THE ROMAN CALENDAR, 218-191 B.C.

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THIS ENQUIRY takes its beginning from an earlier article in *Phoenix*, of which it is in fact a retrogressive continuation.[1] The aim there was to establish the relation of the Roman calendar to the real (or extra-polated Julian) year between 190 and 168 B.C. Here the attempt will be made to do the same for the rest of the years covered by the last two and a half surviving decades of Livy's history. In the former case the task was rendered easier by the fact that the period both began and ended with securely dated astronomical phenomena, the Roman dates for which are preserved in Livy, *viz.*, the eclipses of 190 (solar) and 168 (lunar).[2] For 218-191 things are notoriously otherwise. 190 still provides a guide, but there is nothing quite so exact before that. There do, nevertheless, seem to be sufficient indications along the way to enable one to establish with a reasonable degree of precision a series of calendar equivalences for the years of the second Punic war and the decade following it.

Even were it the case that the start of this period offered an exact equation, as 190 does at the end, it would still not be possible to approach the problem from the beginning. The working of the calendar was not consistent over all these years. For a time intercalations were altogether omitted, and the Roman year was allowed steadily to advance *vis-à-vis*

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[1]"The Roman calendar, 190–168 B.C.," *Phoenix* 27 (1973) 345–356; cf. in general the introductory remarks made there (345 with n.1). In what follows here the following works will be referred to in an abbreviated way: J. Briscoe, *A Commentary on Livy, Books 31–33* (Oxford 1973); G. De Sanctis, *Storia dei Romani* 3.²2 (Florence 1968; with page references to 3.2 in parentheses); F. K. Ginzel, *Handbuch der mathematischen und technischen Chronologie* 2 (Leipzig 1911); P. Marchetti, "La marche du calendrier romain de 203 à 190 (années varr. 551–564)," *AntClass* 42 (1973) 473–496; P. Pédech, *La méthode historique de Polybe* (Paris 1964); W. Soltau, "Die Kalenderverwirrung zur Zeit des zweiten punischen Krieges," *Philologus* 46 (1888) 666–690 and *Römische Chronologie* (Freiburg i.B. 1889); G. F. Unger, "Der römische Kalender 218–215 und 63–45 v. Chr.," *Fleckeisens Jahrbücher für classische Philologie* 30 (1884) 545–564 and "Die römischen Kalenderdata aus 218–215 v. Chr.," *Philologus* 46 (1888) 322–353; F. W. Walbank, *Historical Commentary on Polybius* 1 (Oxford 1957), 2 (Oxford 1967). Throughout, P. = Polybius, L. = Livy.

[2]The solar eclipse of 14 March, 190 B.C. is dated by Livy (37.4.4) to a.d. IV Id. Quinct. in consular 190; the lunar eclipse of 21 June, 168 B.C. to *nocte quam pridie nonas Septembres insecuta est dies* (44.37.8). In the designation of years and dates the system followed here is that adopted in *Phoenix* 1973 (346 n.3), with one exception: true dates will be given simply with English month-names (and not italicized), while for Roman dates the Latin form of the month-name will be preserved; the year in real dates will be specified as B.C. Thus, the Ides of Martius, 190 = 18 November, 191 B.C. (equation derived from table in *Phoenix* 1973, 348–349).

the seasons.[3] It is therefore necessary first to broach the question of the missing intercalations, and the best way of going about this will be to start with 203. The chronology of that year admits of being closely fixed, and once this is done it becomes clear that it was during the 190's that intercalations were omitted. It then becomes possible to combine the evidence of 203 with that of (especially) 217–215 into a coherent system of calendar equations. This years here in question will accordingly be dealt with in two segments, 218–203 and 203–191, and of these the second must be examined first.

<div style="text-align:center">I</div>

It has long been recognized that the chronology of 203 provided the details necessary for establishing, in general at least, the operation of the Roman calendar in the 190's. Polybius' account of the African campaign in Book 14 (supplemented by that of Livy in Book 30) offers a good seasonal date and records with welcome frequency the intervals between many of the major events. One of these is the defeat of Syphax at Cirta, for which Ovid preserves the Roman date in the *Fasti*: 22 Iunius.[4] Some time ago Soltau combined these indications in such a way as to require that there cannot have been more or less than two intercalations between 203 and the eclipse of 190, and more recently Marchetti has argued on the same basis that the period 203–190 might have included either one or two intercalations, but certainly no more or no fewer.[5] He opts in the end for two intercalations on account of additional considerations.[6] These latter do not appear to me to be of probative value, but the evidence for 203 itself is such as to require the view that two intercalations there must indeed have been. The sequence of events is as follows.

(A) Polybius opens his account of the operations of 203 with the very beginning of spring: τὰ μὲν τῆς ἐαρινῆς ὥρας ὑπέφαινεν ἤδη (14.2.1). (B) After setting in motion what was supposed to look like the siege of Utica,

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[3]Cf. *Phoenix* 1973, 348 n.12. The eclipse of 217 tells us only that 11 February, 217 B.C. (the date of the eclipse) was not too very far removed from the beginning of consular 217, whether before it or after.

[4]*Fasti* 6. 763–770; on the reading of *quintus* in 768 (and not *quartus*), cf. Unger 1884, 557; De Sanctis 3.²2.115 (120); Walbank, *Commentary* 1.412; Marchetti 478 n.19.

[5]Soltau, *Röm. Chron.* 194–195; Marchetti 478–480.

[6]Marchetti 493–496. He was influenced (a) by a coincidence that seemed to arise once Zama was dated by the solar eclipse of 19 October, 202 B.C. (481–486, esp. 486) and (b) by the view that an intercalation was performed in 194 in order to move the *ver sacrum* into the winter (474–475, 495–496; based on J. Heurgon, *Le ver sacrum de 217* [in *Coll. Latomus* 26, Brussels 1957, 36–51]). The last-mentioned is difficult of assessment, and, tempting though it may be to date Zama by this eclipse (reported only by Zonaras 9.14 ὁ ἥλιος σύμπας ἐξέλιπεν), it must be admitted that this eclipse could not have been noticed (cf. Ginzel 2.217).

Scipio broke off negotiations with Syphax and Hasdrubal and carried out his plan to set fire to the Carthaginian and Numidian camps. (C) The Carthaginians decided to rally their forces while sending for Hannibal, and in thirty days (P.14.7.9) they and Syphax (with his survivors) and the recently arrived Celtiberians assembled at the Great Plains. (D) As soon as Scipio heard of this he set out for the place and arrived there πεμπταῖος (P.14.8.2). (E) On the fourth day from his arrival the battle was fought (P.14.8.4; cf. L.30.8.4). (F) Laelius and Massinissa were sent with a force in pursuit of Syphax, who had set out for home after the battle (P.14.9.2), and they arrived in Numidia *quinto decimo ferme die* (L.30.11.11; the text of Polybius has by this point broken off). (G) Syphax was brought to battle at Cirta and defeated on 22 Iunius (Ovid, *Fasti*; see above). Now, from the burning of the camps (B) to the arrival of Laelius and Massinissa in Numidia (F) there elapsed a total of some 55 days, with very little room for variation. Between (F) and the battle of Cirta there can have passed no very long time: Laelius and Massinissa had been ordered specifically ἕπεσθαι τοῖς περὶ τὸν Σόφακα καὶ μὴ δοῦναι χρόνον εἰς ἐπίστασιν καὶ παρασκευήν (P.14.9.2).[7] It seems possible to allow about two weeks between (F) and (G), although one may be entitled to doubt whether Syphax would have been given quite as long as this to prepare. From the burning of the camps, then, to the defeat of Syphax at Cirta one is dealing with something very like the seventy days reckoned by Soltau.[8] The dating of Scipio's incendiarism offers no real difficulty. Mention of the first signs of spring (see [A], above) places the opening of Polybius' account early in March, 203.[9] Scipio's preparations were by then complete, and it required little time for him to set the diversion at Utica in motion and to break off the negotiations, his first actions of the year. The camps were fired directly the negotiations ended: sometime, therefore, round the middle of March. Seventy days from 15 March, 203 is 23 May, which thus produces the equation 22 Iunius, 203 = 23 May, 203 B.C. This entails that there were two intercalations between then and the eclipse of 190: in order to allow for three, the interval between (A) and (G) would have to be reduced by just over three weeks, to allow for only one it would have to be increased by the same

[7] This needs to be emphasized, against the extraordinary report in L. 30.11.4–5, and against Marchetti's statement (480 with n.25) about the length of Syphax's preparations before Cirta. Marchetti also reckoned that Syphax had already had two armies annihilated that year, which is not quite true. He fought at the Great Plains with the equestrian survivors of the camp-fire and the adventitious Celtiberians (see esp. P. 14.6.12–7.6), and of these only the Celtiberians were left on the field (cf. P. 14.8.14).

[8] *Röm. Chron.* 195.

[9] See Pédech, *Méthode* 464, following the more detailed statement of Soltau, *loc.cit.*; cf. also Marchetti 489–490 (in connexion with the vernal data in L. 33.3.1–5).

amount. An adjustment of this magnitude is not really possible,[10] and
these two points may accordingly be taken as established. First, that in
203 the Ides of Martius fell on 15 February;[11] second, that between then
and the eclipse of 190 there were a total of two intercalations. One of these
must belong to 190 itself and be seen as a direct result of the resumption
of regular intercalation brought about by the Lex Acilia.[12] It is the date
of the other that needs to be discovered.

As already noted, Marchetti suggested that this other intercalation
was made in 194 with the aim of rendering the *ver sacrum* celebrated that
year as little of a burden as possible. Whatever one thinks of this in-
genious notion, I believe it can be shown that the intercalation cannot
have come as late as this. The data is this instance are provided by the
accounts in Livy and Polybius of late 198 and early 197, and in particular

[10]The precise equation is not, of course, predicated upon the count of exactly seventy
days from exactly 15 March, but upon the fact that the battle at Cirta has been closely
enough fixed to exclude the possibility of one (and *a fortiori* zero) or three intercalations
between the battle and the eclipse of 190. Once this is established, the equation imposes
itself, as does that of Id. Mart. 203 = 15 February, 203 B.C. (see just below), save for
the question of whether 22- or 23-day intercalations are at issue (cf. *Phoenix* 1973, 347
with n.6); for the arrangement of these adopted here, see the table (below, 272–273),
and cf. below, n. 11 *ad fin.*

[11]This equation, imposed by the chronology of the operations of 203, corresponds with
the identification by Soltau (*Röm. Chron.* 186–191) of the famous eclipse mentioned by
Ennius (*ap.* Cic. *Rep.* 1.16.25; 163 in Vahlen, but the book-number is not attested) as
having befallen on the Nones of Iunius with that of 6 May, 203 B.C. This does, however,
require that the number 550 be read in Cicero's text instead of the 350 that stands
(albeit hesitantly) there, and that the line of Ennius (*non⟨is⟩ Iunis soli luna obstitit et nox*)
be taken as referring to a less than total eclipse (cf. Ginzel 2.211–216, who raises both
points and in doing so makes the [in general] salutary remark, "Aber Änderungen an
überlieferten Jahreszahlen bleiben immer bedenkliche Hilfsmittel" [214]; also Beloch,
Hermes 57 [1922] 119–133, who raises the question about the magnitude of the eclipse
[122] while maintaining that the number must be altered [121–122]—he opts for the
eclipse of 13 June, 288 B.C.). These difficulties are perhaps not insurmountable—and
Soltau's argument to the effect that Ennius witnessed the eclipse he recorded has not
been answered, but no system of calendar equations can reasonably take his equation as
its starting point. The most, perhaps, that can be said is that of the views requiring
(*pace* Ginzel) alteration of the number, Soltau's has the most to recommend it. With
regard to Marchetti's stricture on Soltau's chronology (480 n.26, on p. 481), the following
must be said: (1) Soltau's equation for 203 is by no means based solely upon the identifi-
cation of Ennius' eclipse with that of 203 (cf. above, 266); (2) Soltau gave the
equivalent for Kal. Mart. 203 and not, as asserted by Marchetti, for Id. Mart. (see
Philologus 1888, 673—cited by Marchetti). The correct equation (if the eclipse of 203 is
Ennius'), indicated in the present table (which acknowledges what I believe to be
Soltau's correct identification insofar as it makes the intercalation of 202—on which
see below—one of 23 instead of 22 days), should be Kal. Mart. = 1 February (and not 31
January, which Soltau, *loc.cit.*, gives; 203 B.C. is to be reckoned a leap year [cf. *Phoenix*
1973, 346 n.3]).

[12]Cf. *Phoenix* 1973, 348 with n.11.

of the conference between Philip V and Flamininus at Nicaea in Locris and the various embassies consequent upon it.[13] Here again it will be useful to outline the sequence of events. (A) When it was already winter (*hiems iam eo tempore erat*) and Flamininus was in winter quarters, trouble broke out at Opous (L.32.32.1 ff.). (B) Flamininus was in the process of attending to this when a messenger arrived from Philip to request a parley; this was granted, albeit not readily,[14] by Flamininus, and place and time were fixed (L.32.32.5 ff.). (C) The meeting, at which were present also representatives of Rome's allies,[15] lasted for three days, at the end of which a truce of two months was arranged in order that Philip and the other Greeks might send envoys to the Senate to discuss the proposed agreement (L.32.32.9–36; P.18.1–10). (D) The envoys arrived at Rome πρὸ τοῦ τὴν σύγκλητον διαλαβεῖν ὑπὲρ τῶν εἰς τοῦτον τὸν ἐνιαυτὸν καθεσταμένων ὑπάτων, πότερον ἀμφοτέρους εἰς τὴν Γαλατίαν ἢ τὸν ἕτερον αὐτῶν δεήσει πέμπειν ἐπὶ Φίλιππον (P.18.11.1); after, that is, the consuls of 197 had entered office but before the consular provinces had been assigned. The intervals here can be fixed only approximately. The date set for the parley is not likely to have been less than two weeks or so after the request was granted: this much time will have been required for the allies to be informed and for them to appoint and instruct delegates. And not less than 30–35 days can have elapsed between the end of the conference and the arrival of the envoys at Rome: besides the 20–25 days that must (at a minimum) be allowed for the actual voyages, time must be left for the delegates at Nicaea to report home and for the embassies to Rome to be voted (where necessary), prepared, and dispatched.[16] On this analysis,

[13]The fundamental examination of this episode is that of Holleaux, *Études d'épigraphie et d'histoire grecques* 5 (Paris 1957) 29–79 (orig. *REG* 36 [1923]); the fact that his chronology must be slightly adjusted does not prejudice his conclusions in the least. Marchetti also treats of these events in some detail (486–494). His chronology as well is in need of some adjustment, and his view of Flamininus' aims (involving the assumption that the latter must have intended the envoys to get to Rome no more than a little after Id. Mart. 197) must be rejected in favour of Holleaux's: it founders irrevocably upon L. 32.32.7–8, with which Holleaux had so carefully dealt (cf. esp. 65–66 with 65 n.2).

[14]L. 32.32.6: *id gravate regi concessum est*, which means, I take it, not that it took a long time but that Flamininus was displeased about having his attention diverted from Opous.

[15]A goodly group, from a number of places: King Amynander from Athamania, Dionysodorus from King Attalus, Aristaenus and Xenophon from the Achaeans, the Rhodian admiral Acesimbrotus, and a contingent of Aetolians led by the *strategos* Phaeneas (L. 32.32.11; P. 18.1.3–4). The Athenians are not mentioned as having a delegate at the conference, but they did send (at least) one, Cephisodorus, to Rome (P. 18.10.11); on Cephisodorus and his embassies (including, perhaps, this one) see L. Moretti, *Iscrizioni Storiche Ellenistiche* (Florence 1967) no. 33, and Paus. 1.36.5 ff.

[16]On all the intervals involved here, see Holleaux (above, n. 13) 32 and esp. 69–70, with 69 nn.2,3; cf. Marchetti 488 with n.23. The period of the truce may thus be roughly apportioned as follows: 30–35 days for the envoys to get to Rome; 5–10 days in Rome;

the arrival of the legations at Rome will have occurred some 45–50 days after the conference was granted. When, however, was that? Livy's expression, *hiems iam eo tempore erat*, may be taken to represent something in Polybius, and Walbank's suggestion for this is by far the most probable: χειμὼν καταρχόμενος.[17] Although we do not know exactly how Livy would have rendered this Polybian notice, the fact that these events (apparently) came at the beginning of Polybius' account of winter 198/7 militates in favour of the suggestion. Even so, this early phase of winter includes most of November and December.[18] Two alternatives may be tried. If the conference was granted on, say, 15 November, 198 B.C., the embassies will have arrived in Rome about 1 January, 197; if it was granted on 1 December, they will have got there round 15 January. Of these dates, it should be emphasised that 15 November is about the earliest possible, while 1 December is by no means the latest: a date two, or even three, weeks later would still be consistent with the seasonal indication we have. If there were no intercalations between the conference and 190, the Ides of Martius, 197 will have fallen on 7 January, 197 B.C.; if one, then on 16 or 17 December, 198 B.C. These dates accord with, respectively, the late and early alternatives just offered for the chronology of the conference. There do not seem to me to be any factors militating in favour of the early one (conference granted about 15 November). Militating somewhat against it is the fact that the arrival of Philip's envoy is not the first event of the season: *hiems iam eo tempore erat* when the *seditio* at Opous erupted. The Aetolians were called in by one side, the Romans by the other, and Flamininus was to the point of invoking military force when the *caduceator* arrived (L.32.32.1–5 for the sequence). All the same, it seems clear that the question cannot be finally decided by trying to reckon the dates forward from *hiems iam eo tempore erat*.[19] Better prospects are offered by reckoning in the other direction, from the end of the truce. In 33.3.1 Livy reports the following: *Philippus quoque primo vere, postquam legati ab Roma nihil pacati rettulerant, dilectum per omnia oppida*

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20 days for the return trip. The schedule, it may be noted, is remarkably tight, especially given the number of parties involved.

[17] *Philip V of Macedon* (Cambridge 1940) 320 n.4, following Holleaux, *Etudes* 5.77. In preference to this Marchetti (488 with notes) offered ἤδη συνάπτοντος τοῦ χειμῶνος, but his statement that ἤδη καταρχομένου τοῦ χειμῶνος would be represented in Livy by *hieme instante* is unjustified, and it seems, moreover, far more likely that Livy would have rendered ἤδη συνάπτοντος τοῦ χειμῶνος with some form of *hiems iam appetebat* (37.32.14; cf. 36.45.8: *cum hiems iam appeteret*).

[18] See Pédech, *Méthode* 463, reckoning this as the period between the cosmical setting of the Pleiades (about 7 November) and the winter solstice.

[19] Such is effectively the procedure followed by Holleaux and for the most part by Marchetti (see, however, 489–490; but against his use of L.32.38.1, see Briscoe, *Commentary, ad loc.*).

regni habere instituit in magna inopia iuniorum. That *primo vere* refers to the time round the very beginning of March is guaranteed by what follows (33.3.5): *ita suppleto exercitu secundum vernum aequinoctium omnes copias Dium contraxit.* From this it emerges that Philip's envoys returned from Rome not very long before the beginning of March 197. Their negative report imposed the need to strengthen the army, and there is no reason why he should have waited until the beginning of spring to set this process in motion if he had long since been in receipt of the news from Rome. Flamininus, moreover, began to move at the same time (L.33.1.1, 3.6),[20] which, according to Plutarch (*Titus* 7.3), he did directly upon receiving the Senate's decision. As the envoys cannot have returned much, if indeed at all, before the end of the two-months' truce,[21] the truce must have expired toward the latter part of February 197. It began, then, toward the latter part of December, 198, and the arrival of the ambassadors at Rome must accordingly be placed toward the end of January, 197. That the new consuls should have been in office for two or three weeks at that point is quite what one would have expected. That they had been in office for five or six weeks is extremely unlikely.[22] What follows from this is that the Ides of Martius 197 fell on 7 January, 197 B.C. and that there were no intercalations between then and the one in 190.

The other intercalation must accordingly have fallen between 203 and 197. There are not any chronological indications in these years sufficiently precise to allow it to be fixed more closely than this, and at this juncture an hypothesis must be advanced. This other intercalation was the last one made before a long run of consecutive common years brought the calendar to where we know it to have been in 190. Since there is no

[20]Livy's narrative, particularly in 33.3.5ff., indicates that Philip and Flamininus (who went to Thebes [1.1 ff.] before Thermopylae) began their activity at the very same time in March. This would be even further reinforced if the Aetolian *concilium* at 33.3.7 is the annual Panaetolica (held at the time of the vernal equinox), but the possibility of this being, rather, a special meeting cannot be altogether ruled out (cf. Briscoe, *Commentary, ad* 33.3.7).

[21]Cf. above, n.16.

[22]Marchetti (491) rightly draws attention to the activities of the tribunes of 197, L. Oppius and Q. Fulvius (L. 32.28.3 ff.), which are probably to be accepted as historical despite their absence from the Polybian account of the Senate's decision (L. 32.37; P. 18.11.1–12.2); cf. Briscoe, *Commentary, ad* 32.28.3–9. I am inclined, however, to think it not correct to assume that the debate in ch. 28 is to be placed after that in ch. 37, as if these were two descriptions of different parts of the same whole. Rather, each purports to be a full account of the same event, the one being Polybian the other annalistic (for the annalistic and Polybian derivations of chs. 28 and 37, respectively, see H. Nissen, *Kritische Untersuchungen über die Quellen der 4. und 5. Dekade des Livius* [Berlin 1863] 138–139; and on the possibility of the same event appearing under two different guises due to these two different origins, cf. *Phoenix* 1973, 351 with n.20).

Roman year	Kal. Ian.		Kal. Feb.		Kal Mart.		Kal. Apr.		Kal. Mai.		Kal. Iun.	
218[i23]	2 xi	219	31 xii	219	28 i	218	28 ii	218	29 iii	218	29 iv	218
217[c]	22 xi	218	21 xii	218	18 i	217	18 ii	217	19 iii	217	19 iv	217
216[i22]	12 xi	217	11 xii	217	30 i	216	2 iii	216	31 iii	216	1 v	216
215[c]	24 xi	216	23 xii	216	20 i	215	20 ii	215	20 iii	215	20 iv	215
214[i23]	12 xi	215	12 xii	215	1 ii	214	4 iii	214	2 iv	214	3 v	214
213[c]	26 xi	214	25 xii	214	22 i	213	22 ii	213	23 iii	213	23 iv	213
212[i22]	16 xi	213	15 xii	213	3 ii	212	6 iii	212	4 iv	212	5 v	212
211[c]	28 xi	212	27 xii	212	24 i	211	24 ii	211	24 iii	211	24 iv	211
210[i23]	17 xi	211	16 xii	211	5 ii	210	8 iii	210	6 iv	210	7 v	210
209[c]	30 xi	210	29 xii	210	26 i	209	26 ii	209	27 iii	209	27 iv	209
208[i22]	20 xi	209	19 xii	209	7 ii	208	10 iii	208	8 iv	208	9 v	208
207[c]	2 xii	208	31 xii	208	28 i	207	28 ii	207	28 iii	207	28 iv	207
206[i23]	21 xii	207	20 xii	207	9 ii	206	12 iii	206	10 iv	206	11 v	206
205[c]	4 xii	206	2 i	205	30 i	205	2 iii	205	31 iii	205	1 v	205
204[i22]	24 xi	205	23 xii	205	11 ii	204	14 iii	204	12 iv	204	13 v	204
203[c]	6 xii	204	4 i	203	1 ii	203	3 iii	203	1 iv	203	2 v	203
202[i23]	25 xi	203	24 xii	203	13 ii	202	16 iii	202	14 iv	202	15 v	202
201[c]	8 xii	202	6 i	201	3 ii	201	6 iii	201	4 iv	201	5 v	201
200[c]	28 xi	201	27 xii	201	24 i	200	24 ii	200	25 iii	200	25 iv	200
199[c]	18 xi	200	17 xii	200	14 i	199	14 ii	199	14 iii	199	14 iv	199
198[c]	7 xi	199	6 xii	199	3 i	198	3 ii	198	4 iii	198	4 iv	198
197[c]	28 x	198	26 xi	198	24 xii	198	24 i	197	22 ii	197	25 iii	197
196[c]	18 x	197	16 xi	197	14 xii	197	14 i	196	12 ii	196	15 iii	196
195[c]	8 x	196	6 xi	196	4 xii	196	4 i	195	2 ii	195	4 iii	195
194[c]	27 ix	195	26 x	195	23 xi	195	24 xii	195	22 i	194	22 ii	194
193[c]	17 ix	194	16 x	194	13 xi	194	14 xii	194	12 i	193	12 ii	193
192[c]	7 ix	193	6 x	193	3 xi	193	4 xii	193	2 i	192	2 ii	192
191[c]	28 viii	192	26 ix	192	24 x	192	24 xi	192	23 xii	192	23 i	191

reason to believe it was an extraordinary one (which would have been the case had it occurred in 194), it is reasonable to propose that this inter-calation was in fact the last one before the alternating system was temporarily abandoned. In this case, it must be assigned either to 202 or to 201, and two considerations suggest the first of these. The more general one, mentioned now in an anticipatory way, involves the fact that the chronology of some events earlier in the war encourages the view that the even years, and not the odd, were regularly intercalary.[23] The second has to do with the arrival of the Mater Idaea at Rome in 204 and her establishment in the *aedes Victoriae* on the Palatine,[24] the precise Julian

[23]If the odd years were intercalary, the real dates in the table (272-273) for all the even years before 202 would be just over three weeks earlier. It would be difficult to advance the date of the battle at Cannae by this much (see below, 277-278), and an analogous (albeit not quite so serious) problem would arise in connexion with 212 (cf. below, 279, n.44).

[24]For the episode, see esp. L. 29.10.4–11.9, 14.5–14; cf. in general Habel, *RE* Suppbd. 5 (1931) 626 f.

Kal. Quinct.	Kal. Sext.	Kal. Sept.	Kal. Oct.	Kal. Nov.	Kal. Dec.	Roman Year
28 v 218	28 vi 218	27 vii 218	25 viii 218	25 ix 218	24 x 218	218
18 v 217	18 vi 217	17 vii 217	15 viii 217	15 ix 217	14 x 217	217
30 v 216	30 vi 216	29 vii 216	27 viii 216	27 ix 216	26 x 216	216
19 v 215	19 vi 215	19 vii 215	16 viii 215	16 ix 215	15 x 215	215
1 vi 214	2 vii 214	31 vii 214	29 viii 214	29 ix 214	28 x 214	214
22 v 213	22 vi 213	21 vii 213	19 viii 213	19 ix 213	18 x 213	213
3 vi 212	4 vii 212	2 viii 212	31 viii 212	1 x 212	30 x 212	212
23 v 211	23 vi 211	22 vii 211	20 viii 211	20 ix 211	19 x 211	211
5 vi 210	6 vii 210	4 viii 210	2 ix 210	3 x 210	1 xi 210	210
25 v 209	26 vi 209	25 vii 209	23 viii 209	23 ix 209	22 x 209	209
7 vi 208	8 vii 208	6 viii 208	4 ix 208	5 x 208	3 xi 208	208
27 v 207	27 vi 207	26 vii 207	24 viii 207	24 ix 207	23 x 207	207
9 vi 206	10 vii 206	8 viii 206	6 ix 206	7 x 206	5 xi 206	206
30 v 205	30 vi 205	29 vii 205	27 viii 205	27 ix 205	26 x 205	205
11 vi 204	12 vii 204	10 viii 204	8 ix 204	9 x 204	7 xi 204	204
31 v 203	1 vii 203	30 vii 203	28 viii 203	28 ix 203	27 x 203	203
13 vi 202	14 vii 202	12 viii 202	10 ix 202	11 x 202	9 xi 202	202
3 vi 201	4 vii 201	2 viii 201	31 viii 201	1 x 201	30 x 201	201
24 v 200	24 vi 200	23 vii 200	21 viii 200	21 ix 200	20 x 200	200
13 v 199	13 vi 199	12 vii 199	10 viii 199	10 ix 199	9 x 199	199
3 v 198	3 vi 198	2 vii 198	31 vii 198	31 viii 198	29 ix 198	198
23 iv 197	24 v 197	22 vi 197	21 vii 197	21 viii 197	19 ix 197	197
13 iv 196	14 v 196	12 vi 196	11 vii 196	11 viii 196	9 ix 196	196
2 iv 195	3 v 195	1 vi 195	30 vi 195	31 vii 195	29 viii 195	195
23 iii 194	23 iv 194	22 v 194	20 vi 194	21 vii 194	19 viii 194	194
13 iii 193	13 iv 193	12 v 193	10 vi 193	11 vii 193	9 viii 193	193
3 iii 192	3 iv 192	2 v 192	31 v 192	1 vii 192	30 vii 192	192
20 ii 191	23 iii 191	21 iv 191	20 v 191	20 vi 191	19 vii 191	191

date for which Soltau, with surpassing ingenuity, tried to calculate.[25] While I doubt that the information available admits of the possibility of an exact reckoning,[26] it does remain reasonable to posit a fairly close relation between the original *dies festus* (12 Aprilis, according to Livy, but see n.26) and the vernal equinox,[27] which in 204 B.C. occurred on 26 or 27 March.[28] If 203 was intercalary (the last intercalation before 190

[25]*Röm. Chron.* 195–196.

[26]There is (perhaps) first some question about the date of the goddess' establishment. Livy gives *pridie Idus Apriles* (29.14.14, adding *isque dies festus fuit*), which there has been a tendency to reject in favour of *pr. non. Apr.*, later the date of the Megalesia (cf. J. Marquardt, *Römische Staatsverwaltung* 3 [Leipzig 1878] 352 with n.11; Soltau, *Röm. Chron.* 196 n.1; *CIL* 1², p. 314), but see Conway-Johnson *ad loc.* in v. 4 of the *OCT* Livy. Nor do we know what was the original arrangement of the festival (on what it came to be, but may or may not have been originally, see Habel, *loc.cit.* [n.24] and cf. Marquardt, *op. cit.* 355–358).

[27]For this connexion, see esp. Pliny *HN* 18.16 and cf. Marquardt (above, n.26) 355 with n.2, and generally Soltau *loc.cit.* (n.25).

[28]The summer solstice in 204 B.C. fell on 26 June (Ginzel 2.580).

falling therefore in 201) pr. Id. Apr. in 204 would have fallen on 3 March, 204 B.C.; if 202 was intercalary (the last intercalary year before 190), the corresponding date is 25 March, 204 B.c. The latter alternative seems more to recommend itself. To this it may be added that it is easier to envision a voyage that would have brought the envoys back to Rome toward the end of March than it is one that would have got them there at the beginning.[29] On balance, then, it seems best to believe that the last intercalation before 190 was performed in 202, and that prior to this the intercalary month was added in the even years, *viz.*, 204, 206, 208, etc.[30]

This enquiry has so far led to the conclusion that the Ides of Martius 203 fell on 15 February, 203 B.C., that there were no intercalations between the one of 202 and that of 190, and that (more by way of hypothesis, for the moment, than conclusion) during the second Punic War (at least) the even years were intercalary. On this basis the preceding table of calendar equations for the years 218–191 imposes itself. Required next is to see how these square with such other chronological indications as there are, particularly those forthcoming from the early years of the war.

II

The first few years of the war offer three especially good possibilities for checking the validity of the calendar equations provided by the above reconstruction: the battles at Trasimene and Cannae, and the edict of Fabius Maximus in 215. In each case there is a Roman date as well as some seasonal indications, and in each case the combination of these data emerges as thoroughly in accord with the view that during the first part of the war the Roman calendar was running about a month ahead of the seasons.[31]

[29]In connexion with these last two points it should be remembered that the real dates must be advanced by eight days if the Nones and not the Ides of Aprilis be at issue. If perchance even late March seems too early for the envoys to have arrived, one may note that some premium was being set upon rapidity (L. 29.10.8).

[30]On the question of which years, in general, were intercalary and which were not, cf. Soltau, "Die römischen Schaltjahre," *Fleckeisens Jahrbücher* 33 (1887) 423–428 and A. K. Michels, *The Calendar of the Roman Republic* (Princeton 1967) Appendix 1, but there are no firm indications close enough to the second Punic War to enable a decision to be taken on general grounds (cf. Michels 170 for what there is).

[31]Marchetti (475 with nn. 13,14) reports having personally verified the conclusions on these years of Unger *FJ* 1884 (cited by Marchetti 473 n.3; add to this his study in *Philologus* 1888) and Soltau, *Philologus* 1888 (cited *ibid.*; cf. also *Röm. Chron.* 191–206, 211–221). Marchetti's general statement (474) about the work of Soltau and Unger cannot but be heartily approved, although it will emerge from the present enquiry that their conclusions cannot be accepted quite as they stand. In what follows here I shall not refer to them at every turn, but for the most part only to indicate where they seem to me to have gone wrong. To their arguments little or nothing of substance has been

For the battle at Lake Trasimene, Ovid preserves the Roman date of 21 Iunius,[32] for which the equivalent proposed here is 9 May, 217 B.C. That the battle does belong to early May can be gathered also from Polybius' and Livy's accounts of the operations of 217. The interval between Hannibal's departure from winter quarters and the battle itself was not a long one—not much more than a month,[33] and the former event may be quite closely located. Livy (22.1.1) gives *iam ver appetebat cum Hannibal ex hibernis movit*, which suggests a date in March, and notes that he left his winter quarters rather on the early side (§ 4). Polybius' indication is more precise: ἅμα τῷ τὴν ὥραν μεταβάλλειν (3.78.6). The change of season is from winter to spring 217, therefore some time round the vernal equinox. Hannibal, then, set out from winter quarters in late March (early April at the latest), and this points to a date in the first part of May for Trasimene. The same conclusion is imposed by reckoning backward from Hannibal's arrival in the area of Gerunium. Polybius indicates when this was: τῆς ὥρας ἀκμαζούσης πρὸς τὴν συγκομιδήν (3.100.8), and this is late July/early August.[34] After the battle Hannibal remained a short while in Etruria and then set out for the Adriatic coast, which he reached after a march of ten days (P. 3.86.9). There he remained for a longer time, giving his men a much needed chance to recuperate from their wounds and from the hardships of the previous winter (P. 3.87.1–88.2). Only then did he move further south, and his route took him down the Adriatic coast, across the Apennines into Samnium, and then into Campania before he turned back toward the Adriatic and went to Gerunium. The time taken by all this can of course be only approximately estimated, but by the time he moved from the resting place on the

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added since (for bibliography, see Marchetti 473–474 with notes), and it must be said that they have ruled out of court forever any suggestion of a discrepancy of more than two months between the Roman calendar and the seasonal year in the earlier years of the second Punic war (cf. esp. their articles in *Philologus* 1888, aimed in the first instance at the extravagances of Matzat).

[32]See above, n.4.

[33]Cf. Walbank, *Commentary, ad* P.3.78.6.

[34]See Pédech, *Méthode* 461, against the reckoning of De Sanctis 3².2.116–117 (3.2.121, followed by Walbank, *Commentary, ad loc.*). Unger also makes this too late in the season (esp. *Philologus* 1888, 343; cf. *FJ* 1884, 556–557), as he does the temporal reference of Fabius' dictatorial edict (L. 22.11.4). The latter he dates (reasonably) to 10 Quinctilis 217, but his system makes this the equivalent of 24 July, 217 B.C. (*Philologus* 1888, 341). The edict indicates that the grain was then growing in the field, which it will not have been doing anything like as late as 24 July (cf. *RE* 6 [1909] s.v. "Ernte," 479–480). 10 Quinctilis 217 (on the present analysis) = 27 May, 217 B.C., three weeks or so before the harvest in the areas Hannibal would pass through travelling southward. In this connexion it should be recalled that the food supply was always a problem for Hannibal in Italy, and it was this (particularly after the rigorous winter of 218/7) that dictated his early thoughts about winter quarters in 217 (cf. P. 3.100.1).

Adriatic something like forty days must have elapsed since the battle (a week or so in Etruria, the ten days for the march, and some three weeks, surely a minimum, for the army to spend recuperating). For the ensuing peregrinations it seems not unreasonable to allow another forty days, or perhaps slightly longer. The first of August is 84 days after 9 May and corresponds quite well to Polybius' notice in 3.100.8. To these considerations it may be added that the date offered here for Trasimene is in very close accord with Livy's account of the end of Fabius' dictatorship. He reports first that Servilius and Atilius had been summoned by the dictator, *ut exercitus ab se exacto iam prope semenstri imperio acciperent* (22.31.7), and shortly thereafter that the two consuls carried on a Fabian war for what was left of the autumn (22.32.1: ⟨*quod reli*⟩*quum autumni erat*).[35] Fabius' dictatorship began about Kal. Quinct. (= 18 May, on the present analysis) and expired about pr. Kal. Ian (= 11 November). If Fabius turned over the armies at some point during the last month of his *imperium*, there will thus have been something of the autumn left. If Trasimene be put much later than 9 May, there will not.[36]

[35]This was awkward for Unger, who chose to reject Livy here (*FJ* 1884, 557–558), which is indeed what must be done if Trasimene is to be dated later (cf. also De Sanctis 3².2.117 [3.2.121–122]). Polybius' report (3.106.1) that the dictators laid down their magistracy when the consuls of 216 took office cannot be preferred, for it requires that Fabius' dictatorship began in Roman September (cf. Walbank, *Commentary*, ad P. 3.106.1); on the elections for 216 see now G. V. Sumner, "Elections at Rome in 217 B.C.," *Phoenix* 29 (1975) 250–259.

[36]The only (apparent) obstacle to this dating of the battle at Lake Trasimene is the report in Polybius (5.101.6 ff.) that Philip V received news of the Roman defeat by post from Macedon just after watching the athletic contest at the Nemean games of 217. (His statement as to the contemporaneity of Trasimene and the siege of Phthiotic Thebes [5.101.3] cannot guarantee more than that the events happened round the same time of the year—within, perhaps, a month or two of each other; the temporal context of the siege is roughly provided by the reference in 5.95.5 to the approach of the harvest in the Argolid [about May]). About Polybius' account in 5.101.6 ff. there are some points that must be raised. First as to its credibility. It is surely odd that the first news of Trasimene reached Philip by way of Macedon before it reached Argos by way of Tarentum or such (cf. on this De Sanctis 3².2.116 [3.2.120], who reckons that the report mentioned by Polybius cannot have been the first news, but must have been the first detailed report of the engagement to reach Philip). Polybius' account, moreover, is of secret colloquy between Philip and Demetrius of Pharos, which must prompt one to ask how he could have known in such detail what passed between them. This question (and the measure of scepticism that it should involve) acquires more of an edge when it is remembered that, according to Polybius, Philip's decision to make peace with the Aetolians was (a) the result of the news from Italy and Demetrius' advice and (b) the precise point at which the affairs of Greece, Italy, and Libya became enmeshed (5.105.4: Τὰς μὲν οὖν Ἑλληνικὰς καὶ τὰς Ἰταλικάς, ἔτι δὲ τὰς Λιβυκὰς πράξεις, οὖτος ὁ καιρὸς καὶ τοῦτο τὸ διαβούλιον [see 5.102.2 for the διαβούλιον] συνέπλεξε πρῶτον). The notion of συμπλοκή was of great importance to Polybius, and his attempt to establish this particular συμπλοκή led him to place what look like strenuous demands upon the evidence

Similar examination of the chronology of the battle at Cannae leads to corroborative conclusions. The Roman date is preserved by Macrobius (*Sat.* 1.16.26; from Book 5 of the *Annales* of Q.. Claudius Quadrigarius): 2 Sextilis. The equivalent for this offered by the above table is 1 July, 216 B.C. In this case a good argument for an earlyish date has already been produced by Cornelius, who placed the battle in mid-June,[37] which seems, on balance, a little earlier than the evidence warrants. The initial point of reference is again provided by Polybius. After his account of the activities and preparations for a battle undertaken at Rome during the winter of 217/6 (3.106),[38] he continues: τὸν μὲν οὖν χειμῶνα καὶ τὴν ἐαρινὴν ὥραν διέμειναν καταστρατοπεδεύοντες ἀλλήλοις. ἤδη δὲ παραδιδόντος τοῦ καιροῦ τὴν ἐκ τῶν ἐπετείων καρπῶν χορηγίαν, ἐκίνει τὴν δύναμιν ἐκ τοῦ περὶ

(see 5.105.5 ff. with Walbank, *Commentary, ad loc.*; further, Walbank, "Symploke: its rôle in Polybius' histories," *YCS* 24 [1975] 197-212, esp. 200-202). Besides the element of secret history here there is the question as to the chronology itself. The belief that the Nemean Games were in August (perhaps late July) encouraged people to believe in a late date for Trasimene (cf. Unger, *FJ* 1884, 553; *Philologus* 1888, 335; Soltau, *Philologus* 1888, 673; Beloch, *Klio* 1918, 396; De Sanctis, *loc.cit.*). This, however, depended upon the equation of the Argive month Panamos (on the 12th of which the Nemean contests took place, according to two of the *hypotheses* in the scholia to Pindar's Nemean odes) with the Attic Hekatombaion (cf. Beloch, *Griechische Geschichte* 1².2.145 f., cited by Beloch and De Sanctis, *locc. citt.*; the same equation is adopted by Unger and Soltau, *locc. citt.*). But this is not right. Thuc. 5.54 indicates Argive Karneios = Spartan Karneios, and Plut. *Nicias* 28.2 asserts that the Spartan month Karneios is called Metageitnion by the Athenians, which cannot be exact, but is still indicative. Argive Panamos is the *second* month before Argive Karneios, which leads to the equation of the former not with Attic Hekatombaion but with the preceding month, Skirophorion (for the little that is known of the sequence of the Argive months, which includes, however, the progression Panamos—Aguieos—Karneios, see A. E. Samuel, *Greek and Roman Chronology* [*HdA* 1.7: Munich 1972] 90). Precise dating is still impossible, owing to the uncertainty about when any Argive month began and about the relation between the Argive and Athenian calendar in any given year, but about 217 the following may be said, if only by way of example. If Attic Hekatombaion began when it theoretically should have done, with the first new moon after the summer solstice (in 217 this means on 8 July), the 12th of the previous month will have fallen on about 19 June. It must be emphasised that this is not to say that the Nemea of 217 are to be dated to 19 June, only that this is the result obtained if the meagre information at our disposal and Plutarch's necessarily inexact identification be pressed to the limit. These should not be pressed anything like so far, and even Walbank's "July" for the Nemea (*Commentary* 1.412) seems too strong. A degree of uncertainty, then, about the nature of the report received by Philip at Argos, about, indeed, the reliability of Polybius' whole account of this episode, and about the chronology of the Nemean games in 217 leads me to doubt the chronological usefulness of P. 5.101.6 ff.

[37]Fr. Cornelius, *Cannae, Das militarische und das literarische Problem* (*Klio* Beiheft 26 [N.F.13], Leipzig 1932) 2–9.

[38]Unger (*Philologus* 1888, 346–347; cf. *FJ* 1884, 559) puts much of this preparation later than Polybius indicates, which is seriously prejudicial to his attempt to date the battle to 6 August, 216 B.C.

Γερούνιον χάρακος 'Αννίβας (3.107.1). Hannibal moved thence to capture the Roman supply depot at Cannae. The commanders in the field repeatedly requested instructions from Rome and were told that the consuls were being dispatched. Within about two weeks of the departure of the consuls from Rome the battle was fought.[39] Events, in a word, moved along quickly once Hannibal left Gerunium: from then until the battle itself there elapsed perhaps a month or slightly more. And Polybius' notice indeed suggests that it was round the end of May that Hannibal left Gerunium. After winter and spring (which the armies spent encamped opposite one another) comes summer, which began for Polybius in mid- to late May with the rising of the Pleiades.[40] This is also the time of year when it began to be possible for an army to be provisioned from the fields, and it should in this connexion be emphasized that Polybius does not here say something like τῆς ὥρας ἀκμαζούσης πρὸς τὴν συγκομιδήν, as at 3.100.8, or ἤδη δὲ τοῦ θερισμοῦ συνάπτοντος as at 5.95.5.[41]

From 215 comes further corroboration. Early in the consular year Fabius issued another proclamation: *ut frumenta omnes ex agris ante Kalendas Iunias primas in urbes munitas conveherent; qui non invexisset eius se agrum populaturum, servos sub hasta venditurum, villas incensurum* (L. 23.32.14–15). It used to be thought that the grain here at issue was the harvest of 215,[42] but Cornelius recognized that this is quite impossible.[43] The intent of the edict was to deprive Hannibal of supplies, and it is clear that this object could not be accomplished if produce were left

[39]The battle was fought on the seventh day from the arrival of the consular armies (P. 3.113.1 with Walbank, *Commentary, ad loc.*), which reached Cannae δευτεραῖοι after being joined by the consuls (P. 3.110.1), who will have taken perhaps five days (if that long) to travel from Rome to where the army was encamped.

[40]Pédech, *Méthode* 461; as he indicates (n. 169), the ancients reckoned the date for this to be 5–15 May, while the astronomical date was in the fourth week of that month.

[41]It is essential to realize that at no point in P. 3.107 is there a reference to the grain harvest of 216 being in progress. The assumption that there is also lies to a large extent (cf. also n.38, above) behind the late date for the battle urged by Unger et al. (*FJ* 1884, 558–560; cf. Soltau, *Philologus* 1888, 672). But P. 3.107.3 has to do with general practice regarding the use of the supply depot at Cannae and does not say that *at that moment* the newly harvested grain was being collected thither. On the arguments of De Sanctis (3².2.130–131 [3.2.135–137]), see Walbank, *Commentary* 1.438–439. P. 5.110.10 does, however, seem rather to suggest that the battle was on the verge of being fought when Philip turned back from the Adriatic. If he set out in late May (after the brief training period which began ἀρχομένης θερείας [5.109.4]; Walbank, *loc. cit.*, places his departure earlier), he will have reached Sasona, whence he turned back, in mid- to late June (*ibid.* on the length of the voyage).

[42]So Unger, *FJ* 1884, 563–564; *Philologus* 1888, 349–350; Soltau, *Philologus* 1888, 670–671. Unger's argument about the use of *frumentum* and *frumenta* by Livy may not be taken as decisive: see the full set of passages in Livy where these words appear assembled in Packard, *A Concordance to Livy* (Cambridge, Mass. 1968) *s.vv.*

[43]Cornelius (above, n. 37) 3. The alternative to accepting this chronological implication is to throw out Livy's notice altogether, as was done by Beloch (*Klio* 15 [1918] 401) who, however, thought it did refer to the harvest.

in the fields until some date in mid-June or even later: Hannibal was at Capua and could be expected to leave those winter quarters, delightful though they were, well before then. The temporal reference must be to a point earlier in the year—something rather closer to the beginning of the campaigning season, and the grain in question that which was being stored in vulnerable places in the countryside. For Kal.Iun. in 215, the the above table gives as the equivalent 20 April, 215 B.C., which is about as late as one can go.[44]

In all of the cases discussed in this section the calendar equations offered by the above table have been seen to be thoroughly in accord with such external indications as there are. Had there been one fewer or one more intercalation between 218 and 203 than here suggested, all the real dates would move just over three weeks later or earlier, respectively. It seems to me quite unlikely that any of these events could be moved by as much as three weeks in either direction and well nigh impossible for them all to move by that much in the same direction. If such an adjustment were forced, it would, moreover, entail the view that between 218 and 203 intercalation was performed regularly—except in one case. Such treatment of the evidence I would judge to be unwarranted.

For the years between 212 and 203 there are no chronological indications as secure as those already discussed, but some degree of corroboration may be forthcoming in two cases. The first, which may not go very far, is in 206, where the beginning of the consular year (Id. Mart. = 23 February, 206 B.C.) preceded the consuls' departure from Rome, which Livy says occurred *principio veris* (27.11.11; 28.10.8 for the beginning of the consular year). If Livy's notice is indeed exact,[45] the consuls cannot have entered office three weeks later (intercalation lacking between 206 and 203) and still have had time to celebrate the Latin games and be out of Rome by the beginning of spring.[46]

[44]Something of a corroborative sequel to this occurs in the early phases of the campaigning season of 212, when the Capuans, prevented from sowing grain and expecting to be put under siege by the consuls of the year, requested the assistance of Hannibal in transporting into the city grain stored in nearby places (L. 25.13.1-2). If the situation is (as it seems to be) analogous to 215, the date for this should be some time in April: the consuls left Rome after the celebration of the Latin games on 26 Aprilis (L. 25.12.1)— 31 March, 212 B.C., on the present analysis—and when the narrative opens in 25.13.1 they are both in Samnium. Also, it was perhaps five or six weeks (cf. Soltau, *Philologus* 1888, 677) after leaving Rome that they did move their armies into Campania, *non ad frumenta modo, quae iam in herbis erat, corrumpenda sed ad Capuam oppugnandam* (L. 25.15.18). Both the present chronology and the state of the grain (certainly not about the beginning of the harvest, as Soltau *loc.cit.*, but some three to four weeks earlier) suggest for this a date in the first part of May.

[45]If, that is, *principio veris* here is not in some measure a conventional phrase, meaning "early in the consular year" (cf. *Phoenix* 1973, 352 n.21 and 354–355). There is, to be sure, no particular reason to believe this is the case.

[46]The assumption of an extra intercalation between 206 and 203 would put them in

The other is the battle at the Metaurus, which becomes a case in point only if it is, in fact, the Metaurus which Ovid (*Fasti* 6.770) dates to 22 Iunius.[47] If it is, the present suggestion is that the battle was fought on 19 May, 207 B.C. During the winter of 208/7 it was reported at Rome that Hasdrubal was ready to cross the Alps and would do so *proximo vere* (L. 28.36.4). Evidently he did so and indeed managed to cross both earlier and more easily than had been anticipated by Hannibal (L. 27.39.4, 13) and by the Romans (27.39.3), but he tarried over Placentia. The capture of his messengers to Hannibal made it possible for the consuls to unite their armies against him in Umbria, thanks to the dispatch with which Claudius acted and the exceptional forced march he undertook to get there (L. 27.43–45). From this brief summary it is clear that Hasdrubal crossed the Alps quite early in the year and that on the whole events moved quickly, but we are not told just how early he crossed or how long he stayed before Placentia. These lacks make it difficult to arrive at even an approximate date for the battle,[48] but Livy's narrative offers other possibilities. Hadrubal's horsemen, sent to Hannibal with the message, were captured *dum Metapontum cedentem Hannibalem sequuntur* (L. 27.42.15). Hannibal's departure for Metapontum is to be dated about two weeks after Claudius' arrival at Grumentum: between 27.41.2 (Claudius' arrival) and 42.15 (Hannibal's departure) the days are counted, four of them plus a span *insequentibus continuis diebus aliquot* (42.9). For Claudius' arrival at Grumentum the date must be some time round the middle of April (if not somewhat earlier): news of Hasdrubal's early movements and intentions had compelled the consuls *raptim confecto dilectu maturius quam constituerant exire in provincias* (L. 27.39.3). The combination of these notices indicates that Hasdrubal's horsemen were captured about the end of April. This in turn indicates (a) that

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office three weeks earlier, which is not in itself impossible, but it would require the dates of previous events to be advanced by the same amount ahead of what has been here proposed. This I take to militate against such an extra intercalation.

[47]On the reading and the date, cf. above, n.4. The question as to the reference arises out of the line (770) *Et cecidit telis Hasdrubal ipse suis.* In Livy's account of Hasdrubal's end (27.49.1–4) the latter is not literally a suicide (*pugnans cecidit*: 4; cf. P. 11.2.1: ἐν χειρῶν νόμῳ), although *postremo cum haud dubie fortuna hostium esset, ne superstes tanto exercitui suum nomen secuto esset concitato equo se in cohortem Romanam immisit* (L. 27.49.4). That Ovid's Hasdrubal should be taken as Hannibal's brother has been shown, as well as it can be shown, by De Sanctis 3².2.560–561 (3.2.575–576).

[48]Previous treatments tend to rely upon assumptions about the date of Hasdrubal's crossing or, particularly, about the length of his stay at Placentia (cf. Soltau, *Philologus* 1888, 674–676; De Sanctis 3².2.559–560 [3.2.574–575]). It should perhaps be noted that the Punic cause was prejudiced not by the length of time Hasdrubal spent at Placentia, but by the mere fact that he stopped there in the first place: this cost Hasdrubal the advantage of surprise and induced Hannibal not to hurry out of his winter quarters (L. 27.39.11–14).

Hasdrubal had left Placentia some time not long before the middle of April (giving the horsemen two to three weeks on the road) and (b) that it was round the first of May that Claudius set off on his remarkable march. This last is what matters for dating the battle and, Ovid aside, one may confidently assert that the Metaurus was fought about the third week of May. If the date preserved by Ovid is in fact the date of the battle at the Metaurus, one may then add that the proposed equation, 22 Iunius, 207 = 19 May, 207 B.C., has been confirmed in a welcome way.

From the years that have been under review in this enquiry there are forthcoming, I think, no other indications sufficiently firm to allow a calendar equation to be based upon them.[49] From what has been seen so far, however, I believe it fair to assert that the relation between the Roman calendar and the seasonal year cannot really have been otherwise than here proposed. As was noted at the very outset, the eclipse of 190 provides a securely fixed point at the end. To that has been added 203 as an effectively fixed point in the middle, and the evidence yielded by 217–215 (and 212 and, perhaps, 207 and 206) combines to do the same for the early years. If we know where the calendar was in 217–215, 203, and 190 (not to mention 212, 207, and 206) we may without hesitation proceed to the statement that we know where it must have been the rest of the time.

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[49]It will, perhaps, have been remarked that 218 has not itself been discussed. The only telling indication offered by that year has to do with the temporal relation between the battle at the Trebia, fought in the latter part of December (see P. 3.72.3: οὔσης δὲ τῆς ὥρας περὶ χειμερινὰς τροπάς; cf. L. 21.54.7), and the entry into office of the consuls of 217, but the importance of this cannot be fully assessed without its being certain whether Sempronius conducted the elections after the battle (L. 21.57.3–4) or whether they had been held some time before (surely required by P. 3.70.7: μήτε τοὺς ἐπικαθισταμένους στρατηγοὺς φθάσας παραλαβόντας τὴν ἀρχήν; contrast L. 21.53.6; cf., however, Walbank, Commentary, ad 3.68.12–13 and 3.70.7). The equation proposed here, Id. Mart. 217 = 1 February, 217 B.C., is quite consistent with Polybius' version and not seriously at odds with Livy's.