The Role of Riddles in Medieval Education

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ABSTRACT: This paper presents a selection of medieval riddles and discusses the various roles they play in Middle Ages education: from ludus to the relations between *aenigmata* and the omnipresent religious mentality.

KEYWORDS: Medieval Education. Ludus. Riddles. Allegory. Religion.

RESUMO: O estudo apresenta uma seleção de enigmas medievais e discute os diversos papéis que o enigma exerce para a educação da época: do lúdico à suas relações com a visão religiosa, onipresente na pedagogia da Idade Média.

Palavras chave: Educação Medieval. Lúdico. Enigmas. Alegoria. Religião.

Riddle and the allegorical mentality of the Middle Ages

All children love riddles and in every society, guessing games have their place in education, but in the Middle Ages riddles play a special role in Pedagogy. Besides the usual educational importance of riddles - as a ludic and highly motivational activity - in Middle Ages they are involved with religious values. And religion education is – if we want to use the pedagogical terminology of today in many countries - the great "transversal theme" in medieval education: every subject is deep down religious; beneath Arithmetic, Biology or whatever you will find messages of God. One of the main purposes of the medieval study of the liberal arts is that they are not, after all, considered profane: like everything in this world they are allegorical messages from God. In this context – as we will see – the *aenigma* is specially appreciated.

The allegorical mentality, that had been strong already in the Christianity of the Ancient World - for example in Alexandria or in an Augustine -, threw deep roots in the Middle Ages: for a medieval teacher - mainly in the early centuries of that era – a thing in the world is not only that thing that it is, but it is first of all a sign from God, a hint for better understanding the revelation of God, the Word of God: like a riddle to be solved.

A short explanation of allegory is given by Augustine:

It is called an allegory when something appears to sound one way in words, and signify another in the understanding. In this way, Christ is called a lamb (Jo 1, 29), but is He a cattle? Christ a lion (Rev 5, 5), but is He a beast? Christ a rock (ICor 10,4), but is He hardness? Christ a mountain (Dan 2,35), but is He a swelling in the earth? And so, many things appear to sound one way, but signify another. This is called allegory (En. 103, 13).

Being created by God's *Logos*, every creature brings in itself a code message and the believer is expected to decipher: studying animals for example - the dove, the serpent or the ox - , is a way to understand the saying of Jesus: "Be shrewd as serpents and innocent as doves" (Mt 10, 16). And St. Paul explaining the law given by God: "You shall not muzzle the ox while he is threshing" (Dt 25, 4), says ironically: "God is not concerned about oxen, is He? Or is He speaking altogether for our sake? Yes, for our sake it was written" (I Cor. 9, 9-10).

The famous verses - PL 210:579 - attributed to Alain de Lille – point out in the same direction:

Omnis mundi creatura	(All of creation)
Quasi liber et pictura	(Like a book and a picture)
Nobis est speculum.	(Is a mirror for us)
Nostrae vitae, nostrae mortis	(Of our life, of our death)
Nostrae status, nostrae sortis	(Of our state, of our fate)
Fidele signaculum	(A faithful symbol)

Many information the Bible contains, which may seem secondary and irrelevant from a modern christian point of view, are very essential to a medieval reader. The numbers for example: the Gospel of John tells that Peter in a miraculous fishing has caught 153 fishes (Jo 21, 11). A christian today reads this 153 and for him it means only: "Wow, that's a lot of fish!", but for the ancient or medieval christian each and every number mentioned in the Bible has a mystical meaning: it is an *aenigma* from God and He wants us to solve it. Naturally, this necessity of interpretation leads to some allegorical adjustments (or even contortionisms) in order to make things match. In the case of the 153 fishes Augustine, for example, works with the concept of "perfect number": 10 is the number of the perfection of God's law etc. and 7 is the number of the perfection of every number added up to 17; 1+2+3...+16+17 = 153. The fishes are allegorically the elect; the boat of Peter, the Church; and so on...

In *Annex* there is a sample of one of the many comments to this passage of the Gospel by Augustine himself.

It was mentioned above the semantical contortionisms of the allegorical mentality. A medieval writer may, for example, consider 6 a perfect number or a number of imperfection as well. In effect, from *The Arithmetics* of Boethius, the Middle Ages receive the ancient Greek concept: a perfect number is defined as an integer which is the sum of its divisors (excluding the number itself). And so 6 (6 = 3 + 2 + 1) is perfect; 28 (28 = 14 + 7 + 4 + 2 + 1) and 496 etc. are perfect too. Very well, but, if it is necessary, at any moment our medieval writer can consider 6 as a number of imperfection, falling one short of the perfect 7 etc.

Rabanus Maurus, in the 9th century, even wrote a treatise explaining the mystical meaning of each biblical number; and the medieval bestiaries do the same for the animals etc.

The riddle as a model of the misteries of God

The apostle St. Paul compares the truths about God to riddles: now, we see them in a confusing way, like in a riddle; but there will be a day in which we'll see them clearly, like when a riddle is solved (I Cor: 13,12). This way, riddles become a kind of model that simulates the misteries of God. In effect, when a riddle is proposed you feel anxious because the solution does not come immediately, and you wonder if there is any solution at all, but when eventually you solve it everything looks so simple and obvious and you wonder how could ot have been such a difficult problem. "The same goes for the teachings of God - preaches the priest - they may seem hard to us, but when we are determined to obey Our Lord... etc. etc."

One of the most ingenious medieval riddles, precisely for the allusion to the mistery of God, will help to make obvious the parallellism established by St. Paul:

Ego sum principium mundi et finis saeculorum; sum trinus et unus, et tamen non sum Deus (in Amata, 2006, p. 120). I am the beginning of the world and the end of the ages, I am three and I am one, but I am not God.

The answer is "the letter m": being one (one letter) its writing is three in roman. It is the beginning of the word *mundus* (world), and the ending of *saeculorum* ("end of the ages").

And in the *Divine Comedy*, (Purg. 23, 31), we find the human face written with the word "Man" ("*Omo*", in the language of Dante):

Their eyes seemed like rings with no gems And he who, in the face of man, would read "omo" Would here have recognized the M Parean l'occhiaie anella senza gemme Chi nel viso degli uomini legge OMO, Bene avria quivi conosciuto l'emme



Another well known christian riddle is worthy of the *The Da Vinci Code*:

O.....quid.....tuae be.....biae? ra ra ra es et in ram ram ram ii

To solve it, notice that the three terms of the first line are "above" ("*super*", in Latin) of their correspondents of the second line. And in the third line we have "three times" ("*ter*", in Latin) *ra* and *ram*, and "twice" ("*bis*, in Latin") *i*. And so:

O *super*be, quid *super*est tuae *super*biae? *Ter*ra es et in *ter*ram *i*bis O, you proud! What will last of your pride? Dust you are and into dust you will go

Alcuin: riddle and teaching

An important document for the History of Medieval Education is *Pippini* disputatio cum Albino Scholastico (PL 101, 975-980): The Debate between Pippin and Alcuin; the most important scholar of his time, Alcuin, and the second son of the Emperor Charlemagne, Pippin.

Alcuin, in the late 8th century, under Charlemagne's direction founds the Palatine School and is the preceptor of Pippin. The *Disputatio* is a dialogue in which a twelve-year-old-boy discusses - in short askings and answers - with the teacher about everything: the man and the world, life and death, God etc. In the *Disputatio*, tere are many riddles like the following:

#155 P. What is it that makes bitter things sweet?156 A. Hunger.P. What makes a man untirable?A. Profit.P. What is the dream of the vigilant?160 A. Hope.

To begin the final series of riddles (165 ff.) the teacher link them to Faith: "a certitude of something that is both unknown and wonderful" (*ignotae rei et mirandae certitudo*) and designates riddles by *mirandum*, "something that causes wonder". Notice that when the boy comes to know a solution of a riddle he could not solve, he asks: "Why did I not understand this of my own accord?". Again a reminder of the riddle as model of Faith.

165: P. What is faith?

A. A certitude of something that is both unknown and wonderful.

P. What is a wonder [riddle]?

A. Not long ago, I saw a man who never was, who stood, moved and walked.

P. How can this happen? Explain it to me.

A. It is an image in water.

P. Why did I not understand this of my own accord?

A. Since you are a young man of good ability and natural intelligence, I shall propound to you some other wonders; see if you are able to interpret them of your own accord.

(http://www.gillianspraggs.com/translations/alcuin.html transl. by Gillian Spraggs)

At the end of the *Disputatio*, the student, now self-confident by his performance, begins to answer not directly with the word-solution, but using paraphrases indicating he knows the right answer and - at the same time – hiding the solution of the other boys (cf. 184, below).

184: A: (...) Place your finger on your lips, so that the boys may not hear what this is. I was out with others at a hunt, in which if we caught anything we carried nothing with us; what we carried home with us is what we were unable to catch.

P. This is a hunt for something that belongs among peasants. [lice]

A. It is. I saw someone born before he was conceived.

P. You saw this, and perhaps you ate it. [egg]

(ibidem)

From another book of Alcuin (*Carmina*, PL 101, 802B et. ss.), a free translation of other riddles (for the solutions notice that the original deals with Latin words):

I have been the fruit of the sin If you read me forwards you will eat me If you read me backwards you will ride me Who am I? Solution: *malum* (apple) / *mulam*. Commenting the solution, the teacher would remark that both words are direct object of transitive verbs and hence accusative (ending in M). And so, the solving of the riddle would begin by the frame: M ____ M

I am a word of six letters Power and excellence I mean If you split me in the middle: Half of me worships God The other half is human Without the fourth letter I become poison Who am I? *Virtus* (virtue), *tus* (incense) *vir* (man), *virus*.

Two monossylabic words cause all quarrels Yes and No

Two pronouns that throw peace away My and Your

Riddles in Mathematics teaching

To finish this article, we present a short sample of mathematical problems, a field in which riddles were often included. The collection *Propositiones ad acuendos juvenes* ("Problems for Sharpening Youths"), attributed to Alcuin (*PL 101*) or Beda, brings many ingenious and funny formulations, and riddles. After all, as Alcuin himself says: "Ours should be a joyful teaching", as he writes to the Emperor Charlemagne, precisely introducing a list of problems: "*misi excellentiae vestrae... aliquas figuras arithmeticae subtilitatis, laetitiae causa*" (*PL* 100, 314, C).

XIV. Propositio de bove.

Bos qui tota die arat, quot vestigia faciat in ultima riga?

14. Proposition concerning the ox.

How many footprints in the last furrow does an ox make which has been plowing all day?

Solutio.

Nullum omnino vestigium facit bos in ultima riga, eo quod ipse praecedit aratrum, et hunc aratrum sequitur. Quotquot enim hic praecedendo in exculta terra vestigia figit, tot ille subsequens excolendo resolvit. Propterea illius nullum reperitur vestigium in ultima riga.

Solution.

An ox makes no footprints whatsoever in the last furrow. This is because the ox goes in front of the plow, and the plow follows it. For however many footprints the ox makes on the ploughed earth by going first, so many the plough following behind destroys by ploughing. On account of this, no footprints appear in the last furrow.

XLII. propositio de scala habente gradus centum.

Est scala una habens gradus c. In primo gradu sedebat columba una; in secundo duae; in tertio tres; in quarto iiii; in quinto v. Sic in omni gradu usque ad centesimum. Dicat, qui potest, quot columbae in totum fuerunt?

42. proposition concerning the ladder having 100 steps.

There is a ladder which has 100 steps. One dove sat on the first step, two doves on the second, three on the third, four on the fourth, five on the fifth, and so on up to the hundredth step. Let him say, he who can, How many doves were there in all?

Solutio.

Numerabitur autem sic: a primo gradu in quo una sedet, tolle illam, et junge ad illas xcviiii, quae nonagesimo [nono] gradu consistunt, et erunt c. Sic secundum ad nonagesimum octavum et invenies similiter c. Sic per singulos gradus, unum de superioribus gradibus, et alium de inferioribus, hoc ordine conjunge, et reperies semper in binis gradibus c. Quinquagesimus autem gradus solus et absolutus est, non habens parem; similiter et centesimus solus remanebit. Junge ergo omnes et invenies columbas vl.

Solution.

There will be as many as follows: Take the dove sitting on the first step and add to it the 99 doves sitting on the 99th step, thus getting 100. Do the same with the second and 98th steps and you shall likewise get 100. By combining all the steps in this order, that is, one of the higher steps with one of the lower, you shall always get 100. The 50th step, however, is alone and without a match; likewise, the 100th stair is alone. Add them all and you will find 5050 doves.

XVIII. Propositio de homine et capra et lupo.

Homo quidam debebat ultra fluvium transferre lupum, capram, et fasciculum cauli. Et non potuit aliam navem invenire, nisi quae duos tantum ex ipsis ferre valebat. Praeceptum itaque ei fuerat ut omnia haec ultra illaesa transire potuit?

18. Proposition concerning the man, the she-goat, and the wolf.

A certain man needed to take a wolf, a she-goat and a load of cabbage across a river. However, he could only find a boat which would carry two of these [at a time]. Thus, what rule did he employ so as to get all of them across unharmed?

Solutio.

Simili namque tenore ducerem prius capram et dimitterem foris lupum et caulum. Tum deinde venirem, lupumque transferrem: lupoque foris misso capram navi receptam ultra reducerem; capramque foris missam caulum transveherem ultra; atque iterum remigassem, capramque assumptam ultra duxissem. Sicque faciendo facta erit remigatio salubris, absque voragine lacerationis. Solution.

In a similar manner, I would first take the she-goat and leave behind the wolf and the cabbage. When I had returned, I would ferry over the wolf. With the wolf unloaded, I would retrieve the she-goat and take it back across. Then, I would unload the she-goat and take the cabbage to the other side. I would next row back, and take the she-goat across. The crossing should go well by doing thus, and absent from the threat of slaughter.

(http://beyond-the-illusion.com/files/History/Science/host1-2.txt Transl. by Peter J. Burkholder –

ANNEX – Augustine on the 153 fishes

For if we determine on the number that should indicate the law, what else can it be but ten? For we have absolute certainty that the Decalogue of the law, that is, those ten well-known precepts, were first written by the finger of God on two tables of stone. (Deut 9:10) But the law, when it is not aided by grace, makes transgressors, and is only in the letter, on account of which the apostle specially declared, The letter kills, but the spirit gives life. (2 Cor 3:6) Let the spirit then be added to the letter, lest the letter kill him whom the spirit makes not alive, and let us work out the precepts of the law, not in our own strength, but by the grace of the Saviour. But when grace is added to the law, that is, the spirit to the letter, there is, in a kind of way, added to ten the number of seven. For this number, namely seven, is testified by the documents of holy writ given us for perusal, to signify the Holy Spirit. For example, sanctity or sanctification properly pertains to the Holy Spirit, whence, as the Father is a spirit, and the Son a spirit, because God is a spirit, so the Father is holy and the Son holy, yet the Spirit of both is called peculiarly by the name of the Holy Spirit. Where, then, was there the first distinct mention of sanctification in the law but on the seventh day? For God sanctified not the first day, when He made the light; nor the second, when He made the firmament; nor the third, when He separated the sea from the land, and the land brought forth grass and timber; nor the fourth, wherein the stars were created; nor the fifth, wherein were created the animals that live in the waters or fly in the air; nor the sixth, when the terrestrial living soul and man himself were created; but He sanctified the seventh day, wherein He rested from all His works. The Holy Spirit, therefore, is aptly represented by the septenary number. The prophet Isaiah likewise says, The Spirit of God shall rest on Him; and thereafter calls our attention to that Spirit in His septenary work or grace, by saying, The spirit of wisdom and understanding, the spirit of counsel and might, the spirit of knowledge and piety; and He shall be filled with the spirit of the fear of God. (Is 11:2-3) And what of the Revelation? Are they not there called the seven Spirits of God, (Rev 3:1) while there is only one and the same Spirit dividing to every one severally as He will? (1 Cor 12:11) But the septenary operation of the one Spirit was so called by the Spirit Himself, whose own presence in the writer led to their being spoken of as the seven Spirits. Accordingly, when to the number of ten, representing the law, we add the Holy Spirit as represented by seven, we have seventeen; and when this number is used for the adding together of every several number it contains, from 1 up to itself, the sum amounts to one hundred and fifty-three. For if you add 2 to 1, you have 3 of course; if to these you add 3 and 4, the whole makes 10; and then if you add all the numbers that follow up to 17, the whole amounts to the foresaid number; that is, if to 10, which you had reached by adding all together from 1 to 4, you add 5, you have 15; to these add 6, and the result is 21; then add 7, and you have 28; to this add 8, and 9, and 10, and you get 55; to this add 11 and 12, and 13, and you have 91; and to this again add 14, 15, and 16, and it comes to 136; and then add to this the remaining number of which we have been speaking, namely, 17, and it will make up the number of fishes. But it is not on that account merely a hundred and fifty-three saints that are meant as hereafter to rise from the dead unto life eternal, but thousands of saints who have shared in the grace of the Spirit, by which grace harmony is established with the law of God, as with an adversary; so that through the life-giving Spirit the letter no longer kills, but what is commanded by the letter is fulfilled by the help of the Spirit, and if there is any deficiency it is pardoned. All therefore who are sharers in such grace are symbolized by this number, that is, are symbolically represented. This number has, besides, three times over, the number of fifty, and three in addition, with reference to the mystery of the Trinity; while, again, the number of fifty is made up by multiplying 7 by 7, with the addition of 1, for 7 times 7 make 49. And the 1 is added to show that there is one who is expressed by seven on account of His sevenfold operation; and we know that it was on the fiftieth day after our Lord's ascension that the Holy Spirit was sent, for whom the disciples were commanded to wait according to the promise. (*Tractates on the Gospel of John*; 122, 8 http://www.newadvent.org/fathers/1701122.htm)

References

AMATA, Blasius (2006) *De re metrica graeca et latina*. Roma: Pontificia Studiorum Universitas Salesiana. Cópia impressa do original em Word.doc, disponibilizado pelo autor em seu site, acesso em 22-07-06: http://www.geocities.com/blas3/metrica/METRICA.doc

CCSL (1968) De Marco (ed.) *Aenigmata*. Corpus Christianorum Series Latina 133. Ars.; Aenigmata.; Aenigmata de virtutibus et vitiis.; Aenigmata Laurenshamensia.; Aenigmata (Tatuinus, Eusebius (Hwaerberhtus); Wiremuthensis, Bonifatius (Winfredus), Aldhelmus Scireburnensis). Turnhout: Brepols.

CCSL (1968a) Glorie (ed.), *Aenigmata*. Corpus Christianorum Series Latina 133A. Aenigmata quaestionum artis rhetoricae ('Bernensia').; Aenigmata.; De nominibus litterarum (al. de alphabeto). Expositio alphabeti. De dubiis nominibus (Anonymus ('Tullius'), Anonymus ('Tullius'), Symphosius). Turnhout: Brepols.

Recebido para publicação em 05-01-09; aceito em 26-01-09