Revitalizing Turkish Mythological Elements through Artificial Intelligence Applications in Graphic Design: A Case Study on Midjourney

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Abstract

Artificial intelligence has become a new form of expression within our digitally evolving lives. By using illustrations to narrate stories visually, it's possible to visualize cultural values, traditions, and myths, making them more understandable. Fusing traditional storytelling techniques with the digital capabilities of new technologies like artificial intelligence is a powerful tool for revitalizing stories and traditional narratives, adding a new dimension to these tales and myths. Understanding how we can revive traditional narratives and myths is crucial in grasping their role in preserving cultural heritage and passing it down to future generations. Therefore, comprehending how artificial intelligence can be utilized in this field is essential. This study examines how traditions and myths can be revived through artificial intelligence, addressing fundamental concepts like AI and graphic design. To achieve this, some legendary characters from Turkish mythology were selected, and reconstructions of these characters were created in the Midjourney application, contrasting with previous illustration examples. This research article is believed to contribute to defining this contemporary technology in today's ever-changing world and tomorrow's design, where it redefines the design concept.

Keywords: "Artificial intelligence, midjourney, graphic design, illustration, Turkish mythology."

1.   Introduction

Artificial intelligence technologies have profoundly influenced and transformed the world of graphic design. AI presents unprecedented opportunities in graphic design, offering potentials like speeding up workflows, enabling professional-level productions, and more. Analyzing these new technological developments regarding creativity, originality, and functionality holds critical significance. The debate over whether designs created by artificial intelligence carry traces of human creativity and the limitations concerning essence can arise. Professional plans are expected to stand out aesthetically and in terms of functionality, usability, communication, and alignment with the target audience's needs. Hence, it is crucial to evaluate designs created by AI and their alignment with human users' expectations.

The possibilities AI technologies offer in graphic design facilitate the convergence of traditional elements with modern aesthetics and functionality through contemporary AI art. Revitalized traditional factors and mythological figures through AI play a significant role in cultural transmission. These technological innovations become valuable tools to carry the profound values of the past into today's digital age, aiming to pass them on to future generations. AI, presenting mythological characters as reflections of modern art, holds the potential to effectively convey their meanings, stories, and societal values to future generations. Consequently, regarding the sustainability of our cultural heritage, AI is thought to contribute to reviving traditional elements and introducing them to new generations.

In this study, the application of AI in graphic design reunites traditional elements from the depths of Turkish mythology with contemporary AI art, exemplified in the Midjourney. The aim is to analyze how the creative potential of AI technologies interacts with our mythological heritage. Integrating traditional values with AI and its impact on artistic expression has become a crucial focal point. This process, a synthesis of human creativity and technology, highlights how mythological characters are reinterpreted through the lens of the modern age and underscores the role of art in this transformation.

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1.1.   Purpose and Significance of the Research

In recent times, with the widespread application of artificial intelligence across almost every field, including the arts, this article aims to examine the revitalization of symbols and characters from traditional Turkish mythology through modern graphic design techniques and artificial intelligence applications. It seeks to explore how much artificial intelligence differs from human drawings in the design process. The goal is to merge the rich cultural heritage of Turkish mythology with technology, focusing on the interaction of ancient elements with contemporary art and providing a new perspective. The convergence of traditional and cultural aspects with technological innovations is crucial for their transmission and preservation for future generations. The revival of mythological elements through artificial intelligence is significant as an artistic innovation and for preserving cultural memory. This study aims to present a new perspective on the sustainability of cultural heritage by integrating cultural values with the demands of the modern world.

1.2.   Limitations of the Research

The research is limited to the theme of Turkish mythology and legends, and the visual representations in the research application are solely depicted within the Midjourney artificial intelligence application.

2.   Methodology

This study adopted the qualitative research method in order to examine and evaluate the designs of selected characters from Turkish mythology (Umay Ana, Algarısı, Ülgen Han, Bozkurt). At the beginning of the study, the relevant literature was reviewed and existing sources on characters from Turkish mythology were analyzed. In the implementation phase, only Midjourney artificial intelligence software was used to create visual designs of the selected Turkish mythology characters. While selecting the characters, a limitation was made in the triad of female-male-animal. Female characters are divided into two as good character (Umay Ana) and bad character (Algarısı). The male character (Ulgen Han) stands out with his divine characteristic. Bozkurt is an important sacred symbol for Turks. It was aimed to diversify the drawings based on the different characteristics of the characters. Finally, the designs created were examined and the positive and negative aspects of the designs were analyzed.

3.   Conceptual Framework

3.1.   Artificial Intelligence Technology

Artificial Intelligence (AI) is a continuously evolving technology that enables computer systems to develop human-like intelligence and thinking abilities. AI targets computers to perform tasks akin to human intelligence, such as visual perception, natural language processing, learning, decision-making, and problem-solving.

The concept of artificial intelligence fundamentally traces back to the early 20th century, with its origins extending further back in history. Alan Turing, an acclaimed British mathematician and cryptanalysis expert hailed as the father of computer science, prominently stands out in this field. In 1950, Turing laid the groundwork for artificial intelligence by posing, 'Can machines think?[1] Alan Turing, recognized as the pioneer of the field, introduced the concept of the "Turing Test" in 1950. This test aims to measure whether a computer can behave like a human. The "imitation game," developed by Alan Turing, essentially seeks an answer to the question, "Can machines think?" The game involves three participants: a man, a woman, and an interrogator. The interrogator, in a separate room from the other players, attempts to guess their genders based on typed questions and responses. The game's challenge lies in one participant consistently lying to the interrogator while the other always tells the truth. For instance, one player might say, "I am the man," while the other claims, "No, I am the man, don't listen to him!" Turing adapted this game and transformed the queried characteristics from gender to human-machine aspects. Ultimately, if the interrogator becomes convinced that the machine is human, the machine passes the Turing test [2]. Another significant milestone in artificial intelligence was the introducing of the term "artificial intelligence" by computer scientist John McCarthy at the Dartmouth Conference in 1956. A notable development in 1997 was the artificial intelligence program "Deep Blue," developed by IBM, which played against and defeated world chess champion Garry Kasparov, causing a significant sensation worldwide. During the match, Deep Blue made 200 million chess moves per second, showcasing instances where computer programs could outperform humans [3].

There still needs to be a consensus on the exact definition of artificial intelligence, and researchers interpret it differently across various platforms. Artificial intelligence has intersected with realities such as machine learning, deep learning, Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality (MR), among others. Whether machines can think exactly like humans is still debated [2].

3.2.   Artificial Intelligence Developments in Graphic Design

From a graphic design perspective, artificial intelligence is a type of intelligence that is installed on machines with algorithms created by humans [4]. Here, artificial intelligence is a system that analyzes the commands entered into it and creates visuals as a result. It provides designers with an interdisciplinary and wide working area. It can be used in many different fields besides art and graphic design [5]. In the 21st century world, art and design continue to find new and constantly evolving channels [6]. Artificial intelligence is one of these new mediums and while it opens an unlimited door for designers, it also helps them quickly create difficult images that designers find impossible. This is done by analyzing various data and using cognitive abilities to check whether different objects are relevant in the design. AI-powered systems also have the ability to select appropriate color combinations, backgrounds, fonts and overall layout. These capabilities of AI can make the process much more time and cost efficient for designers [7]. Today, manual work has been automated as a result of the opportunities offered by technology [8] and artificial intelligence can optimize design processes and save time. For example, AI-powered design systems can be used to meet a brand's need for a logo with thousands of variations. An example is Nutella, the Italian Ferrero brand. In 2017, Nutella sold 7 million jars in just 1 month. Deciding to renew its labels with colorful and fun designs, Nutella pulled patterns and colors from the algorithm database, created 7 million different designs and applied them to its jars (Figure 1,2,3.). Here, the algorithm took on the traditional role of the designer and created millions of unusual packaging designs for Nutella that designers would perhaps create in a very long time, or perhaps never create so many different variations [9].

Figure 1, 2, 3. Examples of Nutella's graphic identity are created with artificial intelligence technology [10].

Artificial intelligence encourages the creativity of designers and artists, assisting them in creating unique and original works. Designers can collaborate with artificial intelligence to explore new forms and perspectives through human-machine collaboration. Artificial intelligence can analyze user preferences, providing personalized art and design experiences.

3.3.   Midjourney

Various platforms highlighting the interaction between artificial intelligence and art have been made available to users, offering the opportunity to create creative projects. These software programs utilize AI features to expedite users' design processes and achieve more innovative outcomes. Midjourney is an AI service that generates images based on input linked to an entrance in a Discord server. It enables the creation of impressive visuals by inputting text preferences and creative themes. Drawing insights from millions of artboards entered into its software, Midjourney can comprehend design principles and generate creative visuals. Besides image creation, the Discord server allows interaction with users worldwide who have similar interests. Users can share their created images, discover others' products, engage with artists who share similar thoughts, and participate in live discussions [11]. Before purchasing the Midjourney service, users can create 25 free images to experience its functionality. Users looking to continue their experience can opt to buy various packages available.

3.4.   Recreation of Traditions and Myths with Artificial Intelligence

With the advancement of artificial intelligence, the role of technology is also evolving. One of the areas where this change is evident is in graphic design. Algorithms in graphic design can generate new outputs through deep learning models based on machine learning [12]. Artificial intelligence applications are currently prevalent among users, offering diverse experiential opportunities in art and design.

New studies facilitated by artificial intelligence present an opportunity to reintroduce forgotten or unillustrated mythological elements and characters to new generations, thus effectively preserving cultural memory. Data obtained from ancient texts or oral descriptions can be analyzed and combined with modern graphic design techniques, visualizing and digitally revitalizing mythological elements. Blending traditional elements with a modern artistic perspective allows for a fresh outlook. Projects

involving artificial intelligence offer a chance to reassess the mythological aspects of a culture from the perspective of the contemporary era, aiding in the preservation of cultural identity and comprehension of its relevance in the modern world. Revived mythological elements through artificial intelligence, combined with the broader accessibility of digital platforms, enable traditional mythology to reach and resonate with a larger audience, potentially gaining popularity. This convergence bridges technology and traditional culture, supporting the transmission and preservation of cultural heritage to future generations. Artificial intelligence has the potential to stimulate the creativity of artists and designers, fostering the emergence of new artworks.

3.5. The Concept of Mythology and Turkish Mythological Heroes

Mythology is a narrative system encompassing a community or culture's traditional stories, epics, symbols, and legends. 'mythology' is derived from combining the words 'mythos' and 'logos' [13]. These stories often involve extraordinary entities such as gods, heroes, creatures, and natural phenomena. Mythological narratives reflect the beliefs, values, and understanding of a community's past, often being orally transmitted and thus undergoing changes over time.

It is presumed that mythology originates from the early endeavors of human communities to comprehend nature, the universe, and human existence. Early humans resorted to mythological stories to explain natural phenomena, their presence, and surroundings, which they found challenging to understand [14]. Over time, these stories became part of society's belief systems, serving as a significant element of cultural identity.

Addressing the functions of mythology, as mentioned, mythology emerged as an endeavor to seek the meaning of the universe and human existence. Myths aim to simplify complex and unknown truths for explanation. Additionally, mythology constitutes an essential element in shaping a community's identity. Mythological characters, heroes, and gods symbolize a community's history, heritage, and culture [15]. Mythological stories reflect a society's values, norms, and ethical principles, representing a mirror of the social order within a community. Moreover, through the historical transmission of mythology, the aim is to sustainably pass on a society's norms, moral attributes, and the 'ideal.' Indeed, these narratives often contain moral teachings, signifying the 'ideal' for that society.

Traditionally, mythology has been transmitted through oral narratives; however, written sources have also been added with the invention of writing. Today, mythology spreads through literature, visual arts, theatre, cinema, and other media. Moreover, it can transition from one culture to another, fostering interactions between different cultures. In summary, mythology encompasses a culture's collective consciousness, creation beliefs, and system of meaning. Analyzing mythological elements is an important research area for understanding a community's worldview and values.

Turkish mythology also possesses a rich and diverse structure. Delving into the depths of Turkish mythology to comprehend its fundamental concepts and functions is a crucial step in realizing the significance of this rich cultural heritage. Mythology is not only about legends and characters but also a foundational element shaping a community's values, beliefs, and social structure. The subsequent sections of this study will feature some significant characters and attributes from Turkish mythology to be re-visualized using artificial intelligence.

3.5.1. Umay Ana/Umay Mother

Pre-Islamic Turkish mythology holds a rich cultural heritage where female figures have played a significant role. Reviewing relevant literature shows that women held a presence in governance and politics among the ancient Turks, participating in councils and directly taking over governance without a ruler [16]. During this period, women were pivotal in society and emerged as significant characters in mythological stories and epics. One of the most well-known figures is perhaps "Umay Ana" or "Umay Hatun." The existence of Umay Ana in crucial sources of Turkish history, such as the Orkhon Inscriptions [17] and sources like Divan-ı Lugat-i Türk, written by Kaşgarlı Mahmut, emphasizes the importance of this mythological figure. In Divan-ı Lugat-i Türk, Kaşgarlı Mahmut describes Umay as the "companion of the baby in the womb." Umay, also interpreted as the placenta, was believed to be present alongside the woman and the baby in the womb until birth [18]. Umay Ana, one of the wealthy figures in Turkish mythology, is conceptualized as a mother goddess and a life deity associated with nature, fertility, and abundance. Described in some sources with three horns, dressed in white, and depicted with long, white, or silver hair [19], Umay Ana is considered a nurturing entity in Turkish mythology. As the source of abundance, Umay Ana is believed to bring prosperity to communities and families. She is portrayed as a beautiful, graceful, and benevolent entity. Although the exact origin and source remain unclear, 'Umay' is part of the Turkish mythological system and gradually became a part of the ancient Turkish community's religious system. Indeed, this goddess, also depicted in the belief in the Sky God, holds a distinct significance in Turkish history [20]. While written sources about the Umay legend trace back to the Orkhon Inscriptions, there are also visual depictions, sculptures, and drawings related to this mythological figure.

3.5.2.　Alkarısı-Algarısı

Myths, mythologies, and folkloric elements reflect societies' cultural richness and attempts to comprehend the relationship between humans and the universe. These mythological figures symbolize humans' intricate relationships with nature, life, and death. While these narratives might seem like products of early human imagination, they hold deeper meanings when examined. As mentioned in the previous section, in Turkish mythology, Umay Ana assisting mothers and children during childbirth led to her being regarded as a symbol of kindness and abundance. In contrast, the legendary creature known as Alkarısı, unlike Umay, is considered a figure haunting women in the postpartum period or those giving birth, symbolizing malevolence [21]. When examining the myths of Umay and Alkarısı, a perpetual balance has been present throughout humanity's journey in understanding the universe: good and evil, darkness and light, birth and death, war and peace. These mythological figures, not only in Turkish culture but also in mythologies worldwide, explore similar themes. Universal concepts like Ying-Yang represent the balance between good and evil, reflecting dualities present in many cultures.

Alkarısı appears prominently in Turkish mythology as a malevolent entity capable of causing harm to pregnant women and mothers giving birth. This legendary creature is often depicted as the evil mood of a woman or the desire of a deceased woman's spirit to harm an unborn child. According to some sources, this creature is described as giant-like, tall, with long fingers and nails, having a hideous and repulsive face. Its body is oily, with tangled black hair and a gigantic head. Its teeth are large and spaced apart like a horse's, and its feet are reversed [22]. The portrayal of Alkarısı in dark clothing has associated it with darkness and death. According to some accounts, its breasts are described as ugly and sagging [23]. Legend has it that Alkarısı intends to interfere with the lives of mothers and children during childbirth [24]. The Alkarısı legend is shaped to reflect society's anxieties and concerns regarding pregnant women and mothers giving birth. This mythological creature serves as a symbolic expression of fears related to fundamental human experiences such as fertility, childbirth, and motherhood.

3.5.3.　Ülgen Han/Ülgen Khan

Ülgen Khan appears as a popular deity figure in Turkish mythology. This deity, associated with natural phenomena such as wind, storms, and thunder, has also found a place in ancient Turkish beliefs. In the rich narratives of Turkish mythology, Ülgen Khan stands out among the deity figures representing the forces of nature, often referred to as the master of winds and the protector of abundance. This deity, invoked with thunder, reflects the Turks' perspective on natural events and the cycle of life [25]. Ülgen Khan is generally depicted as a deity residing either on the peaks of high mountains or among the clouds in the sky [26]. Ülgen has a palace and a throne made of gold. He is depicted in human form, usually with long hair, and holds a lightning bolt as a bow. Additionally, Ülgen Khan's primary adversary in mythology is Erlik Khan. Erlik Khan is a god dwelling underground and symbolizing evil. In these characteristics, Ülgen and Erlik show similarity to Zeus and Hades in Greek mythology [27]. (Ülgen holds a significant position in the belief of the Sky God and is presumed to be the primary creator. Indeed, prayers, sacrifices, and offerings made to Ülgen in ancient Turkish societies support this belief [28]. Found in the earliest epics attributed to the Turks, the Creation Epic belonging to the Altai Turks holds a prominent place for Ülgen Khan, thus indicating deep-rooted historical significance [29].

3.5.4.　Bozkurt/Grey Wolf

The Bozkurt, holding deep significance in Turkish mythology, has held a special place in Turkish culture for centuries. Although the Bozkurt has been attributed with different meanings at different times, generally, it symbolizes values like independence, freedom, and heroism [30]. The tale of the Bozkurt is often narrated in the epics and stories of Turkish mythology (Figure 4). In these epics, the Grey Wolf serves as an inspiration for heroic adventures for the Turkish nation. The portrayal of the Bozkurt as a courageous and free being symbolizes the Turkish people's passion for freedom and the desire for independence. References indicate stories of a child nursed and raised by wolves [31]. These stories prove that the connection between Turks and the Bozkurt extends beyond a spiritual bond to a biological one.

The legend of the Bozkurt can be found in significant sources in Turkish mythology. In the Epic of Ergenekon, attributed to the Göktürks, the Bozkurt is depicted as the first Turkish ruler, showing the path to salvation for the Turks, interpreted as the son of Noah, the Prophet. Similarly, in another critical epic, the Oghuz Khan Epic, written in Uyghur script, the Bozkurt is represented as a manifestation of the warrior spirit of the Turks [32]. Depictions of the Bozkurt have varied in different artworks and traditional embellishments over time. However, the Bozkurt is generally portrayed as powerful, majestic, and noble. The Bozkurt is typically depicted with a single head, symbolizing unity and integrity. The single-headed Bozkurt represents the unity, strength, and ability to act as a single body of the Turkish nation [33]. The wolf's image was used on the Turkish lira in the Republic's early years. In 1927, on the first Turkish lira printed by the Central Bank of the Republic of Turkey, the wolf figure was used to symbolize the Turkish nation's strength, independence, and freedom at that time (Figure 5).

Figure 4. Examples of Bozkurt drawings in Turkish mythology [34]. Figure 5. 1927 edition of Turkish Lira [35].

4. Findings

This section examined artificial intelligence applications reimagined with the Midjourney application alongside existing illustrations of selected mythological characters from Turkish mythology.

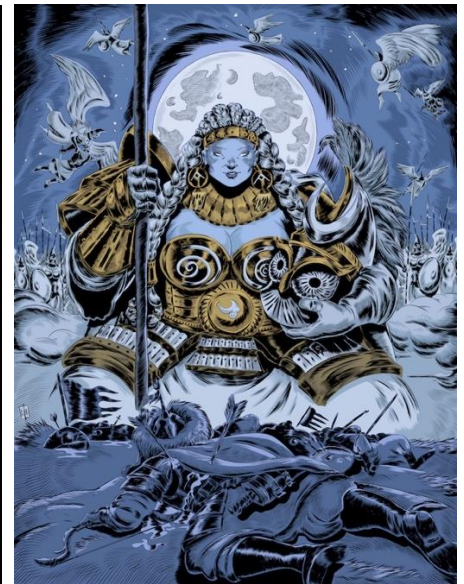### 4.1.1. Umay Mother Design Through Midjourney

Figure 6 (left). Illustration by Esra İlter Demirbilek, Umay Ana [36]. Figure 7 (middle). Illustration by Yiğit Yerlikaya, Umay Ana [37]. Figure 8 (right). Illustration by Bartu Bölükbaşı, Umay Ana [38].

Umay Ana or Umay Hatun is known in Turkish mythology as embodying abundant, fertility, motherhood, childbirth, and family concepts. She's the guardian of pregnant women and babies. Visually, she's often depicted as a youthful, beautiful woman with three horns, sometimes also portrayed as winged. Her hair is typically lengthy and light-colored/white. In figure 6's illustration, Umay Ana is depicted as a large-winged, white-haired figure with three horns. As Umay Ana is associated with nature and abundance, various plant figures are chosen as the background in this illustration. Again, in Umay's arms, a young animal symbolizes nature, life, childbirth, and abundance.

In figure 7, emphasis is placed on Umay Ana's protective nature. Umay Ana is depicted beside a baby's cradle, safeguarding mothers and babies against malevolent forces. Umay is again shown as winged, but instead of horns on her head, a traditional crown, symbolizing her sanctity, is preferred. In figure 7, Umay Ana appears more like a warrior goddess than in other illustrations, holding a helmet and a staff. She stands victoriously, defeated a sprawling enemy, gazing triumphantly toward the audience. In the background, winged warriors soaring in the sky create a more mythological setting—figures 6, 7, and 8 showcase modern illustrations of Umay Ana. The following examples will delve into Umay Ana drawings created using artificial intelligence technology on the Midjourney application.

Prompt for Figure 9: A beautiful and protective goddess, dressed in white clothes, with three horns and very long white hair, her hair flowing down her shoulders.

Figure 9 presents the initial drawing of Umay Ana created in the Midjourney artificial intelligence application. The descriptions given in the command focus on the appearance of the Umay Ana character. The resulting drawing creates a horn effect, resembling rays of light instead of directly placing horns on the surface. Notably, the background of the figure contains numerous creatures with multiple horns. Umay's appearance in the drawing aligns with the command, displaying her in long white garments and long white hair, following a fantastical style. However, there are anatomical irregularities in the figure's hands and fingers.

Figure 9. Umay Ana Design via Midjourney.

Prompt for Figures 10, Figure 11: A protective goddess with three horns, one next to each of her temples and one in the middle of her head, with long white hair and dressed in a long white gown, beautiful and protective, caring for children and mothers.

As a result of the commands entered for Figures 9 and 10, the following depiction of Umay Ana has been created. Despite the order specifying three horns, the figures depict two funnels in one and four in the other. Umay, dressed in a long white gown, possesses the described long white hair. The command implies her role as a protector of women and unborn babies until delivery, hence the phrase 'caring for children and mothers.' Based on this, in Midjourney's interpretation, Umay is portrayed holding a little girl in figure 9, while in figure 10, she embraces one girl, and a second girl is depicted in front of her.

Figure 10 (left). Umay Ana Design via Midjourney. Figure 11 (right). Umay Ana Design via Midjourney.

Prompt for Figures 11 and 12: A nine-month pregnant woman lying on a bed, accompanied by a protective goddess in a white dress with wings and horns.

As a result of the commands entered for figures 12 and 13, the following depictions of Umay Ana have been created. In figure 11, the character is depicted in human form with wings, standing beside a young pregnant woman whose belly isn't prominently featured. Contrary to the command, neither the branches nor the horns are depicted simultaneously. Figure 12 presents a similar composition; Umay, in human form, is seated on the bed, but instead of a pregnant woman, a little girl is lying in her lap, holding Umay Ana's finger. These illustrations depict Umay Ana and her companions in a serene and secure setting."

Figure 12 (left). Umay Ana Design via Midjourney. Figure 13 (right). Umay Ana Design via Midjourney.

Prompt for Figure 14: Turkish goddess, white long-haired, female, horned, baby, womb, celestial background.

The commands for Figure 14 resulted in the following depiction of Umay Ana. The orders included "baby, womb," stemming from the belief of "Umay Ana being the partner of the baby in the womb." Consequently, the figure portrays Umay Ana holding a baby and looking at it. The figure has seven horns, and there are some anatomical discrepancies in the baby's body. The commands did not provide background information, and the application filled in the background.

Figure 14. Umay Ana Design via Midjourney.

Prompt for Figure 15: Umay Ana from Turkish mythology, Turkish style.

The short commands provided for figure 15 resulted in the following depiction of Umay Ana. The created Umay figure has long, dark hair typical of a Turkish woman, crafted in a more oriental style than other fantastical drawings. The figure wears a crown of horns on her head, drawing attention to her accessories.

Figure 15. Umay Ana Design via Midjourney.

4.1.2.　Alkarısı/Algarısı Design Through Midjourney

In Turkish mythology, the character Alkarısı/Algarısı is described as an evil and demonic entity, depicted as a devil. It's a legendary creature that afflicts pregnant women, causing distress and fear, with the intent of harming their babies. While there are variations in depictions across different sources, there's a consensus that it's hideous, frightening, and threatening. Figure 16 is portrayed as resembling a gigantic gorilla rather than a human body covered in fur, with a partially human-like face, long disheveled hair, and large sagging breasts. In figure 17, artist Murat Palta's depiction showcases Algarısı's spite towards the unborn babies of pregnant women. The illustration shows Algarısı with a body resembling a human form but with a more monstrous face, draped in red fabrics with vibrant colors chosen for emphasis. Algarısı is depicted in this artwork as removing organs from the pregnant woman's abdomen. Figure 18 presents another illustration of Algarısı. Here, the artist, inspired by the theme of the demonic Algarısı attacking babies in the mother's womb, creates an imagery of a creature's head, visualized like a womb, with a fetus positioned inside, portraying this being as the demonic Algarısı through two horns protruding from the head. The use of red in the drawing completes the triangle of womb-blood-death action.

Figure 16 showcases historical depictions, while figures 17 and 18 present contemporary representations of Algarısı. Subsequent examples will explore Algarısı illustrations created through artificial intelligence technology in the Midjourney application.

Figure 16 (left): Algarısı illustration, Designer unknown [39]. Figure 17 (middle): Algarısı illustration, Illustration by Murat Palta [40]. Figure 18 (right): Algarısı illustration, Illustration by Emre Aciyan [41].

Figures 19, 20, 21, and 22 display the initial drawings of the Algarısı character created through the Midjourney artificial intelligence application. Key terms were entered into the Prompt section in the Midjourney interface, and after refining the generated results, the following visuals were obtained.

Prompt For Figures 19 and Figure 20: Feet facing the backward, realistic, evil woman, ugly, very long, very long nails, black dress, messy hair, feet backward, oily body, dirty, mythological creature, goblin, scary, a nightmare.

Based on the input provided for figures 19 and 20, the following Algarısı characters were created. When providing visual instructions within the Midjourney application, it's observed that using precise, concise phrases and describing features word by word rather than lengthy sentences gets closer to the desired result. In figure 19, attention is drawn to the character's backward feet. The figure's body is positioned opposite the viewer, achieving the desired backfoot appearance. The input stated that the surface had long fingers and nails, illustrating the figure's hands as long, vine-like structures. At this point, it can be said that Midjourney doesn't strictly adhere to the user's command but leverages various data in its universe to create the outcome. Vine-like structures are seen on either side of the figure. In figure 20, another product from the same commands is observed. Here, the figure faces the viewer, and similar vine-like imagery continues. The instruction indicated the figure should have an oily and dirty body, and the visual shows the figure clothed but with a fluid-like substance, possibly oil or blood, flowing over the clothes. The figure's hands and long fingers are more pronounced in this drawing. However, achieving the requested backward feet specified in the command was unsuccessful. Reflecting the malevolent nature of the Algarısı creature and the words "nightmare, frightening" in the description, Midjourney created a dark, misty, and eerie atmosphere as a background. Moreover, it's observed that while entering verbal instructions into the prompt/message section for the desired drawing, some command inputs are restricted by the Midjourney application. For instance, in requesting Algarısı to have significant and droopy breasts like in figure 16, the prompt was rejected due to "violation of community guidelines."

Figure 19. Algarısı Design via Midjourney. Figure 20. Algarısı Design via Midjourney.

Prompt For Figure 21: Mythological character, woman, evil, genie, scary, in a long black dress, like a giant, with a big head, long hair, black and tangled, fingers and nails very long, feet upside down at the ankles, feet turned backward, eyes red, ugly.

Based on the provided keywords for figure 21, the following Algarısı character has been created. The generated visual portrays the demonic Algarısı figure appearing as if about to take action. Its long, dark hair seems partially ablaze, reminiscent of the mythological Medusa's snake-like hair. Similar to previous drawings, a dark background has been chosen. However, the lower part of the figure's legs/feet is not included in the scene, and the characteristic of backward feet mentioned in the command is not depicted in the drawing.

Figure 21. Algarısı Design via Midjourney.

Prompt for Figure 22**:** Evil, bogie, messy, dark-haired woman creature next to a pregnant woman.

Based on the entered keywords for figure 22, the following Algarısı character has been created. The command requested the depiction of both Algarısı and a pregnant woman together due to Algarısı's affliction on pregnant women. In this illustration, a pregnant woman, slightly showing her belly and calmly standing, is seen, while behind her is the Algarısı, leaning forward toward the woman, with an open mouth, red eyes, crooked teeth, and thick, grotesque skin, giving a threatening look towards the viewer, positioned at the back of the pregnant woman's neck. In the background, faintly visible behind the pregnant woman, is another pregnant figure with folded hands on her abdomen. The application has added the woman to the environment. The instructions provided to the application for this drawing are relatively less detailed than the descriptions in other drawings, resulting in a different Algarısı appearance, with a face resembling human form but also evoking an image akin to a demonic, sinister woman.

Figure 22. Algarısı Design via Midjourney.

4.1.3. Ülgen Han Design Through Midjourney

In Turkish mythology, Ülgen Han is a guardian of nature and life. He governs natural phenomena like storms, lightning, and thunder. Ülgen Han is revered among the sky gods and is depicted in human form. He's seen as the god of water and rain, which grant life to humans, symbolizing fertility. He is shown seated on a golden throne with a lightning arrow—figures 23 and 24 showcases two different illustrations of Ülgen Han. In figure 23, Ülgen is portrayed fantastically, resembling a superhero-like character with attire akin to a comic book hero, depicted amidst lightning and sky-related events. Figure 24, however, illustrates Ülgen in a more traditional Turkish style, with a mustache and wearing ancient clothing characteristic of Turkish culture.

In Figure 23 and Figure 24, illustrations of Ülgen Han can be seen. Subsequent examples will delve into the Ülgen Han drawings created using artificial intelligence technology in the Midjourney application.

Figure 23 (left). Illustration by Mustafa Uslu [42]. Figure 24 (right). Drawing (illustrator unknown [43].

Prompt for figüre 25 and 26**:** Wind storm god, mythological character, long hair, lightning, holding a lightning arrow and bow, sitting on a golden throne, in the clouds, Turkish mythology.

In the light of figure 26 and the words entered for figure 26, the following Ulgen character was created. It is estimated that Midjourney drew Ulgen Khan as a character with black hair, mustache, and beard because of the keyword "Turkish mythology." In figure 25, it can be seen that he is holding his staff in one hand, and in figure 26, he is holding staff in both hands. In both figures, lightning comes out of his scepter, and it can be seen that he sits majestically on his throne above the clouds. Although the entered command contains the phrase "sitting on a golden throne," we cannot see the throne as gold in figures 25 and 26. However, it can be said that the armor similar to the gladiator armor worn by the character resembles gold.

Figure 25. Ülgen Han Design via Midjourney. Figure 26. Ülgen Han Design via Midjourney.

Prompt for figure 27: Appearing from the lightning, mythological character, god of lightning, Turkish mythology, long black hair, long beard, holding a staff made of lightning.

In the light of the words entered for figure 27, the following Ulgen character was created. Figure 27 shows a much more imposing, significant, and threatening god figure than Ulgen Khan's other drawings. Ulgen Khan emerges from the lightning with his staff in his hand. Defined as a protector god of nature, Ulgen is also the god of the heavens and is associated with the color blue. In the created image, blue tones and the night image are dominant.

Figure 27. Ülgen Han Design via Midjourney.

Prompt For Figures 28 and Figure 29: In Turkish mythology, the god of a storm, with long black hair and a beard, surrounded by lightning, against the evil character who is his enemy, fighting in the sky, in the storms.

In the light of the words entered for figure 28 and figure 29, the following Ülgen characters were created. The similarities with the Ulgen character we have seen in the previous figure 27 example draw attention to this. Although the Ulgen character is very similar to the previous one in type, the staff detail is not entered here in the message/prompt section. In figure 28, it is seen that Ülgen has a ball of fire in his hand instead of a staff; in figure 29, it is seen that lightning comes out of a hammer-like tool in his hand. In addition, although a possible enemy and a battle scene were requested to be drawn in the written commands entered, it is seen that a second figure was not added to the stage.

Figure 28. Ülgen Han Design via Midjourney. Figure 29. Ülgen Han Design via Midjourney.

4.1.4.   Bozkurt Design Through Midjourney

In Turkish mythology, the legend of Bozkurt has an important place. According to Turkish mythology, a child was raised by a female bozkurt and breastfed, protected, and raised by the bozkurt. The boy grew up with the grizzly wolf, learned to survive with its teachings, and understood the powers of nature. This legend emphasizes the power of nature in Turkish culture and the relationship and solidarity of man with heart. Bozkurt stands out as a figure that carries a deep symbolism in Turkish culture and has become a part of the national identity and a sacred figure of the Turks. The Bozkurt figure has become a holy symbol and was adopted as a national symbol by the Turks.

There are various similarities between the legend of the Bozkurt and the story of the twin brothers Romulus and Remus, the founders of Rome from Ancient Roman mythology. Both stories involve a wolf figure, and these wolves care for human children. The wolf figure in both narratives has a protective and guiding role.

Figures 30 and 31 show Bozkurt illustrations estimated to belong to the past period. In the following examples, Bozkurt illustrations made in the Midjourney application with artificial intelligence technology will be analyzed.
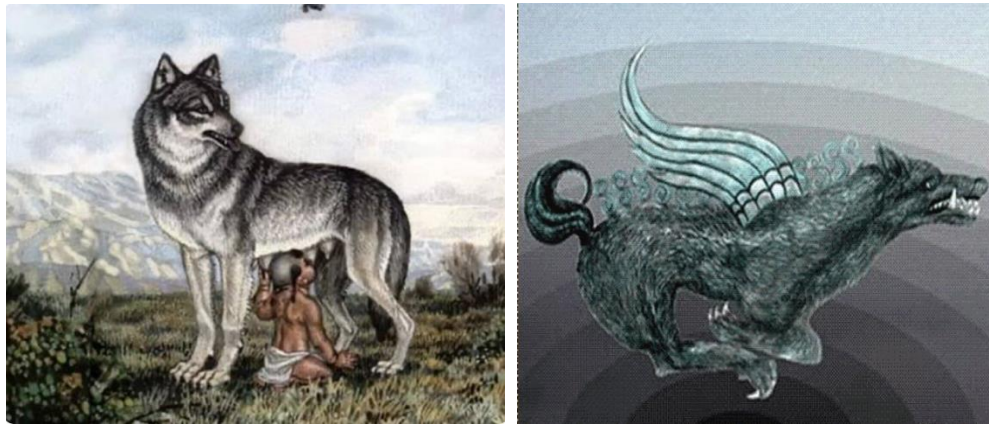

Figure 30. Bozkurt drawing (illustrator unknown), [44]. Figure 31. Bozkurt drawing (illustrator unknown), [44].

Prompt for Figure 32: The vast big wolf and little newborn human in the jungle, wolf taking of a baby boy, epic, Bozkurt, Turkish mythology, realistic, pastel colors.

The following wolf character was created according to the words entered in figure 32. Figure 32 shows a fantastic scene. A large wolf with humanoid features and wearing clothes is seen offering a plate of food to a little boy.

Figure 32. Bozkurt Design via Midjourney.

Prompt For Figure 33: Mother Bozkurt breastfeeding her little child, motherhood, mythology, Turkish mythology, forest, gray wolf epic.

By the commands entered for figure 33, the following wolf character and child figure were created. In this drawing, the authorities try to emphasize the theme of motherhood, and it is seen that a giant wolf is handing something to a little girl, probably to feed her. With the commands, it was tried to draw the event of "the wolf breastfeeding the little child" according to the legend, but no result was obtained for this scene.

Figure 33. Bozkurt Design via Midjourney.

Prompt For Figure 34: The vast big wolf and little newborn human in the jungle, wolf taking of a baby boy, epic, Bozkurt, Turkish mythology, realistic, pastel colors.

The following image was created with the commands entered for figure 34. The controls are similar to figure 33, where the part about the wolf feeding the child was removed from the authorities. In the created image, a baby is seen in a swaddling-like area in the forest, and the wolf is seen leaning toward the baby. The fact that the wolf is holding its paw on the baby is considered an excellent detail, showing that it cares for and protects the baby.

Figure 34. Bozkurt Design via Midjourney.

5. Conclusion

Artificial intelligence is not only an assistant to designers in today's graphic design field but also offers users a potential full of promises. While the productions in this field attract attention with factors such as speed, economy, and professionalism, they

also affect essential elements such as creativity, originality, and functionality. The interaction between design software and innovations in the field of design provides great opportunities to the designer in solving problems in the field of design [45]. The possibilities AI-supported graphic design offers allow designers to manage their time better and focus on more projects. Combining traditional mythology with artificial intelligence can build an exciting bridge between the old and the new. It is thought that AI can reinterpret ancient myths with modern perspectives, which can preserve cultural heritage while at the same time passing it on to new generations. Re-visualizing the characters in Turkish mythology with artificial intelligence can translate these figures into today's visual language, making them more accessible.

In this study, Mother Umay, Algarısı, Ülgen Han characters, and Bozkurt legend were selected from Turkish mythology, and these mythological characters were redrawn with Midjourney, one of the artificial intelligence technologies, and traditional elements were blended with the technology of the new age. By remaining faithful to the descriptions of the selected mythological characters according to the legends, these descriptions were entered into Midjourney as commands, and re-illustrations were made with some repetitions and improvements over the images obtained and shared in the study. Notably, the drawings produced through Midjourney in the sample are generally fantastic style drawings. However, in the application, the user can enter whichever style they want to use in their drawing in the message/prompt section, and different results can be obtained.

Some of the drawings created in Midjourney showed obvious anatomical errors (especially in the hands and fingers). This is seen as a feature of artificial intelligence technologies that still need development.

While entering commands to create an image in Midjourney, it was observed that the application did not accept some orders and did not start drawing. In this case, "Sorry! Our AI moderators think that your request may be against our community standards" and wait for you to change your command (Figure 35). For example, if you have an order that contains excessive sexuality, the application will reject it. While this is a precautionary measure to prevent users from creating some sensitive content (e.g., racist designs, etc.), it is also an indication that users do not have unlimited power.

Figure 35. Midjournej warning, screenshot.

Another point detected while creating drawings in the Midjourney application is that only some commands you enter give a one-to-one result. For example, while drawing Mother Umay's character in the study, the expected image could not be obtained despite entering the "three horns" command several times. On the other hand, images with two horns or many more horns were obtained. As a result of these experiences, it can be interpreted that the application receives a result by combining your and its ideas based on the commands you enter. The importance of human touch features such as creativity and originality in the production process with artificial intelligence cannot be denied. Originality is the uniqueness and creativity of a design. On the other hand, artificial intelligence produces designs by analyzing previous patterns in its universe or considering trends. Since artificial intelligence does not respond directly to every desired command, it may be difficult for these designs to carry that unique and special touch created by humans. At this point, the human designer's creative thinking ability and personal experiences come into play. Artificial intelligence can increase functionality through data analysis and user feedback, but it is thought that human design can ensure that it targets real user needs and emotional connections.

As a result, artificial intelligence is developing more and more every day. When it is carried to an even better point tomorrow, with the balance between artificial intelligence and graphic design, excellent results can be achieved by combining human creativity and technology. While the speed and efficiency provided by artificial intelligence will improve designers' workflows, human emotion, originality, and aesthetic understanding will add meaning to the depths of design. These new technologies should be used to support and develop human creativity and create productive co-operation between man and machine. It is thought that the collaboration of artificial intelligence and human ingenuity can lead to the emergence of new and impressive perspectives in graphic design.

References

[1]   E. Yazar, Uluslararası Hukukta Yapay Zekâ Teknolojisi. Uluslararası Yönetim Akademisi Dergisi, vol. 6, no. 2, pp. 537-553. (2023).

[2]   E. Karaata, "Usage of Artificial Intelligence in Today's Graphic Design," Online Journal of Art and Design, vol. 6, no. 4, pp.183-192, (2018).

[3]   Ş. Kocaman, "Grafik Tasarım Endüstrisinde Yapay Zekâ," Journal of Social and Humanities Sciences Research, vol. 8, no. 77, pp. 3000-3016, (2021).

[4]   A. ÖZDEMİR, "Yapay Zekâ'nın Grafik Tasarıma ve Tasarımcıya Etkisi." Hitit Sosyal Bilimler Dergisi, pp. 628-637, (2022).

[5]   A. G. Pamuklu ve M. B. Fındıkcı, "Grafik Tasarımın Geleceği: Yapay Zekâ ve İnsan," Bilim, Eğitim, Sanat ve Teknoloji Dergisi (BEST Dergi), vol. 7, no. 2, pp. 177-191, (2023).

[6]   Demir, H. "Metaverse Ağında Sanat ve Tasarım: Kullanıcı Arayüzü Tasarımı ve Kullanıcı Deneyimi Tasarımı," Journal of Academic Social Science Studies, 15(90), (2022).

[7]   Das, S., "Transforming advertisement and graphic design through AI." Searchenginewatch.com, September 8, 2020. [Online].   Available: https://www.searchenginewatch.com/2020/09/08/transforming-advertisement-and-graphic-design-through-ai/. [Accessed November 2023].

[8]   Arifoğlu, G., & Ruhi, Ç. A. Y. "QR Kod Teknolojisine Göre Düzenlenen Grafik Tasarım Sergisinin İzleyici Gözüyle Değerlendirilmesi", Bilim Eğitim Sanat ve Teknoloji Dergisi, 7(1), pp. 29-46. (2023).

[9]   F. N. Yokuş, (2021, Ağustos 6). *Yapay Zeka Tasarım Dünyasını Nasıl Etkileyecek?* Kasım 2023 tarihinde TR AI: https://turkiye.ai/yapay-zeka-tasarim-dunyasini-nasil-etkileyecek/ adresinden alındı [8]   Aouf, R. S., "Algorithm designs seven million different jars of Nutella", dezeen.com, June, 1, 2017. [Online].   Available: https://www.dezeen.com/2017/06/01/algorithm-seven-million-different-jars-nutella-packaging-design/.   [Accessed November 2023].

[10]   D. M. Hanna, "The Use of Artificial Intelligence Art Generator "Midjourney" in Artistic and Advertising Creativity," Design Sciences and Applied Arts, vol. 4, no. 2, pp. 42-58, (2022).

[11]   E. Şen, ve B. Atiker, "Grafik Tasarım Uygulamalarında Yeni Bir Aktör: Yapay Zekâ," *JOURNAL OF SOCIAL AND HUMANITIES SCIENCES RESEARCH*, vol. 7, no. 63, pp. 3946-3957, (2020).

[12]   R. Aliyev, Türk Mitolojisi. Ankara, Astana Yayınları, 2020.

[13]   H. Arpaguş, "Mitoloji, Kur'ân-ı Kerîm Kıssaları ve Kültürel Miras". Marmara Üniversitesi İlahiyat Fakültesi Dergisi, no.25, (2003).

[14]   Y. Öztürk, "Tarih ve Kimlik". Akademik İncelemeler Dergisi, vol. 2, no.1, pp. 1-25, (September 2014).

[15]   O. A. Kayabaşı, "Taşeli Yöresi Tahtacılarının Geçiş Dönemlerinde Mitolojik Unsurlar," Türk Kültürü ve Hacı Bektaş Veli Araştırma Dergisi, no. 78, pp. 139-158, (2016).

[16]   C. Doğan, "Eski Türk Ailesinin Yapısı Ve Fonksiyonları," Marmara Üniversitesi Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi,vol. 8, no. 8, pp. 73-81. (1996).

[17]   Ögel, B. Türk mitolojisi: kaynakları ve açıklamaları ile destanlar. Ankara: Türk Tarih Kurumu Basımevi, 1971.

[18]   B. Çemberci, "Türk Mitolojisinde Anaerkillik, Kadın Şaman ve Dişi Ruhlar." İstanbul Üniversitesi, Türk Dili ve Edebiyatı. (2019).

[19]   Karakurt, D. Türk mitoloji ansiklopedisi. Açıklamalı-Resimli. Türk Söylence Sözlüğü, 2012.

[20]   Kayabaşı, O. A. "Türk Mitolojisinin Kutsal Dişisi: Umay." International Journal Of Eurasia Social Sciences, pp. 220-228, (2016).

[21] Y. Kılıç, ve E. Eser, "Lohusalık Sendromu (al ana/alkarısı/albastı)'nun Eskiçağ Yakındoğu Toplumlarının Kültürlerindeki İzleri: Lilith Gerçeği,"Akademik Tarih ve Düşünce Dergisi, vol. 5, no. 17, pp. 29-60, (2018).

[22] E. Şimşek, "Türk Kültüründe "Alkarısı" İnancı Ve Bu İnanca Bağlı Olarak Anlatılan Efsaneler . AKRA Kültür Sanat ve Edebiyat Dergisi," vol. 5 no. (12), pp. 99-115, 2017.

[23] A. Gazanfargizi, "Köpek Kadından Lilit, Alkarısı Ve Isıkıl-Lilla'ya Kadar Uzanan Mitolojik Hatt." Uluslararası Halkbilimi Araştırmaları Dergisi, vol. 2, no. 3, 125-134, (2019).

[24] Ö. Demren, Türk Kültüründe Bir Korku Kültü Olarak Sivas'ta Alkarısı ve Albasması İnanışı . Antropoloji, no. 36, pp. 1-27, (2018).

[25] E. Kıvrak, "Türk Mitolojisindeki Karakterlerin Analizi Ve Yeniden Tasarlanması" (Master's thesis, İnönü Üniversitesi/Sosyal Bilimler Enstitüsü/Grafik Ana Sanat Dalı/Grafik Tasarımı Bilim Dalı). (2020).

[26] S. Yeşil, "Türk ve Arap Mitolojisinin Ortak ve Özgün Figürleri". Şırnak Üniversitesi İlahiyat Fakültesi Dergisi, vol. 11, no. 24, pp. 368-392, (2020)

[27] D. M. Akman, ve Ü. Y. Köktan, "Türk Ve Yunan Mitolojilerindeki Yeraltı Âlemine Ait Unsurlar." Turuk, vol. 7, no. (19), (2019).

[28] SARI, İ. Şamanizm: İnanç ve İbadetleri. Antalya: Net Medya Yayıncılık, 2017.

[29] R. G. Kayabaşı, "Altay Yaratılış Miti İle M. Necati Sepetçioğlu'nun Yaratılış Destanının Yüzeysel Yapı Unsurları Bakımından Karşılaştırılması", vol. 7, no. 22, pp. 229-248. (2016).

[30] E. Balcı, ve O. Özkul, "Türklerde Bozkurt Sembolüne Yüklenen Anlamın Kutsallık Bağlamında Dönüşümü," Yorum Yönetim Yöntem Uluslararası Yönetim Ekonomi ve Felsefe Dergisi , vol. 9, no. (1), pp. 37-48, (2021).

[31] F. Bayat, "Türk Mitolojisinde Dağ Kültü," Ü.A.K Folklor/edebiyat Dergisi, vol. 12, no. (46), (2006).

[32] S. Yılmaz, "Türk Mitolojisinde Bilgelik Kavramı". Türk Dünyası Bilgeler Zirvesi: GönülSultanları Buluşması. 26-28 May 2014. 2013 Türk Dünyası Kültür Başkenti Ajansı (TDKB). Eskişehir, pp. 231-249, (2014).

[33] H. Baltacı, "Türk Mitolojisinin Plastik Sanat Eserlerine Yansıması." Uluslararası Disiplinlerarası ve Kültürlerarası Sanat , vol. 5, no. 10, pp. 85-100, (2020).

[34] Okuryazarım, "Türk Mitolojisinde Börü", okuryazarım.com, May, 13, 2018. [Online]. Available: https://okuryazarim.com/turk-mitolojisinde-boru/. [Accessed October 2023].

[35] Can, T., "Türk Tarihi ve Kültür Araştırmaları", altaylı,.net, 2009, July, 12, 2009. [Online]. Available: https://www.altayli.net/milli-mucadele-ve-turkculuk-ve-ataturk.html. [Accessed November 2023].

[36] Demirbilek, E. İ., "Umay Ana-Mother Umay". Behance.net, [Online]. July, 7, 2023. [Online]. Available: https://www.behance.net/gallery/174751497/Umay-Ana-Mother-Umay. [Accessed November 2023].

[37] Egoistokur, Egoistokur.com. November, 2023. [Online]. Available: https://egoistokur.com/wp-content/uploads/2022/09/Umay-Ana-Yigit-Yerlikaya-Egoist-Okur-scaled.jpg. [Accessed November 2023].

[38] Arkeofili, "Türk Mitoloji Atlası: Bartu Bölükbaşı Röportajı". Arkeofili.com, September, 17, 2022. [Online]. Available: https://arkeofili.com/turk-mitoloji-atlasi-bartu-bolukbasi-roportaji/. [Accessed November 2023].

[39] Öztürk, Ö. "Al, Albastı veya Al Karısı inanışı". ozhanozturk.com, November, 20, 2017. [Online]. Available: https://ozhanozturk.com/2017/11/20/al-albasti-alkarisi-inanisi/. [Accessed November 2023].

[40]   Örgen, E. "Fantastikte Albastı." gzt.com, July, 24. 2020. [Online]. Available: https://www.gzt.com/post-oyku/fantastikte-albasti-3534420. [Accessed November 2023].

[41] Aciyan, E. "The Field Guide To Evil - Al Karısı," behance.net, August 12, 2020. [Online]. Available: https://www.behance.net/gallery/102322033/The-Filed-Guide-To-Evil-Al-Kars?tracking_source=search_projects&l=1 [Accessed November 2023].

[42] Kadıoğlu, Yağmur. 2023. «Türk Mitolojisi'nin Zeus'u: Ülgen.» *soylentidergi.* 26 Mart. Erişildi: Kasım 2023. https://www.soylentidergi.com/turk-mitolojisinin-zeusu-ulgen/.

[43] Çelik, Ö, "Türk Mitolojisinde Ülgen'in Yükselişi ve Erlik'in Çöküşü", antiktarih.com, April, 24, 2020. [Online]. Available: https://www.antiktarih.com/2020/04/24/turk-mitolojisinde-ulgenin-yukselisi-ve-erlikin-cokusu/. [Accessed November 2023].

[44] Donanımarşivi, "Türk Mitolojisi: Yaratıklar, Tanrılar, Tanrıçalar", donanimarsivi.com, July, 22, 2022. [Online]. Available: https://forum.donanimarsivi.com/konu/billinmeyen-tuerk-mitolojisi-1.574957/. [Accessed November 2023].

[45] KAYA, S. E. "Interactive Use of Graphic Tools as a Design Process from Image to Reality: Project Example". International Scientific and Vocational Studies Journal, 5(1), pp. 76-85. 2021.