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Christian Rhythm at the End of Antiquity (4th - 6th cent. AD) - part 3

Thursday 1 September 2016, by Pascal Michon

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_Rhythm as Regular Beat - Augustine's *De musica*, 3, 4, 5

Climbing down the ladder, Augustine then differentiates between verse and meter. Some metric lines, he argues, are uneven and do not have a regular pause before their endings. Instead, verse uses meter but possesses regular pauses. For Augustine—who does not mind, here, quoting the "ancients" i.e. the tradition—there cannot be such thing as what will be called much later "free verse" (see next vol.).

— **Master**. Well! You should know that those among the ancients who have the most authority refuse the name of verse to the first species of meter. For them the verse consists of an assemblage of feet which is divided into two members, united by a regular measure and in a constant proportion [qui duobus quasi membris constaret, certa mensura et ratione coniunctis]. (De musica, 3.2.4, my trans.)

The conclusion of this discussion seems clear at first. Every meter is not necessarily verse nor rhythm but verse is necessarily both rhythm and meter. At least in poetry, rhythm and meter merge together. Poetry is made of verse and since "verse is both rhythm and meter" and "meter is rhythm," one must conclude that, in poetry, rhythm is meter and meter is rhythm.

— **Master**. Retain these three words which we will need in the discussion: rhythm, meter, verse [rhythmum, metrum, versum]. They are distinguished in that, if every meter is rhythm [ut omne metrum etiam rhythmus sit], every rhythm is not meter [non omnis rhythmus etiam metrum], and that, if every verse is meter, every meter is not verse. As such, every verse is rhythm and meter [ergo omnis versus est rhythmus et metrum]: the consequence is rigorous. (De musica, 3.2.4, my trans.)

But this confusion, which will be essential to some future classical theoreticians in 17th century, when poetry will be considered as necessarily composed of verse, and verse of regular succession of

feet, does not hold very long. Indeed, soon, the student starts "beating rhythm" by "clapping hands" while chanting poetry. Here "rhythm" (rhythmus) is clearly equivalent with regular beat (plausus), but not with meter, "the duration of long and short syllables," which the student disregards—probably as many people at the end of the 4^{th} century—due to his lack of education.

— **Student**. Let me beat this rhythm [rhythmum istum exhibeam] not with words but with a simple clapping of hands [ut non verbis, sed aliquo plausu]. I guess, I am able to punctuate the duration of times [ad temporum momenta moderanda] only by following the indications of the ear [iudicium aurium]. But as to the duration of long or short syllables, since it is a thing determined by tradition [quod in auctoritate situm est], I really do not know anything about it. (De musica, 3.3.5, my trans.)

This empirical, if not yet theoretical, depreciation of meter and the identification of rhythm with a regular beat or pulsation which substitutes the former is a very significant phenomenon. We do not know how regular was already the musical beating of time in the remote periods when we see it emerge in our sources in the 5^{th} and 4^{th} centuries BC, but we may suppose that for practical reason, particularly when a singer, a musician and a dancer were performing together, they were probably following a kind of common pulsation in order to synchronize instrument, voice and body movements. However, on the theoretical level, the rhythm was never confused with a regular beat and was always considered as a complex arrangement of various time-lengths. For the first time, at least in our sources, meter is here disregarded and rhythm defined as regular musical beat.

This change was clear to the first translators of *De musica* into French in the middle of 19th century.

Since we are accustomed to chant, we see in feet only more or less artificial combinations of short and long syllables. But this is not the case. "The feet, as Mr. Vincent says (1849), are identical to our musical measures. They consist of times made perceivable by the ear by the beating of time [le battement de la mesure]. The combination of feet can only take place on the condition that they offer equal durations and that they are measured by the same beat. The amphibrach [u - u] cannot combine with any other foot because, divided into a ratio of 3 to 1, it disturbs the beat of the measure and as the student says, grates on the ears. To sum up, the foot expresses a musical measure of which the syllables are the notes, and the combination of the feet must be done according to such a ratio that the raising and the lowering, the weak and the strong, return to constant and regular intervals. (Thénard & Citoleux, Avertissement in the first French translation of De musica, 1864, my trans.)

Naturally, having defined rhythm as "fine modulation," then fine modulation as proportional and regular succession of time-lengths, Augustine needs, when he discusses poetry, to introduce the notion of rest. Indeed, since "music," even in poetry, is more important than words, when the succession of word quantities does not match the regular succession of musical time-lengths, the "real musician" uses rests or silences (*silentiorum spatia*) in his declamation to compensate and entirely regularize the poetic flow.

— **Master**. Thus retain this essential point: meters have rests of regular duration [Teneas igitur oportet haec silentiorum spatia certa in metris esse], and when you feel that a foot is incomplete [deesse pedi legitimo], you will have to examine whether this void is not filled by a rest of an equivalent duration [utrum dimenso atque annumerato silentio compensetur]. — **Student**. I understand this rule: go on. — **Master**. It is now a matter of determining how this rest is measured [ipsius silentii modum]. In this meter we encounter a bacchius [u - - / 5 times] after the choriambus [- u u - / 6 times]: the ear, perceiving that the bacchius lacks one time to form a foot of six times analogous to the choriambus, demanded, at the resumption, a rest of a duration equal to that of a short syllable [in repetitione tanti spatii silentium interponere coegerunt, quantum syllaba occuparet brevis]. But suppose the choriambus is followed by a spondee [- - / 4 times]: before returning to the beginning, we will have to observe a two-time rest [duo nobis tempora cum silentio peragenda sunt]. Such would be this meter: Quae canitis fontem. You understand, no doubt, the necessity of this silence, to avoid any inequality in the beating of the measure [plausus non claudicet] before returning to the beginning of the meter. (De musica, 3.8.17-18, my trans. and expl.)

The objective of the use of rests, as exposed by the master, is to avoid during performance any unevenness in the succession of times in each line and in the succession of lines in each poem. Poetic rhythm must be entirely regularized.

— **Master**. When one performs a tune or sings words which have a definite end, and form more than one foot, if by a natural movement and without any consideration for number there is a certain equality which is charming the ear, it is enough: there is a meter. It matters little that there are less than two feet: the meter appears, as soon as there is more than one foot and that a rest is added, which is equal to the times that are lacking on the second foot. The ear counts then two feet, because the measurement is equivalent to two feet when one adds, before the resumption, a silence which completes the sound. Tell me if you understand all this and approve it. — **Student**. I understand that and I agree with it. (*De musica*, 3.8.19, my trans.)

Augustine finishes the discussion of Book 3 by specifying on very abstract grounds the respective minimal and maximal durations of verse, whose previous definition is here repeated: "a meter composed of two members, whose measure is regular" (3.9.20). One line of verse cannot have less than 8 times, he says, since it is composed at least of two members composed in turn of two minimal feet, and more than 32 times, i.e. 4×8 times, since 8 times is the duration of the smallest verse unit and 4 the first number giving interior limit to the unlimited series of numbers because it is composed of 3 + 1, the famous Pythagorean $\tau \varepsilon \tau \rho \alpha \kappa \tau \upsilon \varsigma - tetrakt \upsilon s - tetractys$.

— **Master**. So if the smallest foot, which is at the same time the first, cannot have less than two times, the verse, which is at once the smallest and the first of all, cannot have less than eight times. — **Student**. That is true. — **Master**. And the longest verse, where must it stop? How many times should it contain? Is not your answer imposed by this progression [1 to 4] to which we return incessantly? — **Student**. Yes, I guess that no verse can go beyond thirty-two times. (*De musica*, 3.9.20, my trans.)

Book 4 resumes the discussion on meter by giving examples of the various possible metric combinations in one line of verse. It principally provides a list that has been elaborated from various metric textbooks of the time, without much comments. As far as we are concerned, the only interesting thing here is the reasoning itself which is entirely based on number and combinatorics.

Since there are 28 kinds of feet and a verse is between 8 and 32 times long, the student's conclusion, after a very long analysis, is that there are 571 different possible metric combinations in Latin verse. The master's corrects a first time this number to 568 because one must disregard 3 of them which have been mistakenly included in the list by the students.

— **Student**. The total number of meters is thus 571. — **Master**. This number would be correct, if it were not necessary to subtract three meters from the total, because one should not put a iambus after the second epitrite. (*De musica*, 4.12.15-16, my trans.)

Then Augustine feels necessary to come back to the issue of rest and suggests that, if necessary, one rest can be introduced to regulate irregular meters not only at the end of a line of verse but also within it "to complete the number of times." Absolute regularity in declamation is a cardinal virtue in poetry because poetry is not considered from the language perspective but from that of music, which means for Augustine mathematics.

— **Master**. Let us add to our method a new rule, that of observing a rest, not only at the end of the meter, but before the end, when the need arises. It is felt in two cases: when the short finale does not permit to place at the end the rest which is necessary to complete the number of times, as in the last example, or when two incomplete feet are placed one at the beginning, the other at the end. (*De musica*, 4.14.19, my trans.)

Once again rhythm is here identified with regular beat. This point has been rightly underlined in her comments on the same passage of Book 4 by Marie Formarier, who explains that this phenomenon which emerges in Augustine's time will develop further during the Middle Ages.

This example is emblematic of an absolutely essential fact: the rhythmic segmentation adopted by the Master is totally dissociated from the theory derived from metric. What counts above all is the regular distribution of times by the beat, whatever the distribution of the syllables. One can note in these examples that the hit always falls on the tonic syllable. In this perspective, the Master pushes the musical logic to its conclusion: the foot is conceived as a measure cut into two isochronous dynamic phases. [...] One is tempted to affirm that the systematic application of an equal relation [between the two parts of the foot] aims at simplifying the rhythmic segmentation of musical discourse and thus at facilitating both execution and perception. It must therefore be admitted that the chanted meters are subjected, since late Antiquity, to a constant pulsation, whatever the configuration of the meter. This principle is observed especially in the psalmic chant, as evidenced by the anonymous treaty *Commemoratio Breuis* (9th century). (Formarier, 2014, p. 141).

Anyhow, the argument prompts Augustine to correct again his calculation of the number of meters and assess it finally as "incalculable," for one must take into account the plentiful possibilities of using rest, the variation of feet from line to line, provided that the numbers of times is constant, and some other possible variations of pronunciation.

— **Master**. You must now understand, I think, that the genera of meters, of which we have fixed the number at 568, are truly incalculable. For, in making this total, we have taken into account only the rests which are added at the end. We have not yet spoken of the combination of feet, and of the resolution of long in short, which lengthens the foot beyond four syllables. If we now wish to take into account all the ways of intercalating rests, substituting feet, resolving long ones, and summing up all meters, it will rise the number so high that we may not find a term to name it. (*De musica*, 4.17.37, my trans.)

In Book 5, Augustine resumes his discussion of verse and makes clearer the distinction between rhythm, meter and verse. *Rhythm* (*rhythmus* – in Latin transliteration from Greek) is the largest category: it denotes a succession of regular time-lengths or feet without end, but also meter in verse. *Meter* (*metrum*) is a succession of regular time-lengths or feet which is regularly interrupted. *Verse* (*versum*) is a succession of regular time-lengths or feet which is regularly interrupted but which admits a cut in the middle and is therefore composed of two members. All actually pertain to the category of *numerus*, which I propose to translate "rhythm" as well, just as *rhythmus*, for two reasons:

- 1. *Rhythmus* is very rarely used by Augustine but, as we have seen already twice, when he does he explicitly equates the term with *numerus*.
- 2. He easily slides, as the following quote shows, from the former to the latter and back.
 - **Master**. Since a succession of regular feet, with no definite end [certo fine], is very different from a sequence of equally regular feet, ending in a fixed limit [certo fine], there were two things that had to be distinguished by two different terms. The first was designated by the particular word "rhythm" [rhythmus], the second by that of "meter" [metrum] without, however, excluding the term "rhythm" [rhythmus]. Then, as these rhythmic movements [eorum numerorum] which have a definite end [qui certo fine clauduntur], I mean meters [id est metrorum], admit or do not admit a cut in the middle [alia sunt in quibus non habetur ratio cuiusdam divisionis circa medium], they thus present a difference which must be expressed by distinct terms. The kind of rhythm which does not have this cutoff [illud, ubi non habetur haec ratio, rhythmi genus], therefore, has properly been called meter [proprie metrum vocatum est], and verse, that which have it [hoc autem ubi habetur, versum nominaverunt]. (De musica, 5.1.1, my trans.)

The most beautiful lines are, according to Augustine, those which have an equal number of feet in each member, or, if they do not, whose members must not be too different in their number of half-feet (5.4.8).

— **Master**. To conclude this conversation, you see that if the number of meters is incalculable, the verse is necessarily composed of two members, which are in fair proportion to each other and terminate either by an even number of half-feet, but non-convertible, as in *Maecenas atavis edite regibus*, or by an odd number of half-feet, however bound together by a certain equality, as are the numbers 4 and 3, 5 and 3, 5 and 7, 6 and 7, 8 and 7, 7 and 9. (*De musica*, 5.13.27, my trans.)

In conclusion, poetry is composed with various kinds or verse wich may be associated in periods *(ambitus)*. Metric finally joins with rhetoric but only in passing.

— **Master**. But one does not always write poems using a single kind of verse, as do the epic and even the comic poets. The lyric poets compose also circuits [sed illos quoque ambitus], which the Greeks call $\pi \epsilon \rho io\delta oi$ [periodoi], not only with meters, which are not subject to the law of verse, but with plain verses. Thus, in Horace: Nox erat, and caelo fulgebat luna sereno / Inter minora sidera. It is a two-member period, composed of verse. And these two lines cannot be united together unless they are chanted by feet of six times. (De musica, 5.13.28, my trans.)

_Rhythm as Divine Rhythmics - Augustine's De musica, 6

The last Book of *De musica* is famous for its philosophical and religious content. But the crucial role played in it by rhythm has long been ignored due to faulty translations proposing indistinctively "number" or "harmony" instead of "rhythm," when Augustine uses the terms *numerus*, "harmonious" instead of "eurhythmic" for *numerosus*, and "harmony" instead of "eurhythmy" for *numerositas*. Before entering in the last part of Augustine's discussion, we must come back one more time to the issue of translation.

Such choices make quite difficult to use, for instance, the 19^{th} century French translation which regrettably has been reproduced ever since without change, even in recent studies and encyclopedia.

The author, by analyzing the movements of the heart and human mind, the movements of the body and the universe, ascends from harmony to harmony, as by a mystical scale, to the eternal and immutable harmony, God, the principle of all movements, and the author of the law which subjects them to order, in other words, the author of harmony in all its degrees. This part contains only one book— the most famous. (Thénard & Citoleux, *Avertissement* in the first French translation of *De musica*, 1864, my trans.)

The same problem affects the recent translation into German by Frank Hentschel (2002) who, after blaming both translations for what he presents as their symmetrical shortcomings, chooses to stick with "number" for translating *numerus*.

The consistent translation of *numerus* as number, which is easy to envisage from a philosophical-historical perspective, is as limited as the consistent translation as rhythm, which presents itself

Jackson Knight's *Synopsis* (1949), which has been many time criticized for obliterating the dialogue and sometimes simplifying too much Augustine's subtle discussion, remains, in this instance, much closer to the original text.

Book 6, the ascent from rhythm in sense to the immortal rhythm which is in truth: Eternal Rhythms. (*St. Augustine's De musica*. A synopsis by W.F. Jackson Knight, 1949)

The best translations into modern language are the French and Italian translations. In Italian, Book 6 is entitled "Ritmologia" which captures in one single word the whole scope of the *De musica*. Unfortunately, they are not completely coherent and both oscillate for the translation of *numeri* between "rhythms" and "numbers" (e.g. Jean-Louis Dumas, in La Pléiade, 1998, suddenly switches in 6.4.7 from the former to the latter without any clear reason – see note 1, p. 686).

In the previous books, we have already gathered a few evidence for the need of a new translation, but Augustine gives in Book 6 a few more clues about what he means when he uses the term *numerus*.

At one point, he quotes the Bible—apparently erroneously but this is of no consequence here—and explicitly opposes the *numeri* that are sought, in his version, by the Ecclesiastes to "those that resound in theaters." One could naturally argues that this opposition concerns two kinds of *numeri* which are so dissimilar that we need to translate them with two different words, "numbers" for those of God, "rhythms" for those in theater. But the easiest solution still remains to think that Augustine does not suppose any intrinsic semantic difference but only considers the difference between pragmatic uses and therefore to translate *numeri* as "rhythms" in both cases.

— **Master**. We read in the Holy Scriptures. "I have run everywhere to know, to investigate and to seek wisdom and rhythms [Circumivi ego, ut scirem et considerarem et quaererem sapientiam et numerum]." (Eccle. 7, 25) And it is necessary to understand by this word "rhythms," not those that resound in infamous theaters [quod nullo modo arbitrandum est de his numeris dictum, quibus in etiam flagitiosa theatra personant], but, in my opinion, those [sed de illis] that the true God communicates to the soul and that she then transmits to the body, far from receiving it by the channel of the senses. (De musica, 6.4.7, my trans.)

In another occurrence, master and student consider the *numeri* "which we notice in the pulse of the veins" and "the phenomenon of respiration." Here, once again, the translation of *numeri* as "numbers" renders quite obscure a text which seems perfectly clear when we translate *numeri* as "rhythms." What would mean, indeed, "the *numbers* that we notice in the pulse of the veins," or "certain *numbers* are manifest in this process"?

— **Student**. If it were shown that the soul produces the rhythms that we notice in the pulse of the veins [si anima hos numeros agit, quos in venarum pulsu invenimus], the problem would be solved: it is evident, indeed, that certain rhythms are manifest in this process [in operatione hos esse manifestum est], which occur without the assistance of the memory. But if one hesitates to believe that these rhythms depend on the activity of the soul, this doubt is no longer permitted for the phenomenon of respiration. Here no one can disregard the existence of rhythms in the interval of time [quin et temporum intervallis numeri sint], and still less the activity of the soul, since it can, with the concurrence of the will, modify them infinitely. But these movements do not require the exercise of memory. [...] Although the pulse and the respiration vary according to the temperaments, who would dare to maintain that they do not occur by virtue of the activity of the soul? These movements, in spite of their different degree of speed or slowness in the various individuals, could not exist without the activity of the soul. (De musica, 6.3.4, my trans.)

Finally, an indirect evidence. The master explicitly compares the cosmic returns of days and nights, months and years, to iambic meter composed of short and long syllables. Since, as we saw previously, "every meter is rhythm," [ut omne metrum etiam rhythmus sit], we may assume that Augustine considers the various cosmic sequences as plain rhythms.

— **Master**. But can he [a student who is naturally gifted] progress so far as to judge of larger movements? Can he become capable, at least apart from the interruptions of sleep, of grasping in its simple and complicated relations the succession of hours and days, months and years, of understanding it, by means of judgment, and to approve it by a sign of assent as a series of moving iambus [tamquam illos iambos motionis]. (De musica, 6.7.19, my trans.)

So, there are in Book 6 a few more lexical evidence which confirm those we have already found in previous Books, but the strongest argument for translating *numeri* as "rhythms" and not "numbers" is maybe theoretical. As we have just seen, Augustine indulges in an extraordinary generalization of the concept of *numerus*. He uses it for dance, music, poetry and theater, but also for physiological phenomena like in the Aristotelian *Problems*, as well as for wide cosmic phenomena as the various periodic return of the sun, the moon or the seasons.

Naturally, one could argue that he generalizes the concept of "number" and not that of "rhythm." But that would imply, firstly, to consider both terms as entirely opposed, which they are not, secondly, to severe his thought from the whole preceding tradition where "rhythm" has had a most significant role, as we have seen. The neat rhythmological distinction between the human and the cosmic sphere that Pierre Sauvanet rightly retraced in Greek theories of rhythm (Sauvanet, 1999, p. 93, 125)—rhuthmós for the former sphere, períodos for the latter—seems not to have faded away during the Roman Empire with Plotinus, as he claims based on wrong evidence (see above), but probably a century later with Ambrose and Augustine.

One could naturally argue that this confusion has obviously neo-Platonic grounds which could be mentioned to defend the translation as "numbers." The first and last Books of *De musica* provide indeed a Platonic or more exactly Plotinian philosophical framework to the more technical inner core exposed in Books 2 to 5. Book 6 is introduced by a declaration of intent which starts at the end of Book 5 and recalls that the previous technical considerations must be overcome by a spiritual

endeavor. Indeed, human *numeri*, which support music, dance and poetry, are only traces (*vestigia*) of the divine *numeri*.

— **Master**. Now let us consider this part of music which deals with the rhythms of times [quae in numeris temporum est], and let us endeavor, as far as the sagacity of our reason permits, to raise up from the sensible traces of these rhythms [ab his vestigiis eius sensibilibus], to the sanctuary where they reside, freed from any corporeal envelope [ad ipsa cubilia, ubi ab omni corpore aliena est]. (De musica, 5.13.28, my trans.)

The objective is to help the reader elevate himself from corporeal to incorporeal realities, i.e. from purely sonorous phenomena to the organized movements of the mind and the soul, then from there to the perfect modulation of the Word.

— **Master**. In the five previous books, we have devoted considerable time and attention, being almost as scrupulous as a child, to look into the rhythmic traces [in vestigiis numerorum] of the duration of times [ad moras temporum pertinentium]. May the moral purpose of our work serve as an excuse, in the eyes of benevolent readers, for these frivolous studies. In composing this work, we have had only one purpose. Without abruptly separating young men or people of all age, whom God has favored with natural gifts, from the corporeal sensations and the worldly sciences, which are so attractive to them, we have wished to make them lose this taste little by little, by means of reasoning, and to bring them, by the love of immutable truth, to attach themselves only to the one God and Master of all things who governs human intelligences without any intermediary. (De musica, 6.1.1, my trans.)

The logic that leads here Augustine's reasoning is very close to that of Plotinus. Whereas Plato, taking a strong dualistic stance, thought of earthly beings mostly as faulty replicas of heavenly Ideas, Plotinus introduced the conception of a unique original Substance, the One, by which all beings have been created and from which Good and Beauty perpetually emanate, "as the light from the sun," and reversely, of a continuous ladder of beings participating in the same Soul and Intellect although endowed with progressive perfection. In this perspective, the material world is not to be despised since it ultimately derives from the One. It is by doing Good or enjoying Beauty that we actualize and recognize the One, in material things and then in Forms.

This accounts, in my opinion, for Augustine's use of the term "traces" (vestigia) instead of "images/copies/imitations" (imagines) to refer to the earthly numeri by contrast with those in heaven. In Augustine's neo-Platonic world, the One is numerosus, numeri perpetually emanate from Him, and every being is participating in its particular and limited way to these numeri. Beauty and Good are to be recognized through the traces they leave in our own numeri.

Thus, since the music emerging from its most mysterious sanctuary [procedens quodammodo de secretissimis penetralibus], so to speak, has left traces [vestigia quaedam posuerit] in our senses or in the objects which they make us feel, must we not first attach ourselves to these traces [eadem vestigia], to arrive more easily without error, if we can, to what I have named its

This is probably the strongest argument in favor of a translation of *numerus* as "number." But, there are other arguments which, in my opinion, show convincingly that we still must translate it as "rhythm."

First, one wonders whether such a translation would change anything in the overall arrangement of the Plotinian doctrine used by Augustine, and even whether it would not renew our view of a doctrine that has been fossilized by centuries of theological and academic studies. How would the One appear if it were to be considered as Divine rhythmics? And the emanations of the Good and Beauty as rhythmic emanations?

Second, the generalization of the concept of *numerus* is not only from neo-Platonic origin. It has also a Christian theological source, which radically changes its meaning. According to Marie Formarier, Augustine borrows from Origen's treatise *On First Principles* (ca. 225) the view that God organizes the world and unify under his power the diversity of matter (*On First Principles*, 2.1.1-3, quoted by Formarier, 2014, p. 28). Elaborating further Origen's suggestion, he considers the divine Creation as the application of the *numeri* which are at the origin of life and direct its development. But these *numeri* are explicitly compared to poetic or musical rhythms. Like a musician or a poet disposing rhythmic intervals in time—contrarily to some comments and translations, he does not mention melody—God disposes according to his will beings and things not only in space but also in time. Origen already thought that God produced spatial diversity of things and beings; Augustine claims now that God, whom he calls the "arranger or times" (*dispositor temporum*), gives rhythm to his Creation. As Spitzer notices, "the God-Artist, creating in time, realizes his idea, his providential decisions, like a musician." (Spitzer, 1963, p. 31) I will come back to this subject when we deal with the vast theological views which end the treatise.

For not in vain has the prophet, taught by divine inspiration, declared concerning God, He brings forth in [rhythms] the course of time [Qui profert numerose saeculum]. For which reason music, the science or capacity of correct [modulation] [bene modulandi], has been given also by the kindness of God to mortals having reasonable souls, with a view to keep them in mind of this great truth. [For if a man, when composing a song/poem [faciendi carminis artifex], knows how to distribute the length of time allowed to each word [novit quas quibus moras vocibus tribuat] so as to make the song flow and pass [currat ac transeat] beautifully], how much more shall God, whose wisdom is to be esteemed as infinitely transcending human arts, make infallible provision that not one of the spaces of time alloted to natures that are born and die [nulla in naturis nascentibus et occidentibus temporum spatia]—spaces which are like the words and syllables of the successive epochs of the course of time [quae tamquam syllabae ac verba ad particulas huius saeculi pertinent]— shall have, in what we may call the sublime psalm of the vicissitudes of this world, a duration either more brief or more protracted than the foreknown and predetermined [modulation] [modulatio] requires! For when I may speak thus with reference even to the leaves of every tree, and the number of the hairs upon our heads, how much more may I say it regarding the birth and death of men, seeing that every man's life on earth continues for a time, which is neither longer nor shorter than God, the arranger of times [Deus dispositor temporum], knows to be in harmony [consonare] with the plan according to which He rules the universe. (Epistolae, 166.5.13 - 415 AD, trans. J.G. Cunningham, my mod.).

Human beings, in turn, must try, in order to reach Beauty, to endow their movements and behavior with those perfect rhythms inspired by God and that Augustine calls *numerositas*, which is properly the Platonic eurhythmy (see chap. 2).

Where there are regularity and similitude, there is eurhythmy. [Ubi autem aequalitas aut similitudo, ibi numerositas]. (De musica, 6.13.38, my trans.)

All these philological as well as theological and anthropological evidence make me think that even if the idea of number is naturally always present in Augustine's mind, the translation of *numeri* as "numbers," *numerosus* ad "harmonious" and *numerositas* as "harmony," have a lot of drawbacks.

- 1. They tend to exaggerate the Pythagorean and neo-Platonic influence on his thought.
- 2. They conceal its Christian core and the reintroduction of time as a positive concept into philosophy triggered by the Jewish and Christian creeds.
- 3. They split one single lexical paradigm (*numerus numerosus numerositas*) into two unconnected series of words (number harmonious/harmony).
- 4. They tends to obfuscate Augustine's real primary conceptual model, which out of sheer personal reasons is clearly from rhetorical and poetic origin and not derived from mathematics.
- 5. They succeed in meeting the remarkable challenge to translate hundreds of pages dedicated to poetry and music, whether considered down here or above and beyond, without using, except in a few and inconsistent instances, the term "rhythm," and so to force Augustine's subtle discussion into a narrow arithmetical doctrine.

Hence, I am of the opinion that we can very beneficially translate in Book 6, as a matter of fact as in previous Books, *numerus* as "rhythm" instead of "harmony" or "number"; *numerosus* as "rhythmic" or "eurhythmic" instead of "harmonious"; and *numerositas* as "rhythmicity" or better yet, "eurhythmy" instead again of "harmony." Naturally, we must keep in mind that all these concepts always simultaneously include the idea of number.

Next chapter