L'ABBÉ JEAN LEBEUF, (1687-1760), A FORGOTTEN PRECURSOR OF ARCHAEOASTRONOMY AND ETHNOASTRONOMY

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Abstract

In the eighteenth century, the Abbé Lebeuf was a reknowned historian, a folklorist, a musicologist, and an archaeologist. He published several books and many articles in the *Mercure de France*. He was still famous in the 19th century but is now almost forgotten. His work contains a great many notes, reflections and other pieces of information of interest to those studying astronomy in culture. I present here a short selection of such fragments.

Key words: history, astronomy, folklore, Middle Ages, archaeology, nepotism.

A Short Introduction

Those of our friends and colleagues who were present at the last joint SEAC-Oxford conference at La Laguna in the Canaries in 1999 may remember my mentioning the Abbé Lebeuf during my review on calendars. I recalled Lebeuf describing how a statue marked the spot where some treasure was buried by casting a shadow at sunrise on the date mentioned on its base. And the way a gentleman chose the date of St Michael for a duel with swords to resolve a conflict with the King of Cyprus. (St Michael, carrying the scales of justice and the sword of punishment at the September equinox, when day and night are in good balance, is of course the herald of divine justice in the calendar: the Saint knocks down evil Lucifer from heaven.) Another fragment contained a discussion about the orientations of tombs as a means of establishing the nation that dug them.

Some colleagues suspected it was all a figment of my imagination and that the Abbé Lebeuf had never existed. Others thought it was just a crazy joke. But the Abbé Lebeuf did really exist: it is just that the memory of his works faded away and he is now almost forgotten. Once I was looking for one of his books in the University library in Warsaw. I filled in the order form and handed it to the lady at the desk. She saw the reader's name, mine, then looked at the author's name and the publication date, 1739, then looked back at me suspiciously. When she brought the volume it was an old book covered in leather, in a perfect state of conservation as if it had just been delivered from the printers. I took it to my table and, after a minute, returned to the desk and asked the lady to lend me a knife to separate the pages. The book had been waiting for 260 years untouched, waiting for another Lebeuf to appear and open it. Then I decided something must be done to save the old man from a shameful oblivion.

A Succinct Biography

Jean Lebeuf was born in Auxerres on the 6th of March 1687. Of the fortune of their ancestors his parents had only saved honor and honesty, they had two sons. Jean who was the older was soon noticed for his grave and serious interests, and his extraordinary love for study. At the age of seven, he started his humanities at the Jesuit's college and took the clerical dress. The church was poor and still using old books of the XIIIth and XIVth centuries, in which Lebeuf learned to decipher gothic scripts and old style musical notations. This is here we find the origin of his passion for ancient manuscripts and music.

Overpowered by the desire to proceed in science, he wished to go and complete his instruction in Paris. But the extreme mediocrity of his father's fortune could not allow him for such a sacrifice. A generous uncle (who was then the secretary of the King) offered to help him. He studied theology, latin, greek, hebrew and spent all his free time at libraries. He made such a progress in paleography, a new science then, that he soon was able to determinate with certainty the age of a manuscript at first glance.

He was first also to establish the age of architectural monuments by the style of their construction, the design and proportions of their vaults, one of the first as well to investigate archaeological discoveries and compare them to historical evidences. He was showing interest for the history of ideas, customs, laws, and



IV. ASTRO-NOMICAL AND COSMOLOGICAL KNOWLEDGE IN HISTORICAL SOURCES AND LITERATURE all sorts of events that could affect the development of European societies and of France in particular since the fall of the roman empire. He became one of the prime scholars in the study of Middle Ages, but his simple and modest nature seemed to ignore oneself.

He wanted to see by himself all the famous places of France were battles or other events had taken place, Ancient monuments, remnants of antique camps, all the roman roads, and all that could help, through direct observation, the understanding of written relations and documents. Every year he went on the roads for a month or two. I collected, from oral traditions some curious information about the manners of that singular tourist who did not care for comfort. He almost always went walking. Some pages of books and sheets of paper describing something he wanted to verify on the spot were his all and only luggage. He took hospitality at parsonages and monasteries went along old paths and roman ways, counting his own steps to verify the maps. He was not afraid of thirty or forty miles to precise 'de visu' some historical point, and when at last he came to the monument, the first thing he did was to measure it, make a plan, draw the interesting details and then asked all around the neighborhood about local traditions, as well the popular ones as the scholarly ones. The smallest incidents helped him to fix a date, precise the location of a battlefield, discover a ruined city or a forgotten castle and solve many difficult problems of geography and archaeology. Archaeology of the middle ages was then a completely new science, a despised period considered as barbaric and not worth interest. Lebeuf had presented the project of writing a treatise on archaeological chronology based on all the knowledge he had acquired, but his health failed then, he was going to be nominated Director of the Royal Institute of Arts and Literature when he died at the age of 73.

The preceding lines are not, of course, of my own invention, but are translated fragments taken both from the biographical notes published in 1760 at the Academy after the Abbé Lebeuf's death and from a biographical notice by Maximilien Quantin which I chose in order to portray this forgotten author as succinctly as possible. We could have added many more tasty episodes in the life of this impoverished savant and inquisitive traveller. He published an impressive number of books and articles on very different subjects such as history, archaeology, iconography, music and folklore, not to mention other topics including some scholarly letters about the excellence of Burgundy wines. He was famous in the 18th and 19th centuries but, strangely, disappeared completely from encyclopedias during the second half of the twentieth century. For the purposes of this conference I have made a short selection of texts that may, I hope, be of some

interest for our genial company of scholars in the field of Astronomy in Culture.

A Tiny Collection Of Texts

(I had to cut drastically my original selection. The interested reader will find further references in the bibliography.)

An astronomical allegory concerning the state of the sciences

In 1734, Lebeuf starts his Critical Discourse about the State of the Sciences in the French Monarchy under Charles the Great with these words: "Sciences as well as empires have their revolutions: for a time they flourish, and then they only persist and decay; at times they wake up and stand again with some honour; Sometimes they fall forever. They are like the Sun with its Solstices and periods; They like to wander and pass from one climate to the other; Often, after illuminating some country, they dive into the abyss and go off to enlighten some new people or nation.... What can be the cause of such revolutions? Is it the influence of the stars? the temperature of the air? or the quality of the spirits that animate our bodies and change according to the climate and changing aspects of the Sun? ... The sciences are tied to the predilections of the nations that cultivate them, but the prevailing fashions and tastes give them quality, value and excellence; And these tastes always reflects the proper genius of the nation. The genius complies with the maxims and the maxims change according to the circumstances of time and location. By the way, and this is a key point, these exquisite tastes, this great and sublime genius, so necessary to the perfection of the sciences, is a gift which the sky rarely pours on the earth, and is then given only to a small number of privileged men" (1734b, p.1291-1306). This illustrates nicely, I think, the use of astronomical metaphors in literature, but it also establishes in just a few words the priest's opinion about the influence of stars: evidently he rejects astrological explanations.

The directions of the world: landscape orientation

Lebeuf walked through the land measuring it by counting his own steps. It is interesting to discover that he seems to have preferred territorial diagonals to orthogonals: "I first had limited myself to the bounds of the diocese of Paris which is about 18 to 20 miles from the Summer Sunrise to the Winter Sunset, and of 12 to 14 miles from the Winter Rise to the Summer Set" (1754-1758, avertissement). He uses this method of orientation in

several places, for example: "Villeneuve-la-Dondagne, situated two leagues from Sens in the direction of the winter sunset" (1848, I, p.X). We see, then, that the directions used by Lebeuf for orientations are those most appreciated by modern archaeoastronomers, making him an early colleague. But he also uses other, more complex solar references for map orientations. In a letter to President Bouhier dated 14th February 1732, he specifies the location of a village named Chenove thus: "It will probably be that one of the dioceses of Challon [that is] five leagues from Bussy by the four o'clock sun"(1885)

The orientation of churches and the beauty of illumination

In his long dissertation about the orientation of graves, Lebeuf mentions that corpses were laid out facing the sunrise, or Orient, waiting for the Saviour, but he also states that graves in churchyards were often simply oriented parallel to the church. He adds that these monuments are also turned eastwards in order to await the morning illumination. He writes that in the sixth century, at the time of Childebert: "Fortunat ... speaks of the marble columns which ornate the church and of its glass windows, and all the chevet turned to the Orient, in such a way that the morning dawn suddenly illuminated the vault and then the floor" (1739-1743). But he also makes clear in several places that what is generally called the Orient is in fact an arc extending between the directions of sunrise at the summer and winter solstices.

Some lunar traditions and problems

Lebeuf discusses several expressions found in old medieval calendars that had already become little understood in the eighteenth century. There are many mentions of lunar counts and the computus. In one place he clarifies the custom of giving solar month names to the lunations and explains what those names mean exactly: "Each lunation, each moon, each lunar month should be given the name of the month in which it finishes, and thus, a moon finishing in January must be called the January moon" (1728, p.269-273). After that he discusses the relationship between the solar year and the lunar cycle, and comments upon embolismic years and the rules of intercalation, before returning to the question of naming the moons: "It could seem strange to some people to hear it said that, in such a year, Easter has been celebrated in the May moon. This language is consistent with common notions, primarily those of countryside people who are well accustomed to seeing that the moon of April finishes in May, and they call it the Ruddy moon" (1728, p.271)... He then adds: "Embolismalis nullius dicitur esse', that is to say that the embolismic moon, which is intercalated, does not take the name of any of the months" (1728, p.274).

A later passage is of particular value, for it documents a little-known lunar cycle of eleven years: "We must, probably, look back at least to the 12th or 13th centuries, when we were accustomed to write this sort of verse in the margins of calendars and even in the text itself. The two famous words Ogdoas and Endecas share the lunar cycle of 19 years, that is to say that Ogdoas signifies the eight-year period and Endecas the eleven-year period" (1728, p. 272-273).

Lebeuf also comments upon the meaning of the expression 'the jump of the moon'. "The bishop of Mende offers a bit later the true explanation of what is called the jump of the moon, which is the excess of one day that must be cut off at the end of every 19-year cycle in order to correct the fact that after 14 of those cycles¹, without it, we would obtain a new moon when there should be a full moon. The celebrated day of this jump is on July 31 according to Duran: 'Luna facit saltum Quintilis luce suprema'. This does not mean (he writes with humour) that the moon jumps better that day than another, 'non quod luna magis saltat illa die quam alia', but arises because the month of July is the last of the lunar months which count 30 days in the Epact year... He claims that, according to him, the jump of the moon does not mean a violent jump of the moon up and down, as some could imagine (such a jump could be harmful to many people), but that it simply means the omission of one day in the cycle" (1728, p.283-284).

Another little-known cycle is mentioned in the dissertation about the sciences in France: "In the year 1064 they had the opportunity to observe the great year, that is to say that one that completed for the second time the great cycle of Dennis the Short (twenty-eight cycles of nineteen years, or 532 years in total). As this large cycle includes all the possible variations of the feast of Easter, a new one was initiated in 1065 starting with year number one" (1741, p. 89-90). But the Abbé mentions the danger of giving importance to such correspondences: "Humbert of Romans, General of the [Dominican] order, knew about the abuse some people made of this art of computation, when he insisted on arguing in one of his sermons against the sentiments and beliefs held by some pagan philosophers that the whole universal machinery would perform a complete cycle in such a way that all things would reappear another time" (1741, p.93-94).



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¹ 'Years' in the text, but this is evidently a mistake, probably by the printer.

Celestial phenomena: comets

In the course of denouncing superstitions, Jean Lebeuf quotes some very precious historical fragments from ancient times. Thus, in the 9th century, "When the Emperor [Louis le Debonnaire, son of Charles the Great, in 837] saw this comet [in Aix la Chapelle during the Easter celebration], being cautious of this sort of sign, he stopped suddenly, and before going to bed, he had a certain man of his court called, together with myself, whom he considered to be very instructed in the knowledge of astronomy, and he asked our advice. I begged him to give me time to observe this comet in order to study the truth, and I would give him a very precise report in the morning. The Emperor believed (rightly) that I was tricking him, both to gain time and to delay the moment of telling him some bad news. 'Go', he said, 'to the next room and then tell us what you think of it. I am sure I did not see this star yesterday evening, and you yourself did not notice anything. For me, I see clearly that it is one of those comets about which we have been speaking these last few days. Tell me what you think it is foretelling.' I gave him some sentences on the subject and then stopped. 'There is something', he said, 'you want to keep secret'. This was because it is told that this sort of phenomenon announces a political change and the death of the prince. I quoted the passage of the prophet where it is said: 'Do not fear the signs in the sky as do other nations'. Immediately, and without any preparation, as if by the effect of his own virtue, he said: 'We should only fear Him who created both us and that star; we can never admire Him enough nor praise His clemency as he sends these signs only to wake us up from the sleep in which we are, we impenitent sinners. The marvel tells me in particular and the others in general: let us hurry to improve ourselves and do better than in the past, in fear that the Lord, after having offered us penitence, would find us unworthy of His mercy.' After these words, he took a few swigs of wine, and ordered all to do the same. We were told later that he had spent all the night in prayers" (1726b, p.2429-2430).

Celestial phenomena: aurora borealis

"I shall not conceal from you, Sir, that my aim was to tell you a few words about something still existing which the people call the Septentrional light because it moves in the direction of the North. Here, these lights only display themselves in the middle of the air at about the time of Advent.... I will tell you in general that this light has nothing to do with astronomy..." (1726b, p.2431-2432).

The Abbé was wrong about this, as we now know. But he quotes early medieval references to the observation of these lights, which will certainly be of interest for our modern historians.

"It is very difficult to believe that Mr Maraldi wrote that a thousand years had passed without the mention of this phenomenon; that is from the years 584, 585, 586 and 587 until 1154 and beyond. Indeed, if we take the trouble of consulting the authors of ancient chronicles... Hughes of Flavigny is certainly worthy of attention since this author, a very clever one for that epoch, was living when this light appeared, and he saw it, tried to understand it, and made some prognostics for the future. He refers to a similar light which had appeared a short time before the bloody battle fought in our part of the world, commonly called the battle of Fontenay, on Saturday June 25th in the year 841" (1724, p.2349). This letter gives other dates and medieval references to the observation of the northern lights. It is followed by two other letters by Monsieur Meynier (1726b, p.2436-2443) and by Monsieur Capperon about the northern lights seen over La Ville d'Eu on October 19th, 1726 (1726b, p.2443-2449). Astrophysicists studying solar activity would doubtless like to study these sources further.

A folklorist

The most interesting of the Abbé's discussions are certainly those on old calendars, popular credulity and lunar cycles. In the Mercure de France of January 1734 we find an interesting letter about the popular traditions concerning the occurrence of the feast of Easter when it falls on the 25th of April its latest possible date: "Sir, you are probably informed of the traditions running among the people concerning the occurrence of the feast of Easter on the 25th of April, such as will be the case in the next year, 1734. The result of this occurrence is that the celebration of Corpus Christi then takes place on June 24th, the day of the Nativity of St John the Baptist; and it is because of this conjunction that a certain proverb came into existence concerning the End of the World. In order to demonstrate this illusion, it seems to me enough to recall its origin or rather its late appearance. Everyone knows that the solemnity of Corpus Christi was only established as late as in the XIIIth century..." (1734a).

Another popular tradition discussed by the Abbé, is that concerning a miraculous grave that fills with water at full moon. Here again, he prefers not to mount a full-frontal attack on the faith of simple people, but instead proposes and lets his readers consider a rational reason for the miracle: "I have often felt like talking to you about a type of Phenomenon that might somehow

be relevant to miracles because it concerns a saintly object. In Arles in Provence, at a place called the Champs Elysées, there is a church by the name of St Honorat which is the ancient cemetery church of that city, served today by the Order of the Minims. Under this church is a crypt in which there are seven marble graves disposed at random, most of them empty. They are said to belong to the bishop saints of Arles - Concordius, Hilary, Eone, Virgilius, and Rolland - to St Genes the notary, and to a Saint of Arles named Dorothea. Some people have mentioned that, according to a passing scholar, the grave of St Concordius who died in the IVth century, which is placed on top of the grave of the Bishop Saint Rolland, fills up with water when the moon is full... I do not doubt that our gentlemen the physicists will desire to be better informed of the reality of that before starting to think about the problem. At present, I cannot provide any more evidence than the testimony of Mr. Chatelain in his catalogue of martyrs dating to January 16th. It is in his note about St Honorat that the fact is mentioned. I think it will be very difficult to explain the cause and suppose that it could be classified in the same group as the miracle of St Gratien's hazelnut tree, which is also very astonishing. This is unless the proximity of the city of Arles to the sea lead us to imagine some canal that would connect to the upper grave exclusively and to no other" (1727, p.927).

Here again, Lebeuf finds a rational explanation for the miracle, but presents it lightly, by a simple suggestion, without directly challenging the popular belief. As he puts it elsewhere: "Is it possible to disabuse the folk from such thoughts? Not if the kings themselves and even emperors were so upset that it was difficult to calm them at the appearance of comets or any other sign, which led them to fear the worst effects" (1726b, p.2427-2428).

I hope these few notes will encourage my friends and colleagues to search for more.

A Very Limited List of References

In what follows I present a short and subjective choice of articles concerning astronomy, calendars, calendrical feasts, and celestial and atmospheric phenomena by the Abbé Lebeuf.

- 1724. Lettre sur la lumière septentrionale. *Mercure de France*, Novembre, 2346. (Les remarques de M. Maraldi au sujet de cette lettre sont dans le journal des Savans, 1725, 255).
- 1725. Lettre au sujet de l'explication donnée, depuis peu, d'un terme de la basse latinité, ou il est parlé d'Abbas Cornardorum, de l'abbé des fous et de leur fête. Mercure de France, Juillet, 1593.
- 1726a. Remarques sur les anciennes réjouissances devant les fêtes de Noel, à l'occasion du mot 'defructus', et sur les

- abus de la Fête des Fous. *Mercure de France*, Fèvrier, 218.
- 1726b. Lettre sur la lumière boréale, à l'occasion de celle qui a paru au mois d'octobre 1726. *Mercure de France*, Novembre, 4220.
- 1726c. Lettre sur un calendrier écclesiastique pour un nouveau bréviaire, ou l'on propose des régles sur cette matière. *Continuation des mémoires de litt érature receuillies par le P. Desmolets,* Tome I, part 1, 320.
- 1727. Lettre sur les fêtages d'Angers, les defructu; sur un tombeau qui se remplit d'eau selon le cours de la lune, superstitions de figures, de pieds attachés aux arbres. *Mercure de France*, Mai, tome III, 921-927.
- 1728. Observations sur les lunaisons: si elles doivent porter le nom des mois; sur l'embolisme, sur le saut de la lune, l'annonce de la fête de Pâques, les cycles, tables pascales, vers des anciens calendriers. *Mercure de France*, Février, tome I, 269 293.
- 1732. Lettres sur les préservatifs contre le tonnerre et contre les maladies du corps humain. Mercure de France, Mai, 903.
- 1734a. Mémoire touchant les traditions populaires au sujet de l'occurence de la fête de Pâques au 25 Avril. *Mercure de France*, Mars, tome I, 485 493.
- 1734b. Discours sur l'état des sciences dans l'étendue de la monarchie française sous Charlemagne". Cette pièce est la première qui ait remporté le prix de l'Academie des Inscriptions et belles lettres; elle se trouve tout entière dans les *Mercures de France* de Juin et Juillet 1734, Paris, Louis Guerin, in-12. tome II, 1291 1306. On en lit l'extrait dans le *Journal des Savants* de Décembre, 2178, édit.in-12. On y loue les recherches et la solidité des remarques dont cette dissertation est remplie.
- 1738a. Dissertation sur l'état des sciences dans les Gaules depuis la mort de Charlemagne jusqu'à celle du roi Robert. In: Receuil de divers écrits pour servir d'éclaircissements à l'histoire de France et de supplément à la notice des Gaules. In 12, 2 vol. Paris: Jacques Barois fils.
- 1738b. Extrait de la lettre au sujet des pierres de foudre tombées en Artois au mois de Juin 1738. *Mercure de France*, Septembre, tome III, 1986 1987.
- 1739-1743. Traité sur les anciennes sépultures, in tome II, (1742), des *Dissertation sur l'Histoire Ecclésiastique et Civile de Paris, suivie de plusieurs éclaircissements sur l'histoire de France*, Paris : *Lambert et Durand*.
- 1741. Dissertation sur l'état des sciences en France depuis la mort du dit roi Robert jusqu'a celle de Philippe le Bel. In: Dissertations sur l'histoire ecclesiastique civile de Paris, suivie de plusieur eclaircissements sur l'histoire de France. In 12, t.2. Paris: Lambert et Durand.
- 1748. Observations critiques sur le calendrier historique et ecclesiastique de M. Lefevre. *Mercure de France*, Avril, 255-260.
- 1750. Reponse sur la date 'Dominica isti sunt dies'. *Mercure de France*, Octobre, 275.
- 1751a. Lettre sur les jubes. Mercure de France, Mars, 208.
- 1751b. Lettre sur la date du Jeudi Magnificat, ou premier Jeudi de Caresme. *Mercure de France*, Mai, 372.
- 1751.c. Observations sur l'origine des samedis gras. *Mercure de France*, Juillet, 34.
- 1752. Sur le Roi des Ribauds et "Sur les feux de Saint Jean". *Mercure de France*, Novembre, 228.
- 1754-1758. *Histoire de la Ville et de tout le diocese de Paris*. 15 volumes, Paris: Chez Prault Pere.
- 1755. Lettre sur les chiffres arabes et leur ancienne figure. *Mercure de France*, Juillet, 38.



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1867. Lettres de l'Abbé Lebeuf, publiées par la société des sciences de l'Yonne, sous la direction de MM. Quantin et Cherest, Auxerres, 1866-1867.

1885. Correspondance de l'Abbé Lebeuf et du President Bouhier. Auxerres.

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ABATAS ŽANAS LEBIOFAS (1687–1760) – UŽMIRŠTAS ARCHEOASTRONOMIJOS IR ETNOASTRONOMIJOS MOKSLŲ PIRMTAKAS

Arnold Lebeuf

Santrauka

Žanas Lebiofas (Jean Lebeuf) gimė Osere 1687 m. kovo 6 d. Būdamas septynerių jis pradėjo studijuoti humanitarinius mokslus Jėzuitų kolegijoje ir tapo klieriku. Jis studijavo teologiją, lotynų, graikų, hebrajų kalbas, visą savo laisvą laiką leido bibliotekose ir tapo puikiu paleografijos ekspertu.

Jis pirmasis ėmėsi nustatinėti architektūros paminklų amžių pagal jų konstrukcijos stilių, vienas iš pirmųjų ėmė gretinti archeologinę medžiagą su istoriniais faktais. Domėjosi idėjų istorija, papročiais, teise ir visų rūšių reiškiniais, kurie galėjo paveikti Europos visuomenę ir konkrečiai Prancūziją po Romos imperijos žlugimo. Jis buvo vienas iš pirmaujančių mokslininkų viduramžių studijų srityje.

- Ž. Lebiofas pristatė mokslo veikalo projektą, skirtą archeologinio datavimo klausimams, kuris rėmėsi visomis jo sukauptomis žiniomis. Tačiau staiga pablogėjus sveikatai mirė, būdamas 73 metų, nespėjęs tapti Karališkojo menų ir literatūros instituto direktoriumi, kuriuo buvo rengiamasi jį paskirti.
- Ž. Lebiofas paskelbė įspūdingą skaičių knygų ir straipsnių labai įvairiomis temomis: istorijos, archeologijos, muzikos, tautosakos, etnologijos ir kt. Jis buvo gerai žinomas XVII–XIX a., bet keistai dingo iš enciklopedijų XX a. antrojoje pusėje. Straipsnio pabaigoje pateikiama rinktinė su kultūros astronomijos tematika susijusių Ž.Lebiofo straipsnių bibliografija.

Vertė Jonas Vaiškūnas