Date Formulas in Cuneiform Tablets and Antigonus Monophthalmus, Again

Tom Boiy

Katholieke Universiteit Leuven

INTRODUCTION

In date formulas from the early Hellenistic period, not only kings are mentioned. In Babylonian cuneiform documents and in Aramaic ostraca from Idumaea[1] also Antigonus Monophthalmus appears in the date formulas already before he accepted the royal title in 306 B.C. In the cuneiform documents he is called [lú]*rab uqu* or "strategos."

Legal and administrative cuneiform documents were dated with Antigonus' name from Antig.03 until Antig.09. Thanks to two astronomical tablets, the well-known Saros Canon TAPS 81,6 12 (= LBAT 1428) and the so-called Solar Saros TAPS 81,6 24, these years can be placed exactly in the early Hellenistic period. Both cuneiform texts are so-called Saros Cycle Texts that present eclipse possibilities arranged in an 18-year cycle. The Saros Canon

Abbreviations follow those used in *The Chicago Assyrian Dictionary*. Other abbreviations: AL = A. Lemaire, *Nouvelles inscriptions araméennes d'Idumée, Tome II*, Transeuphratène Supplément 9 (Paris: Librairie Gabalda, 2002); EN = I. Eph'al and J. Naveh, *Aramaic Ostraca of the Fourth Century BC from Idumaea* (Jerusalem: The Magnes Press, 1996); ISAP = Institute for the Study of Aramaic Papyri; L = A. Lemaire, *Nouvelles inscriptions araméennes d'Idumée au Musée d'Israël*, Transeuphratène Supplément 3 (Paris: Librairie Gabalda, 1996).

The Babylonian date formulas are abbreviated under the form "king/ruler.year.month.day," e.g., AlexIII.07.08.09 = 9 Araḫsamna (= month VIII) of the seventh year of Alexander (III) the Great. The abbreviated (royal) names are: Alex = Alexander; Antig = Antigonus; Phil = Philip; SE = Seleucid Era.

1. In this contribution we will focus on the cuneiform documentation. The Aramaic ostraca from Idumaea are a fairly recent discovery and the name of Antigonus was not immediately recognized (for this reading, see R. Zadok, "Antigonos Monophthalmos in Documents from Idumaea," *NABU* 1997/54, and W. Röllig, review of L and EN, *WO* 28 (1997): 220–22). Antigonus appears in the ostraca from Idumaea as אנתגנס, אתגן אתגנס or ארתגנס without any title. EN.56, AL.50, AL.92, AL.93, and AL.94 are dated Antig.03; EN.108, ISAP.212, and ISAP.2510 are dated Antig.05; and the year numbers in L.59, EN C.128, ISAP.227, ISAP.639, and ISAP.1658 are not (completely) preserved.

It was generally accepted that the Aramaic ostraca from Idumaea mentioning Antigonus Monophthalmus in the date formula used the same system as the Babylonian cuneiform tablets and should be dated accordingly. These documents attested Antigonus' presence in Idumaea in summer 315 B.C. and compelled us to accept the so-called "high chronology" for the period of the second and third Diadoch Wars (see T. Boiy, *Between High and Low: A Chronology of the Early Hellenistic Period* [Frankfurt am Main: Verlag Antike, 2007], 122–24). E. Anson, "Idumaean Ostraca and Early Hellenistic Chronology," *JAOS* 125 (2005): 263–66, a supporter of the low chronology, has recently questioned the Julian dates that have been linked to the Antigonus ostraca from Idumaea. In order to save the low chronology for the third Diadoch War he decoupled the year-counting system used in the Aramaic ostraca from the one in use in Babylonia and proposed a local system, starting with Antigonus' conquest of Palestine and Idumaea. In a forthcoming study on local and imperial dates in the early Hellenistic period (T. Boiy, "Local and Imperial Dates at the Beginning of the Hellenistic Period," *Electrum*), I consider the existence of local time reckoning systems outside the Greek and Phoenician cities in the early Hellenistic period to be unlikely.

lists possible lunar eclipses and the Solar Saros mentions the possibilities of solar eclipses. Since both lunar and solar eclipses can occur twice (occasionally thrice) a year, every single year of each cycle is recorded in the Saros Cycle Texts. In the Saros Canon the years Phil.01–06 are followed by Antig.01–06 and in the Solar Saros the years Antig.03–06 follow Phil.07–08. Although the information in the two texts is not exactly the same, they are perfectly compatible, and because the date of Alexander's death (and its relation to the start of the reign of Philip Arrhidaeus)[2] is known, these years can also be dated in absolute terms.[3]

Table 1.   324/3 to 311/0 B.C. in Solar Saros and Saros Canon

B.C.	Solar Saros		Saros Canon	
324/3	AlexIII	7	AlexIII	7
323/2	[Phil]	[1]	Phil	1
322/1		[2]		2
321/0		[3]		3
320/19		[4]		4
319/8		[5]		5
318/7		[6]		6
317/6		7	Antig	1
316/5		8		2
315/4	Antig	3		3
314/3		4		4
313/2		5		5
312/1		6		6
311/0	AlexIV	6	SE	1

It has been noticed that the Saros Canon, compared to the date formulas from the legal and administrative tablets, presents a later, schematized version of the dating formulas of the early Hellenistic period.[4] The regnal years of Alexander the Great were AlexIII.01–07 in-

2. For the exact time of death of Alexander the Great, see L. Depuydt, "The Time of Death of Alexander the Great: 11 June 323 B.C. (−322), ca. 4:00–5:00 PM," *WO* 28 (1997): 117–35. In addition, the year Phil.02 can be dated exactly because the astronomical diary AD 1 −321: 'rev. 23' mentions a solar eclipse on Phil.02.06.28 (26 September 322 B.C.). This observation is in complete agreement with modern computations and therefore Phil.02 must have been 322/1 B.C. (see E. Anson, "A Note on the First Regnal Year of Philip III (Arrhidaeus)," *JCS* 57 [2005]: 127–28).

3. For the exact date of the so-called Saros tablet AD 5 34 and the goal-year text AD 6 5 = LBAT 1216, both astronomical cuneiform tablets that were used in the past to present a different date for the regnal years of Antigonus Monophthalmus, see T. Boiy, "Dating Problems in Cuneiform Tablets concerning the Reign of Antigonus Monophthalmus," *JAOS* 121 (2001): 645–49.

4. See T. Boiy, *Between High and Low*, 77–78, 84–86, and 100. Originally J. Oppert, "Alexandre à Babylone," *Comptes rendus de l'académie des inscriptions et belles-lettres* 1898: 419 n. 1, dated the start of AlexIII.01 on 1 Nisannu following the conquest of Babylonia by Alexander the Great or 3 April 330 B.C. According to Oppert, this resulted in an Alexander Era when after Alexander's death documents were still dated to Alexander instead of his successor Philip Arrhidaeus (for a comment on this theory, see T. Boiy, *Between High and Low*, 84–85). Later R. A. Parker and W. H. Dubberstein, *Babylonian Chronology 626 B.C.–A.D. 75* (Providence: Brown Univ. Press, 1956), 19, called the cuneiform evidence for the period of Alexander the Great confused because two systems were in use: one from 3 April 330 B.C. and another from the moment he ascended to the royal throne in Macedonia in 336 B.C. This way they eliminated the posthumous dates and the so-called Alexander Era. Although Parker and Dubberstein stress that "the few dated business tablets are not decisive in determining the contemporary practice," it has been used later as proof for the existence of two dating systems for contemporary legal and administrative documents (for its use to convert a date on an Aramaic document from Bactria, see S. Shaked, *Le satrape de Bac-*

stead of his Macedonian regnal years that were in use in the date formulas of contemporary legal and administrative documents.[5] In 311 B.C. the Saros Canon starts counting the years according to the Seleucid Era although the date formulas of the legal and administrative tablets use AlexIV.06–11 for the period from 311/0 until 306/5 B.C. and the years according to the Seleucid Era only appear there starting from 305/4 B.C. when Seleucus I was actually Seleucid king.[6] The years Phil.07–08 are replaced by Antig.01–02 because Philip Arrhidaeus was murdered in October 317 B.C. and Phil.07–08 for 317/6 and 316/5 B.C. were largely posthumous dates in the date formulas of the legal and administrative tablets. Since no date formulas mentioning Antig.01–02 were found, they were considered virtual backdates.

The Solar Saros on the other hand, perfectly followed, apart from the reign of Alexander the Great, the dating habits from the early Hellenistic period that can be deduced from the date formulas of the legal and administrative tablets: Phil.01–08, Antig.03–06, and AlexIV.06 are found in these date formulas, only 324/3 B.C. appears as AlexIII.13 in the date formulas of the tablets instead of AlexIII.07 in the Solar Saros.

As mentioned above, the years Antig.03–09 appear in the date formulas of legal and administrative tablets. Antig.07–09 are not mentioned in the Solar Saros, but if the logic of regnal dating is followed, these years must be identical with AlexIV.06–08 (311/0–309/8 B.C.). The political history of these years explains why two regnal dating systems were used in Babylonia. In spring 311 B.C., soon after the start of the Babylonian year, Seleucus reconquered his Babylonian satrapy and restored the name of Alexander IV in the date formulas of the cuneiform tablets. For this reason 311/0 B.C. was not only called Antig.07, but also AlexIV.06. But Antigonus did not give in so easily and he first sent his son Demetrius to reconquer the region. When this attempt failed, he headed another campaign himself. The astronomical diaries and so-called Chronicle of the Successors BCHP 3[7] report hostilities until at least AlexIV.08.05.25 or 26 (30 or 31 August 309 B.C.).[8] Because of the unstable political situation in Babylonia in 311–309 B.C. and especially the presence of both Antigonus Monophthalmus and Seleucus in the region, it is no surprise that the years 311/0–310/09 B.C. were called both AlexIV.07–08 and Antig.08–09[9] in the date formulas of contemporary legal and administrative cuneiform documents.

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triane et son gouverneur. Documents araméens du IVe s. avant notre ère provenant de Bactriane [Paris: Éditions de Boccard, 2004], 17 n. 8). In the meantime more contemporary documents have come to light and it is now clear that only one system was in use in Babylonia during Alexander's lifetime: Alexander's Macedonian regnal years (see below and T. Boiy, *Between High and Low*, 24).

5. See T. Boiy, "Local and Imperial Dates." For an overview of the cuneiform tablets dated during the reign of Alexander the Great, see T. Boiy, *Between High and Low*, 24. From the conquest of Babylonia by Alexander until the end of the Babylonian year, the traditional Babylonian "Accession Year" was used (see T. Boiy, "The 'Accession Year' in the Late Achaemenid and Early Hellenistic Period," in *Mining the Archives: Festschrift for Christopher Walker on the Occasion of his 60th Birthday*, ed. C. Wunsch [Dresden: ISLET, 2002], 30–31) and on 3 April 330 B.C. Alexander's seventh (Macedonian) regnal year began.

6. When Seleucus assumed the royal title in 305/4 B.C. and antedated his rule to the moment he reconquered Babylonia (331 B.C.) the new dating method was not yet an era, but rather a system counting the years when Seleucus ruled in Babylonia (first as strategos and later as king) as was the tradition in Babylonia already for a millennium. It is not until 281 B.C., when Antiochus I decided to continue the count of his father's years instead of starting all over again, that it can be called an era.

7. See AD 1 –309: obv.' 9 and 14: BCHP 3: rev. 21'–23', rev. 37'–39', and L.E. 1–2.

8. See T. Boiy, *Between High and Low*, 147.

9. BM 105211 is the last document dated to Antigonus: Antig.09.05.22 (27 August 309 B.C.), around the same time as the last hostilities between Antigonus and Seleucus mentioned in BCHP 3: L.E. 2.

The years AlexIV.01–02 are present in the cuneiform documents BM 78948 (AlexIV.01), CT 49 27 (AlexIV.01), and CT 49 13 (AlexIV.02). These dates are not mentioned in the Solar Saros, but if we count back from the attested year AlexIV.06 = 311/0 B.C., the years AlexIV.01–02 must be identified with 316/5 and 315/4 B.C. Since these years were counted in the Solar Saros as Phil.08 and Antig.03, respectively, and both Phil.08 and Antig.03 appear in the date formulas of legal and administrative tablets, there is at first sight no place for AlexIV.01–02. As I explained earlier,[10] there is an essential difference between lists of regnal years and date formulas. In date formulas the name of the king/ruler changes at the moment the old king/ruler dies and is replaced by a new one or at the moment this news was known in Babylonia, whereas in lists an abstraction of the actual situation was made and only one name and regnal year appears for every year. A dating system that attributes the year during which such a change took place to the old king/ruler is called a postdating system. If such a year is attributed to the new king/ruler, we call it a predating system.[11] For these reasons there is room for more date formulas in the legal and administrative tablets at every change of rule.[12] Since there is a change from Philip Arrhidaeus to Antigonus Monophthalmus, the date formulas may have more regnal years than those visible in the lists. We would therefore expect a date formula in legal and administrative tablets that mentions either Antig.02[13] in a postdating scenario or Phil.09[14] in a predating scenario. Since neither Antig.02 nor Phil.09 appears in the date formulas of legal and administrative tablets, we concluded that the presence of AlexIV.01–02 fits this gap perfectly. In 316/5 B.C. the date formulas changed from Phil.08 to AlexIV.01 and the following year another change took place, from AlexIV.02 to Antig.03. If the Solar Saros had systematically used either predatation or postdatation, the result would have been as follows (compared to the actual situation in the Solar Saros):

Table 2. Systematic Pre- and Postdatation and Actual Situation in Solar Saros

	postdatation		predatation		actual situation	
317/6	Phil	7	Phil	7	Phil	7
316/5		8	AlexIV	1		8
315/4	AlexIV	2	Antig	3	Antig	3
314/3	Antig	4		4		4

If we compare the actual situation in the Solar Saros with a systematic pre- or postdating scenario, it is clear that a combination of both methods is used. In 316/5 B.C. Phil.08 is postdated and in 315/4 B.C. Antig.03 is predated. A combination of post- and predatation and a change of king/ruler in two consecutive years resulted in the disappearance of the regnal

10. T. Boiy, "Dating in Early Hellenistic Babylonia: Evidence on the Basis of CT 49 13, 1982.A.1853 and HSM 1893.5.6," *NABU* 1998/134, and T. Boiy, *Between High and Low*, 88.

11. For pre- and postdating, see also L. Depuydt, "Foundations of Day-exact Chronology: 690 BC–332BC," in *Ancient Egyptian Chronology*, ed. E. Hornung, R. Krauss, and D. A. Warburton (Leiden: Brill, 2006), 462–63.

12. Only if the change of rule took place on 1 Nisannu, Babylonian New Year, would the date formulas show exactly the same information as the lists of regnal years. In this case only would the old king/ruler end with a full year and the new king/ruler start with a full year. Both years would be attributed to the same king/ruler in the date formulas and lists of regnal years in the same way.

13. The existence of Antig.02 in the date formula of a legal or administrative cuneiform tablet means that the year 316/5 B.C. was originally called Phil.08 in the contemporary cuneiform documents and later that year was replaced by Antig.02. If the lists postdated, the complete year 316/5 B.C. would be called Phil.08 (as in the Solar Saros).

14. The existence of Phil.09 in the date formula of a legal or administrative cuneiform tablet means that the year 315/4 B.C. was originally called Phil.09 in the contemporary cuneiform documents and later that year was replaced by Antig.03. If the lists predated, the complete year 315/4 B.C. would be called Antig.03 (as in the Solar Saros).

years of Alexander IV from the Solar Saros. This way we have reconciled the information from the Solar Saros and Saros Canon with the years of Philip Arrhidaeus, Antigonus Monophthalmus, and Alexander IV that were attested in the date formulas from legal and administrative cuneiform tablets.

NEW DATES FROM CUNEIFORM TABLETS
MENTIONING ANTIGONUS MONOPHTHALMUS

In the meantime AD 5 2, a lunar text presenting lunar eclipse possibilities arranged in 18-year groups[15] from 731/0 until 317/6 B.C., has been published with the following content for the year 317/6 B.C.:[16]

rev.' V'	1'	[. . .] ⌜x x x⌝ [. . .]	[. . .] . . . [. . .]
	2'	MAR *ana* SI *ṣal-pu* GIN ⌜5?⌝ [KÙŠ]	The west wind which was slanted to the north blew. 5? [cubits]
	3'	*ina* IGI SI MÁŠ *ád ina* 10 UŠ	in front of β Capricorni it was eclipsed. At 10°
	4'	GE$_6$ GIN	after sunset.
	5'	GAN 15 Á ULU$_3$ *u* KUR	Month IX, the 15th. When it began on the south and east side,
	6'	*ki* TAB *ina* 19! *gab* ŠÚ 5 ÍR	in 19° all was covered. 5° maximal phase
	7'	*ina* 16 *ana bi* SI *u* KUR ZALAG$_2$	In 16° it cleared to between north and east.
	8'	40 GAR ÍR *u* ZALAG$_2$ *ina* GAR ÍR	40° onset, maximal phase, and clearing. During onset (and) maximal phase
	9'	*né-ḫi ina* ZALAG$_2$ *ḫa-mut*	it was slow, during clearing fast.
	10'	AN-KU$_{10}$-*šú* SA$_5$ 1 1/2 KÙŠ	Its eclipse was red. 1 1/2 cubits
	11'	*ina* IGI MAŠ-MAŠ *ár ád ina* 44 ⌜GE$_6$ GIN⌝	in front of β Capricorni it was eclipsed. At 44° after sunset.
	12'	GAN *ina* 27 *Pi-il-l*[*i*?- . . .]	Month IX, on the 27th, Phil[ip . . .]
	13'	MU-2-KAM ᵐ*An-ti-gu-nu-su*	Year 2 of Antigonus
	14'	DUMU x *ru*[17]	. . .

This means, contrary to what has been thought previously, that the year Antig.02 is nonetheless attested. In addition, the date appears in combination with a lunar eclipse possibility that must be dated in December 317 B.C., whereas according to the other cuneiform tablets, Antig.02 must be 316/5 B.C. Assar[18] tried to explain away this last problem by interpreting Antig.02 as the year when the text was prepared. Though the last lines of AD 5 2 are written on the upper edge, they do not look like a colophon at all. If AD 5 2: rev.' V' 13'–14' is no colophon, the astronomical tablet could have been composed at a much later date and the presence of Antig.02 could be explained as a later schematization/simplification of the actual situation.

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15. AD 5 2 differs from the Saros Canon and Solar Saros mentioned above. The Saros Canon and Solar Saros are arranged in cycles of 18 years (one column for each cycle) and every year of this 18-year cycle is mentioned. In AD 5 2 only one year per cycle is mentioned, resulting in observations/predictions that are always 18 years apart.

16. Transliteration and translation by Hunger in AD 5.

17. Antigonus' title here is problematic. Hunger notes in his commentary on AD 5 2: "The first sign may be GAL as well as DUMU. The next one could be ÉRIN (although it looks more like PI), but the last is certainly RU." R. J. van der Spek, "review of AD 5," *BO* 62 (2005): 547, reads GAL? ERÍN? — *ru* and he refers to other problematic titles of Antigonus Monophthalmus in cuneiform tablets (OECT 9 1 and TCL 13 234; see also R. J. van der Spek, "review of G. F. del Monte, *Testi dalla Babilonia Ellenistica. Volume 1: Testi Cronografici*," *Orientalia* 69 [2002]: 435).

18. F. Assar, "Parthian Calendars at Babylon and Seleucia on the Tigris," *Iran* 41 (2003): 185 n. 12.

In the same volume of lunar and planetary tablets as AD 5, another text is published with observations of Mercury on the obverse and Venus on the reverse. In AD 5 53: 'obv.' II 26′ the date "mu-1 *An* ⌐BAR⌐" is mentioned and this was translated by Hunger as "Year 1, Antiochus?, month I?." Since no Antiochus had a first regnal year[19] and the date for the Mercury and Venus phenomena are not certain, van der Spek[20] proposed to interpret "*An*" as "Antigonus." This means that we would have another attestation of one of Antigonus' "virtual" years in an astronomical tablet. It has to be stressed, however, that the exact date of the tablet cannot be verified on the basis of the astronomical data. Even if the attribution to Antigonus is correct, it is still unknown when the tablet was written and, in the case of a later redaction, the possibility of a later schematization/simplification of the actual situation is realistic also for AD 5 53.

Finally, BM 35920, a small fragment that might have been part of an astronomical diary or the Chronicle of the Successors, also mentions "mu-1-kám ᵐ*an-t*[*i-gu-nu-su*]."[21] Although BM 35920 is fragmentarily preserved, it is clear that the date mentioned is not the date of composition, but that an earlier incident is referred to ("*šá ina* mu-1-kám," "which happened in year 1"). Therefore, also in the case of BM 35920 a (much) later redaction is without doubt.

Because of the uncertainty concerning the date of redaction of AD 5 2 and 53 and BM 35920, these tablets do not prove that Antig.02 was in use in contemporary documents. For AD 5 2: rev.′ V′ 13–14′ the relation of Antig.02 (316/5 B.C.) to the lunar eclipse in December 317 B.C. in AD 5 2: rev.′ V′ 5′–11′ remains enigmatic.

In spring 2008 C. B. F. Walker showed me in the reading room of the British Museum BM 79016, fragment of a ration list that belonged to the so-called Esagil archive. Since the upper part of the obverse and lower part of the reverse were more or less preserved, the months for which the rations listed in BM 79016 were distributed is known (in fact not much else is preserved in the text). Both at the beginning and the end of such Esagil ration lists the document mentions the commodity provided (barley, dates, or wool), the profession of the beneficiaries, the period (one or more months) for which the rations were provided, and finally the name of the person responsible for distributing the rations. A combination of the preserved parts of the date on the obverse with those on the reverse results in at least the months Kislīmu, Ṭebētu, Šabāṭu, and Addaru[22] of Antig.02. In this case Antig.02 is attested in a date in a contemporary administrative tablet. There is no possibility of chronological schematization or simplification during a (much) later redaction of the text.

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19. Antiochus I started as coruler with his father Seleucus I from at least SE18.08.01 = 18 November 294 B.C. (BM 109941, see J. Oelsner, *Materialien zur babylonischen Gesellschaft und Kultur in hellenistischer Zeit* [Budapest: ELTE, 1986], 271) with the years of his father. After Seleucus I died, he continued to count with his father's years and the Seleucid Era was born. All Seleucid kings (and therefore all kings named Antiochus) used the Seleucid Era for dating purposes.

20. R. J. van der Spek, "review of AD 5," *BO* 62 (2005): 549.

21. See http://www.livius.org/cg-cm/chronicles/bchp-diadochi/diadochi_06.html. Van der Spek proposed here to disconnect the name Antigonus from the date formula and to read this passage as "whom in the year 1 (of Alexander) Ant[igonus, the general had deposed]" instead of "who in the year 1 of Ant[igonus]." In a new article (R. J. van der Spek, "Seleukos, Self-Appointed General (*stratēgos*) of Asia [311–305 B.C.]," [in press]) he does take Antig.01 into consideration.

22. One wedge of ⁱᵗⁱᶠš¹[e] (the month Addaru) is preserved in rev. 4′. Antig.02 (316/5 B.C.) was an intercalary year with an extra month Addaru at the end. Although the right edge of the tablet is not preserved, it is clear from the tablet's form that not much is missing after ⁱᵗⁱᶠš¹[e] at the end of rev. 4′. The only possibility to restore an extra month ⁱᵗⁱdiri.še (= Addaru II) in rev. 4′ is to suppose that this line was continued on the edge.

obv.

rev.

1 cm

obv. 1′ x
      iti[
      mu-2-[

      _i-te_-x [
   5′ 2g ᵐᵈen-[
      1g 4p 1b ᵐx-x[
      2p 2b ᵐᵈen-˹x˺-[
      1g 3p 2b ᵐx-[
      1g 1b [ ] x-x [
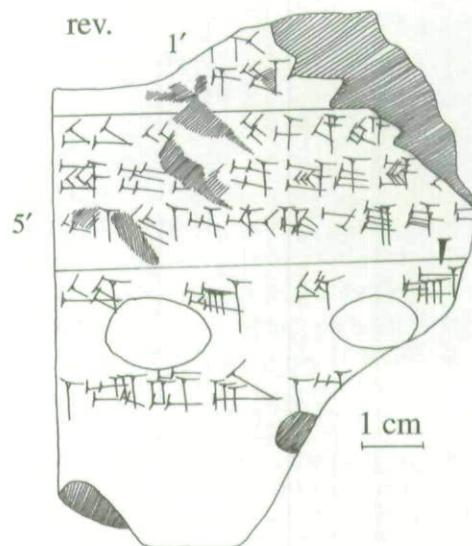
rev. 1′   ] x [
             ] x x [
      pap.pap 20[+ gur] še.bar. šuk.ḫi.a [

      ⁱᵗⁱgan [ⁱᵗⁱ]ab ⁱᵗⁱzíz ⁱᵗⁱ˹š˺[e]
   5′ mu˹2-kám˺ ᵐ_an-ti-ig-nu-su_ gal ú?-[
      na₄.kišib   na₄.kišib
      ᵐᵈen-nigin-_ir_   ᵐᵈ[

The date in BM 79016 is, however, no ordinary date formula at the end of a legal or administrative document mentioning day, month, year, and king. The date in the ration list does not mention the moment when the document was composed, but the period for which the rations were intended. Therefore no days, but only months are registered. A problem with dating the ration lists of the Esagil archive is that we do not know when exactly they were written: before, during, or after the time span for which the rations were meant. A date when the text was written is never provided and in addition, there is no verb indicating whether the rations had already been given or were to be given in the (near) future. I have argued else-where[23] that since the text describes a long period for which every individual is named, it is more likely an exact account of expenses and not an estimation of future costs. Therefore, if the ration list was composed after the period it describes, it is likely that the ration list was composed after the end of the month Addaru or at the beginning of the year Antig.03.[24] The tablet was evidently written after the introduction of the year count in the name of Antigonus, but this introduction must not necessarily have happened before Antig.03. We may conclude that at the moment BM 79012 was written in Antig.03, a fictitious backdate Antig.02 was used for the previous year described in the text.

23. See T. Boiy, "The Reigns of the Seleucid Kings according to the Babylonian King List," *JNES* (in preparation).

CONCLUSION

In the light of this new date Antig.02 in BM 79016 the other tablets from this period must be re-examined. The last tablet dated to Philip Arrhidaeus (AION Suppl. 77 79; Phil.08.07.18 = 9 October 316 B.C.) and the, until recently, earliest tablet dated to Antigonus Monophthalmus (CT 49 34; Antig.03.07.[ ] = December/January 315/4 B.C.) pose no problem at all. Both are ordinary date formulas.

All tablets dated to AlexIV.01–02, however, have no date formulas, but originate, like Antig.02 in BM 79016, from the ration lists in the Esagil archive, where they indicate the period for which rations were provided. Both texts from AlexIV.01, BM 78948 and CT 49 2,[25] have no month names preserved. Therefore, these tablets pose no problems for the appearance of Antig.02 in BM 79016; both texts can be dated after AION Suppl. 77 79,

24. Other ration lists for which the details are preserved have either one single month or list rations for six months (OECT 12 B2 from Simanu until Araḫsamna, OECT 12 B7 and BM 132271 from Kislīmu until Ayyaru). It is remarkable that OECT 12 B7 and BM 132271 deal with the same six-month time span (although they are dated 28 years apart, OECT 12 B7 in ArtIII.13 and BM 132271 in Phil.06) and that OECT 12 B2 covers the other six months of the Babylonian year (from Simanu until Araḫsmna). Although it is risky to draw conclusions from only three tablets, it looks as if these six-month periods used over such a long span of time are no coincidence and that they have something to do with the method of bookkeeping in the Esagil ration lists. Also other ration lists where the time span is not completely preserved fit the same pattern because they mention either Kislīmu as first month of the rations (BM 16094, VS 6 293, TBER 89 [AO 26770]) or Araḫsamna or Ayyaru as last month (CT 44 80, BM 16698).

BM 17010 and 17136 are two other ration lists from the Esagil archive that mention rations up to the end of the month Addaru. Unfortunately the line mentioning the starting date of the rations is not preserved in either text so we do not know the exact time span here. CT 49 25 deals with the rations of at least twelve months because the text mentions rations from the first month of the year until the end of the last month of the year:

obv. 1   še.bar/zú.lum/síg.ḫi.ašuk.ḫi.a ˡᵈ]gír.lá.⟨meš⟩ ta ⁱᵗⁱbar
      2   mu-x-kám e]n til ⁱᵗⁱše mu-11-kám
      3   ᵐa-lek-sa-an-d]ar a ᵐki.min

obv. 1   barley/dates/wool, rations for the] butcher⟨s⟩, from Nisannu
      2   year x un]til the end of Addaru, year 11
      3   (king) Alexand]er, son of ditto.

Since the beginning of obv. 2 is not preserved, it is possible that the month Nisannu has to be dated earlier than AlexIV.11 (the date at the end of obv. 2 added to the month Addaru). Because of the available space (see the normal formula in obv. 1) we expect something between "ta ⁱᵗⁱbar" in obv. 1 and "en til ⁱᵗⁱše" in obv. 2. I have argued earlier (see T. Boiy, "The Accession Year," 31–32) that if both months occur in the same Babylonian year, ration lists only mention a year number after the last month name, and only if two different Babylonian years are involved is the first month also followed by a year number (for completely preserved examples of this procedure, see OECT 12 B2: 4′, OECT 12 B7: rev. 3′–4′, and BM 132271: rev. 14′–15′). Since a year must be restored in the gap before "en til ⁱᵗⁱše" it would mean for CT 49 25 that rations of at least two years or twenty-four months were listed. This is a quite long period for an Esagil ration list.

In comparison with OECT 12 B2, OECT 12 B7, and BM 132271, it is remarkable that BM 17010 and 17136 both deal with wool rations whereas the three other texts deal with barley; in OECT 12 B7 this is not explicitly stated, but the measure units used preclude wool. Although we still do not know the exact time span for CT 49 25, we might conclude from this evidence that it was for a wool ration.

Compared to the admittedly few ration lists mentioning more than one month, the barley or date rations (the measure units again preclude wool) for four (or five) months in BM 79016 are exceptional. There are, however, also other ration lists that do not follow the pattern sketched above. BM 87252, for instance, mentions barley for the months Nisannu, Ayyaru, and Simanu (and perhaps for the following month(s)), but the tablet breaks off after the line mentioning the rations for the month Simanu.

25. For the date in this text, see F. Assar, "Parthian Calendars," 185 n. 12.

the last tablet of Philip Arrhidaeus, and before BM 79016. CT 49 13 mentions rations for Alex.IV.02.03 (= June/July 315 B.C.) and is more problematic. Even if the hypothesis formulated above—that the ration list is an account of expenses and was composed after the dates for which the rations were intended—is correct and the date Antig.02 is a fictitious backdate written at a moment when the year count in the name of Antigonus was in use, CT 49 13 complicates matters. BM 79016 must have been composed a few months after the period of the rations. In addition, CT 49 13 is also a ration list of the Esagil archive. The same logic must be followed here and because this tablet still mentions a date according to Alexander IV, it should have been written before the introduction of Antigonus' year count. This means that CT 49 13 dealing with AlexIV.02.03 was written earlier than BM 79016, a text that deals with rations for the months 09 until 12 (or 12b) of the year before.

Since such a scenario is rather unlikely, we cannot escape the conclusion that more than one system was in use at the same time in the same place, even in the same archive. The reason for such co-existence is not evident: the new revolutionary system was perhaps not immediately enforced and the scribe from Esagil who wrote BM 79016 refused to follow the change and continued dating in the traditional manner using the regnal years of the king, or we have a simple scribal error because of the recently changed situation. It has to be stressed that a few years later both systems also appear in a double date in one cuneiform tablet for no apparent reason (AION Suppl. 77 87: 19–20).

APPENDIX: ANTIGONUS' YEARS AS KING

As is clear from the cuneiform and Idumaean evidence, the date formulas with Antigonus' name were firmly established in the regions ruled by Antigonus. What happened to this dating system after Antigonus took the royal title for himself and his son Demetrius Poliorcetes is not self-evident. He had two options: either to start the count all over again with his name and the royal title this time, and, if so desired, accompanied by the name of his son Demetrius as coregent, or to continue the count he had started earlier with the addition of the royal title to his name (perhaps also here together with Demetrius). We have no direct cuneiform or Aramaic documents dating from the period of Antigonus Monophthalmus as king.[26]

There is, however, SEG 12 314, a Greek inscription from Beroia dated to the 27th year of "king Demetrius." At first sight neither Demetrius Poliorcetes nor Demetrius II qualifies as king for this date formula, since neither of them ruled 27 years. The effort of the first editor to use SEG 12 314 as proof for a coregency of Antigonus Gonatas with Demetrius II before Demetrius became sole king was countered convincingly by Errington[27] at the second "Ancient Macedonia" conference in Thessaloniki in 1973. Demetrius Poliorcetes was therefore the only option left and Errington proposed a posthumous date caused by the problematic political situation in Macedonia between 287/6 and 279/8 B.C. At the fifth "Ancient Macedonia" conference in 1989, Grzybek[28] proposed to identify the beginning of Demetrius'

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26. For an incorrect interpretation of the goal-year text AD 6 5 = LBAT 1216 identifying year 14 of Antigonus Monophthalmus, see T. Boiy, "Dating Problems in Cuneiform Tablets," 648–49.

27. R. M. Errington, "An Inscription from Beroa and the Alleged Co-rule of Demetrius II," in *Archaia Makedonia 2: Papers Read at the Second International Symposium Held in Thessaloniki, 19–24 August 1973* (Thessaloniki: Institute for Balkan Studies, 1977), 115–22.

28. E. Grzybek, "Eine Inschrift aus Beroia und die Jahreszählweisen der Diadochen," in *Archaia Makedonia 5: Papers Read at the Fifth International Symposium Held in Thessaloniki, 10–15 October 1989* (Thessaloniki: Institute for Balkan Studies, 1993), 521–27.

(virtual) rule with that of his father Antigonus Monophthalmus.[29] This would mean that Demetrius' first (virtual) Macedonian regnal year was 317/6 B.C. and that his 27th year (or 291/0 B.C.) was not a posthumous year. Grzybek's hypothesis is very attractive and if correct, it would prove that Antigonus Monophthalmus did not start to count all over again when he adopted the royal title.[30]

29. A similar situation occurred under the Seleucid dynasty when Antiochus I became coregent with his father Seleucus I. Also in this instance the year count that started from Seleucus' return to Babylon in 311 B.C. was simply continued.

30. In Ptolemaic Egypt, Ptolemy I only inserted his name with a new count into the date formulas of the Demotic documents from the moment he accepted the royal title. In the Greek documents, however, the count from the moment he was appointed satrap of Egypt continued. In the only dated Greek document from the period before Ptolemy accepted the royal title, his name and satrapal years are also included next to the regnal year of king Alexander IV (see T. Boiy, *Between High and Low*, 37, and "Local and Imperial Dates"). In Seleucid Babylonia, Seleucus started to insert his name systematically in the date formulas of the cuneiform documents from the moment he became Seleucid king. His count, backdating from the moment he returned to Babylon in 311 B.C., has now been convincingly linked with Seleucus taking the title of strategos of Asia or ^{lú}*rab uqu*, the title previously used in Babylonia by Antigonus in the date formulas of the cuneiform documents (R. J. van der Spek, "Seleukos, Self-Appointed General (*stratēgos*)"). Although Seleucus did not follow Antigonus' example in replacing the royal name in the date formulas with his own, he did on some occasions add his name and his title ^{lú}*rab uqu* to the name and regnal year of Alexander IV (AD 1 –309; 'rev. 11' and U.E. 1 and AD 1 –308: 'rev. 17' and U.E. 1). Antigonus' example and his own occasional use of his name/title in addition to the royal name in colophons probably led Seleucus to backdate his reign when he accepted the royal title.