

## Original Research Article

## A Hyper-Textual Interpretation of the Seven Planets` Motif Design in Seljuk Art (Case study «Enamel bowl» and book of «Aja'ib al-Makhlūqat» by Zakariya al-Qazwini)

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### Abstract

**Introduction:** The Seljuk era, was a prosperous time in case of dealing with art; during this time art reached to higher level, as numerous and diverse artworks with cosmological concepts were created, which represents the significance of cosmology in this time. The artists in this era, by considering the position of astronomy and cosmological issues, frequently reflected the relevant concepts and contents as practical decorations and motifs in their works. This study aims to comprehend the concepts of cosmological motifs to target the mutual influence of Seljuk artists on each other while designing these patterns; Therefore, the manner these artists influence each other in designing the planet motifs and their meanings has been addressed in two artworks related to Seljuk era; in this regard, the following questions arises: Which kind of hypertextuality is more likely to be influenced by the design of the target motifs of the planets? And what changes have been made in these motifs while influencing each other? The research aims to understand the manner the design of planets' motifs influence each other and the alterations in the two target works by focusing on the hypertextuality theory of Gerard Genette.

**Research Method:** A descriptive-analytical method has been adopted and the data was collected by using library sources; The results were analyzed relying on a qualitative method.

**Findings:** According to the research findings, the cosmological motifs that appeared in the Seljuk manuscripts are rather compatible with other built-in arts, in the case of decoration, besides considering the cosmological criteria; however, some changes have been made according to the artist's priorities. The artists in the Seljuk era were completely aware of the art developments of their own time and also the previous eras, as they tried their best to improve the art of their time by benefiting from the experiences of other artists.

**Conclusion:** the research finding showed that the planet motifs in «Ajaib al-Makhlūqat» (hypertext) which is inspired by the planet motifs in the enamel bowl (pre-text or hypotext) have a transposition or transformation with serious function according to the hypertextuality of Genette. The created transformation in hypertext includes a variety of changes (gender, form, composition, and color). The miniature painter of «Ajaib-ul-Makhlūqat» has not simply adopted an imitation attitude in creating a new and independent hypertext, as it has been designed differently.

### Keywords

Seljuk Art, Planet, Pottery (Ceramic), Miniature Painting, Hypertextuality of Gérard Genette

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### Introduction and Problem Definition

Since the beginning of Islam, Muslims paid special attention to astronomy and other scientific phenomena, to know the precise praying time and other Sharia rituals. In the Seljuk era, art reached to highest prosperity, as frequent diverse artworks with cosmological concepts were created, which represents the significance of astronomy in this era. During this time, the artists by knowing the position of astronomy and cosmological issues, have frequently reflected astronomical concepts and themes in their works as decorations and practical motifs. The Seljuk era is one of the flourishing times of the Islamic world in case of dealing with science and art. They ruled over different regions (Iran, Central Asia, Turkey); Their support for artists and wise people (With the guidance of Iranian scientific ministers) as their attempt significantly contributed to the advancement of science and art. During this time, art and science were closely entangled. The art of pottery and book design were unique spaces for representing the cosmological sciences. The book written by Qazvini titled «Ajaib al-Makhlūqat» (Wonders of Creatures) is one of the first written illustrated works that targets cosmology in specific parts. In this research, an enamel bowl created in the central regions of Iran and a copy of a book written by Qazvini, «Ajaib al-Makhlūqat», illustrated and prepared in Iraq, were selected as two case studies, which both appeared first in the Seljuk era and decorated with the motifs of seven planets of astrology. Despite the expansion of the geopolitical territory of the Seljuqs and the occupied territories art prominently progressed in all fields; beyond this, each region was highly inspired by other regions, which resulted in the progress of art. One of the prominent features of Islamic Iranian art is the stability and evolution of different art schools; As, creating artworks in any school and time, was continuing and progressed in the next schools and eras. By considering this proposition, studying and analyzing artworks in different histories of Islamic-Iranian art requires a theoretical approach that targets the relations between artworks and influences each other in different historical times and regions of this expanded territory. To achieve this purpose, in this research, the «Hypertextuality» approach of «Gérard Genette» has been adopted to study and analyze the data gathered. The concept of hypertextuality is categorized as *Transtextualité* according to the approach of Gérard Genette, which targets the methods of adopting works from each other. In hypertextuality, creating text (b) without the presence of text (a) or hypotext is impossible, as, inspiration and partial influence are not focused, rather the general influence of one text on another text is addressed. By considering this theoretical background, this study aims to analyze the roles of the seven planets in two artworks that date back to the Seljuk era. The lack of independent research on this topic shows the necessity of doing this research. Therefore, two artworks here called figures decorated with the seven planets in the Seljuk era from the two different geographical regions, Iran and Iraq, were selected for study, which can be one of the best implications of hypertextuality according to the theory of Genette that has been discussed in this research. This research aims to study the relations between two different Seljuk artworks from two distinct geographical regions (A pottery work, or Hypotext from the central regions of Iran and a book design or hypertext from the territory of Iraq) according to the hypertextuality of Gérard Genette. So, the research questions are as follows: 1. Which type of hypertextuality is dominant in drawing the motifs of the planets that appeared in «Ajaib al-Makhlūqat» influencing the enamel bowl during the Seljuk era? 2. What changes have been made while drawing these motifs in this process? To answer the research questions, the two case studies have been analyzed based on the two specific indicators of Gerard Genette's theory (Function and Relations).

### Research Method

This study is qualitative research in which data analysis is carried out by using descriptive and analytical methods, according to hypertextual approach of Gerard Genette. The research data was collected from reliable library resources and other documents including academic theses, scientific articles, tables, and figures. In this process, initially, the two case study figures, hypotext, and hypertext, were introduced; Then, the establishing relations were presented based on the intra-semiotic, inter-disciplinary, and cross-sectional (Synchronicity) relations. Finally, the case studies have been evaluated according to the two indicators of Gerard Genette (Function and Relations). To address the transformation process of hypertext compared to the hypotext, it has been tried to describe the changes that occurred in the target motifs. The case studies include two artworks, 1. A Seljuk enamel bowl, kept in the Metropolitan Museum of Art, No. (57.36.4) and 2. The book «Ajaib al-Makhluqat» by Qazvini is kept in the Bavarian Library in Munich, No. 464 (in Arabic), which is referred to as hypotext and hypertext accordingly based on the theoretical foundation of this research. The technique of non-random purposive sampling has been selected for this study.

### Research Background

According to the literature review, several researches which were addressing the influence of astronomy in Seljuk art were found and studied according to the research foundation as follows: «Canby, Beyazit & Ruzgadi» (2016) in a book titled «Court and Cosmos: The Great Age of the Seljuqs»; Initially, the history of this era reviewed and then the influence of astrology and magic, the visual application of medical discovery, royal arts, burial issues, and literature in the artworks of this era studied. The book is a comprehensive study of the extent of Seljuk's achievements, which represents the glory of one of the most magnificent reigns in the Islamic era and provides insights into the rich cultural tradition that has formed the legacy of Islamic culture until now. In a similar study, «Canby, Beyazit and Ruzgadi» (2020) in a book entitled «The Seljuqs and their Successors: Art, Culture and History», investigated the Seljuks' rule, the migration of societies and the exchange and combination of various traditions, including Turkmen, Iranian- Arabic-Islamic, Byzantine, Armenian, Crusaders, and other Christian cultures. Moreover, they tried to know how religious beliefs alterations, ideologies of authority, and lifestyles during the Seljuk era affected cultural and artistic productions, urban and rural architecture, memorial inscriptions, royal titles, and religious and magical practices. In the master thesis of «Sistani and Merasi» (2014) with the title «The pictorial Evolution of Symbols and Constellations in Iran's Written Works from the Seljuk to Safavid Eras», the authors studied the development process of aesthetics and symbolization of constellation motifs in astronomical written documents from the Seljuq era to the Safavid reign; they concluded that the constellations motifs and the relevant symbols originally date back to the pre-Islamic art and Muslim-dominated regions, including the territory of Iran. Another study by «Gholami Goodarzi, and Mahmoudi» (2021) thesis entitled «The Role of Astronomy in Pictorial Metal Works in the Seljuk Era» investigated the role of astronomy in making metal works illustration in the Seljuk era. Boyiri Kenari and Shateri (2023) in an article entitled «Review and analysis of decorative arrays of "non-observational astronomical instruments" of the Safavid period», investigated and studied about 35 engraved non-observatory astronomical instruments in the Safavid period and came to the conclusion that most The non-observational tools made in this period had a personal function and were mostly used to find the way and recognize the direction of the Qibla and to know the religious times and were also used as an offering. The most

common motifs are inscriptions and human-animal motifs of constellations and the twelve signs, the name of the maker and the date of manufacture, which were created by engraving and silver plating (To better display the position of the stars) on the works. Based on the literature review of this study, no independent research work similar to the present study was identified, as it has focused on the method of illustration works of Seljuk artists inspired by planets and addressing the hypertextuality theory of Gérard Genette.

### **Theoretical Foundation**

The term intertextuality was first coined by «Kristeva» in 1966, in an article titled «Word, Dialogue and Novel». Her idea is based on the fact that texts are never created simultaneously, as other texts contribute to the creation of a new text (Azar, 2015). According to this idea, any new text is a texture influenced by other past textiles, as it can be said that only the mythical alone person who was attached to the intact world is excluded from the dialogic relationships by having his/her unique words (Todorov, 1998, 126). The idea of intertextuality argues that a new text is not merely inspired by a single or some other source as it is supposed that an emerging text is inspired by multiple sources and influenced by them (Namvar Motlagh, 2016, 34). Gerard Genette believes that intertextuality occurs as the result of the simultaneous presence of two or more texts and the actual presence of one text included in another text and addresses the influence and relations of these texts (Ahmadi, 2001, 320). According to the idea of Gérard Genette, there is no text independent from previous texts. He has considered the concepts of influence and inspiration, especially in hypertextual relations, as he establishes his idea based on the influence of multiple texts from each other (Namvar Motlagh, 2015, 83). Intertextuality is an approach that reveals the visual experiences of visual arts according to partial or deep influence by other texts and investigates the relations of a new work with other previous works (Parvizi, 2003). The concept of intertextuality according to the idea of Genette is classified into two major categories (1. Explicit or Covert 2. Implicit or Overt) (Namvar Motlagh, 2016, 38). By developing the ideas of Kristeva, Genette expressed the relations of one text with another text (s) with the new expression of transtextuality, and classified it into five groups of Intertextualite, Arcitextualite, Paratextualite, Metatextualite, and Hypertextualite (Azar, 2015). Gérard Genette has made many alterations in the general structure of it and presented a coherent approach which he coined «Transtextuality». A term that can be expressed as intertextuality from the point of structural foundation (Allen, 2001, 140). According to the idea of hypertextuality, the relationship between two texts is explained based on the adoption and influence level of two texts from each other (Namvar Motlagh, 2007). Thereby, it can be mentioned that while studying hypertextuality, the way of reproduction and expansion of texts is investigated; To achieve this, three basic conditions must be available as below: 1. The textual nature of the subject 2. The presence of two or more texts 3. Certainty of the relations between hypotext and hypertext (Namvar Motlagh, 2012). Genette, by studying the relations of hypertextuality, considered too many parameters, among them the type of relation is of great importance, and according to this concept, he categorized the relations of texts into the two types of «Homogeneity» (Imitation) and «Transformation» (Change). The criteria for Genette in this grouping is the style of adoption. According to the classification of Genette in addressing the presence of one text in other texts, three kinds of literary-artistic order have been mentioned with essential roles in the transformation from one text to another: funny, humorous, and serious. The emergence of each genre based on the relations between two texts has been briefly stated here (Tables 1 and 2) (Ghani & Mehrabi, 2019).

**Table 1.** The appearance style of three artistic types in each kind of hypertextual relations .Source: Namvar Motlagh, 2012.

No.	Expressive Genre	Hypertextuality	
		Homogeneity	Transformation
1	Entertainment/ Funny	Pastiche	Parody/ Parodie
2	Humoral	Charge Satire Pastiche parody in the common sense of the word	Travestissement parody in the common sense of the word
3	Serious	Forgerie	Transposition

The reason for using the hypertextuality approach in this study is to adapt it to the main purpose of the research, as it aims to investigate how Seljuk artists used to influence each other in creating cosmic motifs and to study the ways of influencing one text on another text according to the hypertextuality of Genette.

**Table 2.** The various types of relations in artistic hypertextual orders. Source: Ghani & Mehrabi, 2019.

No	Relation Type	Explabaiton
1	Pastiche	In this type, the style has been imitated, but in most cases, another topic has been addressed. Pastiche is a stylistic imitation of the pretext.
2	Charge	The exaggeration of hypertext compared to hypotext, which is accompanied by kind of humor.
3	Forgerie	The serious imitation of the hypertext compared to the hypotext.
4	Parody	There is a transformation in the style of hypertext compared to hypo text.
5	Travestissement/ Transvestism	There is a transformation in sexuality and the nature of hypertext compared to hypotext.
6	Transposition	Serious change in the style of hypotext to transpose multiple texts

## Case Studies

The first object of study, which here is known as hypotext is an enamel bowl decorated with royal and astronomical motifs made in central or probably northern Iran, which was made on the order of the Seljuk court in the late 12<sup>th</sup> century to the early 13<sup>th</sup> century AD, and is now preserved in the New York Metropolitan Museum (No. 57.36.4) (Fig 1) The target bowl has been decorated with seven rings and a circular band with different motifs. The bowl is decorated with seven different circular motifs. The following motifs have been shown in order from first to sixth band: 1. Sun is personified in a human face, 2. Six planets are shown, 3. The profile of ten horseriders is drawn with birds among them. 4. There are two rows of geometric patterns, 5. Two rulers are shown sitting on the throne surrounded by twenty-six figures, 6. An inscription (damaged and repaired) in Kufic script containing words of praise for the Muslim king of the time, which is not readable due to the damage. The inscription content indicates that the artwork was ordered by the royal court. In the seventh and last band, a series of regular geometric motifs, in the shape of a circle surrounded the entire edge of the bowl (Table 3).





A

B

**Fig 1. A:** Seven planets shown on a clay-made plate, Seljuk era. Source: Ettinghausen, 1975.  
**B:** Some images of constellations taken from Qazvini's «Ajaib al-Makhluqat» book, Munich copy. Source: Munich Bavarian Library.

The second figure or hypertext is the book «Aja'ib al-Makhluqat wa Ghara'ib al-Mawjudat» (Wonders of Creatures and Strangeness of Creatures) authored and gathered by Zakaria Qazvini. The author gave the book to «Abu Talib Tughril ibn Arslan bin Tughril». He was the Seljuk ruler of Iraq, who reigned from 556 to 573 AH. The book was initially written by Zakaria Qazvini in Arabic and later the Persian version provided by him. The Munich version of the book is known as the oldest version of Ajaib al-Makhluqat (Wonders of Creatures) by Qazvini based on the literature review of the research. It is preserved in the «Bavarian» library in Munich (No. 464, Arabic) (Fig 1). By referring to the contents of the opening page, the images presented were taken by «Mohammad bin Ali Dameshqi Moatayeb», in the city of Wasit, located in the south of Baghdad on the banks of the Euphrates River, and completed them in 658 AH/1280 AD [25/24 Shawwal 678 AH] (Von Hees & Schwartz, 2006). According to the title page, the Munich copy of the book was first illustrated and written during the author's lifetime and completed three years before his death. The text of the book includes 467 images (Beyg Babapour, 2013, 139). This version contains the images and description of the constellations which are presented in the initial part of the book and is the closest source to the hypotext of this research study (Table 3).

**Table 3.** The characteristics of the Case studies. Source: Authors.

The Figures/ Case Studies			Date & Place of Creation	Owner	Artist	Place of storing Artwork
1	Hypotext	A bowl decorated by royal and astronomical motifs	At the end of the 12 <sup>th</sup> century central in Northern Iran (Aja'ib al-Makhluqat wa Ghara'ib al-Mawjudat) «Wonders of Creation and Strangeness of Creatures»	Unknown Seljuk ruler at the time/ The owner of a dedicated inscription work	Unknown	Metropolitan Museum of Part No. (57.36.4)
2	Hypertext	The book Aja'ib al-Makhluqat	1280 AD, the city of Wasit, located in the south of Baghdad	Abu Talib Tughrel ibn Arslan ibn Tughrel, Seljuk	Muhammad bin Ali Dameshqi Moatayeb	Munich Bavarian Library No. 464 (Arabic)

## Seven Planets

In ancient astronomy, the seven planets in the Solar System, were the sun, the moon, and the five planets Saturn, Jupiter, Mars, Venus, and Mercury. These celestial bodies are visible to the naked eye due to their brightness and were recognized before the invention of the telescope. In two case studies, these planets are personified, which have been discussed in this research (Table 4).

**Table 4.** The Manifestation of the seven planets in two case studie. Source: Authors.

Planet	Sun	Mars	Mercury	Venus	Moon	Saturn	Jupiter
Arabic Name	Shams	Al-Merrikh	Al-Atarod	Al-Zuharah	Al-Ghamar	Zohal	Mushtarî
Persian Name	Khorshid, Khur, Hoor Mehr	Bahram	Tir	Zohreh, Nahid	Mah	Keyvan	Hormoz
A Pottery from the Seljuk, Era	Fig 2	Fig 3	Fig 4	Fig 5	Fig 6	Fig 7	Fig 8
Wonders of creatures, Munich version	Fig 2	Fig 3	Fig 4	Fig 5	Fig 6	Fig 7	Fig 8

**Planet of Sun:** The Sun is considered the main celestial body among the other planets of our solar system, and is the first planet that was known by humans who found its essential role in preserving human life and nature. According to early man, the sun was the center of existence, in the place of God with an essential place in many religions including Mithraism. In astronomy, frequent characteristics such as wisdom, knowledge, generousness, pride, purity, calmness, and patience are attributed to the sun (Mosafa, 1978, 248). In the first case study, the enamel bowl, the center of the bowl is decorated with the image of the sun which is a manifestation of it and the six other planets of the solar system have been placed around it, according to the motion of the hands of the clock: Mars, Mercury, Venus, Moon, Saturn and Jupiter. The sun is personified with round eyebrows, big eyes, and small lips which all represent a female character. In this case, only the human face of the sun has been shown, which is surrounded by two rows of radial lines. The artist has used gold, blue azure, and ocher colors in this work (Fig 2). In the second figure, the book «Aja'ib al-Makhluqat wa Ghara'ib al-Mawjudat» (Wonders of Creatures, the Bavarian Library copy), the sun is shown in the form of a complete human body. Despite a distorted figure, the type of design and clothes represent the sun in the character of a man. Sun, the man is sitting on the throne like a king and dressed in a formal royal dress, with a sword on his knees as a sign of power and royalty, in which there is a circle in front of his face representing the sun by using blue, azure and red colors (Fig 2).



**Fig 2. A:** Sun motif, enamel bowl of Seljuk era. Source: Ettinghausen, 1975. **B:** The sun motif («Ajaib al-Makhluqat», Qazvini). Source: Munich Bavarian Library.

**Planet of Mars (Bahram/Persian):** Mars is the fourth planet in the solar system. The Persian name of this planet is Bahram, and Mars according to the Arabic-Greek language. Bahram or Warahrān, with the Avestan equivalent of «Verethragna» means victorious, warrior, and conqueror. In Persian poetry, there are frequent references to Mars to remind us the characteristics of anger and valor, which is reminded as Bloody Mars, Haider-e Razm-e Falak (the warrior of felucca battle), and Mars, the Warrior (Mosafa, 1978, 730). This star has been the God of War according to Iranian, Greek, and Roman fiction; Thereby, astrologists have considered Mars as the star of cruel soldiers and rulers, a representative for thieves and corrupters (Mosafa, 1978, 729). In the first figure, the enamel bowl, the planet of Mars appeared as a warrior with a Mongolian face, sitting in a cross-legged position, holding a sword on his left shoulder with a severed head in his right hand. There is a circle around the head of the warrior in which the eyes are looking to the right side. The golden, brown, and juniper colors have been used in this figure. In the second figure, the book «Ajaib al-Makhluqat» (the copy of Bavarian Library), Mars is depicted as a red-robed warrior sitting on a throne, with a sword in his right hand and a severed head in his left hand, while looking at the front side. The ocher, red, and dark blue colors have been used in drawing the figure. Despite the damage of figure faced, the design of the clothes clearly shows that a man is depicted. The ocher, red, and azure colors have been used in drawing the figure (Fig 3).





A



B

**Fig 3. A:** The motif of Mars in the Seljuk enamel bowl. Source: Ettinghausen, 1975. **B:** The place of Mars according to the book «Ajaib al-Makhlūqat». Source: Munich Bavarian Library.



A



B

**Fig 4. A:** The motif of Mercury in the Seljuk enamel bowl. Source: Ettinghausen, 1975. **B:** The place of Mercury according to the book «Ajaib al-Makhlūqat». Source: Munich Bavarian Library.

**Planet of Mercury** (Tir/ in Persian: Arrow): It is the closest planet to the Sun. Mercury is the smallest and fastest planet in the solar system. This planet is known as an evasive planet, which is why the ancient Iranians called it Tir which means an edgy arrow. In ancient Rome, it was also known as «Mercury» or «Messenger of the Gods»; In ancient Greece, it was called «Hermes» or «God of Speed». In astrology, the planet Mars is the star attributed to poets, sages, medics, painters, merchants, marketers, and others. It has also been referred to in Persian poetries as Kateb-e Gardoon (The scribe of the sphere), Akhtar-e Danesh (Star of Knowledge), Dabir-e Anjom (Secretary of Stars), and Kateb-e Alavi (Ghahari Gigolo & Mohammadzadeh, 2010, 13). In Persian and Arabic literature, Mercury is also known as Dabir-e Falak, which means the secretary of the planets. Based on these explanations, the illustrated books, it is representing a sitting scribe man. In the first figure, the enamel bowl, Mercury is depicted as a scribe man, representing Mongolian Turkish clothes and appearance, sitting cross-legged, looking right side, while holding a pen in his right hand.

A circle outlines the figure's head from the background (Fig 4). The gold, ocher, and blue colors have been used in creating this work. In the second figure, the book «Ajaib al-Makhluqat» (The copy of Bavarian library), Mercury is depicted as a scribe man, in Persian clothes and appearance, with a pillow at the back of his head, sitting cross-legged, looking at the left side, while holding a pen in his right hand. A colored circle outlines the figure's head from the background. The ocher, pink and blue-green colors can be seen in this artwork (Fig 4).

**Venus (Zohreh/Nahid in Persian):** Venus is the second planet after Mercury in the solar system. «Venus» in Latin and ancient Greek mythology was derived initially from the goddess of love and beauty (Aphrodite) in ancient Roman. In Persian literature, Venus is referred to as Nahid and Bidokht, the latter in ancient Persian literature was referred to as Baghdokht and means «the Daughter of God». The other names of the planet are Anahita, Anahid or Nahid means purity and perfection, which refers to the guardian angels of water. According to the rules of astrology, this planet is described by characteristics like adornment and luxury, star of women, pleasure, and happiness, sarcasm and false swearing, love and elegance. In Persian literature, the planet Venus is known as a woman who plays the string, and the music, and the woman who sings, as the name of Venus or Zohreh in Persian is associated with poems, and resembles singing and playing (Mosafa, 1978, 345). In the first figure, the enamel bowl, Venus resembles a woman playing the harp, and balbas with a Mongolian Turkish appearance, sitting cross-legged, looking to the right side, and holding a club in her right hand. The device of Barbat or Barbud is in harmony with the circle form surrounding the figure and outlines the background by its color (Fig 5). The golden, maroon, light brown, and blue colors have been used in this figure. In the second figure, the book «Ajaib al-Makhluqat» (The copy of Bavarian library), Venus is depicted as a woman playing harp, in a Persian dress and appearance, with a pillow at the back of the head, sitting cross-legged position, looking at the right side, and holding a club in the right hand. Although the figure is rather damaged, the type of design and clothes represents a woman. The ocher, orange and blue colors have been used for drawing it (Fig 5).



**Fig 5. A:** Venus in the Seljuk enamel bowl. Source: Ettinghausen, 1975. **B:** The place of Venus in the book «Ajaib al-Makhluqat». Source: Munich Bavarian Library.



A

B

**Fig 6. A:** The motif of Moon/Qamar in the Seljuk enamel bowl. Source: Ettinghausen, 1975. **B:** The motif of Moon/Qamar in the book «Ajaib al-Makhluqat». Source: Munich Bavarian Library

**Planet of Saturn (Keyvan):** After Jupiter, Saturn is the second-largest planet in the solar system and the most distant planet that ancient astronomers could see at that time. This planet is named after the Roman god of agriculture and wealth who was also the father of Jupiter. This planet was an ancient Roman god of agriculture and wealth which was known as the father of Jupiter. «God Saturnus» was associated with the planet Saturn and the god of agriculture in ancient Rome. This planet was known to early humans, including Babylonians and Far Eastern astronomers. The name of this planet was inspired by the ancient Roman god Saturnus, which was known as «Cronus» in ancient Greeks. The Romans identified the planet Saturn with the Greek goddess Kronos. Saturn or Zohal in Persian, means «to be distant or remote». According to astrologers the planet Saturn is attributed to the lord of castles, elders and peasants, past families, black slaves, desert dwellers, ordinary people, and ascetics with no knowledge, and it is referred to as ignorance, greed, grudge, malice, conflict and laziness (Mosfa, 1978, 237). In the first figure, the enamel bowl, the planet Saturn/Keyvan is depicted in the form of a man in Western clothes and appearance, in a sitting position facing right, holding two ax-like weapons in both hands with a colored circle behind his head (Fig 7). The artist has used golden, maroon, light brown and blue colors in drawing the figure. In the second figure, the book «Ajaib al-Makhluqat» (The copy of Bavarian library), Saturn is depicted in the form of a man in Western clothes and appearance, sitting on a chair facing right, wearing a long cone-shaped hat, with a long sickle on his left shoulder. The artist has used ocher, orange, and blue colors in drawing the figure (Fig 7).





A



B

**Fig 7. A:** Saturn in the Seljuk enamel bowl. Source: Ettinghausen, 1975. **B:** Saturn motif in the book «Ajaib al-Makhluqat». Source: Munich Bavarian Library.



A



B

**Fig 8. A:** Jupiter in Seljuk enamel bowl. Source: Ettinghausen, 1975. **B:** Jupiter in «Ajaib al-Makhluqat». Source: Munich Bavarian Library.

**Jupiter (Hormuz):** It is the largest planet in our solar system, which was known as «Zeus» in ancient Greek and «Jupiter» (God of nature) in ancient Rome. In Arabic, it is also called Khatib (lecturer) and Judge in Heaven. Jupiter in ancient Iran, was worshiped as the bright/shining god of the sky (Hormazd/ Hormuzd) which dates back to the mehr religion and even earlier. «Ahuramazda» in the Zoroastrian religion, was the same belief as Hormuzd or Urmuzd and according to astronomical rules, Hormuz planet is the star attributed to judges, scholars, nobles, the owners and lords of astrologers and God-fearers or God-worshippers Tarsayans (Mosafa, 1987, 736). In the first case, the enamel bowl, the planet Jupiter or Hormuz is depicted as a man with a beard in Mongolian Turkish dress and appearance, who is sitting facing right, holding a book-like object in his left hand, raising his right hand, with a colored circle behind his head (Fig 8). The artist has used golden, maroon, light brown and blue colors in drawing the figure. In the second figure, the book «Ajaib al-Makhluqat» (The copy of Bavarian library), the planet Hormuz is depicted in the form of an old man

with Persian clothes and appearance, sitting facing right, with a small device in his left hand and a larger device in his right hand with a pillow behind his head. The artist has used the colors of ocher, orange, and blue in drawing the figure (Fig 8).

### Textual Relations between the two figures (case studies)

According to the theory of Genette, texts have different visual or verbal signs. If these texts follow the same sign or models, then they are either in a transtextual (Intra-sign/Intra-semiotic) or (The same semiotic order); Otherwise, their communication will be of inter-textual semiotic relation (Namvar Motlaq, 2015, 260-261). According to this concept, there is an intra-semiotic relation between the case studies of this research, and both follow a pictorial system. Based on the theory of Genette, the target texts may follow two different models arising from different cultures. If the texts belong to the same culture, their relations are intra-cultural, and if the texts belong to different cultures, there is an inter-cultural relationship between them (Namvar Motlaq, 2015, 260). Based on this, the target texts in this research follow an intra-cultural relationship, as they belong to the same Iranian culture in the Seljuk era. Due to not so long interval between the creation of these two texts, hypotext and hyper-text, they follow a transverse or simultaneous semiotic relation. If the works under review belong to the same field, their relationship is called (Intra-discipline) and if the works belong to different disciplines, there is an (Inter-discipline) relationship between them. Based on this, the works in this research have had an interdisciplinary relationship, as the first figure belongs to a pottery work and the second one belongs to the art of book design (Table 5).

**Table 5.** Semiotic Relations between two case studies in the research. Source: Authors.

NO.	Semiotic Relation	Implication
1	Intra-Semiotic	Two case studies follow the same pictorial order.
2	Intra-Cultural	Two case studies belong to Persian/ Iranian culture.
3	Transverse or simultaneous relation	Two case studies belong to the Seljuk era
4	Inter-disciplinary field	Two case studies belong to two different fields: (Hpo-text: pottery, Hyper-text: painting).

### Typology of Hypertext

The French literary theorist, Gérard Genette defines two indicators (Function and Relationship) for the typology of works, then classifies the works in one of the six types of hypertext. Gérard Genette typologies of hypertext are: pastiche, charge, forgery, parody, travestysman and transposition.

**1. The Index of Function:** This index examines the intention or effect of any action that can be funny or humorous (Charge), humorous or serious (Namvar Motalagh, 2012). In humorous function, the relation of the hypertext to the hypotext is for reproducing text, along with a kind of humorous and entertaining aspect. In this textual relation, hypertext follows a kind of devaluation and critical aspect compared to hypotext. In Forgerie, hypertext aims to continue the work and translate the work, with literary and artistic adaptations, and similar functions. Considering that the book «Ajaib al-Makhluqat» was dedicated to the king of that time, it is almost certainly a royal official book that was ordered by the court, and influenced by the pottery belonging to the court. Moreover, there is no sign of criticism, devaluation, or humorous items. So, according to the indicator of function, the influence kind of hypertext by hypotext is known as serious. Finally, based on the



analysis of the hypertext and hypotext, the typology of the hypertext in the book «Ajaib al-Makhlūqat» is a kind of «transposition», that means, the hypertext influenced by its hypotext, in another form and texture of reproduction. Transposition includes two fields of visual and thematic forms. The hypertext in this research is classified as visual transposition, as the theme and content have not changed, only the form or the appearance of the planets has altered (transition from the Seljuk style of design to the Persian/Iranian one) and the theme (Cosmology) has remained unchanged. Moreover, regarding the types of transposition, it is a kind of artistic one, under the subgroup of inter-artistic transposition, as the hypertext has been influenced by another art field; in other words, the hypotext and hypertext belong to two different artistic disciplines (Table 6).

**Table 6.** Types and typology of Transposition. Source: Authors.

Types of Transposition		Sub-type of Transposition	
1	Formal Transposition	Literary Transposition	1 .Intralingual Transposition 2. Interlingual Transposition
		Artistic Transposition	Intra-artistic Transposition 2. Inter-artistic Transposition
2	Thematic or Content Transposition	Literary-Artistic Transposition	1.Transposition from literary type to artistic 2.Transposition from artistic type to literary

**2. The Indicator of Textual Relation:** According to the idea of Gérard Genet, textual relations mean the degree of adoption in the hypertext or the second text, to the hypotext or the first text. This indicator deals with the Homogeneity or imitation and Transformation or change of the hypertext compared to the hypotext. Genette then introduced his idea on hypertextuality, based on two indicators of relations and function (Table 2). It seems that the artist of «Ajaib al-Makhlūqat» in adopting the pictorial figures of an enamel bowl, has been loyal to the whole structure of the work, but not to design elements and details. In other words, hypotext and hypertext in this study, have a relation of transformation kind, as the hypertext is not completely following the hypotext. These changes are noticeable in four types of transformation (Gender, shape, composition, and color).

**2-1. Gender Transformation:** In this kind of transformation, the changes in the figures' gender of the two works have been considered. The seven planets have been personified in the same sexual characteristic in both examples, except in one case in which the sun is drawn as a female (The first figure), Sun, the Mistress, and in the second figure it is drawn as a male, Sun, the Mister (Table 7).

**Table 7.** Gender Transformation in the two case studies. Source: Authors.

Planet		Sun	Mars	Mercury	Venus	Moon	Saturn	Jupiter
Gender Transformation	Hypotext	Female	Male	Male	Female	Female	Male	Male
	Hypertext	Male	Male	Male	Female	Female	Male	Male

**2-2. Formal Transformation:** In this kind of transformation, the emphasis is on the pictorial and formal changes of the two case studies compared to each other. There are specific figurative changes in the hypertext, compared to hypotext, including changes in appearance, the general appearance of the clothes, outfits, and other decorations. In the first case study, the enamel bowl, which is known as hypotext here, the artist has used the common Turkish-Mongolian dressing to personify the planets. As in most enamel pottery of this time, the figures were characterized by round faces and elongated eyes, bigger heads compared to the body, and a halo around the head to outline the background, which was

under the influence of Manichean art; the clothes are decorated with geometric motifs without wrinkles. As mentioned earlier, the human body of the planets is equipped with some outfits, in harmony with the surrounding circle. In the figure, the book «Ajaib al-Makhlūqat» (The copy of Bavarian Library) as hypertext, the artist has not completely followed the hypotext. Opposite to the hypotext, the artist has shown the Sun planet in a male body. Moreover, to cover the planets with human dress, the common clothes of the Abbasid have been shown. These clothes have been taken from the Sasanian dressing form which has some wrinkles inspired by the influence of Byzantine art. The planets personified in male form have beards similar to the Iranian/Persian and Semitic races. Also, as mentioned above, in designing the outfits and other accessories, the artist has not completely followed the hypotext (Table 8).

**Table 8:** Formal transformation in the two target figures. Source: Authors.

Planet	Formal Transformation	
	Hypotext	Hypertext
<b>Sun</b>	Only the face is depicted in Mongolian Turkish appearance	The figure is personified in Iranian appearance (face & clothes)
<b>Mars</b>	Mongolian Turkish face & clothes	Persian face & clothes
<b>Mercury</b>	Mongolian Turkish face & clothes	Persian face & clothes
<b>Venus</b>	Mongolian Turkish face & clothes	Persian face & clothes
<b>Moon</b>	Mongolian Turkish face & clothes Open hairstyle	Persian face & clothes A pillow behind the head
<b>Saturn</b>	A figure in Western Turkish face & clothes, while holding two axes	The figure in Western appearance (face & clothes) while holding a long sickle
<b>Jupiter</b>	Mongolian Turkish face & clothes	Persian face & clothes A pillow behind the head

**2-3. Transformation of Composition:** In this type of transformation, organizing the position of the work components is considered to create harmony and proportionality in the whole and between different parts of the two figures. The composition of the figures in the hypertext shows significant variations compared to the hypotext, including the angle of view in the figures, the outfits, and the kind of tools in their hands. In the first figure, the enamel bowl as the hypotext, all planets are facing to their right side, except for the moon which is facing the front side. In the second figure, the book «Ajaib al-Makhlūqat» as the hypertext, three planets are looking to the right side, three planets facing the front side and only Mercury is looking to the left side. Opposite to the hypotext, the work's creator has personified the sun in a male body with a sword in his hand. In Mars, the place of the sword and the severed head has been replaced. In Mercury, a pillow has been added to the back of the figure's head. Venus is presented in a square shape, despite the hypotext; Moreover, the bow in her hand has a triangular shape. In moon, the lady moon is holding the circle facing her face. In Saturn, a chair and a long sickle with a long trumpet-shaped hat have been added to the figure. The outfits used for designing Jupiter planet have also been changed and a pillow has been added to the back of the figure's head (Table 9).

**Table 9.** Transformation of composition in the two case studies. Source: Authors.

Planet	Transposition of Composition	
	Hypotext	Hypertext
<b>Sun</b>	The figure is facing the right side	The figure is shown on a royal throne or robes, a sword on his knees, facing to the front side in a round face
<b>Mars</b>	Holding a sword on his left shoulder and a severed head in the right hand, facing to the right side	A sword in his right hand, a severed head in his left hand, looking at the Front.
<b>Mercury</b>	In a cross-legged position, facing right side, holding a pen in his right hand with a circle around his head	A pillow on the back of the head, cross-legged position, facing the left side, a pen in the right hand, and a circle around his head.
<b>Venus</b>	In a cross-legged position, facing to the right side, having a plectrum in the right hand, Barbat or Oud in a circle shape, colored circle behind the figure.	A pillow on the back of the head, in cross-legged position facing to the right side, a club in the right hand, the face of the the figure is distorted.
<b>Moon</b>	Sitting in a cross-legged position, looking at the front, a colored circle in front of the figure	Sitting in a cross-legged position, looking at the front, a circle in front of the figure, a pillow at the back of the head, distorted face
<b>Saturn</b>	Seated facing the right side, holding two ax-like weapon in both hands and a colored circle behind the head	Seating on a chair facing the right side, a long con or trumpet-like cap, long sickle in the left hand holding on shoulder
<b>Jupiter</b>	Seating position, facing right side, book-like object in left hand, right hand raised and colored circle behind the head.	An old man in a Persian dress and face, sitting facing the right side, two tools in both hands, a pillow behind his head.

**2-4. Color Transformation:** In this kind of transformation, the emphasis is on the color changes of the two figures and their components compared to each other. There are significant changes in the coloring of the figures compared to the hypotext. In the first figure, the enamel bowl, which is known as hypotext here, generally the colors show dark and rough tonalities, while in the second figure, the book «Ajaib al-Makhluqat» (copy of the Bavarian Library), as a hypertext, the artist has used more transparent and brighter colors for planets and related components compared to the hypotext. Light blue has been used instead of dark blue in the hypotext and light brown color instead of dark maroon color. Also, instead of golden color, light and yellow colors have been used (Table 10).

**Table 10.** Color transformation in the two case studies. Source: Authors.

Planet	Color Transposition	
	Hypotext	Hypertext
<b>Sun</b>	Golden, maroon, blue	Ocher, blue, and red
<b>Mars</b>	Golden, brown, and maroon	Ocher, blue, and red
<b>Mercury</b>	Golden, maroon, and blue	Ocher, pink, and green
<b>Venus</b>	Golden, maroon, brown and blue	Ocher, orange, and blue
<b>Moon</b>	Golden, maroon, brown and blue	Ocher, pink, orange, and blue
<b>Saturn</b>	Golden, maroon, brown and blue	Ocher, orange, and blue
<b>Jupiter</b>	Golden, maroon, brown and blue	Ocher, orange, and blue

## Conclusion

Art in Persian territory has always been a constant current from the beginning to the present time and has followed an evolutionary process; artists in all historical times have been fully aware of the past art and struggled to develop and prosper the art of their time to its highest level by taking advantage of the past experiences. Considering it, in this research, an attempt has been made to study and analyze the inspiration for the design and drawing of the seven planets in the book «Ajaib al-Makhluqat» (the copy of Bavarian Library) from an enamel bowl in the Seljuk era, based on the hypertextuality of Gerard Genette. In response to the first question to know which type of hypertextuality is more followed under the influence of the planets figure in the book «Ajaib al-Makhluqat» inspired by the enamel bowl in the Seljuk era, the following can be concluded: According to the literature review of the research, it can be concluded that the planets design in the second figure, «Ajaib al-Makhluqat» (the copy of Bavarian Library) as the hypertext here, shows kind of transformation or changes compared to the hypotext. Moreover, considering the functionality, it is placed in the serious category; as a result, according to hypertextuality of Gerard Genette, it is categorized as textual transposition or a transformation with a serious function. In response to the second question, to know what changes have been made in the design of the planets in this influencing process, it can be mentioned that there are four examples of variation and transformation: (gender, form, composition, and color). Although the artist was influenced by a hypotext of his time in creating the illustrations and motifs of the book «Ajaib al-Makhluqat», but he did not limit himself to repetition and imitation and insisted the artist used his creativity. In other words, the artist of the book «Ajaib al-Makhluqat» has not imitatively followed the artists of his time and has gone beyond his hypotext, as he is more influenced by the Persian traditional painting and his society. In the process of creating hypertext and the influence of the author of the book "Ajaib al-Makhluqat" from the artist of the enamel bowl, due to the difference in the cultural, artistic, and social background, the hypertext has shown a kind of transformation. The changes in the figures of the seven planets of «Ajaib al-Makhluqat» in addition to creating a new and independent work, have also created a hypertext related to the art and society of its time in which the work has been created. In some parts of the paintings, the artist refers to the cultural-artistic and social characteristics of the Persian society, for example, using Iranian common clothes in Abbasid miniatures, the fluid and dynamic lines around the figures, the creation of wrinkles in the clothes of the figures, and the design of the figures according to Persian appearances all refer to the aesthetic rules of Iranian painting. Finally, it can be concluded that although the painter of the seven planets in the target book was influenced by work with Turkish Seljuk cultural-artistic characteristics, he created an independent novel work by applying thoughtful adaptations in which the culture and tradition of Iranian/Persian techniques of painting have been continued.

## Author Contributions

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**Conflict of Interest**

The author (s) declare that there are no potential conflicts of interest related to this research, in writing, and publication of this article

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