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SUMMARIZED BEAUTY: THE MICROCOSM-MACROCOSM ANALOGY AND ISLAMIC AESTHETICS

Inka Nokso-Koivisto

ABSTRACT

In this article, I will examine the connection of aesthetics with the microcosmmacrocosm analogy in a tenth century encyclopedic work, the Rasa'il Ikhwān aṣ-Ṣafā'.¹ In Islamic medieval thought, the microcosm-macrocosm analogy was most extensively developed by the Ikhwan. Although they did not treat aesthetics as a separate branch of science, themes concerning the criterion for beauty and philosophy of arts appear in different contexts in the Rasā'il. The microcosmmacrocosm analogy in Islamic medieval aesthetics (especially in the writings of the Ikhwan) and its influence on later aesthetic thought will be addressed in three ways. First I will consider an Islamic version of the Pythagorean definition of music, which provides an example of the correspondence between the universe and the material world. While the bodily aspect of man is already seen in the context of music when the position of the lute as microcosm is explored, I will examine the idea of human being as the microcosm more profoundly in the section focusing on the proportionality of the human body and its relation to the microcosm-macrocosm analogy. In the final section, my concentration is on the creative role of an artist; I will approach the idea of microcosm as an analogy between human being and God as the Creator. In addition to its contribution to study of the Ikhwan and Islamic aesthetic theory, this article suggests some broader perspectives for the examination of the microcosm-macrocosm analogy in the study of intellectual history.

¹ The first version of this paper was presented at the symposium Islamic aesthetics, organized jointly by The Finnish Society for Aesthetics and The Finnish Oriental Society 27–28 October 2008.

1. INTRODUCTION

In Islamic medieval thought, aesthetics does not form its own separate branch of philosophy. Thus, the concept of beauty and aesthetic ideals are bound together with other fields of philosophy, such as cosmology and epistemology. The microcosm-macrocosm analogy is an example of an idea influencing in various areas of philosophy, bringing together, among others, cosmological and aesthetic ideas. The importance of the microcosm-macrocosm analogy in Islamic philosophy, especially in its esoteric branches, has been recognized by scholars of medieval Islamic thought.² Nevertheless, the idea has not been studied comprehensively. In this article, I will examine the microcosm-macrocosm analogy in the context of Islamic aesthetics.

Among Muslim philosophers, the microcosmic idea is most extensively elaborated by the group called Ikhwān aṣ-Ṣafā' (the Brethren of Purity). The Ikhwān were active during the tenth century in Basra. The group composed an encyclopaedic work *Rasā'il Ikhwān aṣ-Ṣafā' wa Khillān al-Wafā'*,³ which represents an eclectic philosophy combining Greek philosophy and Middle Eastern monotheistic, most importantly Islamic, sources.⁴ The analogy between the microcosm and the macrocosm is an essential theme in the cosmological, epistemological and anthropological views of the *Rasā'il*.⁵ The idea appears in all the sciences, from mathematics to theology. In addition to tracing the general outlines of the microcosmic idea in Islamic aesthetics, my aim is to examine the role of the Ikhwān in the development of the field. I will explore the ways in which the treatment of aesthetic topics in the *Rasā'il* is connected to one of the main themes of the work, the microcosm-macrocosm analogy.

The microcosmic idea has been interpreted in various ways in the history of human thought and it has received a wide range of definitions. In this article, the

² The microcosm-macrocosm analogy has been approached, for example, by Seyyed Hossein Nasr (1978) from the perspective of cosmology and Masataka Takeshita (1987: 74–108) as a part of his study on the idea of perfect man. Various aspects of the idea and its relations with western philosophy have been studied in *Islamic Philosophy and Occidental Phenomenology on the Perennial Issue of Microcosm and Macrocosm* (Tymieniecka 2006).

³ The dating of the text, as well as the identity of the writers, is disputed. For a general overview of the subject, see, e.g. Tibawi 1955. After Tibawi, Stern (1964) has contributed to the discussion with some new information regarding the identity of the Ikhwān. The most extensive study on the Ikhwān has been made by Yves Marquet. His argumentation is based on the Ismā'īlī interpretation of the *Rasā'il* (see, e.g. Marquet 1985).

⁴ About the sources of the Ikhwan, see Netton 1982.

⁵ I have examined the microcosmic idea of the Ikhwān from the perspective of human being previously in my article "Creation in Miniature: Varieties of the Microcosm Idea in the Rasā'il Ikhwān as-Safā" (Maukola 2009).

influence of the microcosmic idea in Islamic aesthetics will be illustrated with three examples, each of them representing a different interpretation of the idea. The microcosm-macrocosm analogy will be shown to have an aesthetic dimension in its cosmological, corporeal and potential forms. First of all, however, I will clarify some general perspectives of the microcosmic idea in Islamic philosophy.

2. THE MICROCOSM-MACROCOSM ANALOGY IN ISLAMIC THOUGHT

The microcosm-macrocosm analogy refers to the idea that the features of a bigger entity are summarized in a smaller unit. As George Perrigo Conger (1922: xiii) declares: "according to these theories, portions of the world which vary in size exhibit similarities in structures and processes, indicating that one portion imitates another or others on a different scale". The analogy can prevail between different layers of reality: sometimes the role of the macrocosm is played by the universe in its entirety and the sub-lunar world takes the place of the microcosm. An approach to the microcosm-macrocosm idea may also be restricted to the examination of the correspondences between the human being and the surrounding reality. In that case, man is considered as the miniature of a bigger unit, such as a city-state or reality as a whole.⁶ At times the examination is limited to the occurrences of the term microcosm, or in the Islamic tradition to its Arabic equivalent 'ālam ṣaghīr. When the microcosm-macrocosm analogy is understood in its broadest sense, it can refer to any analogical resemblance between two entities.

Allers (1944) divides the varieties of the microcosmic idea into six categories: elementaristic, structural, holistic, symbolistic, metaphorical, and psychological theories. Without going into the details of Allers's classification it can be argued that the majority of his categories are present in Islamic elaborations of the microcosmic idea. In this paper, however, I will introduce a division more suitable for the context and divide the microcosm-macrocosm analogies into three categories, each of which appears in the context of aesthetics as well. What Allers maintains regarding his classification applies also to the following categories: They are rough divisions that help in analysing the idea. They usually appear varied, rarely in pure form. The following classification is not meant to be a comprehensive presentation of variety in the Islamic microcosm-macrocosm analogy, but to bring out the essential aspects and purposes of the idea. As we will see, in this paper the microcosm-macrocosm analogy is understood in a fairly broad manner.

⁶ The word "man" is in this article used gender-neutrally as a synonym for "human being".

The first category could be described as a cosmological approach to the idea. In this form, the analogy between the microcosm and the macrocosm defines the ontological order of the universe. The perfect order is thought to be replicated in different layers of reality: for example, in the sub-lunar world, the city and, lastly, in the human being. This kind of analogy may concern the order of the universe as a whole or solely define the generic position of human being. Man is thought to be the last entity created and to reunite the created. The theory of the human archetype as an all-integrating microcosm, as defined, for instance, by Abū Ḥāmid al-Ghazālī (d. 1111) (see, e.g. al-Ghazālī: 31), is an example of the cosmological microcosmic idea from the perspective of man. From an aesthetic perspective, Islamic elaborations of the Pythagorean definition of music, which will be treated in chapter three, could be regarded as an example of this kind of microcosm-macrocosm analogy at a higher level.

Although the cosmological microcosm-macrocosm analogy concentrates mainly on the spiritual aspects of man and cosmos, in some contexts the microcosm-macrocosm analogy is treated at a physical level. Correspondences are then sought between the corporeal features of the compared entities. Such analogies could be regarded as their own category in the microcosm-macrocosm analogy. At the corporeal level, analogical thinking is considered to be derived from the Hermetic tradition (Marquet 1973: 243–244). Apart from the Ikhwān, corporeal comparisons are not widely employed in Islamic mainstream philosophy. They appear mostly in some more marginal, especially astrological and alchemical texts.7 In the Rasā'il, the corporeal parallelism between the microcosm and the macrocosm is treated in the form of detailed listings of the corresponding features, usually between the human body and the surrounding reality. These comparisons cannot be regarded as the most elevated philosophical reasoning of the Ikhwan, but they surely reveal a great deal about the respectful attitude of the writers towards the human body describing it as a reflection of the ideal structure and harmony of the universe. The corporeal microcosm-macrocosm analogy in the Rasā'il is connected to aesthetics as well, as we will see in section four, which treats proportionality as it manifests itself, for example, in the human body.

The third approach to the microcosm-macrocosm analogy accentuates potentiality and man's abilities. Cosmological and corporeal microcosm-macrocosm analogies often consider the correspondence between the microcosm and the

⁷ For instance, in a pseudo-Apollonian text *Sirr al-Khalīqa* appear ideas resembling the corporeal microcosm-macrocosm analogy of the Ikhwān, concerning, for instance, embryology (Balīnūs: 516–519). *Ghāyat al-Ḥakīm* also has some very similar passages to those of the Ikhwān concerning the correspondence between the human body and celestial bodies (see, e.g. al-Majrīṭī: 45–48).

macrocosm existing and, in this way, actual. In some contexts, however, the correspondence is seen as something normative and ideal, something worth seeking for. Potentiality is emphasized, for example, in the epistemological microcosm-macrocosm analogies, which in Allers's classification are called psychological (Allers 1944: 330–331).8 In this form of the theory, the knowledge that man gains from the surrounding world is transmitted as ideas of objects of knowledge to the human mind, which then turns into a reflection of the macrocosm. As the Persian poet Ḥāfez (d. 1389) puts it: "He who acquires a portion of knowledge, he himself becomes a world." Among Muslim philosophers, the most brilliant developer of the microcosm as an epistemological concept is Ibn 'Arabī (d. 1240). In his thought, the analogy has the third level as well, God. According to Ibn 'Arabī, God created world in order to make Himself knowable. The whole created universe is a reflection of His attributes. These attributes are summarized in the most noble among the created, the perfect human being. Hence, a man who perfects himself, not solely but primarily by means of knowledge, becomes a microcosm and a reflection of the attributes of God. (Chittick 1989: 17) The perfect man has actualized the potential microcosm in his mind and brings together the created realm, which corresponds to the Creator. In this form, the microcosm-macrocosm analogy is connected to the idea of man being (or becoming) God-like and producing the microcosm in his mind. In the fifth section, I will examine the work of an artist from the perspective of the microcosm-macrocosm analogy. Then both, the question of man's God-like position and his ability to produce a microcosm, will be examined.

3. MUSIC AND THE MICROCOSM-MACROCOSM ANALOGY

3.1 Pythagorean definition of music as a cosmological analogy

The Islamic medieval definitions of music can be divided into two branches. The first could be characterized as the Pythagorean approach to music, which was initiated by al-Kindī (d. around 870). The second branch has a more practical perspective on music and its most important representatives are al-Fārābī (d. 950) and Ibn Sīnā (d. 1037). According to Oliver Leaman (2004: 105), the major difference between these two branches is that for al-Kindi and his followers "what is important about music is what it reflects, for al-Farabi and Ibn Sina what

⁸ The potential aspect is present also, for example, in the analogies which focus on describing the ideal society as a reflection of the cosmological order and the human soul. These comparisons can be very similar to the epistemological ones, with the distinction that their focus is on society, not on the human being. This aspect of the microcosmic idea is elaborated extensively by al-Fārābī.

is important about music is what it does for us". Because al-Fārābī was himself a musician, his approach to music was much more practical. The Pythagorean branch, on the other hand, has been characterized as an ethical, cosmological and therapeutic approach to music. This kind of interpretation of music in Islamic thought reached its zenith with the Ikhwān. (Shiloah 1995: 49–51) The Ikhwān were not that interested in the actual process of producing music. They examined music primarily from a cosmological perspective and their interest in the technical aspect of music was rather superficial. The Pythagorean conception of music represented by the Ikhwān is a good example of the microcosm-macrocosm analogy influencing the aesthetic ideas in Islamic medieval thought.

Music for the Ikhwān was an art reflecting the numerical harmony of the universe. In their *Rasā'il*, they dedicate one of the 52 epistles to music. The epistle on music is placed in the first part of their fourfold division of sciences, and music is regarded as one of the mathematical sciences. Like all nature, music is based on a harmonic numerical order. However, the Ikhwān also recognize the artistic importance of the discipline. They explain the superiority of music in comparison with the visual arts, for instance, by the elevated status of hearing. The Ikhwān (I: 236) quote an aphorism which explains why sight has a lower status: in its observations, the eye is mostly restricted to material objects, while the ear perceives solely spiritual phenomena.

In Pythagorean thought, music is understood as a part of the hierarchical cosmos, which is based on analogy. Thus, music is a reflection of its heavenly counterpart. Pythagoreans assumed that motions of the celestial bodies produced melodies, while terrestrial music produced by man-made instruments was thought to imitate this heavenly music. The Pythagorean definition is followed in the *Rasā'il* and music forms a logical part of the hierarchical universe — everything in the created universe is, according to the Ikhwān, arranged in hierarchical order. The material is a sign of the spiritual: the lower corresponds to the higher, the microcosm to the macrocosm. The correspondence between the reality of the spheres and the material world under generation and corruption rationally leads to the Pythagorean definition of music:

Individuals of the heavenly spheres are causes for the individuals in the world of generation and corruption. Motions in the world of generation and corrup-

⁹ There are older French and English translations of the epistle on music with commentaries made by Amnon Shiloah (Shiloah 1964a&b and 1978). As a part of the project of the Institute of Ismaili Studies to provide a critical edition and translation of the whole $Ras\bar{a}'il$, Owen Wright's new critical edition with English translation of the epistle on music has been published 2010. Unfortunately, I did not have access to it.

tion are caused by the motions in the heavenly spheres, and the lower motions imitate the higher ones. For all this, it has to be so that the earthly melodies imitate the melodies in the heavenly spheres. (Ikhwān aṣ-Ṣafā' I: 208)

The impact of music on the human soul is due to man's cosmological position. The human soul is regarded as having a heavenly origin. Music reminds human beings of their noble origin and makes them yearn for it. The Ikhwān (I: 207) describe the influence of music on the human soul: "The melodies of musicians influence the souls of the world of generation and corruption like the melodies of the spheres and heavenly bodies influence those of the spiritual world." Music is said to mould the soul and the musician is for the soul of a listener as the sculptor is for the material from which he composes the work of art (Ikhwān aṣ-Ṣafā' I: 183).

In addition to this quite abstract influence of music, the Ikhwān (I: 185—188) list some more mundane ways music influences the human soul. Music may work as a valuable tool on various occasions. First of all, it can be used for religious purposes and on occasions of joy or sorrow. On the other hand, it is thought to encourage those in battle, relieve pain and ease hard physical work. According to the Ikhwān, the receptiveness to music is not something peculiar to the human soul; it influences the souls of animals as well. Certain melodies relieve the exhaustion of not only workmen, but of hard-working camels as well. One significant aspect of music, which is also related to its cosmological position, is its therapeutic value. As Shiloah (1964a: 161) points out, the therapeutic influence of music is present in Pythagorean and Platonic texts and continues as an important theme among medieval thinkers. The Ikhwān, however, provide a particularly detailed description of the therapeutic features pertaining to different melodies. This is an essential topic in the fourfold division (*al-murabba*'āt) that the Ikhwān present in the epistle on music. The basis for this division is the four-stringed lute, 'ūd.

3.2 The analogy of the four-stringed lute

The Ikhwān's definition of music is an example of the cosmological microcosm-macrocosm analogy even though it has not been expressly connected to the idea. The analogy is, nonetheless, explicitly present in their theory of music when the lute is described as the microcosm ('ālam ṣaghīr). The lute has a special position among the Arab instruments, and Islamic tradition contains many legends describing its invention. Some of them parallel the lute with the human body. There is a well-known legend according to which the first lute was made by the biblical figure Lamekh. It is told that he invented the instrument while grieving for the death of his child and constructed it based on the skeleton of the dead son. (Shiloah 1995: 36–37)

The Ikhwān regarded the lute as an instrument of philosophers and believed that it was philosophers themselves who invented it. It is considered the noblest among instruments. In the *Rasā'il* (I: 202), the lute is described as an all-integrating instrument which forms the microcosm corresponding not only to man but to the whole universe at various levels. A cosmological theory of music was summarized in a particular instrument by earlier philosophers as well. Conger (1922: 27) mentions the doctrine that a stringed instrument, often a lyre, has a connection with the universe in its entirety as a widely known idea among Pythagoreans. In the Islamic tradition, parallelism between the lute and the surrounding reality was already drawn by al-Kindī (Shiloah 1995: 50).

Even if the Ikhwān were not unique in their idea of the correspondence between the universe and the lute, taking the correspondence to a very concrete level was original. The correspondence between the four strings of the lute and the surrounding reality was manifold. According to the Ikhwān (I: 213), each string of the lute corresponded to one of the four elements. The arrangement of the strings from the lowest to the highest followed the arrangement of the elements in their own spheres under the sphere of the Moon. The highest string, $z\bar{\imath}r$, which is the undermost one in the playing position, corresponded to fire, the lowest one, bamm, to earth. The correspondences formed a system that included various areas — each of the strings corresponded, among others, to different rhythms, seasons, zodiacal signs, perfumes, ages of man, and hours of the day. (Ikhwān aṣ-Ṣafā' I: 229–232)

The correspondences also had practical scientific value. Knowledge of them was useful in astrology, as well as in the medical sciences. The system of correspondences explained, for example, the therapeutic influence of music. Following the Galenian theory the Ikhwān assumed that the healthy function of the human organism was dependent on the harmony of the four bodily humours, black bile, yellow bile, phlegm and blood. Sickness was caused by a disturbance of this balance, which needed to be stabilized. One of the methods for the stabilization was music. According to the Ikhwān (I: 213), each string of the lute affected one of the bodily humours and strengthened its influence. Thus, utilizing the

¹⁰ The Ikhwān followed the Islamic application of the Ptolemaic system according to which the universe consisted of altogether nine spheres. The outermost was the empty sphere ($muh\bar{\imath}t$) before the sphere of the fixed stars. Inside those were seven spheres for each of the seven planets. Below the sphere of the Moon was the Earth, in which everything consisted of the four elements. According to the Ikhwān, the elements had their own spheres below the sphere of the Moon.

¹¹ Systems linking music with, for example, ethnology and arithmetics, were produced by ancient as well as early Semitic thinkers. However, according to Shiloah (1964: 179), the system represented in the *Rasā'il* is particularly rich, universal and methodological.

wisdom of the correspondences the human body could be healed and kept sound by means of music.

In the comparison between the lute and the surrounding reality number four had a central position. Numerology was an important discipline for the Ikhwān and, especially in their microcosm-macrocosm analogies, the numerological aspect is emphasized. Although the lute, because of its essential position among Arabic instruments, was natural choice for the Ikhwān as a counterpart for the universe, the number of strings, four, also supported its selection to this salient position. The same numbers appear in the analogies of the Ikhwān and four is one of the most often recurring numbers in the microcosm-macrocosm analogies of the *Rasā'il.*¹² Analogical correspondences are found between different entities which correspond to each other in number, and some of them have obviously been selected in the analogies for numerological reasons. For instance, the lunar mansions are recurrently paralleled with the alphabets of the Arabic language, both 28 in number. An important aspect of the microcosm-macrocosm analogies seems to be descriptions of the numerological importance of some specific numbers.

Although the theory of the correspondence between the lute and the surrounding reality had astrological, medical as well as numerological aspects, the primary reason for the parallelism was cosmological, and above all, religious. The theory of music is an example of esoteric thought in the Rasā'il: like astrology, the science of music has more sublime goals than practical ones. When one studies the stars and contemplates the reality above, one starts to yearn for that (Ikhwān aṣ-Ṣafā' I: 137). The same happens when one practices musical sciences: one who understands the music of the spheres starts to yearn for the reality above (Ikhwān aṣ-Ṣafā' I: 225). Despite this religiously elevated position of music as an art and scientific discipline, the Ikhwan describe its subordinate position in comparison with the most highly dignified voice, the speech of God. For the closure of the epistle on music, the Ikhwān (I: 241) relate how Moses listened to the most beautiful music, the holy speech of God, and after that no terrestrial melody had any meaning for him. In this way, after praising the virtues of musicians and the nobility of music, the Ikhwan express their view regarding the hierarchy of sciences and place music in its position as a science of instrumental value, subordinate to theology. Mundane music was for Moses solely a means for reaching something he had already reached.

¹² In the history of philosophy, four has often been considered as a number of the human body, although in the Vitruvian model, number five as the number of chief members was usually thought to symbolize the corporeal aspect of man (Wayman 1982: 185).

During the centuries following the Ikhwān, the cosmological aspect of music was denied among the mainstream of Muslim philosophers and the approach to music represented by al-Fārābī achieved a dominant position. Thereafter, music was understood principally as a phenomenon of this world, and the supernatural did not have a place in the predominant definitions of music. The Pythagorean theory was restricted to esoteric Islam, and was preserved, for instance, as a part of the Sufi theory of music (Leaman 2004: 106). However, the therapeutic value given to music, which in the *Rasā'il* was strongly related to the cosmological theory of music, maintained wide acceptance in Islamic science. For example, in *Qānūn fī't-ṭibb* of Ibn Sīnā, the influence of music on the human soul is a part of medical theory. Ibn Sīnā's ideas of the therapeutic value of music appeared in Islamic as well as in European writings on medicine until the nineteenth century. (Shiloah 1995: 52)

4. THE MICROCOSM AND THE HARMONY OF PROPORTIONS

4.1 An Islamic canon of human measurements

Ibn al-Haytham (d. 1039), is best known for his optical theories.¹³ His definition of visual beauty had, however, an important impact on the later development of aesthetic theory. It has been argued that he was the first medieval thinker to define beauty as a category on its own, independent of ethics, logic or theology. Consequently, his definition of beauty has been characterized as an antecedent for modern aesthetics. (Gonzalez 2001: 25) In Kitāb al-Manāzir (200–206), Ibn al-Haytham defines the properties of the object perceived by the sense of sight that produce a feeling of beauty in the soul of the perceiver. On some occasions, colours cause objects to be considered beautiful, which is the case when one is observing flowers. On the other hand, the moon looks more beautiful than the smaller stars, because size is one of the properties causing beauty. After defining twenty properties of this kind, Ibn al-Haytham mentions proportionality (at-tanāsub) and harmony (al-i'tilāf) as their own category. In order for an eye to perceive beauty in calligraphy or in any object consisting of various parts, harmonic proportionality is demanded. Proportionality of an object produces beauty distinct from the beauty produced by any other particular property or combination of the properties causing beauty. The human body is one of the examples Ibn al-Haytham brings up of the objects which proportionality makes

¹³ Ibn al-Haytham is also known in the West by the Latin names Alhacen or Alhazen.

look beautiful. In a beautiful man, the organs, for example, should correlate with each other in size and thin lips are more beautiful for a small-mouthed person.

The proportions and their harmonic combinations were highly valued by the Ikhwān as well. In this they followed their times: mathematical proportions were accepted as an important factor defining beauty in medieval Islamic thought. According to Doris Behrens-Abouseif (1999: 37):

The Arabs inherited from the Greeks the doctrine that proportion was the basis of beauty. This principle was adopted in all periods and in the context of various disciplines, in particular in the arts of calligraphy and music. The doctrine of proportion allowed the formulation of universal aesthetic statements applicable to all arts as well as to human beauty.

However, the Ikhwān produced a particularly detailed analysis of this criterion for beauty and connected it to their idea of man as the microcosm. Hence, the idea of proportionality as well as all their ideas that concerned aesthetic topics, were closely related with cosmology. For the Ikhwān, mathematical proportions formed the basis for all the sciences and arts. The right proportions were demanded for the medical sciences, for tasty cooking and for goodness of character. In addition to medicaments, tasty food and pious people, examples of right proportions were manifested in the arts as well, in the harmony of music and in beautiful paintings. A talented painter had to follow the balance of colours. (Ikhwān aṣ-Ṣafāʾ I: 251–253) Different kinds of proportions were described in the relations of numbers to each other. In the material world, harmonic proportions appeared in the human body.

The particular interest of the Ikhwān in the bodily aspect of man can be seen in their detailed description of human measurements. Such descriptions have been familiar in various artistic traditions throughout human history. Even so, the listing of the Ikhwān, according to Panofsky (1955: 106), is unique in the Islamic tradition. In the Rasā'il, the proportions of the human body are illustrated in the epistle on music. The Ikhwān (I: 222–225) explain that the human body contains the noblest proportions, because the Creator made all body parts in the right proportions with each other. The head is in proportion with the rest of the body, the shape of the face with the shape of the eyes and different internal organs are in proportion with each other. The exact information about the ideal proportions of the human body is given describing the relation of a new born baby's span with its body. Its length is eight spans long; the distance from its knees to its toes is two spans. The distance from the knees to the genitals is two spans; from the genitals to the height of the heart two spans and from the heart to the hairline, similarly, two spans. The face is said to be one span and an eighth high, the nose

one fourth of span and the breadth from one shoulder to the other two spans. The whole proportionality of the baby's body is described in this way, measuring it with the baby's own span.

According to Shiloah (1964: 172-173), details of the proportions given in the Rasā'il in many ways resemble the proportions of Vitruvius and the medieval European canons of human proportions. However, there are two distinct features in the description of the Ikhwan. One is the use of the span as a measurement. In declarations of human proportions the unit of measurement is usually the length of the face or nose. Another, and more significant, factor that distinguishes the Ikhwan from other theorists of human measurements is that the proportions are described for the body of a new born baby. As Panofsky (1955: 106) mentions, this is done in order to emphasize the cosmological importance of the theory, by connecting the idea of human proportions to the embryology of the Rasā'il. According to the Ikhwān (III: 401), differences between human beings are due to four factors: the influence of the celestial bodies, the balance of the bodily humours, the climate and nature of the soil prevailing in the geographical area and, lastly, the education and guidance given by parents. The celestial bodies start to influence the development of an embryo at the moment of conception. Thereafter, an embryo is under the impact of different planets during each month of pregnancy. At the moment of birth, a new born starts to be influenced by the surrounding world as well, and the importance of the three other factors increases. However, a baby is still under the impact of the heavenly bodies.

Even though the Ikhwan themselves seem to have intended the definition of human proportions to also serve as a pragmatic tool in the creative work of an artist, this hardly was the case in practice. After defining the proportions of the baby the Ikhwan (I: 225) declare: "These correspondences and analogies are the ones according to which the skilled artisans work making their works, sculptures, figures or paintings, well-proportioned in their structure, combinations and harmony." There is, however, no evidence of the direct practical value of the Ikhwān's canon in Islamic art (Soucek 1998: 539). In the history of art, these kinds of canons have usually been used when defining the portrayal of the human body in the arts. The canons were widely employed in ancient art as well as in the Western tradition until the fifteenth century, when art was transformed significantly and began to move in the direction of subjective expression (Panofsky 1955: 136–137). Naturally, description of the human body was not the most popular theme in the medieval Islamic art in general. The lack of any practical influence of the Ikhwān's canon, which is affirmed by Panofsky (1955: 106) as well, is, however, difficult to prove because of the shortage of material on aesthetics in the Islamic medieval culture. A similar problem is confronted when the value of human measurements as an ideal in architecture is considered. There are few sources for Islamic medieval architectural ideals: most of the writings on architecture treat the technical aspects of building.

The principal element in the representation of human proportions in the *Rasā'il* is cosmological. The proportions are a manifestation of cosmic harmony, which is summarized in man, the microcosm. According to Panofsky (1955: 118–120), during the Middle Ages the practical canons of human proportions were usually separated from those with cosmological significance. This changed in the early European Renaissance, when the new humanists brought together the two aspects of the Vitruvian man and attached the mystical significance of cosmic harmony to the artistic ideal. That is to say, the rational, Aristotelian theory was combined with the mystical, Platonic interpretation of the idea. Islamic theorists of beauty were involved in this development; Panofsky states that there is reason to assume that one of the earliest post-classicist Italian artists, Lorenzo Ghiberti (d. 1455), adopted the importance of proportionality as an essential criterion for beauty from the writings of Ibn al-Haytham.

4.2 Proportionality as an aesthetic ideal

Man's position as the microcosm is a central reason for the Ikhwān's view that the most perfect reflection of the cosmic harmony can be found in the human body. Proportionality as an aesthetic ideal is also related to the microcosmic idea in the context of the corporeal comparisons appearing in various parts of the *Rasā'il*. Some of these microcosm-macrocosm analogies concentrate on the structural parallelism between the human body and a house, and correspondences have been sought between the body parts or organs of man and different parts of a building (see, e.g. Ikhwān aṣ-Ṣafā' II: 383–384). These analogies could be examined from the perspective of the ideals in architecture and possibly some indications of the suggestion to follow the human form in building a house might be read from them. Still, undoubtedly, their main focus is to describe the holistic nature of man, and the architectural aspect is not significant.

The Ikhwān's definition of the ideal human proportions is, nonetheless, interesting regarding corporeal comparisons in general. In addition to architectural comparisons, the Ikhwān parallel the structure of the human body with, for example, a city, the earth, and the heavenly spheres. Examining the corporeal comparisons from the perspective of human proportions makes them look more rational and also links them more closely to aesthetic theory. Both the canon of human measurements and the corporeal microcosm-macrocosm analogies are a distinctive feature of the *Rasā'il*. Representation of human measurements in

the context of the arts is one of the possible explanations for the wide use of corporeal analogies in the *Rasā'il*. These, even annoyingly detailed, listings of the correspondences between the human body and the surrounding world not only describe the brilliant corporeal structure of man as a reflection of reality in its entirety, but, likewise, emphasize the arithmetical harmony between different parts of it. Hence, the corporeal comparisons could be seen as exaltations of the harmony present in reality and summarized in its miniature, the human body. The central purpose might be to highlight the ideal proportionality, which is, not least of all, an aesthetic ideal.

Sometimes man's unique ability to perceive proportionality is related to the geometrical theme characteristic of Islamic architecture. Mathematical order, of which the harmony of the human body is a reflection, is mentioned many times in the Rasā'il as something fundamental. People perceive this innately and use this order as a criterion for beauty. Man is able to perceive this fundamental structure because of his position as the microcosm, a summary of the cosmic order. This theme has formed a part of the recent discussion on Islamic aesthetics, regarding the universal, cosmological significance given to geometric patterns employed in Islamic architecture. The Ikhwan are among those medieval thinkers referred to in this discussion. It has been claimed that, according to these medieval thinkers, the beauty the observer of the geometric patterns perceives is due to the higher universal order these patterns reflect (see, e.g. Gonzalez 2001: 72-93). Leaman (2004: 136-138), among others, criticizes this view and questions whether some universal principles, which are regarded as objective, can be accepted as a criterion for beauty. He emphasizes that not everybody necessarily accepts these principles, nor defines beauty through them.

In spite of their irrationality, the meanings given to the geometric patterns cannot be denied as a part of the discussion on the history of Islamic aesthetics and the cosmological ideas that have been associated with arts in the Islamic tradition. One of the contemporary Islamic philosophers who has presented corresponding spiritual interpretations of the elements of Islamic art and architecture is Seyyed Hossein Nasr (see, e.g. Nasr 1987). In this respect, his writings should naturally not be approached as a critical history of art. His views do not reveal the meanings given to the works of art by their medieval composers nor the impressions of everyone who contemplates art today. However, his philosophy represents a contemporary example of a mystical Islam similar to what the Ikhwān represented eleven centuries ago. Nasr's ideas therefore offer valuable information on the meanings the living Islamic mystical tradition gives to art and architecture.

5. WORK OF THE CREATOR IN MINIATURE

One of the values of the Ikhwān in aesthetics is their contribution to the discussion of the artist's position in Islamic arts. In the same context in which they demand proportionality in art, the Ikhwān (I: 225) describe the work of an artist: "All this is done imitating the work of God, exalted to be His power, and to resemble Him in wisdom, like it is said in the definition of philosophy: philosophy is becoming God-like, as much as it is possible for a man." The Ikhwān express high respect for the work of an artist, who, like philosophers, imitates God. In Islamic discussion on the arts, the role of an artist has been a contentious theme. An artist as an imitator of God's unique position as the Creator has sometimes been found blasphemous. The idea that man is the microcosm and therefore in all his acts reflects the structures of reality as a whole, has, according to Priscilla Soucek (1998: 539), played an important role in the arguments supporting artistic creativity.

The microcosmic position of the human being defines all the activities of man, also his role as an artist. According to the Ikhwān (I: 306), man's characterizing feature — what makes him man — is his position as the microcosm. This distinguishes man from all other animals and guarantees the human race the collective status as the vicegerent of God on earth (*khalīfat allāh*). Man's role as the microcosm because of his capacity to produce anything in the universe is summarized by the early Basran thinker al-Jāḥiz (d. 868/869): "Man is called the microcosm, because he is capable of producing anything with his hands and imitating all the sounds with his mouth" (al-Jāḥiz I: 213). The microcosmic position of man is related to his abilities, and it could be interpreted from the perspective of potentiality: man fulfils his microcosmic nature by producing things.

In addition to seeing man as the microcosm because of his ability to produce something, the whole process of producing art can be regarded as the creation in miniature, the creation at microcosmic level. If man, as noted in previous section, perceives everything through the universal harmonic structures that are manifested in him as the microcosm, it is also innate for him to replicate order in the things he produces. ¹⁴ Thus, the work of art man produces represents the universal order of creation as a whole. Man imitates God as a creator, while the work of art that man produces imitates the creation of God. This idea applies to everything

^{14.} In Allers's division, this kind of microcosmic idea could be regarded as an example of the holistic microcosm theory. The holistic microcosm refers to the idea that man tends to produce order around him, which reflects his own inner order. The holistic microcosm has been elaborated especially in its sociological form, but Allers (1944: 323–326) also mentions the aesthetic holistic microcosmic idea. Without going into details in defining the idea he links it with the idea of God as the great artist and denotes that this kind of analogy has not been extensively elaborated, even though he mentions it to have existed during the Romantic period.

man does and, consequently, to all the artistic disciplines. The parallelism between the Creator and the artist has been especially developed in writings on calligraphy. This alludes to the high status the calligraphy has in the Islamic culture.

Even if the canonization of human proportions did not have much practical importance in Islamic painting because of the lack of theoretical writings on the discipline, Islamic calligraphy had its systematisers. In contrast with many other fields of Islamic art, calligraphy has attracted theoretical interest and writings on it have been produced throughout Islamic history. Calligraphy is treated in the *Rasā'il* as well. The Ikhwān (I: 220–222) define the ideal proportion of each of the letters in relation to the first letter, *alif*. Like ideals of many other disciplines, the ideals of calligraphy are described as a reflection of the arithmetic proportions recurring in the universe, also in the human body (Ikhwān aṣ-Ṣafā' I: 252–253). In this way, the Ikhwān connect the theory of calligraphy to their cosmological theory of proportions. In addition to technical matters defined in the writings on calligraphy, the position of the art and artist is discussed and even mythologized.

In Islamic tradition, the highly honoured profession of a calligrapher and his working process has been explained and paralleled with creation. One of the well-known myths regarding the work of a calligrapher, which has been elaborated widely by later theorists, is present already in the Rasā'il. It has to do with the allegorical language the Ikhwān employ in the context of their cosmology. According to the emanationism adapted by the Ikhwan, the first thing created by God is the Universal Intellect (al-'Aql al-Kullī). The Universal Intellect is the first hypostasis after God and includes the ideas of everything in the universe. Hence, everything is created through the Intellect. The Ikhwan describe the Universal Intellect as the Heavenly Book or, employing qur'anical terminology, as al-Lawh al-Maḥfūz, Well-preserved Tablet, to which the pre-existent Pen (qalam) draws forms of everything. (See, e.g. Ikhwān aṣ-Ṣafā' IV: 203.) In this way, creation is described as the work of the Divine Calligrapher. This has led to the idea of a calligrapher as a creator at microcosmic level, and the cosmological dimension in the work of a calligrapher is a part of the mythological basis that defines the calligraphers' profession as honoured, even sacred, in Islamic culture. Similar ideas have been produced extensively in later Islamic thought, especially among mystic philosophers. (Schimmel 1984: 79–80)

Traditional techniques of calligraphy are still employed in the Islamic world and the traditional mystical ideas regarding the position of a calligrapher influence alongside them. However, the medieval artistic concepts and meanings given to art live side by side with modern techniques as well. A contemporary example of this is the Iraqi painter and art-theorist Shākir Ḥassan as-Said (1925–2004). In his writings, as-Said develops a philosophy and technique of

calligraphy called *One Dimension* (al-bu'd al- $w\bar{a}hid$). The One Dimension forms a synthesis of Islamic mystical thought and Western existentialism. As-Said, for instance, applies such Sufi terminology as the interior ($b\bar{a}tin$) and the exterior ($z\bar{a}hir$) existence of the work of art, and the whole theory of one dimension is said to be about the relationship between the visual and non-visual. According to as-Said, the working process of an artist, like the path of a sufi, consists of five stages ($maq\bar{a}m\bar{a}t$) and various states ($ahw\bar{a}l$). As-Said describes the fifth and the last stage as a moment of ecstasy and, resembling the sufi $fan\bar{a}$ ', it is about unity and losing the personal, individual self. Traditional Islamic numerology also plays a formal role in some of as-Said's works. The Ikhwān are among the medieval thinkers to whom as-Said refers to in his writings. He also adopted and developed their theory of line. (Shabout 2007: 97–121)

6. CONCLUSION

The microcosm-macrocosm analogy is present in medieval Islamic aesthetics in various forms. The Pythagorean definition of music itself is based on the analogy: terrestrial music is seen as a reflection of its heavenly counterpart at the microlevel. The microcosmic idea appears explicitly in the analogy of the lute, which summarizes the Ikhwan's entire theory of music. On the other hand, proportionality, which is a prevailing theme in the Rasā'il as a whole, is somehow connected to all the themes treated in this article. The proportionality manifested in the human body receives exceptional attention from the Ikhwan which suits their general interest in the corporeal aspect of man and especially the microcosmic dimension of the human body. They cannot be called the Islamic Vitruvians, however, since their theory of proportions lacked practical importance. That kind of ideal seemingly did not have wide practical significance in Islamic art or, at least, there is not much evidence of that. Like their Renaissance successors, the Ikhwan link the proportionality of the human body to the microcosmic idea; thus, their description of human proportions would require a more extensive study, especially from the perspective of the idea of man. Through proportionality the microcosm-macrocosm analogy is related to some, even currently ongoing discussions on Islamic aesthetics, such as that of the meanings given to geometric patterns. Man as the microcosm, according to the Ikhwān, reflects cosmic harmony and is, therefore, able to perceive the cosmic harmony concealed in the works of art. Similarly, the microcosmic position of man grants the artist his exceptional creative power and ability to produce harmony. The artist is a God-like creator who in his work of art produces a miniature of creation. In this way, the discussion on the position of an artist connects the aesthetics to the discussion on the relation between man and God, and, moreover, on the role of man among the created.

As we can see, the Ikhwān engaged in the discussion on art at various levels; their views have been involved in the debate on art itself, the ideals given to it as well as the process of perceiving and producing it. Some of the artistic ideas developed in the Rasā'il still form a part of the living Islamic tradition. Some of them, on the other hand, belonged to the sphere of marginal Islamic thought already at the time they were written. The unifying idea in all the topics treated is the microcosm-macrocosm analogy. In this article, the idea itself has been understood in a very broad sense. Such an approach to the microcosmic idea would probably not be especially rewarding in a more extensive examination of the idea. A more restricted study concentrating solely, for instance, on the idea of man as the microcosm might be more productive. In the context of aesthetics, however, this definition of the microcosm-macrocosm analogy reveals something essential concerning the other principal aim of this article: it draws a general picture of the influence the *Rasā'il Ikhwān aṣ-Ṣafā'* had in Islamic aesthetics. The microcosmic idea appears in the context of all the artistic disciplines treated by the Ikhwān. The microcosm-macrocosm analogy, interpreted in this rather broad manner, is an overarching factor in their views on art.

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