

Greek Papyri in Byzantine and Early Arabic Times

Dating Methods for Greek Papyri

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The primary focus of this paper will be on the Dating Methods for Greek Documentary Papyri in Byzantine and early Arabic times with the aim of providing you with useful practical information for dating of such papyri.

Despite a broad range of documents preserved from Byzantine and Early Arabic times in Egypt, these are often only fragments of preserved documents. In addition, they still have to be identified and dated. If we are very lucky, we find a – for this period of history pretty complicated – date written at the top or at the end of the document. If, however, the condition of the papyrus is too bad or if it happens to be a private document without any official dating formula, we have to look for other methods of putting the antique testimony into a time line.

First of all, I shall present a short outline of the administrative circumstances for the time period with which we are dealing. Then I would like to present various methods of dating papyri, beginning with the different chronological systems, for which I shall give examples of how to use dating tools like the “Chronological systems of Byzantine Egypt” from Bagnall and Worp. The second part of this paper will contain some dating methods by means of analysing the form and content of documents such as palaeography, the use of Christian symbols, names and honorific titles.

1) Political circumstances

Since my colleague has already given an introduction to political and administrative issues, it will be sufficient to give a short synopsis of some facts particular to the Byzantine and Early Arabic period.

The Byzantine period is conventionally dated between 284 to 642 AD. After 642 AD begins the Arabic period of Egypt.

In 284 AD, the emperor Gaius Aurelius Valerius Diocletianus was enthroned in Rome. He began to reform the provincial administration all over the Roman Empire, of which Egypt

was part, in 297/298 AD. From then on Egypt was part of the large administrative unit called *dioecesis oriens* and as a province it was under the control of a *vicarius*. Diocletian reorganized the division of the land and reformed a big part of the administrative body. Whereas Egypt had earlier been divided into epistrategies, nomoi, toparchies and villages, it then was part of the Eastern *dioecesis* and divided into provinces, μητροπόλεις (*municipium*) with their ἐνορία (*territorium*, the former nomoi) and πάγοι / pagi (the territory not belonging to the metropoleis) as well as villages. The organization of the land was varying during the reign of Diocletian and his successors, and it came to an end only around 535 AD under the reign of Flavius Petrus Sabbatius Iustinianus.

The Strategos for example, the chief of the nomos, in ptolemaic and roman times was replaced by the *exactor civitatis*, also known as “στρατηγὸς ἦτοι ἐξάκτωρ” and was from then on responsible for the financial resort. Also other officials were also replaced or new offices were created during the Byzantine period.

From 619 until 629 AD Egypt had been dominated by the Sassanids before it was eventually conquered in 641 AD by the Arabs, and became a province of the Caliphate. The Arabs brought with them the paper which replaced eventually papyrus as writing material. The papyrologists' field of work ends with a Papal document of 1057 AD and an Arabic document of 1087 AD, which are the last two items ever written on papyri.

2) The Chronological system of Byzantine Egypt

For understanding the Chronological system, let us first of all have a look at the calendar system:

When Alexander the Great conquered Egypt, he brought the Macedonian calendar with him, a calendar based on the cycle of the moon with months à 29 and 30 days, thus years with 354 days. The difference to the solar calendar was balanced by an inserted supplementary month. This method was not very handy, and the conquerors adopted the local calendar system: the Egyptian year had 12 months à 30 days, thus 360 days - plus 5 *Epagomenai*, thus supplementary days. Under the emperor Augustus a sixth ἐπαγομένη was inserted into every fourth year. The conquerors also adopted the name of the Egyptian months. Therefore we find in dating formulas Egyptian names for the months.

With the reorganization of the Empire by Diocletian in order to adjust the administration of the Roman possessions it took effect also on the dating systems. Whereas in

Roman times documents were dated – like in earlier periods - by regnal years, the reign of Diocletian brought not only the dating by consulates but also other forms of dating emerged.

There are altogether six distinct chronological systems in Byzantine times: Dating by a) Regnal years, b) Consulates and Postconsulates, c) Epigraphai and Indictions in cycle of fixed length, d) Era of Diocletian / Era of Martyrs and e) Era of Oxyrhynchus, and f) the Hijra era after the Arab conquest. Thus, if there is a date mentioned in a document, it is one of these.

a) Regnal years

Like the Pharaohs, Ptolemies or the Roman Emperors, the system of dating after regnal years was still in use after Diocletian's ascension to the throne. They are attested in Egypt until 317 AD, although in the Oxyrhynchite and Herakleopolite nomes survived beyond this date. From 537 AD onwards we find the regnal years again in dating formulas, due to Novella 47 issued by Emperor Iustinian in AD 537, which ordered the dating of all contracts and legal documents as follows: a) the current regnal year of the ruling emperor, b) an indication of the consul of the current year, c) an indication of the current indiction year, and finally d) the month and day.

b) Consulates and Postconsulates

In order to adjust the dating throughout the whole Empire, eponymous magistrates, that is the consuls, found entry into the dating formula. Yet, from time to time scholars have slight problems from time to time dating the documents, because it took time to announce and to recognize the new consul in Egypt, although his predecessor was already outdated in Rome. Consequently, the scribes used the old name of the consul by default and began to date the documents by postconsulate dates, such as “after the consulship of NN”. The earliest documents dated by consulship are P.Lips. I 4 and 5, a deed of sale of a slave girl, dated from the 10th September 293 AD.

c) Epigraphai and Indictions

The scribes were slightly surer about the so-called indiction. After some trials with the financial cycle of 5 years called Epigraphai or διατύπωσις (*delegatio*), the indiction cycle was established from 312 AD onwards. From then onwards a cycle of 15 years was in use,

beginning at a variable time between early and mid summer. It was declared each year by the government after the harvest because the taxes were collected in the new indiction.

d) Era of Diocletian / Era of the Martyrs

In papyri we also find dating systems confined to certain regions of Egypt or certain types of documents. One of them is the Era of Diocletian, later called Era of the Martyrs. It was mainly used for private purposes like the dating the births of individuals, for creating a horoscope or in private inscriptions like gravestones or graffiti. In ordinary papyri documents it was used after the Arab conquest, probably as a Christian medium for propaganda contrasting the Arab Hijra era.

The Era of Diocletian was based on the Egyptian civil year, beginning on Thoth 1st. It was called thus because it was counted from the first year of reign of the reign of Emperor Diocletian. It was in use up to the end of the 13th century, which was year 887 of the Era of Diocletian, that is 1170 AD. Yet, the name changed from the 6th century onwards, and the Era was called that of the Martyrs due to Christian influence.

e) Era of Oxyrhynchus

The other chronological system, this time a regional one, is the so called Era of Oxyrhynchus. It was in use only in the Oxyrhynchite nome. This form of dating practise consisted of two year specifications, “year xx and xx”. The first number was the regnal year of Emperor Constantius II, and the second number was the regnal year of emperor Julian. This kind of dating continued beyond the two emperors’ deaths. How did it come?

In the year 336/337 AD, the emperors Constantine I, Constantine II, Constantius II, Constans and Dalmatius reigned together. After the death of these emperors, their regnal years were continued to be used (insert table) until only the regnal years of Constaius II and Dalmatius were used going on until the Arab conquest in 641 AD.

f) Hijra Era

After the Arab conquest the Hijra Era was used for dating official documents. The count of years began with Mohammed’s flight from Mecca to Medina, that is – according to tradition – the 16th July 622 AD. Because the Muslim year was a lunar year, the conversion to the Julian year is more complicated.

The Hijra Era was referred to as the era “κατὰ Σαρακηνός” in Greek and especially Coptic papyri, but also the phrase “κατ’ Ἀραβας” is found.

3) Other Methods

What, if no date is given in a document that is to be dated?

a) The first thing a papyrologist needs to do is to look at the palaeographic evidence. I shall show you now three different papyri, from a different periods: The first one is Ptolemaic. You can see that the letters are somewhat broad, and arranged as if they hang on an upper line. The writing is regular and has a touch of elegance.

The second papyrus is from the Roman period. The letters are tighter and more cursive, the hands are small and very rapid. The characters do not show any regularity, they have different sizes and different basic forms. Some characteristic letters are the Epsilon, written in one draw, also the Kappa, and Ypsilon and Eta differ only by the flecion of their feet.

The Byzantine writing greatly differs from that of other periods: The hand appears to be elegant, large, and has many flourishes. The vertical element predominates. The characters, especially Espilons, go beyond the upper and lower lines, especially Epsilon. Ypsilon is often written “in the air” above the other characters. Delta often has the form of the Latin character “d”.

There are, of course, also some palaeographic hints concerning the dating of the papyrus to a century, but today I shall only give an overview of the dating possibilities, and not discuss every detail.

b) Invocatio

Christian Invocation formulas were first ordered to be included in the dating formulas by an edict from Mauricius around 591 AD (the edict may have been issued earlier but the first instance has hitherto been dated to the year 591 AD).

There are four types of invocation formulas: The invocation of Christ, the invocation of the Holy Trinity, the invocation of the Holy Trinity and Mary, to which Saints are sometimes added, and the invocation of Christ, Mary and the Saints.

c) Christian symbols

Christian symbols appear in various forms in the papyri; for example, as crosses at the beginning of a document or letter, or before a signature. Also we find Chi Rhos and staurograms in papyri, which indicate that Christians did not to have hide anymore and that their persecution was forbidden by Constantine the Great in 313 AD (edict of Milan).

Other symbols are ΧΜΓ, θβ and ρθ.

The meaning of χμγ has remained a riddle until now. Some scholars want to read it as an abbreviation for “Χριστὸν Μαρία γεννᾷ” (Mary gave birth to Christ) or “Χριστός, Μιχαήλ, Γαβριήλ”, that is Christ in combination with the archangels Michael and Gabriel.

A more recent interpretation of χμγ, however, understands it as an isopsephism to θβ, which seems to signify “θεὸς βοηθός”, that is “God Helper”. We talk of an isopsephism when the value of numbers are equal. Since Greek letters were also used as numbers (Alpha was 1, Beta 2, etc.), χμγ and θβ have the same value, that is 643. The combination χμγθβ also appears in papyri. The isopsephisme of ρθ with the word “ἀμήν” (e.g. “amen”) is well attested: Both have the value of 99.

d) Nomina Sacra

Also one finds in the papyri (example) letters with a stroke above, like $\overline{\theta\varsigma}$ or $\overline{\iota\varsigma}$. Those are so called *nomina sacra*, holy names: θεός and Ἰησοῦς are abbreviated in this way.

e) The use of κύριος and δεσπότης

In Byzantine times, there is a significant increase of the use of “δεσπότης” in the imperial titulatures, replacing “κύριος”. Already in 1972 Dieter Hagedorn rejected the well-established interpretation that it has something to do something with the Christian use of “κύριος” as the designation of God, whereas secular rulers were in consequence designated as “δεσπότης”. He showed that when “κύριος” ceased to be used in the imperial titulatures and was replaced by “κύριος”, Christians were still persecuted and did not thus have such an influence on legal documents. There must, however, be another explanation for this change in words, even though it has not been found yet. The fact of the matter is that the use of “δεσπότης” in the imperial titulatures began around the end of the 3rd and the beginning of the 4th century AD.

f) Titles of the town Oxyrhynchus

Not only the titulatures of the Emperors give us a hint for dating documents, but also the varying titles of the town Oxyrhynchus in Byzantine times. The town constantly changed its name from the 4th until the 6th century AD. Of course, other towns also went through similar changes; but it is only for Oxyrhynchus that a detailed study has been conducted, yet (but see also the title of Hermupolis).

g) Honorific Titles

As you can see, the titles of the town Oxyrhynchus included words like “λαμπρότατος”. Such words like λαμπρότατος (*clarissimus*), ανδρειότατος (*fortissimus*), διασημότητα (*perfectissimus*) are called honorific titles (Ehren- / Rangprädikate) and were frequently used not only for emperors but also for higher officials during Byzantine times.

h) The names Aurelius and Flavius

Also the names of private individuals could change with time. In 212 the Constitution Antoniniana, issued by Emperor Caracalla, marked the beginning of a tradition that fully developed only after Constantine’s victory over Licinius in the battle of Chrysopolis in 324 AD.

When the Constitution Antoniniana granted Roman citizenship to all free citizens of the Roman Empire, it appears that a lot of “new Romans” adopted the name Aurelius as a Praenomen. Of course, they did not have the same privileges as the Romans with long-term citizenship. Eventually, these called themselves Marcus Aurelius to distinguish themselves from the new citizens. We thus find a lot of Aurelians and Marci Aurelii in papyri from since 212 AD onwards.

In 324 AD, Constantine triumphed over Licinius in the battle of Chrysopolis with the help of the Christian God. He took over the Eastern parts of the Roman Empire. From that time onwards “Flavius” is found in papyri as a status designation with regard to all higher civil and military officials, officials of the provincial administration, high juristic officials and soldiers. From the 5th century onwards, the Flavii also often appear in lease contracts as lessors, Aurelii as lessees.

i) Others

Of course, some hints of dating papyri are also given by a whole range of new officials introduced by Diocletian and his successors as well as some new meanings of words like “σῖτος” which meant in earlier times “corn” and adopted the special meaning of “wheat / bread” in Byzantine times.

Summing up, there are a lot of hints in the documentary papyri which allow scholars to date papyri more or less precisely. These hints range from dating formulas via palaeography, names, officials and Christian symbols to specific vocabulary.

I hope has given you useful information for assigning documentary papyri to their special periods of the ancient world.