

Graphism of Tabriz Doctrine 2 (Writing and Layout of Shahnameh 948 AH/1540 AD): Extracted from the Dissertation

Ashrafosadat Mousavi Lar and Elaheh Moravej
Department of Art, University of Al-Zahra, Tehran, Iran

Abstract: Beginning of 10th century coincides with the formation of the Safavid Dynasty. Founder of Safavid Dynasty was the first Shah Ismail with an artistic personality. Tabriz doctrine 2 was supported by Safavid government and formed on the basis of Turkmen and Herat arts. Support from art and artists in this period led to creation of art workshops both inside and outside the court and writing, painting and bookbinding prevailed in community as a cultural vocation. Whether there is significant relationship between the book layout graphism of Tabriz doctrine 2 and contemporary graphic principles? Current study is carried out by graphic approach and aims to introduce writing and page layout of a version of Shahnameh (948 AH/1540 AD) related to Safavid dynasty and Tabriz doctrine 2 and with descriptive-analytical method. Adaptation of book layout principles of that period with contemporary page layout principles show that common book layout graphism of Tabriz doctrine 2 is relatively similar to the contemporary page layout. Research findings indicate strict regard to page layout principles in that period and also its similar function in temporary art. Based on results, applied page layout principles of Tabriz doctrine 2 is often used now and has been defined in new graphic software.

Key words: Shahnameh Ferdowsi, Safavid Dynasty, writing, contemporary graphism, Tabriz doctrine 2, software

INTRODUCTION

Iranian manuscript designing is comprised of collection of miniature, calligraphy, illumination and bookbinding which all together brought the book layout art of Tabriz doctrine 2 to the climax in the beginning of the Safavid dynasty and especially in the early tenth century AH (16th century AD). Relationship and interaction of different art branches and coordination between literary content and artistic form imply the high knowledge and executive skills of artists in that period. Remarkable growth of calligraphy and painting before the Safavid dynasty represents attention of rulers to the book layout. All kinds of art were used together by artists to produce a book in art workshops. These workshops were active in art centers including Shiraz, Mashhad, Tabriz (Tabriz doctrine 2) before Timurid dynasty and created new ways of page layout and painting in order to increase the production of manuscripts and for trading (O’Kane, 2009). There are many books from Safavid dynasty which were produced outside the court. Among them Shahnameh has a great role. Unique features of this epic book have been always considered by rulers and kings. It should be noted that, since, Timurid Dynasty, painters have produced manuscripts out of court, especially, in Shiraz and many of them are maintained in museums and libraries and have not been studied and evaluated

adequately. In this study, page layout and book layout of one of the Shahnameh books which are existing in Iran libraries is studied. This version of Shahname is related to 948 AH (= 1540 AD) and coincides with the reign of King Tahmaseb Safavid. It is now kept in National Library of Tehran with the number of 10982-5 which has 93 paintings, 4 frontispieces and 3 colophons. In researches which have already been conducted are about his toriography issues or painting of exquisite and courtier versions. Page layout of out of court customized versions has been less studied. Although, there has not been any comprehensive research done about the considered Shahnameh, some papers about other versions of Shahnameh can be cited. The study of Mahnaz Shayestefar titled “paintings of Shahnameh manuscripts related to 959 AH/1551 AD with emphasis on heroic contents were published in MaheHonar book, 2010, in which combat events were analyzed. Abdol Majid published an article titled “explanation of innovative aspects and image creativity in the Qasemi’ Shahnameh” in Negareh journal from his PhD thesis, in which he has studied page layout and configuration of Qasemi’ Shahnameh paintings. In the current study, book layout graphism by Shahnameh (947 AH) is investigated and compared with the contemporary page layout principles.

TABRIZ DOCTRINE 2 IN SAFAVID DYNASTY AND BOOK LAYOUT AT THAT TIME

After failure of the Aghkoyunlular by King Ismael in 906 AH/1498 AD, Tabriz was selected as the capital and he gained the authority of the Royal Library of Aghkoyunlular. Artists of the library also came to serve him. Sultan Mohammad who was one of the leading artists of the Tabriz doctrine, came to serve Shah Ismael and became as one of the solid foundations of Tabriz doctrine in the Safavid period. King Ismael was interested in art and calligraphy became widespread which was noticed by religious leaders as an Islamic art. King Ismael's son, Tahmaseb Mirza became Herat ruler who started to learn painting and calligraphy by prominent masters. In addition to being professional in painting he had skills in writing thuluth, Naskh (script) and Nastalygh. He wrote a version of Arefi's couplet-poems of Orb and Polo (Guy and chogan). He began to reign in 928 AH/1915 AD and then transferred many artists to the Tabriz. In 928 AH/1915 AD chose King Ismael Behzad as the Head of the Royal Library. Shah Tahmaseb have always supported these arts due to his infatuation in painting and calligraphy and employed many artists from Herat and Turkmen doctrines in book layout and thus Tabriz works of Safavid period were emerged. Glorious works such as Tahmasebi Shahnameh and Nezami Khamse were created in this school. Prominent calligraphers, painters, table and cover designers were employed in Royal workshop. King Tahmaseb shifted the capital from Tabriz to Qazvin in 955 AH/1552 AD and Tabriz doctrine also was transferred to the Qazvin. Gradually, Shah Ismael decreased his support of artists and caused dispersion of Qazvin and Tabriz' artists and then Tabriz doctrine faded (Azhand, 2005). At the beginning of Tabriz doctrine, pages layout and designs used in books were under the influence of Herat artists and by investigation of available versions from King Ismael and Tahmaseb period it can be concluded that frontispieces of this period is too much similar to those of Herat (Rahnavard, 2007).

Shahnameh introduction 948 AH/1540 AD, Tabriz doctrine 2: Shahnameh, 948 AH/1540 AD, No. 5-10982, currently is kept in National Library of Tehran. While this version has 3 colophons, its scribe name wasn't mentioned in anyone and the scribe is unknown. Studied Shahname has 662 pages with 19×31 cm size, in 4 columns of 23 rows and is written in black ink and the size of rows is 12 cm. topics are mainly in 1 or 2 or more rows and surrounded by golden rectangles in some cases there are more than one topic in a page, topics are in red and with the same font as text. Lyrics are just written in black

ink. Cover of this version is composed of 2 pieces of cardboard with the black surface with bergamot (medallion) and golden semi bergamot design by burned and decorated with floral motifs related to Safavid period. Some pages of this manuscript were missed and there are some pages which have been repaired. Its first page was adorned with epigraph and religion inscription and carbuncled with gold and lapis lazuli. This Shahnameh has 93 paintings from ancient Persia stories and legends and combat scenes were often depicted. Drawings are simple and without details. Most numbers of them are rectangle with the same width as the book and with a length of more than half of the page. There is no drawing which covers the entire page.

Book layout and page layout history: Iranians have long been worked in different image and decoration areas such as book layout and painting on the wall for a long time. Illustration is originated from Sassanid and Mani periods (Eu, 2010) and after that, some versions from early Muslim periods are available which are without decoration. Since, Book layout in Iran has a very deep connection with the literature, most prominent book layout samples can be found in Shahnameh versions, the Khamseh or "Quintet" of Nizami, Jami's Haft Awrang and so. The meaning of writing is beyond the calligraphy and painting and is a set of arts including calligraphy, gilding, table drawing, paint, paper, binding, cover, etc., in this study, layout of Shahnameh is studied.

Cover design: Book binding or cover design is one of the important techniques of book layout which has grown along with other arts during the painting history. The first element which is studied and observed in book layout of each version is its cover. Because, it has remarkable colors, reliefs and designs in addition to protection of the book from tearing, getting dirty and outwearing. Cover designers in Islamic period have made covers from leather, fabric, wood, paper and paperboard which have always been considered. The Shannameh (948 AH/1540 AD) volume made of paperboard and red calfskin leather. A bergamot and a half-bergamot were engraved on its cover. Covers are named based on their construction and preparation method. So that, they can be categorized into 4 types: burned and mosaic cover and lacquered cover. In the 10th AH/16 AD century, a new approach was created to design book covers. It was based on using steel and copper seals, so that, a drawing related to the nature was engraved on a large half sheet. Drawings were usually symmetrical and figured. Leather was covered with golden color and then a hot seal sheet was placed on it and was pressed (Dehqani, 2007).

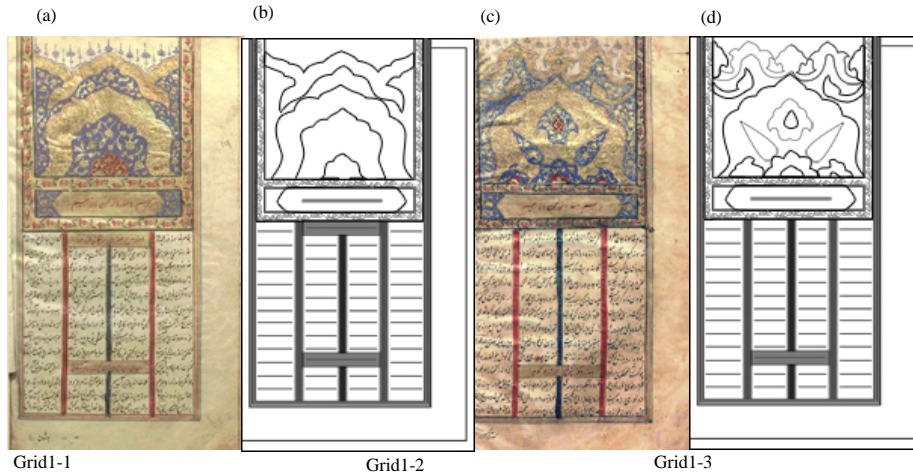


Fig. 1: Adaptation of 3 representative samples of Shahnameh (948 AH/1540 AD) Grids National Library, No. 5-1982 (Researchers reference)

Paper: From writer's point of view, paper is one of the four pillars of manuscripts layout. Other pillars are ink, pencil and cover. The oldest paper was papyrus which emerged in the early 2nd century AH in Egypt. Afterward it was replaced by the Chinese paper. Until the advent of paper, animalhides also were used in writing. In the ancient Islamic manuscripts, according to writing position and available papers and type of the text precious or regular-different kinds of paper were used. Among most popular papers in Islamic period, parchent, Bokhara, Bagdad Isfahan, cashmere, Frankish and brown papers can be mentioned (2011). Shannameh (948 AH/1540 AD) layout is from cashmere.

Cashmere paper: It is made of fine cashmere is Isfahan which is delicate with good quality, high strength, regular and same tissues and pistachio green color. Many court versions had been written on these papers in Safavid and Qajar period with calligraphy and decorations (Afshar, 2011).

Gridding: One of the main elements in page layout was using regular artistic grids in order to organize the page including image and text. These vertical and horizontal nets which today are known as grids were called row layout (Mastar) traditionally. The distance between lines and text and inscriptions intervals in the page were calculated using grids. This specific network which was made based on a square and pixilation of page can be shown by dividing specific surfaces of image into certain parts. In the past, gridding was done on a cardboard with the same size as a book which was supposed to be written in calligraphic style. Some holes were made at the beginning and end of each row and then a special string was passed through them. Calligrapher put this cardboard

under the sheet which was supposed to be written and knock on the row with pressure to carve the string trace on the paper. Next, words can be written by the effects that string left on the page according to the general anticipated design. There are 4 seasons with 3 colophons in this version. First season begins with frontispiece and has 34 pictures and ends with a colophon which was written as a downward triangle. Second season begins with a frontispiece is comprised of 23 pictures and ends to a triangle colophon. There are 30 pictures in the third season and no colophon. Beginning of the season 4 is with frontispiece has 6 pictures and a colophon which indicates the end of the version. In the 948 AH/1540 AD Shahnameh, gridding were used as all other versions. Because, all pages are equal in size and include a table with 8 colored lines, rows are 12 cm in length and their intervals are 1.5 cm. all pictures have red and blue strips between text columns on which a simple figure (pattern) was drawn. Writer of this version considered 3 grids for texts which the first one is simple and is called main grid of the book (or in modern parlance master page). Most pages of this Shahnameh were written in this way Fig. 1a, b is cross-shaped and Fig. 1 are cross texts as lozenge. In some cases there are 2 grids were integrated with different combinations. Today, there are rules for texts and pictures composition same as row layout (mastar) that is called grid in which rows number and length, row intervals, required margin for print, pictures position, topics and columns spacing are all determined. Today, grid is designed in graphic soft wares (for example illustrator). In fact, modern soft wares substitute the cardboard sheets between text and picture and other components of the page which determine the total required harmony in the book.

Table 1: Compare of conventional and modern widths of books (reference: writers)

Traditional name of width	Size (cm)	Equivalent name in the modern graphic	Size (cm)
Small Vaziri	14×22	Raqee	14×21 cm
Vaziri	16×24	Vaziri	16.8×21
Large Vaziri	20×30	Rahli	21×28
Soltani	30×40	-	-
Small Rahli	25×40	Large Rahli	24
Rahli	30×50	-	-
Large Rahli	-	35×60	-

Springing (Margin): Many books were decorated with tables and there are spaces between main table and other tables and usually the distance between that 2 lines were filled by gilt, through this a margin was made ready for calligraphy, illumination, painting and extra bits or calligraphy practices were written here. Margin lines were just drawn in 3 sides of the page and turning side is without margin (Amiri, 1984). Now a days, springing is replaced by margin, means marginal edge. The 4 distances around the page means space between written text and turning, top, side and bottom of the page are not same in size and common standard sizes are in proportion to the numbers of 6, 4, 3 and 2, respectively which results from golden ratio. And space between text and the turning must be always less than other 3 margins, since, it is only distance which repeats in 2 front pages side by side. Because, 2 front points create a visual overview emotionally, required space between the 2 halves is better to be minimal (Lapoto, 2006: 20). In the studied version of Shahnameh margin is 29.5×17.5 and distance of margin from paper edge is 1.5 cm and their distance from the table is 2.5 cm from 3 sides which most of them are related to pages with paintings and in some pages margin were not completed (Table 1).

Table: Table refers to a number of direct and geometric lines surrounding the four sides of the text. Paintings and manuscripts are drawn to separate them (Mile, 1994). Table is composed of colored stripes and empty spaces with black borders. At first tables were simple but since, 8th century AH/14th century AD found artistic aspect, so both the number of lines and colors became more diverse (Ayatollahi and Maleki, 2009). Several lines with different width were drawn in pages of this version which first there are 2 narrow black lines and their inside was filled by Azure and then 2 narrow black lines were drawn and filled by gilt and a relative wide red line is observed after that, there is a relative wide blue line at the end. So that, it can be mentioned that tables of this version have 8 lines. It seems that some pages were missed and some were repaired. Gridding and tabulation of this version is not good in quality and precision. Because, most lines of tables were often cracked and irregular and colors were

overlapping and in some cases paintings were out of margin. It seems that this version was uncompleted since painting and page layout has been discontinued in some pages.

Paper size: In librarianship culture in Iran, the size of book was noted in addition to physical characteristics at the back of some versions which called “width”. Nomination of book width became common since, 4th century (Afshar, 2011). The most important and more applied book widths are: small Vaziri 14×22 cm, Vaziri 16×24 cm, large Vaziri 20 cm, Soltani 30×40 cm, small Rahli 25×40 cm, Rahli 30×50 cm, large Rahli 35×60 cm (Bayani, 2003). The studied version is 19×31 cm in width which is close to large Vaziri. Today, there are some common widths based on common papers or certain multiples of standard papers available on the market.

Inscription and font size: Font size was determined based on gridding in traditional method. Scribe craved the pen and nib determined the font size. Type of pen (font) was selected in such a way that could be compatible with spacing between rows and “font could be suitable for area which was assigned to writing and prevent words from overlapping”. Most books were written by Nastaliq font in Safavid and Timurid period (Hill, 2006). Common font in contemporary page layout various kinds of Naskh fonts and in typesetting soft 12-14 font sizes are chosen. This version same as the most versions of Safavid period was written in Nastaliq and black ink and in 4 columns. In inscriptions, text is red Nastaliq. After pages review it seems that the pen size was not appropriate for defined space for calligraphy and in many texts words were overlapped. This can be due to current attitude and difference between visual form and graphism of modern automatic type setting Naskh fonts with calligraphy graphism of Nastaliq font that an important part of its beauty is because of combination of coordinate word elongations but when the same font is used for cross writing (Chalipa), better rows are obtained for configuration.

There have been inscriptions from ancient times, even before the Achaemenid Empire which shows the bond between text and designation and in many historical places where thematic narration entered to the text and was written on the stone and the written subject was depicted alongside them. At that time, painting and inscription had close relationship, it seems that there was no certain breakdown between the two elements and fonts of inscription and text were different in most versions and usually inscription has been written in bold red. Today,

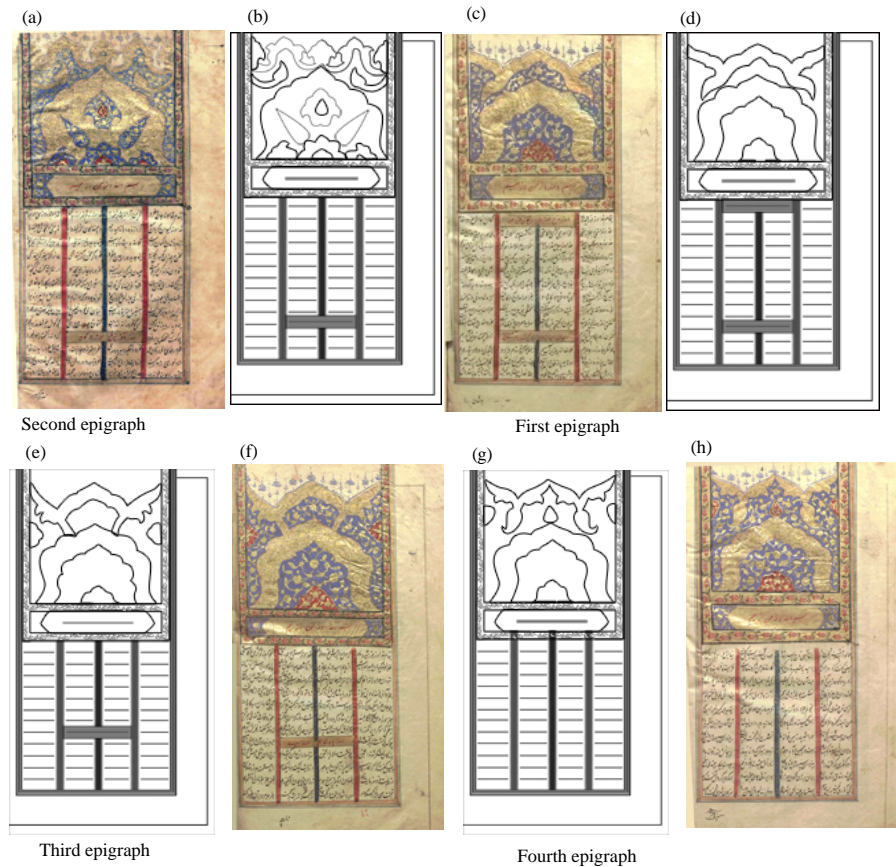


Fig. 2: Analytical comparison of epigraphs related to the version 948 AH/1540 AD of Shahnameh (National Library of Tehran, No. 5-1982)

caption or more commonly head line or title are used instead of inscription which refer to the main captions of the text and used to draw reader's attention and the font is larger. In this version inscriptions are usually in two columns and one or two rows which are surrounded by golden rectangle with two thin black lines around it. First, second and fourth epigraphs have inside text inscriptions and there are inscriptions in 8 painted pages and all are located at the top of these pages.

Catchword: In the ancient book layout a method called writing catchword was used to put pages in tandem arrangement after writing completion and to fix pages. On this basis that the first word of the next page was written in the bottom right corner of study to arrange pages when binding. In fact, catchword role is both to show page numbers and to establish issue succession. In current books, page number is used instead of catchword which is in the margin in front of the page turning but its place is variable according to the subject and designer style and

usually has been defined in graphic software as default and the software arranges pages based on page number automatically.

Epigraph: In many manuscripts, the first page or two first pages has been decorated by epigraph which comprised of precise geometric designs or beautiful decorative flowers and leaves with different colors and gold. Sometimes an ornate inscription was added under the main epigraph which was attached to it and "in the name of god" or "book title" was written in the text of the inscription. Epigraphs of the studied Shahnameh are illuminated.

ILLUMINATED MANUSCRIPTS (ILLUMINATION)

Illumination means gilding on the books and sheets or in other words, when an artist attempts to decorate book pages or scrapbooks using gold and physical and emotional colors, this art is called illumination which has been seen in book layout since the beginning of the Islam. Safavid style in writing epigraphs began in the late 9th

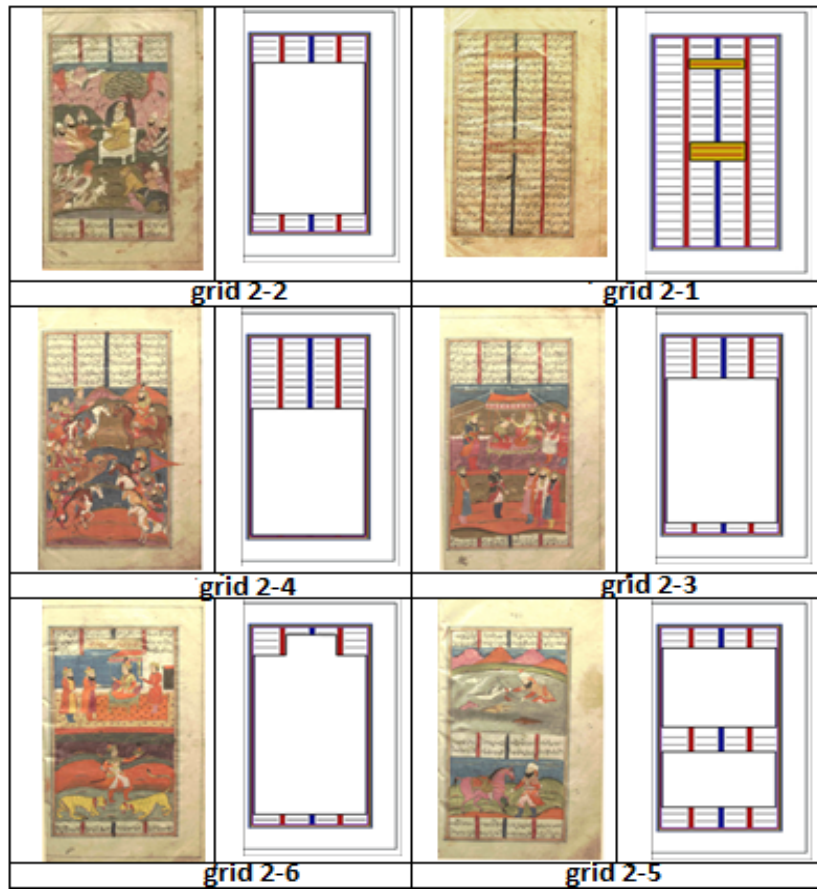






Fig. 3: Grids of the Shahnameh 948 H/1540 AD

century AH/15th century AD and reached to climax in the mid-10th century AH/16th AD. Safavid Dynasty was very impressed by the Timurid period. Consequently, decorative designs were affected by this period (Zaki, 1984). The style of Timurid epigraphs has even been continued. Although, books of 10th and 11th centuries AH were started with a series of pages decorated with stars, sun, bergamot and pendants and more in navy and yellow. The studied Shahnameh has 4 epigraphs with the same properties with the Timurid period. In the beginning of Safavid, a new type of epigraph has been developed in which the upper rectangle has a half that is called crown in page layout terminology. It was surrounded by a wide table and was connected to the inscription at the bottom (Rahnavard, 2007). This kind of crown matched all illuminated flowers at the margin of exquisite versions and Qurans of Safavid period in Tabriz doctrine 2. There is no illumination at the margin of the studied Shannameh. Now a days as before, separated pages are designed for headings and Arabesque designs are still used in them. This version was divided into 4 seasons or volumes and

there was an epigraph at the beginning of each season. In fact, epigraphs of this version have the role of today's headings.

Similarities and differences of epigraphs: In adjusting the studied Shahnameh epigraphs, it can be seen that every 4 epigraphs have assigned a half of a page to themselves and navy and gold are among main colors used in the pages. So that, navy, gold, red, green, pink and orange backgrounds are the most colors which are seen in the aesthetic designs, respectively. Only 6 colors have been used in these epigraphs. It seems that a separate grid (matar) was drawn to design epigraph, on the grounds that the bottom half of the epigraph box followed the gridding of text and the top half is composed of a crown in the middle and two half-crowns are joined together on the sides and lines between them were filled with golden arabesque patterns on a colorless paper background. There are blue lines at the top part of the crowns which were extended to the top with dedicate and blue patterns vertically. Golden arabesque patterns which

Table 2: Variety of text and image positions in grids of the Shahnameh 948 H/1540 AD, National Tehran Library, No 5-1982

the fourth booklet				the third booklet				the second booklet				the first booklet				the type of grid	result
meet ing coun- cil	myth coun- cil	joy coun- cil	com bat coun- cil	meet ing coun- cil	myth coun- cil	joy coun- cil	com bat coun- cil	meet ing coun- cil	myth coun- cil	joy coun- cil	com bat coun- cil	meet ing coun- cil	myth coun- cil	joy coun- cil	com bat coun- cil		
			1	Δ	3	-	3	5	-	-	10		4	4	10		the most number of using grid 2-2 is in the combat council
3	-	2		4	3	2	2				3	1	1	-	1		the most number of using grid 2-3 is in the myth council
				3	-	1	4				3			1	1		the most number of using grid 2-4 is in the combat council
											2		2				the most number of using grid 2-5 is in the combat and myth council

follow the crowns forms-were drawn under the crownson navy background. There is a full crown under these patterns with golden arabesque patterns. Inside the crown was filled by golden arabesque patterns on navy background and leads to red half bergamot.

All golden arabesque patterns, crowns, half-crowns and half bergamot are in a rectangular box. Pink and orange flowers, with red boarder cleaning and green leaves are between the lines of this box to the top of the box where the paper is cut. There is a blue inscription with golden arabesque patterns under the rectangle and the phrase of "in the name of the god" were written inside the golden box in red Nastaliq font. While a same grid was used for these 4 epigraphs, there are some differences between them. Different designing of connected half crowns at the top of page: different patterns were designed in the first epigraph which matches the pattern of main crown and is different from other epigraphs and includes golden arabesque patterns on colorless background as well as the three other pages. It looks that the artist used a same grid with a bergamot and two half bergamots in three other epigraphs, however, some innovations are seen in this part design. In the second epigraph, bergamot is in line with the first crown and without connection to it. In the third epigraph, bergamot

and half bergamot pattern has little difference with the second epigraph and fourth epigraph is so much similar to the second one but is connected to the main crown (Fig. 2).

The main crown: A same crown (in terms of size and type) was used to design the crown of four epigraphs and golden arabesque patterns were used in all of them. But crown design of the first epigraph is different from others. Patterns were drawn symmetrically and in harmony with crown design inside the main crown of the first epigraph which their inside is navy and decorated with golden arabesque patterns. Abergamot and 3 small red half bergamots can be seen inside the patterns. There are little differences in the other 3 epigraphs and crowns were drawn completely similar and without differences in grids. Their insides were filled with navy color and golden patterns. The small half red bergamots inside the epigraphs can be seen in all of them. There are same half red bergamots in other parts of the epigraphs except the second epigraph. By investigation of epigraphs it can be concluded that some innovations were applied to the main grid of epigraphs in order to distinct the first epigraph which text starts with and is more important.

POSITION OF TEXT AND PICTURE IN PAGE LAYOUT OF SHAHNAMEH 948 AH/1540 AD ANALYSIS

In traditional page layout, vertical and horizontal grids were first drawn. Next, painter created his desirable combination based on remaining space. " at the beginning of daily work calligrapher was aware of the determined painting for that day and painter also was drawing pictures which their positions were already determined, since, calligrapher was always ahead (Hillen Brand, 2006). In the contemporary page layout, grids of picture books are mainly designed as two facing pages, since there are more practice fields for designing infacing pages and more artistic creativity space. Then, a same grid is designed to combine picture and text in all pages of a book. In examining and analyzing of this Shahnameh it can be seen that 6 grids were designed for painted pages. This is an important point in the modern and traditional page layout (Fig. 3). In literary and poetry books, position of text and pictures and page layout method are determined based on the number of pictures and text size. Typography and illustration establish their own relationships through page layout system. In fact, a rational, meaningful and geometric thought determines the position of the text and picture. Observed variety in grids of the studied Shahnameh creates a visual diversity for audience while maintaining the logical order through decreased and increased levels of picture and text in addition to keeping the original format.

The purpose is to prevent page layout from monotony and fatigue caused by the plurality of the text. Respect to diversity looks critical both in traditional and modern page layouts. Master page is similar to the grid (2-1) or main grid of Shahnameh 948AH. This applied similarity is observed in traditional and modern page layout. In grid (2-2) in which most pagers was assigned to painting, picture occupied two-thirds of the page table that is equivalent to 4 columns and 18 rows. So that, there are 3 lines text at the top and 3 lines text at the bottom of most pages. Creation of visual connection between text and picture results from common logic of modern and traditional page layout (Fig. 2). In Grid (2-3) almost double area of page is dedicated to picture in which 4 columns and 18 rows can be placed. So, that in most pages, 5 lines of text are at the top and 1 line at the bottom of page. In grid (2-4), picture frame is smaller than frames of (2-1 and 2-3) and allocates about half of the page Table 4 columns and 15 rows can be replaced by them. Thus 6 lines text can be written at the top of page and picture is at the bottom. Grid (2-5) has two picture frames and one of them is larger and each frame is equivalent to one-fourth

of the page area. 4 columns and 7 and 9 rows can be replaced with these frames. Therefore, there is 2 lines text at the top, middle and bottom of the most pages. Grid (2-6) includes a picture which covers the most of the page area. Width and length of the picture is equivalent to 4 columns and 19 rows. So that, there is 1 line text at the top and 1 line at the bottom of each page (Table 2).

In an analytical and statistical introduction it was observed that the non-court and illustrated 948 AH/1940 AD Shahnameh has 93 paintings including 34, 23, 30 and 6 paintings in the 1th-4th booklets. In all of them, gridding was used to establish logic connection between text and picture and one main grid and 5 subsidiary grids were used to make the connection.

Table 1 show that Vaziri and Rahli size are common terms in traditional and contemporary page layout. The same principles and terms are used in traditional and modern approaches. According to Table 2 it can be realized that in all painting pages of the studied Shahnameh, 6 kinds of grids were used in 24 combat councils, 8 joy councils, 7 myths councils and 19 meeting councils.

CONCLUSION

The grid (2-1) is considered as the main grid in the contemporary graphic and the other 5 variable grids follows the grid (2-1) in terms of main components such as number of columns (4 columns), column size and number of rows (23 rows). In the subsidiary grids (2-2, 2-3, 2-4, 2-5 and 2-6), methods of the text and picture combination, reducing the number of rows and replacing with pictures and the same graphic measures have been observed in traditional and modern page layout. Comparative results indicate that there is a significant relationship between page layout graphism of Tabriz doctrine 2 and principles of the contemporary page layout. According to this results common non-court page layout graphism of Tabriz doctrine 2 has relative similarity with the contemporary page layout principles. Exact page layout principles observances at that period and their similar artistic functions in the contemporary era imply that page layout principles of Tabriz school 2 are still used and new graphic soft wares are designed based on logical order.

REFERENCES

- Afshar, I., 2011. Paper in the Iranian Culture and Life. The Research Center of Written Heritage, Tehran, Iran,.
- Amiri, 1984. Page Layout Review and an Introduction of Traditional Manuscripts. Fine Arts College, Tehran, Iran,.

- Ayatolahi, H. and M.M. Nejad, 2009. Illumination in Tahmasebi Shahnameh. The Art Academy, Tehran, Iran.
- Azhand, Y., 2005. Tabriz Painting Doctrine. Academy of Arts Press, Tehran, Iran.
- Dehqani, A., 2007. Page Layout Customs in the Safavid Dynasty. Fine Art College, Tehran, Iran.
- Eu, P., 2010. Painting Principles and Page Layout. The Art Academy, Tehran, Iran.
- Hill, B.R., 2006. Visual Language of the Shahnameh. Art Academy, Tehran, Iran.
- Mile, H.N., 1994. Book Layout in the Islamic Civilization. Astan Quds Razavi Press, Tehran, Iran.
- Rahnavard, Z., 2007. Iran Art History, Islamic Period of Book Layout. Open Humanities Press Company, London, England.
- Zaki, M.H., 1984. Iran Industries History After Islam. Khial Publication, Tehran, Iran.