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THE AESTHETIC VIEWS OF MUSIC OF DESCARTES AND COMENIUS

The intellectual legacy of René Descartes (1596–1650) and Johann Amos Comenius (1592–1670), two eminent personalities of the first half of 17. century, has been dealt with in scholarly literature from different points of view; however, the scholars analysed especially the relationship between both learned men from the viewpoint of philosophy. In my contribution, I concentrate on the sphere of arts and I pay attention to the parallels in the aesthetic ideas of both representatives of modern philosophy. Clarifying the ideas of music and aesthetics of Descartes and Comenius, we get the more vivid picture of the two prominent representatives of European science and philosophy of 17. century. As for Comenius, this fact enables us to add a new aspect to the present views of his encyclopedic, pansophic, pedagogical and didactic work, which is Comenius's relationship to music in the light of his aesthetic ideas. At the same time, we realise that, in Comenius's time, aesthetics did not exist as an independent branch of science and that Comenius's ideas of beauty were based on his belief that beauty consists in the „proper proportion of parts“.

The period in which Descartes and Comenius lived and worked was, from the viewpoint of music development and thinking of music, the period of beginning and rapid development of the monodial Baroque style. However, the style of counterpoint and the practice of thoroughbass gained ground too, sacred and secular music forms and genres were formed and the opera started to develop as a new music genre from the sphere of secular Baroque music. Both thinkers reflected in a way this purely music development in their work. Descartes did so especially in his work „Compendium musicae“ (written in 1618, published in Utrecht in 1650), which is, in a number of problems, connected with the sphere of philosophy of music, and Comenius in his textbooks („Janua linguarum“, „Orbis pictus“, „Eruditionis scholasticae“), as well as in his pansophic works („De rerum humanarum...“, Panaugia).

Descartes's work „Compendium musicae“ from 1618 was not an instructive textbook, but rather a complex of the philosophy of music theory. In its 13

chapters, Descartes was dealing with the principles of hearing and the structure of the human ear, the impulses of hearing and the sound waves, the intervals, consonances and dissonances. He was also dealing with the problematics of the partial tones, the tone system and the melody, the teaching of music instruments and music compositions, and, at last, with the basic problem of aesthetics – the teaching of the beauty of art. Solving the problems of music theory and aesthetics, Descartes was distinctly drawing upon his knowledge of natural sciences. Knowing that this philosopher paid great attention to mathematics in connection with the philosophy of 17. century and its emphasis on rationality, we cannot be surprised at the fact that Descartes was interested especially in physical and acoustic aspects in music. As far as purely aesthetic questions are concerned, Descartes was drawing upon the philosophy of the ancient world and he was undoubtedly influenced by the aesthetics of the monodial style of the beginning of 17. century. The main importance of Descartes in the sphere of music theory consists in the fact, that he discovered partial tones and described them in his work „Compendium musicae“. His discovery was then continued by a French learned man Marin Mersenne (1588–1648), who was engaged in mathematics, astronomy and music.¹ Both philosophers were also dealing with the problematics of consonances and dissonances in music: Descartes was doing so in his „Compendium musicae“ and Mersenne in his work „Cogitata mathematico–physica“ from 1644. Their efforts were later on continued in forming the system of modern harmony in the treatise „Traité de l’harmonie“: by J. Ph. Rameau from 1722. The mutual relationship between Descartes and Mersenne is worth mentioning. They were friends since the time they were students and their numerous letters of correspondence serve as an evidence for the fact that they were exchanging views of a large number of problems in the sphere of music theory and aesthetics. In his letters, Mersenne was often asking Descartes for advice and became his follower although he never admitted in public the direct influence of Descartes on his own work, nor did he quote Descartes in his books.² The fundamental work of Mersenne is represented by „Harmonie universelle“ in two volumes (Paris 1636–1637), where we can find important pieces of information about music of the early 17. century, especially about French music. This book includes an explanation of the theory of music and a valuable description of music instruments of the period and it reminds us of an analogous work „Syntagma musicum“ by Michael Praetorius (1571–1621).³ Mersenne was gathering source material for this synthetic work for many years and almost all of the important letters dealing with music, which were ex-

¹ In the letters of correspondence between Descartes and Mersenne from 1633–1634 we can find Descartes’s information about partial tones, designated by the term „resonare“. See Jan Branberger: Descartes, the philosopher of music. Prague 1933.

² Quoted in Jan Branberger, p. 72.

³ It is especially the case of the second volume of this treatise: Syntagmatis Musici Tomus Secundus – De Organographia. Wolfenbüttel 1618.

changed between Descartes and Mersenne, date from the years 1629–1634, i. e. from the time when Mersenne was outlining his „*Harmonie universelle*“.⁴

Clarifying the problematics of consonances and dissonances in music, Descartes paved the way for the solution of basic aesthetic problems in his work. In the baroque period, there came to the fore music imitations of mental motions, of affects. The theory of affects, which was gradually elaborated in a self-contained system, was then still maintained in the Age of Enlightenment. It was the purpose of the means of expression of the Baroque music to imitate affects; this situation was reflected also in some of the theoretical studies of the period.⁵ Descartes's contribution to the forming of the theory of affects consists in the fact that he created its philosophical basic and studied music also from the viewpoint of the person who perceives it and values it. In his work „*Compendium musicae*“, Descartes presented the theory of affects as one of the most significant manifestations of the Baroque aesthetic thinking. In this work, Descartes also presented an original synthesis of the mathematical aspects and psychological and physiological knowledge; in this way, he created a basis for a more complex and scientific interpretation of the problems of music. According to Descartes's interpretation, the affect is an emotional excitement, the cause of which should be searched for in the human body, not in spirit. The natural and spontaneous effectiveness of affects is caused by the fact that they are effective immediately after they emerge (without any participation of reason) and that they are diverse and rich in moods. As far as diversity is concerned, Descartes was inspired by Aristotle and thought that the diversity of phenomena was arousing great pleasure. According to Descartes, the pleasure evokes such a feeling, rhythm or interval in music that is not boring or tiring. It is necessary to avoid extremes in aesthetic perception: too monotonous impulses or, on the contrary, impulses offensive to the sense organ which perceives them. In this part, Descartes gives examples of the impulses which are offensive to human ears and eyes and arouse displeasure: „*Ad hanc delectationem requiritur proportio quaedam obiecti cum ipso sensu. Unde fit ut, v. g., strepitus scloporum vel tonitruum non videatur aptus ad Musicam: quia scilicet aures laederet, ut oculos solis adversi nimius splendor.*“⁶ This aesthetic view becomes more comprehensible if we take into account Descartes's study of mental passions and his

⁴ In 1648, Mersenne's treatise „*Harmonie universelle*“ was translated into Latin under the title: *Harmonicorum libri XII*. Besides this fundamental work, Mersenne wrote some other works related to the sphere of music, e. g. *Traité de l'harmonie universelle* 1627, *Questions harmoniquae* 1634, *Les préludes de l'harmonie universelle* 1634. Mersenne did not quote Descartes in any of these works. A number of Descartes's letters concerning music addressed to Mersenne were published in the edition: *Renati Descartes epistolae*. Amstelodami 1682.

⁵ For instance, in the work of A. Werckmeister, we observe the connection between affects and the theologian and mathematical conception of music. See *Musicology*, Prague 1988, vol. I, p. 57.

⁶ *Oeuvres de Descartes*, Publiées par Charles Adam and Paul Tannery. Paris 1908, ed. Léopold Cerf. Volume X. *Compendium musicae* (II. *Prænotanda*), p. 91.

instructions for the control of functioning of the reason. Here we can also find Descartes's conviction that only such passions and feelings are good which result in the benefit of the human organism without exerting it to an excessive extent. Also the following quotation exemplifies Descartes's theory of affects: „Finis, ut delectet, variosque in nobis moveat affectus. Fieri autem possunt cantilenae simul tristes et delectabiles, nec mirum tam diversae: ita enim elegeiographi et tragoedi eo magis placent, quo maiorem in nobis luctum excitant.“⁷ As follows from the text, the tunes can be sad or entertaining and we cannot be surprised at their diversity. Therefore, the greater sadness the elegiac or tragic speech arouses in us, the more we like it. The excitement is the cause of pleasure: however, not only cheerful feelings and impulses but also sad feelings arouse our pleasure and bring about an aesthetic experience. Descartes considers the role of our senses in this respect: „Sensus omnes alicuius delectationis sunt capaces.“⁸ Keeping the preceding text in view, we can understand also Descartes's demand that music should become the expression of feelings. The associative meaning of the melody is connected with this fact as well: the melody, which represented a recall of a cheerful perception, arouses pleasant feelings in the listeners during repeated audition and, similarly, the melody perceived during a sad event evokes sadness when we listen to it again. This opinion of Descartes is based on some of the views of ancient thinkers (Aristotle's Poetics and his teaching of catharsis).⁹

Descartes also paid attention to the melody in connection with the verbal communication, i. e. to the mutual relationship between music and words. Already in his „Discours de la méthode“, he was dealing with the incomparable power and beauty of eloquence and the fascinating grace of poetry. He also considers the human voice as the most pleasant of all the sounds, which captures most aptly different nuances of our moods and was also able to adapt best to our feelings. Therefore, we prefer the voice of our friend to that of our enemy and similarly we prefer the feeling of liking to that of aversion: „Id tantum videtur vocem humanam nobis gratissimam reddere, quia omnium maxime conformis est nostris spiritibus. Ita forte etiam amicissimi gratior est, quam inimici, ex sympathia et dispathia affectuum...“¹⁰ According to Descartes, the rhythm of music is intended to evoke such a mood in our soul which is similar to the mood expressed in music. A slow rhythm evokes soft and weary feelings, e. g. dejection or sadness, while a fast rhythm evokes lively and cheerful feelings, such as joy. Therefore, every single aesthetic impulse strives to arouse a corresponding reaction and to meet a response in the human soul. In this part, Descartes mentions the laws of nature to explain the effects of music and the cause of the

7 Ibid. *Compendium musicae* (I. Huius obiectum est sonus), p. 89.

8 Ibid. *Compendium musicae* (II. Praenotanda), p. 91.

9 The fact, that the aesthetic prediction depends mostly on random association is mentioned in Descartes's reply to Mersenne's letter (1630), in which Mersenne asks him for the definition of beauty. See *Oeuvres de Descartes*, vol. I, pp. 132–134.

10 *Oeuvres de Descartes*, *Compendium musicae* (II. Praenotanda), p. 90.

predilection for certain sounding music forms.¹¹ The last chapter but one of Descartes's work „Compendium musicae“ (XII De ratione componendi et modis) represents a valuable source of information about the author's views of some of the problems in the sphere of music acoustics, physiology as well as a creative practice in music. In this part, Descartes deals with the composition of vocal music according to certain rules; he mentions the way the intervals should be arranged in the melody and the way chords should be combined. He also explains why he regards some of the composition structures as imperfect and less acceptable for our senses. Descartes aptly describes the process of perception of polyphonic vocal music. He thinks that the person who listens to the piece of music expects that an imperfect consonance should be followed by a perfect consonance, which is more acceptable for our ears and comforts our senses, in accordance with the laws of nature. Descartes observes not only the way an acoustic impulse is perceived but also the way it is differentiated, experienced and, partially, also evaluated. He also reflects on the fact whether and to what extent the chords (perfect or less perfect consonances) come up to the listener's expectations: „Ratio autem, quare id potius servetur in motu a consonantiis imperfectis ad perfectas, quam in motu perfectarum ad imperfectas, est quia, dum audimus imperfectam, aures perfectiorem expectant, in qua magis quiescant, atque ad id feruntur impetu naturali; unde fit, ut magis vicina debeat poni, cum scilicet illa fit quam desiderant. Contra vero, dum auditur perfecta, imperfectiorem nullam expectamus ...“¹² Descartes also describes overall development of the melody and its structure especially in polyphonic compositions; he mentions Zarlino, a music theorist, and admits Zarlino's influence on his own conception of music theory included in the treatise „Compendium musicae“: „Ut in fine cantilenae ita auribus satisfiat, ut nihil amplius expectent, et perfectam esse cationem animadvertant. Quod fiet optime per quosdam tonorum ordines, semper in perfectissimam consonantiam desinentes, quos practici cadentias vocant. Harum autem cadentiarum omnes species fuse Zarlinus enumerat; idem etiam habet tabulas generales, in quibus explicat, quae consonantiae post quamlibet aliam in tota cantilena possint poni. Quorum omnium rationes nonnullas affert; sed plures, opinor, et magis plausibiles ex nostris fundamentis possunt deduci.“¹³

Having written his treatise „Compendium musicae“, René Descartes paved the way for forming new aesthetic opinions in 17. century, which were based also on the analytical and experimental research.¹⁴ The fact that Descartes combined so closely music with mathematics in his treatise should not be regarded as a mere continuation of former classification of music as one of the subjects of „quadrivium“ within „septem artes liberales“ (in Descartes's time,

11 See The history of aesthetics (Gilbertová-Kuhn), Prague, SNKLHU 1965, p. 173.

12 Oeuvres de Descartes, Compendium musicae (XII. De ratione componendi et modis), p. 133.

13 Ibid., p. 133.

14 See Comenius's work „Janua linguarum“ (Amsterdam 1666), chapter LXXIII Poesis et musica, par. 699, 700, 701.

incidentally, „quadrivium“ was gradually disappearing from the universities). There can also be felt the influence of Descartes's strong concentration on natural sciences, thanks to which Descartes made his fundamental discovery in the sphere of acoustics and physiology of music, which was the discovery of partial tones. Thanks to this fact, Descartes still ranks among the significant personalities engaged in the sphere of music theory. Forming his theory of affects, he anticipated some of the issues of music aesthetics of the following period.

Johann Amos Comenius did not write any complete work about music. The information about his views of music and music education is spread sporadically in his books („The School of Infancy“, „Didactics“, „Janua linguarum“, „Orbis pictus“, „Schola ludus“, „Eruditionis scholasticae“, „Pansophiae prodromus“, „De rerum humanarum emendatione consultatio catholica“). The greatest piece of knowledge of music is to be found in his textbooks. As for his views of music and its function in the society, its expressive possibilities and its aesthetic value, Comenius was influenced especially by the traditions and rules of his church (The Unity of Brethren) and by the cultural background of the places where he lived and worked. From this viewpoint, we observe a progressive change in his attitudes to arts and music in the course of time as well as shaping of his aesthetic views. Comenius appreciated in particular sacred music and he had a reserved, even disapproving, attitude towards secular arts. He preferred vocal music as higher kind of art serving for the celebration of God (especially psalms and sacred songs). He regarded instrumental music more like as a means of entertainment and pleasure which was not of such importance as vocal music although, on the eve of his life, he valued this music more favourably than in his youth, in accordance with new pieces of knowledge and the changing social function of music of the Baroque period. Most probably, also the cultural atmosphere in Amsterdam, where Comenius spent the last years of his life, contributed to the part that, at the end of his life, he broadened his views of each single kind of music arts and he rewrote some of the texts about music in his textbooks.

Comenius's attitude towards different kinds of music is dependent on the extent to which this music contributes to the celebration of God – this fact can be derived from the attitude of Comenius as a theologian. Comenius deals with basic issues of music theory and aesthetics, also from the viewpoint of a theologian and a philosopher. He regards music as a means of achieving universal harmony and he even reaches the sphere of the philosophy of music of the period in his texts about music harmony, the divine harmony and the harmony of the world and nature („Pansophiae prodromus“, „De rerum humanarum ...“). In his statements related to the sphere of music theory, aesthetics or the philosophy of music, Comenius follows the medieval and Renaissance thinking of music and the Czech tradition of the Unity of Brethren.¹⁵ The influence of humanistic

¹⁵ In this respect, Comenius was influenced most by his predecessor Jan Blahoslav and his work „Musica“. Blahoslav's „Musica“ was the first treatise concerning the theory of music written in Czech. It was published in Olomouc in 1558; the second edition (published in

and Reformation way of thinking is evident in Comenius's reflexions on the relationship between words and music in connection with the phenomenon „*musica poetica*“ (e. g. „*Janua linguarum, „Eruditionis scholasticae*“). However, Comenius also paid attention to the composition rules of the Baroque period related to the way of composing music according to the principles of the theory of affects. This fact is very important, in particular, for the topic of my study. In Comenius's work, valuable source material concerning this issue can be found. Nevertheless, it was necessary, to go through all of Comenius's textbooks as well as other books and to select from the large number of his studies the texts which were related to the problematics of music. In this way, a collection was created, which was rather small but significant as for the source material. In this collection, one of the more extensive texts is related directly to the theory of affects. This text of Comenius is included in the work „*Eruditionis scholasticae pars tertia, Atrium*“, published in Sárospatak in 1652. This work represents a collection of three textbooks for „*schola pansophica*“, which Comenius wrote as well as published during his stay in Hungary. We should remember that Comenius lived in Sárospatak in the years 1650–1654, having been invited by the princely family of the Rákóczi. During his sojourn in Sárospatak he wrote his principal textbooks, which reflected his philosophical ideas and his pansophic conception. Analysing these books, we learn that, as for Comenius's thinking of music, a medieval or Renaissance conception of music prevails. However, in these works, we can also come across ideas and knowledge confirming that Comenius was dealing with the issues of music in a wider context within the European philosophical development of 17. century. The textbook „*Atrium*“ from the collection „*Eruditionis scholasticae*“ is the evidence for the fact that Comenius was acquainted with the way of composing music in accordance with the rules of the theory of affects. Therefore, let us pay closer attention to this pedagogical treatise of Comenius.

„*Eruditionis scholasticae pars tertia, Atrium, rerum linguarum ornamenta exhibens*“ is the last textbook written by Comenius for „*schola pansophica*“ in Sárospatak. If focused on the Latin language especially as far as stylistics was concerned and, in two chapters, it also dealt with the problematics of music: the chapter XLVII *Voluptuosae artes* was acquainting the pupils with the classification of music instruments and the chapter LXXIII *Poeseos et musicae artes* was already focusing on the issues of music aesthetics. The textbook „*Atrium*“ from the collection „*Eruditionis scholasticae*“ includes also the chapter XXVIII *Mens, Affectus, Conscientia*, in which Comenius explains the basic concepts of the theory of affects, however, without any relation to the problematics of music. This problematics is not dealt with until the chapter LXXIII *Poeseos et musicae artes*, in which the greatest attention is paid to the connection between music and rhetorics and to the mutual relationship between poetry and music. As for the contents, this chapter draws upon the text of the same chapter in the

Ivančice in 1569) was completed with two „*Additions*“ destined for composers of songs and for singers.

preceding textbook „Janua“ from the collection „Eruditionis scholasticae“. Nevertheless, this text was rewritten and extended to a considerable extent and it was also much more difficult for the pupils as for the mode of expression. The second part of this chapter provides the most important pieces of information about Comenius's views of the problematics of music in connection with aesthetic issues and the theory of affects. This part includes, at first, a brief characterization of the basic poetic forms and the way they should be recited (e. g. with lyre accompaniment) and it deals with the role of rhythm and metre in the structure of a poetic work. In this respect, Comenius thinks that the metre is more important than the rhythm when writing that the metre makes all the elements of speech (syllables, words, sentences) be subject to harmony while the rhythm does so just in some of them: „Plus tamen artis et variationis, eoque suavitatis et admirationis, habet Metrum, omnia in sermone (Syllabas, Voces, Sententias) ad numerum, mensuram, pondus reducens. Cum enim Rhythmus quaedam tantum, Metrum omnia, ad harmoniam concinnet, palam est imperfectum ibi, perfectum hic, esse artificium: cujus tamen leges tradere non hujus loci sit.“¹⁶ The mentioned fact enables us to understand why Comenius all of his life was dealing with the metrical structure of sacred songs from the viewpoint of theory (On Czech Poetry, about 1620, Annotata from 1633, the preface of the Hymnal from 1659), as well as of practice (as the author of 135 poetic compositions included in his outstanding edition of sacred songs from 1659). In the following part of the text, Comenius focused on issues which, in his time, belonged to the sphere of the so-called „musica poetica“: „Nec tamen ibi etiam conquevit aurium suavitates venandi libido: sed quemadmodum Oratores ingeniosae compositioni ingeniosam addunt pronuntiationem, ita Musurgi argutae carminum structurae argutum excogitant modulamen. Quod non tantum in accomodanda syllabarum quantitati Vocis celeritate et tarditate; aut ascensione descensioneve toni, consistit: sed in eo potius, ut melos ipsum, accommodatum sit materiae, laeta sonans laete, tristia triste etc. ad provocandum quem volumus affectum. Cui usui excogitati sunt Modi certi: Lydius, Phrygius, Dorius, Jonicus etc. sive cantilando Voce assa, sive adsonando Organis sonantibus, quod Psaltae et psaltriae faciunt.“¹⁷ When he writes about setting poetry to music, Comenius states that musicians strive to find appropriate melodies for poems just as the orators add appropriate pronunciation to the poetic structure, because our ears keep longing for pleasure. When composing a melody, musicians do not merely adapt its speed or slowness to the length of the syllables of spoken words or to rising or falling of the tones; the melody itself should be adapted to the material in such a way, that the „cheerful would sound cheerfully and the sad sadly“ in order to achieve the desired effect. For this purpose, as Comenius states, certain modes were invented (Lydian, Phrygian, Dorian, Ionian), for singing either

16 Eruditionis scholasticae pars tertia, Atrium. In: Opera didactica omnia, Amsterdam 1657. Edition: Joannes Amos Comenius Opera didactica omnia, Tomus II, Pars III, Prague 1957, par. 667.

17 Ibid., par. 668.

without any accompaniment or accompanied by music instruments. Therefore, Comenius thinks that the modes are able to function as means of expression and to arouse affects by themselves. The mentioned text is quite unique and it cannot be found anywhere else in Comenius's work. It provides an evidence for the fact that Comenius was acquainted also with artistic conceptions of the period and that he knew the principles of the theory of affects.¹⁸

In Comenius's opinion, the music composed and performed in the spirit of the mentioned principles of the theory of affects is considerable powerful: „Admirere Musicae vim quum Elisaeum cithara melancholiam pepulisse, Davidem ipsum satanam fugasse, legis. At nunc apud nos plures sunt amusi quam Musici. Plures Midae (quorum aures melius implet vox Corvi, ac modulatio afficit Philomelae) quam Amphiones, quos testudine domare feras (feros intellige mores) delectet. De quibus recte usurpes illud: Harmonice factus non est, qui non delectatur harmonia. Quibus nos valere et suos boatus, mugitus, grunnius etc. sibi habere jussis, ad culturae humanae reliqua progrediamur. In fine cognoscitur, cujus sit toni cantio.“¹⁹ When describing the admirable power of music, Comenius mentions David, whose music expelled the Devil himself, and Eliseus, who overcame his dejection with the help of music (two stories from the Bible are presented in this part). Comenius thinks that, in these days, however, there are more people without any musical talent than real musicians; there are more people like Midas (the king Midas is presented in Comenius's text as an example of a man without any musical talent), whose ears are full of raven's croaking rather than of nightingale's singing. The following idea of Comenius is related to the problematics of musicality as well: People, who do not enjoy harmony cannot have a sense of harmony. Some years later, we come across these words also in the preface to the Hymnal from 1659.²⁰ Let us add that the idea of a man with a sense of harmony penetrates a number of Comenius's works; it is the reason for all Comenius's didactic efforts, for all his searching for the balance of the man and nature, the man and the universe and the human activities as such as well as his searching for the balance of every single feature of human personality.

Due to the limited extent of this study, in this connection, it is not possible to mention a very interesting issue, which is Comenius's conception of harmony (from the viewpoint of music harmony as well as in the broader context of his pansophia – the harmony of the man, nature and the world, the divine harmony). I have dealt with this topic in one of my other studies as well as in my extensive monography, which has not been published yet.²¹

¹⁸ Certainly, it would be very interesting to study the source of this opinion of Comenius knowing that, for instance, the theory of music of 16. century was also dealing with the affects of the modes as far as affects are concerned.

¹⁹ *Eruditionis scholasticae*, Atrium, par. 668.

²⁰ Johann Amos Comenius: *The sacred songs*. Prepared by Antonín Škarka. Prague, Vyšhrad 1952, p. 49.

²¹ Olga Settari: *Music and music education in the works of Johann Amos Comenius*. Volume II – Comenius's Stay in Hungary, Brno 1993, p. 186.

From the preceding authentic texts from the work of René Descartes (*Compendium musicae*) and Johann Amos Comenius (*Eruditionis scholasticae, Atrium*), we can infer the parallels in the aesthetic thinking of both these learned men. They both deal with the theory of affects; however, the intensity of their approach to the topic is different. As for Descartes's work, Comenius was probably inspired most by Descartes's emphasis on the importance of the melody in the mutual relationship between music and words and by his basic demand that music should become the expression of feelings. Nevertheless, we should not forget about another possible influence, which is the work of Descartes's friend, a French philosopher Marin Mersenne (1588–1648). Mersenne lived in Paris in the time, he was very cultivated, as for his attitude towards music, and he knew Comenius's treatise „*Pansophiae prodromus*“. As follows from the correspondence between Comenius and Mersenne, Comenius, probably, studied Mersenne's treatise about harmony „*Harmonie universelle*“ (Paris 1636) and Mersenne was willing to consult with Comenius some of the issues connected with the sphere of the philosophy of music.²² Nevertheless, Mersenne was shaping some of his aesthetic opinions under the direct influence of Descartes; therefore, it is possible that Comenius was influenced by both of these philosophers in his texts about music. Comenius's text from the textbook „*Atrium*“ represents an isolated source dealing with the theory of affects, which suggests also the relationship between Comenius's thinking of music and the philosophical thinking of 17. century.

²² In Comenius's letter to Mersenne dated January 2, 1640 from Leszno, we can read: „*Eo autem gratior nobis est propensio tua quod quae communicare promittis (de Motu, de Luce, de Harmonia, de Magnetis) prodigiis sive disquisitiones totales sive particulares observationes tuas universali operi nostro prorsus fundamentalia sint ...*“ The letter can be found in the manuscript ms. fr. nouv. acq. NAF 6206, Bibl. Nationale Paris, pp. 132–133.