A Comparative Visual Analysis of Nineteenth-Century Iranian Portrait Photography and Persian Painting

Pérez González, C.M. del

4. ARRANGEMENT OF SPACE

The function of "space" in Persian traditional painting, greatly influenced by Iranian mystic culture, may have lent itself to nineteenth-century Iranian photography by a large extend. I will devote this chapter to explore the understanding of space in Persian painting and the influence that this may have had on nineteenth-century Iranian photography. I will analyze the formal use of space both in Persian miniature painting and photography. The main research issues related to the arrangement of the space in Persian miniature painting are topics such as the non-linear perspective approach or the isometrical perspective (also called parallel perspective) to project a three-dimensional space onto a two-dimensional picture plane; the existence of multiple centres of attention (*diffuse* composition); the grid layout structure; and the vertical composition/vertical perspective. I will introduce the kinds of compositions that can be defined on the basis of the arrangement of the elements in the pictorial or photographic space, and explore the ones that are peculiar to nineteenth-century Iranian photography as influenced by the Persian painting tradition.

4.1. Spatial characteristics of Persian miniature painting

Space is perceived, understood, represented and inhabited in different ways in different cultures. This observation follows the same line of thought presented in the previous chapters of my book, and defends that artistic representation and composition is culture conditioned.

As Helen Westgeest states in her book *Zen in the fifties. Interaction in Art Between East and West,* Kitaro Nishida (1870-1945)[256] described the traditional Japanese way of suggesting space as follows: "The space in art from the Far East is not the space facing the self, but the space in which the self is situated".[257] Further, she remarks that the Japanese artist Hajime Shimoyama confirmed this in an interview with the comment that space for Western artists exists primarily in front of him, whereas for the Japanese artist space is surrounds him.[258] This difference, states Westgeest, would seem to be reflected in the terms *observation* with respect to Western artists, and *participation* with respect to Japanese artists. She remarks also that, in the words of the French scholar of cultural geography Augustin Berque, the opposition between subject and object, between self and non-self, appears only at a certain level, while at another level both terms merge. The surroundings are, in his opinion even more important than the subject, a phenomenon, which he calls *contextualism.* He contrasts this with the Western approach, which he defines as: "This culture less easily assimilates itself to nature because, fundamentally, the subject's spontaneous self-definition, or particularity, acts in opposition to the definition, or naturalness, of its environment".[259] Interestingly, the analysis that I will present here points to the fact that Iranians also perceive space in a more active way, meaning here, that individuals become part of the whole picture, the whole surrounding space. I will come back to this later while analyzing photographs. Another interesting appreciation that is

[256] Prominent Japanese philosopher, founder of what has been called the Kyoto School of Philosophy.
[257] Westgeest 1998, p. 20.
[258] Westgeest 1998, p. 25, note 48.
[259] Westgeest 1998, p. 25, note 49.

relevant for this research, is that of the French scholar Bernard Hourcade about the understanding and meaning of mountains (and space in general) for Iranian people. He stated in a conference held in Paris in 2006 that Iranians tend to feel that they are part of and somehow belong to the space that surrounds them.[260] This is interesting since it agrees with the way the Iranian people are present in nineteenth-century photographs of big groups of people and of buildings: people invade the whole structure of the building as we shall see later in this chapter, becoming part of the structure.

It is quite obvious that when we are looking at paintings and photographs made by artists from different cultures, we realize that there is a different understanding of space, a different treatment of photographic or pictorial space. If we take a representative series of Persian book paintings from a particular school and observe them with analytical attention, then it is straightforward to conclude that they obey certain conventions governing the depiction of space. The art of Persian miniature painting, so delicate and yet so vigorous, is an interesting historical manifestation. It is impossible to specify characteristics, which are applicable to all Persian miniature paintings, since there are many different schools with their own peculiarities. However, there are a number of recurring aspects regarding the understanding of the space. To be sure, many of these conventions differ greatly from those followed in Western painting, especially after the Italian Renaissance. In Western works since the Renaissance, a clear composition with one centre of attention dominates, whereas in Oriental traditional miniature paintings (Indian, Iranian, Chinese, etc.) we clearly find different centres of attention. That is the first difference that we can notice and that is related to the grid structure layout of the Oriental miniatures.

The second topic that I will take into consideration is the isometric perspective used in Persian miniature paintings (inherited most probably from the Chinese) in contrast to Western linear perspective. The latter issue deals with vertical composition and vertical perspective. These spatial elements can be actually grouped in two clusters: the first one being concerned with the fragmentation of the space into units (diffuse composition/grid layout structure) and the second one being concerned with methods of suggesting perspective. I will devote some time to each one of these three sub-sections.

Diffuse and scanned compositions / grid layout structure

The French art historian Lucien Rudrauf has made a systematic study of compositional patterns. This study is sixty years old, but I find it still applicable as far as the definitions are concerned. He distinguishes two families of plastic composition: *diffuse* and *scanned.* However, I do not quite agree with his idea that the scanned composition is more interesting (or developed) from an aesthetic point of view. He calls that type of composition *diffuse* which, without being unrhythmic, does not follow any hierarchical principle in the distribution of its elements. In Rudrauf's words, compositions of this kind are often made of a great number of details, none of which is marked with a predominant accent. The eye is not guided to go from one object to another. Attention scatters itself without hindrance over all parts of the

[260] I attended this conference in the Institute of History in Paris in June 2006, but the paper was not published, so I can only recall his words from the conference.

plane, with nothing to lead it imperiously back to the centre of radiation. Such pictures can be freely cut up into sections capable of having an independent life. Diffuse compositions ignore, intentionally or not, the effect of lighting which produces accents and contrasts incompatible with its nature. These kinds of compositions are often, if not always, freed from the laws of perspective (of linear perspective, as I emphasize).[261]

The Persian miniature, as we shall see later in this chapter, offers typical examples of such diffuse composition. In Occidental art this is an exceptional phenomenon, most often encountered in earlier epochs, before the Italian Renaissance. But it does not disappear in the more evolved stage of spatial realism. The Dutch painters Jerome Bosch (1453-1516) and Pieter Bruegel the Elder (1525-1569) prefered it. In the words of Rudrauf, its theoretical interest lies, in part, in the position of its essential characteristics in those of the other large class of plastic compositions: scanned.[262] Rudrauf calls that type of composition *scanned* which spreads out before our eyes according to a spatial rhythm which is strongly hierarchical, allowing principal and secondary accents, marked with variable strength but always clearly perceptible. In sum, there are two different kinds of composition, diffuse and scanned, the first being relevant for my study since it is the one that is present in Persian miniature painting and also, as I shall show with clear examples, used in nineteenth-century Iranian photography. Both mediums display a composition that presents multiple centres of attention.

In an interview with Westgeest[263], we viewed some Persian miniature paintings and discussed the arrangement of the space in Persian miniatures and its possible influence on nineteenth century Iranian photographs. She remarked on the resemblance of the formal structure of the miniatures and that of the *grid* that became popular at the beginning of the twentieth century in European art. The multiple centres of attention characteristic of Persian miniatures, are supported or framed by a structure that resembles the grid layout structure, this late concept being a Western contemporary concept. I will briefly introduce this concept to further analyze it in Persian miniatures.

In the early part of the last century there began to appear in France and shortly after in Russia and Holland a structure that has remained emblematic of the modernist ambition within the visual arts ever since. As art critic Rosalind Krauss states, 'surfacing the pre-War cubist painting and subsequently becoming even more stringent and manifest, the grid announces, among other things, modern art's will to silence its hostility to literature, to narrative, to discourse'.[264] Krauss continues that there are two ways in which the grid functions to declare the modernity of modern art. 'One is spatial; the other is temporal. In the spatial sense, the grid states the absolute autonomy of the realm of art. Flattened, geometricized, ordered, it is anti-natural, anti-mimetic, anti-real. It is what art looks like when it turns its back on nature. In the flatness that results from its coordinates, the grid is the means of crowding out the dimensions of the real and replacing them with the lateral spread of a single surface.

[261] Rudrauf 1949, p. 329.
[262] Rudrauf 1949, p. 329.
[263] In Leiden, September 2008. I am very grateful to Helen Westgeest for her ideas and reading of the photographs and paintings selected for this chapter, especially regarding the topic of axonometry/isometrical perspective and grid structure layout.
[264] Krauss 1979, p. 51.

In the over-all regularity of its organization, it is the result not of imitation, but of aesthetic decree. Insofar as its order is that of pure relationship, the grid is a way of abrogating the claims of natural objects to have an order particular to themselves; the relationships in the aesthetic field are shown by the grid to be *sui generis* and, with respect to natural objects, to be both prior and final. The grid declares the space of art to be at once autonomous and autotelic. In the temporal dimension, the grid is an emblem of modernity by just being that: the form that is ubiquitous in the art of our century, while appearing nowhere at all, in the art of the last one. In that great set of chain reactions by which modernism was born out of the efforts of the nineteenth-century, one final shift resulted in breaking the chain, Krauss arguments. By "discovering" the grid, Cubism, De Stijl, Mondrian, Malevich, etc., landed in a place that was out of reach of everything that went before. This is to say, they landed in the present, and everything else was declared to be the past'.[265]

Krauss points out that one has to travel a long way back into the history of art to find previous examples of grids. She is referring here to the Western world; one has to go to the fifteenth and sixteenth centuries, to treatises on perspective and to those exquisite studies by Ucello, Leonardo or Dürer, where the perspective lattice is inscribed in the depicted world as the armature of its organization. But perspective studies are not really early instances of grids. Perspective was, after all, regarded as the science of the real for a long period of time, not the mode of withdrawal from it. Perspective was the demonstration of the way reality and its representation could be mapped onto one another, the way the painted image and its real-world referent did in fact relate to one another - the first being a form of knowledge about the second. Everything about the grid opposes that relationship, cuts it off from the very beginning. Unlike perspective, the grid does not map the space of a room or a landscape or a group of figures onto the surface of a painting. Indeed, if it maps anything, it maps the surface of the painting itself.[266]

The grid has played a central role in the development and consolidation of the modern movement in twentieth-century graphic design, according to the graphic designer historian Jack H. Williamson.[267] His article "The grid: History, Use and Meaning", is an interesting analysis of the evolution of the grid in Western art. The article starts with the late medieval grid followed by the Renaissance and Cartesian grids, then the modern grid to finish with the post-modern grid. It is an interesting article that explores the evolution of the grid from a symbolic and formal point of view. In the words of Williamson, for practical purposes, the process may be said to begin with Paul Cézanne's initial move away from Renaissance illusionism toward the abstraction and geometricization of nature and an emphasis on the flat field of the picture plane. This impulse continues through the faceting of the picture plane by synthetic cubism to produce an overall effect, and it peaks when Piet Mondrian (1872-1944) takes up the pictorial grid of synthetic cubism to explore and purify it in virtual isolation from other pictorial elements. Under cubism's influence, Mondrian's naturalistic subject matter became progressively abstracted and continued to employ vertical and horizontal bars, sometimes colored and usually not touching, on a white field. Often these bars appear to continue off the edge of the canvas, suggesting that the field extends infinitely in all directions although the viewer sees only that portion visible within the "window" of the canvas.[268] This is also the sensation that may be

[265] Krauss 1978, p. 3.
[266] Krauss 1978, p. 4.
[267] Williamson 1986, p. 15.
[268] Williamson 1986, p. 22.

produced in the viewer by many Persian miniatures, like the ones that will be analyzed here, since they all share this sense that the scene goes on in all directions and off the page.

The grid shares, only structurally, the non-linear perspective approach of the Persian miniature painting tradition and its characteristics of non-realistic representation of the real world. There is an interesting corpus of literature on the "grid layout" for Persian miniatures, much of it determined by the text, including the module of column and ultimately the pen-stroke. It is interesting to note that these authors do not use the term "grid" to refer to this phenomenon. The grid structure that underlies every miniature is made more obvious through the way in which architecture has been used to divide space into blocks, as we will see with clear examples in the next section. The first attempt to make a rigorous study of the grid layout was done in the 1930s by co-authors Emmy Wellesz and Kurt Blauensteiner, in "Illustrationen zur einer Geschichte Timurs".[269] They achieved interesting conclusions after analyzing a manuscript of the *Zafar-nameh*[270] dated in 953 (1546) and designated as "The Praetorious Codex". The structural base of composition is best understood in the form of a diagram that was done by these two authors after the study (fig. 125). Also the Islamic art historian Grace Dunham Guest did a classical and fundamental study in the 1940s on the use of space and composition of Persian miniatures, "Shiraz Painting in the Sixteenth Century".[271] She undertook a deep analysis of the "inner order" and excellence in composition found in the miniatures of the manuscript volume of the *Khamsa* of Nizami[272] held at the Freer and Sackler Gallery of Art in Washington. She explained that this inner order is based on a mathematically-controlled plotting of the page design as a whole. She states that the complete Shiraz canon of proportion, then, which was evolved in the third decade of the sixteenth century appears in the diagram illustrated in figure 126. As stated by Dunham, greater liberties were taken with the "canon" towards the end of the century when the "inner axes" were sometimes abandoned and the upright composition based on divisions of thirds adopted (figure 127). Another, more recent, fundamental study of the understanding of space in Persian miniature painting was written in the 1970s by the Iranian archaeologist and research director at the CNRS (Paris) Chahryar Adle, "Recherche sur le module at le tracé correcteur dans la miniature orientale".[273] In this study he deeply analyzes, with the rigour of a mathematician, some miniatures and draws a schema of designs for them, like the modular composition and "traces correcteurs" (fig. 128) of the scene of *Shah Abbas attacking the Uzbek army* from *Fotuhat-e Hamayun,* from the school of Shiraz (fig.129). Note the position of the hand of the man right on the centre of the image, the vertical divisions of the page in three vertical identical parts regulated by the length of the text. After this analysis, I

[269] Wellesz 1936.

[270] The *Zafar-nameh* is an epic poem written by the Persian poet Hamdollah Mostowfi (d. 1334). The epic history explores Iranian history from the Arab conquest to the Mongols.

[271] Dunham 1949.

[272] Nizami-ye Ganjavi (1140-1202) is considered the greatest romantic epic poet in Persian literature, who brought a coloquial and realistic style to the Persian epic. His *Khamsa* consisted of 5 poems written in the form of couplets: *Makhzan al-Asrar*(„Treasure of Secrets", 1177); *Khosrov and Shirin* (1180); *Leyla and Majnun* (1188); *Haft Paikar* ("Seven Beuatifull Girls", 1196) and *Iskandar-Nama* (1203, usually divided into the *Sharaf-Nama,* which deals with Iskandar's conquests, and the *Iqbal-Nama,* which deals with his prophetic mission). For general information, see, J.R. Rypka et al. *History of Iranian Literature,* Dordrecht, 1968, pp. 210-219.

[273] Adle 1975.

can state that miniatures do present a grid-layout structure and I wil study later in this chapter if this holds true also for Iranian photography.

Linear perspective versus isometrical projection

Isometry (like linear perspective) is a graphic method to project three-dimensional space on a two-dimensional picture plane. With an isometrical perspective, the length and width of a cube are placed on the horizontal line of projection with an angle of 30 degrees (see fig. 130).

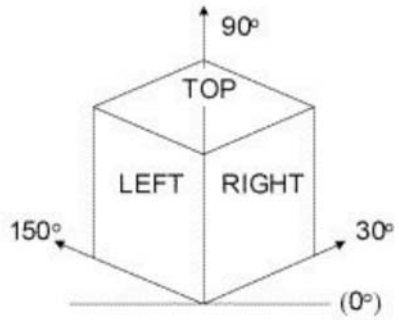
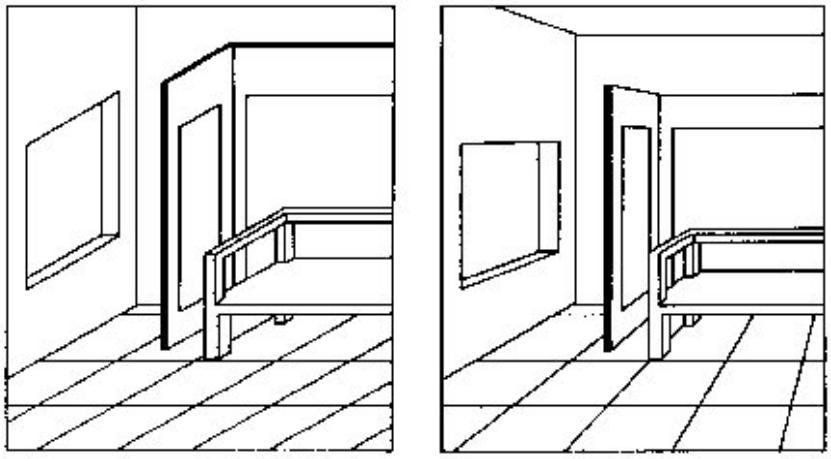


Figure 130

The three dimensions of a cube are projected onto the picture plane without optical distortion. Height, width, and length are true to scale, they are rendered in equal measures. To be more precise, measurements do not change, but optically they distort: there are no 90º corners (squares become rombus). This is different from linear perspective, in which edges that recede from the viewer are drawn shorter to stimulate the optical effect of things looking smaller in the distance. Because things do not get smaller in the distance in isometrical perspective, parallel lines remain parallel. The projection of three-dimensional space onto the two dimensional picture plane is a problem that has roots far back in history. In Europe, the problem was tackled by Renaissance artists such as Filippo Brunelleschi (1377-1446) and Leon Battista Alberti (1404-1472). As stated by the journalist expert in Asia technology Jan Krikke, traditionally European art was based on optical representation.[274] This method of representing linear perspective dominated European art until it was challenged in the twentieth century by the Cubists, who interpreted reality by juxtaposing several viewpoints on a single canvas. The discovery of the vanishing point, which means that the lines of projection meet at an imaginary point at the horizon, resulted in linear perspective: a perspective that is achieved by receding to the vanishing point. Linear perspective tries to achieve visual realism in paintings of three-dimensional environments. But not only in Europe a system to project space on the two-dimensional picture plane was developed. In China, axonometry was developed, which unlike linear perspective is not based on optical principles. In axonometry there

[274] The invention of linear perspective in Western art in the Renaissance was achieved thanks to the discovery of the mathematical priciples that underly the concept of perspective by the Arab polymath Abu Ali Ibn al-Hasan Ibn al-Haitham (965-1040), known in the West as Alhazen. He made significant contributions to the principles of optics, astronomy, anatomy, visual perception and to science in general with his intrioduction to the scientific model. See: Saliba, George, *Islamic Science and the Making of the European Renaissance,* Cambride, Mass., 2007; and "al-Haytam", in Onians, John, *Neuroarthistory. From Aristotle and Pliny to Baxandall and Zeki,* New Haven and London, Yale University Press, pp. 38-41.

is no vanishing point and, therefore, no optical distortion (see fig. 131, an illustration of the difference between axonometry as it is used in Chinese painting (left) and linear perspective).[275]



. Figure 131

In Chinese and Japanese painting, we can find easily examples of building interiors in which its structural elements like pillars will remain parallel as they are in reality and their size and geometry remains constant (see fig. 132), even if at first sight observers may perceive them as divergent. The key features of axonometry are its high vantage point and the parallel lines of projection in the three principal directions: lines that are parallel in the three-dimensional space remain parallel in the two dimensional picture, in contrast with linear perspective in which lines along the z-axis in the three dimensional space collapse to a single vanishing point at the horizon in the two dimensional picture. As we can appreciate in the Japanese woodprint just introduced above, another characteristic of this kind of perspective is that objects that are distant have the same size as objects that are near; objects do not get smaller as they move away from the viewer. Axonometry was introduced to Europe in the seventeenth-century by Jesuits returning from China, Krikke mentions. However, the wider acceptance of axonometry had to wait until it was given a mathematical foundation, by William Farish who provided axonometry with its geometrical basis. He formulated isometry, which means "equal measures" because the same scale is used for height, width and depth.[276]

An interesting book by the German art historian Hans Belting, *Florenz und Bagdad. Eine westöstliche Geschichte des Blicks,* offers a well documented and argumentative study of the Arabic origins of the Western linear perspective in art and constitutes a comparative study of the way of looking in the West and in the Islamic world. He shows differences and similitudes between the way of looking and thinking in the East and the West. As Belting states, "Die heutige Globalisierung der Perspektive, die in dem westlichen Patent der weltweiten Medien TV und Presse Unterstützung findet, hat in der Kolonisation anderer Erdteile wie auch in ihrer Missionerung für das Christentum eine erstaunlich lange Vorgeschichte. In diesem gewaltsamen Export wurde die Perspective anderen Kulturen gegen deren eigene Sehgewohnheiten förmilch aufgezwungen".[277]

[275] Example taken from Krikke 1996.
[276] Krikke 1996. Further reading: Krikke 2000.
[277] Belting 2008, p. 54.

As observed by the art historian Peter Owen, the same perspective system was used by Byzantine, Islamic, Chinese, Indian, and Persian artists, and can be also seen in early periods of Assyrian and Egyptian art and European Medieval painting. Childrens and "naïve" or outsider artists also rely on this system to express three-dimensional form.[278] Interestingly enough and agreeing with the previous statement, as noted by Westgeest,[279] this system of projection of three-dimensional space onto the two-dimensional picture plane was used as well in Persian miniature painting. I will come back to this topic when I undertake the visual analysis of those miniatures further below in this same chapter.

Vertical compositions/vertical perspective

Around the fourteenth century the Shiraz School of miniature painting introduced a new system of vertical perspective, in which figures are shown one over the other, overlapping, and where such things as ponds and carpets appear as flat on the page.[280] In *Humay and Humayan Meeting in the Garden*[281] (fig. 133), we can see this way of placing the figures one over the other in this miniature that depicts two lovers that meet at night in a luxurious and enclosed garden. The bright colors, the flower motifs in the margins and the faces and figures with rounded contours, fine lines, narrow eyes and rather characteristic sideways glances are particular to the Shiraz School of later fourteenth century Persia. In this kind of vertical perspective, the objects most distant from the spectator are placed at the top; those closest at the bottom. After analyzing Persian miniatures, it seems that there is a tendency to use this kind of vertical perspective from the late fourteenth century onwards.

On the other hand, layering or vertical composition in the arrangement of the sitters in the pictorial space, has been used by several Persian miniature painting schools. A well-known example of this is *The Court of Fath 'Ali Shah,* painted by an unknown artist around 1815 (fig. 134). It is an image in miniature scale which evokes the monumental imperial enthronement scenes. The watercolor is one of a series of reduced copies of life-size wall paintings in the Negarestan palace outside of Tehran, as stated by Diba. She argues further that 'the original wall paintings represented an imaginary New Year's reception at the court of the monarch. The murals were completed in 1812-13 for the reception hall of the palace, by a team of artists led by 'Abdullah Khan. The copies (undated and unsigned, and executed in opaque watercolor, oil, and engraving) were produced sometime between the completion of the mural in 1812-13 and 1834, the year of Fath 'Ali Shah's death'.[282] The central image depicts Fath 'Ali Shah enthroned with twelve of his multiple sons.[283]Fath 'Ali Shah sits on a large jeweled throne with a sword across his lap and a nargileh pipe in his hand. His sons are depicted all standing (a symbol of respect) with their arms

[278] Owen 1970, p. 204.
[279] Interview done in Leiden, December 2008.
[280] See: Talbot 1971.
[281] *Humay and Humayan* is a medieval Persian romance written by the Persian poet Khwaju Kirmani (1280- 1352). For further information see "Humay and Humayan: A Medieval Persian Romance", in *Annali Instituto Italiano per il Medio e Estremo Oriente,* Roma, 1990, pp. 347-57.
[282] Diba 1999, p. 174.
[283] For a detailed descrition of this image and identification of Fath 'Ali Shah's sons, see: Eskandari-Qajar, Manoutchehr, M.: "The Message of the Negarestan Mural of Fath 'Ali Shah and His Sons: Snapshot of Court Protocol or Determinant of Dynastic Succession", in *Qajar Studies,* Rotterdam/Gronsveld/Santa Barbara/Tehran, 2008, pp. 17-41.

crossed and all of them identified by a yellow inscription to their right. In the lower section ambassadors from France, Great Britain, Russia, the Ottoman Empire and the kingdoms of Sind and Arabia are depicted in meticulous detail. Another example of this layered vertical composition is *Saf-e Salam* (fig. 135), also painted by 'Abdulla Khan. In this image, we can see three rows and in each one of them five men have been depicted. Hierarchy is surely one of the reasons for the layering structure: notice the long beared men in the top of row, whereas in the middle and bottom rows the men do not have a beard, an indication that the men in the upper row are older (and consequently more influential) than those on the middle and lower rows. In this painting the fifteen men are depicted standing with their arms crossed. All of them are sons and grandsons of Fath 'Ali Shah.

4.2. The use of space in Persian miniature painting

Having defined the different types of spatial composition, I will analyze a selected group of Persian miniatures that show all or some of the three spatial elements that I have just introduced and defined above.

One of the miniatures that I have found in the course of this research where we can more clearly notice the isometrical perspective used to suggest the three-dimensional space, is *Life in Town,* a painting probably intended for Shah Tahmasp's manuscript of Nizami's *Khamsa*, Tabriz, 1539-43 (fig. 136). We can notice that all lines remain parallel in the three dimensions of the space, not receding to a vanishing point, and all the figures depicted in this painting have the same size. The vertical composition here only seems to reinforce the suggestion of a three dimensional space by isometrical perspective. In this dense image that is an evocation of urban life in sixteenth century Iran, all kinds of people from different social and economic classes and ages are depicted. They are all engaged in different activities and pleasures that are typical of the evening hours, as we can see by the darkness used in the colours of the sky. In the bottom left corner of the painting, there is a group of male musicians playing different instruments. Right above them, a prince hosts a reception for noblemen on a tiled blue terrace. Notice the three servants bringing fruits and cones of sugar. There is also a group of women sitting on a balcony in the upper left part of the image and observing what is happening on the terrace while listening at the music played by the musicians. Candles, oil lamps and all other lighting sources are spread all over the space through the private houses, the markets (see an active market scene right in the centre of the painting) and the mosque (see in the right top corner, the building that has the richest external decoration in the painting). This is a fascinating painting where many different events are happening in multiple centres of attention at the same time and with a narrative that gives the image a temporal and spatial dimension at the same time. The grid layout structure is also clear. The apparent lack of compositional organization in this picture is remarkable. Instead it appears to be a series of urban and genre-like architectural vignettes comfortably fitted together, even if at times the spatial logic would have us accept that a blossoming fruit tree can grow on a public walkway beside a high brick wall in the midst of a market.

The Persian outlook is essentially and incurably romantic. It enjoys all that is marvelous, it is quite ready to believe the incredible. The painter stages his scene for his own and the spectator's enjoyment, much as it might be arranged in a theatre.[284]

[284] Binyon et al. 1933 , p. 5.

Here is important to note that the majority of the Persian miniatures that I have seen during this research are vertical. In this particular painting, it is especially clear to note that there is a combination of two spatial strategies to give the painting an alternative way of suggesting perspective: isometrical and vertical perspective. In the vertical perspective, the objects most distant from the viewer are placed at the top, whereas the objects closest to the viewer are placed at the bottom. This combination of isometrical and vertical perspectives is something that is typical of Persian miniature painting and that I have not found, for instance, in Japanese or Chinese painting. Actually, it is relevant in order to understand the difference in the use of isometrical perspective in these countries that the origin of axonometry in China was found in the Chinese scroll paintings. A typical scroll painting has a size of approximately 40 cms high by several meters wide. For these scroll paintings, the Chinese painters needed a perspective that had no explicit vanishing points; every scene of the scroll painting would be seen individually, and a vanishing point that lies outside the viewpoint creates a disoriented view of the scene. The Chinese painters solved the problem by drawing lines along the z-axis as parallel lines in the scroll painting. This has the effect of placing the horizon at an imaginary line high above the painting. The axonometric projection is a technical term for a group of perspectives to which Chinese parallel perspective also belongs.[285] This is an important difference between the arrangement of the space and use of isometrical perspective used in China and Japan (horizontal format) and introduced here in contrast to this in Iran (vertical format). Notice that Japan has also *kakemono* (= hanging vertical scroll) as opposed to *makimono* which is meant to be unrolled laterally on a flat surface. The *kakemono* is intended to be hung against a wall as part of the interior decoration and lacks, due to its format, the isometric perspective approach that was shown in the horizontal scrolls. Interestingly, what both pictorial traditions share and make them different from a Western spatial approach in painting, is that in Oriental painting the eyes scan parallel to the surface instead of looking from foreground to background as in the Western approach.

Wedding Celebration of Prince Humay and Princess Humayan (fig. 137) painted by Junayd Naqqash Sultani in 1396, is another example where we find several of the spatial elements introduced above. As noted by Blair, 'the window-grille above the princess's head (the one sitting on her bed at the left side of the image), bears the signature of Junayad, "the royal painter", the first unquestionably genuine signature in Persian manuscript painting'.[286] The floors of the royal halls, the palace gardens or the fields are represented vertically on the first plane, and then, immediately, the eye passes on to succeeding planes, which follow each other vertically, or at opposite angles, with their princely banquets, hunting, battle or love scenes. The picture plane is conceived as a flat backdrop against which the figures are posed in a circle. Here the vertical perspective used to suggest three dimensional space is also clear: the way in which the figures have been arranged to give the impression that the ones placed at the bottom are closest to the observer, whereas the ones placed at the top are most distant. In this case, the princess is the one that seems to be furthest from our view, inside of her room and sitting on her bed. In the words of Grabar, 'a fascinating composition with dominant red colors in which all the episodes of a wedding, from

[285] Thiadmer 2009. This article shows two interesting examples that can be seen on-line of two scroll Chinese paintings that have been digitalized and can be seen as a continuum. The second example is a reproduction from a18th century remake of a 11-meter handscroll by artists of the Qing court. It is a good example to understand the isometrical perspective in Chinese painting.

[286] Blair & Bloom 1994, p. 33.

sexual consummation to dancing, are either depicted or symbolized'.[287] As stated by Blair, 'the depiction of architecture is particularly elaborate, with geometric tile dadoes, floral arabesque archways, compartment carpets, and carved plaster grilles displayed in a dazzling array of brilliant blues, oranges and reds. This world of eternal lyricism in which flowers bloom and birds sing forever is one of the most characteristic features of Persian manuscript painting of the following century'.[288]

The next miniature, *Nushaba shows Iskandar his own portrait* (fig. 138), a painting in Shah Tahmasp's manuscript of Nizami's *Khamsa* from the British Library, shows as well some of spatial characteristics defined in the previous section. Here, the two principal figures are placed in a garden-reception held on a luxurious terrace. Nushaba sits on the throne to the left, and Iskandar is seated to the right slightly below her, on the terrace, with his head bent as he examines his own portrait. Notice the two centres given here: on the left bottom corner, the circular pool with an extravagant lobed interior profile and on the other side of the diagonal, on the right top corner, the ornamented canopy, and between these two points, the pool and the canopy. All the personages involved in the scene are playing their role in a harmonic circular way. In this miniature we can not say anything about isometrical perspective since there are no building structures that bear one particular kind of perspective. But the painting is especially interesting as far as the vertical perspective is concerned: we can see how different scenes are happening at different vertical levels and all the personages depicted have exactly the same size, and they have been placed spatially at different levels according to the distance they have from the viewer. The closest plane is represented at the very bottom of the picture and the furthest plane is represented by the scene at the top right corner above the canopy.

There is an interesting article written by the Islamic art historian Priscilla P. Soucek, "Nizami on Painters and Painting,"[289] where she analyzes Nizami's writings with references both to artists and to works of art. In various passages scattered through the books of his *Khamsa,* Nizami discusses the education and training of artists, the relation between a portrait and the person portrayed (this is especially interesting, since it is a motif that is used in the miniature that I have just analyzed), and gives descriptions of works of art. There are many versions of this scene where a personage (be it Iskandar, Shirin or Khosrow) looks at their own portrait.

The most interesting study for my own research that I have found on the understanding and use of the space in Persian miniature painting is "The Use of Space in Timurid Painting" by the Islamic art historian Robert Hillenbrand. He focuses his study on four specific areas where the spatial understanding of space in Persian miniature painting is at its most intense: architecture, the preference for solid blocks of colour or form, the margin and the use of empty space. I will just refer to the first two aspects, since they are the ones relevant for my own analysis of nineteenth century Iranian photographs. In his words, most strikingly of all, Timurid painting learned to *suggest* an architectural framework rather than to display it.[290] This idea can be clearly appreciated in the next miniature, the *Shahnameh* (*The Book of the Kings)*[291] scene *Ardashir and his slave-girl Gulnar* (fig. 139). As Hillenbrand points

[287] Grabar 2001, p. 55,
[288] Blair 1994, p. 33.
[289] Soucek 1972.
[290] Hillenbrand 1992, p. 77.
[291] "The Book of the Kings" is the national epic of Iran written by the Persian master of poetry Abu al-

out, it is the difference in plane within the architecture which helps structure the picture and above all integrate it with the text.[292] The vertical divisions of the architecture reinforce those of the text columns, and the blocks of colour operate in harmony with that aim. This solid skeleton of the composition can easily accommodate different seemingly insignificant details, like the cute detail of a pair of bedroom slippers by the bed of the principal characters, the pillow, the candle, the teapot and other decorative details. In this case, it is important to note that it is the choice of architectural division that has placed considerable emphasis on the sleeping personages. This element is also found in nineteenth century Iranian photography, even though the text on them has been added after the photograph has been printed and, in the case of the painting, the whole conception of the page, as far as design is concerned, has been arranged previously. Another example of this kind of architectural arrangement is to be found in the Nizami's British Library *Khamsa* scene *Harun al-Rashid in a Bathouse* (fig. 140). The story of the caliph Harun al-Rashid going to bath is neither romantic nor heroic, as is normally the case in most of the miniatures. It is, nevertheless, a good example of how a public bath at that time was, where even the caliph leaves his own crown in a cupboard in the room where the men get undressed. This miniature is interesting as well because it shows a different organization of the space: simple walls have replaced richly colourful and decorated ones and all the bathhouse workers are shown in their work clothes. In the classic study by D. H. Zain, *Formal Values in Timurid painting*[293], the author includes numerous schema of design that clearly show the grid layout and block schema that I am analyzing in Persian miniatures. Three of the figures shown in Zain's study are, as it happens, design schemas of miniatures that I have selected for this chapter. One of them (fig. 141) is the schema of design of the miniature that I am concerned with here. We can also appreciate here the isometric perspective that is clearly recognized by the parallel lines in the z-axis that do not recede towards a vanishing point.

Many buildings present in the miniatures, embody an arrow device to draw the eye into the picture: flights of steps are invitingly located near the bottom of the painting, doors are located to guide you from one space to the other, curtains are drawn aside to disclose figures stepping in and out of doors, drawbridges welcome the viewer into a castle and into a painting at the same time and half-open doors operate as a kind of *repoussoir*. Sometimes these devices are used in concert at different levels, compelling the eye to move upwards and further into the painting. Closely packed receding planes, often with people jammed between them, sometimes with curtain walls (in depiction of castles and palaces) bring the third dimension somehow to life. In some paintings, nature is brought in the scene in the form of a huge tree or some mountain rocks. Then, we have seen that the most used contemporary fashion for composing an image on several levels is often reflected on the architectural forms themselves and those forms would allow many stories to happen at the same time, implying depth both in form and meaning. As Hillenbrand stated, a more dramatic version of the same idea is found in the sharp zigzag movement of successive flights of stairs that are sometimes used in miniatures. This is especially clear in *The Seduction of Yusuf,* the celebrated scene of Yusuf pursued by Zulaika in the Cairo

---

Qasim Firdowsi (934-1025-26). He devoted 35 years to write the *Shahname* and this is he most studied of all Persian manuscripts, which was never finished.

[292] Note that in some photographs we can also find this kind of integration of picture and text. See, for instance, figure 25 in chapter 2.

[293] Zain 1989.

Saadi's[294] *Bustan* of 893, painted in 1488 as it is written on the cartouche to the left of the iwan, and that is a painting which implies the passage of time as well as a sequence of spaces (fig. 142). This miniature is signed by the great master Bezhdad on the architectural panel over the window in the room on the upper left. This painting accompanies a passage in Saadi's *Bustan* that mentions the seduction of Yusuf by Zulaykha (the Biblical Joseph and the wife of Potiphar). Sadi's text is written in cartouches at the top, middle and bottom of the illustration. According to Blair, 'Sadi's text does not require Bezhdad's elaborate architectural setting. Instead, this setting is described in the mystical poem "Yusuf and Zulaykha", written by the Timurid poet Jami five years earlier….'.[295] In this case, as Hillenbrand explains further, 'the explosive impact of the encounter between the two major protagonists owes much of its intensity to the earlier temporal and spatial building-up. The artist has responded to the accumulated suspense and eventual dramatic climax of the literary text with an extraordinarily apt visual equivalent whereby the principals of each tale confront each other at the very top of the picture–pictorially speaking at the very last moment. Thus time is suggested by space'. [296] Saadi's text merely refers to the attempts of seduction of Yusuf by Zulaykha, wife of an Egyptian functionary, but Jami describes at some length Zulaykha's vain efforts to persuade the beautiful Yusuf to give in to her wishes. He concludes this part of the story with the description of an architectural construct that is rich and laden with mystical overtones. In the words of Sims, that 'Jami's palace should be a sufi metaphor for the spiritual journey of both Yusuf and Zulaykha is hardly to be wondered, for a poet who was also the leader of the sufi order of the Naqshbandiya in Herat'.[297] Behzad's painting is a fantasy on the theme that is exposed in the visual language of Timurid architecture and its decoration. The architectural forms are exceedingly rich, but also empty. In the midst of this patterned elaboration, colour and the absence of pattern draw the eye to the two figures and their relationship. Notice here, once more, the perfectly-designed page with the columns where the text has been written being the ones that decide the final composition of the painting with a grid layout. As stated by the Islamic art historian and curator Lisa Golembek, 'the correspondence of text and painting in detail and in emphasis are static levels of relationship. There is yet in Behzad's painting a dynamic level in which the formal composition actively conveys meaning'.[298] Notice the grid layout that has been perfectly shown by Zain's schema (fig. 143). Note as well the isometric perspective approach to suggest three-dimensional space. For instance, the balcony on the right top corner of the miniature shows clearly the parallel lines in each space direction and the same holds true for any other part of the structure of the building. The vertical composition is also clearly shown here, like in all other miniatures selected for this section.

Persian miniaturists have always been fond of using solid blocks of form and colour. Often these blocks are created by the structure of the building where the scene is happening (as it happens in fig. 136), at other occasions blocks may be created by

---

[294] Sheikh Saadi (full name: Musli-od-Din Mushrif ibn Abdullah), born in Shiraz (1184-1283-1291?), is one of the major Persian poets of the medieval period. He is recognized not only fort he quality of his writting, but also fort he depht of his sociological thoughts. His best known works are *Bustan* (*The Orchad)* completed in 1257 and *Gulistan* (*The Rose Garden)* in 1258. *Bustan* is enterely in verse (epic metre) and consists of stories to illustrate the good virtues recommended to Muslims and also includes reflections of the behaviour of dervishes and their ecstatic practices.

[295] Blair 1994, p. 63.

[296] Hillenbrand 1992, p. 78.

[297] Sims 2001, p. 247.

[298] Golombek 1972, p. 28.

rectilinear or multifold pods of water (as in fig. 138), doors, balconies, floors, etc. In the words of Hillenbrand, it is a prerequisite of their compositional role that they should be as monochrome as is consistent with their nature. Thus they establish a presence in the picture, something that is much more than mere decorative infill or background. They have an obvious spatial significance.[299]

In *Funeral Procession,* from *Mantiq al-Tayr* ("The Language of the Birds") by Farid ad-Din Attar[300], 1483 (fig. 144), the ground is shown in several receding planes. The landscape, in fact, constitutes a true background to the depicted subjects. The tree that strays outside the frame-like margins is an element that was adopted by Persian miniaturists as an influence from the Chinese painting tradition. Contrarily to what Rudrauf stated regarding *diffuse* composition, that the eye is not guided to go from one object to another (see pags. 96-97 of this chapter), Grabar states in *Mostly Miniatures,* that 'if we go a little further in the analysis, we discover the curious fact that despite the apparently artificial compositions of the human figures, two details are rendered somewhat less unreal. One is the important clue of the gaze. All the miniatures of a certain quality are organized by a circuit of gazes that the protagonists launch at each other. It is a complex and passionate game of clues that, as in embroidery, organizes the relationships among the persons'.[301] We can see this clearly in this miniature, in which a complex composition is shown, 'heads and eyes compel a dynamic movement leading up to the snake in the tree, which is about to gobble up the eggs in the nest. The other trait are the witnesses, a whole world of figures who are there as if to bear witness to the truth of what is depicted; they are furnished with a formulary of gestures whose details it would be interesting to unravel. These two traits are familiar in Italian painting of the same centuries, but they have been miniaturized in Persian painting and demand a greater effort from the observer, just as the painter was obliged to work with a precision that did not allow for error'.[302] The painting is a good example to see the funerary practices in the fifteenth century. A funeral procession arrives at the gate of the cemetery; inside workmen are preparing the grave of the man whose coffin is preceded by his mourning son, clothes torn from his upper body. He is placed in the vertical centre of the picture, on the direct axis supplied by one corner of the platform where his father's grave is being dug. The secondary axis of the picture is the horizontal line of the cemetery wall, effectively dividing the two parts of the picture. Notice that, even if this miniature that is mostly a non-architectural miniature, the isometric perspective is working: the octagonal fence that is depicted at the top left corner is shown with parallel lines in the three directions of space. Once again, Zain's schema clearly shown the grid layout structure and we can see clearly the parallel lines that I have just talked about in the octagonal fence (fig. 145).

We can see this grid structure in the miniature attributed to Mir Musavvir, *The Nightmare of Zahhak,* from the *Shahname* by Shah Tahmasp, ca. 1525-35 (fig. 146), where the king (shown with snakes on his shoulders) has a nightmare; as explained by Blair 'his screams wake up the entire palace, whose attendants form the painting's main subject. Prince Zahhak had been lured by Iblis, the Devil, into killing his father and usurping his throne. Distinguished, Iblis then demanded to kiss the new king on

[299] Hillenbrand 1992, p. 84.
[300] Farid ad-Din Attar (1142-1220) was a Muslim scholar and Sufi mystic. "The Language of the Birds" is a book of poems of aproximately 4500 lines. The poem uses a journey by a group of 30 birds, led by a hoopoe as an allegory of a Sufi *sheikh* or master leading his pupils to enlightment.
[301] Grabar 2001, p. 133.
[302] Grabar 2001, pp. 133-136.

the shoulders, whereupon two serpents sprang from the spots where he had been kissed'.[303] Notice its grid structure, composed of different squares and rectangles where the different scenes are occurring at the same time as the final scene. In this image we can also appreciate the zigzag movement that I referred to in the previous section. In order to ensure that the viewer does not get to the final point too quickly, the picture is punctuated by visual barriers: steps, walls, doorways, and abrupt changes of direction. This execution of zigzagging forms might be described as two dimensional in terms of technique, but their three-dimensional effect is clear. It is something like an intuitive perspective with temporal and narrative content. Here we can see clearly the parallel lines in each spatial direction as it was the case when I analyzed *The Seduction of Yusuf,* a clear sign of isometric perspective to project the three dimensional space into the two dimensional picture plane.

Persian artists of every generation and every style retained their innately Persian understanding of design. Some experts in the field of Persian painting have tried to explain the fact that the Persian miniature painters did not use linear perspective to suggest a three dimensional space. For instance, as stated by the art historian in Persian painting Sheila Canby, 'by favouring two-dimensionality and compositional harmony, they presented things as they should be, not necessarily as they are. Within these parameters, Persian artists produced paintings over six centuries unrivalled in their perfect realization of an ideal world'.[304] No matter what its period, a great Persian painting will exhibit a distinct sense of design and an understanding of how to arrange colours and forms on a flat surface to form a rhythmic whole. Despite the influence of European art from the seventeenth century onwards, Persian painters do not appear to have been convinced of the desirability of the illusionism that transforms two dimensions into the suggestion of three. Perhaps such visual tricks seemed innately dishonest. Finally, this art of highly developed surface values draws the viewer in, but does not trespass into his world. Before the nineteenth century the figures in Persian painting almost never look directly at the viewer. Later, when they do, they keep their emotions to themselves. Yet, as Canby states, 'the most gifted Persian artists could capture their sitters' character without invading their wall of reserve'.[305]

In conclusion, Persian miniatures do display a diffuse composition and grid structure layout. Often the proper structure of the buildings, the architectural structure that composes the painting, help stress this multiple-centred composition dividing the space into blocks. Many buildings embody an arrow device to draw the eye into the painting: flights of stairs located near the bottom of the image, doors to guide the viewer from one room to the next one, curtains drawn aside to disclose figures stepping in and out of doors, just to mention some of the most frequently used ones. Sometimes these devices are used in concert at different levels, compelling the eye to move upwards and further into the miniature. The third dimension is brought to life with the help of receding planes and at the same time allows several scenes to happen simultaneously, therefore achieving that multiple-centre or diffuse composition that is simultaneously spatial and temporal.

[303] See Blair 1994, p. 168.
[304] Canby 1993, p. 7.
[305] Canby 1993, pp. 11-12.

After having analyzed a representative corpus of Persian miniature paintings, I am able to state that the isometric system of projection to suggest perspective is used consistently, one of the influences that Persian miniature painting had from Chinese traditional painting. Next to this, the vertical composition/vertical perspective is used consistently in Persian miniatures as well. The combination of these two strategies to suggest perspective is, in my opinion, a unique element found in this painting tradition.

4.3. The use of space in nineteenth-century photography in Iran

I will explore in this section the way in which space has been arranged in nineteenth century Iranian photography. An immediate question is whether isometrical perspective, *diffuse* composition, the grid layout structure and vertical composition/vertical perspective are to be found in nineteenth-century photography as they are in traditional Persian painting. As was the case in the previous chapters, another important question to be answered is whether this understanding of space is something peculiar to the Persian visual arts tradition or if it can be found in other countries. It is important to note that isometrical perspective is impossible in photography. As stated by the chief curator of photography at MOMA in the 1990s Peter Galassi, the ultimate origins of photography (both technical and aesthetic) lie in the fifteenth-century invention of linear perspective. The technical side of this statement is simple: photography is nothing more than a means for automatically producing pictures in linear perspective. The aesthetic side is more complex and is meaningful only in broader historical terms.[306] Therefore, as far as the topic on isometrical projection is concerned, there is no possible argumentation when related to photography: no matter who is behind the camera, an Italian, Iranian or Malawian photographer, the result will be always a photograph in true linear perspective, as a result of the monocular viewpoint, which is also the basis of Alberti's theory of linear perspective. I have established different categories of photographs in order to be able to study in depth the different spatial characteristics present in Persian traditional painting as well as in photography. I have named the first group ***diffuse compositions/grid structure*** and the second ***vertical composition/vertical perspective.***

The first group that I have defined is ***diffuse*** **composition/*grid structure***, a term that means, as I elaborated in the previous section, the presence of multiple centres of attention within the photographic space. In order to understand fully and to be able to give enough examples of the composition used in nineteenth Iranian photography, I will broaden my scope and consider other kinds of photographs besides portrait studio photographs, since it is difficult to find those Persian elements of composition (*diffuse* compositions, grid layout structure, and vertical composition) in them. I will start with a photograph taken by an Iranian unknown photographer in which a group of school children (boys) are depicted together with their teachers from the school Nawbar in Tabriz. We can see that there is not a special centre of attention. On the contrary, the eye can scan the whole content of the picture freely and without a fixed path (fig. 147). See, for instance, the window on the right, full of people, in the same way that miniatures present different scenes all with the same importance as far as information is concerned, as we have seen previously while analyzing the material selected for the previous section. These are examples of Rudrauf's *diffuse* composition. Further, we

[306] Galassi 1981, p. 12.

can also make here an abstraction of the photograph and we get a grid structure as we did before with a miniature. There is an especially remarkable photograph of a group of school children gathered together to celebrate a special school event (fig. 148) in Mushirie's school in Yazd. The way in which the space has been depicted is interesting. See the left half of the image, where a group of teachers is depicted sitting around a huge table and the upper right part of the image in which a large group of schoolboys has been densely packed in a reduced space and ascending almost up to the ceiling. Here the monocular linear perspective of the table, drives the eye from the front to the back. This photograph is, indeed, a good example to illustrate the fact that photography is a perfect technique to produce pictures in perfect linear perspective. But, at the same time, the general aspect of the image is that of miniatures, with their multiple centres of attention and grid layout structure. The Persian carpets that are hung on the walls, fully covering them, help to give the final image the appearance of a miniature. Notice the three men in the balcony on the top left of the image, looking downwards, as in many miniatures, at what is happening on the hall. Another example of a photograph where this miniature like structure is clear is figure 149. These kinds of images are examples of what I introduced above about the "invasion" of space by Iranian people. Here it is important to remark that the possible parallels that I may establish between photography and miniatures are only valid from a pure formal point of view. The important temporal and spatial narrative dimension present in the miniatures as I have analyzed in the previous sections, is something that the photographs do not have. Further, the fact that the miniature belongs to a book that has its precise place between the previous miniature and the following one is fundamental and needs to be clearly pointed out in order to avoid confusion or to arrive at false conclusions.

The second group of photographs is ***vertical composition.*** An interesting photograph is one that depicts a group of seven men arranged in two rows, occupying two horizontal planes, and dividing the photographic space into two identical halves, in two independent spaces (fig. 150). The governor of Kerman is depicted sitting on a carpet on the lower row, on the left of the image, next to two colleagues. The carpet bends along the stair to become the carpet on which the other four men on the upper row are also sitting. The plain of the photographer has been lowered in order to get a frontal image where the whole group is packed within the photograph's horizontal frame. The formal parallelism in the vertical composition between this photograph and figures 134 and 135 is remarkable. This is interesting, since isometric projection suggests birdeye's perspective.

One extreme example of this vertical composition is an image that displays the most bizarre composition of a group of people, in this case four men that I have found during my research (fig. 151). The original glass plate is partially broken, so we can only see in the print four heads of the five military men depicted. The heads of the four men have been arranged on a vertical line, being those heads fully packed on the vertical photographic frame. The photograph was taken by the Iranian photographer Mirza Mehdi Chehreh-Nama, who ran a very well-known studio in Isfahan.

There are several photographs that I have found during my research that show an aesthetic approach similar to those of the miniatures. This effect is caused, as I will explain shortly, by the technical restrictions of the camera rather than by an aesthetical intention of the photographer. I will call this group ***optical illusions.*** Naser od-Din Shah took the next two photographs consider here. The two women depicted in these images, seem to have been pasted to the blurred backdrop, giving them the

impression that they are partially floating on the photographic space. This probably happens due to the technical restrictions of the camera rather than due to an aesthetical effect intended by the photographer, but the perception of both of them is similar to those of the miniatures and this effect is reinforced by the carpet, clothing and pose of the women depicted. Notice that here the presence of the carpet is an important element that conditions the perception of the space by the viewer of the final image, as was the case in the previous picture. The first one depicts Iran al-Muluk (fig. 152), daughter of Naser od-Din Shah. The second depicts Bakhbaubashi (the one to the left), one of the wives of Naser od-Din Shah (fig. 153) the receding stairs giving a clear true perspective to the final image. In both of them there is a clear separation between the foreground and the background, therefore a clear linear perspective as I have already pointed out at the beginning of this section.

Within this group, we could consider another sub-group of photographs that show another peculiar element to be found in nineteenth-century Iranian photography: the use of the middle horizon in the photographic space. As we know from the laws of composition in Western photography, one should not place the horizon exactly in the middle of the photograph. But if we analyze the next two photographs, we clearly see that this is exactly what happened: a row of kneeling mullahs (religious men) is placed in the upper half of the photographic space, just starting at the horizon line or the middle line of the photograph, leaving an empty and wide space in the lower half part of the image (figs. 154 and 155). Actually this is just an optical illusion, since there is a carpet in both photographs that as a result of the bad quality of the print that lost its sharpness, we cannot see clearly. Further, the placing of the horizon right in the middle of the photographs is most probably due to technical restrictions of the camera, because the photographer needed to lower his camera in order to take a frontal image of the group and therefore, the carpet or floor, would have taken a dominant role in the image. It is important to note that this way of arranging the space is only found in photography and therefore peculiar to this medium due to technical restrictions of the camera, since it is not found in Persian traditional painting, where the lower half of the image is especially important in its content and density of information. Next to this kind of image, there is another one that depicts men as if they were floating in the air. I have selected two photographs to illustrate this spatial illusion. The first one is a portrait of Mirza Mehdi Khan taken by an anonymous Iranian photographer (fig. 156) and the second is a portrait of Hajji Housseinquli Khan Nuri Mustawfi, Ministry of Foreign Affairs, taken by an anonymous Iranian photographer (fig. 157). Next to these two images, there is one that is both interesting as a collage and because of the spatial arrangement of the three women depicted therein, all of them floating in the photographic space (fig. 158). This is actually the page of one of the albums of Naser od-Din Shah's wives. Three full portraits of woman have been cut and pasted directly to the album page and the final image presents a strange understanding of space since the three identical women are literally floating on the album page like the men in the previous two portraits did. This kind of collage became quite popular between the Shah and his family, since they do appear quite regularly in the albums' pages in the last years of his reign. An important difference between this last image and the previous photographs is that, in the collage, the photographer would be the one that decide to give the floating effect to the poseurs, not the camera!

It has often been remarked that the lower part of a visual pattern demands more weight. Gravitation is probably at the root of this asymmetry in the vertical dimension, but how its effect on vision comes about is not known. The compensation,

which keeps the lower part of a pattern from looking too light or too small, is needed everywhere, except for the structurally strong shapes, which resist the distortion of angles. It cannot be maintained, however, that general artistic practice makes patterns look heavier at the bottom – that is, lowers the centre of gravity. True, in the landscape that man, the land animal, sees around himself, the lower part of the visual field is crowded with buildings, fields, trees, and events whereas the sky is relatively empty. A corresponding effect is sought in the arts wherever the realistic representation of solid bodies is intended. By lowering the center of gravity, the painter or sculptor adapts his work to the asymmetry of physical space. This practice, however, is not universal. It goes with certain styles only. For instance, modern art – because of its trend towards abstraction – has little use for this uneven distribution of masses.[307] This is also true for some Iranian photographers active in the nineteenth century. Interestingly, in those images of a group of kneeling religious men, they actually seem to be levitating while being photographed and they do have, indeed, a very light appearance!

There is another group of photographs that can be considered as a sub-group of the one I am now analyzing. ***Plan-perpendicular*** shows a clear use of this way of understanding space. One of the peculiarities encountered in the Iranian style is the representation of sitters themselves in the perspective, above a patterned carpet that is shown in plan-perpendicular (straight-from-above) view and has no particular relationship to the rest of the studio setting, as we can see in the photograph where a man sitting on a chair is depicted (fig. 159). This image of Mohammad Ebrahim Khan Mehmarhbashi, Minister of Defence and head of Tehran department, presents as well an illusionary perception of the sitters, as if they were floating on the air. This element is also typical of the Indian photography of that time. We can see an obvious resemblance between this image and fig. 160, an 1885 albumen print taken by an unknown Indian photographer and painted partially with opaque watercolour where a music-loving landowner is depicted. The image shows him sitting, his face, hands and feet remaining photographic. Flatness of space is achieved through the way the carpet is painted, as in miniatures. Also the lack of shadows in the colours helps to give this non-perspective element of the space. As the art historian and critic Judith Mara Gutman states in her book *Through Indian Eyes. 19th and Early 20th Century Photography from India*, 'when photography was introduced to India in the nineteenth century, photographic expression followed the same pattern as paintings did. Photographers made photographs that emulated the space and subjects found in Indian paintings, using the patterns and forms that streamed through their aesthetic traditions; this ultimately changed the place, role, function, and representation of those patterns in photographs. Many photographs were composed with the same spatial arrangements that existed in paintings'.[308] Therefore, the influence of painting in photography in the nineteenth-century in different countries is clear, but it is also more evident in some countries (like India, Iran or Japan) than in others as it is when using some techniques (like hand-coloring) rather than others.

In sum, the grid layout typical of the Persian miniatures is also to be found in Iranian photographs that depict large groups of people spread over a more or less large space, be it the entrance of a school, a room in a school, a market, a theatre palace, etc. In

[307] Arnheim 1969, pp. 20-21.
[308] Gutman 1982, p. 69.

those cases, the people seems to completely inhabit the given space, and the final result, formally, has the grid layout structure and multiple centres of attention that I have analyzed in detail in the sections concerned with miniatures. Next to this, a vertical tendency towards organizing the sitters is also to be noted. The majority of the miniatures are vertical, whereas most of the group photographs of the kind analyzed here are horizontal, which could be explained in practical terms. Since the majority of the miniatures are used as a page in a book it seems that the artists find themselves with no choice but the vertical arrangement. In this respect the photographers do not feel such limitations and as a result the horizontal arrangements of sitters in the case of large groups of people are commonly found in the photographs of the period. It is important to note that the conclusions drawn here are exclusively from a pure formal approach. The placement of the horizon in the middle of the photographic space is something peculiar of some Iranian photographs and it is not found in Persian miniature painting, but this clearly happens in this way due to technical restrictions of the camera rather than a self-consciuos aesthetical approach of the photographer to achieve this particular effect. Photographers, in this sense, did not arrange the space. The camera did that for them. They did frame the part of reality that they wanted to show and compose the final image within that frame.

I have shown through visual analysis of the paintings and photographs selected for this chapter that the understanding of space is one of the cultural components involved in the process of producing a painting or a photograph. I have created a theoretic model to classify my corpus of paintings and photographs according to spatial components. For the paintings corpus I have defined three groups: *diffuse composition / grid structure; isometrical perspective* and *vertical composition / vertical structure.* For the photographic corpus I have defined two groups: *diffuse composition / grid structure* and *vertical composition / vertical structure.* Persian miniatures employ diffuse composition and grid structure layout to achieving multiple-centre or diffuse composition that is at the same time spatial and temporal. Often the proper structure of the buildings, the architectural structure, that composes the painting, help to stress this multiple-centred composition dividing the space into blocks; and the third dimension is brought to life with the help of receding planes and at the same time allows several scenes to happen simultaneously. Furthermore, by using the isometric system of projection they provide a consistent usage of space, one of the many influences that Persian miniature painting had from Chinese traditional painting. However, the combination of these two strategies to suggest space is, in my opinion, unique to the traditional Persian miniature. The parallels observed in Iranian photographs, in this regard, is also direct influence of the Persian paintings.