed by Wes Craven. New Line Cinema, United States 1984.

Apex Legends. Electronic Arts, Redwood City 2019.

Arrested Development. Created by Mitchell Hurwitz, Imagine Television, The Hurwitz Company and 20th Century Fox Television, United States 2 Nov. 2003.

A-Team. Created by Frank Lupo and Stephen J. Cannell, United States 1982.

Blade Runner. Directed by Ridley Scott, United States 1982.

Call of Duty: Modern Warfare 2. Infinity Ward, Encino 2009.

Chrono Trigger. Square, Tokyo 1995.

Counter-Strike: Global Offensive. VALVE, Bellevue 2012.

Coleridge, Samuel Taylor. *Coleridge Poetical Works*. Oxford University Press, Oxford 1969.

Conan the Barbarian. Directed by John Milius, Dino De Laurentiis Corporation and Edward R. Pressman Productions, United States 16 March 1982.

Counter-Strike. Valve Corporation, Bellevue 2000.

Cowboy Bebop. K.K. Sunrise and Kadokawa Shoten, Tokio 1998-2000.

Dahl, Roald. *Charly and the Chocolate Factory*. Penguin, London 2016.

Darkstalkers. Created by Alex Jimenez, Capcom 1994.

Demigod. Gas Powered Games. Redmond 2009.

Dick, Philip K. *Do Androids Dream of Electric Sheep?* Doubleday Science Fiction, New York 1968.

Django Unchained. Directed by Quentin Tarantino, The Weinstein Company, Columbia Pictures and A Band Apart, United States 2012.

Doctor Strange. Directed by Scott Derickson. Marvel Studios, United States 2016.

DotA. Kyle “Eul” Sommer, Steve “Guinsoo” Feak, Abdul “IceFrog” Ismail et al. , 2002.

Dota 2. Valve Corporation, Bellevue 2013.

Dr. Seuss. *The Lorax*. Random House, New York 1971.

Dungeons & Dragons, Gygax and Arneson, Lake Geneva 1974.

Fable. Lionhead Studios, Guilford 2004.

Fallout. Interplay Productions, Irvine 1997.

Final Fantasy IV. Square, Tokio 1991.

Final Fantasy X. Square, Tokio 2001.

Frost, Robert. *New Hampshire*. Henry Holt, Baltimore 1923.

For a Few Dollars More. Directed by Sergio Leone. Produzioni Europee Associati (PEA), Arturo González Producciones, Cinematográficas, Constantin Film, Italy, West Germany and Spain, 1965.

Forster, E. M. *The Machine Stops*. Archibald Constable, Edinburgh 1928.

Fortnite. Epic Games, Raleigh 2017.

Gladiator. Directed by Ridley Scott. Scott Free Productions and Red Wagon Entertainment. United States and United Kingdom 2000.

Grand Theft Auto 5. Rockstar Games, New York 2015.

Guardians of Middle-earth. Monolith Productions, Kirkland 2012.

Guardians of the Galaxy. Directed by James Gunn, Marvel Studios, United States 2014.

Half-Life. Valve Corporation, Bellevue 1998.

Hearthstone. Blizzard Entertainment, Irvine 2014.

He-Man and the Master's of the Universe. Created by Michael Halperin. United States 1983-85.

Her Story. Sam Barlow, Brooklyn 2015.

Heroes of Newerth. Frostburg Studios, Rohnert Park and Kalamazoo 2010.

Heroes of the Storm. Blizzard Entertainment, Irvine 2015.

Herzog Zwei. Technosoft, Nagasaki 1989.

Highlander. Cannon Films and Highlander Productions Limited, United States 1986.

House M. D. Shore Z Productions, Bad Hat Harry Productions and NBC Universal Television, United States 2004-2007.

Hughes, Ted. *The Iron Man*. Faber and Faber. London 1968.

Fagles, Robert and Bernard MacGregor eds. intro. Bernard Knox. *The Iliad*. Vol. 20. Penguin, London 1991.

Herzog Zwei. Technosoft, Sasebo 1989.

Infinite Crisis. DC Comics, New York 2005.

Jurassic Park. Directed by Steven Spielberg. Amblin Entertainment, United States 1993.

Kanzaka, Hajime. *Slayers*. Fujimi Shobō, Tokio 1989.

Kindergarten Cop. Directed by Ivan Reitman. Imagine Entertainment, Beverly Hills 21 Dec. 1990.

King, Stephen. *Pet Sematary*. Simon & Schuster New York, 2001.

League of Legends. Riot Games, Los Angeles 2009.

Lewis, C. S. *The Lion, the Witch and the Wardrobe*. Geoffrey Bles, London 1950.

Little Red Riding Hood. 17th Century Folktale, Europe.

Lovecraft, Howard Phillips. *Necronomicon: The Best Weird Tales Of HP Lovecraft*. Hachette UK 2008.

Lovecraft, Howard Phillips. *The Call of Cthulhu And Other Weird Stories*. Penguin, London 1999.

Mad Max Beyond Thunderdome. Directed by George Miller and George Ogilvie, Warner Brothers, Australia 1985.

Magic: The Gathering. Richard Garfield, Wizards of the Coast, Rento 1993.

Magnússon, Eiríkur. *Gróttasöngur*. Curtis & Beamish, 1919.

Manhunt. Rockstar North, Edinburgh 2003.

Martin, George R. R. *A Song of Ice and Fire*. Bantam Books, New York 1996.

Mechs vs. Minions. Riot Games, Los Angeles 2016.

Meyer, Stephenie. *Twilight: Volume 1*. Atom, London 2007.

Miéville, China. *Perdido Street Station*. Macmillan Publishers, London 2000.

Miller, Frank and Lynn Varley. *300*. Dark Horse Comics, Milwaukie 1998.

Minecraft. Mojang, Stockholm 2009.

Monty Python and the Holy Grail. Directed by Terry Gilliam and Terry Jones. Python Pictures, Michael White Productions, National Film Trustee Company, United Kingdom 1975.

Mortal Kombat. Midway Games, Chicago 1992.

Mortal Kombat. Warner Bros. Entertainment Inc. Los Angeles 2019.

Napoleon Dynamite. MTV Films, Napoleon Pictures, United States 2004.

Neverwinter Nights. BioWare, Edmonton 2002.

One Froggy Evening. Warner Brothers, United States 1955.

On the Waterfront. Directed by Elia Kazan. Horizon Pictures, United States 1954.

Overwatch. Blizzard Entertainment, Irvine 2016.

Persona. Atlus, Setagaya 1996 - present.

Pet Sematary. Directed by Mary Lambert. Paramount Pictures, United States 1989.

Phantasy Star Online. Sega, Tokio 2000.

Planescape: Torment. Black Isle Studios, Orange County 1999.

PlayerUnknown's Battlegrounds. Bluehole, Seongnam 2017.

Predator. Directed by John McTiernan, Lawrence Gordon Productions and Silver Pictures and Davis Entertainment, United States 12 June 1987.

Poe, Edgar Allen. *The Complete Poetry of Edgar Allen Poe*. Penguin, London 2008.

Pong. Atari, Sunnyvale 1972.

Pulp Fiction. Directed by Quentin Tarantino, Miramax Films, United States 1994.

Quake. Designed by John Romero, American McGee, Sandy Petersen and Tim Willits. id Software, Richardson 1996.

Ran. Directed by Akira Kurosawa. Herald Ace, Nippon Herald Films, Greenwich Film Productions, Japan and France 1985.

Rowling, J. K. *Harry Potter and the Philosopher's Stone*. Bloomsbury Publishing, London 1997.

Salvatore, R. A. *The Demon Awakens*. Ballantine Books, New York 1996.

Sekiro. Activision, Santa Monica 2019.

Sendak, Maurice, and Peter Schickele. *Where the Wild Things Are*. Penguin, London 2015.

Shakespeare, William. *A Midsummer Night's Dream*. Edited by Sukanta Chaudhuri, Bloomsbury Academic, London 2017.

Shakespeare, William. *Romeo and Juliet*. Edited by René Weis, Bloomsbury Academic, London 2012.

Shakespeare, William. *King Richard III*. Edited by James R. Siemon, Bloomsbury Academic, London 2009.

Six Million Dollar Man. Produced by Harve Bennett, United States 1973.

SMITE. Hi-Rez Studios, Alpharetta 2014.

Solstice Arena. Zynga, San Francisco 2013.

South Park. Created by Trey Parker and Matt Stone. Braniff, Parker-Stone and South Park Studios, United States 1997- present.

Spaceballs. Directed by Mel Brooks, Brookfilms, United States 24 June 1987.

Spartacus. Directed by Stanley Kubrick. Bryna Productions. United States 1960.

Spiderman II. Treyarch, Santa Monica 2004.

Stoker, Bram. *Dracula*. Archibald Constable and Company, London 1897.

Starcraft: Broodwar. Blizzard Entertainment, Irvine 1998.

Starcraft II: Wings of Liberty. Blizzard Entertainment, Irvine 2010.

Stevenson, Robert Louis. *Strange Case of Dr Jekyll and Mr Hyde*. Longmans, Green & Co., London 1886.

Sturluson, Snorri. *The Prose Edda*. Vol. 5. American-Scandinavian Foundation, New York 1916.

Sturluson, Snorri. *Heimskringla: History of the Kings of Norway*. Translated by Lee M. Hollander, University of Texas Press, Austin 1964.

Super Mario Bros. Nintendo, Kyoto 1985-2019.

Super Smash Bros. Nintendo, Kyoto 1999-2008.

Tekken. Namco, Tokio 1995.

Tenchu. Acquire & K2, Tokyo 1998.

Tetris. Alexey Pajitnov, Moscow 1984.

The Avengers. Directed by Joss Whedon, Walt Disney Studios Motion Pictures, United States 11 April 2012.

The Birds. Directed by Alfred Hitchcock. Alfred J. Hitchcock Productions, United States 1963.

The Dark Knight Rises. Directed by Christopher Nolan. Warner Bros. Pictures, United States 2012.

The Iron Giant. Directed by Brad Bird. Warner Brothers Feature Animation. United States, 1999.

The Jungle Book. Joseph Rudyard Kipling. Macmillan, New York 1894.

The Jungle Book. Directed by Wolfgang Reitherman and Walt Disney. Walt Disney, United States 1967.

The Legend of Zelda: A Link to the Past. Nintendo, Kyoto 1991.

The Lord of the Rings (film series). Directed by Peter Jackson. New Line Cinema and Wingnut Films. New Zealand and United States 2001; 2002; 2003.

The Terminator. Directed by James Cameron, Hemdale and Pacific Western Productions and Cinema '84, United States 26 Oct. 1984.

Thor: Ragnarok. Directed by Taika Waititi, Marvel Studios, Burbank 10 Oct. 2017.

Tolkien, J.R.R. *The Fellowship of the Ring*. George Allen & Unwin, New South Wales 1954.

Touhou Project. Team Shanghai Alice, Hakuba 1996-2019.

Transformers. Directed by Michael Bay. DreamWorks Pictures, Paramount Pictures, Hasbro, Di Bonaventura Pictures, United States 2007.

Twilight. Directed by Catherine Hardwicke, Temple Hill Entertainment, Maverick Films, Imprint Entertainment and DMG Entertainment, Los Angeles 2008.

Ultima Online. Designed by Raph Koster. Origin Systems, Electronic Arts and Mythic Entertainment, Houston 1997.

Vonnegut, Kurt. *Slaughterhouse-five: Or, The Children's Crusade, a Duty-dance with Death*. Delacorte Press, New York 1969.

World of Warcraft. Blizzard Entertainment, Irvine 2004.

Wall Street. Directed by Oliver Stone, 20th Century Fox, United States 1987.

Warcraft III. Blizzard Entertainment, Irvine 2002.

Wasteland 2. InXile Entertainment, Newport Beach 2014.

Willy Wonka & the Chocolate Factory. Directed by Mel Stuart, Wolper Pictures and The Quaker Oats Company, New York 11 Nov 1971.

World of Warcraft. Blizzard Entertainment. Irvine 2004.

X-Men. Marvel Comics, New York, 1963- present.

Yu, Anthony C. *The Journey to the West, Revised Edition, Volume 1*. University of Chicago Press, Chicago 2012.

11.2 Secondary Sources

Adams, Alyssa M., and Sara I. Walker. "Real-world Open-ended Evolution: A League Of Legends Adventure." *International Journal of Design & Nature and Ecodynamics* vol.12, no.4, Sothampton and Billerica 2018, pp. 458-469.

Agha, Brandon. *League of Legends: Players and Esports*. Dissertation. Hamilton 2015.

Arjoranta, Jonne. *Interpretive Challenges in Games*. University of Jyväskylä, Jyväskylä 2018.

Ashkenazi, Michael. *Handbook of Japanese Mythology*. ABC-CLIO, Santa Barbara 2003.

- Assmann, Aleida. *Introduction to Cultural Studies*. Erich Schmidt Verlag, Berlin 2019.
- Avontuur, Tetske. "Modeling player skill in Starcraft II." *HAIT Master Thesis series*, Tilburg 2012, Volume 12, issue 4.
- Barker, Chris and Emma A. Jane. *Cultural Studies*. SAGE, London, Thousand Oaks, New Delhi & Singapore 2016.
- Baumann, Uwe. *Shakespeare und seine Zeit*. Klett, Stuttgart 2005.
- Baxandall, Michael. *Patterns of intention. On the historical explanation of pictures*. Yale University Press, Yale 1985.
- Bedoya, Paola A. "Team Edward or Team Jacob? The Portrayal of Two Versions of the "Ideal" Male Romantic Partner in the Twilight Film Series." Thesis, Georgia State University, Atlanta 2011.
https://scholarworks.gsu.edu/communication_theses/85
- Beil, Benjamin, Thomas Hensel, and Andreas Rauscher, eds. *Game Studies*. Springer-Verlag, Mainz 2017.
- Bekir, Seyhan, and Eyüp Çelik. "Examining the factors contributing to adolescents' online game addiction." *Anales De Psicología/Annals of Psychology*, vol. 35, no. 3, Sakarya and Bursa 2019, pp. 444-452.
- Bennett, T. *Culture: A Reformer's Science*. NSW: Allen & Unwin, St. Leonards 1998.
- Blomberg, Catharina. *The Heart of the Warrior: Origins and Religious Background of the Samurai System in Feudal Japan*. Routledge, London 2013.
- Bornemark, Oscar. "Success factors for e-sport games." *Umeå's 16th Student Conference in Computing Science*, Umeå 2013, pp. 1-13.
- Briggs, Katharine. *An Encyclopedia of Fairies, Hobgoblins, Brownies, Boogies, and Other Supernatural Creatures*. Pantheon Books, New York 1976.
- Brunaux, Jean-Louis. *Die Weisheit der Kelten*. Aus dem Französischen von Susanne Held. Klett-Cotta, Stuttgart 2009.
- British Library. *Siren enchants sailors*. England, Salisbury 1230-1240.
- Buchanan, Ian. *A Dictionary of Critical Theory*. Oxford University Press, Oxford 2010.

- Buro, Michael. "Real-time strategy games: A new AI research challenge." *IJCAI*, Edmonton 2003, pp. 1-2. Vol. 2003.
- Caillois, Roger. *Man, play, and games*. University of Illinois Press, Illinois 1961.
- Cassel, J., & Jenkins, H. Chess for girls? Feminism and computer games. In J. Cassel & H. Jenkins (Eds.), *From Barbie to Mortal Kombat: Gender and computer games*, MIT Press, Cambridge 1998, pp. 2– 45.
- Chen, Mark. *Leet noobs: Expertise and collaboration in a World of Warcraft player group as distributed sociomaterial practice*. Dissertation. Seattle 2010.
- Chen, Shuo, and Thorsten Joachims. "Modeling intransitivity in matchup and comparison data." *Proceedings of the ninth acm international conference on web search and data mining*. ACM, Ithaka 2016.
https://www.cs.cornell.edu/people/tj/publications/chen_joachims_16a.pdf
- Cheung, Gifford, and Jeff Huang. "Starcraft from the stands: understanding the game spectator." *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. ACM, Vancouver 2011.
- Chomsky, Noam. *Hegemony of Survival – America's Quest for Global Dominance*. Penguin, London 2003.
- Claypool, Mark, et al. "On the Impact of Software Patching on Gameplay for the League of Legends Computer Game." *The Computer Games Journal*, vol. 6, no. 1-2. Worcester Polytechnic Institute, Worcester 2017, pp. 33-61.
- Cohen, Jeffrey Jerome. *Monster Theory: Reading Culture*. University of Minnesota Press, Minneapolis 1996.
- Consalvo, Mia. *Cheating: Gaining advantage in videogames*. The MIT Press, Cambridge 2009.
- Costikyan, Greg. *Uncertainty in games*. The MIT Press, Cambridge 2013.
- Coyne, Sarah M., et al. "Violent video games, externalizing behavior, and prosocial behavior: A five-year longitudinal study during adolescence." *American Psychological Association*, vol. 54, no. 10, Washington 2018: pp. 1868-1880.

Csíkszentmihályi, Mihály and Eugene Halton. *The meaning of things: Domestic symbols and the self*. Cambridge University Press, Cambridge 1981.

Csíkszentmihályi, Mihály, and Izabela Lebeda. "A Window Into the Bright Side of Psychology: Interview With Mihaly Csikszentmihalyi." *Europe's Journal of Psychology*, vol. 13, no. 4, 2017, pp. 810-821.

Dawkins, Richard. *The Selfish Gene*. Oxford University Press, Oxford 2006.

DeKoven, B. "Changing the game". *The Game Design Reader: A Rules of Play Anthology*, edited by Katie Salen & Eric Zimmerman, The MIT Press, Cambridge 2005, pp. 518–537.

Davidyuk, Y. "Electronic sports." *Prospects for the development of vocationally oriented foreign language education in a multicultural space: a collection of materials of the III International Scientific and Practical Student Conference for students of non-linguistic specialties*, Zhytomyr Ivan Franko State University, Zhytomyr 2017.

Donaldson, Scott. "Mechanics and metagame: Exploring binary expertise in League of Legends." *Games and Culture*, Sage Publishing, vol. 12, no. 5, Thousand Oaks 2017, pp. 426-444.

Doniger, Wendy. *On Hinduism*. Oxford University Press, Oxford 2014.

Dormans, J. "Integrating emergence and progression." *Proceedings of DiGRA 2011 Conference: Think design play*. Amsterdam University of Applied Sciences, Amsterdam 2011. <http://www.digra.org/wp-content/uploads/digital-library/11310.25319.pdf>

Downs, E., & Smith, S. L. (2010). Keeping abreast of hypersexuality: A video game character content analysis. *Sex Roles*. Springer Science, vol. 62, no. 11-12. Berlin 2010, pp. 721-733.

Eagleton, Terry. *The Idea of Culture*. Blackwell Publishing, Malden, Oxford and Carlton 2000.

Edge, Nathan. "Evolution of the gaming experience: live video streaming and the emergence of a new web community." *Elon Journal of Undergraduate Research in Communications*, vol. 4, no. 2, Elon University, Elon 2013, pp. 33-39.

Egenfeldt-Nielsen, Simon, Jonas Heide Smith, and Susana Pajares Tosca. *Understanding video games: The essential introduction*. Routledge, 2013.

- Eskelinen, Markku. "Towards computer game studies." *Digital Creativity*, vol. 12, no. 3, Taylor & Francis, Abingdon 2001, pp. 175-183.
- Evans, Ivor H. *Brewer's Dictionary of Phrase and Fable*. Cassell, London 1981.
- Fackre, G. "The new leisure: Planner and Citizen in Partnership". In E. Stanley & N. P. Miller (Eds.), *Leisure, and the Quality of Life*. AAHPER Press, Washington 1972.
- Feige, Daniel Martin. *Computerspiele: Eine Ästhetik*. Suhrkamp, Frankfurt am Main 2015.
- Ferrari, Simon. "From Generative to Conventional Play: MOBA and League of Legends." *DiGRA Conference*. Georgia Institute of Technology, Atlanta 2013.
- Finkel, Irving L., ed. *Ancient Board Games in Perspective*. British Museum Press, London 2007.
- Flieger, Verlyn. "How Trees Behave-Or Do They?" *Mythlore: A Journal of JRR Tolkien, CS Lewis, Charles Williams, and Mythopoeic Literature*, vol. 32, no. 1, Mythopoeic Society 2013, pp. 21-33.
- Foo, Chek Yang, and Elina MI Koivisto. "Defining grief play in MMORPGs: player and developer perceptions." *Proceedings of the 2004 ACM SIGCHI International Conference on Advances in computer entertainment technology*. ACM, Tampere & Perth 2004, pp. 245-250.
- Freyermuth, Gundolf S. *Games, Game Design, Game Studies: Eine Einführung*. CCR Writers Inc, Bielefeld 2015.
- Freytag, Gustav. *Die Technik des Dramas*. Autorenhaus Verlag, Berlin 2003.
- Frieling, Jens. "Virtual goods in Online Worlds: Basics, Characteristics and Monetization." *Jahrestagung der Gesellschaft für Informatik e.V. (GI)*. Koblenz 2013.
- Fritz, Jürgen. "Zwischen Lust und Frust. Warum Computerspiele faszinieren können." *Computerspiele(r) verstehen. Zugänge zu virtuellen Spielwelten für Eltern und Pädagogen*, edited by Jürgen Fritz, Bundeszentrale für politische Bildung, Bonn 2008, pp. 96-111.
- Fuchs, Max, and Theo Geissler. *Streitfall Computerspiele: Computerspiele zwischen kultureller Bildung, Kunstfreiheit und Jugendschutz*. Ed. Olaf Zimmermann. Deutscher Kulturrat, Berlin 2008.

Fuld, James J. *The Book of World-Famous Music: Classical, Popular and Folk (3rd ed.)*. Dover Publications, Mineola 1985.

Gadamer, Hans-Georg. *Philosophical Hermeneutics*. University of California Press, Berkeley and Los Angeles 1976.

Gadamer, Hans-Georg. *Wahrheit und Methode. Grundzüge einer philosophischen Hermeneutik*. Mohr Siebeck, Heidelberg 2010.

Garber, Marjorie B., and Nancy J. Vickers, eds. *The Medusa Reader*. Routledge, New York 2003.

Gee, J. P. *What Video Games Have to Teach Us About Learning and Literacy*. Palgrave Macmillan, 2007.

Gee, J. P. "Learning and games." In K. Salen (Ed.), *The Ecology of Games: Connecting Youth, Games, and Learning*. MIT Press, Cambridge 2008, pp. 21–40.

Gilai, Arieh, and I. Parnas. "Neuromuscular physiology of the closer muscles in the pedipalp of the scorpion *Leiurus quinquestriatus*." *Journal of Experimental Biology*, vol. 52, no. 2, Jerusalem 1970, pp. 325-344.

Giraudoux, Jean. *Sans pouvoirs*. Editions Du Rocher, Paris 1946.

Goetsch, Paul. *Monsters in English Literature: From the Romantic Age to the First World War*. Europäischer Verlag der Wissenschaften, Frankfurt am Main 2002.

Goldberg, Christine. "At the Ogre's House." *Folklore*, vol. 115, no. 3, Taylor & Francis, Abingdon 2004, pp. 309-320.

Grafton, Anthony, Glenn W. Most, and Salvatore Settis. *The Classical Tradition*. Harvard University Press, Cambridge 2010.

Granic, Isabela, Adam Lobel, and Rutger CME Engels. "The benefits of playing video games." *American psychologist*, vol.69, no. 1, Nijmegen & New York 2014, pp. 66-78.

Gregersen, Erik, ed. *The Outer Solar System: Jupiter, Saturn, Uranus, Neptune and the Dwarf Planets*. The Rosen Publishing Group, New York 2009.

Gresseth, Gerald K. "The Homeric Sirens." *Transactions and Proceedings of the American Philological Association*, vol. 101, The Johns Hopkins University Press, Baltimore 1970, pp. 203-218.

- Gribble, F. H. *The Origin of the Can-can*. Dancing Times, London 1953.
- Grossberg, Lawrence. *Cultural Studies in the Future Tense*. Duke University Press, Durham and London 2010.
- Guerber, Hélène Adeline. *The Myths of Greece & Rome*. Dover Publications, New York 1993.
- Guiley, Rosemary Ellen. *The encyclopedia of witches, witchcraft and wicca*. Facts On File, New York 2008.
- Guo, Yong, et al. "An analysis of online match-based games." *IEEE International Workshop on Haptic Audio Visual Environments and Games (HAVE 2012) Proceedings*. IEEE, 2012.
- Gygax, Gary. *Official Advanced Dungeons & Dragons Monster Manual II*. TSR Hobbies Incorporated, Lake Geneva 1983.
- Haita-Falah, Corina. "Sunk-cost fallacy and cognitive ability in individual decision-making." *Journal of Economic Psychology* vol. 58, Zurich, Haifa & Friedrichshafen 2017, pp. 44-59.
- Hall, Edward Twitchell, and Mildred Reed Hall. *Understanding cultural differences: Germans, French and Americans*. Intercultural Press, Boston 2000.
- Hall, Stuart. "The Work of Representation." *Representation: Cultural Representations and Signifying Practices*, edited by S. Hall, SAGE, London 1997.
- Hall, Stuart. "Cultural Studies and its Theoretical Legacies." *Cultural Studies*, edited by L. Grossberg, C. Nelson and P. Treichler, Routledge, London and New York 1992, pp. 277-86.
- Hamari, Juho, and Max Sjöblom. "What is eSports and why do people watch it?" *Internet Research*, vol. 27, no. 2, SSRN, Tampere 2017, pp. 211-232.
- Hamilton, Edith. *Mythology*. Back Bay Books, London 1942.
- Hamilton, William A., Oliver Garretson, and Andruid Kerne. "Streaming on Twitch: fostering participatory communities of play within live mixed media." *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, ACM, New York 2014, pp. 1315-1324.
- Hardaker, Claire. "Trolling in asynchronous computer-mediated communication: From user discussions to academic definitions." *Journal of Politeness Research*, vol. 6, no. 2, de Gruyter, Berlin 2010, pp. 215-242.

- Harjani, Dayal N. *Sindhi Roots & Rituals – Part I*. Notion press, Chennai 2018.
- Harms, Daniel and John Gonce. *Necronomicon Files: The Truth Behind Lovecraft's Legend*. Weiser Books, Newburyport 2003.
- Hart, George. *The Routledge Dictionary of Egyptian Gods and Goddesses*. Routledge, London and New York 2005.
- Hegel, Georg Wilhelm Friedrich: *Werke. Auf der Grundlage der Werke von 1832-1845 neu edierte Ausgabe*. Redaktion Eva Moldenhauer und Karl Markus Michel, Frankfurt a. M.: Suhrkamp, 1979
- Henderson, Lol, and Lee Stacey, eds. *Encyclopedia of Music in the 20th Century*. Routledge, 2014.
- Himmelstein, Daniel, Yitong Liu, and Jamie L. Shapiro. "An Exploration of Mental Skills Among Competitive League of Legend Players." *International Journal of Gaming and Computer-Mediated Simulations*, vol. 9, no. 2, IGI Publishing, Hershey 2017, pp. 1-21.
- Hinnant, Neal C. *Practicing Work, Perfecting Play: League of Legends and the Sentimental Education of E-Sports*. Thesis, Georgia State University, Atlanta 2013.
http://scholarworks.gsu.edu/communication_theses/102
- Hofmeyr, Isabel. *The Portable Bunyan: A Transnational History of The Pilgrim's Progress*. Princeton University Press, Princeton 2018.
- Howard, Matthew Jungsuk. *Esport: Professional League of Legends as Cultural History*. Dissertation. Houston 2018.
- Huber, Richard. *Treasury of Fantastic and Mythological Creatures: 1,087 Renderings from Historic Sources*. Dover Publications, New York 1982.
- Huizinga, Johan. *Homo Ludens: A study of the play-element in culture*. Routledge, London 1949.
- Hull, Jay G., et al. "A longitudinal study of risk-glorifying video games and behavioral deviance." *Journal of personality and social psychology* 107.2, National Institutes of Health, 2014, pp. 300- 325.
- Hull, Jay G., Ana M. Draghici, and James D. Sargent. "A longitudinal study of risk-glorifying video games and reckless driving." *Psychology of Popular Media Culture* 1.4, American Psychological Association, 2012, pp. 244-253.

Idel, Moshe. *Jewish Magical and Mystical Traditions on the Artificial Anthropoid*. State University of New York Press, Albany 1990.

Ingersoll, Ernest. *Dragons and Dragon Lore*. Payson & Clarke Ltd, New York 1928.

Jakobsson, P., Pargman, D., & Rambusch, J. “Exploring E-sports: A Case Study of Gameplay in Counter-Strike.” *Proceedings of the 2007 DiGRA International Conference: Situated Play*. Tokyo 2007.
<http://www.digra.org/digital-library/forums/4-situated-play/>

Jamme, Christoph, et al. *Handbuch der Mythologie*. Philipp von Zabern, Darmstadt 2014.

Jarman, A. O. H., “The Merlin legend and the Welsh tradition of prophecy”, in: Bromwich, Rachel, A. O. H. Jarman, and Brynley F. Roberts (eds.), *The Arthur of the Welsh. The Arthurian legend in medieval Welsh literature, Arthurian Literature in the Middle Ages I*, University of Wales Press, Cardiff 1991, pp. 117–145.

Jesch, Judith. *Ships and Men in the Late Viking Age – The Vocabulary of Runic Inscriptions and Skaldic Verse*. The Boydell Press, Woodbridge 2001.

Jhally, Sut. *The codes of advertising: Fetishism and the political economy of meaning in the consumer society*. Routledge, London 2014.

Jin, Dal Yong. *Korea’s Online Gaming Empire*. The MIT Press, Cambridge 2010.

Juul, Jesper. *A clash between game and narrative: A thesis on computer games and interactive fiction*. University of Copenhagen, Copenhagen 1999.

Juul, Jesper. *Half-Real. Video Games between Real Rules and Fictional Worlds*. The MIT Press, Cambridge 2005.

Kaminski, Winfred. “Mythisch-märchenhafte Elemente in Computerspielen.“ *Computerspiele(r) verstehen. Zugänge zu virtuellen Spielwelten für Eltern und Pädagogen*, edited by Jürgen Fritz, Bundeszentrale für politische Bildung, Bonn 2008, pp. 112-120.

Kim, Se Jin. *Gender Inequality in eSports Participation: Examining League of Legends*. Dissertation. University of Texas, Austin 2017.

Kim, Young Ji, et al. *What Makes a Strong Team?: Using Collective Intelligence to Predict Team Performance in League of Legends*. CSCW, New York 2017, pp. 2316-2329.

Kingsbury, Paul. "Anime cosplay as love-sublimation." *Geographical Aesthetics*. Routledge, London 2016, pp. 67-83.

Kou, Yubo, and Xinning Gui. "Playing with strangers: understanding temporary teams in league of legends." *Proceedings of the first ACM SIGCHI annual symposium on Computer-human interaction in play*. ACM, Irvine 2014.

Kramer, Jürgen. „Vorwort.“ *KULTURWISSENSCHAFTEN IN DER ANGLISTIK – EINE STANDORTBESTIMMUNG*. Institut für Anglistik und Amerikanistik, Dortmund 2003.

Kunczik, Michael, and Astrid Zipfel. *Gewalt und Medien*. Böhlau Verlag, Köln 2006.

LeBlanc, M. "Tools for Creating Dramatic Game Dynamics". *The Game Design Reader: A Rules of Play Anthology*, edited by Katie Salen & Eric Zimmerman, The MIT Press, Cambridge 2006, pp. 438-459.

Lee, D. & Schoenstedt, L. J. "Comparison of eSports and Traditional Sports Consumption Motives." *The Journal of Research in Health, Physical Education, Recreation, Sport & Dance*, vol. 6, no. 2, ICHPER-SD, Reston 2011, pp. 39-44.

Lee, R. *Religion and leisure in America*. Abingdon Press, New York 1964.

Lee, Sang Woo, Jae Woong An, and Ji Young Lee. "The Relationship between E-Sports Viewing Motives and Satisfaction: The Case of League of Legends." *Proceedings of The International Conference on Business, Management & Corporate Social Responsibility*. Batam 2014, pp. 33-36.

Leeming, David. *The Oxford Companion to Worldly Mythology*. Oxford University Press, Oxford 2005.

Lévi-Strauss, Claude, and Jean-Pierre Vernant. *Mythos ohne Illusion*. Suhrkamp, Frankfurt am Main 1984.

Lewis, Jeff. *Cultural Studies*. Sage Publishing, London, Thousand Oaks, New Delhi, and Singapore 2008.

Lindow, John. *Handbook of Norse Mythology*. ABC-CLIO, Santa Barbara 2001.

Link, Luther. *Devil: A Mask Without A Face*. Reaktion Books, London 1995.

Lobel, Adam, et al. "Video gaming and children's psychosocial wellbeing: A longitudinal study." *Journal of youth and adolescence*, vol 46, no. 4, Springer, Berlin 2017, pp. 884-897.

Lurker, Manfred. *A Dictionary of Gods and Goddesses, Devils and Demons*. Routledge, London 2015.

Lynch, H. L. *Composing a gamer: A case study of one gamer's experience of symbiotic flow*. Dissertation. ProQuest Dissertations Publishing, Atlanta 2013. Retrieved from http://scholarworks.gsu.edu/msit_diss/112.

Lynch, T., Tompkins, J. E., van Driel, I. I., & Fritz, N. (2016). "Sexy, strong, and secondary: A content analysis of female characters in video games across 31 years." *Journal of Communication*, vol 66, no. 4, Wiley Subscription Services, Hoboken 2016, pp. 564-584.

Lysaght, Patricia. "Aspects of the Earth-Goddess in the Traditions of the Banshee in Ireland." *The Concept of the Goddess*, edited by Billington, S. and Miranda Green, Routledge, London 1996, pp. 152-65.

Macedo, Tarcízio, and Manuela do Corral Vieira. "Far beyond the pixels: consumption and material culture experiences in League of Legends." *Comunicacao, Midia e Consumo*, vol 14, no. 41, Escola Superior de Propaganda e Marketing, Sao Paulo 2017, pp. 146.

Macey, Samuel L. *Patriarchs of Time: Dualism in Saturn-Cronus, Father Time, the Watchmaker God, and Father Christmas*. University of Georgia Press, Athens 2010.

Mair, Victor H. "Suen Wu-kung= Hanumat? The Progress of a Scholarly Debate." *Proceedings of the Second International Conference on Sinology*. Taipei: Academia Sinica 1989, pp. 659-752.

March, Jennifer R. *Dictionary of Classical Mythology*. Oxbow Books, Oxford 2014.

Marchart, Oliver. *Cultural Studies*. UVK Verlagsgesellschaft mbH, Konstanz 2008.

Marconi, Momolina. "Can the Cosmogony of the Greeks Be Reconstructed?" *History of Religions*, vol. 1, no. 2, University of Chicago Press, Chicago 1962, pp. 274-280.

MARTIN, J. "Consuming Code: Use-Value, Exchange-Value, and the Role of Virtual Goods in Second Life." *Journal of Virtual Worlds Research*, vol. 1, no. 2, Western University Canada, London 2008, pp. 1-21.

- Mäyrä, Frans. *An Introduction to Game Studies*. SAGE Publications, Los Angeles, London, New Delhi, Singapore and Washington DC 2008.
- Miah, A. "How do esports companies support their community's wellness?" *International Journal of Esports*, vol. 1, no. 1. Manchester, 2020, pp. 1-12.
- McChesney, R. *The Problem of the Media: US Communication Politics in the 21st Century*. Monthly Review Press, New York 2004.
- McGonigal, Jane. *Reality is broken: Why games make us better and how they can change the world*. Penguin, London 2011.
- McTee, Michael. "E-sports: More than just a fad." *Okla. JL & Tech*, Oklahoma 2014, pp. 1-27.
- Meister, D.M., Müller-Lietzkow, J., Burkatzki, E., Kröger, S. "Digital Games in the Context of Adolescent Media Behavior". *Computer Games and New Media Cultures - A Handbook of Digital Games Studies*, edited by Fromme, J., Unger, A., Springer, Dordrecht 2012, pp. 295-313.
- Melton, J. Gordon. *The Vampire Book: The Encyclopedia of the Undead*. Visible Ink Press, Canton 2010.
- Milne, G. R., & McDonald, M. A. *Sport marketing: managing the exchange process*. Jones and Bartlett, Burlington 1999.
- Morris, Sarah P. *Daidalos and the origins of Greek art*. Princeton University Press, Princeton 1995.
- Mokherjee, Souvik. *Video Games and Postcolonialism: Empire plays back*. Sage Publishing, Los Angeles, 2018.
- Muir, John Kenneth. *The Encyclopedia of Superheroes on Film and Television*. McFarland & Company, Jefferson 2008.
- Muir, Kenneth. Folklore and Shakespeare. *Folklore*, vol. 92, no. 2, Taylor & Francis, Abingdon 1981, pp. 231-240.
- Müller, Wolfgang G. A Study on the Interdependence of Literary Figures. In Heinrich F. Plett (ed.), *Intertextuality*, de Gruyter, Berlin & New York, 1991, pp. 101–121.
- Mumford, Ethel Watts. "The Japanese Book of the Ancient Sword." *Journal of the American Oriental Society*, vol 26, New Haven 1905, pp. 334–410.

Nachmanovitch, Stephen. *Free Play: Improvisation in Life and Art*. Tarcher/Penguin, London 1990.

Ng, Brian D. and Wiemer-Hastings, Peter. "Addiction to the Internet and Online Gaming." *CyberPsychology & Behavior*, vol. 8, no. 2, New Rochelle 2005, pp. 110-113.

Nietzsche, Friedrich. *Beyond Good and Evil*. Random House, Munich 1966.

Nünning, Ansgar and Jucker, Andreas. *Orientierung Anglistik/Amerikanistik*. Rowohlt Taschenbuch Verlag, Hamburg 1999.

Olsen, Anders Hval. *The evolution of eSports: an analysis of its origin and a look at its prospective future growth as enhanced by Information Technology Management tools*, Cornell University, Ithaca 2015.

Pereira, Luís Lucas, Pedro Machado Santa, and Licinio Roque. *What You Draw Is What You Play: a natural approach to participatory game creation*. University of Coimbra, Coimbra 2014.

Poor, Nathaniel. "Computer game modders' motivations and sense of community: A mixed-methods approach". *New Media and Society*, vol. 16, no. 8, SAGE Publishing, Texas, Springfield and Louisville 2013, pp. 1249–1267.

Poulakou-Rebelakou, E., Tsiamis, C., Panteleakos, G., & Ploumpidis, D. "Lycanthropy in Byzantine times (AD 330—1453)." *History of Psychiatry*, vol. 20, no. 4, SAGE Publishing, Texas, Springfield and Louisville 2009, pp. 468–479.

Przybylski, Andrew K., Netta Weinstein, and Kou Murayama. "Internet gaming disorder: Investigating the clinical relevance of a new phenomenon." *American Journal of Psychiatry*, vol.174, no.3, Washington 2017, pp. 230-236.

Van Putten, Marijke, Marcel Zeelenberg, and Eric Van Dijk. "Who throws good money after bad? Action vs. state orientation moderates the sunk cost fallacy." *Judgment and Decision Making*, vol. 5, no.1, San Diego 2010, pp. 33-36.

Ray, S. G. *Gender inclusive game design: Expanding the market*. Charles River Media, Needham 2004.

Reitman, J. G., Anderson-Coto, M. J., Wu, M., Lee, J. S., & Steinkuehler, C. (2020). Esports research: A literature review. *Games*

and Culture, SAGE Publishing, Texas, Springfield and Louisville, vol. 15, no. 1, pp. 32-50.

Roberts, K. *The Business of Leisure*. Palgrave, London 2016.

Roller, Lynn E. "The Legend of Midas." *Classical Antiquity*, vol. 2, no. 2, University of California Press, Berkeley 1983, pp. 299–313.

Roper, Bill. "Bill Roper & His Merry Band Of Orcs." *HWM*, vol. 45, no. 5, Singapore 2002, pp. 100-101.

Rose, Carol. *Giants, monsters, and dragons: An encyclopedia of folklore, legend, and myth*. WW Norton & Company, 2001.

Ruckenstein, Michael. "Homo Ludens: A Study of the Play Element in Culture." *Leisure and Ethics*, Taylor & Francis, Milton Park, London and Abigdon, 1991, p. 237.

Russoniello, Carmen V., Kevin O'Brien, and Jennifer M. Parks. "The effectiveness of casual video games in improving mood and decreasing stress." *Journal of CyberTherapy & Rehabilitation*, vol. 2, no. 1, San Diego and Washington 2009, pp. 53-66.

Rutgers, A. J. "Hera and Herakles." *Numen*, vol. 17, no. 3, Leiden 1979, pp. 245–247.

Salen, K. and Eric Zimmerman. *Rules of Play: Game Design Fundamentals*. MIT Press, Cambridge 2004.

Salen, K. and Eric Zimmerman. *The Game Design Reader*. MIT Press, Cambridge 2007.

Salvatore, R.A. *The Demon Awakens*. Del Rey, 1998.

Schmidt, Robert. "Pop-Sport-Kultur." *Praxisformen körperlicher Aufführungen*. UVK Verlagsgesellschaft mbH, Konstanz 2002.

Scholz, Tobias. *eSports is Business*. Palgrave 2019.

Scholz, Tobias. New Broadcasting Ways in IPTV – The Case of the Starcraft Broadcasting Scene. *Esportsyearbook.com*, 2012, pp. 89–105. <https://esportsyearbook.com/eyb201112.pdf>.

Schor, Juliet B. *The overspent American: Why we want what we don't need*. Harper Perennial, New York 1999.

Schöber, Timo, and Georg Stadtmann. "Fortnite: The business model pattern behind the scene." *European University Viadrina Frankfurt*

(Oder) *Department of Business Administration and Economics*
Discussion Paper 415, Frankfurt 2020.

Seelow, David. "Listening to youth: Woodstock, music, America, and Kurt Cobain's suicide." *Child and Youth Care Forum*, vol 25, no. 1, Cham 1996, pp. 49-53.

Shahar, Meir. "Ming-Period Evidence of Shaolin Martial Practice." *Harvard Journal of Asiatic Studies*, vol. 61, no. 2, Beijing 2001, pp.359–413.

Shaw, Adrienne. "What is video game culture? Cultural studies and game studies." *Games and Culture*, vol. 5, no. 4, Philadelphia 2010, pp. 403-424.

Sheed, Wilfrid. "Why Sports Matter". *The Wilson Quarterly*, vol. 19, no. 1, Washington 1995, pp. 11-25.

Shen, C., Ratan, R., Cai, Y. D., & Leavitt, A. *Do men advance faster than women? Debunking the gender performance gap in two massively multiplayer online games.* *Journal of Computer-Mediated Communication*, vol. 21, no. 4, 2016, pp. 312–329.

Shifman, Limor. *Memes in Digital Culture.* The MIT Press, Cambridge 2014.

Showman, Adam P., and Renu Malhotra. "The galilean satellites." *Science*, vol. 286, no. 5437, 1999, pp. 77-84.

Smarzoch, Raphael. "Sgt. Pac Man's Lonely Hearts Club Band". *Neue Zeitschrift für Musik*, 2017, p. 56.

Smith, William and Charles Anthon. *A Dictionary of Greek and Roman Antiquities.* Harper & Brothers, New York 1857.

Sorabella, Jean. "A Satyr for Midas: The Barberini Faun and Hellenistic Royal Patronage." *Classical Antiquity*, vol. 26, no. 2, 2007, pp. 219–248.

Speidel, Michael P. "Berserks: A History of Indo-European 'Mad Warriors.'" *Journal of World History*, vol. 13, no. 2, 2002, pp. 253–290.

Stein, Daniel. *Popular Seriality, Authorship, Superhero Comics: On the Evolution of a Transnational Genre Economy.* *Media Economies: Perspectives on American Cultural Practices*, 2014, pp. 133-157.

Steptoe, Andrew, Angus Deaton, and Arthur A. Stone. Subjective wellbeing, health, and ageing. *The Lancet*, vol. 385, no. 9968, 2015, pp. 640-648.

- Sutton-Smith, Brian. *Ambiguity of Play*. Harvard University Press, Cambridge 2001.
- Szulborski, Dave. *This Is Not A Game. A Guide to Alternate Reality Gaming*. New Fiction Publishing, 2005.
- Taylor, T.L. *Raising the Stakes: E-Sports and the Professionalization of Computer Gaming*. The MIT Press, Cambridge 2012.
- Taylor, E. W., and N. M. Whiteley. "Oxygen transport and acid-base balance in the haemolymph of the Lobster, *Homarus Gammarus*, during aerial exposure and resubmersion." *Journal of Experimental Biology*, vol. 144, no. 1, Birmingham, Düsseldorf and St. Andrews 1989, pp. 417-436,
- Tehrani, Jamshid J. "The phylogeny of little red riding hood." *PloS one*, vol. 8, no. 11. 2013, pp. 1-11.
- Thompson JJ, Blair MR, Henrey AJ. Over the Hill at 24: Persistent Age-Related Cognitive-Motor Decline in Reaction Times in an Ecologically Valid Video Game Task Begins in Early Adulthood. *PLoS one*, vol. 9, no. 4, 2014.
- Thorpe, Benjamin. *The Edda of Sæmund the Learned. From the Old Norse Or Icelandic, with a Mythological Index, Volume 2*. Trübner, London 1866.
- Topper, Kathryn. Perseus, the Maiden Medusa, and the Imagery of Abduction. *Hesperia: The Journal of the American School of Classical Studies at Athens*, vol. 76, no. 1, 2007, pp. 73-105.
- Torjussen, Stian Sundell. "Release the Kraken!"—The Recontextualization of the Kraken in Popular Culture, from Clash of the Titans to Magic: The Gathering. *New Voices in Classical Reception Studies*, vol. 1, no. 1, 2016, pp. 1-13.
- Travis, William J. Of Sirens and Onocentaurs: A Romanesque Apocalypse at Montceaux-L'Etoile. *Artibus Et Historiae*, vol. 23, no. 45, 2002, pp. 29-62.
- Turnbull, Stephen. *The Samurai Swordsman: Master of War*. Frontline Books, Barnsley 2008.
- Vatter, Hannes. *The Devil in English Literature*. Francke Verlag, Berne 1978.
- Vollmer, Wilhelm, and Johannes Minckwitz. *Dr. Vollmer's Wörterbuch der Mythologie aller Völker*. Hoffmann, Stuttgart 1874.
- Von Linné, Carl. *Carolus Linnaeus Systema Naturae, 1735*. De Graaf, Nieuwkoop 1964.
- Waldenfels, Bernhard. *Verfremdung der Moderne – phänomenologische Grenzgänge*. Wallstein, Göttingen 2001.

Walker, Hera S. Indigenous or Foreign?: A Look at the Origins of the Monkey Hero Sun Wukong. *Department of Asian and Middle Eastern Studies*, vol. 81, no. 87, University of Pennsylvania, Philadelphia 1998.

Wagner, Michael G. "On the Scientific Relevance of eSports." *International Conference on Internet Computing*. Department for Interactive Media and Educational Technology Danube University, Krems 2006.

Weinstock, Jeffrey. *The Ashgate Encyclopedia of Literary Cinematic Monsters*. Routledge, London 2016.

Welty Peachey, Jon, et al. "Building social capital: Examining the impact of Street Soccer USA on its volunteers." *International Review for the Sociology of Sport*, vol. 48, no. 1, SAGE Publishing, Texas, Springfield and Louisville 2013, pp. 20-37.

Whiting, Jim. *Hercules*. Mitchell Lane Publishers, Hallandale 2008.

Winn, Chris. "The Well-Played MOBA: How DotA 2 and League of Legends use Dramatic Dynamics." *DiGRA Conference*. 2015

Wittek, Charlotte Thoresen, et al. "Prevalence and predictors of video game addiction: A study based on a national representative sample of gamers." *International journal of mental health and addiction*, vol. 14, no.5, Berlin 2016, pp. 672-686.

Wright, Talmadge, Eric Boria, and Paul Breidenbach. Creative player actions in FPS online video games: Playing Counter-Strike. *Game studies*, vol. 2, no. 2, 2002, pp. 103-123.

Yee, Nick. "Motivations for Play in Online Games." *CyberPsychology & Behavior*, vol. 9, no. 6, 2006, pp. 772-75.

Zhang, Yifen, et al. "Brain activity toward gaming-related cues in Internet gaming disorder during an addiction stroop task." *Frontiers in psychology*, vol.7, Shanghai 2016, article 714, pp. 1-9.

Zimmermann, Olaf, and Gabriele Schulz. „Zensur oder öffentliche Förderung? Computerspiele in der Diskussion.“ Zimmermann, Olaf/Geißler, Theo (Hg.)(2007): *Streitfall Computerspiele: Computerspiele zwischen kultureller Bildung, Kunstfreiheit und Jugendschutz*, Berlin 2007, pp. 12-15.

Zimmerman, Eric. "Manifesto for a ludic century." *The gameful world: Approaches, issues, applications*, 2015, pp. 19-22.

11.3 Online Sources

A-Team. "SUPERCUT "I love it when a plan comes together." *YouTube*, uploaded by Ayer Nomias, 14 Feb. 2018, <https://www.youtube.com/watch?v=NsUFBm1uENs>.

Aether Wing Kayle – Night of Fire Dance. "Aether Wing Kayle - Night of Fire Dance - League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 11 Jan. 2013, <https://www.youtube.com/watch?v=EQb8GMhB-Ws>.

Aether Wing Kayle 2019. "Aether Wing Kayle (2019) Skin Spotlight – League of Legends." *YouTube*, uploaded by SkinSpotlight, 17 March 2019, https://www.youtube.com/watch?v=Txgl0jq_V0s.

Ahri Run Devil Dance Reference. "Ahri - Dance Reference." *YouTube*, uploaded by SpotlightBrasil, 2 Dec. 2016, <https://www.youtube.com/watch?v=z7gwhHLBXLk>.

Ahri Genie Dance Reference. Popstar Ahri - Genie Dance - League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 7 Nov. 2013, <https://www.youtube.com/watch?v=MWz84APw6zw>.

Alderton, Rory. "Ask Riot – Bugs and Dances." *LeagueofLegends*, 1 Jan 2018, <https://nexus.leagueoflegends.com/en-us/2017/12/ask-riot-bugs-and-dances/>. Accessed 21 Sept. 2018.

Altay, Omer. "The First Moba – Aeon Of Strife." *MMOS*, 26 May 2015, <https://mmos.com/editorials/the-first-moba-aeon-of-strife>. Accessed 1 March 2019.

Ambühl, Annemarie (Groningen). 'Thoosa'. Brill's New Pauly. Ed. Hubert Cancik et al. Brill Reference Online. Web. 20 June 2021, https://referenceworks.brillonline.com/search?s.f.s2_parent=s.f.book.bri-ll-s-new-pauly&search-go=&s.q=cyclops.

Amumu Dance. "Amumu Dance Reference South Park Goth Kids' Dance." *YouTube*, uploaded by League of Legends, 13 Jan. 2015, <https://www.youtube.com/watch?v=13QMXyTySjM>.

Anchorman Fight Scene 2004. "ANCHORMAN COMPLETE FIGHT SCENE." *YouTube*, uploaded by Rodolfo Tobias, 10 July 2013, <https://www.youtube.com/watch?v=ipsPgNEmAXI>.

Animemes Subreddit. "i drew a gif of kyouko dancing a decade old meme." *reddit*, uploaded by Gaburiel, 9 Jan. 2019. https://www.reddit.com/r/Animemes/comments/ae1kr1/i_drew_a_gif_of_kyouko_dancing_a_decade_old_meme/.

Anivia Troll Teamkills. “League of Legends - Anivia Troll Teamkills.” *YouTube*, uploaded by VG Legion, 15 Dec. 2013, <https://www.youtube.com/watch?v=lCEowPv9xLo&feature=youtu.be>.

Arrested Development Chicken Dance Montage. “Arrested Development Chicken Dance Montage.” *YouTube*, uploaded by tammy lewis, 3 Dec. 2009, <https://www.youtube.com/watch?v=APWXorE6h8U>.

Arte.TV. “K-Pop.” 6. March 2012, <https://web.archive.org/web/20120308105216/http://www.arte.tv/de/K-Pop/6428924.html>. Accessed 3 April 2019.

Ashton, Graham. “Cheating in Esports – How Is It Done, and How Is It Dealt With?” *Esportsobserver.com*, 27 May 2019, <https://esportsobserver.com/cheating-in-esports/>. Accessed 26 Sep. 2019.

Aurel Vlaicu 2019. “AUREL VLAICU.” *Earlyaviators.com*, 2019, <http://earlyaviators.com/evlaicu.htm>. Accessed 6 Oct. 2019.

Avengers Caramelldansen. “Avengers-Caramelldansen.” *YouTube*, uploaded by 草宣, 12 Oct. 2012, <https://www.youtube.com/watch?v=PdEx87fY04w>.

Baranowski, Jordan. “The untold Truth of League of Legends.” *SVG*, 8 June 2018, <https://www.svg.com/125466/the-untold-truth-of-league-of-legends/>. Accessed 6 Feb. 2019.

Bergeskans, Jesper. “Kings of the power spikes: analyzing the key to Liquid’s dominance.” *Cybersport*, 7 Aug. 2018, <https://cybersport.com/post/liquid-analysis-power-spikes>. Accessed March 11 2019.

Bigfishgames.com. “Stealth Games as a Genre:” 10 March 2010, <https://www.bigfishgames.com/blog/stealth-games-as-a-genre/>. Accessed 9 Oct. 2019.

Bilg21, a user on *reddit*, 20 Sep. 2016, https://www.reddit.com/r/DotA2/comments/53k8up/heroes_vs_champions_uniqueness/d7tsstw/. Accessed 9 Jan. 2019.

Black Beard 2019. “Blackbeard.” *Wikipedia.org*, 2019, <https://de.wikipedia.org/wiki/Blackbeard>. Accessed 6 Oct. 2019.

Blistein, Jon. “How ‘Leaving Neverland’ Has – and Hasn’t – Changed Michael Jackson’s Legacy.” *Rollingstone*, 18 March 2019, <https://www.rollingstone.com/music/music-news/michael-jackson-legacy-leaving-neverland-fallout-808813/>. Accessed March 19 2019.

Blitzcrank Piltover Skin 2012. “Piltover Customs Blitzcrank League of Legends Skin Spotlight.” *YouTube*, uploaded by SkinSpotlights, 26 March 2012, <https://www.youtube.com/watch?v=7AeDQEGEOZO>.

Blizzard.com. “Heroes of the Storm News.” 13 Dec. 2018, <https://news.blizzard.com/en-us/blizzard/22833558/heroes-of-the-storm-news>. Accessed 24 Oct. 2019.

Blues Brothers Scene. “The Blues Brothers - Jailhouse Rock (Elvis Presley cover) - 1080p Full HD.” *YouTube*, uploaded by Juanjo de Goya, 7 May 2013, <https://www.youtube.com/watch?v=hjLruk4uZzQ>.

Blue Sentinel’s Dance. “Blue Sentinel's Dance – Open the Door – League of Legends (LoL).” *YouTube*, uploaded by NeiLalwaysLeeT, 10 Nov. 2015, <https://www.youtube.com/watch?v=YP-8qn46rk0>.

Bohner, Steven. “The Top 10 Best Dances In League Of Legends.” *WGRD*, 31 Aug. 2012, <http://wgrd.com/the-top-10-best-dances-in-league-of-legends/>. Accessed 24 Feb. 2019.

Bonifacio, Patrick. “DOTA 2 HERO GUIDE.” *Firstblood.io*, 2019, <https://pages.firstblood.io/pages/blog/dota-2/dota-2-hero-guide/>. Accessed 26 Sep. 2019.

Bosch, Jef Van den. “Riot Games launches their first Wild Rift esports tournament for Europe and MENA called Origin Series.” *Esports.com*, 2021, <https://www.esports.com/de/riot-games-launches-their-first-wild-rift-esports-tournament-for-europe-and-mena-called-origin-series-216747>. Accessed 16 June 2021.

Breslau, Rod. “League of Legends Season 2 Championships most watched eSports event of all time.” *Gamespot*, 22 Oct. 2012, <https://www.gamespot.com/articles/league-of-legends-season-2-championships-most-watched-esports-event-of-all-time/1100-6398663/>. Accessed 9 Jan. 2019.

Brody, Richard. “The Worst Thing About “Birth of a Nation” Is How Good It Is.” *NewYorker.com*, 2019, <https://www.newyorker.com/culture/richard-brody/the-worst-thing-about-birth-of-a-nation-is-how-good-it-is>. Accessed 9 Oct. 2019.

Businesswire.com. “Blizzard’s Worlds Collide.” 20 April 2015, https://www.businesswire.com/news/home/20150420005352/en/Blizzard%E2%80%99s-Worlds-Collide-Heroes-Storm%E2%84%A2-Launches-June#.VTUx_1VVhBe. Accessed 24 Oct. 2019.

Campbell, Colin. “How esports fans spend their time, and their money.” 5 Nov. 2015, <https://www.polygon.com/2015/11/5/9676764/how-esports-fans-spend-their-time-and-their-money>. Accessed 1 Nov. 2020.

Carton, Sean. "Aeon of Strife." *Lanepushinggames*, 5 Dec. 2013, <https://lanepushinggames.com/article/aeon-of-strife>. Accessed 9 Dec. 2018.

Carton, Sean. "The Lane Pushing Name." *Lanepushinggames*, 19th May 2019, <https://lanepushinggames.com/article/the-lane-pushing-name>. Accessed 14 June 2019.

Cavanagh, Daniel. "Scale comparison: Summoner's Rift superimposed over Dota 2 map." *Defenseofthelegends*, 8 Dec. 2015, <https://defenseofthelegends.tumblr.com/post/104669185429/so-the-spawn-pads-in-summoners-rift-are-around>. Accessed 1 Oct. 2019.

Chess.com. "Do your friends play chess?" 30 June 2007, <https://www.chess.com/forum/view/community/do-your-friends-play-chess>. Accessed 26 Sep. 2019.

Chessnyc.com. "Places to play chess in NYC." 2019, <https://www.chessnyc.com/places-to-play-chess-in-nyc.html>. Accessed 26 Sep 2019.

Childrens Commissioner Report (2019). Gaming the system. October 2019, <https://www.childrenscommissioner.gov.uk/wp-content/uploads/2019/10/CCO-Gaming-the-System-2019.pdf>. Accessed June 22nd 2021.

Chung, Leopold. "Paris 2024 Olympics: Esports 'in talks' to be included as demonstration sport." *BBC*, 25 April 2018, <https://www.bbc.com/sport/olympics/43893891>. Accessed 30 Nov. 2018.

Cincameron, a user on *YouTube*, 9 Dec. 2018, <https://www.youtube.com/watch?v=XYZHhLQQ53c&lc=UgyvNmUtWPI4ghyuldN4AaABAg>. Accessed 9 April 2019.

Cocozza, Paula. "You Have to Keep Fit to Stay in Gaming." *TheGuardian*, 16 Oct. 2018, www.theguardian.com/sport/shortcuts/2018/oct/16/keep-fit-to-stay-in-gaming-esports. Accessed 30 Nov. 2018.

Collins, Sean T. "The Rise of 'Guardians of the Galaxy's Rocket Raccoon.'" *Rollingstone.com*, 29 July 2014, <https://www.rollingstone.com/culture/culture-news/the-rise-of-guardians-of-the-galaxys-rocket-raccoon-205130/>. Accessed 2 Nov. 2019.

Council of Europe. "Culture and Sport." *COE.int*, 2019, <https://www.coe.int/en/web/compass/culture-and-sport>. Accessed 14 March 2019.

Curtin, Paul. "Heroes of Newerth Discounted." *Mediastinger.com*, 24 March 2011, <http://www.mediastinger.com/heroes-of-newerth-discounted-on-sale-for-only-10-until-march-27th/>. Accessed 29 Sep. 2019.

Dark Knight Rises Anthem 2012. "The Dark Knight Rises - Bane Destroys Gotham + Stadium Anthem (HD) IMAX." *YouTube*, uploaded by JokDon, 18. Nov. 2012, <https://www.youtube.com/watch?v=UsoYwysCdfY>.

Dean, Paul. "The Story of DOTA." *Eurogamer*, 30 Jan. 2018, <https://www.eurogamer.net/articles/2011-08-16-the-story-of-dota-article/>. Accessed 29 Sep. 2019.

Dedmon, Tanner. "League of Legends Tops Free-to-Play Revenue Charts in 2017." *Comicbook*, 30 Jan. 2018, <https://comicbook.com/gaming/2018/01/30/league-of-legends-top-free-to-play-revenue-charts-in-2017/>. Accessed 1 April 2019.

Derrickson, Scott. "Why The Time Manipulation In Doctor Strange Isn't Really Time Travel." Interview by Eric Eisenberg on *Cinemablend.com*, <https://www.cinemablend.com/news/1581369/why-the-time-manipulation-in-doctor-strange-isnt-really-time-travel>. Accessed 14 Oct. 2019.

Destructed3, a user on *reddit*, 20 Sep. 2016, https://www.reddit.com/r/DotA2/comments/53k8up/heroes_vs_champions_uniqueness/. Accessed 9 Jan. 2019.

Dibbell, J. "The Unreal Estate Boom." *Wired Magazine*, 1 Jan. 2003, <https://www.wired.com/2003/01/gaming-2/>. Accessed 30 Nov. 2018.

Dignitas Website. "Mental Health." *Dignitas.gg*, 10 April 2017, <https://dignitas.gg/articles/blogs/Unknown/11049/mental-health-why-the-league-of-legends-community-should-care>. Accessed June 23rd 2021.

Disco Nunu. "My first Disco Nunu." *YouTube*, uploaded by RossBoomsocks, 15 Dec. 2017. <https://youtu.be/7IPJhXQ2S2A?t=34>.

DJ Sona Caramelldansen. "DJ Sona Dance Reference - Caramell – Caramelldansen." *YouTube*, uploaded by GrimlyGaming, 11 Feb. 2015, <https://www.youtube.com/watch?v=OMN8q7CeE1Y>.

Dog_obgyn, a user on *reddit*, 20 Sep. 2016, https://www.reddit.com/r/DotA2/comments/53k8up/heroes_vs_champions_uniqueness/d7ttpbf/. Accessed 9 Jan. 2019.

Dota Observatory. “The International 2018 Draft Analysis.” 2019, <https://medium.com/dota-observatory/how-does-og-win-the-international-2018-macro-strategy-and-draft-analysis-137ed3cd8dc5>. Accessed 11 Oct. 2019.

Draven Death Animation 2012. “LoL - Draven Death Animation [HQ].” *YouTube*, uploaded by WretchedOutkasts, 17 Aug. 2012, <https://www.youtube.com/watch?v=OMN8q7CeE1Y>.

Dutton, Fred. “Valve opens DOTA 2 beta registration.” *Eurogamer*, 16 Aug. 2011, <https://www.eurogamer.net/articles/2011-08-16-valve-opens-dota-2-beta-registration>. Accessed 29 Sep. 2019.

Enrei, a user on *Leagueoflegends*, 2 March 2012, <http://forums.na.leagueoflegends.com/board/showthread.php?t=1783617>. Accessed 6 June 2019.

Dolby, Thomas. “She Blinded Me With Science.” *YouTube*, uploaded by emimusic, 15 April 2009, <https://www.youtube.com/watch?v=V83JR2IoI8k>.
Dota-frenzy.blogspot.com, “DotA Items.” 2019, <http://dota-frenzy.blogspot.com/p/dota-item-list.html>, Accessed 15 Oct. 2019.

Dotawiki.de. “Dotalicious-Gaming.” 2019, <http://dotawiki.de/index.php?title=DotAlicious-Gaming>. Accessed 1 April 2019.

Dota2.com. “Puck.” 2019, <http://www.dota2.com/hero/puck/>. Accessed 2. April 2019.

Dota2.com. “The International.” 2019, <http://www.dota2.com/international/overview/>. Accessed 29 Sep. 2019.

Dota2.com. “The Main event with new STEAM broadcasting.” 20 Aug. 2018, <http://blog.dota2.com/2018/08/the-main-event-with-new-steam-broadcasting/>. Accessed 23 Oct. 2019.

Dota2.com. “Tinker.” 2019, <http://www.dota2.com/hero/tinker>. Accessed 5. June 2019.

“Dota 2 vs. LoL - Eure Meinung?” *LeagueofLegends*, 10 April 2012, <http://forums.euw.leagueoflegends.com/board/showthread.php?t=866607&page=3>. Accessed 21 Sept. 2018.

Dota2.Gamepedia.com. “Abaddon.” 2019,
<https://dota2.gamepedia.com/Abaddon>. Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Abilities.” 2019,
<https://dota2.gamepedia.com/Abilities>. Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Aegis of Champions.” 2019,
https://dota2.gamepedia.com/Aegis_of_Champions. Accessed 14 Oct. 2019.

Dota2.Gamepedia.com. “Aegis of the Immortal.” 2019,
https://dota2.gamepedia.com/Aegis_of_the_Immortal. Accessed 18 April 2019.

Dota2.Gamepedia.com. “Animal Courier.” 2019,
https://dota2.gamepedia.com/File:Animal_Courier_Radiant_model.png. Accessed 28 Feb. 2019.

Dota2.Gamepedia.com. “Announcers.” 2019,
<https://dota2.gamepedia.com/Announcers>. Accessed 29 Sep. 2019.

Dota2.Gamepedia.com. “Announcer Responses.” 2019,
https://dota2.gamepedia.com/Announcer_responses. Accessed 9 April 2019.

Dota2.Gamepedia.com. “Announcers.” 2019,
<https://dota2.gamepedia.com/Announcers>. Accessed 9 April 2019.

Dota2.Gamepedia.com. “Axe.” 2019,
<https://dota2.gamepedia.com/Axe>, Accessed 17 April 2019.

Dota2.Gamepedia.com. “Bane.” 2019,
<https://dota2.gamepedia.com/Bane>, Accessed 17 April 2019.

Dota2.Gamepedia.com. “Bane Responses.” 2019,
<https://dota2.gamepedia.com/Bane/Responses>, Accessed 11 Oct. 2019.

Dota2.Gamepedia.com. “Blink Dagger.” 2019,
https://dota2.gamepedia.com/Blink_Dagger, Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Bloodseeker.” 2019,
<https://dota2.gamepedia.com/Bloodseeker>, Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Bloodthorn.” 2019,
<https://dota2.gamepedia.com/Bloodthorn>, Accessed 12 Oct. 2019.

Dota2.Gamepedia.com. "Bolvar Fordragon." 2019,
https://wow.gamepedia.com/Bolvar_Fordragon. Accessed 8 April 2019.
Accessed 8 April 2019.

Dota2.Gamepedia.com. "Boots of Travel." 2019,
https://dota2.gamepedia.com/Boots_of_Travel. Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. "Bots." 2019,
<https://dota2.gamepedia.com/Bots>. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. "Bottle." 2019,
<https://dota2.gamepedia.com/Bottle>. Accessed 31 Oct. 2019.

Dota2.Gamepedia.com. "Brewmaster." 2019,
<https://dota2.gamepedia.com/Brewmaster>, Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. "Buyback." 2019,
<https://dota2.gamepedia.com/Gold#Buyback>, Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. "Centaur Warrunner." 2019,
https://dota2.gamepedia.com/Centaur_Warrunner, Accessed 12 Oct. 2019.

Dota2.Gamepedia.com. "Cooldown." 2019,
<https://dota2.gamepedia.com/Cooldown>, Accessed 29 Sep. 2019.

Dota2.Gamepedia.com. "Courier." 2019,
<https://dota2.gamepedia.com/Courier>, Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. "Creeps." 2019,
<https://dota2.gamepedia.com/Creeps>, Accessed 28 Sep. 2019.

Dota2.Gamepedia.com. "Crystalys." 2019,
<https://dota2.gamepedia.com/Crystalys>, Accessed 11 Oct. 2019.

Dota2.Gamepedia.com. "Captains Mode." 2019,
https://dota2.gamepedia.com/Game_modes#Captains_Mode, Accessed 28 Sep. 2019.

Dota2.Gamepedia.com. "Cheese." 2019,
<https://dota2.gamepedia.com/Cheese>. Accessed 18 April 2019.

Dota2.Gamepedia.com. "Chen." 2019,
<https://dota2.gamepedia.com/Chen>. Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. "Chrystal Maiden." 2019,
https://dota2.gamepedia.com/Crystal_Maiden. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Clockwerk.” 2019,
<https://dota2.gamepedia.com/Clockwerk/Responses>. Accessed 2 April 2019.

Dota2.Gamepedia.com. “Creeps.” 2019,
<https://dota2.gamepedia.com/Creeps>. Accessed 27 Sep. 2019.

Dota2.Gamepedia.com. “Creep Pulling.” 2019,
https://dota2.gamepedia.com/Jungling#Creep_Pulling. Accessed 2 Oct. 2019.

Dota2.Gamepedia.com. “Daedalus.” 2019,
<https://dota2.gamepedia.com/Daedalus>. Accessed 12 Oct. 2019.

Dota2.Gamepedia.com. “Dagon.” 2019,
https://dota2.gamepedia.com/Dagon#Recommended_heroes. Accessed 12 Oct. 2019.

Dota2.Gamepedia.com. “Dazzle.” 2019,
<https://dota2.gamepedia.com/Dazzle>. Accessed 4 Nov. 2019.

Dota2.Gamepedia.com. “Debuff.” 2019,
https://dota2.gamepedia.com/Glossary#A_-_E. Accessed 2 Oct. 2019.

Dota2.Gamepedia.com. “Demon Edge.” 2019,
https://dota2.gamepedia.com/Demon_Edge. Accessed 19 April 2019.

Dota2.Gamepedia.com. “Demon Edge Lore.” 2019,
https://dota2.gamepedia.com/Demon_Edge/Lore. Accessed 9 Oct. 2019.

Dota2.Gamepedia.com. “Denying.” 2019,
<https://dota2.gamepedia.com/Denying>. Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Desolator.” 2019,
<https://dota2.gamepedia.com/Desolator>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Disable.” 2019,
<https://dota2.gamepedia.com/Disable>. Accessed 28 Feb. 2019.

Dota2.Gamepedia.com. “Disruptor.” 2019,
<https://dota2.gamepedia.com/Disruptor#Trivia>. Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Divine Rapier.” 2019,
https://dota2.gamepedia.com/Divine_Rapier. Accessed 18 April 2019.

Dota2.Gamepedia.com. “Doom.” 2019,
<https://dota2.gamepedia.com/Doom>. Accessed 25 April 2019.

Dota2.Gamepedia.com. “Dota 2.” 2019,
https://dota2.gamepedia.com/Dota_2. Accessed 8 April 2019.

Dota2.Gamepedia.com. “Dust of Appearance.” 2019,
https://dota2.gamepedia.com/Dust_of_Appearance. Accessed 2 Oct. 2019.

Dota2.Gamepedia.com. “Dying.” 2019,
<https://dota2.gamepedia.com/Gold#Dying>. Accessed 2 Oct. 2019.

Dota2.Gamepedia.com. “Enchantress.” 2019,
<https://dota2.gamepedia.com/Enchantress>. Accessed 25 April 2019.

Dota2.Gamepedia.com. “Eul’s Scepter of Divinity.” 2019,
https://dota2.gamepedia.com/Eul%27s_Scepter_of_Divinity. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Eye of Skadi.” 2019,
https://dota2.gamepedia.com/Eye_of_Skadi. Accessed 18 April 2019.

Dota2.Gamepedia.com. “Experience.” 2019,
<https://dota2.gamepedia.com/Experience>. Accessed 28 Sep. 2019.

Dota2.Gamepedia.com. “Ezalor.” 2019,
https://dota2.gamepedia.com/Keeper_of_the_Light. Accessed 11 Oct. 2019.

Dota2.Gamepedia.com. “Ezalor Responses.” 2019,
https://dota2.gamepedia.com/Keeper_of_the_Light/Responses.
Accessed 11 Oct. 2019.

Dota2.Gamepedia.com. “Farming.” 2019,
<https://dota2.gamepedia.com/Farming>. Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Gabe Newell Announcer.” 2019,
https://dota2.gamepedia.com/Mega-Kills:_Gabe_Newell. Accessed 9 April 2019.

Dota2.Gamepedia.com. “Game modes.” 2019,
https://dota2.gamepedia.com/Game_modes. Accessed 12 April 2019.

Dota2.Gamepedia.com. “Ganking.” 2019,
<https://dota2.gamepedia.com/Ganking>. Accessed 29 Sep. 2019.

Dota2.Gamepedia.com. “Gaze of the Cyclopean Marauder.” 2019,
https://dota2.gamepedia.com/Gaze_of_the_Cyclopean_Marauder.
Accessed 15 March 2019.

Dota2.Gamepedia.com. “Gem of True Sight.” 2019,
https://dota2.gamepedia.com/Gem_of_True_Sight. Accessed 18 April
2019.

Dota2.Gamepedia.com. “Hand of Midas.” 2019,
https://dota2.gamepedia.com/Hand_of_Midas. Accessed 18 April 2019.

Dota2.Gamepedia.com. “Heart of Tarrasque.” 2019,
https://dota2.gamepedia.com/Heart_of_Tarrasque. Accessed 18 April
2019.

Dota2.Gamepedia.com. “Heroes.” 2019,
<https://dota2.gamepedia.com/Heroes>. Accessed 27 Sep. 2019.

Dota2.Gamepedia.com. “Heroes by Release.” 2019,
https://dota2.gamepedia.com/Heroes_by_release. Accessed 30 Sep.
2019.

Dota2.Gamepedia.com. “Huskar.” 2019,
<https://dota2.gamepedia.com/Huskar>. Accessed 25 April 2019.

Dota2.Gamepedia.com. “Icefrog.” 2019,
https://dota2.gamepedia.com/IceFrog#External_Links. Accessed 13
Oct. 2019.

Dota2.Gamepedia.com. “Invoker.” 2019,
<https://dota2.gamepedia.com/Invoker>. Accessed 30 Sep 2019.

Dota2.Gamepedia.com. “Iron Branch.” 2019,
https://dota2.gamepedia.com/Iron_Branch. Accessed 15 March 2019.

Dota2.Gamepedia.com. “Items.” 2019,
<https://dota2.gamepedia.com/Items>. Accessed 2 Oct. 2019.

Dota2.Gamepedia.com. “Juggernaut.” 2019,
<https://dota2.gamepedia.com/Juggernaut>. Accessed 10 April 2019.

Dota2.Gamepedia.com. “Juggernaut Responses.” 2019,
<https://dota2.gamepedia.com/Juggernaut/Responses>. Accessed 15 Oct
2019.

Dota2.Gamepedia.com. “Jungler.” 2019,
<https://dota2.gamepedia.com/Role#Jungler>. Accessed 28 Sep. 2019.

Dota2.Gamepedia.com. “Kaya.” 2019,
<https://dota2.gamepedia.com/Kaya>. Accessed 29 Sep. 2019.

Dota2.Gamepedia.com. “Keeper of the Light.” 2019,
https://dota2.gamepedia.com/Keeper_of_the_Light. Accessed 11 April 2019.

Dota2.Gamepedia.com. “Kunkka.” 2019,
<https://dota2.gamepedia.com/Kunkka>. Accessed 11 April 2019.

Dota2.Gamepedia.com. “Laguna Blade.” 2019,
https://dota2.gamepedia.com/Lina#Laguna_Blade. Accessed 29 Sep. 2019.

Dota2.Gamepedia.com. “Last-hitting.” 2019,
https://dota2.gamepedia.com/Creep_control_techniques#Last-hitting.
Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Legion Commander Responses.” 2019,
https://dota2.gamepedia.com/Legion_Commander/Responses. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Leshrac.” 2019,
<https://mtg.gamepedia.com/Leshrac>. Accessed 8 April 2019.

Dota2.Gamepedia.com. “Leveling.” 2019,
<https://dota2.gamepedia.com/Experience#Leveling>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Lina.” 2019,
<https://dota2.gamepedia.com/Lina>. Accessed 8 April 2019.

Dota2.Gamepedia.com. “Lion.” 2019,
<https://dota2.gamepedia.com/Lion>. Accessed 8 April 2019.

Dota2.Gamepedia.com. “Lion Responses.” 2019,
<https://dota2.gamepedia.com/Lion/Responses>. Accessed 11 Oct. 2019.

Dota2.Gamepedia.com. “Lycan.” 2019,
<https://dota2.gamepedia.com/Lycan>. Accessed 23 Feb. 2019.

Dota2.Gamepedia.com. “Mad Moon.” 2019,
https://dota2.gamepedia.com/g00/Mad_Moon. Accessed 23. April 2019.

Dota2.Gamepedia.com. “Maelstrom.” 2019,
<https://dota2.gamepedia.com/Maelstrom>. Accessed 18 April 2019.

Dota2.Gamepedia.com. “Mana.” 2019,
<https://dota2.gamepedia.com/Mana>. Accessed 1 Oct 2019.

Dota2.Gamepedia.com. “Map.” 2019,
<https://dota2.gamepedia.com/Map>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Medusa.” 2019,
<https://dota2.gamepedia.com/Medusa>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Meepo.” 2019,
<https://dota2.gamepedia.com/Meepo>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Mirana.” 2019,
<https://dota2.gamepedia.com/Mirana>. Accessed 29 April 2019.

Dota2.Gamepedia.com. “Mithril Hammer.” 2019,
https://dota2.gamepedia.com/Mithril_Hammer. Accessed 18 April 2019.

Dota2.Gamepedia.com. “Mjollnir.” 2019,
<https://dota2.gamepedia.com/Mjollnir>. Accessed April 18 2019.

Dota2.Gamepedia.com. “Monkey King.” 2019,
https://dota2.gamepedia.com/Monkey_King. Accessed April 18 2019.

Dota2.Gamepedia.com. “Monkey King Bar.” 2019,
https://dota2.gamepedia.com/Monkey_King_Bar. Accessed April 18 2019.

Dota2.Gamepedia.com. “Morphling.” 2019,
<https://dota2.gamepedia.com/Morphling>. Accessed 8 April 2019.

Dota2.Gamepedia.com. “Naga Siren.” 2019,
https://dota2.gamepedia.com/Naga_Siren. Accessed 29 April 2019.

Dota2.Gamepedia.com. “Nature’s Prophet.” 2019,
https://dota2.gamepedia.com/Nature%27s_Prophet. Accessed 11 Oct. 2019.

Dota2.Gamepedia.com. “Necronomicon.” 2019,
<https://dota2.gamepedia.com/Necronomicon>. Accessed 18 April 2019.

Dota2.Gamepedia.com. “Neutral Creeps.” 2019,
https://dota2.gamepedia.com/Neutral_creeps#Spawning. 1 Oct. 2019.

Dota2.Gamepedia.com. “Nyx.” 2019,
<https://dota2.gamepedia.com/Nyx>. Accessed 29 April 2019.

Dota2.Gamepedia.com. “Nyx Assassin.” 2019,
https://dota2.gamepedia.com/Nyx_Assassin. Accessed 29 April 2019.

Dota2.Gamepedia.com. “Observer Ward.” 2019,
https://dota2.gamepedia.com/Observer_Ward. Accessed 29 April 2019.

Dota2.Gamepedia.com. “Ogre Magi.” 2019,
https://dota2.gamepedia.com/Ogre_Magi/Lore. Accessed 1 April 2019.

Dota2.Gamepedia.com. “Phantom Lancer” 2019,
https://dota2.gamepedia.com/Phantom_Lancer. Accessed 9 Oct. 2019.

Dota2.Gamepedia.com. “Phoenix.” 2019,
<https://dota2.gamepedia.com/Phoenix>. Accessed 25 April 2019.

Dota2.Gamepedia.com. “Proof of Courage.” 2019,
https://dota2.gamepedia.com/Proof_of_Courage. Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Puck.” 2019,
<https://dota2.gamepedia.com/Puck>. Accessed 23. Jan 2019.

Dota2.Gamepedia.com. “Pugna.” 2019,
<https://dota2.gamepedia.com/Pugna>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Pugna Guide.” 2019,
<https://dota2.gamepedia.com/Pugna/Guide>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Pushing.” 2019,
<https://dota2.gamepedia.com/Pushing>. Accessed 28 Sep. 2019.

Dota2.Gamepedia.com. “Respawning.” 2019,
<https://dota2.gamepedia.com/Heroes/Mechanics#Respawning>.
Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Riki.” 2019,
<https://dota2.gamepedia.com/Riki>. Accessed 9 Oct. 2019.

Dota2.Gamepedia.com. “Role.” 2019,
<https://dota2.gamepedia.com/Role>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Role Carry.” 2019,
<https://dota2.gamepedia.com/Role#Carry>. Accessed 12 Oct. 2019.

Dota2.Gamepedia.com. “Roshan.” 2019,
<https://dota2.gamepedia.com/Roshan>. Accessed 28 Sep. 2019.

Dota2.Gamepedia.com. “Rubick.” 2019,
<https://dota2.gamepedia.com/Rubick>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Runes.” 2019,
<https://dota2.gamepedia.com/Runes>. Accessed 11 March 2019.

Dota2.Gamepedia.com. “Sand King.” 2019,
https://dota2.gamepedia.com/Sand_King. Accessed 10 Oct. 2019.

Dota2.Gamepedia.com. “Sange and Yasha.” 2019,
https://dota2.gamepedia.com/Sange_and_Yasha. Accessed 18 April 2019.

Dota2.Gamepedia.com. “Scythe of Vyse.” 2019,
https://dota2.gamepedia.com/Scythe_of_Vyse. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Sentry Ward.” 2019,
https://dota2.gamepedia.com/Sentry_Ward. Accessed 2 Oct. 2019.

Dota2.Gamepedia.com. “Shadow Blade.” 2019,
https://dota2.gamepedia.com/Shadow_Blade. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Shadow Fiend.” 2019,
https://dota2.gamepedia.com/Shadow_Fiend. Accessed 11 March 2019.

Dota2.Gamepedia.com. “Shadow Shaman.” 2019,
https://dota2.gamepedia.com/Shadow_Shaman. Accessed 30 April 2019.

Dota2.Gamepedia.com. “Shiva’s Guard.” 2019,
https://dota2.gamepedia.com/Shiva%27s_Guard. Accessed 18 April 2019.

Dota2.Gamepedia.com. “Slark.” 2019,
<https://dota2.gamepedia.com/Slark>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Slark Guide.” 2019,
<https://dota2.gamepedia.com/Slark>. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Sniper.” 2019,
<https://dota2.gamepedia.com/Sniper>. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Spectre Abilities.” 2019,
<https://dota2.gamepedia.com/Spectre#Abilities>. Accessed 11 March 2019.

Dota2.Gamepedia.com. “Squee.” 2019,
<https://mtg.gamepedia.com/Squee>. Accessed 8 April 2019.

Dota2.Gamepedia.com. “Storm Spirit.” 2019,
https://dota2.gamepedia.com/Storm_Spirit. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Storm Spirit Responses.” 2019,
https://dota2.gamepedia.com/Storm_Spirit/Responses. Accessed 11 March 2019.

Dota2.Gamepedia.com. “Stun.” 2019,
<https://dota2.gamepedia.com/Stun>. Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Support.” 2019,
<https://dota2.gamepedia.com/Role#Support>. Accessed 28 Sep. 2019.

Dota2.Gamepedia.com. “Sven.” 2019,
<https://dota2.gamepedia.com/Sven>. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Sven Responses.” 2019,
<https://dota2.gamepedia.com/Sven>. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Talents.” 2019,
<https://dota2.gamepedia.com/Talents>. Accessed 30 Sep. 2019.

Dota2.Gamepedia.com. “Tango” 2019,
<https://dota2.gamepedia.com/Tango>. Accessed 12 Oct. 2019.

Dota2.Gamepedia.com. “Taunt.” 2019,
[https://dota2.gamepedia.com/Taunt_\(Equipment\)](https://dota2.gamepedia.com/Taunt_(Equipment)). Accessed 24 Feb. 2019.

Dota2.Gamepedia.com. “Taunt: All Sparkles n’ Rainbows.” 2019,
[https://dota2.gamepedia.com/Taunt: All Sparkles n’ Rainbows](https://dota2.gamepedia.com/Taunt:_All_Sparkles_n%27_Rainbows).
Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Taunt: Chicken!” 2019,
[https://dota2.gamepedia.com/Taunt: Chicken!](https://dota2.gamepedia.com/Taunt:_Chicken!). Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Taunt: Do the Robot!” 2019,
[https://dota2.gamepedia.com/Taunt: Do the Robot!](https://dota2.gamepedia.com/Taunt:_Do_the_Robot!) Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Taunt: Fit to Rule.” 2019,
[https://dota2.gamepedia.com/Taunt: Fit to Rule](https://dota2.gamepedia.com/Taunt:_Fit_to_Rule). Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Taunt: Giddy Up.” 2019,
[https://dota2.gamepedia.com/Taunt: Giddy Up!](https://dota2.gamepedia.com/Taunt:_Giddy_Up!). Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Taunt: Raging Bull.” 2019,
<https://dota2.gamepedia.com/Taunt: Raging Bull>. Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Taunt: RazorFlip!” 2019,
<https://dota2.gamepedia.com/Taunt: RazorFlip!>. Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Taunt: Quick Draw!” 2019,
<https://dota2.gamepedia.com/Taunt: Quick Draw!> Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Templar Assassin.” 2019,
<https://dota2.gamepedia.com/Templar Assassin>. 30 Sep. 2019.

Dota2.Gamepedia.com. “The International.” 2019,
<https://dota2.gamepedia.com/The International>. Accessed 27 Feb. 2019.

Dota2.Gamepedia.com. “Tidehunter.” 2019,
<https://dota2.gamepedia.com/Tidehunter>. Accessed 30 April 2019.

Dota2.Gamepedia.com. “Tidehunter Abilities.” 2019,
<https://dota2.gamepedia.com/Tidehunter#Abilities>. Accessed 11 March 2019.

Dota2.Gamepedia.com. “Timbersaw.” 2019,
<https://dota2.gamepedia.com/Timbersaw>. Accessed 8 April 2019.

Dota2.Gamepedia.com. “Tinker.” 2019,
<https://dota2.gamepedia.com/Tinker>. Accessed 6 Feb. 2019.

Dota2.Gamepedia.com. “Tinker Guide.” 2019,
<https://dota2.gamepedia.com/Tinker/Guide>. Accessed 12 Oct. 2019.

Dota2.Gamepedia.com. “Tinker Lore.” 2019,
<https://dota2.gamepedia.com/Tinker/Lore>. Accessed 11 Oct. 2019.

Dota2.Gamepedia.com. “Tinker Responses.” 2019,
<https://dota2.gamepedia.com/Tinker/Responses>. Accessed 6 Feb. 2019.

Dota2.Gamepedia.com. “Tiny.” 2019,
<https://dota2.gamepedia.com/Tiny>. Accessed 1 Oct. 2019.

Dota2.Gamepedia.com. “Town Portal Scroll.” 2019,
<https://dota2.gamepedia.com/Town Portal Scroll>. Accessed 19 March 2019.

Dota2.Gamepedia.com. “Towers.” 2019,
<https://dota2.gamepedia.com/Buildings#Towers>. Accessed 27 Sep. 2019.

Dota2.Gamepedia.com. “True Sight.” 2019,
<https://dota2.gamepedia.com/Glossary#A - E>. Accessed 2 Oct. 2019.

Dota2.Gamepedia.com. “Tusk.” 2019,
<https://dota2.gamepedia.com/Tusk>. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Tusk Responses.” 2019,
<https://dota2.gamepedia.com/Tusk/Responses>. Accessed 7 Oct. 2019.

Dota2.Gamepedia.com. “Ultimates.” 2019,
<https://dota2.gamepedia.com/Abilities#Ultimates>. Accessed 27 Sep. 2019.

Dota2.Gamepedia.com. “Version 6.47.” 2019,
https://dota2.gamepedia.com/Version_6.47. Accessed 2 Oct. 2019.

Dota2.Gamepedia.com. “Voice Actors.” 2019,
https://dota2.gamepedia.com/Voice_actors. Accessed 6 Oct. 2019.

Dota2.Gamepedia.com. “Weapons.” 2019,
<https://dota2.gamepedia.com/Items#Weapons>. Accessed 12 Oct. 2019.

Dota2.Gamepedia.com. “Weaver.” 2019,
<https://dota2.gamepedia.com/Weaver>. Accessed 11 Oct. 2019.

Dota2.Gamepedia.com. “Weaver Responses.” 2019,
<https://dota2.gamepedia.com/Weaver/Responses>. Accessed 19 March 2019.

Dota2.Gamepedia.com. “Windranger.” 2019,
<https://dota2.gamepedia.com/Windranger>. Accessed 15 March 2019.

Dota2.Gamepedia.com. “Witch Doctor.” 2019,
https://dota2.gamepedia.com/Witch_Doctor. Accessed 15 March 2019.

Dota2.Gamepedia.com. “Wukong.” 2019,
https://dota2.gamepedia.com/Monkey_King#Wukong.27s_Command. Accessed 8 April 2019.

Dota2.Gamepedia.com. “Zeus.” 2019, <https://dota2.gamepedia.com/Zeus>. Accessed 7 Oct. 2019.

Dota 2 Ingame Tutorial. “Dota 2 - Ingame Tutorial Teil 1 (german).” *YouTube*, uploaded by GetToTheKeyboard, 28 Feb. 2018,
<https://www.youtube.com/watch?v=NsUFBm1uENs>.

Dota2.de. “The International Battle Pass.” 2019,
<http://www.dota2.com/international/battlepass>. Accessed 31. Oct. 2019.

DotAwiki.de. “DotAlicious Gaming.” 2019,
<http://dotawiki.de/index.php?title=DotAlicious-Gaming>. Accessed 31.
Oct. 2019.

Draper, Stephen. “Esports Terminology: Skill Ceilings and Skill Floors.” *Esportsedition.com*, 27 Sep. 2017,
<https://esportsedition.com/general/skill-ceiling-skill-floor-esports-terminology/>. Accessed 23 Oct. 2019.

Dr. Mundo Dance. “Dr. Mundo - Fight the Power Dance - League of Legends (LoL).” *YouTube*, uploaded by NeiLalwaysLeeT, 12 Nov. 2011,
<https://www.youtube.com/watch?v=HpzBLUDnQik>.

Duffy, Owen. “League of Legends: Mechs vs Minions review – a challenging triumph.” *TheGuardian*, 24 Oct. 2016,
<https://www.theguardian.com/technology/2016/oct/24/league-of-legends-mechs-vs-minions-review>. Accessed 1 March 2019.

Ebert, Rober. “On the Waterfront.” *Rogerebert.com*, 21 March 1999,
<https://www.rogerebert.com/reviews/great-movie-on-the-waterfront-1954>. Accessed 7 Oct. 2019.

Ebert, Rober. “ANCHORMAN: THE LEGEND OF RON BURGUNDY.” *Rogerebert.com*, 9 July 2004,
<https://www.rogerebert.com/reviews/anchorman-the-legend-of-ron-burgundy-2004>. Accessed 7 Oct. 2019.

EchoMTG.com. “Goblin Soothsayer.” 2019,
<https://www.echomtg.com/card/90231/goblin-soothsayer/>. Accessed 8
April 2019.

Elementalist Lux Dance References 2016. “Elementalist Lux – Dance Reference.” *YouTube*, uploaded by SpotLightBrazil, 3 Dec. 2016,
<https://www.youtube.com/watch?v=VdzCtNle8IM>.

Elise Dance. “Elise - The Can-Can - League of Legends (LoL) Dance.” *YouTube*, uploaded by NeiLalwaysLeeT, 29 Nov. 2012,
<https://www.youtube.com/watch?v=W0d9J8ydaNA>.

Elm Street Scene 1984 “Nightmare on Elm Street 2 - Creepy Sister Singing.” *YouTube*, uploaded by MaelMakingMothersbaugh, 27 Dec. 2017,
<https://www.youtube.com/watch?v=3J3eilU9ACE>.

Epicgames.com. “How to submit suggestions.” Epicgames.com, 2019,
<https://epicgames.helpshift.com/a/fortnite/?s=general-support&f=how->

[do-i-submit-suggestions-and-feedback-for-fortnite&l=en](#). Accessed 23 Oct. 2019.

Erdelack, W. (2013). "All the way down." *Versus Everything Land*, 25 January 2013, <http://versuseverythingland.wordpress.com/2013/01/25/all-the-way-down/>. Accessed 11 March 2019.

Escharts.com. "The International 2019." 30 Aug. 2019, <https://escharts.com/blog/results-the-international-2019>. Accessed 17 Oct. 2019.

ESL-One.com. "Dota 2." 2019, <https://www.esl-one.com/dota2>. Accessed 21. Oct. 2019.

Esportsearnings.com. "History 2018." 2019, <https://www.esportsearnings.com/history/2018/games>. Accessed 1 April 2019.

Esports Charts (ESC). "2017 World Championship." ESC.Watch, 2019, <https://esc.watch/tournaments/lol/2017-world-championship>. Accessed 14 March 2019.

Everson, J. "Why do MOBA's make such good eSports games?" *Game Skinny*, 27 July 2013, <http://www.gameskinny.com/avpgu/why-do-mobas-make-such-good-esports-games>. Accessed 5 Dec. 2018.

Ezreal Dance. "Ezreal Dance Reference - Haruhi Dance - Hare Hare Yukai." *YouTube*, uploaded by GrimlyGaming, 10 Jan. 2015, <https://www.youtube.com/watch?v=Hj1Xf16ZCwg>.

Ezreal Taunt. "You Belong In A Museum." *YouTube*, uploaded by Paragon Z, 28 May 2015, <https://youtu.be/UWPZ7bwz11o?t=59>.

Fable Original Theme 2008. "Fable Original Theme by Danny Elfman." *YouTube*, uploaded by liam Cuthbert, 21 Feb. 2008, <https://www.youtube.com/watch?v=w4I23yxiJq4>.

Fandom.com. "Aatrox Quotes." 2019, <https://leagueoflegends.fandom.com/wiki/Aatrox/Quotes>. Accessed 10 Oct. 2019.

Fandom.com. "Aegis of the Legion." 2019, https://leagueoflegends.fandom.com/wiki/Aegis_of_the_Legion. Accessed 14 May 2019.

Fandom.com. “Aeon of Strife.” 2019,
[https://starcraft.fandom.com/wiki/Aeon_of_Strife_\(map\)](https://starcraft.fandom.com/wiki/Aeon_of_Strife_(map)). Accessed 29
Sep. 2019.

Fandom.com. “Akali Quotes.” 2019,
<https://leagueoflegends.fandom.com/wiki/Akali/Quotes>. Accessed 6
Oct. 2019.

Fandom.com. “Annie Quotes.” 2019,
<https://leagueoflegends.fandom.com/wiki/Annie/Trivia>. Accessed 9
April 2019.

Fandom.com. “Announcer.” 2019,
<https://leagueoflegends.fandom.com/wiki/Announcer>. Accessed 6 Oct.
2019.

Fandom.com. “Banshee” 2019,
https://leagueoflegends.fandom.com/wiki/Banshee%27s_Veil.
Accessed 15 Oct. 2019.

Fandom.com. “Baron_Nashor.” 2019,
https://leagueoflegends.fandom.com/wiki/Baron_Nashor. Accessed 28
Sep. 2019.

Fandom.com. “Berserker’s Greaves.” 2019,
https://leagueoflegends.fandom.com/wiki/Berserker%27s_Greaves.
Accessed 15 Oct. 2019.

Fandom.com. “Black Mage.” 2019,
[https://finalfantasy.fandom.com/wiki/Black_mage_\(Final_Fantasy_IX\)](https://finalfantasy.fandom.com/wiki/Black_mage_(Final_Fantasy_IX)).
Accessed 9 Oct. 2019.

Fandom.com. “Black Mesa Incident.” 2019, [https://half-
life.fandom.com/wiki/Black_Mesa_Incident](https://half-life.fandom.com/wiki/Black_Mesa_Incident). Accessed 9 Oct. 2019.

Fandom.com. “Brand Quotes.” 2019,
<https://leagueoflegends.fandom.com/wiki/Brand/Quotes>. Accessed 10
Oct. 2019.

Fandom.com. “Brush.” 2019,
<https://leagueoflegends.fandom.com/wiki/Brush>. Accessed 2 Oct. 2019.

Fandom.com. “Champion Ability.” 2019,
https://leagueoflegends.fandom.com/wiki/Baron_Nashor. Accessed 28
Sep. 2019.

Fandom.com. “Death.” 2019,
https://leagueoflegends.fandom.com/wiki/Baron_Nashor. Accessed 28
Sep. 2019.

Fandom.com. “DotA Wiki: Puck.” 2019,
[https://dota.fandom.com/wiki/Puck_\(DotA\)](https://dota.fandom.com/wiki/Puck_(DotA)). Accessed 23 Jan. 2019.

Fandom.com. “Experience Champion.” 2019,
[https://leagueoflegends.fandom.com/wiki/Experience_\(champion\)](https://leagueoflegends.fandom.com/wiki/Experience_(champion)).
Accessed 30 Sep. 2019.

Fandom.com. “Falcon Punch.” 2019,
https://fzero.fandom.com/wiki/Falcon_Punch. Accessed 9. Oct. 2019.

Fandom.com. “Farming.” 2019,
<https://leagueoflegends.fandom.com/wiki/Farming>. Accessed 30 Sep.
2019.

Fandom.com. “Fiora.” 2019,
<https://leagueoflegends.fandom.com/wiki/Fiora#Bladework>. Accessed 6
Oct. 2019.

Fandom.com. “Free Champion Rotation.” 2019,
https://leagueoflegends.fandom.com/wiki/Free_champion_rotation.
Accessed 30 Sep. 2019.

Fandom.com. “Gambit.” 2019, <https://x-men.fandom.com/wiki/Gambit>.
Accessed 9 April 2019.

Fandom.com. “Gandalf.” 2019, <https://lotr.fandom.com/wiki/Gandalf>.
Accessed 11 Oct. 2019.

Fandom.com. “Gob.” 2019,
<https://arresteddevelopment.fandom.com/wiki/G.O.B>. Accessed 7 Oct.
2019.

Fandom.com. “Haruhi Wiki: “Hare Hare Yukai.” 2019,
https://haruhi.fandom.com/wiki/Hare_Hare_Yukai. Accessed 12 March
2019.

Fandom.com. “Health Potion” 2019,
https://leagueoflegends.fandom.com/wiki/Health_Potion. Accessed 11
Oct. 2019.

Fandom.com. “Heimerdinger Trivia.” 2019,
<https://leagueoflegends.fandom.com/wiki/Heimerdinger/Trivia>.
Accessed 7 Oct. 2019.

Fandom.com. “Heroes Wiki: Aguri Madoka.” 2019, https://hero.fandom.com/wiki/Aguri_Madoka. Accessed 30 Sep. 2019.

Fandom.com. “Isaac Kleiner.” 2019, https://half-life.fandom.com/wiki/Isaac_Kleiner. Accessed 9 Oct. 2019.

Fandom.com. “Jhin Quotes.” 2019, <https://leagueoflegends.fandom.com/wiki/Jhin/Quotes>. Accessed 9 Oct. 2019.

Fandom.com. “John Hannibal Smith.” 2019, https://a-team.fandom.com/wiki/John_%22Hannibal%22_Smith. Accessed 7 Oct. 2019.

Fandom.com. “Jungling.” 2019, <https://leagueoflegends.fandom.com/wiki/Jungling>. Accessed 30 Sep. 2019.

Fandom.com. “Kill.” 2019, <https://leagueoflegends.fandom.com/wiki/Kill>. Accessed 1 Oct. 2019.

Fandom.com. “List of Champions.” 2019, https://leagueoflegends.fandom.com/wiki/List_of_champions. Accessed 30 Sep. 2019.

Fandom.com. “Lina Inverse.” 2019, https://kanzaka.fandom.com/wiki/Lina_Inverse. Accessed 7 Oct. 2019.

Fandom.com. “Lux.” 2019, <https://leagueoflegends.fandom.com/wiki/Lux>. Accessed 7 Oct. 2019.

Fandom.com. “Lux Trivia.” 2019, <https://leagueoflegends.fandom.com/wiki/Lux/Trivia>. Accessed 8 Oct. 2019.

Fandom.com. “Mage.” 2019, https://leagueoflegends.fandom.com/wiki/Champion_classes/Mage. Accessed 30 Sep. 2019.

Fandom.com. “Marisa Kirisame.” 2019, https://touhou.fandom.com/wiki/Marisa_Kirisame. Accessed 30 Sep. 2019.

Fandom.com. “Minion.” 2019, <https://leagueoflegends.fandom.com/wiki/Minion>. Accessed 27 Sep. 2019.

Fandom.com. “Mithril.” 2019, <https://lotr.fandom.com/wiki/Mithril>. Accessed 12 Oct. 2019.

Fandom.com. “Mordekaiser Trivia.” 2019, <https://leagueoflegends.fandom.com/wiki/Mordekaiser/Trivia>. Accessed 27 Sep. 2019.

Fandom.com. “Morellonomicon.” 2019, <https://leagueoflegends.fandom.com/wiki/Morellonomicon>. Accessed 11 Oct. 2019.

Fandom.com. “Morrigan Aensland.” 2019, https://darkstalkers.fandom.com/wiki/Morrigan_Aensland. Accessed 9 Oct. 2019.

Fandom.com. “Muramana.” 2019, <https://leagueoflegends.fandom.com/wiki/Muramana>. Accessed 15 Oct. 2019.

Fandom.com. “Nasus” 2019, https://leagueoflegends.fandom.com/wiki/Nasus#cite_note-0. Accessed 14 Oct. 2019.

Fandom.com. “Nazgul.” 2019, <https://lotr.fandom.com/wiki/Nazgûl>. Accessed 27 Sep. 2019.

Fandom.com. “Olaf.” 2019, <https://leagueoflegends.fandom.com/wiki/Olaf/Trivia>. Accessed 5 April. 2019.

Fandom.com. “Pyke.” 2019, <https://leagueoflegends.fandom.com/wiki/Pyke>. Accessed 6 Oct. 2019.

Fandom.com. “Rabadon’s Deathcap.” 2019, https://leagueoflegends.fandom.com/wiki/Rabadon's_Deathcap. Accessed 11 Oct. 2019.

Fandom.com. “Refillable Potion.” 2019, https://leagueoflegends.fandom.com/wiki/Refillable_Potion. Accessed 12 Oct. 2019.

Fandom.com. “Rift Quest.” 2019, https://leagueoflegends.fandom.com/wiki/Rift_Quest. Accessed 10 Oct. 2019.

Fandom.com. “Riot Points.” 2019, https://leagueoflegends.fandom.com/wiki/Riot_Points. Accessed 27 Sep. 2019.

Fandom.com. “Runes.” 2019,
https://leagueoflegends.fandom.com/wiki/Runes_Reforged. Accessed
30 Sep. 2019.

Fandom.com. “Ryze.” 2019,
<https://leagueoflegends.fandom.com/wiki/Ryze>. Accessed 6 Oct. 2019.

Fandom.com. “Sauron.” 2019, <https://lotr.fandom.com/wiki/Sauron>.
Accessed 5 April 2019.

Fandom.com. “Shadowfax.” 2019,
<https://lotr.fandom.com/wiki/Shadowfax>. Accessed 11 Oct. 2019.

Fandom.com. “Sion Trivia.” 2019,
<https://leagueoflegends.fandom.com/wiki/Sion/Trivia>. Accessed 6 Oct.
2019.

Fandom.com. “Soulcalibur Wiki: “Seong Mi-na.” 2019,
https://soulcalibur.fandom.com/wiki/Seong_Mi-na. Accessed 5 April
2019.

Fandom.com. “Spike Spiegel” 2019,
https://cowboybebop.fandom.com/wiki/Spike_Spiegel. Accessed 9 Oct.
2019.

Fandom.com. “Starcraft Wiki: Xel’Naga.” 2019,
[https://starcraft.fandom.com/wiki/Xel%27naga#cite_note-
SC2_CineProphecy-5](https://starcraft.fandom.com/wiki/Xel%27naga#cite_note-SC2_CineProphecy-5). Accessed 1 April 2019.

Fandom.com. “Summoner’s Rift.” 2019,
[https://leagueoflegends.fandom.com/wiki/Summoner%27s_Rift#Gener
al](https://leagueoflegends.fandom.com/wiki/Summoner%27s_Rift#General). Accessed 30 Sep. 2019.

Fandom.com. “Swain Trivia.” 2019,
<https://leagueoflegends.fandom.com/wiki/Swain/Trivia>, Accessed 16
April 2019.

Fandom.com. “Touhou Wiki.” 2019,
https://touhou.fandom.com/wiki/Touhou_Wiki, Accessed 16 April
2019.

Fandom.com. “Tryndamere Trivia.” 2019,
<https://leagueoflegends.fandom.com/wiki/Tryndamere/Trivia>. Accessed
6 Oct. 2019.

- Fandom.com*. "Turret." 2019,
<https://leagueoflegends.fandom.com/wiki/Turret>, Accessed 27 Sep. 2019.
- Fandom.com*. "Tutorial." 2019,
<https://leagueoflegends.fandom.com/wiki/Tutorial>, Accessed 1 Oct. 2019.
- Fandom.com*. "Udyr." 2019,
<https://leagueoflegends.fandom.com/wiki/Udyr>, Accessed 6 Oct. 2019.
- Fandom.com*. "Violator." 2019,
<https://spawn.fandom.com/wiki/Violator>, Accessed 11 Oct. 2019.
- Fandom.com*. "Vivi Ornitier." 2019,
https://finalfantasy.fandom.com/wiki/Vivi_Ornitier. Accessed 6 Oct. 2019.
- Fandom.com*. "Volibear." 2019,
<https://leagueoflegends.fandom.com/wiki/Volibear>, Accessed 6 Oct. 2019.
- Fandom.com*. "Ward." 2019,
<https://leagueoflegends.fandom.com/wiki/Ward>, Accessed 2 Oct. 2019.
- Fandom.com*. "Yordle." 2019,
<https://leagueoflegends.fandom.com/wiki/Yordle>, Accessed 16 April 2019.
- Fandom.com*. "Zanmato." 2019,
<https://chrono.fandom.com/wiki/Zanmato>, Accessed 9 Oct. 2019.
- Feak, S. and Steve Mescon. "Postmortem: Defense of the Ancients." *Gamasutra*, 19 March 2009,
http://www.gamasutra.com/view/feature/132358/postmortem_defense_of_the_ancients.php. Accessed 8 Dec. 2018.
- Feige, Daniel Martin, Arno Görgen, Rudolf Inderst and Eugen Pfister. "LIEBE MUSEUMSLEITUNG, DIESES KUNSTWERK IST AUFZUHÄNGEN. Zur Ästhetik von Computerspielen." *Spiel-Kultur-Wissenschaften*, 13 May 2016, <http://spielkult.hypothesen.org/942>. Accessed 10 July 2019.
- Fiddlesticks Dance Reference. "Fiddlesticks - Scarecrow Dance - League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 1 Nov. 2011, <https://www.youtube.com/watch?v=G96Wkq2yCSc>.

Fiora Dance. “Fiora - Puttin On The Ritz - League of Legends (LoL) Dance.” *YouTube*, uploaded by NeiLalwaysLeeT, 2. March 2012, <https://www.youtube.com/watch?v=e9JGYgppGc>.

Fishbein, Jennifer. “Europe’s Manga Mania.” *Spiegel.de*, 27. Dec. 2007, <https://www.spiegel.de/international/business/changing-of-the-comic-guard-europe-s-manga-mania-a-525417.html>. Accessed 12 Oct. 2019.

Flakes, Niko. “Erfolgreich aber namenlos: Woher kommen MOBAs?” *Bonjwa*, 27 June 2015, <https://www.bonjwa.de/archiv/stories/erfolgreich-aber-namenlos-woher-kommen-mobas>. Accessed 5 Dec. 2018.

Flood, Alison. “Fairytale much older than previously thought, say researchers.” *TheGuardian*, 20 Jan. 2016, <https://www.theguardian.com/books/2016/jan/20/fairytales-much-older-than-previously-thought-say-researchers>. Accessed 30 April 2019.

Forbes.com. “Rubenstein” - “Why Esports Team Misfits Is Prioritizing Mental Health For Players And Staff.” *Forbes.com*, 9th June 2021, <https://www.forbes.com/sites/mikestubbs/2021/06/09/why-esports-team-misfits-is-prioritizing-mental-health-for-players-and-staff/>. Accessed June 23rd 2021.

Forecast Janna Dance. “Forecast Janna - Singing in the Rain - League of Legends (LoL) Dance.” *YouTube*, uploaded by NeiLalwaysLeeT, 15. Aug. 2013, <https://www.youtube.com/watch?v=dAPQ5wjd1WU>.

Fortnite Caramelldansen. “Caramelldansen with music blocks!!” *reddit*, uploaded by ReverseWakanda. 17 Feb 2019, https://www.reddit.com/r/FortniteCreative/comments/arjbo9/caramelldansen_with_music_blocks_i_apologize_for/.

Fortnite Groove Jam. “FORTNITE - GROOVE JAM 1 HOUR (NEW DANCE).” *YouTube*, uploaded by Vaka, 1 May 2018, https://www.youtube.com/watch?v=kELYv8_Bb9s.

Fortniteskins.net. “Frostwing.” 2019, <https://fortniteskins.net/gliders/frostwing/>. Accessed 6 Oct. 2019.

Funk, John. “MOBA, DOTA, ARTS: A brief introduction to gaming's biggest, most impenetrable genre.” *Polygon*, 2 Sep. 2013, <https://www.polygon.com/2013/9/2/4672920/moba-dota-arts-a-brief-introduction-to-gamings-biggest-most>. Accessed 31 Mar. 2019.

Gameofthrones.fandom.com. “Dothraki.” 2019, <https://gameofthrones.fandom.com/wiki/Dothraki>. Accessed 7 Oct. 2019.

Garcia, Ahiza. "Philadelphia 76ers are the first U.S. pro team to get into eSports." *CNN*, 28 Sep. 2016, <https://money.cnn.com/2016/09/28/news/companies/sixers-esports-ceo-scott-oneil/index.html>. Accessed 4 Jan. 2019.

Garea, Ed. "Dracula A.D. 1972." *Celluloidclub.blogspot.com*, 25 Jan. 2016, <http://celluloidclub.blogspot.com/2016/01/dracula-ad-1972.html>. Accessed 13 Oct. 2019.

Garen Dance. "Garen - Johnny Bravo's 'The Monkey' - League of Legends (LoL) Dance." *YouTube*, uploaded by NeiLalwaysLeeT, 2 Aug. 2013, <https://www.youtube.com/watch?v=e6Uc4PIA5jI>.

Gaudiosi, John. "How Riot Games created the most popular game in the world." *Fortune*, 10 July 2013, <http://fortune.com/2013/07/10/how-riot-games-created-the-most-popular-game-in-the-world/>. Accessed 21 Sept. 2018.

Genius.com. "All the Single Ladies." 2019, <https://genius.com/Beyonce-single-ladies-put-a-ring-on-it-lyrics>. Accessed 4 June 2019.

Genius.com. "Wave of Mutilation." 2019, <https://genius.com/Pixies-wave-of-mutilation-lyrics>. Accessed 4 June 2019.

Girantikanon, Tom. Jon Huang and Jeremy White. "Watch 10,000 League of Legends Games in 30 Seconds." *NYTimes.com* 10 Oct. 2014, <https://www.nytimes.com/interactive/2014/10/10/technology/league-of-legends-graphic.html>. Accessed 21 Oct. 2019.

Gnox, Tommy. "Dev Blog: Exploring Runeterra." *LeagueofLegends*, 21 Sept. 2018, <https://na.leagueoflegends.com/en/creative-spotlight/dev-blog-exploring-runeterra/>. Accessed 21 Sept. 2018.

Goldmansachs.com. "esports – from Wild West to Mainstream." Merwin, Christopher et al. 26 June 2018, <https://www.goldmansachs.com/insights/pages/infographics/e-sports/report.pdf>. Accessed 21. Oct. 2019.

Goslin, Austen. "Fortnite hits new concurrent player high despite Apex Legends' success." *Polygon.com*, 21 Feb. 2019, <https://www.polygon.com/2019/2/21/18234998/fortnite-record-players-apex-legends>. Accessed 23 Oct. 2019.

Goslin, Austen. "The 2018 League of Legends World Finals had nearly 100 million viewers." *Rifthermal.com*, 11 Dec. 2018, <https://www.rifthermal.com/2018/12/11/18136237/riot-2018-league-of-legends-world-finals-viewers-prize-pool>. Accessed 17 Oct. 2019.

Griezmann, Antoine. "Antoine Griezmann 'Take The L' Dance Celebration Against Sporting CP." *YouTube*, uploaded by Footballers World, 6 April 2018, https://www.youtube.com/watch?v=GWpeIDUCc_8.

Grimhammer, a user on *Reddit.com*, 9 Aug 2016, https://www.reddit.com/r/DotA2/comments/4wu9v0/what_are_the_maj_or_differences_between_this_and/d6a2kmj. Accessed 21 Dec. 2018.

Grubb, J. "Analyst: Dota 2 made around \$80 million in microtransaction revenues in 2013." *Venturebeat*, 22 Jan. 2014. <http://venturebeat.com/2014/01/22/doat-2-madearound-80-million-in-microtransaction-revenues-in-2013-according-to-analyst-firm/>. Accessed 21 Dec. 2018.

Grubb, J. "League of Legends for mobile and consoles is coming in 2020." *Venturebeat*, 15 Oct. 2020. <https://venturebeat.com/2019/10/15/league-of-legends-for-mobile-and-consoles-is-coming-in-2020/>. Accessed 2 Nov. 2020.

Gutelle, Sam. "Fortnite' Streamer Ninja Helped Florida's GuardianCon Raise \$2.7 Million For St. Jude." *Tubefilter.com*, 13 July 2018, <https://www.tubefilter.com/2018/07/13/ninja-fundraising-twitch-guardian-con/>. Accessed 2 Nov. 2020.

Hall, Charlie. "Riot will finally allow LoL super fans to create their own champions." *Polygon.com*, 16 Oct 2014, <https://www.polygon.com/2014/10/16/6990837/lol-riot-allow-super-fans-create-champions>. Accessed 11 Sep. 2020.

Hatenablog.com. "All Time Best-selling Books in Japan (No.1-No.10)." 21. Feb. 2016, http://nbakki.hatenablog.com/entry/All_Time_Best-selling_Books. Accessed 12 Oct. 2019.

Hattenstone, Simon. "The rise of eSports: are addiction and corruption the price of its success?" *TheGuardian*, 16 Jun. 2017, <https://www.theguardian.com/sport/2017/jun/16/top-addiction-young-people-gaming-esports>. Accessed 14 March 2019.

Hecarim Dance. "Hecarim Dance Reference - Rhett & Link - Dope Zebra." *YouTube*, uploaded by GrimlyGaming 16 Feb. 2015, <https://www.youtube.com/watch?v=5i4FrOPb1UQ>.

Heimer, Richard, "Dota vs. LoL 2019: Which is Better?" *UnrankedSmurfs*, 5 March 2017, <https://www.unrankedsmurfs.com/blog/dota-vs-lol>. Accessed 30 Sep 2019.

Heimer, Richard. "How many people play League of Legends – Updated 2018." *UnrankedSmurfs*, 5 June 2018, <https://www.unrankedsmurfs.com/blog/players-2017>. Accessed 10 Jan. 2019.

Henrichs, Albert (Cambridge, MA). 'Moira'. *Brill's New Pauly*. Ed. Hubert Cancik et al. Brill Reference Online. Web. 20 June 2021, https://referenceworks.brillonline.com/search?s.f.s2_parent=s.f.book.bri ll-s-new-pauly&search-go=&s.q=atropos.

Henrichs, Albert (Cambridge, MA), and Bähler, Balbina (Göttingen). 'Zeus'. *Brill's New Pauly*. Ed. Hubert Cancik et al. Brill Reference Online. Web. 20 June 2021, https://referenceworks.brillonline.com/search?s.f.s2_parent=s.f.book.bri ll-s-new-pauly&search-go=&s.q=zeus.

Heroesofthestorm.Gamepedia.com, "Easter Eggs." 2019, https://heroesofthestorm.gamepedia.com/Easter_eggs_in_Heroes_of_the_Storm#References. Accessed 24 Oct. 2019.

Heroesofthestorm.com, "Heroes." 2019, <https://heroesofthestorm.com/heroes/>. Accessed 24 Oct. 2019.

Hextec Sion Spotlight 2017. "HEXTECH SION SKIN SPOTLIGHT." *YouTube*, uploaded by Rubico TV 9 April 2017, https://www.youtube.com/watch?v=s798s4aD_ko.

Holland, James. "Age of Empires." *PCGames.gwn.com*, May 4 2002, https://web.archive.org/web/20080611224845/http://pcgames.gwn.com/reviews/gamereview.php/id/21/p/0/title/Age_of_Empires.html. Accessed 16 Oct. 2019.

HoN.Gamepedia.com. "Sun Wukong." 2019, https://hon.gamepedia.com/Sun_Wukong, Accessed 13 Oct. 2019.

Hopper, Chris. "Offseason poaching explained." *LolSports.com*, 16 Dec. 2016, <https://nexus.leagueoflegends.com/en-us/2016/12/offseason-poaching-explained/>. Accessed 8 Dec. 2018.

Icecolddragon, a user on *Reddit*, 5 Sep. 2016, https://www.reddit.com/r/DotA2/comments/517kwh/why_do_more_people_play_lol_than_dota/. Accessed 21 Dec. 2018.

IMDb.com. "Dota 2." 2019,
<https://www.imdb.com/title/tt2290962/movieconnections>. Accessed 29
Sep. 2019.

Immortan Joe Creation. "Mad Max: Fury Road - Creating Immortan
Joe." *YouTube*, uploaded by IGN, 31 Aug. 2015,
<https://www.youtube.com/watch?v=hk6KuKgVFF4>.

Ishutin, Danil. "Wicked sick Dendi by Tinker @ The Defense."
YouTube, uploaded by NAVI Dota 2, 14 Aug. 2012,
<https://www.youtube.com/watch?v=y89OYXMV4HA>.

Ito, Robert. "The Gore of Greece, Torn From a Comic." *NYTimes*, 26
Nov. 2006,
[https://www.nytimes.com/2006/11/26/movies/26ito.html?pagewanted=
all&_r=0](https://www.nytimes.com/2006/11/26/movies/26ito.html?pagewanted=all&_r=0). Accessed 9 April 2019.

I'm the Juggernaut, Bitch!!!. "I'M THE JUGGERNAUT, BITCH!!!"
YouTube, uploaded by Zachary Schneller, 7 Oct. 2007,
<https://www.youtube.com/watch?v=bSuvOVH0aSQ>.

Jack Rabbit Slims' Restaurant Scene 1994. "Pulp Fiction - the 'Jack
Rabbit Slims' restaurant scene." *YouTube*, uploaded by vaibhavaug, 19
April 2009, <https://www.youtube.com/watch?v=A8X2SM0ioJ4>.

Janna Jazz-Funk. "Janna - Jazz-Funk Dance - League of Legends (LoL)." *YouTube*,
uploaded by NeiLalwaysLeeT, 23 Jan. 2012,
<https://www.youtube.com/watch?v=GrU4XEyoRuo>.

Jensen, K. Thor. "What happened to the real-time strategy genre?" *Geek.com*, 18
March 2016, [https://www.geek.com/news/what-happened-to-the-real-time-strategy-
genre-1649869/](https://www.geek.com/news/what-happened-to-the-real-time-strategy-genre-1649869/) Accessed Sep 24 2019.

Jhin Dance. "Jhin Dance Reference – Lezginka." *YouTube*, uploaded by
GrimlyGaming, 29 March 2016,
<https://www.youtube.com/watch?v=dzmZMOEtf6M>.

Jhin Django Reference. "8 Facts You Might Not Know About Jhin | League of
Legends." *YouTube*, uploaded by Jeremy – Gaming Curios, 26. Feb. 2016,
<https://www.youtube.com/watch?v=dzmZMOEtf6M&feature=youtu.be&t=214>.

Jhin SKT Dance. "LoL SKT T1 Jhin recall dance reference (Big Bang - Bang Bang
Bang) - Worlds 2016." *YouTube*, uploaded by l0beda0st, 13 June 2017,
<https://www.youtube.com/watch?v=TrKfLppOlk>.

Jinx Dance. "Jinx Dance Reference - Adventure Time - Jake's Phat Beats."
YouTube, uploaded by GrimlyGaming, 5 Jun. 2015,
https://www.youtube.com/watch?v=FAwu-yXD_TQ.

- Johnson, Eric. "Why Amazon really bought Twitch." *Vox.com*, 26 Aug. 2014, <https://www.vox.com/2014/8/26/11630224/why-amazon-really-bought-twitch>. Accessed 21 Oct. 2019.
- Jones, Ali. "Snoop Dogg's new esports league 'definitely allows the use of cannabis'". *PCGames*, 16 March 2019, <https://www.pcgamesn.com/madden-nfl-19/snoop-dogg-gangsta-gaming-league>. Accessed 25 March 2019.
- Kain, Erik. "5 Reasons To Play ,Fortnite' Instead of 'PUBG'." *Forbes.com*, 8 March 2018, <https://www.forbes.com/sites/erikkain/2018/03/08/5-reasons-why-you-should-play-fortnite-instead-of-pubg/#76afbda454b7>. Accessed 23 Oct. 2019.
- Kalista Dance. "Kalista Dance Reference - Oberynt Martell Spear Dance." *YouTube*, uploaded by GrimlyGaming, 6 Nov. 2014, <https://www.youtube.com/watch?v=yLDJWigzkbA>.
- Karukef. "The sequel to DotA." *WC3C*, 14 March 2006, <http://www.wc3c.net/showthread.php?t=81279>. Accessed 25 Sept. 2018.
- Katarina Dance. "Katarina - Napoleon Dynamite Dance #1 - League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 31. Oct. 2011, <https://www.youtube.com/watch?v=km-FwNjcUyk>.
- Kaskowitz, Sheryl. "'God Bless America': 100 Years of an Immigrant's Anthem." *Nytimes*, 2 July 2018, <https://nyti.ms/2NifNbj>. Accessed 27 Feb. 2019.
- Kayle Dance. "Kayle - Jump On It Dance #1 - League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 29 July 2011, <https://www.youtube.com/watch?v=FtsJLKw5aWA>.
- Käppel, Lutz (Kiel). 'Medusa'. Brill's New Pauly. Ed. Hubert Cancik et al. Brill Reference Online. Web. 20 June 2021, https://referenceworks.brillonline.com/search?s.f.s2_parent=s.f.book.brill-s-new-pauly&search-go=&s.q=medusa.
- Kearns, Emily (Oxford), and Neudecker, Richard (Rome). 'Daedalus'. *Brill's New Pauly*. Ed. Hubert Cancik et al. Brill Reference Online. Web. 20 June 2021, https://referenceworks.brillonline.com/search?s.f.s2_parent=s.f.book.brill-s-new-pauly&search-go=&s.q=daedalus.
- Koalitionsvertrag*. CDU, CSU and SPD 2018, https://www.cdu.de/system/tdf/media/dokumente/koalitionsvertrag_2018.pdf?file=1. Accessed 14 March 2019.
- Kim, Ben. "A comprehensive comparison of Dota 2 and League of Legends." *Pcgamer*, 9 July 2013, <https://www.pcgamer.com/a-comprehensive-comparison-of-dota-2-and-league-of-legends/2/>. Accessed 17 Dec. 2018.

Khan, Imad. "More than one percent of the global population is playing 'League of Legends'." *Digitaltrends*, 15 June 2016, <https://www.digitaltrends.com/gaming/league-of-legends-100-million-players/>. Accessed 15 March 2019.

Kindred Dance. "Kindred Dance Reference - "Cups" Tap Dance - Anna Kendrick." *YouTube*, uploaded by GrimlyGaming, 6 Nov. 2015, <https://www.youtube.com/watch?v=RYYVUHcAVTM>.

Kisselgoff, Anna. "Dance View; Fred Astaire Perfected A New Art Form." *Nytimes*, 28 June 1987, <https://www.nytimes.com/1987/06/28/arts/dance-view-fred-astaire-perfected-a-new-art-form.html>. Accessed 27 Feb. 2019.

Knowyourmeme.com. "Fallout." 2019, <https://knowyourmeme.com/memes/war-never-changes>. Accessed 9 Oct. 2019.

Koch, Mike. "Yurnero's story - from Blademaster to Juggernaut." *Joindota*, 22 April 2018, <https://www.joindota.com/en/news/68370-yurneros-story-from-blademaster-to-juggernaut>. Accessed 2 April 2019.

Kollar, Phil. "The past, present and future of League of Legends studio Riot Games." *Polygon*, 13 Sept. 2016, <https://www.polygon.com/2016/9/13/12891656/the-past-present-and-future-of-league-of-legends-studio-riot-games>. Accessed 5 Dec. 2018.

Lanepushinggames.com. "Aeon of Strife." 2019, <https://lanepushinggames.com/moba/aeon-of-strife>. Accessed 24 Sep. 2019.

Lantz, J. "The Snowball Effect: DotA vs. Hokra." *In Machinam*, 16 April 2012, <http://www.decisionproblem.com/inmachinam/?p=82>. Accessed 8 Dec. 2018.

Laughton, Max. "How an esports tournament is built, Smite World Championship recap, behind the scenes of esports." *Foxsports.com.au*, 10 Jan 2016, <https://www.foxsports.com.au/more-sports/how-an-esports-tournament-is-built-smite-world-championship-recap-behind-the-scenes-of-esports/news-story/ec71483ab7eecdada4f94506bc0d41ba>. Accessed 29 Sep. 2019.

LCS Rule Set. 2019. https://nexus.leagueoflegends.com/wp-content/uploads/2019/01/2019-LCS-Rule-Set-v19.3_uh6o67g0zd58db0o5p08.pdf. Accessed 21. Oct. 2019.

Leagueoflegends.com. “Aatrox.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Aatrox/>.
Accessed 9 April 2019.

Leagueoflegends.com. “Aatrox Short Bio.” 2019,
https://universe.leagueoflegends.com/en_GB/champion/aatrox/.
Accessed 9 April 2019.

Leagueoflegends.com. “Ahri.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Alistar/>.
Accessed 17 April 2019.

Leagueoflegends.com. “A huge mistake.” 2019,
<https://boards.na.leagueoflegends.com/en/c/story-art/yYVFu3XZ-summoners-no-longer-exist>. Accessed 11 Oct. 2019.

Leagueoflegends.com. “Akali.” 2019,
https://universe.leagueoflegends.com/en_US/champion/akali/. Accessed
3 June 2019.

Leagueoflegends.com. “Alistar.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Ahri/>.
Accessed 3 April 2019.

Leagueoflegends.com. “Alistar Short Bio.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Ahri/>.
Accessed 3 April 2019.

Leagueoflegends.com. “Amumu.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Ahri/>.
Accessed 17 April 2019.

Leagueoflegends.com. “Amumu Short Bio.” 2019,
https://universe.leagueoflegends.com/en_US/champion/amumu/.
Accessed 14 Oct. 2019.

Leagueoflegends.com. “Anivia.” 2019,
https://universe.leagueoflegends.com/en_GB/champion/anivia/.
Accessed 4 April 2019.

Leagueoflegends.com. “Annie.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Annie/>.
Accessed 10 Oct. 2019.

Leagueoflegends.com. “Ashe.” 2019,
https://euw.leagueoflegends.com/en_GB/champion/Ashe/. Accessed 1
Oct. 2019.

Leagueoflegends.com. “Bard.” 2019,
https://euw.leagueoflegends.com/en_GB/champion/Bard/. Accessed 1 Oct. 2019.

Leagueoflegends.com. “Beginners Guide To Streaming.” 2019,
<https://euw.leagueoflegends.com/en/page/ever-wanted-stream>.
Accessed 27 Feb. 2019.

Leagueoflegends.com. “Blitzcrank.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/blitzcrank/
. Accessed 2 April 2019.

Leagueoflegends.com. “Brand.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Brand>.
Accessed 2 April 2019.

Leagueoflegends.com. “Buhru Guidelines.” 2019,
<https://boards.na.leagueoflegends.com/en/c/story-art/OPkqt6tg-waaarghbobo-you-say-you-work-on-champion-languages?comment=00000001000000000000>, Accessed 11 Oct. 2019.

Leagueoflegends.com. “Can we get a Cthulhu?” 2012,
<http://forums.na.leagueoflegends.com/board/showthread.php?t=1719813>.
Accessed 11 Oct. 2019.

Leagueoflegends.com. “Cassiopeia.” 2019,
https://universe.leagueoflegends.com/en_GB/champion/cassiopeia/.
Accessed 17 April 2019.

Leagueoflegends.com. “Champions.” 2019,
<https://euw.leagueoflegends.com/de/game-info/champions/>. Accessed
27. Sep. 2019.

Leagueoflegends.com. “Cho’Gath.” 2019,
https://universe.leagueoflegends.com/en_US/champion/chogath/.
Accessed 9 April 2019.

Leagueoflegends.com. “Cho’Gath Short Bio.” 2019,
https://universe.leagueoflegends.com/en_US/champion/chogath/.
Accessed 11 Oct. 2019.

Leagueoflegends.com. “Daven.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/draven/.
Accessed 9 Oct. 2019.

Leagueoflegends.com. “Dr. Mundo.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/drmundo/.
Accessed 1 April 2019.

Leagueoflegends.com. “Dunkmaster Darius.” 2019,
<https://euw.leagueoflegends.com/en/news/champions-skins/skin-release/dunkmaster-darius-hits-court>. Accessed 1 April 2019.

Leagueoflegends.com. “Fiora.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/fiora/.
Accessed 6 Oct. 2019.

Leagueoflegends.com. “Flipping The Script: The history of lane-swaps.” 2015,
<https://euw.leagueoflegends.com/en/news/esports/esports-editorial/flipping-script-history-lane-swaps>. Accessed 27 Feb. 2019.

Leagueoflegends.com. “Gangplank.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/gangplank/>.
Accessed 6 Oct. 2019.

Leagueoflegends.com. “Garen.” 2019,
https://universe.leagueoflegends.com/en_US/champion/garen/.
Accessed 25 March 2019.

Leagueoflegends.com. “Irelia.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/irelia/.
Accessed 4 June 2019.

Leagueoflegends.com. “Janna.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Janna/>.
Accessed 4 June 2019.

Leagueoflegends.com. “Jhin.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Jhin/>.
Accessed 9 Oct. 2019.

Leagueoflegends.com. “Jinx.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/jinx/.
Accessed 4 June 2019.

Leagueoflegends.com. “Kassadin.” 2019,
<https://na.leagueoflegends.com/en/game-info/champions/kassadin/>,
Accessed 11 Oct. 2019.

Leagueoflegends.com. “Katarina Animation Removal. ‘Okay guys, here's what we do about Katarina's animation removal’.” 12 July 2012,
<http://forums.na.leagueoflegends.com/board/showthread.php?t=287718&page=2>. Accessed 26 March 2019.

Leagueoflegends.com. “Kindred.” 2019,
https://universe.leagueoflegends.com/en_GB/champion/Kindred/.
Accessed 6 April 2019.

Leagueoflegends.com. “Kog’Maw.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/kogmaw/.
Accessed 8 April 2019.

Leagueoflegends.com. “Le Blanc.” 2019,
https://universe.leagueoflegends.com/en_GB/story/champion/leblanc/.
Accessed 7 Oct. 2019.

Leagueoflegends.com. “Lee Sin.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/LeeSin/>.
Accessed 6 Oct. 2019.

Leagueoflegends.com. “Map.” 2019, <https://map.leagueoflegends.com/>.
Accessed 6 April 2019.

Leagueoflegends.com. “Master Yi.” 2019,
https://universe.leagueoflegends.com/en_GB/champion/masteryi/.
Accessed 6 April 2019.

Leagueoflegends.com. “Mordekaiser.” 2019,
[https://euw.leagueoflegends.com/de/game-
info/champions/Mordekaiser](https://euw.leagueoflegends.com/de/game-info/champions/Mordekaiser). Accessed 6 April 2019.

Leagueoflegends.com. “Mordekaiser – Shadow and Fortune.” 2019,
[https://na.leagueoflegends.com/en/site/shadow-and-
fortune/mordekaiser.html](https://na.leagueoflegends.com/en/site/shadow-and-fortune/mordekaiser.html). Accessed 6 April 2019.

Leagueoflegends.com. “Mordekaiser Story.” 2019,
[https://universe.leagueoflegends.com/en_GB/story/champion/mordekai
ser/](https://universe.leagueoflegends.com/en_GB/story/champion/mordekaiser/). Accessed 6 April 2019.

Leagueoflegends.com. “Morgana.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/morgana>.
Accessed 9 Oct. 2019.

Leagueoflegends.com. “Nautilus.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Nautilus/>.
Accessed 3 Oct. 2019.

Leagueoflegends.com. “New Player Guide.” 2019,
[https://euw.leagueoflegends.com/en/game-info/get-started/new-player-
guide/](https://euw.leagueoflegends.com/en/game-info/get-started/new-player-guide/). Accessed 26 Sep. 2019.

Leagueoflegends.com. “Nidalee.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/nidalee.
Accessed 6 April 2019.

Leagueoflegends.com. “Nunu.” 2019,
<https://na.leagueoflegends.com/en/game-info/champions/Nunu/>.
Accessed 6 April 2019.

Leagueoflegends.com. “Nunu Short Bio.” 2019,
https://universe.leagueoflegends.com/en_US/champion/nunu/. Accessed
11 Oct. 2019.

Leagueoflegends.com. “Universe.” 2019,
https://universe.leagueoflegends.com/en_US/. Accessed 17 April 2019.

Leagueoflegends.com. “Olaf.” 2019,
https://universe.leagueoflegends.com/en_GB/champion/olaf/. Accessed
6 April 2019.

Leagueoflegends.com. “Pantheon.” 2019,
<https://euw.leagueoflegends.com/de/game-info/champions/Pantheon/>.
Accessed 11 Oct. 2019.

Leagueoflegends.com. “Pendragon.” 2019,
https://leagueoflegends.fandom.com/wiki/Steve_%27Pendragon%27_Mescon. Accessed 29 Sep. 2019.

Leagueoflegends.com. “Piltover.” 2019,
https://universe.leagueoflegends.com/en_US/region/piltover/. Accessed
28 Feb. 2019.

Leagueoflegends.com. “Rammus Story.” 2019,
https://universe.leagueoflegends.com/en_GB/story/champion/rammus/.
Accessed 10 Oct. 2019.

Leagueoflegends.com. “Renekton.” 2019,
<https://na.leagueoflegends.com/en/game-info/champions/renekton/>.
Accessed 14 Oct. 2019.

Leagueoflegends.com. “Renekton Short Bio.” 2019,
https://universe.leagueoflegends.com/en_US/champion/renekton/.
Accessed 14 Oct. 2019.

Leagueoflegends.com. “Rift Quest.” 2019,
https://leagueoflegends.fandom.com/wiki/Rift_Quest. Accessed 10 Oct.
2019.

Leagueoflegends.com. “Rumble.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Rumble/>.
Accessed 10 Oct. 2019.

Leagueoflegends.com. “Rumble Short Bio.” 2019,
https://universe.leagueoflegends.com/en_GB/champion/rumble/.
Accessed 10 Oct. 2019.

Leagueoflegends.com. “Rumble Story.” 2019,
https://universe.leagueoflegends.com/en_GB/story/champion/rumble/.
Accessed 10 Oct. 2019.

Leagueoflegends.com. “Ryze.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/Ryze.
Accessed 6 Oct. 2019.

Leagueoflegends.com. “Similar Abilities.” 2019,
<http://forums.na.leagueoflegends.com/board/showthread.php?t=421663>.
Accessed 29 Sep. 2019.

Leagueoflegends.com. “Sion.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Sion>.
Accessed 29 Sep. 2019.

Leagueoflegends.com. “Skarner.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/skarner>.
Accessed 10 Oct. 2019.

Leagueoflegends.com. “SKT Skins now available.” 2019,
<https://na.leagueoflegends.com/en/page/skt-t1-2016-skins-now-available>. Accessed 3 April 2019.

Leagueoflegends.com. “Sona.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Sona/>.
Accessed 18 April 2019.

Leagueoflegends.com. “Sona Short Bio.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Sona/>.
Accessed 14 Oct. 2019.

Leagueoflegends.com. “Swain.” 2019,
https://universe.leagueoflegends.com/en_US/champion/swain/.
Accessed 3 April 2019.

Leagueoflegends.com. “Swain Short Bio.” 2019,
https://universe.leagueoflegends.com/en_GB/champion/swain/.
Accessed 10 Oct. 2019.

Leagueoflegends.com. “Swain Story.” 2019,
https://universe.leagueoflegends.com/en_GB/story/champion/swain/.
Accessed 10 Oct. 2019.

Leagueoflegends.com. “Tahm Kench.” 2019,
https://universe.leagueoflegends.com/en_US/champion/tahmkench/.
Accessed 3 April 2019.

Leagueoflegends.com. “Taric.” 2019,
<https://na.leagueoflegends.com/en/game-info/champions/Taric/>.
Accessed 15 Oct. 2019.

Leagueoflegends.com. “Taric Short Bio.” 2019,
https://universe.leagueoflegends.com/en_US/champion/taric/. Accessed
15 Oct. 2019.

Leagueoflegends.com. “Tryndamere.” 2019,
https://universe.leagueoflegends.com/en_US/champion/tryndamere/.
Accessed 6 Oct. 2019.

Leagueoflegends.com. “Twisted Fate.” 2019,
[https://euw.leagueoflegends.com/en/game-
info/champions/TwistedFate/](https://euw.leagueoflegends.com/en/game-info/champions/TwistedFate/). Accessed 10 Oct. 2019.

Leagueoflegends.com. “Udyr.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/udyr/.
Accessed 6 Oct. 2019.

Leagueoflegends.com. “Vayne.” 2019,
https://universe.leagueoflegends.com/en_US/champion/vayne/.
Accessed 17 April 2019.

Leagueoflegends.com. “Vayne Game Info.” 2019,
[https://euw.leagueoflegends.com/en/game-info/champions/vayne.](https://euw.leagueoflegends.com/en/game-info/champions/vayne/)
Accessed 5 May 2019.

Leagueoflegends.com. “Vayne Story.” 2019,
https://universe.leagueoflegends.com/en_GB/story/champion/vayne/.
Accessed 14 Oct. 2019.

Leagueoflegends.com. “Veigar.” 2019,
<https://leagueoflegends.fandom.com/wiki/Veigar>. Accessed 8 Oct.
2019.

Leagueoflegends.com. “Veigar Story.” 2019,
https://universe.leagueoflegends.com/en_GB/story/champion/veigar/.
Accessed 9 Oct. 2019.

Leagueoflegends.com. “Velkoz.” 2019,
[https://na.leagueoflegends.com/en/news/champions-skins/champion-
reveal/velkoz-eye-void-revealed](https://na.leagueoflegends.com/en/news/champions-skins/champion-reveal/velkoz-eye-void-revealed). Accessed 12 April 2019.

Leagueoflegends.com. “Vladimir.” 2019,
https://universe.leagueoflegends.com/en_US/champion/vladimir/.
Accessed 12 April 2019.

Leagueoflegends.com. “Vladimir Short Bio.” 2019,
https://universe.leagueoflegends.com/en_GB/champion/vladimir/.
Accessed 14 Oct. 2019.

Leagueoflegends.com. “Vladimir Story.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/vladimir/.
Accessed 7 May 2019.

Leagueoflegends.com. “Volibear.” 2019,
https://universe.leagueoflegends.com/en_US/story/champion/volibear/.
Accessed 6 Oct. 2019.

Leagueoflegends.com. “Warwick.” 2019,
<https://na.leagueoflegends.com/en/game-info/champions/warwick/>.
Accessed 14 Oct 2019.

Leagueoflegends.com. “Why hate Teemo.” 2019,
<https://boards.na.leagueoflegends.com/en/c/player-behavior-moderation/OFgWG0Hj-why-the-stupid-popular-hate-towards-teemo>.
Accessed 12 April 2019.

Leagueoflegends.com. “Wukong.” 2019,
<https://na.leagueoflegends.com/en/game-info/champions/MonkeyKing/>.
Accessed 13 Oct. 2019.

Leagueoflegends.com. “Xin Zhao.” 2019,
https://universe.leagueoflegends.com/en_US/champion/xinzhao/.
Accessed 12 April 2019.

Leagueoflegends.com. “Xin Zhao Story.” 2019,
https://universe.leagueoflegends.com/en_GB/story/champion/xinzhao/.
Accessed 6 May 2019.

Leagueoflegends.com. “Yorick.” 2019,
<https://euw.leagueoflegends.com/en/game-info/champions/Yorick/>.
Accessed 2 Oct. 2019.

LEC Rules. 2019, <https://eu.lolesports.com/en/about/lec-rules>. Accessed 21. Oct. 2019.

Lee, Julia. “K/DA, Riot Games’ pop girl group, explained.” *Polygon*, 5 Nov. 2018, <https://www.polygon.com/2018/11/5/18064726/league-of-legends-kda-pop-stars-video-akali-ahri-evelynn-kai-sa>. Accessed 8 April 2019.

Lee Sin Soccer. "Lee Sin Dance Reference - Shaolin Soccer - Mighty Steel Leg." *YouTube*, uploaded by GrimlyGaming, 19 March 2015, <https://www.youtube.com/watch?v=tJM6hytks0c>.

Liquipedia.net. "Dota History." 2019, https://liquipedia.net/dota2/Dota_History. Accessed 1 April 2019.

Liquipedia.net. "Version 6.86." 2019, https://liquipedia.net/dota2/Version_6.86. Accessed 1 Oct. 2019.

Lockley, Greg. "MOBA: The Story so Far." *MCVUK*, 3 June 2014, <https://web.archive.org/web/20170427151821/http://www.mcvuk.com/news/read/moba-the-story-so-far/0133335>. Accessed March 11 2019.

Loedts, Youri. "Video Games help forge lifelong friendships." *Flega.be*, 12 April 2016, <http://www.flega.be/video-games-help-forge-lifelong-friendships/>. Accessed 26 Sep. 2019.

LoLesports.com. "Hero Selection 2.0." 2019, <https://eu.lolesports.com/de/artikel/heldenauswahl-2-0>. Accessed 29 Sep 2019.

LoL.Gamepedia.com. "Athene's Unholy Grail." 2019, [https://lol.gamepedia.com/Athene%27s_Unholy_Grail_\(Item\)](https://lol.gamepedia.com/Athene%27s_Unholy_Grail_(Item)). Accessed 7 Oct. 2019.

LoL.Gamepedia.com. "Flash." 2019, [https://lol.gamepedia.com/Flash_\(Summoner_Spell\)](https://lol.gamepedia.com/Flash_(Summoner_Spell)). Accessed 1 Oct. 2019.

LoL.Gamepedia.com. "LCS 2019 Pick Ban History." 2019, https://lol.gamepedia.com/LCS/2019_Season/Summer_Season/Pick-Ban_History. Accessed 28 Sep. 2019.

LoL.Gamepedia.com. "Stealth Ward." 2019, [https://lol.gamepedia.com/Stealth_Ward_\(Item\)](https://lol.gamepedia.com/Stealth_Ward_(Item)). Accessed 29 Sep. 2019.

LoL.Gamepedia.com. "Summoner Spells." 2019, https://lol.gamepedia.com/Portal:Summoner_Spells. Accessed 29 Sep. 2019.

LoliKnight, a user on *Leagueoflegends*, 5 Nov. 2017, <https://boards.na.leagueoflegends.com/en/c/gameplay-balance/qgBWhIsi-lol-vs-dota-2-is-it-a-time-to-migrate-to-dota-2?comment=0004>. Accessed 21 Dec. 2018.

Lolskinshop.com. "Warwick Skin." 2019, <https://lolskinshop.com/product/big-bad-warwick/>. Accessed 14 Oct. 2019.

Lynch, Andrew. (May 06, 2016). "Tracing the 70-year history of video games becoming eSports." *Fox Sports*, 6 May 2016, <https://www.foxsports.com/buzzer/story/esports-explainer-league-of-legends-heroes-of-the-storm-hearthstone-cs-go-dreamhack-050616>. Accessed 9 Dec. 2018.

Maiberg, E. "League of Legends revenues for 2013 total \$624 million." *Gamespot*, 24. Jan. 2014, <http://www.gamespot.com/articles/league-of-legends-revenues-for2013-total-624-million-update/1100-6417224/>. Accessed 21 Dec. 2018.

Malim, George. "Video games market is worth more than music and movies combined so why aren't CSPs launching games services?" *Vanillaplus.com*, 5 July 2018, <https://www.vanillaplus.com/2018/07/05/40093-video-games-market-worth-music-movies-combined-arent-csps-launching-games-services/>. Accessed 6 Nov. 2019.

Maravilla, Cabra. "The Inconvenient Truth about Korea's League of Legends Dominance." *Dotesports.com*, 7 Nov. 2016, <https://dotesports.com/league-of-legends/news/the-inconvenient-truth-about-koreas-league-of-legends-dominance-5431>. Accessed 19 Oct. 2019.

Margaris, James. "On the eSports Failure of Heroes of the Storm." *Gamasutra.com*, 12 Dec. 2016, https://www.gamasutra.com/blogs/JamesMargaris/20161212/287359/On_the_eSports_Failure_of_Heroes_of_the_Storm.php. Accessed 24 Oct. 2019.

Mastercard.com. "LoL Press Release." 19 Sep. 2018, <https://newsroom.mastercard.com/eu/press-releases/mastercard-signs-with-league-of-legends-as-first-global-partner-of-the-worlds-largest-esport/>. Accessed 21. Oct. 2019.

Mastercard.com. "Mastercard Debuts Priceless Experiences." 2018, <https://newsroom.mastercard.com/press-releases/mastercard-debuts-priceless-experiences-for-fans-at-the-league-of-legends-2018-world-championship/>. Accessed 21. Oct. 2019.

Master Yi Recall. "Master Yi's Recall - Junpei Iori's Victory Pose - League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 18 March 2014, <https://www.youtube.com/watch?v=MU4nXZ2-ai4>.

Maximus vs. Tigris 2018. “Gladiator Maximus vs Tigris of Gaul.” *YouTube*, uploaded by Scott2016, 4 June 2018, <https://www.youtube.com/watch?v=TWetJFr1QM4>.

McAloon, Alissa. “Analyst: PUBG out-earned every other premium PC and console game in 2018.” *Gamasutra*, 17 Jan. 2019, http://gamasutra.com/view/news/334636/Analyst_PUBG_outearned_every_other_premium_PC_and_console_game_in_2018.php. Accessed 1. April 2019.

Medium.com. “Esports — Bigger than Traditional Sports ?” 1 July 2019, <https://medium.com/@IGGalaxy/esports-the-next-generation-of-sports-7ac9ec6d71c>. Accessed 2 Oct. 2019.

Meet the Guardians: Rocket 2014. “Meet the Guardians of the Galaxy: Rocket.” *YouTube*, uploaded by Marvel Entertainment, 20 Feb. 2014, <https://www.youtube.com/watch?v=0Udzfdl2xuw>.

Miceli, Max. “Counter-Strike Twitch Viewership Up in 2018, Lead by Majors.” *Esportsobserver.com*, 22 Dec. 2018, <https://esportsobserver.com/twitch-viewership-2018-csgo/>. Accessed 18 Oct. 2019.

Miceli, Max. “Overwatch League Twitch Viewership Exceeds 2018 Figures for First Time in Stage 2.” *Esportsobserver.com*, 24 April 2019, <https://esportsobserver.com/owl-stage2-week3-2019/>. Accessed 18 Oct. 2019.

Ming, Nate. “A Thin Line Between Good and Evil Edition.” *Crunchyroll*, 11 May. 2013, <https://www.crunchyroll.com/de/anime-feature/2013/05/10/feature-fanart-friday-a-thin-line-between-good-and-evil-edition>. Accessed 22 Feb. 2019.

Minotti, Mike. “Comparing MOBAs: Dota 2 vs. League of Legends vs. Heroes of Newerth.” *Venturebeat*, 27 July 2013, <https://venturebeat.com/2013/07/27/comparing-mobas-dota-2-vs-league-of-legends-vs-heroes-of-newerth/>. Accessed 29 Sep. 2019.

Minotti, Mike. “The history of MOBAs: From mod to sensation.” *Venturebeat*, 1 Sept. 2014, <https://venturebeat.com/2014/09/01/the-history-of-mobas-from-mod-to-sensation/>. Accessed 8 Dec. 2018.

MMO-Champions.com. “Skill Cap.” 2011, <https://www.mmo-champion.com/threads/1014298-quot-Skill-cap-quot-for-those-who-don-t-know>. Accessed 29 Sep. 2019.

Monty Python and the Holy Grail. “Black Knight Scene - Monty Python and the Holy Grail.” *YouTube*, uploaded by Omar David Panos, 14. May 2014, <https://www.youtube.com/watch?v=RG1P8MQS1cU>.

Moreno, Kasia. "Gaming For Good." *Forbes*, 11 April 2016, <https://www.forbes.com/sites/kasiamoreno/2016/04/11/gaming-for-good/>. Accessed 21 May 2019.

MTG. Gamepedia.com, "Squee." 2019, <https://mtg.gamepedia.com/Squee>. Accessed 10 Oct. 2019.

Muay Thai Lee Sin Movements. "Muay Thai Lee Sin - Tony Jaa Training - League of Legends (LoL) Dance." *YouTube*, uploaded by NeiLalwaysLeeT, 9 March 2013, <https://www.youtube.com/watch?v=UY8cDZXbc3U>.

Newzoo.com. "Esportsreport." 2020, <https://newzoo.com/esportsreport>. Accessed 1 Nov. 2020.

Newzoo.com. "Global Esports Market Report." 2020, <https://newzoo.com/insights/trend-reports/newzoo-global-esports-market-report-2020-light-version/>. Accessed 1 Nov. 2020.

Newzoo.com. "Number of Gamers." 2020, <https://newzoo.com/insights/articles/games-market-engagement-revenues-trends-2020-2023-gaming-report/>. Accessed 1 Nov. 2020.

Newzoo.com. "Why sports brands want to be in esports." 2016, <https://newzoo.com/insights/trend-reports/why-sports-brands-want-to-be-in-esports/>. Accessed 21 Oct. 2019.

Ninja Warlord, a user on *Leagueoflegends*, 20 Aug. 2015, <https://boards.na.leagueoflegends.com/en/c/gameplay-balance/v3GRtUEF-what-the-hell-was-riot-thinking-with-tahm-kenchs-swallow>. Accessed 21 Dec. 2018.

Martinello, Eva. "League of Legends generated \$1.5 billion revenue in 2019." *Dotesports.com*, 3 Jan. 2020, <https://dotesports.com/league-of-legends/news/league-of-legends-generated-1-5-billion-revenue-in-2019>. Accessed 2 Nov. 2020.

Mywaydance.com. 2019. https://mywaydance.com/en/dance_style/jazz-funk/. Accessed 5 April 2019.

Nautilus Peeparoonie Dance 2012. "Nautilus – Peeparoonie Dance – League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 1 March 2012, <https://www.youtube.com/watch?v=tojiQp-a4UY>.

Neon Strike Vi Pose. "Neon Strike Vi's Recall - Franky SUPER! - League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 24 April 2014, <https://www.youtube.com/watch?v=m-CCWHzMixE>.

Ng, Wayne. "History of DotA." *Gosugamers*, 26 Aug. 2011, <https://www.gosugamers.net/dota/features/36824-history-of-dota>. Accessed 5 Jan. 2019.

Nintendo.com. "Kirby." 2019, <https://kirby.nintendo.com/>.

Ocelot Gun Spinning 2016. "Every Time Revolver Ocelot Spins a Gun in the Metal Gear Solid Series." *YouTube*, uploaded by LieutenantShwa, 10 April 2016, https://www.youtube.com/watch?v=To7rfQuk_k8&feature=youtu.be.

OG vs. LGD Grand Final. "OG vs LGD - Last Game Full Drafting Phase Grand Final Ti8 Game 5." *YouTube*, uploaded by LeagueOfDota, 26 Aug. 2018, <https://www.youtube.com/watch?v=8wcHc2gOgbl>.

One Froggy Evening. "Looney Tunes, One Froggy Evening." *YouTube*, uploaded by WB Kids, 22 Sep. 2015, <https://www.youtube.com/watch?v=ISSOUU6yYYM>.

On the Waterfront. "Why Marlon Brando's acting was the best EVER. – StoryBrain." *YouTube*, uploaded by StoryBrain, 7 Nov. 2016, <https://www.youtube.com/watch?v=efHzGxEzDQA>.

Orland, Kyle. "Does Valve really own Dota? A jury will decide." *ArsTechnica*, 18 May 2017, <https://arstechnica.com/gaming/2017/05/does-valve-really-own-dota-a-jury-will-decide/>. Accessed 29 Sep 2019.

Ouguide.com. "Client Patch." 2019, http://www.uoguide.com/Client_Patch_1.23.33b, Accessed 16 Oct. 2019.

Özil, Mesut. "Famous Player FORTNITE Celebrations 2018-2019." *YouTube*, uploaded by SportVideosMM, 22 Sept. 2018, <https://youtu.be/0hAKRps2ePw?t=107>.

Paradise, Andrew. "The rise of esports as a spectator phenonemon." *Venturebeat.com*, 30 Nov. 2018, <https://venturebeat.com/2018/11/30/the-rise-of-esports-as-a-spectator-phenomenon/>. Accessed 21 Oct. 2019.

Paragon.Fandom.com. "Wukong." 2019, <https://paragon.fandom.com/wiki/Wukong>. Accessed 13 Oct. 2019.

Pet Sematary Opening 1989. "Pet Sematary Opening." *YouTube*, uploaded by supernikoz, 27. Nov. 2012, <https://www.youtube.com/watch?v=gRbyK7TMZLI>.

Partridge, J. “Genetically engineered: How MOBAs invaded eSports.” *Red Bull*, 17 March 2014, <https://www.redbull.com/ie-en/genetically-engineered-howmobas-invaded-esports>. Accessed 5 Dec. 2018.

Paterson, Callum. “Cardiff City Football Player Callum Paterson Fortnite Emote Celebrations.” *YouTube*, uploaded by bluebirdlegend, 17 March 2018, <https://www.youtube.com/watch?v=zMCXJxw8pUk>.

Pearson, Craig. “Valve's Robin Walker on six figure item sales and the future of modding.” *PCGamer.com*, 11 Jan. 2013, <https://www.pcgamer.com/valves-robin-walker-on-six-figure-item-sales-and-the-future-of-modding/>. Accessed 24 Oct. 2019.

Pfister, Eugen. “Über diesen Blog.“ *Spielkult-Kultur-Wissenschaften*, 10 Jan 2019, <https://spielkult.hypotheses.org/>. Accessed 10 Jan 2019.

Philpot, Nick. “The 15 Most Valuable X-Men Toys From The '90s You Wish You Kept.” *CBR.com*, <https://www.cbr.com/valuable-90s-x-men-toys/>. Accessed 6 Oct. 2019.

Pioneer2.net. “Sange and Yasha.” http://wiki.pioneer2.net/index.php?title=Sange_%26_Yasha. Accessed 9 Oct. 2019.

Playdota.com. “Heroes.” <https://web.archive.org/web/20120103153819/http://www.playdota.com/heroes>. Accessed 1 Oct. 2019.

Playearthstone.com. “HCT.” <https://playearthstone.com/de/de/esports/tournament/hct-world-championship-2019/>. Accessed 26 Sep. 2019.

Project: Yi – Have A Nice Day 2015. “PROJECT: Yi Dance – HAVE A NICE DAY – League of Legends (LoL).” *YouTube*, uploaded by NeiLalwaysLeeT, 14. Nov. 2015, https://www.youtube.com/watch?v=J1_dclQEasM.

Rabinovitch, David. “Infographic: Which countries do Dota 2 pros come from vs. casual players?” *Thecoresports.com*, Jun 21 2017, <https://www.thecoresports.com/news/14443-infographic:-which-countries-do-dota-2-pros-come-from-vs.-casual-players?>. Accessed 22 Sep 2019.

Reddit.com. “ImGizmoh; SnazmanJimmy.” 25 Dec. 2014, https://www.reddit.com/r/leagueoflegends/comments/2qbhon/make_the_blue_buff_golem_dance_popstar_ahri/. Accessed 3 April 2019.

Reddit.com. “Patch 9.18 discussion.” 11 Sep. 2019, https://www.reddit.com/r/leagueoflegends/comments/d2ls39/patch_918_discussion/. Accessed 2 Oct. 2019.

Reddit.com. "Patch 9.20 discussion." 11 Oct. 2019,
https://www.reddit.com/r/leagueoflegends/comments/dfewce/patch_920_discussion/. Accessed 21 Oct. 2019.

Reddit.com. "Stomp." 2018,
https://www.reddit.com/r/leagueoflegends/comments/84125k/stomp_or_get_stomped_games/. Accessed 30 Sep. 2019.

Reddit.com. "Streamers quit LoL." 2019,
https://www.reddit.com/r/leagueoflegends/comments/865zrn/is_every_league_streamer_trying_to_quit_league/. Accessed 19. Oct. 2019.

Reddit.com. "Warcraft III Matchmaking History." 29 Sep 2018,
https://www.reddit.com/r/WC3/comments/8h5djz/warcraft_3_matchmaking_its_history_how_it_works/. Accessed 29 Sep. 2019.

Reilly, Jim. "VALVE Goes Big with Dota 2 Tournament." *IGN*. 1 Aug. 2011,
<https://web.archive.org/web/20121109072431/http://www.ign.com/articles/2011/08/01/valve-goes-big-with-dota-2-tournament>. Accessed 7 Dec. 2018.

Reyes, Maouie. "Heroes of Newerth is approaching its end." *Mineski.net*. 20 Feb. 2019, <https://www.mineski.net/news/heroes-of-newerth-last-major-patch>. Accessed 2 Oct. 2019.

Riotgames.com. "Mental Health." 2021,
<https://www.riotgames.com/en/news/free-mental-health-resources-for-content-creators>. Accessed June 23rd 2021.

Riotgames.com. "Riot Manifesto." 2019,
<https://www.riotgames.com/en/who-we-are/values>. Accessed 10 July 2019.

Robinson, Tasha. "Gateways To Geekery: Anime." *AVClub*. 3 May 2009, <https://film.avclub.com/gateways-to-geekery-anime-1798215994>. Accessed 6 April 2019.

Rodriguez, Veronika. "Dota 2 Ranked No. 4 Among Esports Titles in Viewership in 2017." *Dbltap.com*. 31 Jan. 2018,
<https://www.dbltap.com/posts/5964656-dota-2-ranked-no-4-among-esports-titles-in-viewership-in-2017>. Accessed 1 Nov. 2020.

Rose, Victoria, "The International 8 prize pool surpasses last year's, making it the largest prize pool in esports." *Theflyingcourier*. 20 Aug. 2018,
<https://www.theflyingcourier.com/2018/8/20/17675312/dota-esports-video-game-competition-largest-purse>. Accessed 3 Jan. 2019.

Ryze Dance. "Ryze Dance Reference - I.M. Meen Dance." *YouTube*, uploaded by Grimly Gaming, 5 Jan. 2015, <https://www.youtube.com/watch?v=bAhvuEoMysI>.

Sailor Moon Transformation. "Sailor Moon S Group Transformation (R2) (Episode 123)." *YouTube*, uploaded by Cody Lee, 18 Nov. 2012, <https://www.youtube.com/watch?v=Pui8thvfB8g>.

Sand King Crixalis 2015. "DotA 6.81d - Sand King, Crixalis Beyond GODLIKE !" *YouTube*, uploaded by TheBaltazarTV, 9 March 2015, <https://www.youtube.com/watch?v=dmP-v1StWpA>.

Scheer, Tanja (Rome). 'Arcas'. Brill's New Pauly. Ed. Hubert Cancik et al. Brill Reference Online. Web. 20 June 2021, https://referenceworks.brillonline.com/search?s.f.s2_parent=s.f.book.bri-ll-s-new-pauly&search-go=&s.q=Lycaon.

Scorpionworlds.com. "Top Scorpion Facts." 2019, <https://www.scorpionworlds.com/>. Accessed 10 Oct. 2019.

Serio, John N. "On Fire and Ice." *Modernamericanpoetry*, 22 Jan. 2015, <http://www.modernamericanpoetry.org/criticism/john-n-serio-fire-and-ice>. Accessed 9 April 2019.

Shannon, Tim. "MOBA: The Story so Far." *MCVUK*, 3 June 2014, <https://www.mcvuk.com/moba-the-story-so-far/>. Accessed 2 Nov. 2019.

Shen Tai Chi 2012. "Shen - Tai Chi 24-Form - League of Legends (LoL) Dance." *YouTube*, uploaded by NeiLalwaysLeeT, 10 march 2012, https://www.youtube.com/watch?v=MttgF4_Id8w.

Shyvana - River Dance. "Shyvana Dance Reference - AKB48 River Dance." *YouTube*, uploaded by GrimlyGaming, 4 Jan. 2015, <https://www.youtube.com/watch?v=rcuBTcUOC20>.

Sion Dance Reference. "Sion's Dance - Chris Farley's Chippendale Audition - League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 10 Oct. 2014, <https://www.youtube.com/watch?v=-20GQ2LHrs>.

Six Million Dollar Man 2018. "The Six Million Dollar Man - 10 memorable episodes." *YouTube*, uploaded by Moon Film 27 June 2017, <https://www.youtube.com/watch?v=0Iymqy8p5qc>.

Slay Belle Katarina Pole Dance 2012. "Extremely Incomplete - Slay Belle Katarina - League of Legends." *YouTube*, uploaded by *Smitefire.com*. "Skadi." 2019, <https://www.smitefire.com/smite/god/skadi-74>, Accessed 15 Oct. 2019.

SkinSpotlights, 6 Dec. 2012,
<https://www.youtube.com/watch?v=5GVzzYvqDic&feature=youtu.be&t=20s>.

SMITE.Gamepedia.com. “Sun Wukong.” 2019,
https://smite.gamepedia.com/Sun_Wukong. Accessed 13 Oct. 2019.

Snowyamur, a user on *Leagueoflegends*, 17 July 2015,
<https://boards.na.leagueoflegends.com/en/c/GD/J9qJZEm2-why-dota-2-is-probably-better-than-league-of-legends>. Accessed 21 Dec. 2018.

Sonnenberger, Heike. “180 Mädchenbeine.” *Spiegel*, 23 March 2012, <http://www.spiegel.de/kultur/musik/90-saengerinnen-gehoren-zur-japanischen-popgruppe-akb48-a-822157.html>. Accessed 12 March 2019.

Spike Death Scene 2017. “Cowboy Bebop - Final Scene - Spike Vs Vicious.” *YouTube*, uploaded by Anas Hart 13 May 2017,
<https://www.youtube.com/watch?v=ZgQKVKT3RpU>.

Spinaroonie 2003. “Christian and Booker T compete in a Spinaroonie Challenge: Raw, June 9, 2003.” *YouTube*, uploaded by WWE, 9 June 2017,
<https://www.youtube.com/watch?v=YnHSas0TJHM>.

Star Guardian Jinx Dance. “Jinx Ievan Polkka (Dance reference).” *YouTube*, uploaded by ASheep HisKitten 24 Sept. 2016,
<https://www.youtube.com/watch?v=X3HSD729A0o>.

Star Guardian Lux Dance. “Star Guardian Lux - Dance Reference.” *YouTube*, uploaded by The Yellow Supremacy, 1 May 2015,
https://www.youtube.com/watch?v=NOAde11_9cE.

Steamcharts.com. “Dota 2 MAU.” 2020,
<https://steamcharts.com/app/570>. Accessed 1 Nov. 2020.

Steamcharts.com. “PUBG.” 2020,
<https://steamcharts.com/app/578080#All>. Accessed 1 Nov. 2020.

Steamcommunity.com/Workshop. “Bohemian Summer Mirana.” 2019,
<https://steamcommunity.com/workshop/filedetails/?id=924733705>. Accessed 13 Oct. 2019.

Steampowered.com. “CONTENT CREATORS EARN OVER \$50M THROUGH STEAM WORKSHOP, CAN NOW EARN MONEY IN MORE GAMES.” 28 Jan. 2015, <https://store.steampowered.com/news/15614/>. Accessed 24 Oct. 2019.

Steampowered.com. “DOTA 2 PRESS RELEASE.” 2010,
<https://store.steampowered.com/news/4487/>. Accessed 29 Sep. 2019.

Stenger, Jan (Kiel). ‘Minos’. *Brill’s New Pauly*. Ed. Hubert Cancik et al. Brill Reference Online. Web. 20 June 2021,
https://referenceworks.brillonline.com/search?s.f.s2_parent=s.f.book.brill-s-new-pauly&search-go=&s.q=minotaur.

Strife.Gamepedia.com. “Gokong.” 2019,
<https://strife.gamepedia.com/Gokong>. Accessed 13 Oct. 2019.

Sullivan, Lucas. “Heroes of Newerth goes Free-to-Play.”
PCGamer.com, 29 July 2011, <https://www.pcgamer.com/heroes-of-newerth-goes-free-to-play/>. Accessed 29 Sep. 2019.

Superdata Research (2017). ESports – the 2017 report.

Superdata Research (2018). ESports – the 2018 report.

Super Galaxy Rumble Pose. “Super Galaxy Rumble - Gurren Lagann Reference #1 - League of Legends (LoL).” *YouTube*, uploaded by NeiLalwaysLeeT, 4 April 2014,
<https://www.youtube.com/watch?v=wuSihMPju9I>.

Syndra Hoot Dance Reference. “Syndra - Hoot Dance - League of Legends (LoL).” *YouTube*, uploaded by NeiLalwaysLeeT, 5 Sep. 2012,
<https://www.youtube.com/watch?v=z37B3mSBfAw>.

Takahashi, Dean. “Riot Games signs Mastercard as League of Legends Sponsor as it Fixes Sexist Culture.” *Venturebeat*, 21 Sept. 2018,
<https://venturebeat.com/2018/09/18/riot-games-signs-mastercard-as-league-of-legends-sponsor-as-it-fixes-sexist-culture/>. Accessed 21 Sept. 2018.

Tallisvale, Paul. “A Gallery of Video Game Characters Inspired by Bruce Lee.” *Unrealitymag*, 6 June 2013, <https://unrealitymag.com/a-gallery-of-video-game-characters-inspired-by-bruce-lee/>. Accessed 28 Feb. 2019.

Tassi, Paul. “PUBG 'Lost' To 'Fortnite,' But It Still Made \$1 Billion In 2018.” *Forbes*, 20 Jan. 2019,
<https://www.forbes.com/sites/insertcoin/2019/01/20/pubg-lost-to-fortnite-but-it-still-made-1-billion-in-2018/>. Accessed 1 April 2019.

Taylor, Rich. “Video Games’ Place in American Culture.”
Huffingtonpost, 6 Dec. 2017, https://www.huffingtonpost.com/rich-taylor/video-games-place-in-american-culture_b_7063838.html?guccounter=1. Accessed 14 Jan. 2019.

Technopedia.com. “Patch.” 2019,
<https://www.techopedia.com/definition/24537/patch>. Accessed 16 Oct. 2019.

Teemo Dance. “Teemo - Badgers Dance - League of Legends (LoL).” *YouTube*, uploaded by NeiLalwaysLeeT, 6 Feb. 2012,
<https://www.youtube.com/watch?v=Xs3s2AjJsFQ>.

Tencent Interim Report 2011, *Tencent Holdings Limited*, 8 March 2014
<https://web.archive.org/web/20140308024641/http://tencent.com/en-us/content/ir/rp/2011/attachments/201101.pdf>. Accessed 12 March 2019.

The Birds Scene 1963. “The Birds (1963) The school scene - Alfred Hitchcock, Tipi Hedren.” *YouTube*, uploaded Leitura Filmica, 19 April 2016, <https://www.youtube.com/watch?v=19r7ctge2II>.

The Esports Forum. “The Esports Forum - Main event.” *YouTube*, uploaded by IOC Media, 21 Jul. 2018,
<https://www.youtube.com/watch?v=y89OYXMV4HA>.

The Iron Giant Movie 1999. “The Iron Giant: Signature Edition - Official Trailer [HD].” *YouTube*, uploaded by Warner Bros. Pictures, 27. Aug. 2015, <https://www.youtube.com/watch?v=obLtyj8hfFk>.

Thorn, Ed. “League of Legends: How to unlock Champions.” *Metabomb.net*, 20 July 2018,
<https://www.metabomb.net/leagueoflegends/gameplay-guides/league-of-legends-how-to-unlock-champions>. Accessed 30 Sep. 2019.

Tofugo.com. “Genki Sudo’s World Order.” *Tofugo.com*,
<https://www.tofugu.com/japan/world-order-band/>. Accessed 3 Oct. 2019.

Top 10 Video Game Characters Based on Bruce Lee 2014. “Top 10 Video Game Characters Based on Bruce Lee.” *YouTube*, uploaded by WatchMojo.com, 23 June 2014,
<https://www.youtube.com/watch?v=Bc167MGiTJo>.

Trundle Dance. “Trundle - Dancing Trollface - League of Legends (LoL).” *YouTube*, uploaded by LeiLalwaysLeeT, 3 April 2013,
https://www.youtube.com/watch?v=j_CAlm9D9jM.

Twitchtracker. “Twitch Statistics & Charts.” *Twitchtracker*, 2019,
<https://twitchtracker.com/statistics>. Accessed 14 March 2019.

Twitter.com. “@afzzzy’s Frostwing.” 21 Sep. 2019,
<https://twitter.com/afzzzy/status/1043130324769759232>. Accessed 6 Oct. 2019.

- Unrankedsmurfs.com, “King Rammus.” 2019, <https://www.unrankedsmurfs.com/skins/king-rammus>. Accessed 10 Oct. 2019.
- USK “Dota 2”: <https://usk.de/?s=dota>. Accessed June 21st 2021.
- USK “League of Legends”: <https://usk.de/usktitle/26380/>. Accessed June 21st 2021.
- Vainglorygame.com. “Ozo.” 2019, <https://www.vainglorygame.com/heroes/ozo/>. Accessed 13 Oct. 2019.
- VALVE Software. “Puck.” 2019, <http://www.dota2.com/hero/puck/>. Accessed 23 Jan. 2019.
- Van Allen, Eric. “My Life In 3,000 Hours Of Dota 2” *Kotaku*, 27 June 2017, <https://compete.kotaku.com/my-life-in-3-000-hours-of-dota-2-1796329080>. Accessed 5 Nov. 2019.
- Viesports.com. “Counter-Strike meta.” *Viesports.com*, 1 Feb. 2019, <http://viesports.com/counter-strike-meta-is-changing-but-not-everyone-is-happy/>. Accessed 5 Nov. 2019.
- Volibear Dance. “Volibear - Sam B Dance - League of Legends (LoL).” *YouTube*, 29. Nov. 2011, <https://www.youtube.com/watch?v=LpC1DT7eYr4>.
- Walbridge, Michael. “Analysis: Defense of the Ancients - An Underground Revolution.” *Gamasutra*, 12 June 2008, <https://archive.li/DzNKq>. Accessed 30 Oct. 2019.
- Walde, Christine (Basle). ‘Centaurus’. *Brill’s New Pauly*. Ed. Hubert Cancik et al. Brill Reference Online. Web. 20 June 2021, https://referenceworks.brillonline.com/search?s.f.s2_parent=s.f.book.brill-s-new-pauly&search-go=&s.q=centaurs.
- Walde, Christine (Basle). ‘Nyx’. *Brill’s New Pauly*. Ed. Hubert Cancik et al. Brill Reference Online. Web. 20 June 2021, https://referenceworks.brillonline.com/search?s.f.s2_parent=s.f.book.brill-s-new-pauly&search-go=&s.q=nyx.
- Warcraftmovies.com. “Leeroy.” 2019, <https://www.warcraftmovies.com/movieview.php?id=1666>. Accessed 20 June 2019.
- Warman, Peter. “Esports revenues will reach \$696 million this year and grow to \$1.5 billion by 2020 as brand investment doubles.” *Newzoo*, 14

Feb. 2017, <https://newzoo.com/insights/articles/esports-revenues-will-reach-696-million-in-2017/>. Accessed 14 March 2019.

Warr, Philippa. “League Of Legends: Riot Shake Up The Lane Swap.” *Rockpapershotgun.com*, 22 July 2016, <https://www.rockpapershotgun.com/2016/07/22/league-of-legends-lane-swap/>. Accessed 23 Oct. 2019.

Wasilak, Sarah. “Tonya Harding's Ice-Skating Costumes Really Did Look Like That — Down to Every Sequin and Bead.” *Popsugar*, 11 Feb. 2018, https://www.popsugar.co.uk/fashion/Tonya-Harding-Skate-Costumes-44503100?utm_medium=redirect&utm_campaign=US:DE&utm_source=direct. Accessed 10 March 2019.

Webb, Kevin. “Microsoft, Sony, and Google are investing in subscriptions and streaming to give gamers more choice — but the real challenge is changing the way people play.” *Businessinsider.de*, 9 July 2019, https://www.businessinsider.de/apple-arcade-google-stadia-video-game-subscription-boom-2019-7?_ga=2.13599799.1000227688.1571342904-1296918298.1571342901&r=US&IR=T. Accessed 17 Oct. 2019.

Wikipedia.com. “Play DotA.” *Wikipedia*, 2019, <https://www.wikihow.com/Play-DotA>. Accessed 29 Sep. 2019.

Wikipedia.org. “Battle Royale Game.” 2019, https://en.wikipedia.org/wiki/Battle_royale_game. Accessed 27 Oct. 2019.

Wikipedia.org. “Card Captor Sakura.” *Wikipedia*, 2019, https://de.wikipedia.org/wiki/Card_Captor_Sakura. Accessed 17 March 2019.

Wikipedia.org. “First-Person Shooter.” *Wikipedia*, 2019, https://en.wikipedia.org/wiki/First-person_shooter. Accessed 27 Oct. 2019.

Wikipedia.org. “Game Physics.” *Wikipedia*, 2019, https://en.wikipedia.org/wiki/Game_physics. Accessed 24 Oct. 2019.

Wikipedia.org. “NBA Finals television ratings.” *Wikipedia*, 2019, [https://en.wikipedia.org/wiki/NBA_Finals_television_ratings#Game-by-game_breakdown_by_year_\(1974_-_present\)](https://en.wikipedia.org/wiki/NBA_Finals_television_ratings#Game-by-game_breakdown_by_year_(1974_-_present)). Accessed 14 March 2019.

Wikipedia.org. “Tetris.” *Wikipedia*, 2019, <https://en.wikipedia.org/wiki/Tetris#Gameplay>. Accessed 27 Oct. 2019.

Wikipedia.org. "Tic-Tac-Toe." *Wikipedia*, 2019, <https://en.wikipedia.org/wiki/Tic-tac-toe>. Accessed 27 Oct. 2019.

Winkie, Luke. "An animated tour of the history of MMO expression through /dance." *PCGAMER*, 3 Sept. 2019, <https://www.pcgamer.com/the-history-of-dance-emotes-in-11-gifs/#comment-jump>. Accessed 24 Feb. 2019.

Wolf, Jacob. "Why MonteCristo and DoA won't cast at Worlds." *ESPN*, 16 Sep. 2016, https://www.espn.com/esports/story/_/id/17496928/why-montecristo-doa-cast-worlds. Accessed 1 April 2019.

Wolmarans, "Kyle. Dota 2 vs. League of Legends: Updating the numbers." *Criticalhit*, 22 Sep. 2016, <https://www.criticalhit.net/gaming/dota-2-vs-league-legends-updating-numbers/>. Accessed 1 April 2019.

WHO.com. "World Health Organization Online: Gaming Disorder." 2021, <https://www.who.int/news-room/q-a-detail/addictive-behaviours-gaming-disorder>. Accessed 23 June 2021.

WoW.Gamepedia.com. "Greed is Good." 2019, https://wow.gamepedia.com/Greed_is_Good. Accessed 23 June 2021.

WoW.Gamepedia.com. "Lich King." 2019, https://wow.gamepedia.com/Lich_King. Accessed 23 June 2021.

WoW.Gamepedia.com. "Scourge." 2019, <https://wow.gamepedia.com/Scourge>. Accessed 23 June 2021.

Xin Zhao Dance. "Xin Zhao - Seung Mina Dance - League of Legends (LoL)." *YouTube*, uploaded by NeiLalwaysLeeT, 22 Dec. 2011, <https://www.youtube.com/watch?v=qsmBtYGBBXE>.

xSyrusx, a user on *Leagueoflegends.com*, 10 April 2012, <http://forums.euw.leagueoflegends.com/board/showthread.php?t=866607&page=3>. Accessed 23 June 2021.

You are who you choose to be. "The Iron Giant – 'You are who you choose to be'." *YouTube*, uploaded by Corndog Ninja, 21 July 2015, <https://www.youtube.com/watch?v=bgH3cGW6mbo>.