

# PTOLEMAIC CHRONOLOGY

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## *The Beginning of the Macedonian Regnal Year*

In discussing the beginning of the Macedonian regnal year Edgar was unable to settle definitely upon a single date as the New Year's Day.<sup>43</sup> He was torn between what he felt were contradictory pieces of evidence; it will be useful to review these here.

P. Col. Zen. 8 provides definite *termini* between which the year must begin. This document, a letter from Artemidoros to Zenon, is dated year 28, Dystros 23. On the verso is a docket of receipt dated year 29, Xandikos 2. Clearly the year must have changed between Dystros 23 and Xandikos 2, and it is in this period we must find the precise date for the beginning of the year.

Edgar used P. Cair. Zen. 59209 to show that this date was Dystros 25 or 26. That document, a fragment of a letter, is dated year 32, Pharmouthi 3. Now the years of the Macedonian calendar which were not in-

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<sup>43</sup> P. Mich. Zen., pp. 51-52.

tercalary were shorter than the Egyptian year, and because of this it happens in these years that certain Egyptian dates can be assigned positively to the beginning or end of a Macedonian year with certainty. In the case at hand, the year 32 is not an intercalary year. When this year is charted against the Egyptian year, based on the double dates of the period, it is found that Pharmouthi 3 is equivalent to Dystros 26, but only at the beginning of the Macedonian year. Macedonian year 32 ended before Pharmouthi 3 came around again. Therefore, the Dystros 26 to which Pharmouthi 3 is equivalent is at the beginning of the year, and so the beginning of the year is at the latest, Dystros 26. This is based on Edgar's table of equivalences for this period. This table is not completely accurate, but the reasoning Edgar followed is sound.

Edgar was puzzled, however, by the double date in P. Cair. Zen. 59139, year 29, Dystros 26 = Phamenoth 26. Edgar concluded that this date fell at the end rather than the beginning of a year, since the intercalation of Peritios Embolimos that year precluded the accuracy of the equation at the beginning of the year, while it was accurate for the end of the year. If this date does belong at the end of the year, it indicates that the year began after Dystros 26.

However, this equation has no value for establishing the beginning of the year. We have repeatedly emphasized the unreliability of double dates which have the appearance of direct equations. While it is true that with regard to the cycle this date does appear accurate for the end of year 29, there is no assurance that it is not a direct equation made at the beginning of the year, when Phamenoth 26 did not equal Dystros 26. Because of the intercalation, there were two Phamenoths that year, and depending upon the beginning of the Macedonian year, there could have been two Phamenoth 26's. We must not let a double date which could be a direct equation be introduced as evidence of the date of the beginning of the year. It is possible that the document was dated on Phamenoth 26 at the beginning of the year, and this was arbitrarily equated to Dystros 26; or it may have been dated on Dystros 26 at the beginning of the year, and this may have been arbitrarily equated to Phamenoth 26.

Fortunately there is additional evidence to show exactly the day on which the new year began. This evidence comes as the result of a careful examination of the dates of P. Cair. Zen. 59202, 59203, and 59204. These are all letters from Apollonios to Zenon, and bear the following dates and docketts.

	Date	Docket
P. C. Z. 59202	year 31, Dystros 23 = Phamenoth 30	year 31, Pharmouthi 1
P. C. Z. 59203	year 31, Dystros 23 = Phamenoth 30	year 32, Pharmouthi 1
P. C. Z. 59204	year 31, Dystros 23 = Phamenoth 30	year 31, Pharmouthi 1

The restoration in 59203 is certain. Only in year 31 can Dystros 23 be equivalent to Phamenoth 30. The clue to the beginning of the year is found in the docket of 59203, which unlike the dockets of 59202 and 59204 placed Pharmouthi 1 in the 32<sup>nd</sup> year.

Now recalling that the Egyptian calendar day began at daybreak while the Macedonian calendar day began in the evening, we see that two years were given for Pharmouthi 1 because the year changed at evening that day, when a new Macedonian day began. The change in year at this time is illustrated by confusion in 59202. In the publication of 59202 Edgar indicated that the reading of year 31 in the docket was uncertain, and admitted that it could be read 32, corrected from 31, instead of 31, corrected from 32, as he read it.

This explanation presumes a sequence of events like the following. The letters were all written on the evening of Phamenoth 30, on which Dystros 23 began.<sup>44</sup> The following day, Pharmouthi 1, while Dystros 23 was still running its course, 59204 was received and docketed year 31. 59202 was docketed in the evening of Pharmouthi 1, after Dystros 23 had ended, and the date was written as year 31, then changed to year 32 when the scribe realized that the year had changed. 59203 also was docketed in the evening of Pharmouthi 1, but no mistake was made on this docket, and year 32 was written without any confusion. That there is evidence of erasure on 59202 supports the proposal that this was the evening on which the regnal year changed, and the day that began that evening, and thus the first day in the Macedonian regnal year, was Dystros 24. This date was New Year's Day in the calendar in use during the latter part of the reign of Philadelphus.

<sup>44</sup> According to the cycle, Dystros 1 began on the evening of Phamenoth 8, so Dystros 23 must have begun on the evening of Phamenoth 30.

## *The Double Date of the Rosetta Stone*

After the double date of the 14<sup>th</sup> year of Philopator there are no more double dates until the 9<sup>th</sup> year of Epiphanes. This double date appears on the Rosetta Stone, O. G. I. 90, and reads: year 9, Xandikos 4 = Mecheir 18.

In considering this date, the first matter to be examined is the question whether the double date fits the system used by the double dates of the early years of Philopator. The last double date of Philopator, year 9, Hyperberetaios 30 = Pharmouthi 7, shows that in that year Hyperberetaios began on Phamenoth 7/8. Beginning from Phamenoth 8 and counting on the Egyptian calendar to Mecheir 14, the beginning of the month indicated on the Rosetta inscription, in year 9 of Epiphanes, we get a total of 16 years, 11 months, 11 days, or 6181 days. Now from Hyperberetaios of the year 9 of Philopator to Xandikos of year 9 of Epiphanes there are, based on the Macedonian calendar continued from the system of the early years of Philopator, counting a Peritios Embolimos in year 9 of Philopator, 16 years, 7 months, or 6110/11 days. The Macedonian total differs from the Egyptian. Closer agreement could be gained by adding two extra intercalary months over the years, bringing the Macedonian total to 6170/71 days, but we are still 10/11 days short. This could be rectified by assuming that more than half of the months in each year were 30, instead of half 29 and half 30, but even this could not have been a regular phenomenon, since one extra 30 day month per year would give for this period 16 days. Thus it is clear that there is no agreement between the system used in the early years of Philopator and that followed by the double date on the Rosetta Stone.

We must now see whether the double date of the Rosetta Stone fits with the moon. According to the double date, Xandikos began on Mecheir 14/15. This is 23/24 March 196 B. C., and the calculation for this date follows:

<i>First day of Macedonian Month</i>	<i>Conjunction</i>	<i>Evening of First Visibility</i>
23 Mar 196 B. C.	20 Mar 05:47 P. M.	21 Mar

Here first visibility precedes the beginning of the month by two days. It is possible that the month was regulated by the moon, but the lack of additional evidence precludes any certainty about this.

In any case, it is clear that the double date of the Rosetta Stone had no relation to the system in use in the early years of Philopator, or in fact, to any other system known to have been in use, and we can only suppose that the Macedonian date on the stone was chosen on the basis of some other system, or by observation, and that however chosen, it was still fairly close to the moon.