

RECONSTRUCTING THE CHRONOLOGY OF CAESAR'S GALLIC WARS¹

Abstract: Caesar dates only the beginning of his first campaign and rarely mentions routes, distances, and times consumed. No detailed timelines for Caesar's Gallic Wars exist. This gap can be filled by exploiting available clues in Caesar's text (e.g., astronomical and seasonal events) and Cicero's letters, and by determining the routes Caesar is likely to have chosen, average traveling and marching speeds (based on data in Caesar's works and those of other authors), and the days required to cover the distances involved. Modern, digital maps based upon a GIS interface make it possible to measure distances with unprecedented precision. The resulting chronology, though often still speculative, is much more reliable than anything suggested previously.

Keywords: Caesar, Gallic wars, chronology, speed of army movements, application of digital maps

Introduction: General Assumptions, Principles, and Data²

In the middle of the nineteenth century, German scholars wrote monumental commentaries on Caesar's *Gallic War* and *Civil War*. Those works, published

¹ The reconstruction presented here is the result of work we originally did for the *The Landmark Julius Caesar* (Raaflaub (2017)). Planned as an appendix, it proved too large to be included in that volume. A much condensed version will be placed on the website of the publisher (Pantheon). We thank Robert Strassler, the editor of the Landmark series, and Edward Kastenmeier at Pantheon for the permission to publish the full version in *Histos*, and the journal's editor, Christopher Krebs, for accepting our submission on short notice. Chronological tables based on the present reconstruction and comprising the correlation of dates of the pre-Julian Roman civil calendar and the Julian calendar will be published in a later issue of this year's *Histos* (Ramsey and Raaflaub (2017)).

² The following abbreviations will be used throughout this Appendix: Jul. = Julian (for the proleptic Julian calendar), km = kilometers, mi = English miles, R = Roman (for the pre-Julian Roman civil calendar), R mi = Roman miles. References without work title are to the *Gallic War*, while references to Plutarch's *Lives* are by section numbers in the Loeb, not the Teubner edition. All dates are BCE, unless indicated otherwise. Extrapolated Julian dates are given according to the calculations of Holzapfel (1885), as presented by P. Groebe in Drumann and Groebe (1906) 812–23, and Marinone (2004) 431–61, with corrections to intercalation in four years (in 58, not 59 and in 55, not 54): see www.tulliana.eu/ephemerides/calendario/cal07oagiuliano.htm (accessed 5 Nov 2016). This widely-accepted system is based on the calculation that 1 Jan. 45 (the first day of the reformed civil calendar) is equivalent to 2 Jan. 45 (Jul.). Julian equivalents for Roman dates given by T. Rice Holmes, who regarded 1 Jan. 45 (R) = 1 Jan. 45 (Jul.), will be one day earlier than those given by us, whereas Julian equivalents according to Bennett (2004), who reckoned 1 Jan. 45 (R) = 31 Dec. 46 (Jul.), will be two days earlier.

by Weidmann, were revised in the early twentieth century, supplemented with a new epilogue and bibliographical addenda in the mid-twentieth century, and reprinted numerous times.³ The Weidmann commentary on the *Civil War* is accompanied by a quite detailed timetable. Chronological tables are included as well in the more modest commentaries on the *Alexandrian* and *African Wars* that come out of the same scholarly tradition.⁴ By contrast, the German commentators on the *Gallic War* never constructed a timetable. The reason for the difference within the same scholarly tradition is that as compared with the *Gallic War*, both the *Civil War* and the later *Wars* contain a larger number of time markers, and contemporary or later evidence, including especially Cicero's corpus of letters, makes it possible to assign a date to a great many events either precisely or within a narrow range. Hence it was possible to reconstruct fairly detailed and accurate chronological tables for the wars of 49–45—although, as our re-examination of the evidence has revealed, it is still possible to make significant improvements to the accuracy and completeness of the earlier, nineteenth-century tables.

Quite different is the evidence found in the seven books of the *Gallic War* written by Caesar himself, and the eighth book composed by Hirtius. The *Gallic War* offers fixed dates only at the very beginning of books 1 and 8.⁵ Scholars have, therefore, been reduced to relying on occasional temporal clues (for example, the mention of astronomical events such as an equinox or a full moon, or a passing reference to seasonal events such as the ripeness of grain in the fields), on rough estimates of distances covered and marching times consumed, and on otherwise educated guess work. Past attempts to work out the chronology of each year of Caesar's campaigns in Gaul have tended to paint the picture in broad strokes. For example, for 57, the chronology of the Gallic War offered by Wolfgang Will (a meticulous scholar who has collected a host of data on many aspects of Caesar's war in Gaul) arranges events for that year under such broad headings as winter, spring, c. May–June, c. end of July, c. early September, and late fall.⁶ We, on the other hand, have come to the conclusion that it is possible to assign events to a narrower range of dates, if we exploit every available clue in Caesar's text and in contemporary authors—in particular, Cicero's correspondence (not least with his brother Quintus who served for a while as one of Caesar's legates in Gaul) proves helpful on a few crucial occasions—and determine, as precisely as possible, (a) the routes Caesar is likely to have chosen for his movements from Cisalpine Gaul to independent Gaul and within the latter, (b) average traveling and marching speeds,

³ *Gal.*, Kraner et al. (1960a), (1960b), (1961); *BCiv.*, Kraner et al. (1963).

⁴ Kraner et al. (1963) 367–74; Schneider (1888), (1905).

⁵ 1.6.4, 7.6; 8.2.1.

⁶ Will (1992) 105–14, at 106–7.

based primarily on data in Caesar's own works but also on comments by contemporaries and later authors, and (c) the days required to cover these distances (including rest days). Thanks to modern, digital maps based upon a GIS interface (such as those provided by Antiquity À-la-Carte and Orbis), we can measure distances much more accurately than earlier scholars could who had to rely upon imperfect, paper maps and very rough estimates of distances and routes followed by ancient roads such as could be derived from ancient itineraries and literary sources. The first section of this study gives an overview of the data that form the foundation for the narrative analysis of the chronology of Caesar's Gallic campaigns.

Climate conditions

According to research on climate fluctuations over long periods of time, the time of the Gallic War roughly coincided with a peak in a warming period in central Europe that caused glaciers to recede to levels comparable to today and made it possible to cross some Alpine passes earlier than usual.⁷ We thus assume that Caesar was able to cross the Alps by early May on the most direct route from Cisalpine to Transalpine Gaul without being forced to take time-consuming detours.⁸

Distances and place names

We measure distances along the Roman roads drawn in the *Barrington Atlas of the Greek and Roman World*.⁹ For various reasons, these measurements are often likely to be too short. For one thing, obviously Roman roads had not yet been constructed in independent Gaul in Caesar's time, and even elsewhere many of the Roman roads were built later. Except in flat terrain, ancient roads tended to wind their way along the contours of the landscape and not cut across them on a more direct line as modern and even to some extent Roman roads tend to do and as the roads drawn into the large-scale maps of the *Barrington Atlas* suggest. We thus assume that distances on pre-Roman roads outside of the Roman empire (especially in independent Gaul) were at least one

⁷ Lamb (1977) 424; Holzhauser et al. (2005). Caesar's experience in mid-March 52 provides a warning against exaggerated expectations. His troops had to cut a path through six-foot high snow walls on the pass over the Cevennes mountain range (7.8.2), although this pass (Col du Pal) is only 1,052 m (3,451 ft) high.

⁸ This does not apply to the Great Saint Bernard Pass (the Roman Summus Poeninus) because its northern access was at the time not under Roman control. Caesar's attempt to gain control of it failed in the late fall of 57 (3.1–6).

⁹ Talbert (2000). We use the tool to measure distances provided by the website 'Antiquity À-la-carte' (AALC) of the Ancient World Mapping Center at www.awmc.unc.edu/wordpress/alacarte (accessed 27 Apr. 2016); see also 'ORBIS: The Stanford Geospatial Network Model of the Roman World' at www.orbis.stanford.edu (accessed 5 May 2016).

quarter longer than those on modern roads and even those on later Roman roads.¹⁰ Thus we augment distances measured along later Roman roads by 25 per cent. Having been assured that distances measured along the Roman roads drawn in the *Barrington Atlas* take the terrain into account,¹¹ we consider these reliable for travel in Italy and in Roman provinces where Roman roads already existed at the time (such as Cisalpine Gaul, Transalpine Gaul, Spain, Greece, Macedonia, and Asia). We compensate for travel in rugged terrain by reducing the traveling speed. Moreover, since these measurements are only rough approximations, we normally round them to the nearest increment of 5 km.

In most territories covered by the *Gallic War*, Roman towns did not yet exist. We thus use the names given by Caesar, those of modern cities, or those of their (later) Roman predecessors (for example, Lugdunum (Lyon)).

Time requirements

We assume that, in uncomplicated conditions, preparations for a formal siege (constructing covered sheds, at least one siege tower, and preparing a siege ramp) required a minimum of two days. In some cases, though, the army was able to attack a walled town directly out of its march or, after minimal preparation, on the day of its arrival.¹² We assume further that the formal procedures involved in accepting the surrender of a town (assembling and handing over hostages and arms), re-supplying the army, and preparing for the next stage of operations took at least two days (unless Caesar expressly states that he was in a hurry).

Dates

Unless Caesar gives firm dates, all dates presented in the chronology reconstructed here are estimates, based on reasonable calculations. Deviations of up to ± 3 –5 days are thus inevitable, unless clues in Caesar's text (such as a moon phase or equinox) allow us to gain occasional fixed points. The dates given

¹⁰ Büchsenschütz (2017) §7, rightly points out that Caesar's long, cross-country marches would not have been possible without serviceable roads. But serviceable does not mean straight.

¹¹ We thank Gabe Moss at the Ancient World Mapping Center for helpful explanations. John Ramsey has run a test on the distance from Rome to Brundisium by way of the Via Appia. According to Strabo (*Geog.* 6.3.7, 283C) and Pliny (*Nat.* 2.244), the distance is 360 R mi (532.8 km). The third-century CE *Antonine Itinerary* gives 366 R mi (542 km), ORBIS 539 km and AALC 543 km. Such agreement is remarkable; Roman milestones must have been well-established along that route. If we emend Strabo and Pliny to 365 (CCCLX<V>) R mi (540 km), they too are in full agreement.

¹² For the latter, see, for example, the attack on Gomphi (*BCiv.* 3.80). The sequence of events in *Gal.* 7.10–13 seems to be fairly typical.

here correspond to the pre-Julian, Roman civil calendar. Throughout the Gallic War, the difference between the dates of this calendar and the proleptic Julian calendar was relatively small. For example, 28 March 58, when the Helvetii were to assemble near Genava (Geneva), corresponds to 25 March, Julian.¹³ It is only toward the end of the wars in Gaul and in the civil wars, when political disorder caused no adjustments to be made to the calendar between the years 51 and 47 BCE, that the gap between calendar and solar year widened and eventually comprised more than two months.

Traveling and marching speeds

Caesar offers a few indications of the time it took his army to cover certain distances. Occasionally, other sources comment on the time it took him to reach certain destinations, usually when the time was amazingly short. Other republican and imperial sources provide additional information about travel and marching speeds. We collect here relevant pieces of this information and use it to establish average speeds that will help us determine the chronology of Caesar's campaigns.¹⁴

Information gathered from Caesar's own text. Caesar uses the expression 'a day's normal march' to describe a distance of c. 16 R mi (15 mi or 24 km) covered in roughly five hours.¹⁵ Hirtius refers to 'normal daily marches', but without specifying their length.¹⁶ In 57, Caesar covered the distance between Vesontio (Besançon) and the Matrona (Marne, perhaps at modern Epernay) in 15 days.¹⁷ The average daily distance covered was 20 km (c. 12.4 mi) if Caesar made no pause, 21 km (13 mi) with one rest day, 23 km (14.3 mi) with two.¹⁸ Distances covered in a day's march increased substantially if Caesar was in a hurry. For instance, also in 57, he traversed the distance from the site of the battle at the Axona (Aisne, near Berry-au-Bac) to Noviodunum (near Soissons)—c. 50 km, augmented by 25 per cent = 62.5 km (39 mi)—in a forced march and attacked the town directly from the march but failed to take it.¹⁹

In the late fall of 54, having received a message about the predicament of Quintus Cicero's winter camp that was under siege by the Nervii and their

¹³ *Gal.* 1.6.4. See n. 55 below.

¹⁴ Riepl (1913), not always reliably, gives a survey of speeds of travel and times required. Kolb (2000) discusses the transmission of official correspondence, state support for traveling officials, and state-sponsored transportation.

¹⁵ *Civ.* 3.76.1.

¹⁶ *Gal.* 8.39.4.

¹⁷ 2.2.6.

¹⁸ For the distance involved, see text at n. 75 below.

¹⁹ 2.12.1–2.

allies,²⁰ Caesar sent a mounted messenger around the eleventh hour (in winter between 3 and 4 p.m.) from Samarobriua (Amiens) to his quaestor Marcus Crassus, whose camp was 25 R mi (23 mi or 37 km) away, ordering him to leave his camp, even in the middle of the night, and come to Samarobriua as quickly as possible. Crassus received the message early enough to leave presumably not too long after midnight. His advance party informed Caesar of his impending arrival around the third hour (c. 9:30 am).²¹ Crassus thus covered the distance with a fully encumbered legion (including its baggage train) in a night march of 8–9 hours, traveling at a speed of slightly more than 3 R mi (2.7 mi or 4.4 km) per hour. Setting out immediately (at the third hour) and hurrying to bring aid to Cicero's embattled camp, Caesar covered 20 R mi (18.5 mi or c. 30 km) on that same day.²² Had he been able to leave earlier, he probably would have added another 10 R mi.

In June of 52, Caesar left his camp at Gergovia early in the morning with lightly equipped legions, covered 25 R mi before engaging in a peaceful confrontation with Aeduan rebels, let his army sleep three hours early in the night, and marched back to Gergovia, reaching his camp before sunrise.²³ Thus legions that were unencumbered (*legiones expeditae*) and clearly in a great hurry were able to cover 50 R mi (46.25 mi or 74 km) in 24 hours, with a break of only 3–4 hours.

In May 58, while occasionally battling mountain tribes that tried to block his path, Caesar marched with five legions in seven days from Ocelum at the entrance of the road across the Mt. Genève Pass to the territory of the Vocontii²⁴—an estimated distance of 195 km (122 mi). Caesar's army thus covered 28 km (17.5 mi) per day, even in the mountains and against sporadic opposition, although most likely only with pack animals, no wagons.

Information provided by other sources on Caesar's traveling speeds. Plutarch informs us that in March of 58 Caesar traveled from Rome to the Rhone, reaching it on the eighth day.²⁵ While some scholars have taken this to mean that Caesar covered the distance from Rome to Geneva (Geneva), his ultimate destination, in eight days,²⁶ the facts do not support this conclusion. A far more plausible

²⁰ 5.38–45.

²¹ 5.46.1–47.1.

²² 5.47.1.

²³ 7.40–1.

²⁴ 1.10.4–5.

²⁵ *Caes.* 17.5; see *Gal.* 1.7.1–2.

²⁶ Gelzer (1968) 102 and Walser (1998) 51. While it is true that the Rhone flows out of Lake Geneva, and so conceivably Plutarch could have had in mind Caesar's final destination, the distance is impossibly long: 1,240 km (770 mi, 838 R mi). For such a great distance to have been covered in just under eight days, it would have been necessary to travel at an

interpretation is that Plutarch refers to Caesar's arrival at Arelate (Arles), on the southern coast of France, where the Rhone flows into the Mediterranean.²⁷ If we allow 7.5 days of travel, the maximum possible in keeping with an arrival on the eighth day, then Caesar covered the distance of c. 878 km (549 mi, 593 R mi) to Arelate at an average daily rate of 117 km (73 mi). This surely is an upper limit of speed over a long distance, whatever means of transportation Caesar employed.

A much shorter distance, 350 km (218 mi) from Rome to Ravenna, could be covered in three days, averaging the same speed.²⁸ In the late fall of 46, traveling with only a small entourage, Caesar covered the roughly 2,116 km (1,323 mi) from Rome to Obulco (modern Porcuna) in Farther Spain in 27 or even 24 days. If 27, the average distance covered per day was c. 78 km (49 mi); if 24, it was c. 88 km (55 mi), which seems more unlikely.²⁹ A late source has Caesar reach Saguntum in Nearer Spain (c. 1,650 km (1,031 mi) from Rome) in 17 days, thus covering an average 97 km (60.6 mi) per day.³⁰

With respect to travel in Italy, on good roads, we have precise information. For instance, on 19 February 49, Pompey hurried from Luceria to Canusium, covering the 80 km (50 mi) in one day.³¹ A few weeks later, when there was no great urgency, Caesar traversed the 540 km (c. 340 mi) from Brundisium to Rome on the Via Appia at a rate of speed equivalent to 45–50 km (c. 28–31

average speed of roughly 165 km (103 mi, 112 R mi) per day. This surely surpasses belief, given the nature of the roads, mountainous in places and mere tracks in others, and taking into account the absence of a regular system of relays to supply fresh horses. Pelling (2011) 215–16 has Caesar travel by the coastal route but does not comment on the locale signified by the Rhone.

²⁷ So correctly Riepl (1913) 198, who, along with Walser (1998) 51, logically concludes that Caesar must have taken the coastal road, not the Alpine passes, since in March snow would have made the latter routes impassable. Riepl, however, accepts the inflated figure of 796 R mi (1,178 km) given by the *Antonine Itinerary* (289.4–5) as the distance separating Rome from Arelate, and so concludes that Caesar traveled at the breakneck speed of 150 km per day, over the course of eight full days. From Arelate, Caesar will have continued up the Rhone valley to Genava. We can presume that he made one stop, at least briefly, in one of the towns of the Province to order levies and initiate other emergency measures necessitated by the possibly impending war.

²⁸ For Caesar's mode of transportation, see below. For Rome–Ravenna, see n. 95 below.

²⁹ *BHisp* 2.2–3. Twenty-seven days: Str. *Geog.* 3.4.9 (160C); App. *BC* 2.103; 24 days: Suet. *Jul.* 56.5 (this can be explained as a corruption: IIII instead of VII).

³⁰ Oros. 6.16.6.

³¹ On 20 Feb., Pompey was at Canusium (*Civ.* 1.24.1), having traveled from Luceria, c. 80 km (50 mi) distant, on the 19th (*Cic. Att.* 8.9a.2); on the 21st, he set out for Brundisium (*Cic. Att.* 8.14.1).

mi) per day.³² According to Ovid, the route covered by Caesar required nine days at an unhurried pace, which translates into a speed of c. 60 km per day.³³ The top speed on record for that same journey is credited to Cato the Elder in the second century: he is said to have covered the distance in only five days, which translates into 108 km (c. 68 mi) per day.³⁴

Cicero comments on Caesar's 'incredible speed' during his advance in Italy in 49 and writes in the fall of 44 that Antonius traveled with 'Caesarian speed'.³⁵ These comments take note of the proverbial speed with which Caesar and his armies moved but offer no help in achieving precise calculations. Suetonius writes that Caesar 'covered very long distances with incredible speed, traveling without luggage in a rented four-wheel carriage, one hundred miles [R mi = 92 mi or 148 km] in a single day'.³⁶ This distance exceeds by some 30 km any other attested in this period, before the introduction of regular relay stations in imperial times. Plutarch adds that 'he took most of his sleep while traveling in his litters or carriages; even his hours of rest had to be used in the service of action. Then at daybreak he would drive to the garrisons and cities and camps; at his side would sit one slave boy, trained to take dictation, while Caesar was driving.'³⁷ Although such travel, in carriages without rubber on the rims of the wheels, without springs or suspensions, and on rough roads that were paved with stones that provided a less than flat surface, must have been uncomfortable, enough testimonia survive to demonstrate that people did sometimes cover long distances in this way.³⁸ Even so, it seems likely that on long trips Caesar would at least have alternated carriage travel with riding, and travel on horse would have been even faster.

Other information on travel distances and speeds. In late antiquity, Vegetius composed a military manual, *De re militari*, that draws upon earlier works, including, at least indirectly, a work of the same title written by Cato the Elder in the second

³² Caesar's progress from Brundisium through Beneventum (25 Mar.), Capua (26 Mar.), Sinuessa (27 Mar.) is reported, with dates, by Cicero (*Att.* 9.15.6 = 15a.1); Caesar thus covered c. 383 km (c. 239 mi) in 8+ days, at an average speed of 45–50 km/day. Similarly, on 1 Oct. 47, Cicero was at Venusia and anticipated arriving in Tusculum (c. 315 km = 196 mi away) on 7 or 8 Oct. (*Fam.* 14.20). Hence his projected speed of travel was c. 45–52 km per day.

³³ *Pont.* 4.5.7–8. Horace (*Sat.* 1.5) describes a journey from Rome to Brundisium in 37 that was completed over the course of some 15 days, at the more leisurely pace of c. 25 R mi (= 23 mi or 37 km) per day.

³⁴ Plut. *Cat. Ma.* 14.3.

³⁵ *Att.* 7.22.1; 16.10.1.

³⁶ Suet. *Jul.* 57.

³⁷ Plut. *Caes.* 17.4, trans. Pelling (2011) 89.

³⁸ See Riepl (1913) 152–7.

century BCE.³⁹ Vegetius' work contains a large section on military recruitment and training that places great emphasis on exercising the 'military step', which is considered crucial if an army is to maintain ranks and order on the march or in battle. 'The only way that this can be done is by learning through constant training to manoeuvre quickly and evenly. For a divided and disordered army experiences danger from the enemy ... So at the military step 20 [R mi] should be covered in five hours, at least in summer time. At the full step, which is faster, 24 [R mi] should be covered in the same time. If you add anything to this, it now becomes running.'⁴⁰ Vegetius' 'military step' (*militaris gradus*) appears to correspond to the term 'modest step' (*modicus gradus*) used by republican authors, while 'the full step' (*plenus gradus*, 'at a quick march') is a term commonly employed by other writers.⁴¹ As Milner observes, the military step 'will correspond to the speed of the "standard march" or *iustum iter* known from Caesar'.⁴² It is 'defined as a normal route-march on good roads, in good weather, between camps, leaving time to build the camp and *curare corpora* [care for the body], and leave in good time the next day'.⁴³

This helps determine the speed of the march. Vegetius explicitly mentions 'summer hours'. Five summer hours are, in fact, equivalent to roughly six equinoctial hours. Twenty R mi in six hours equals 3.33 R mi (3.06 mi or 4.93 km) per hour in normal speed, while 24 R mi in six hours equals 4 R mi (3.7 mi or 5.9 km) in accelerated speed, which seems plausible. To complete the 'standard march' of 16 R mi with his army, Caesar thus would have been on the road for 4–5 hours, depending on the season, although, given the length of the marching column with the baggage train, it would easily have taken six hours for the entire army to reach the site of the new camp.

Polybius and Livy provide information about extreme feats of Roman armies in the Punic Wars.⁴⁴ We are here less interested in what an army could accomplish in great emergencies than in average marching speeds and distances. We note, however, that the maximum distance achievable over several days seems to have been 60 R mi (55.5 mi or 89 km) but only if the soldiers carried no baggage whatsoever and at the risk of total exhaustion.

Speed of pack animals and wagons. According to Suetonius, the emperor Caligula moved so fast in Germany in 39 CE that the Praetorian Guard 'could not keep

³⁹ On Cato's lost treatise, see Astin (1978) 184–5. On Vegetius, see the introduction of Milner (1996).

⁴⁰ Vegetius 1.9.1–4 (Milner (1996) 10–11).

⁴¹ See, for example, Sal. *Jug.* 98.4; Livy 9.45.14; 30.5.3.

⁴² *Civ.* 3.76 .1. See text at n. 15 above.

⁴³ Milner (1996) 10 n. 6, with reference to Kromayer and Veith (1928) 352.

⁴⁴ Listed by Riepl (1913) 129–36, with modern analogies, but with measurements of distances that need to be checked carefully.

up with him except by breaking tradition: they had to tie their standards on the pack-mules'.⁴⁵ Hence pack-mules were perfectly capable of matching the speed of a fast-moving army. According to Roth, they traveled at a speed of 7.2–8 km (4.5–5 miles) per hour and were able to do so for 10–12 hours.⁴⁶

Apart from mules (and, rarely, horses), wagons for the transportation of the legions' heavy baggage were drawn by oxen.⁴⁷ 'A draft bullock can pull around 180 kg (400 lb) at a maximum speed of 4 km (2.5 miles) an hour, but can only do so over a flat, firm surface, which emphasizes that good roads were absolutely essential for moving baggage. A bullock can only travel at this speed for 7–8 hours a day' (because of the time needed for grazing and resting). Thus, 'even on the best roads, a single ox-cart could travel for a maximum of between 28 and 32 km (17.5–20 miles) in a day. In a long column, and crossing uneven terrain on imperfect roads, this total was drastically reduced.'⁴⁸ This must have been the reason that Caesar used wagons as little as possible.⁴⁹

Traveling speed of messengers. Based on much contemporaneous evidence, messengers and letter carriers on foot could cover up to 80–90 km in one day, 70–80 km per day in trips of several days, and 60–70 km on very long trips.⁵⁰ In the field, Caesar normally employed mounted messengers. Cicero's correspondence provides firm evidence revealing that on at least two separate occasions in the late summer and fall of 54 Caesar's letter carriers reached Rome from the coast of Britain in 27 days.⁵¹ One day may be allowed for crossing the channel, while the distance from Portus Itius (modern Boulogne) to Rome (augmented by 25 per cent for the c. 700 km outside the Roman Province) is c. 1,800 km (c. 1,125 mi). Hence the letter carriers covered c. 70 km (43 mi) per day over the course of 26 days.

We receive an impression of the maximum speed messengers were capable of achieving from an episode in the crisis winter of 54/3. Having finally received news of the siege of Quintus Cicero's winter camp, Caesar sent a messenger to inform Labienus of his plans. This courier, clearly under emergency

⁴⁵ Suet. *Cal.* 43 (trans. R. Graves). We thank Jonathan Roth for this reference.

⁴⁶ Roth (1999) 206: 'Estimates of daily travel rate vary from 40 km (25 miles) to 80 km (50 miles) per day.' See his section on pack-animals, 202–7.

⁴⁷ Mules and oxen appear as draft animals on Trajan's and Marcus Aurelius' columns. On the use of wagons by Roman armies, see Roth (1999) 208–14.

⁴⁸ Goldsworthy (1996) 110.

⁴⁹ Roth (1999) 210 with references to bibliography.

⁵⁰ Riepl (1913) 143; see Kolb (2000) 20–7.

⁵¹ *Q.fr.* 3.1.17 (accepting the almost certain emendation 'septimo' for the impossible 'Sept.' of the MSS) and 3.1.25. Two other letters sent by Quintus took, respectively, 29 days to arrive in Rome (*Att.* 4.18.5) and 33 days to reach the town of Arpinum c. 115 km SSE of Rome (*Q.fr.* 3.1.13).

conditions, covered the distance between Samarobriva (Amiens) and the territory of the Treveri near the border of the Remi (more than 400 km or 250 mi) and back (slightly shorter because Caesar had been moving east) in perhaps four days, thus traveling up to 175 km or 110 mi per day.⁵² Over longer distances, it seems, one could expect a horseman to average 60–80 km (37.5–50 mi), in emergencies 80–100 km (50–62.5 mi) per day.⁵³

Rest days. We are not aware of any specific evidence on this issue. Decisions about when to schedule a rest day must have depended on the length of the marches, the terrain, the urgency of the mission, etc. Caesar explicitly mentions that during his campaign against the German warlord Ariovistus in 58 he marched 6+ days (arrival on the seventh day) without interruption; hence we presume that this was an exception.⁵⁴ If so, a rest day would normally have been scheduled after every fourth or fifth day of marching. We assume the latter, unless Caesar was in a great hurry.

Basic assumptions. All this information leads us to base our calculations for the marching speed of Caesar's army on 25 km (15.5 mi) per day, unless Caesar expressly indicates that he was moving in forced marches (40 km or 25 mi) or with extreme urgency (50 km or 31.25 mi), or that his march was impeded by obstacles or enemy interference (20 km or 12.5 mi). Under normal circumstances, we include one rest day per five days of marching.

Gallic War, Book 1: 58 BCE

The Helvetian campaign (58 BCE)

The Helvetian threat. The Helvetii, a Celtic people living in the region between lakes Geneva (Geneva) and Constance, decided to emigrate to southwestern Gaul. They spent the years 60 and 59 on preparations (1.2–4). Planning to travel through the Roman province of Transalpine Gaul (1.5–6), they set a date for all to assemble on the banks of the Rhone near Geneva (1.6.4). That date, Caesar tells us, corresponded to the fifth day before the Kalends of April 58, that is, to the twenty-eighth day of the Roman month of March.⁵⁵ It is one of

⁵² *Gal.* 5.47.4–48.1, with the comment by Kraner et al. (1960a) 107.

⁵³ Riepl (1913) 147–51.

⁵⁴ *Gal.* 1.41.5, so interpreted by Kromayer-Veith (1928) 422–3. We thank J. D. Morgan for advice.

⁵⁵ 25 March, Jul. The date selected by the Helvetii for their muster is likely to have coincided with, or stood close to, the date of the new moon in March. The reasons for drawing this conclusion are threefold. First is the fact that the Celtic Helvetii most likely followed the Celtic practice of employing a lunar calendar whose months began with each new moon. Hence, it would be logical for them to select the first of a month as the date of their

only two fixed dates in the seven books authored by Caesar, both at the beginning of the work.⁵⁶ Informed of those plans, Caesar traveled at great speed to the province of Transalpine Gaul, reaching the Rhone near Arelate (Arles) on the eighth day,⁵⁷ ordered levies in his province, and hurried to Genava (1.7.1–2)—presumably arriving a few days before 28 March. Hearing of his arrival, the Helvetii requested his permission to cross the province. Caesar stalled to gain time (1.7.3–6) and had his troops build walls and forts along the Rhone to prevent the Helvetii from crossing the Rhone into the Province against his will (1.8.1–2). On 13 April (10 Apr., Jul.),⁵⁸ the second and last firm date supplied in books 1–7, Caesar rejected the Helvetii’s request and in the following (three?) days frustrated their attempts to cross the Rhone despite his refusal (1.8.4). Through the services of Dumnorix the Aeduan, the Helvetii gained the permission of their neighbors, the Sequani, to migrate through their territory (1.9). This would have taken a week to ten days: they might have left almost two weeks after Caesar’s rejection of their request on 13 April.

Preparations for the Helvetian war. On c. 26 April, therefore, the Helvetii began their trek westward. Receiving this news, Caesar rushed to Cisalpine Gaul, enrolled two additional legions,⁵⁹ summoned three others from their winter quarters around Aquileia at the top of the Adriatic, and with those five legions hurried back to Transalpine Gaul. The only indication of time he gives is that he crossed the Alps via the closest route, by way of what is now the Mt. Genève Pass (from Ocelum to the territory of the Vocontii) in seven days (1.10.3–5). Presumably this is also the route he took when traveling to Cisalpine Gaul.

muster. Second, the first new moon after the vernal equinox (24 Mar., Jul.) was regarded by the Celts as marking the opening of the season for warfare: an ideal time for their gathering. Third and last, the Celts and the Germans appear to have regarded the new moon as an auspicious time for beginnings (*Gal.*1.50.5; cf. Tac. *Ger.* 11). The only slight disagreement among scholars concerning the Julian equivalent of 28 Mar. Roman is over whether it fell on the day of the new moon, 24 Mar., Jul., or on the next day, under the erroneous assumption that the first faint crescent would have been visible on 25 Mar., Jul. (see Holmes (1923) I.339–40). In fact, for the latitude of Lugdunum (Lyons) in March 58, first visibility of the moon’s new crescent would have been one day later, after sunset, on Mar. 26, Jul. (SkyMap Pro 11).

⁵⁶ For an explanation of this striking feature, see Raaflaub (2017) Appendix CC §8.

⁵⁷ See text at nn. 25–7 above.

⁵⁸ Henceforth, with few exceptions, we give only the dates of the Roman civil (pre-Julian) calendar. For correlation with Julian dates, see the chronological tables in Ramsey and Raaflaub (2017).

⁵⁹ He must have ordered these levies on his earlier trip (1.7.1–2, although there he mentions only levies in the Transalpine province). Otherwise he would not have had these legions of recruits at his disposal so soon. We do not hear of the results of the levies in the Transalpine province.

If so, we can estimate distances and times. The distance from Aquileia to Ocelum at the foot of the pass, by good Roman roads through the province of Cisalpine Gaul, is roughly 510 km (319 mi). Since Caesar was in a great hurry to get back to Gaul, we assume that he forced his army to cover 50 km per day (without baggage train). It would thus have taken the legions from Aquileia 11 days (including one rest day) to reach Ocelum. They needed seven to get into the territory of the Vocontii (thus taking a southern route out of the mountains and joining the road along the Rhone north of the Druentia (Durance) River. The distance from Ocelum over the Mt. Genèvre Pass to the Vocontii⁶⁰ measures 195 km (122 mi). Conceivably, Caesar's army thus covered 28 km (17.5 mi) per day even in the mountains and while fighting local tribes, and so took roughly seven days to traverse the pass. The roads from there to the Rhone and then along the Rhone north to the confluence of the Rhone and the Arar (Saône) at the later site of Lugdunum (Lyon) measures 350 km (218 mi); these roads must have been good and relatively straight. At 50 km a day, the journey would have required seven more days, and the march beyond the Rhone into the territory of the Segusiavi (1.10.5) perhaps one more.⁶¹ We have to add two rest days after the departure from Ocelum. All in all, the march from Aquileia took at least 28 days.⁶²

A mounted messenger, changing horses frequently, at least when traveling in the provinces, would have covered the distance from Genava to Aquileia, perhaps along a shorter, more northerly route (from Valentia (Valence) across the Mt. Genèvre Pass) in about two weeks.⁶³ We assume that the messenger was sent off on 26 April (because Caesar could hardly give marching orders to all three legions in Aquileia, thus depriving Illyricum of protection, before he knew that the Helvetii were actually going to persist with their plan); he might have arrived on 10 May. If the legions (presumably placed on high alert when

⁶⁰ We have selected a modern place called Segusterio for our measurement.

⁶¹ Since Allobroges lived on both sides of the Rhone, we assume that Caesar was able to cross the river on an existing bridge.

⁶² If the legions traveled from Aquileia with their baggage train, it would have taken considerably longer, but Caesar clearly was in a hurry. We simply do not know when Caesar acquired the heavy equipment needed for bridge building and siege warfare. We assume that on this march the legions transported the essential minimum by pack mules (see text at nn. 45–6 above).

⁶³ We assume that the messenger was able to cover at most 60 km per day on bad roads and in the mountains, 90 on good roads and with changing horses. It would have taken him two days from Genava to Vienna (Vienne), another to Valentia, 5½ days over the passes to Ocelum, and finally 5½ days to Aquileia, with a total of 14 days, half as many as Caesar's legions. If (in late April) he was able to use higher mountain passes more to the north (like the Little St Bernard Pass), he could easily have cut his travel time by four days. This would have made the marching schedule of the legions a little less tight.

Caesar left for Genava in March) were able to leave after one day of preparation (on May 11), they would have met Caesar somewhere in Cisalpine Gaul (perhaps at the location where the new legions were enrolled) and could have arrived at their destination in the territory of the Segusiavi on 8 June, at the very earliest.⁶⁴

The Helvetian war. On 8 June, Caesar crossed into independent Gaul with five legions.⁶⁵ Delegations of various nations awaited him, complaining about the devastation of their lands by the Helvetii (1.11). Caesar learned that one of the four tribes of the Helvetii (the Tigurini) still remained east of the Arar (Saône), within easy marching distance from his camp. On 10 June, Caesar attacked and massacred that tribe (1.12). He then had a bridge built (1.13.1)—in one day, thus presumably a pontoon bridge. On 11 June, he crossed the Arar and was met by Divico, a Helvetian leader, in an unsuccessful parlay (1.13.2–14). On the next day, the Helvetii resumed their march, followed by Caesar and his army, skirmishing intermittently (1.15.1–4). This went on for about 15 days (1.15.5). At the end of that period, Caesar faced serious supply problems because grain and fodder were not yet ripe in the fields (1.16.1–2), which fits the time of the year,⁶⁶ and he was by now far from his riverine supply line. This crisis prompted Caesar, on 26 June, to hold an emergency meeting with the leaders of the Aedui, on whose support he depended (1.16.4–20). On the next morning, a surprise attack on the camp of the Helvetii failed because of erroneous intelligence (1.21–2). On that day (27 June), Caesar followed the Helvetii in the usual way (1.22.5).

The first great battle. By 28 June, ‘only two days were left before the grain ration for the army was due’ (1.23.1). If this distribution was normally carried out on the first of the month (a big *if*, but not implausible), our calculation fits the calendar exactly. Caesar turned away to resupply in the Aeduan town of Bibracte. He was followed and harassed by the Helvetii (1.23) and, unexpectedly, a battle, which proved decisive, developed on the same day, ending long after nightfall with a disastrous defeat of the Helvetii (1.24–26.4). The surviving Helvetii marched for four days into the territory of the Lingones, roughly northeast of Bibracte (29 June–3 July).⁶⁷ Forced to bury his own dead and take care

⁶⁴ Corresponding to 4 June, Jul. Holmes (1911) 49, assumes 7 June.

⁶⁵ The legion so far operating near Genava (1.8) must have joined him there, bringing the total to six.

⁶⁶ The availability of grain and fodder provides a useful indicator for checking our calculations of dates. According to 1.40.11, the grain was ripe in late August; see also 4.19.1 (perhaps late July); 7.56.5 (mid-August).

⁶⁷ Napoleon III (1866) 76, 87 assumes that they ended up around modern Tonnerre (between Auxerre and Châtillon-sur Seine). But see the discussion in Holmes (1911) 631–3.

of the wounded (whom he presumably left in Bibracte), Caesar was unable to pursue them for three days (1.26.5–6). On 3 July, he resumed the pursuit, while the Helvetii, deprived of support and supplies, sent an embassy to offer their surrender. On 6 July, Caesar reached the camp of the Helvetii and, upon their agreeing to his conditions, accepted their surrender. Six thousand Verbigeni, a tribe of the Helvetii, who had fled were hunted down and executed or enslaved. Caesar ordered the Helvetii to return to their country and called upon the Allobroges to support them through the first winter (1.27–8). All this would have taken at least a week, say, to 14 July.

The campaign against Ariovistus (58 BCE)

Alarming news about Ariovistus. Meanwhile, news of Caesar's victory had spread, and leaders of virtually all nations of Gaul proper converged on Caesar's camp (1.30.1) to thank him and ask for permission to hold a pan-Gallic meeting. They probably arrived toward the end of the week Caesar spent among the Lingones. Presumably, they held their meeting in that same area or, since Diviciacus the Aeduan played a leading role, at Bibracte. Most likely, Caesar did not remain among the Lingones (despite the assumption of some scholars to the contrary) but also returned to Bibracte. That town was well supplied and in allied territory, where his wounded soldiers may have been waiting.⁶⁸ This march took three more days. By 17 July the pan-Gallic meeting had taken place, and Gallic leaders met with Caesar, raising the issue of the oppressive rule of the German warlord Ariovistus over several Gallic nations (1.30–33.1).

The failure of diplomacy and preparation for war. Caesar decided that his intervention was required (1.33.2–5). Beginning on 19 July, an exchange of envoys took place: Caesar sent emissaries to Ariovistus, received his response, sent other emissaries and received another response, none of which was satisfactory (1.34–6). We can only guess where Ariovistus was at the time and how long this exchange would have taken. If Ariovistus was in the area of the Triboci (near modern Strasbourg), as some scholars assume, the distance would have been 402 km by later Roman roads or, augmented by 25 per cent, 502 km (314 mi). Assuming a traveling speed of 80 km (50 mi) per day, the two roundtrips would have taken Caesar's emissaries 25 days, with a speed of 60 km (37.5 mi) 33 days. Neither is implausible; we choose a compromise of 29 days and add four further days to provide a day for rest and deliberation at the end of each leg. The second embassy thus would have returned on 20 August. At that time Caesar received further alarming news (1.37.1–3) and decided to act. With supplies collected, he set out c. 21 August, possibly from Bibracte, and hurried in long

⁶⁸ Holmes (1911) 633–4 has Caesar return after a short stay among the Lingones, for different reasons.

marches eastward (1.37.4–5). After three days, having covered about 120 km (75 mi), he was informed (1.38.1) that Ariovistus had begun moving west, planning to occupy Vesontio (Besançon), a strategically and logistically very important town (1.38.2–6). Marching at top speed now, day and night, Caesar arrived there first (1.38.7). The distance between Bibracte and Vesontio is c. 170 km by later Roman roads, c. 210 km (132 mi) with augmentation. The remaining 90 km (56 mi), from the point at which Caesar learned of the threat to Vesontio, would have consumed less than two days. Caesar thus arrived at Vesontio on about August 25. He then paused ‘a few days’ (say, 5) at Vesontio to re-supply and prepare the next move (1.39.1). There followed the famous episode of the ‘panic at Vesontio’ (1.39.2–41.3), which prompted Caesar to depart from Vesontio immediately, perhaps on 29 August. The crops in the fields were now ripe (1.40.11), which suggests the first half of August, at the earliest.⁶⁹ We are still roughly on target.

Approaching Ariovistus. After leaving Vesontio, Caesar marched without a break, though on a circuitous route (1.41.4), and found himself on the seventh day (6 Sept.) 24 R mi from Ariovistus (1.41.5). Seven days of forced marches would have brought him 280 km (175 mi) beyond Vesontio. Even if he took a detour to remain in open country (1.41.4) and moved more cautiously and slowly once he reached the Doubs valley, he clearly must have been able to reach the foothills of the Vosges Mountains between modern Belfort and Mulhouse. The distance from Besançon to Mulhouse by modern roads is 135 km (84 mi), to Belfort 100 km (62.5 mi); as measured along ancient, pre-Roman roads, the distance was very much longer because of the difficult terrain in the winding Doubs Valley. On the other hand, Ariovistus must have started to move soon after he dismissed the second embassy (on c. 13 Aug.) and it became clear to him that a military confrontation was inevitable. If he left the area of modern Strasbourg,⁷⁰ for example, on 15 August and progressed slowly (encumbered by bringing along the entire wagon train with the families of his soldiers: 1.51.3), 10–15 km (6.25–9.5 mi) per day, he would have had ample time by 6 September to reach any of the areas proposed by scholars for the meeting between the two leaders and the final confrontation (most likely, near modern Belfort,⁷¹ 155 km (97 mi) from Strasbourg on modern highways, more than 200 km (c. 125 mi) on pre-Roman roads). The precise distances do not matter here, since we only need to establish that both opponents were able to reach the area in the time available. From now on, we have Caesar’s day-by-day account.

⁶⁹ Kraner et al. (1961) 164; Pennacini (1993) 191.

⁷⁰ In the region of the Triboci.

⁷¹ For detailed discussion, see Pelling (1981) 751–66.

Defeat of Ariovistus. During the next days, Caesar probably moved his camp closer to that of Ariovistus. Given the distances involved, negotiations about a meeting must have taken two days; on the fifth day after agreement was reached (1.42.3), on 13 September, the first meeting between the two leaders took place (1.43–5) but was interrupted by aggressive moves of Ariovistus' cavalry (1.46). On the next day (14 Sept.),⁷² Ariovistus asked for a second meeting but held Caesar's envoys captive without entering negotiations (1.47). Ariovistus moved his camp forward, within 6 R mi of Caesar's (1.48.1). On 15 September, Ariovistus marched beyond Caesar's camp and established his own camp 2 R mi to the west (1.48.2). On this and the next four days (15–19 Sept.) Caesar offered battle, but Ariovistus refused, although his cavalry engaged in skirmishes (1.48.3–7). On 20 September, in order to keep Ariovistus from continuing to block his supply lines, Caesar established a second, smaller camp a short distance beyond (west of) Ariovistus' camp and warded off attacks by the latter's light infantry and cavalry (1.49). On the next day (21 Sept.), Caesar again offered battle; Ariovistus refused but then attacked the smaller camp, which prompted fierce fighting until the evening (1.50). Again on the next day (22 Sept.), having learned the reason for Ariovistus' reluctance to fight a battle (omens warning him not to fight before the next new moon (1.50)), Caesar provoked him into accepting a battle. The resulting fierce fighting ended with a complete rout of the Germans (1.51–3). Most scholars assume that this battle took place around the middle of September.⁷³ The terminus ante is the next new moon on 25 September (18 Sept., Jul.). Caesar makes it clear that he had forced Ariovistus to fight before that date (*necessario*, 1.51.2). This fixed date

⁷² The phrase Caesar uses (*biduo post*) is ambivalent: it can mean 'on the next day', although it usually means 'after two days, on the second day'. Many scholars understand it in the latter way here too and assume that on the day after the attack by Ariovistus' cavalry during the failed negotiations his cavalry attacked Caesar's again. Caesar, they think, does not mention these skirmishes explicitly but alludes to them in 1.47.2 below ('just the day before'). For various reasons, we consider this highly implausible and reject the idea that Caesar would have omitted a second attack by Ariovistus' cavalry. In a lengthy section beginning here, Caesar gives a precise day-to-day account of events. He is obviously eager to establish beyond any doubt that he acted correctly throughout and all aggression originated with Ariovistus. At that time, the two camps were still separated by at least 12 R mi; hence an attack by Ariovistus' cavalry would have been deliberate and planned. Since Caesar meticulously records every cavalry skirmish, for which he uses specific terminology ('cavalry battle', *equestre proelium*), his omission of this one would seem surprising, and the formulation 'the Germans could not be kept from launching weapons at our soldiers' (1.47.2) does not fit a skirmish. But this formulation corresponds exactly with that used in 1.46.1, when Ariovistus' cavalry interrupted the negotiations between the two leaders. Hence we follow Rolfe (1913) 1–4 against Conrad (1914) and conclude that 'on the day before' (1.47.2) refers to the latter event (1.46.1), and *biduo post* here means indeed 'on the next day'.

⁷³ Kraner et al. (1961) 184, 189.

anchors the events and endows the chronology of the entire campaign with a fair amount of certainty.

The end of the campaign year. After his victory, Caesar must have stayed in the area for a few days to deal with the aftermath of the battle. Around 27 September, he led his troops to winter quarters among the Sequani, ‘a little earlier than was strictly necessary according to the time of the year’ (1.54.2). Presumably by mid-October, as soon as he had confirmation that the winter quarters were established, he himself left from Vesontio for Cisalpine Gaul (1.54.3).

Galic War, Book 2: 57 BCE

Campaigns against the Belgae (57 BCE)

The beginning of the campaign. For this book we have no fixed dates.⁷⁴ Alarmed by reports about preparations for war among the Belgae, Caesar traveled from Cisalpine to independent Gaul as soon as the season allowed it (‘when the warm season [that is, the campaign season] was beginning’, 2.2.1). Around the middle of June (early June, Jul.), ‘as soon as there began to be a supply of fodder’ (2.2.2), Caesar arrived in the territory of the Sequani, where his troops were in winter quarters—we presume around Vesontio (Besançon). He needed time to reconnect with his troops and officers, train especially his two newly recruited legions (2.2.1), and organize the campaign. He was probably able to leave Vesontio by the end of June. After a march of ‘about 15 days’ (2.2.6), that is, around the middle of July, Caesar arrived at the Matrona (Marne) River, the border of the Remi, a nation of the Belgae (1.1.2). The distance from Vesontio to the Marne by later Roman roads is 235 km, augmented 295 km (184 mi).⁷⁵ At the Matrona, Caesar accepted the surrender of the Remi and gathered intelligence about the plans and troop strength of the Belgae, perhaps progressing to the capital of the Remi, Durocortorum (Reims). The distance from the Matrona-crossing to Durocortorum is c. 50 km, augmented 63 km (39 mi), covered in two days. Caesar may have stayed in Durocortorum for two days, waiting for scouts to report the whereabouts of the Belgian army (2.5.4), before he marched to the bridge over the Axona (Aisne) at modern Berry-au-Bac. This distance, a mere 18 km (11.25 mi), consumed less than a day, and Caesar was now in a hurry.

⁷⁴ As always, we give dates according to the Roman civil calendar. By the beginning of the campaign season in June of 57, this calendar was a little more than two weeks ahead of the solar year (1 June = 17 May, Jul.).

⁷⁵ For the augmentation by 25 per cent of distances along roads outside Roman provinces, see text at nn. 10–11 above.

The battle at the Axona River. On c. 21 July, Caesar crossed the Axona and established his camp on a hill north of the river (2.5.4), protecting the bridge by a fort and a camp under the command of the legate Quintus Titurius Sabinus. Perhaps two days later (23 July), the army of the Belgae attacked Bibrax, 8 R mi north of the Axona. During the night, Caesar sent in reinforcements, causing the Belgae to desist from the attack (2.6–7). They spent some time (two days?) devastating the farms of the Remi and then moved on. On c. 26 July, they established their camp across a swamp, less than 2 R mi from Caesar's (2.7.3, 9.1). Daily cavalry skirmishes followed. After a few days, Caesar had his troops build two trenches toward the enemy and back to the river, with a fort at the end of each (2.8), to limit the battlefield and prevent the enemy from outflanking his troops. All this might have taken another week. On c. 2 August, Caesar offered battle, but neither army was willing to cross the swamp. When Caesar returned to the camp, the enemy rushed to the river and tried to cross it to attack Sabinus' fort (2.9). In the fierce battle that ensued, the Belgae were repelled with great losses (2.10.1–3). In council, they changed their strategic plans. They left during the night in great disorder (2.10.4–11.1). On the next day (3 Aug.), Caesar's troops pursued and massacred the rear column of the fleeing Belgae (2.11.2–6).

The submission of the Suessiones, Bellovaci and Ambiani. On the very next day (4 Aug.), after a forced march, Caesar reached Noviodunum of the Suessiones near modern Soissons (c. 50 km, augmented 62.5 km or 39 mi, along the valley of the Axona).⁷⁶ He attacked directly from the march but failed to take the well-fortified town (2.12.1–2). He built a fortified camp and prepared siege equipment (2.12.3), presumably on the next day. In the following night, the survivors from the fighting at the Axona returned. During the following days (presumably at least two), Caesar's troops prepared for an assault. When they began to move their siege equipment, the defenders panicked and surrendered (2.12.5–13.1) on c. 8 August. Two days later, Caesar turned against the Bellovaci and marched to Bratuspantium. This town has not been identified with certainty. Likely candidates are Roman Caesaromagus (modern Beauvais) and a site at modern Breteuil. The distance from Noviodunum to Caesaromagus on later Roman roads is about 105 km, augmented 131 km (82 mi), the distance to Breteuil a little shorter. In either case, since Caesar did not need to hurry, he probably took five days to reach his destination, arriving on c. 15 August and immediately accepting the town's surrender (2.13.2–15.2). Two days later, on 17 August, he marched to the territory of the Ambiani. We assume that he accepted their surrender at their main town of Samarobriva (Amiens), and that

⁷⁶ Caesar must have taken that route; another, along the later Roman roads through Durocortorum (Reims) and Augusta Suessionum (Soissons), is considerably longer (76 km, augmented 95 km or 60 mi).

he was coming from the area of later Caesaromagus, covering the distance of 55 km (augmented 69 km or 43 mi) in three days. He accepted the surrender of the Ambiani (2.15.2) upon his arrival (on 20 Aug.).

The defeat of the Nervii. After two days, on 22 August, Caesar left Samarobriva for the territory of the Nervii. His route must have led through the site of later Camaracum (Cambrai) in the direction of Bagacum (Bavais). At some point he entered Nervian lands and moved for three days through their territory (2.16.1) until he camped 10 R mi from the Sabis River, across which, he learned, the Nervii and their allies were hiding (2.16). He sent an advance party to reconnoiter a camp site and on the next day arrived at the river. Thus his own account. Much is unclear or debated here. We do not know even roughly where the territory of the Nervii began and thus where Caesar's three-day march through Nervian territory started (2.16.1). Most scholars seem to think of some point along the 30 km between modern Bapaume and Cambrai (Roman Camaracum);⁷⁷ we choose the halfway point, 15 km before the latter. The distance between Samarobriva and Camaracum is 75–80 km. This is reasonably flat country, and the road must have been one of the main thoroughfares and fairly straight, even before the Roman road was constructed. Hence we augment the distance by only ten per cent to 85 km and assume that Caesar marched 70 km (44 mi) in three days before entering Nervian territory.

A further difficulty is posed by uncertainty over the site of the battle. Scholars have long located it at the Sambre River (probably the ancient Sabis) south of Bagacum (later the capital of the Nervii), where the distance to the Sabis is just about correct. Yet, because of inconsistencies between Caesar's description of the battle and the proposed site, recently another site, at the Selle River (a tributary of the Scaldis (Scheldt)), near modern Saulzoir, has gained more support.⁷⁸ However, inconsistencies are also presented by this site, and it is difficult to reconcile with it Caesar's own description of his march to the battle site. For Saulzoir lies 17 km (19 if augmented by ten per cent) beyond Camaracum, a little more than 35 km (augmented) from where we place the Nervian border. Even moving more slowly than usual, Caesar cannot have needed three days to cover that distance. And he surely had guides or scouts of the Ambiani who told him where this border was. On the other hand, the distance between Camaracum (Cambrai) and Bagacum (Bavais) is c. 45 km (50 augmented); if we add the 17 km (augmented) from the assumed Nervian border to Camaracum, we have 67 km (42 mi): a comfortable march of three days

⁷⁷ Kraner et al. (1961) 212.

⁷⁸ See Arnould (1941); Turquin (1955); Herbillon (1977), and the summary in Pelling (1981) 747–9, who calls attention to Caesar's tendency to omit topographical details that would only have confused his readers in Rome, where familiarity with Gallic topography was limited.

in Nervian territory. Since this was an important road, the dense hedges Caesar complains about (2.17.5) may not have posed a big problem before he turned off this road to reach his camp and the battle site. We thus base our calculations on the site on the Sabis River.⁷⁹

On 29 August, Caesar arrived at the camp site above the Sabis River. The battle with the Nervii was fought on the same day (2.17–27). Caesar's narrative leaves no doubt that his army suffered heavy casualties (although he does not give numbers). They presumably equalled or surpassed those of the battle at Bibracte against the Helvetii, where he had been forced to pause for three days to bury the dead and take care of the wounded.⁸⁰ We assume the same delay here (1–3 Sept.). During this time Caesar would have received the envoys of the surviving Nervii and accepted their surrender (2.28).

The defeat of the Atuatici. On 4 September, ready to resume his campaign, Caesar sent Publius Crassus off with one legion to deal with the maritime nations along the Atlantic (2.34). Caesar himself departed in pursuit of the Atuatici who had been approaching to assist the Nervii but turned around when they learned the outcome of the battle (2.29). The town where the Atuatici concentrated their population and defense (2.29) is still debated.⁸¹ We randomly choose one of the candidates, modern Namur, to estimate distances.⁸² From Bagacum (Bavais) to Namur it is, on later Roman roads, 86 km, augmented to almost 100 km (62 mi), since the last 19 km are not on the thoroughfare referred to at 2.16.1. On 4 September, he would have returned to his old camp on that thoroughfare, c. 10 R mi to the north. Caesar was in no hurry and perhaps was slowed down further by the great number of wounded soldiers he had to

⁷⁹ The other site (on the Scaldis (Scheldt) River) would add about two days to our calculations concerning the continuation of the campaign.

⁸⁰ 1.26.5.

⁸¹ The fortified *oppidum* occupied by the Atuatici must have been situated in or to the north of the Ardennes forest, on or near the Sabis (Sambre) or Mosa (Meuse) Rivers. That Caesar does not offer geographical details is to be explained by his tendency (discussed by Pelling (1981)) to omit information that seems crucial to us but would not have mattered much to his readers. Modern Tongeren, Namur, and Mont Falise near Huy have been proposed in the past. Recently, a site near modern Thuin (c. 10 miles southwest of Charleroi, at the confluence of Sambre and Biesmelle) has been suggested by Roymans and Fernández-Götz (2015) 74–7; see also Roymans et al. (2012). The site fits Caesar's description. It was occupied at the time but not in the first two centuries CE. The discovery of three hoards of Gallic gold coins of the middle of the first century BCE suggests war-caused panic, and large quantities of Roman lead sling bullets prove Roman presence.

⁸² Namur lies at the confluence of Sabis (Sambre) and Mosa (Meuse). Other sites proposed by scholars for the town of the Atuatici lie farther down the Mosa, except for Thuin, which lies about halfway between Bavais and Namur.

take along. Hence he would have required five more days to reach the town of the Atuatuaci.

Caesar thus arrived on c. 9 September. He built a circumvallation with frequent forts and towers, prepared heavy equipment for a siege, and constructed a siege ramp and tower (2.30.2–3). Since the conquest of the town roughly coincided with the arrival of Crassus' report about the success of his mission (2.34),⁸³ the construction of these siege works seems to have taken 2–3 weeks.⁸⁴ When the townspeople saw the siege tower moving toward their wall, they capitulated (2.31–32.3); on the next day, they handed over some of their weapons (2.32.4) but in the following night attempted a breakout, which failed (2.33.1–5). On the next morning, Caesar's troops entered the town; the population was sold to the slave traders (2.33.6–7). By the end of September or the beginning of October, this campaign and its aftermath were over.

The end of the campaign. Around the same time, Publius Crassus reported the surrender of the maritime nations along the Atlantic (2.34). In the first half of October, the legions were brought to their winter quarters, and (probably in the second half of Oct.) Caesar departed for Cisalpine Gaul.⁸⁵ When the senators in Rome received his report, on the motion of Cicero and with the wholehearted support of Pompey,⁸⁶ they decreed a thanksgiving celebration of unprecedented length (2.35.4).⁸⁷

⁸³ Depending on where Crassus accepted the submission of the maritime nations, he had to cover between 400 and 500 km by later roads, which would easily have consumed close to three weeks; a messenger would have needed another 5–7 days to bring the news to the town of the Atuatuaci.

⁸⁴ During the Italian campaign in the civil war, a much smaller army needed a week to build the larger circumvallation at Corfinium, though without siege equipment, ramp, and tower (9.23.5); because of difficulties of the terrain, here probably more time was required.

⁸⁵ Caesar was in a hurry to get back to his provinces south of the Alps, partly to discharge his gubernatorial obligations and to make an inspection tour in Illyricum, but also because momentous political decisions were soon to be made in Rome, and he wanted to be close enough to influence them. Still, he probably waited until he received reports from all legions that the legions had built and settled into their winter camps (see, for a parallel, 5.24.8).

⁸⁶ Cic. *Prov.* 25–7.

⁸⁷ The exceptional duration of 15 days surpassed by five days the previous record which was held by Pompey, when, on the motion of Cicero, the senate in 63 awarded Pompey a *supplicatio* of ten days, double the usual length of five days, in recognition of his victory over Mithridates.

Gallic War, Book 3: 56 BCE

This book, most memorable for Caesar's naval victory over the Veneti, features, in addition, three campaigns by Caesar's legates, one of which was conducted in the fall of the previous year, 57. The book is devoid of any precise time markers. Caesar's involvement in negotiations with his political allies in Rome and Italy allows us to estimate with some precision the date of his departure from Cisalpine Gaul to join his army, and thus the beginning of the campaigns in Gaul. Otherwise we can sketch the course of these campaigns only roughly, determining in what month or season events took place, and sometimes how long the events might have lasted.

Galba's campaign in the upper Rhone valley (57 BCE)

This campaign, intended to secure free access to the *Summus Poeninus* (Great St Bernard Pass), took place in the fall of 57 but is reported here (3.1–6), rather than at the end of book 2.⁸⁸ Shortly before his departure for Cisalpine Gaul in October 57, Caesar sent his legate, Servius Sulpicius Galba, with the 12th legion to the Rhone valley that controlled the northern access to the Pass (3.1.1). As described at the end of book 2, Caesar had ended his campaigns in 57 with the siege and conquest of the town of the *Atuatuci*. He then led his army to winter quarters among nations (the *Carnutes*, *Turones*, *Andes*) living along the middle and lower *Liger* (*Loire*) valley, before departing for Cisalpine Gaul. It seems reasonable to assume that he sent Galba off from the site of the last victory and did not have him make the detour to the middle *Liger*.

For practical reasons, we again assume that the town of the *Atuatuci* was *Namur*. We assume, furthermore, that Galba skirted the *Ardennes Forest* on the western side, marching through areas over which Caesar had previously established his control. From the *Axona* (*Aisne*) River southward to *Vesontio* (*Besançon*) he would have retraced the route covered by Caesar in the spring of 57. From there, the route would have taken Galba across the *Jura Mountains* to *Lake Lemannus* (*Leman*) and to the upper *Rhone valley*. The distance along later Roman roads is 650 km, enhanced 810 km (508 mi). Galba was in no special hurry; his legion took along its full equipment (3.3.3), and it was a long march. Hence he would have traveled by normal marches (25 km/day). This amounts to 32 days, plus at least five days of rest. If he departed on 29 September, right after the surrender of the town of the *Atuatuci*, he would have arrived at *Octodurus* (*Martigny*) around 6 November 57.

⁸⁸ Clearly, Caesar did not want the triumphant ending of book 2 (2.35) to be dulled by the failure of Galba's mission, which took place after Caesar's departure for Cisalpine Gaul in mid- to late October 57. Therefore he postponed giving an account of it until the opening chapters of the following book.

After arriving, Galba fought several skirmishes with the native tribes of the Nantuates, Veragri, and Seduni, captured several of their forts, and forced them to surrender (3.1.4). This will have taken at least a week, to 13 November. He then established winter quarters for two cohorts among the Nantuates (perhaps at later Acaunum, modern St Maurice) and for the rest of the legion in one part of the village of Octodurus, which he fortified with a wall and trench (3.1.4–6). This might have taken another few days. After several days in these winter quarters but before the grain supply had been fully secured and the fortifications completed (3.2.1, 3.1)—perhaps ten days after accepting the natives' surrender and moving into Octodurus—Galba's legion was attacked by Veragri and Seduni. On c. 23 November, in a furious battle, the Romans eventually routed the enemy (3.2.1–6.3). But Galba was doubtful about sufficient supplies and security. On the next day (24 Nov.), he left the area, marched to the Roman Province (we do not know where) and spent the winter there.

Roman politics and Caesar's departure for Gaul (56 BCE)

Caesar's involvement in Roman politics. In Gaul, a new war was brewing (winter 57/6, 3.7–8). Caesar's legate, Publius Crassus, who had accepted the submission of the Veneti and other maritime nations in the autumn of 57 and was wintering in the territory of the Andes, sent information about developments that Caesar interpreted as rebellious and requiring a forceful response. Since he was compelled to remain in Italy longer than he would have preferred, he instructed his legates to construct a fleet of war ships in the Liger (Loire) River (3.9.1) and to hire the experienced crews needed to put it in service (3.9.1). There is no indication of when Caesar received the information from Crassus and when his orders went out. Nor do we have any clue about the time when Caesar started his campaign.⁸⁹ He departed 'as soon as the season allowed' and hurried to join his legions (3.9.1–2)—that is, as soon as the roads became passable and enough forage was available to feed the horses and draft animals (the grain for the legions could be supplied from winter storage), which was usually around mid-June of the solar year. The question is how long political dealings and negotiations detained Caesar in Cisalpine Gaul.

The spring of 56 was crucial for Caesar's plans. His enemies in the Senate were hoping to gain election to one or both of the consulships of the succeeding year (55) with the aim of replacing him as governor of Gaul, since, as he had

⁸⁹ When the Veneti realized that they were facing a war, they mowed their fields and brought the grain into their towns, but we cannot draw the inference that the grain was ripe, which would give us an approximate time of year. On the contrary, as Kraner et al. (1961) 254 point out, *frumenta* (as opposed to *frumentum*, the grain after threshing) means the corn with the grains; hence the Veneti and their allies mowed their fields before the grain was ripe, not least to deprive Caesar of supplies.

claimed himself, Gaul was pacified and the job was completed.⁹⁰ In addition, with Cicero's support, those same enemies were planning to renew debate about a law on land distribution in Campania, which Caesar had enacted in the face of stiff opposition in his consulship in 59, and which was of vital interest to Pompey. In order to prevent both these hostile agendas from being realized, Caesar needed to shore up his support in Rome, and the most effective way to do that was to renew and strengthen his alliance with Crassus and Pompey. He achieved this through private negotiations that took place first on c. 13 Apr. (20 Mar., Jul.) at Ravenna (with Crassus)⁹¹ and later on c. 18 Apr. (25 Mar., Jul.) at Luca (with Pompey),⁹² out of which the famous agreement of Luca emerged.⁹³ Caesar could not possibly leave Cisalpine Gaul before these agreements were concluded and secured by insuring that other influential persons would support them. In fact, Pompey placed so much pressure on Cicero that the latter decided not to participate in a Senate debate on the Campanian issue that had been called, upon his own proposal, for 15 May (20 Apr., Jul.).⁹⁴ The news that this debate ended without any action being taken would have reached Caesar in Ravenna at most four days later, on 19 May.⁹⁵ Although the

⁹⁰ See *Gal.* 2.35; 3.7.1.

⁹¹ Cic. *Fam.* 1.9.9, with no indication of date. Ward (1977) 262 n. 1 plausibly suggests that Crassus visited Caesar in Ravenna later than assumed by most scholars, after the Senate meeting on 5 Apr. (12 Mar., Jul.), in which the Campanian issue was hotly debated (Cic. *Q.fr.* 2.6.1) and Cicero proposed that another debate be held on 15 May (20 Apr., Jul.). If Crassus left Rome on 6 Apr., the day after the attested meeting of the Senate, he could easily have reached Ravenna for a consultation with Caesar on c. 13 Apr. (seven days of travel to cover the c. 350 km (c. 218 mi) from Rome, at an average speed of c. 50 km (c. 31 mi) per day). This, in turn, allowed Caesar enough time to journey from Ravenna to Luca for his meeting with Pompey on c. 18 Apr. (leaving Ravenna on 14 April and covering the c. 265 km to Luca in four or five days).

⁹² Cic. *Fam.* 1.9.9. Cicero met Pompey on 8 Apr. (15 Mar., Jul.), shortly before Pompey was expected to leave on 11 Apr. for state business in Sardinia (Cic. *Q.fr.* 2.6.3). Instead, Pompey turned up a few days later in Luca to consult with Caesar. Presumably he arrived there on about the 17th, if he left Rome, as planned, on the 11th (seven days of travel to cover c. 325 km (203 mi)). For the political issues, see Gelzer (1968) 116–25 and Ward (1977) 259–66.

⁹³ That agreement sealed the renewed alliance and arranged for Pompey and Crassus to have, after their second consulship, which was planned for 55, provinces and armies comparable to Caesar's.

⁹⁴ Cic. *Fam.* 1.9.8–12.

⁹⁵ This seems to be an adequate amount of time for a fast messenger to cover the distance from Rome (c. 350 km, c. 218 mi), to judge from *Civ.* 1.3.6, where two senators requested six days to travel to Ravenna and back in order to inform Caesar of recent developments and bring back his response. Similarly App. *BC* 2.32 reports that Curio took three days in late Dec. 50 to bring a letter of Caesar's from Ravenna to the Senate in Rome. Cf. SHA *Max.* 25.2.

agreements worked out at Ravenna and Luca were not made public, it is likely that considerable numbers of senators sought a meeting with Caesar at the time of the negotiations.⁹⁶ Caesar thus probably remained involved in hectic diplomacy for, say, two additional weeks, before he was satisfied that he had brought affairs in Rome sufficiently under control to be able to leave for Gaul, perhaps in the first days of June.⁹⁷

Caesar's travel to Gaul. Caesar hurried to join his army, presumably in the area of the lower Liger (Loire), where his soldiers had been constructing the fleet, perhaps assembling it near the town of the Namnetes (later called Portus Namnetum, modern Nantes). We do not know what route he took and whether he preferred to travel in Gaul as much as possible through friendly territory, which might have required detours. We assume that he left from Ravenna, traveled on the most direct road to Ocelum, went across the Mt Genève Pass to Valentia (Valence), crossed into independent Gaul at the site of later Lugdunum (Lyon), and then took the most direct route via Decetia, Avaricum, and the town of the Turones (later Caesarodunum (Tours)) to Nantes. The distance from Ravenna to Lugdunum is 900 km (562.5 mi), of which 285 km (178 mi) lead through mountains. The distance from Lugdunum to Nantes is c. 650 km, augmented c. 810 km (c. 510 mi). Assuming further that Caesar was traveling with an escort of cavalry and was not able to achieve record speeds because of the distance, we calculate an average of 80 km per day, except for the portion over the Alpine passes, where he would have slowed down to 60 km/day. The entire trip would thus have taken him c. 23 days, plus at least three rest days, hence c. 26 days. Thus, if he set out on c. 4 June, he could have arrived in the area of Nantes by 29 June. This is the last date we consider reasonably firm. The rest is vague.

Caesar's war against the Veneti (56 BCE)

Realizing that Caesar was determined on war (3.9.3), the Veneti began to prepare for war as well. Apparently they had not expected this development.⁹⁸

⁹⁶ Reports in Plutarch (*Caes.* 21.2) and Appian (*BC* 2.17) of 200 senators and 120 lictors converging on Luca are certainly vastly exaggerated and may assign the wrong place to the gathering. Still, behind them may lie the fact that at a time when the prospects of Caesar's opponents began to look less promising, as revealed by the Senate meeting of 15 May, many senators wanted to be sure not to be identified as supporters of the wrong side.

⁹⁷ Crucial decrees providing for the financing of Caesar's legions and the number of his legates were passed soon after the meeting of the Senate on 15 May (*Cic. Fam.* 1.7.10; *Prov.* 28; *Balb.* 61). We do not know the date(s) of those decrees, but if Caesar expected the debate to come up soon, this would have provided him with a powerful motive for staying longer to lobby for passage.

⁹⁸ The Veneti seem to have considered their detention of the Roman envoys a bargaining chip. Whatever the exact circumstances, it seems clear that Caesar, having declared Gaul

Their preparations, as described by Caesar (3.9.8–10), including the establishment of a network of alliances, took time. Caesar himself first dispatched three of his legates to other areas of Gaul and to Aquitania to cut off potential support for the ‘rebels’ (3.11; see below).⁹⁹ His fleet apparently was not yet ready, and the ships he had commandeered from ‘pacified’ maritime nations had not yet assembled (3.10.5). So he started the campaign with his land forces, leaving perhaps a week after his arrival (July 8). He hurried in a few days to the nearby territory of the Veneti and tried to break their resistance by taking their towns—a strategy that, for specific local reasons, was exceedingly difficult to execute and had little effect, even when successful (3.11.5–14.1). Having wasted much effort on several demanding sieges (described in 3.12.3–4), each of which must have taken considerable time (rest of July and August), Caesar decided to wait for the fleet—which for most of the summer had been prevented from sailing by continuous bad weather (3.12.5). So, toward the end of the summer, the fleet finally arrived, and a big naval battle took place. The Romans won by cleverly outmaneuvering and paralyzing the enemy ships, which were superior in numbers and brute force (3.14.2–15). With their fleet destroyed or incapacitated, the Veneti and their allies along the coast had no way of continuing the war and capitulated (3.16). By the end of the summer (say, late Sept. = late Aug., Jul.), the war was over.

Sabinus’ war against the Venelli (56 BCE)

Meanwhile, Caesar’s legate, Titurius Sabinus, was conducting a campaign against the Venelli in modern Normandy. The distance from Nantes to roughly the middle of their territory was about 265 km (165 mi), enhanced 330 km (207 mi), which Sabinus would have covered in two weeks (including two rest days). This hardly matters, however, because all Caesar tells us about Sabinus’ successful campaign is that it ended in a wild enemy attack on Sabinus’ camp, induced by a stratagem, and a total rout of the enemy (3.18–9), which prompted all nations involved to capitulate (3.19.5–6). Chronologically, this battle roughly coincided with Caesar’s naval battle against the Veneti, because each heard at the same time about the other’s victory (3.19.5). This battle, too, should thus be dated to late September.

pacified just a few months before but having to demonstrate to the Roman public why he still needed to continue in his command, needed a *casus belli* and found it in this act of the Veneti. He had done the same in starting the war with the Helvetii two years earlier. For insightful comments on this issue, see Maier (1978) 55–9.

⁹⁹ We do not hear anything more about the mission of Labienus, who was sent with a cavalry contingent to the east to shore up the support of the Remi and other Belgic nations and to prevent German forces from crossing the Rhine (3.11.1–2).

Publius Crassus' campaign in Aquitania (56 BCE)

Caesar's legate Crassus, sent to Aquitania to prevent the formation of a large hostile alliance that might assist the rebellious Gauls (3.11.3), directed his operations against three nations: the Sotiates, Vocates, and Tarusates. Aware that the Aquitanians had inflicted defeats upon the Romans in the past (3.20.1), Crassus prepared himself carefully, organising supplies, enlisting cavalry and infantry auxiliaries, and re-enlisting veterans (*evocati*) from colonies in the Roman province of Transalpine Gaul (3.20.2). We do not know what route he took. Invading enemy territory without having one's forces assembled and integrated seems risky. To meet at a predetermined assembly point inside enemy territory (as most scholars seem to think he did), appears foolhardy. Nor was Crassus in a great hurry, there being no emergency. Hence we assume that he skirted Aquitania, went to Tolosa (Toulouse, the border town in the province), assembled there his auxiliaries and *evocati* (all of whom were alerted by advance messengers), and then entered Aquitania and marched toward the territory of the Sotiates. The distance from Nantes to Tolosa on later Roman roads is 540 km, augmented 675 km (422 mi), a march of 31 days (including four rest days). If he left Nantes on 8 July, at the same time as Sabinus and Caesar, he would have arrived in Tolosa on 7 August. After a good week of final preparations, he would have begun his invasion, say, on 17 August, aiming for Sotium.

The (augmented) distance from Tolosa to Sotium is c. 180 km (113 mi), eight days of normal march (including one rest day). But Crassus was attacked on his march, apparently fairly close to Sotium. In a fierce battle his troops repelled the enemy (3.20.3–21.2). He then tried to assault the town directly from his march, perhaps on the 9th day, 25 August (3.21.2). This attack failed, and a formal siege began, impeded by sorties and tunneling on the part of the Sotiates, and lasting several days. Seeing the futility of their efforts, the enemy finally capitulated (3.21.3–22), perhaps after a week (4 Sept.). Crassus then turned his attention to the Vocates and Tarusates, to the southwest of the Sotiates. Apparently, the enemy had had time to organize a wide-ranging system of alliances and collect a large number of troops, even soliciting support from tribes in Spain across the Pyrenees (3.23.1–6). Led by commanders experienced in Roman-style warfare, they tried to avoid a pitched battle and disrupt Crassus' supply lines. In order to prevent them from gaining even more strength, Crassus eventually decided to force a decision, attacked the enemy camp, and won a resounding victory (3.23.7–26.6). Upon news of this Roman success, most Aquitanians capitulated (3.27.1) but, since winter (the end of the campaign season) was approaching (3.27.2), Crassus was not able to pursue the distant nations that refused to join the general surrender. Putting all this vague information together, we assume that the final battle took place in late September.

Crassus then presumably marched north again, this time on a more direct route, to rejoin the rest of Caesar's army. He would have arrived in the area between Liger (Loire) and Sequana (Seine), where Caesar was placing his army's winter quarters (3.29.3), about four weeks after leaving the site of the final battle in Aquitania, in late October.

The end of the campaign season (56 BCE)

The campaign against the Morini. Caesar himself used the time after his victory over the Veneti for a punitive expedition against the Morini, who had so far shown no willingness to submit. After initial successes, this campaign, which began late in the season (in Oct.), became mired in the forests and swamps into which the Morini withdrew, and it finally had to be broken off because of the onset of the rainy season (3.28.1–29.2). This may take us to the end of October. In the first half of November, Caesar's legions built their winter quarters (3.29.3).

Conclusion. It seems likely that the three campaigns, the one led by Caesar himself (against the Veneti and their allies), by Sabinus (against the Venelli and their allies), and by Crassus (against Aquitanian nations), all began in early July and ended with decisive battles in late September.

Gallic War, Book 4: 55 BCE

This book, which recounts such momentous events as Caesar's victory over German invaders of Gaul, the first crossing of the Rhine into German territory, and the first invasion of Britain, is almost devoid of precise chronological markers. Exceptions are (1) a comment that Caesar spent a total of 18 days east of the Rhine (4.19.4), (2) a report on a storm linked with a full moon and spring tide that wreaked havoc on his fleet in Britain (4.29.1), and (3) a remark on the closeness of the fall equinox that prompted Caesar to hasten his return from Britain to Gaul (4.36.2). We know neither when he began his campaign in the spring, nor where exactly the battle with the Germans took place. The latter gap in our knowledge is especially troublesome because the location of that battle determines how much time was consumed by Caesar's first march across Gaul and whether or not an additional fairly long march to the site of the Rhine crossing was required. We thus have to rely on a series of inferences and assumptions and ultimately must test their plausibility by calculating back from the single fixed date, the full moon on the night of 15/16 Sept. (30/31 Aug.,

Jul.). We start by listing the sequence of events and estimating the likely time frames.¹⁰⁰

Preparations (55 BCE)

Caesar rejoins his army. Alarmed by news about a large-scale invasion of the territory of the Menapii along the lower Rhine by two German nations, the Usipetes and Tencteri, and its possible impact on the attitudes of the recently subjected Gauls (4.1–5), Caesar left Ravenna earlier than usual (4.6.1). Scholars commonly assume that this means early April: say, 19 April (7 April, Jul.), about six weeks earlier than in the previous year. This was too early to cross the Alpine passes. Hence Caesar traveled along the coastal road to the Rhone, as he did in his very first trip to his province in March 58, though from Ravenna, not Rome.¹⁰¹ The distance from Ravenna through the Po valley to the coast at modern Genua, then along the coastal road to the intersection with the Rhone, and along the Rhone valley to Lugdunum (Lyon) is c. 1,120 km (c. 700 mi). Caesar must have traveled with a bodyguard of cavalry; even under such circumstances, he was apparently able to maintain a daily average of at least 80 km.¹⁰² Including one rest day, he thus might have reached the border of independent Gaul in 15 days. The distance from there to Samarobriua (Amiens), where he may have joined his army and met with Gallic leaders (below), along later Roman roads is roughly 575 km, augmented 720 km (450 mi). If he continued with the same speed and allowed one more rest day, this leg of the trip would have taken him another ten days. He would thus have reached his army 25 days after his departure from Ravenna: by 15 May.

Preparations for the campaign. Since the news from Gaul had been alarming (4.1–5) and Caesar expected to be forced to conduct a campaign in the area of the Rhine, he might have decided to get a head start by ordering his army to assemble not in the lower Sequana (Seine) area, where they had spent the winter, but at a suitable location along the way, perhaps at Samarobriua. It is to this place, too, that he might have summoned the Gallic leaders by messengers sent ahead. Arriving there, Caesar found the news from the Rhine area urgent

¹⁰⁰ As usual, all dates correspond to the pre-Julian Roman civil calendar and may vary by \pm a few days. The conversion of Roman dates to Julian takes into account the fact that we now know, thanks to an inscription published in *AE* (1992) 177, that 55, not 54 as Drumann-Groebe (1906) surmised, was intercalary. Hence, the tables in Drumann-Groebe (1960) III.800–1 must be adjusted by the insertion of an extra 22 days after 20 Jan., Jul., = 23 Feb. of the Roman calendar, to take into account the inclusion of an intercalary month of 27 days after that date. This caused the normal 355 days in a Roman year to be increased by 22 (the 27 days in the intercalary month, minus the five days removed from 24–8 Feb.).

¹⁰¹ See nn. 25 and 27 above.

¹⁰² See text at nn. 25 and 27 above and the data in that entire section.

enough to cause great concern (4.6.2–4). He thus decided to launch his campaign immediately. The meeting with the Gallic leaders (4.6.5) might have taken place around 18–19 May. At that meeting Caesar ordered the Gallic leaders to send him cavalry. He departed when he had organized his grain supply and selected his cavalry from the contingents sent to him (4.7.1). It will have taken at least another ten days for the cavalry to assemble and the selection to be made. At the earliest, Caesar could have departed on 29 May for the area where the Germans were.

The defeat of the Usipetes and Tencteri (55 BCE)

We hear next that, when Caesar was a few days' march from the location of the Germans, he was met en route by envoys of their nations (4.7.2). We are not told where the Germans were or what route Caesar took. We do know, though, that upon meeting their envoys Caesar refused to allow them to stay in Gaul but discussed with them the possibility of relocating them in the territory of the Ubii across the Rhine; when the envoys at a later meeting expressed a willingness to consider that possibility, they asked for three days to negotiate with the leaders and council of the Ubii (4.11.2–3). They must, therefore, have been in a region close enough to the territory of the Ubii to cross the Rhine, negotiate, and return in a three-day span. Since the Ubii at that time lived roughly across from the Treveri,¹⁰³ this rules out the area settled by the Menapii on the lower Rhine, lower Meuse, and Waal, where the German invaders had spent their winter (4.4.7). Indeed, encouraged by some Gallic nations, the Germans had long left that area and moved south, into the territories of the Eburones and Condrusi, neighbors and dependents of the Treveri (4.6.2–4). By the time Caesar arrived in that region, they may even have entered the territory of the Treveri themselves.

At any rate, Caesar reports that he eventually attacked the Germans' camp, upon which they fled to the confluence of the Rhine and another river where most of them were massacred or drowned (4.14.1–15.2). The consensus of the manuscripts of Caesar's text identifies this other river with the Mosa (Meuse), but the evidence just presented offers good reasons to place these events not at the Mosa¹⁰⁴ but at the Mosella (Moselle) and thus near later Confluentes (Koblenz). Two additional arguments support this conclusion, although neither on its own is compelling. One is that the Germans had sent most of their cavalry across the Mosa to plunder and collect grain (4.9.3, 11.4). That force was not back on the fourth day when the rest of the German cavalry attacked Caesar's (below); hence the Germans whom Caesar met must have

¹⁰³ Decades later, Marcus Agrippa transferred the Ubii to the west bank of the Rhine, where the town at the site of later Cologne became their capital.

¹⁰⁴ The Mosa does not flow into the Rhine but into the Waal; for discussion of the ancient situation, see Pennacini (1993) 1039.

been south of the Mosa by a distance in excess of what could be covered by cavalry in two days. This is compatible with our reconstruction.¹⁰⁵ The second point in favor of the Mosella is that we are fairly certain about the area where Caesar crossed the Rhine (near modern Neuwied, a few kilometers north of Koblenz). The direct distance from the confluence of the Waal and Meuse to Neuwied by later Roman roads is at least 240 km, augmented 300 km (188 mi). If the battle had taken place at that river confluence, Caesar and his army, marching at the normal speed, with two rest days, would have consumed two weeks to reach the point of the Rhine crossing at Neuwied. We would expect him at least to mention this march, but in his narrative (4.16.1) he moves directly from the battle to the Rhine crossing.¹⁰⁶ At any rate, if our calculations for the campaign season taken as a whole have any merit, it is difficult to include in the available time frame of this summer an additional march of two weeks from the site of the battle to the site of the bridge.

¹⁰⁵ We do not know the location of the territory of the Ambivariti (mentioned only by Caesar and only here), to which the German cavalry supposedly went. But if our determination of Caesar's route is correct (below), he met the Germans for the first time when he was a four-day march from the area of Koblenz, that is, shortly before he reached the Rhine in the area of modern Cologne and from that point turned south. From there, cavalry could easily cross the Mosa in two days.

¹⁰⁶ Whichever site we choose, it is clear that Caesar omitted a great deal of topographical and other detail. As Pelling (1981) 750 points out, this is typical of Caesar's battle descriptions in general. The problems his narrative poses 'rest on Caesar's silence; they rest on topographical difficulties which we, with the aid of autopsy and detailed maps, can expose. That is surely the wrong approach. Caesar's immediate audience would find no difficulty in these silences. They would not know where the *Eburones* and the *Condrusi* were to be found; they would not know how far it was to the *Ubi*; they would not be able to tell exactly where Caesar built his bridge. Caesar could again safely simplify his account, and omit marches and movements which would complicate his narrative and confuse the reader. Whichever location we choose, it is clear that this is what he has done.' Pelling decides in favor of a northern site. We decide differently. We should add here that finds on a battle site discovered near Kessel in the southern Netherlands, dated to the first century BCE, include skeletons (including those of women and children) with cutting and stabbing marks, spearheads, swords, and a Gallic helmet. Virtually all these finds were made in an ancient river bed. The Dutch archaeologist Nico Roymans, who has re-examined these finds, suggests that this is the site of Caesar's massacre of the two German nations, and we thank Prof. Roymans for sharing his article with us before publication (2017). This suggestion certainly must be taken seriously, but since very few items link the finds directly to Romans, other explanations are worth entertaining for several reasons. First of all, Caesar's armies are known to operated in these areas on other occasions, in campaigns against the Menapii and Eburones. Secondly, as noted above, to locate the battle site so far to the north necessitates a march of at least two weeks to the site of Caesar's crossing of the Rhine, a march that is wholly absent from the narrative. The debate, entered into a century ago by Holmes (1911) 691–706 and Walker (1921), remains alive. We readily admit that the full publication of the finds at Kessel (currently in preparation) could possibly tip the balance in favor of Roymans' view and of the Mosa over the Mosella.

Based on that conclusion, we can calculate the time required to reach the Germans. The distance from Samarobriva, which we presume Caesar left on c. 29 May, to Koblenz (via later Cologne) is 440 km, augmented 550 km (c. 345 mi). Marching at the normal speed of 25 km/day, with three rest days, Caesar would have reached Koblenz in 25 days, on 22 June, and the area of the first meeting with the German envoys (4.7.2) four days earlier, on 19 June.

At that meeting, the envoys asked for three days to bring his proposal to their council and return with the response (4.9.1). Refusing their request that he not advance in the meantime (4.9.2), Caesar marched on; on the third day (22 June) he was only 12 R mi from the Germans (4.11.1). They again asked for three days to negotiate with the Ubii, but Caesar granted only a one-day truce and promised not to advance farther than four miles to a source of water (4.11.3–4). On that same day, the German cavalry attacked and defeated Caesar's (4.12). Now fully convinced of the Germans' bad intentions, Caesar on the very next day (23 June) detained a large number of German leaders who had come to apologize and renew negotiations, covered 8 R mi to the German camp and surprised, routed and massacred the enemy (4.13–14), whose flight was stopped by the confluence of the Moselle and the Rhine (4.15.1–2; see above). Accordingly, the distance from the enemy camp to the rivers was, at most, a few miles, and when Caesar met for the second time with the German envoys (12 R mi (c. 18 km) from their camp), he was less than a day's march from the rivers. If he continued at normal speed after his first meeting with the envoys, this first meeting took place at a distance of four marching days or roughly 100 km (62.5 mi) from the rivers.

The first expedition into German territory (55 BCE)

The construction of the first bridge over the Rhine. After the battle, Caesar returned to his camp. Even if his army emerged from the fight with the Germans almost unscathed (4.15.3), he needed to give his men some rest. During the next days, Caesar made his decision to cross the Rhine, and sent envoys to the Sugambri, demanding the surrender of the cavalry of the Usipetes and Tencteri that were off on a plundering raid at the time of the battle and had fled to them. He declined an offer of the Ubii to furnish boats on which his army could be ferried across the Rhine, choosing instead to build a bridge for which his engineers would have required some days to reconnoiter the best site and prepare the logistics (4.16). We assume that almost a week elapsed before Caesar had all the information he needed, and plans were ready to build the bridge. The actual construction thus began on c. 1 July and took ten days to complete, 'counting from the time when the wood began to be hauled in' (4.18.1).

Caesar's first excursion into Germany. After the bridge was constructed, Caesar crossed over on c. 11 July and spent 18 days on the German side of the Rhine

(4.19.4). He thus returned over the bridge on c. 29 July, tore it down (4.19.4), and prepared his army for the return march. This presumably would have taken at least another three days, to 1 August. Support for this chronology can be derived from two unfortunately very vague pieces of information. One is that, east of the Rhine, Caesar's army cut the grain in the fields of the Sugambri, who had fled into deep woods for safety. Hence the grain was presumably ripe or almost so, which would suggest mid- to late July.¹⁰⁷ The other indication of chronology is that by the time Caesar returned to Gaul 'very little of the summer remained'.¹⁰⁸ Summer (*aestas*) here denotes the season suitable for campaigning. In this context, the time is likely to be mid- to late August, which in 55 corresponded to mid-September of the Roman civil calendar, and the lateness in the season may be slightly overstated.¹⁰⁹

The first expedition to Britain (55 BCE)

Caesar's return to the Atlantic coast and preparation for an expedition to Britain. Despite the late season, Caesar decided to make an expedition to Britain (4.20). He gave orders for a single warship under the command of Gaius Volusenus to reconnoiter the coast of Britain for a suitable landing place and commanded the fleet of warships and troop transports to assemble (4.21.1, 4, 9). On c. 1 August, he departed from the Rhine for the territory of the Morini on the Atlantic coast opposite Britain. The harbor he chose was most likely at modern Boulogne-sur-mer.¹¹⁰ Since the distance from Koblenz to Boulogne exceeds that to Samarobriua (above) by c. 110 km, augmented 140 km (c. 86 mi), the march westward required seven more days (including one rest day). Caesar would thus have reached Boulogne 32 days after leaving Koblenz, which puts his arrival on c. 3 September. At that point, Caesar must have devoted a few days to settling diplomatic matters (several British nations and the Morini offered their surrender) and sending off the bulk of his legions under the command of his legates Sabinus and Cotta to campaign against the Menapii (4.21.3–22.6). With Caesar's departure (4.23.1) and landing on the same day (4.23.2–6), we

¹⁰⁷ At 1.16.1, in the second half of June, the grain had not yet been ripe, while at 1.40.11 (dated to the first half, or middle, of August) the grain was ripe. Hanson (1998) emphasizes that destruction of crops did only temporary damage, but the impact could still be severe, depriving the population of food supplies for the winter and seeds for the subsequent year's harvest, and making them dependent on the support of others.

¹⁰⁸ 4.20.1.

¹⁰⁹ In the subsequent year (autumn of 54), a similar remark (5.22.4) concerns a date around 29 Sept. (3 Sept., Jul.).

¹¹⁰ Caesar does not specify the exact place. In addition to Boulogne (in antiquity variously called Gesoriacum, Portus Itius (5.2.3 and 5.1), and Bononia), other candidates that have been suggested are Wissant or Calais. For discussion, see Holmes (1907) 552–95; (1911) 432–8.

finally gain firm chronological footing thanks to an astronomical marker (see next section).

Caesar's landing in Britain. According to 4.23.1, on the day of his departure, Caesar set sail 'around the time of the third watch' (i.e., shortly after midnight) and 'around the fourth hour of the day' (between c. 8:25 and 9:36 am) arrived off the coast of Britain, where landing was impossible because the enemy had occupied the heights (4.23.2). Therefore, his ships lay at anchor off the cliffs (of Dover) until the ninth hour (between c. 2:25 and 3:36 p.m.), when a favorable wind and tide carried Caesar's ships 9 R mi forward until they landed on a 'wide and open beach' (4.23.4–6). The Britons stoutly opposed the landing but were eventually forced back and fled (4.24–26). On the next day, they submitted (4.27). Then, according to Caesar's text at 4.28.1 (*post diem quartum*), four days (by inclusive reckoning) after Caesar's arrival, his cavalry transports approached but were driven back by a sudden storm (4.28). On the night following that day was a full moon, causing a spring tide (4.29.1). That tide, combined with the storm, badly battered Caesar's fleet and made most ships incapable of sailing (4.29.2–4). Here at last the full moon on the night of 15/16 September (30/31 Aug., Jul.) provides a fixed date, indirectly confirming that our calculations of dates earlier in this campaign season must be roughly correct. The cavalry failed to land on 15 September, and if Caesar set sail three days earlier, he must have departed from Gaul and landed in Britain on 12 September (27 Aug., Jul.).

The fixed point established by the full moon at 03:28 U.T. (Universal Time) on 31 August, Jul. is inalterable, but suspicion may fall on the interval of four days that is said to separate the date of Caesar's landing from the failed attempt of the transports to make landfall on 30 August, Jul.¹¹¹ The narrative as transmitted in the MSS presents this contradiction: whereas the text at 4.23.6 clearly implies movement of Caesar's ships to the northeast around the South Foreland and a landing on the beach somewhere between Walmer and Deal,¹¹² studies by hydrographers have conclusively demonstrated that the tidal flow at the 9th hour on 27 August, Jul. was at its maximum to the southwest and should have carried Caesar's fleet in the opposite direction.¹¹³ The problem vanishes, however, if at 4.28.1 we adopt the simple emendation of

¹¹¹ So Collingwood and Myres (1937) 37.

¹¹² Dio 39.51.1–2 has Caesar's fleet 'sail around a certain projecting headland' before it made its landing in the shallows.

¹¹³ See Holmes (1907) 605–11 and Olson and Doescher (2008) 20–2. We thank Donald Olson for sending us an offprint of his article and for discussing his findings with us by email, and we also thank Colin Bell of the UK National Oceanography Centre, Liverpool, for confirming that the direction of the tidal flow must have been to the SW at the ninth hour on 27 Aug.

‘VIII’ for ‘III’ and have Caesar land on 23 August, Jul. (eight days by inclusive reckoning ahead of the storm on 30 August). A recent study has proposed that revised date for Caesar’s landing on the grounds that on that day tidal conditions fit Caesar’s description perfectly.¹¹⁴ That is, on 23 August, the tidal stream began to turn to the NE at 1:25 p.m., and by the beginning of the ninth hour the tide was running NE and accelerating.¹¹⁵ Under those conditions a landing in the vicinity of Deal is precisely what is to be expected. We assign, therefore, Caesar’s landing to 23 August by means of the slight correction to the text at 4.28.1, and the surrender of the Britons will have taken place on 24 August. The delay of seven days before the transports set out to join Caesar can easily be accounted for by remembering the effect adverse sailing weather can have. For instance, approximately one year later, foul weather prevented Caesar from setting out on his second British expedition for approximately 25 days (5.7.3).

Caesar’s stay in Britain and return to the Continent. Perceiving Caesar’s difficulties, the Britons renewed their resistance (4.30). For a few days (a week?), in anticipation of their attack, Caesar and his troops collected grain and repaired the ships (4.31). On one of these days, one of Caesar’s legions was attacked by the Britons but saved by Caesar’s timely intervention (4.32, 34.1–3). Several days of storms followed, during which the Britons prepared an attack on Caesar’s camp (4.34.4–5). Caesar then defeated them in a battle in front of his camp (4.35). On the next day, Caesar accepted the Britons’ request for peace (4.36.1). Realizing that the equinox was close, and fearing worsening weather conditions, on the next morning Caesar sailed back to Gaul (4.36.2–3). The autumnal equinox in that year was on 13 October (26 Sept., Jul.). We may thus surmise that Caesar returned around the beginning of October.

End of the campaign season. On the return voyage, two of Caesar’s transports missed the harbor, landing a bit to the south. When the men were on their way to rejoin the army, they were attacked by Morini and had to be rescued

¹¹⁴ Olson and Doescher (2008).

¹¹⁵ Olson and Doescher (2008) 22–3. Also, as shown by the charts on p. 22, on 23 Aug. the water level at Dover would have been falling between 5 and 7 p.m., just before sunset, at the time when the Romans were forcing their way to shore in the face of stiff resistance from the Britons (4.24–6). Falling water is what we find described in an anecdote told by V. Max. 3.2.23b, illustrating the heroism of one of Caesar’s soldiers on the occasion of the landing. In Valerius’ account, the receding water level made possible a sudden surge of British fighters, threatening the position occupied by the Romans just off shore. Clearly this must be a description of the landing in 55, not the one in 54 when ‘no enemy was to be seen’ in the area of the landing (5.8.5). Tidal conditions on 27 Aug. do not at all fit Valerius’ narrative because just before sunset on that date the water level was rising, not receding, and achieved high water at 8:30 p.m.

by a relief force of cavalry (4.36.4–37.4). On the next day, Caesar sent Labienus on a punitive expedition that resulted in the surrender of the Morini (4.38.1–2). Presumably by the middle of October, Caesar settled his troops in winter quarters among the Belgae (4.38.4), and towards the end of that month, the Senate in Rome decreed a thanksgiving celebration of 20 days (4.38.5). Contrary to his past practice, Caesar delayed his departure for Cisalpine Gaul until after the first of the new year, departing probably in early January 54 (mid-December 55, Jul.).¹¹⁶

Gallic War, Book 5: 54 BCE

This book contains a reference to an astronomical event (the fall equinox, at 5.23.5) that gives us a firm date (23 Oct. = 26 Sept., Jul.) before which Caesar returned from his second expedition to Britain. In addition, thanks to the circumstance that Marcus Cicero's younger brother Quintus joined Caesar as a legate in this year and sent news from the front, we are better informed about some events in 54 than we are for any other year of the Gallic war. Precise or approximate dates supplied by Cicero's correspondence help us pinpoint with some accuracy the timing of both Caesar's landing in and departure from Britain. Furthermore, thanks to another of Cicero's letters, we can estimate the likely date of Caesar's departure from Ravenna in the spring. Otherwise, we must rely upon the usual methods of measuring distances and allotting sufficient time for marches—an effort that is complicated by the fact that we do not know the precise location of the winter camps that are the centres of dramatic action in the second part of the book.

The second expedition to Britain (54 BCE)

Caesar's departure from Ravenna. At the end of the previous campaign year, Caesar had left his troops in Belgic territory, on or near the Atlantic coast, and he had departed for Cisalpine Gaul much later than usual, probably in early January 54 (mid-Dec. 55, Jul.). Presumably he arrived in Ravenna about four weeks later, in early February (mid-Jan., Jul.). In the spring of 54, after he had completed routine business in Cisalpine Gaul, he spent time in the neighboring province of Illyricum, dealing with a security issue (5.1.5–9) and later attending to the judicial circuits (5.2.1). He then returned to Cisalpine Gaul (5.2.1) and set out from there to rejoin his army across the Alps. During the course of that journey, he met up with his new legate Quintus Cicero, younger brother of the orator Marcus, in the vicinity of the town of Placentia (Piacenza). This we

¹¹⁶ 5.1.1. Part of the reason for his late departure may have been his concern with planning the second expedition to Britain and his desire to supervise the design of the ships that his legions were ordered to build over the winter (5.1.1–4).

learn from the fact that on 2 June (10 May, Jul.), Marcus Cicero received in Rome a letter dispatched from Placentia by Quintus, who was on his way to join Caesar's staff,¹¹⁷ and on the same or the next day, Marcus received another letter from Quintus together with one from Caesar.¹¹⁸ Both Caesar's letter and Quintus' second one, it has recently been argued, were most likely dictated en route, c. 50 km north of Placentia, between the town of Laus Pompeia and an attested station for changing horses located at the ninth milestone farther along the road connecting Placentia to Mediolanum (Milan).¹¹⁹ Since a letter carrier could easily have covered the distance from that locale to Rome (c. 610 km or 380 mi) in nine days, the letters must have been dispatched c. 24 or 25 May (2 or 3 May, Jul.),¹²⁰ and we can use this information to calculate the approximate date on which Caesar left Ravenna.¹²¹ Assuming that Caesar traveled with a light escort, at an average rate of c. 80 km per day, he would have required five days to cover the 360 km (225 mi) from Ravenna to the locale c. 50 km north of Placentia from which his letter and Quintus' were

¹¹⁷ Cic. *Q.fr.* 2.14.1. A previous letter (2.13.1), sent by Quintus from Ariminum and received by Marcus in May, indicates that Quintus traveled from Rome to Cisalpine Gaul by way of the via Flaminia. From Ariminum, he would have taken the via Aemilia to Placentia.

¹¹⁸ Cic. *Q.fr.* 2.14.1.

¹¹⁹ This interpretation is the brilliant solution offered by Linderski (2015) 293–4 to make sense of the puzzling statement that Caesar's and Quintus' letters were 'sent from Blandeno' (*datas Blandenone*). No town bearing the name Blandeno is to be found in the vicinity of Placentia. Linderski unravels what presumably is a corruption by positing that Quintus described the letters as having been 'sent en route from Laus to the 9th milestone' (*datas ab Laude ad nonum*). The journey by way of Mediolanum adds c. 11 km, and we cannot say why Caesar did not select the slightly shorter route that branches off the road connecting Placentia with Mediolanum c. 18 km north of Placentia. It was most likely during this journey of approx. 17 days from Cisalpine to Transalpine Gaul (20 May–5 June) that Caesar composed his treatise in two books on Latin style, *De analogia* (Suet. *Jul.* 56.5); see Garcea (2012) 24–6.

¹²⁰ This assumes that the letter carrier started c. 50 km north of Placentia and took the via Aemilia from Placentia to Ariminum (c. 260 km) and the via Flaminia from Ariminum to Rome (c. 300 km), covering c. 610 km (c. 380 mi) at an average rate of c. 70 km (c. 44 mi) per day. Linderski (2015) 285 allows eight or nine days for the journey, which he underestimates slightly as c. 582 km.

¹²¹ Linderski (2015) 284–5 thinks that Caesar went from Illyricum (Aquileia) directly to his army, without making the detour to Ravenna. We disagree. Caesar does not say that after completing his business in Illyricum he left to join his army. On the contrary, he explicitly states that he returned from Illyricum to Cisalpine Gaul and left from there to join his army (5.2.1–2). Ravenna was customarily his winter headquarters. He would have had ample reason to return there to make last minute preparations and to take along what he needed for a long season of warfare. Moreover, for once, no war was brewing in Gaul, and Caesar was, therefore, in no great hurry.

dispatched and received by Marcus Cicero in Rome on 2 June. Thus his departure date from Ravenna was c. 20 or 21 May (27 or 28 Apr., Jul.).

Caesar's arrival in Portus Itius and landing in Britain. Before we undertake a reconstruction of Caesar's journey onwards from 24 May, it is desirable first to determine the date of his landing on the British coast since that important piece of information can be recovered with some degree of certainty. Once we have established that fixed point in the campaign, it will permit us, in turn, to work our way back to the probable date on which Caesar arrived at Portus Itius (Boulogne), his port of departure for the crossing of the English Channel. We shall then have a fixed number of days stretching back from that point in time to 24 May within which to assign Caesar's various activities before he joined his fleet.

Three letters in Marcus Cicero's correspondence shed light on the chronology of Caesar's second invasion of Britain. (1) In a letter written on 27 July (3 July, Jul.) in Rome, Marcus surmised, based on a letter he had received from Quintus, that his brother, about to depart when he wrote, was already in Britain.¹²² Since reliable and abundant evidence establishes 27 days as the minimum number of days required for a letter to be brought to Rome from the British coast,¹²³ we can reasonably allow a minimum of 26 days for a letter to travel to Rome from the port across the Channel (Portus Itius), from which Caesar completed his crossing in less than 24 hours (5.8.2, 9). Hence Quintus' letter informing his brother of his imminent departure can have been written no later than 2 July (8 June, Jul.). This gives us a date by which all preparations for sailing must have been made.¹²⁴ (2) In another letter, one written in August,¹²⁵ Marcus expresses relief at having received a letter sent by Quintus announcing his safe arrival in Britain. Since Marcus mentions how anxious he had previously been about the dangers posed by the crossing and that he felt greatly reassured by Quintus' letter,¹²⁶ that letter must be the first one Marcus

¹²² *Att.* 4.15.10.

¹²³ See text at n. 51 above.

¹²⁴ Quintus' departure was, in fact, delayed by adverse weather for approximately 25 days (5.7.3), but when Marcus wrote to Atticus on 27 July, he had no way of knowing that his brother's expectation of sailing in early July had not been fulfilled.

¹²⁵ *Q.fr.* 2.16. This letter must have been written in Aug. (after 27 July and before 2 Sept.) as revealed by the statement in 2.16.3 that Cicero expected to be defending Scaurus 'straight away' (*statim*), in a trial that ended in an acquittal on 2 Sept. (*Asc.* 18.3 Clark). *Att.* 4.15.9 of 27 July mentions that Cicero expected to be arguing the case of Scaurus after his defense of Drusus, and Drusus' acquittal occurred on the day Cicero wrote 2.16 (explicitly stated in §3).

¹²⁶ *Q.fr.* 2.16.4: 'Oh how welcome your letter from Britain has been! I had been worrying about the ocean and the island's coast. What is coming now is not negligible but offers more hope than fear, and I am agitated more by expectations than by worry.'

received confirming a safe landing. Furthermore, in order for that letter to have arrived in Rome before the last day of August, the 29th, it had to have been dispatched from Britain no later than 2 August since, as noted above, a minimum of 27 days was required for a letter to reach Rome.¹²⁷ Hence 2 August is the latest possible date for Caesar's landing. (3) Lastly, on 13 September (18 Aug., Jul.), Marcus received in the town of Arpinum (c. 115 km SSE of Rome) a letter that Quintus had sent from Britain on 10 August (17 July, Jul.).¹²⁸ That letter is of note because it attests in the text of the letter itself a date on which Quintus was present in Britain. It thereby confirms the conclusion based upon letter no. 2 that Quintus had arrived by 2 August at the latest. The date of 10 August also happens to fit the account of activities that occurred during the days soon after the landing.¹²⁹

Turning now to Caesar's account of the crossing, he states that his forces reached the coast of Britain at about noon, on the day after he set sail at sunset on the previous evening, and that after making landfall, the troops established a camp (5.8.2–9.1). Then, after nightfall, in the third watch of the night, Caesar advanced 12 R mi toward the enemy, fought a successful engagement, gained control of a fortified enemy position, and constructed a camp. Those activities consumed the whole of the first full day after his landing on the previous day (5.9). On the morning of the second day of his foray into the interior, Caesar learned from a messenger that massive damage had been inflicted on his ships by a huge storm during the previous night (5.10). He returned immediately to the coast, ordering his army to follow with due caution (5.11.1).

It is tempting to attribute the extreme violence of the storm to its coincidence with a spring tide at either a new or full moon, as in the previous year.¹³⁰ This would provide a fixed date, and since Caesar reports that some time after daybreak on the day of his landing the tide turned westward after having previously carried him off course when the wind dropped around midnight (5.8.2–3), we can conclude that he crossed shortly before a new or full moon.¹³¹ In his

¹²⁷ Of course Quintus' letter is likely to have been composed some days earlier than 2 Aug. since a date as late as 29 Aug. for *Q.fr.* 2.16 will not allow enough time for Scaurus' trial to be completed by 2 Sept. when a verdict was reached. This is especially true in view of the fact that the trial was for extortion and so, by statute, had to be conducted in two separate and complete pleadings (*actiones*) by prosecution and defense.

¹²⁸ *Q.fr.* 3.1.13.

¹²⁹ As we shall see below, during the days immediately preceding 10 Aug., Caesar's army was occupied with repairing the storm-damaged fleet. Apparently Quintus did not mention the setback caused by the storm for reasons about which we can only speculate.

¹³⁰ This is the view of Kraner et al. (1960a) 23, already proposed by Napoleon III (1866) 198.

¹³¹ Holmes (1907) 729 remarks that the tidal conditions described by Caesar point to the coincidence of his landing with either a new or full moon. We thank Colin Bell of the UK National Oceanography Centre, Liverpool, for confirming by email that tides would have

account of a violent storm that hindered a landing of cavalry transports in 55, Caesar (4.29) explicitly comments on the contribution made by a full moon and spring tide to the intensity of the storm. Clearly, however, the date of the full moon on 14 August (21 July, Jul.), 54 is nearly two weeks too late to have been a factor in contributing to the intensity of the storm on the second night after Caesar's landing because, as we have seen, Caesar's forces must have landed by 2 August at the latest.¹³² We should, rather, place his landing in the days shortly before the new moon. The evidence of the tidal pattern on the night of Caesar's sailing, combined with the surge and storm on the second night after the landing in 54, allows us to place the arrival of Caesar's forces in Britain on roughly 29 July, two days before the night of the new moon on 30/31 July (6/7 July, Jul.). This reconstruction satisfies the requirement that Caesar's arrival had to precede 2 August (9 July, Jul.), the latest date for the dispatch of the letter sent by Quintus Cicero soon after his safe arrival. It also is to be noted that conditions at the time of the new moon in July 54 were favorable for a spring tide because the moon was at perigee on that day, standing at its third closest distance to earth for the whole of the year (357,825 km).¹³³

been nearly identical in the days preceding those phases of the moon and for modeling the tides at Dover at 1 a.m., 5 a.m., and 10 a.m., on a recent date corresponding to the lunar phase cycles of 4 July 54 BCE, Jul. The chart for 5 a.m. reveals that the tide had reversed direction from the early morning hours, and at approximately 1½ hrs after sunrise the current would have been moving at maximum force, in a southerly direction, parallel with the coast. This is in accord with the conditions Caesar describes: viz., after sunrise, his ships were carried back in the direction of their intended landing place to the south, but they had to be rowed vigorously to make land in the absence of a wind.

¹³² A firm date established by the letter attested by *Q.fr.* 2.16.3 and discussed above. This fact invalidates the conclusion of Brodersen (2003) 90–3, who puts Caesar's landing shortly before the full moon of 14 Aug. As supporting evidence, Brodersen lays emphasis on Caesar's description of the tides, without apparently realizing that the same general tidal patterns prevailed during the days leading up to a new moon. Brodersen's further contention that Caesar's march on the night after his landing (5.9.1) required the light of a full moon resurrects an argument made by Napoleon III (1866) 222 that was long ago refuted by Holmes (1907) 730. Not only did Caesar quite routinely set out from camp with his army during the third or fourth watch of the night, apparently without any relation to the phases of the moon, but the nights are exceptionally short in early July in the British Isles. Specifically, at the latitude of Dover, on 5 July 54 BCE, Jul. the sun set at 20:11 and nautical twilight ended at 22:09, followed by roughly only 3½ hours of full darkness. Darkness ended on the morning of Caesar's departure (6 July, Jul.) with the commencement of nautical twilight at 1:40 (SkyMap Pro 11). Hence soon after Caesar set out in the third watch (sometime between roughly midnight and 1:45), he would have been marching in ambient light leading up to sunrise at 3:38.

¹³³ Times of new moon (19:41 U.T.) and perigee (05:49 U.T.) on 6 July, Jul. calculated by SkyMap Pro 11.

Taking 29 July (5 July, Jul.) as the date of the landing,¹³⁴ we can assign Caesar's sailing from Portus Itius just before sunset on 28 July (5.8.2). A few days earlier, his departure was interrupted and temporarily delayed in reaction to the flight of Dumnorix, an Aeduan chieftain, who rode off with some of his native horsemen just when Caesar was ready to sail (5.7.4). Caesar stopped the embarkation and sent the cavalry in pursuit; Dumnorix resisted and was killed (5.7.6–9). Now if, on the earlier occasion, Caesar was planning to sail towards sunset as he did later on 28 July, we must set aside the day of Dumnorix's flight and at least one further day to accommodate the chase by the cavalry. Hence, this interruption will have occupied 26 and 27 July. Lastly, prior to 26 July, we are informed that adverse winds prevented Caesar from sailing for 'approximately (*circiter*) 25 days', during which time he settled affairs with Gallic leaders, many of whom were compelled to accompany him to Britain as hostages (5.5.4). The inclusion of the word 'approximately' virtually guarantees that 25 is a rounded number, and so we regard 23 as a reasonable estimate of the actual number of days that Caesar was kept in port by unfavorable weather, say from roughly 3 to 25 July. In that case, we can place his arrival at Portus Itius on c. 2 July (8 June, Jul.) at the latest.¹³⁵

Caesar rejoins his army in the spring. We now have two reasonably secure dates marking off a timeframe within which to situate events described in 5.2–5.4 (Caesar's departure from Cisalpine Gaul to his arrival at Portus Itius). On c. 24 May (1 May, Jul.), Caesar was en route in the Po Valley, roughly 50 km north of Placentia, on the road to Mediolanum. And on c. 2 July (8 June, Jul.), he arrived at Portus Itius. In between, he joined his army in their winter quarters on or near the coast of Gaul opposite Britain, inspected the ships built over the winter, and made a whirlwind march east to the territory of the Treveri and back. It is impossible to determine precise dates within the 39 days comprising that period, but we can try to establish at least roughly when Caesar was where.¹³⁶

¹³⁴ Rauschen (1886) 16, 56 n. 87 gives this same date. Holmes (1907) 730 placed Caesar's landing on the day of the new moon, which he erroneously assigned to 7 July, Jul., one day late.

¹³⁵ Hence Quintus' letter written at Portus Itius no later than 2 July, which is attested by *Att.* 4.15.10 of 27 July, must have been composed at about the time Caesar arrived, and this explains why Quintus gave his brother the impression that sailing would take place within days.

¹³⁶ Our estimate of the length of this period (1 May to 8 June, Jul.) closely agrees with the calculation made by Napoleon III (1866) 223–4 (36 days, from 22 May to 26 June, Jul.) and Holmes (1907) 727 (42 days, from 1 May to 11 June, Jul.). Since Napoleon's Julian dates were calculated according to the system of LeVerrier, which fails to take into account the correct number of days intercalated in 46, his dates are equivalent to 30 Apr. to 4 June, Jul. according to the system we follow.

What route did Caesar take to reach Gaul? Linderski speculated that Caesar would have taken the direct route over the Great St Bernard Pass,¹³⁷ but we consider this unlikely.¹³⁸ Instead, he may well have chosen the Little St Bernard Pass. Because of the time constraints in his schedule (see below), we think it unlikely that he took the longer route over the much lower Mt Genève Pass. If he proceeded by way of the Little St Bernard, he could have covered the c. 450 km (c. 280 mi) from c. 50 km north of Placentia to Lugdunum (250 km of which led through mountains) in six days and completed that phase of his journey on 29 May.

What was his destination when he continued on from Lugdunum? He had placed his legions in winter quarters among the Belgae (4.38.4), and since all legions were charged with building ships for the second expedition to Britain, the camps had to be near the Atlantic or along navigable rivers. We do not know how many camps there were in all or where they were placed.¹³⁹ The only camp that Caesar happens to mention in passing was in the territory of the Meldi (5.5.2) along the Matrona (Marne) River, near its confluence with the Sequana (Seine), c. 40 km east of Paris.¹⁴⁰ Since the ships built there sailed down the Matrona and Sequana but were unable to reach Portus Itius because of a storm (5.5.2), presumably no other winter quarter was placed along the Sequana. It thus would have been logical for Caesar to begin his inspection tour of all winter quarters with that among the Meldi, which must have been the first he could reach, and to continue his circuit from there. This allows us to calculate the approximate dates of his tour. The distance from Lugdunum to the area of the camp among the Meldi is c. 450 km by later Roman roads,

¹³⁷ Linderski (2015) 294 n. 40.

¹³⁸ *Pace* Linderski (previous note), Caesar's legate Galba had not secured control of that pass in the late fall of 57. In 54, Caesar was traveling with only a few officers and a cavalry escort. If his chief concern was fast and secure travel, he would not have risked another encounter with the hostile Alpine tribes that had almost wiped out his legate Galba with the eight cohorts under his command in the autumn of 57. Moreover, the Great St Bernard Pass is 8,100 ft (2,469 m) above sea level, hardly passable in the first half of May. The Little St Bernard Pass is lower (7,178 ft, 2,188 m) and was perhaps negotiable at that time.

¹³⁹ The need to find sufficient, suitable timber would have required a fairly wide distribution of the camps. Caesar apparently did not like to place single legions in winter camps (see his elaborate justification for doing so in the fall of 54: 5.24). Of the 600 transports and 28 warships built, only 60 were constructed by the soldiers occupying the camp among the Meldi, which, therefore, probably comprised a single legion. Perhaps there was one other camp with just one legion and three with two. Caesar left sufficient troops in each place to complete the tasks of building and outfitting the ships and sailing them to Portus Itius, while he took four legions on a whirlwind march to the Treveri and back.

¹⁴⁰ Meaux, the name of a commune in the metropolitan area of Paris, and Meldois, the name of the residents of that district, recall the name of the Meldi.

augmented c. 565 km (c. 350 mi). Caesar could thus have arrived at the first of the winter camps after seven days, on 5 June.

There followed a tour around all winter camps, with an inspection of the work done over the winter (5.2.2–3). We have no idea how long this took but, in view of the subsequent march to the Treveri and back (see immediately below) Caesar cannot have spent more than eight days on this tour.¹⁴¹ We assume, therefore, that on c. 13 June he arrived at Samarobriva, where he had presumably assembled the contingent he was going to take to the east (see next section).

March to the Treveri and back. The Treveri had not attended meetings of Gallic leaders Caesar had convened (5.2.4).¹⁴² He interpreted this as a sign of resistance, if not outright rebellion, and decided to forestall trouble by making a show of force in their territory. If the troops Caesar intended to lead on that expedition had been ordered ahead of time to assemble in Samarobriva, he may have been able to leave for the east on 14 June, the day after his arrival at that town. We do not know where in the territory of the Treveri he met with the nation's leaders and nobles (5.3–4), whom he most likely had summoned by messengers sent in advance. We assume that Caesar's main focus for the campaign season was the expedition to Britain and that he wanted to spend as little time as possible on the 'distraction' caused by the Treveri. He thus may have halted after marching only a day or two beyond the Mosa (Meuse), crossing perhaps in the area of modern Charleville-Mézières. Traveling with lightly equipped troops, at 50 km a day and without a day of rest, he could have covered the distance from Samarobriva (c. 235 km (augmented c. 290 km or 180 mi)) in six days. The meetings that he held with the leaders of the Treveri would have consumed at least three days, and another nine days (including a day of rest) would have been required for the march back, via Samarobriva, to Portus Itius (5.5.1), where the fleet had assembled. All this is extremely tight, but it seems just possible that Caesar could have arrived at Portus Itius on c. 2 July (8 June, Jul.), on the eighteenth day after leaving Samarobriva.¹⁴³

Caesar's campaign against Cassivellaunus and his return to the Continent (5.11.7–9, 15–23). Before Caesar set out for the interior of Britain a second time, after his hasty return to the coast on 31 July, to inspect the damage caused by the storm (5.11.1), it was necessary for him to spend ten days on the repair of ships that had been battered on the preceding night (5.11.6). Hence that task occupied 31

¹⁴¹ Napoleon III (1866) 224 allows only six days.

¹⁴² We do not know to which meetings Caesar alludes.

¹⁴³ Kraner et al. (1960a) 9, adopting the view of Holmes (1907) 727–30, place Caesar's arrival a mere three days later, around 11 June, Jul.

July–9 August, and the letter written by Quintus on 10 August (*Q.fr.* 3.1.13 discussed above) falls precisely at the end of that period. Unfortunately Caesar's narrative of his second foray into the interior, commencing on 10 August, provides no indications of time and distance.¹⁴⁴ There are only two signposts during the whole campaign: (1) a victory won by three legions under the command of Trebonius on the day after Caesar resumed his foray into the interior, so on c. 11 August (5.17) and (2) a visit that Caesar paid to the coast on 1 September without bringing his whole army back with him.¹⁴⁵ Holmes assumes that the march out and back had covered a distance of not less than 200 mi (320 km).¹⁴⁶ What Caesar does tell us is that, having brought about Cassivellaunus' capitulation, he decided to end the expedition and return to the coast and Continent because little of the season suitable for warfare was left (5.22.4). He ferried across his army in two trips: after waiting in vain 'some time' (four days?) for the return of the ships that had carried the first contingent and for ships Labienus had been ordered to build on the Continent to replace those destroyed by the storm, he decided to sail with overloaded ships at his immediate disposal because 'the equinox was near at hand' (5.23.5). While the fall equinox was on 23 October (26 Sept., Jul.), Caesar must have sailed back several weeks earlier because on 25 September both Quintus Cicero and Caesar had already returned to the coast of Britain and provided a summation of the outcome of the British campaign in their letters 'dispatched from the shores of Nearer Britain on 25 September'. As Marcus, who received those letters on 24 October, wrote to Atticus, 'They [Caesar and Quintus] had settled Britain, taken hostages but no booty (tribute, however, imposed), and were about to bring the army back from the island'.¹⁴⁷ Even if those letters had been sent at the very beginning of the short period during which Caesar waited for additional ships from the Continent, he must have sailed in the late evening of c. 29 September (3 Sept.,

¹⁴⁴ Within the approximately six weeks during which Caesar campaigned in the interior (c. 10 Aug. until shortly before 25 Sept.), there are only two letters sent from Britain whose dates can be determined: (1) a letter from Quintus Cicero received by Marcus, in Rome, on 20 Sept., 27 days after its dispatch, so sent on 23 Aug. (*Q.fr.* 3.1.17); and (2) a letter dispatched by Caesar from the coast on 1 Sept. and received by Cicero in Rome on 27 Sept. (*Q.fr.* 3.1.25).

¹⁴⁵ Caesar's presence on the coast is attested by Cic. *Q.fr.* 3.1.25, where it is specifically mentioned that Q. Cicero was not with Caesar and so, presumably was still with the army pursuing Cassivellaunus. Possibly, as Holmes (1907) 733 speculates, Caesar made this hasty return to the coast to insure the failure of a surprise attack planned by the kings in the region on the naval camp (5.22.1–3).

¹⁴⁶ Holmes (1907) 732 n. 3.

¹⁴⁷ *Att.* 4.18.5 (trans. Shackleton Bailey modified).

Jul.) at the latest (roughly three weeks before the fall equinox), landing at Portus Itius on the next day, 1 October (5.23.6).¹⁴⁸ It was during this final phase of the British expedition, after Caesar returned to the coast by 25 September, that he learned the sad news of his daughter's death.¹⁴⁹

A disastrous autumn: Belgian attacks on two of Caesar's winter camps (54 BCE)

Preparations for the winter. Immediately after landing, Caesar went to Samarobriua for a meeting with Gallic leaders (5.24.1). Many of them had accompanied Caesar to Britain (5.5.4), but the others needed to be summoned, which Caesar probably did even before he was back on the Continent. Hence the meeting perhaps took place around 3–4 October. This gave Caesar enough time to plan the distribution of his legions to winter camps which, owing to supply problems resulting from bad harvests, needed to be spread more widely than usual (5.24.1). Those farthest away were stationed among the Eburones, at least 250 km (augmented c. 315 km or 195 mi) from Samarobriua, and in the territory of the Remi, close to the border of the Treveri, c. 225 km (augmented c. 280 km or 175 mi) away (5.24.3–4).¹⁵⁰ Leaving by c. 7 October and moving at normal speed with all their gear, the legions would have reached their destinations two weeks later and completed the basic fortification of their camps after another week (c. 28 Oct.). This roughly fits the date of a letter Marcus Cicero received from Quintus in late November, which was most likely sent off in early November and in which Quintus reported that he was among the

¹⁴⁸ Holmes (1907) 735 concluded that Caesar returned not earlier than several days after 25 Sept.

¹⁴⁹ Plut. *Caes.* 23.4. This interpretation of Plutarch's text is confirmed by Sen. *Cons. Marc.* 14.3, and adopted by Pelling (2011). It is preferable to the reading in Plutarch (*loc. cit.*) that has Caesar receive the news after he returned to the Continent (a version accepted by many translators). Julia, Caesar's only child and wife of Pompey, died while giving birth, and the child died a few days later (Plut. *Pomp.* 53.4).

¹⁵⁰ We do not know the precise location of the three camps that were soon to figure prominently in events during the last two months of 54. (1) The camp of Cicero was probably somewhere around modern Charleroi (see discussion in Pennacini (1993) 1066). (2) The camp of Sabinus and Cotta was at Atuatuca (6.32.3–5), but it is unlikely that the place later called Atuatuca had that name already in Caesar's time; see discussion by Pennacini (1993) 1065–6, who opts for a site near modern Tongeren. (3) The camp of Labienus is placed by some scholars in the area of Mouzon (ancient Mosomagus) on the Mosa (Kraner et al. (1960a) 107–8). A parallel road leading from Durocortorum (Reims) toward the Ardennes Forest crosses the Mosa some 30 km to the northwest at modern Charleville-Mézière. A location in that area would make more plausible the distances Caesar gives from the camp of Sabinus and Cotta to the camps of Labienus and Cicero (50+ R mi: 5.27.9), but we do not know whether topographical conditions there fit Caesar's description.

Nervii and complained about the labors and hardships of military service.¹⁵¹ At any rate, a few days later, Caesar received his legates' reports (5.25.5). At that juncture, but not before, Caesar had planned to depart for Cisalpine Gaul (5.24.8). We do not know whether he actually set out and broke off his journey to return soon afterwards because of the alarming news that started to come in. Most probably, he never left.¹⁵²

Revolts among the Belgae: attacks on two of Caesar's winter camps. Soon after the legions had marched off, trouble erupted among the Carnutes, in reaction to which Caesar moved one of his legions to their territory (5.25.1–4). About two weeks after the legions had arrived in their winter quarters (5.26.1), around 4 November, the Eburones assaulted the camp of Sabinus and Cotta. Their king Ambiorix persuaded the two legates to evacuate their camp in order to join the forces of Cicero or Labienus some 50–60 R mi away (5.27.9; c. 46–55 mi or 74–89 km). On the next morning (5 Nov.), he ambushed and destroyed their 15 cohorts (5.26–37). Only a few men survived to report the disaster (5.37.7).

Two days later (on c. 7 Nov.), riding day and night, Ambiorix arrived among the Nervii and stirred them into rebellion (5.38). They assembled their army and allies and launched a vehement surprise attack on Quintus Cicero's camp (5.39). This will have taken a few days to plan and execute; so the attack began perhaps on 14 November and lasted without interruption for almost three weeks, bringing the defenders to the brink of exhaustion (5.40–2). On the seventh day (20 Nov.), flaming-hot sling shots burned the thatched roofs of the huts in the camp (5.43.1–4), which greatly increased the defenders' misery but did not lessen their morale. Perhaps two days later (on 22 Nov.), Cicero finally succeeded in getting a messenger through the tight ring of the attackers (5.45); this man will have reached Caesar in Samarobriva after 2–3 days (say, on 24 Nov.). Caesar received this message in the late afternoon and immediately ordered his quaestor, Marcus Crassus, who was encamped with one legion only 25 R mi (37 km or 23 mi) away, to move to Samarobriva (5.46). Crassus left in

¹⁵¹ By late Nov., Marcus had heard from Quintus that Caesar treated him with special favor, even allowing him to choose his legion for the winter (*Att.* 4.19.2), and that Quintus was among the Nervii about whose precise location Marcus requested more information, a sign that his brother had only recently moved to that region of Gaul (*Q.fr.* 3.6.2). Quintus used both Caesar's and Labienus' couriers (*ibid.*), which added a few days' travel time. Caesar was at Samarobriva, two days closer to Italy than Portus Itius. Hence letters from there would have taken c. 24 days, from Quintus' camp perhaps c. 28 days. Therefore, Quintus' letter informing his brother of his posting for the winter was sent off at the very beginning of November.

¹⁵² Caesar does not say that he actually left, but at least one of his legates assumed that he did (5.29.2). Some later authors (*Plut. Caes.* 24.2; *Dio* 40.9.1) state that he departed but returned when he heard about the revolt of the Belgae.

the same night, and by mid-morning on 25 November his advance guard informed Caesar of his approach.

Without waiting for his arrival, Caesar marched off with the legion stationed in Samarobriva, picked up another legion on the way and moved toward Cicero's camp as fast as he could (5.47.1–48.3). We do not know the location of Cicero's camp, but if it was indeed roughly 50 R mi from the camp of Sabinus and Cotta (5.27.9; see above), it must have been in the south-eastern part of the Nervian territory, perhaps 180–200 km, augmented 200–20 km (125–38 mi) from Samarobriva. Therefore, Caesar will have arrived in the area four days later (on Nov. 29).¹⁵³ Cicero was informed of Caesar's approach by a message that remained unnoticed for two days after it was shot into his camp by means of a messenger's javelin (5.48.2–10). The Nervii, learning from their scouts of Caesar's arrival, abandoned the siege of Cicero's camp and hurried to face the advancing forces of Caesar who, in turn, received another of Cicero's messages telling him that the situation had changed (5.49.1–4). On the next day (perhaps 3 Dec.), Caesar advanced further, set up camp, and on the next morning (4 Dec.) enticed the enemy into an attack on unfavorable ground that resulted in their complete defeat (5.49.5–51). On the same afternoon, Caesar reached Cicero's camp and, a day later (5 Dec.), held an assembly, praising the defenders and putting the recent events into perspective (5.52). Before midnight on the day of the battle, the news of the victory reached Labienus in his camp, c. 60 R mi (almost 90 km or 55 mi) away (5.53.1).¹⁵⁴ Upon receiving this news, the Treveri decided against carrying out the attack they had planned on Labienus' camp (5.53.2). Over the next week, Caesar marched back to Samarobriva with Cicero's legion and established winter quarters for three legions in separate camps around that town (5.53.3).

The winter. Caesar decided to spend the winter with his army, incessantly coping with news of attempted insurrections (5.53.4–54). Later in the winter, Labienus defeated an attack of the Treveri on his camp and succeeded in having their leader, Indutiomarus, killed (5.55–8). This had a dampening effect on further disturbances.

¹⁵³ Caesar states that on the day of his departure (25 Nov.), he covered 20 R mi (= 18.5 mi or c. 30 km; 5.47.1). Marching at high speed, he could have covered the rest of the distance in four days.

¹⁵⁴ This distance seems roughly accurate if Labienus' camp was near the Mosa (Meuse) in the far north-eastern corner of the Remi's territory (n. 150), and Cicero's in the south-eastern part of that of the Nervii. If the camp of Sabinus and Cotta among the Eburones really was 50 R mi from Cicero's and 'a little more' from Labienus' (5.27.9) the Atuatuca given as the location of their camp cannot have been identical with Atuatuca known from later sources. The quandaries posed by this information and by the 100 R mi at 5.24.7 have defied compelling resolutions.

Gallic War, Book 6: 53 BCE

This book contains no precise dates, only a few vague clues, including a possible indication of a fixed date (1 Oct. = 24 Aug., Jul.) in a reference to the approaching date for the distribution of monthly rations to the legions (6.33.4).

Campaigns against the Nervii and Senones (53 BCE)

Two legions levied during the winter in Cisalpine Gaul and one borrowed from Pompey (6.1) probably reached Caesar in late March. Caesar himself spent the winter with his army. 'Before the winter was over', that is, before the spring equinox (below), he conducted a surprise campaign into the territory of the Nervii (6.3.1–3). 'At the very start of spring', presumably soon after the equinox (say, on 27 April),¹⁵⁵ Caesar announced a meeting of Gallic leaders, probably at his headquarters in Samarobriva (6.3.4). It would have taken some ten days for the leaders to assemble. At the meeting (perhaps on 8–9 May), Caesar took the absence of the Senones, Carnutes, and Treveri as proof of rebellion and moved the meeting to Lutetia (Paris), leaving on 10 May. There he announced and immediately launched a campaign against the Senones (6.3.4–6). The final installment of the meeting of the Gallic leaders was probably held at the capital of the Senones, Agedincum, where the campaign against the Senones ended in a settlement when they sent envoys to sue for peace (6.4.2–5). The distance from Samarobriva to Lutetia is 125 km (augmented c.155 km or c. 98 mi), covered in six days. Leaving Lutetia the next day and moving in forced marches (6.3.6), Caesar could reach Agedincum (110 km or c. 69 mi away) in two days (on 19 May). There he accepted the surrender of the Senones and within days also of the Carnutes (6.4), ending the Gallic meeting perhaps on 22 May.

Campaigns against the Menapii and Treveri (53 BCE)

Caesar's campaign against the Menapii. Caesar now planned a campaign against the Treveri and Ambiorix (6.5.3–5), for which he ordered up cavalry from the Gallic nations (6.4.5). It will have taken approximately ten days for those contingents to assemble. He sent, perhaps on 1 June, two legions and the baggage train of the entire army (which must have remained at Samarobriva) to join Labienus in his camp near the territory of the Treveri (6.5.6). In order to cut Ambiorix off from possible support from neighboring nations, Caesar decided to move first against the Menapii, then against the Treveri. On about 1 June he himself left with seven unencumbered legions for the territory of the

¹⁵⁵ The spring equinox was on 25 Apr. (23 Mar., Jul.). Kraner et al. (1960a) 134 assume that Caesar convened the meeting at the equinox. The text, however, does not require that interpretation.

Menapii (6.5.6). The distance he had to cover was substantial (c. 435 km, augmented c. 545 km or c. 340 mi), requiring some 16 days of long marches (40 km per day, including two rest days). The ensuing campaign took place in very difficult terrain (6.6.1). We estimate that it took at least another two weeks (c. 17–29 June) until the Menapii capitulated on c. 1 or 2 July (6.6.2–3), and Caesar was free to move against the Treveri (6.6.4). By that time (on c. 2 July), however, Caesar had received word of Labienus' victory over the Treveri (below).

Labienus' campaign against the Treveri. In fact, Labienus' dealings with the Treveri may give us a better means of establishing approximate dates. The Treveri had been preparing to attack Labienus' camp. They were only two days' march from his camp when they learned that the two legions Caesar had sent to him with the baggage train (6.5.6) had arrived (6.7.1–2). Labienus apparently was still in the camp he had built in the previous autumn. We calculated above¹⁵⁶ that in October–November 54 it took a single legion two weeks of normal marches (including two rest days) to cover the 225 km (augmented 280 km = 175 mi) from Samarobriva to that site. Bringing along the entire baggage train of Caesar's army, the two legions moved more slowly (20 km a day) and needed 16 days (including two rest days), arriving on 16 June. The Treveri now built a camp 15 R mi (less than 14 mi or 22 km) from Labienus' and waited for German reinforcements (6.7.3). Labienus decided to force a decision before these reinforcements arrived, and established an advance camp only 1 R mi from the enemy (6.7.4–5). After a few days (6.7.5), he lured them into attacking on unfavorable terrain, defeated them, and accepted their renewed submission (6.7.6–8.9). From the day after the arrival of the two legions, these actions presumably took at least ten days. It thus was roughly 27 June when the Treveri surrendered.

The second expedition into German territory (53 BCE)

Caesar re-unites his army. After completing his campaign against the Menapii, Caesar reached the territory of the Treveri (6.9.1). Where did he arrive, and when and where did Labienus' three legions join him? Caesar's decision to cross a second time into Germany, with the aim of discouraging the Germans from offering any further support to the Treveri or Ambiorix (6.9.1–2), must have been made after Labienus' success in subduing the Treveri. Presumably, Caesar was initially planning to attack the Treveri from the north, which would have forced them to turn against him and so would have relieved the pressure on Labienus. This strategy was obviated by Labienus' victory. A few weeks later, Labienus commanded one of the three task forces pursuing Am-

¹⁵⁶ See text at nn. 150–1 above.

biorix (6.33.1). He had thus rejoined Caesar. Hence, most likely, Caesar summoned Labienus with his three legions and the baggage train (with some of the equipment required to build a big bridge) to meet him farther east, perhaps even on the Rhine. News of Labienus' victory might have taken three days to reach Caesar (on 1 or 2 July); Labienus may have received Caesar's orders on 4 or 5 July and left his camp on the next day. He required about 17 days (including rest days) to march the c. 270 km (augmented c. 340 km or c. 210 mi) across the territory of the Treveri and reach the Rhine. He thus could have joined Caesar on the Rhine around 23 July. Caesar, in turn, would have had enough time to cover the c. 320 km (augmented 400 km or 250 mi) from the territory of the Menapii to the Rhine near modern Koblenz and reach the place selected for the rendezvous with Labienus' forces several days ahead of him.

The second expedition into German territory. After Labienus' arrival, Caesar's army constructed another bridge (a little upriver)¹⁵⁷ in a shorter time than the last (6.9.1–4), say, in eight days. Having crossed it, Caesar spent a few days among the Ubii (6.9.5–8), then considered conducting a campaign against the Suebi, the source of all troubles originating east of the Rhine. It took a few days for the scouts to return and report what they had learned about the enemies' preparations (6.10.1). Caesar then set up a camp and collected the supplies needed for a campaign (6.10.2–3). After a few more days, scouts reported that the Suebi had withdrawn to the edge of the Bacenis forest (6.10.3–5, 29.1). Since Caesar did not want to engage in an uncertain campaign, far into German territory, he decided to return to Gaul. He had his troops tear down the last section of the bridge on the Ubian side, fortified the bridge, and left a garrison in place (6.29.2–3), which consumed a few more days. By then, 'the grain began to ripen' (6.29.4): it probably was early September (late July, Jul.).¹⁵⁸

Caesar's revenge campaign against Ambiorix and the Eburones (53 BCE)

Caesar's campaign against Ambiorix. Caesar was now free to focus on Ambiorix. He sent his cavalry under Lucius Minucius Basilius ahead across the Ardennes Forest (6.29.4–5). Basilius caught Ambiorix by surprise in his hiding place but failed to prevent his last-minute escape into the surrounding woods (6.30). Arriving in the area, Caesar accepted assurances of the Segni and Condrusi (6.32.1–2) and concentrated the baggage of all his legions in a camp at Atuatuca (the site of Sabinus' disaster in the previous winter), which he placed

¹⁵⁷ That is, a little closer to Koblenz than the first one. The site has been identified between Weissenturm and Urmitz.

¹⁵⁸ See n. 66 above for the time when the grain was ripe.

under Quintus Cicero's command (6.32.3–6). As mentioned earlier, this Atuatuca is probably not identical with the later Roman town of the same name; hence we do not know its precise location.¹⁵⁹ Caesar now divided his army into three task forces that were to scour regions to the north and west (6.33.1–3). He promised to return after seven days because the grain rations were to be distributed then (6.33.4). If our earlier assumption is correct that the rations were usually distributed on the first of the month, we would have here a firm date for Caesar's expected return:¹⁶⁰ 1 October (24 Aug., Jul.). We know that on his march from the Rhine he did not skirt the Ardennes Forest but crossed it. The distance from the Rhine bridge to Atuatuca (presumed to be farther west along the Mosa or Sabis Rivers than its later namesake) by way of such a route might have been c. 180 km (augmented c. 225 km or c. 140 mi), consuming (with the entire baggage train) 12 days (including one rest day). Even if the distance was longer, and despite delays caused by negotiations and the search for Ambiorix, Caesar, having left the area of the Rhine crossing in early September, could easily have arrived at Atuatuca by 22 September and departed on his seven-day expedition on 24 September. The day of his planned return (1 Oct.) was filled with high drama: raiders from the German Sugambri launched a surprise attack, almost succeeded in taking the camp, and caused heavy losses (6.35–41). Caesar's advance force of cavalry arrived during the night, Caesar himself on the next day. A day later, he held an assembly with Cicero's legion (6.42).

The end of the campaign. Caesar immediately set out again to harry the enemy and chase Ambiorix (6.43.1). Aided by cavalry from many nations, the Roman army conducted a thorough (but in the end unsuccessful) search for Caesar's archenemy and ravaged the territory of the Eburones: the livestock was driven off, the crops were consumed by the soldiers and pack animals and eventually flattened by seasonal rains (6.43.2–6), which suggests that these efforts lasted at least to the end of October (second half of Sept., Jul.).¹⁶¹ Caesar then marched his army back to Durocortorum (6.44.1). He convened a council of Gaul (perhaps in early November) and passed judgment on the ringleaders of the rebellion of the Senones and Carnutes in the spring (6.44.1–2). Finally, he distributed his army in winter quarters, placing two legions on the borders of the Treveri, two among the Lingones, and six in the territory of the Senones around Agedincum. Once these were established (by late November (late Oct., Jul.)), Caesar left for Cisalpine Gaul (6.44.3), probably in mid-December.

¹⁵⁹ See n. 150 above.

¹⁶⁰ Cf. 1.23.1 (likely referring to the Kalends).

¹⁶¹ Cf. 3.28.1–29.2 for the analogous impact of bad weather on the punitive campaign against the Morini in late 56.

Gallic War, Book 7: 52 BCE

This was the year in which the Arvernian leader Vercingetorix formed a pan-Gallic coalition that challenged everything Caesar had accomplished so far. Caesar's victory at Alesia late in the year appeared to seal his conquest of Gaul. Momentous events in Rome in January and their political repercussions allow us to determine the probable date of Caesar's departure from Ravenna to Gaul. Indications of changes in the season make it possible to trace the early phases of Caesar's campaign against Vercingetorix. Later in the year, since time markers are lacking entirely, we are forced to limit ourselves to offering only approximate dates for events.¹⁶²

Caesar's departure from Ravenna (52 BCE)

On 18 January (8 Dec. 53, Jul.), the notorious, populist politician and gang leader Publius Clodius Pulcher was murdered on the Via Appia.¹⁶³ This greatly exacerbated ongoing political turmoil that had so far prevented the election of magistrates for 52. The only officeholders in place were tribunes of the plebs. On the day after Clodius' murder (19 Jan. (9 Dec., Jul.)), rioting broke out in Rome, leading to the destruction of the Senate house, where the mob cremated Clodius' body. In reaction, the Senate met in emergency session and set in motion procedures that would make it possible to fill the consulship.¹⁶⁴ On c. 1 February (20 Dec., Jul.), after several attempts to hold elections had failed, the Senate passed an emergency decree declaring martial law and authorizing Pompey to levy troops in order to restore order in Rome.¹⁶⁵

¹⁶² In this year, after 24 Feb. (12 Jan., Jul.) an intercalary month of 27 days was inserted into the calendar, adding 23 days to the year (23 + 4 days after 24 Feb.). For the sake of clarity, during this period we give dates according to the Roman civil calendar with their Julian equivalents.

¹⁶³ The date is given by Asc. 31 Clark.

¹⁶⁴ Date of funeral and riots given by Asc. 32 Clark; Dio 40.49.5 reports the meeting of Senate. The Senate acted to appoint an *interrex* whose task it was to conduct the consular elections or, if he failed to do so within five days, to appoint another *interrex*, until consuls were elected. In this case, it was the twelfth *interrex* who presided over Pompey's election 58 days later.

¹⁶⁵ For the likely date, see Ramsey (2016) 301–2. Dio 40.49.5 places the emergency decree on the day after Clodius' murder (19 Jan. (9 Dec., Jul.)), but Asc. 34 Clark explicitly puts it after the failure of more than one *interrex* to hold elections (a minimum of ten days after the 19th since each *interrex* served for five days). Passage as early as 19 Jan. is ruled out by the fact that on 22 Jan. (12 Dec., Jul.) Pompey was still lying low on his suburban estate just outside of Rome (Asc. 51 C) and not taking charge as he must have done as soon as the Senate granted him authority to raise troops.

Caesar at the time was in Cisalpine Gaul, where he had probably arrived only recently (on c. 11 Jan. (1 Dec. 53, Jul.)), holding the assizes (7.1.1).¹⁶⁶ If he was near Ravenna, news of Clodius' murder and the subsequent turmoil in Rome could have reached him three days after the events, on 21 January.¹⁶⁷ Intense negotiations ensued, between Pompey and the Senate in and near Rome, and with Caesar in Ravenna. Ultimately, Caesar acquiesced to Pompey's election as sole consul,¹⁶⁸ but only after receiving a guarantee that Pompey would support a bill that exempted Caesar from the requirement that he appear in Rome in person to pursue his future candidacy for a second consulship (in 49 for 48). On the twenty-fourth day of an intercalary month (5 Feb., Jul.), Pompey was elected consul.¹⁶⁹ Presumably within a few days he had things under control in Rome, and by the 27th, three days after Pompey's election, news of the resolution of the impasse must have reached Ravenna. In principle, Caesar was now free to leave for Gaul (7.6.2), from where his legates had been sending him increasingly alarming news (see below). The tribunes' bill about his candidacy in absentia was passed during Pompey's consulship, though we do not know the date.¹⁷⁰ But Caesar did not need to wait for its passage, since Cicero had visited him in Ravenna and yielded to his urgent request to persuade his protégé Marcus Caelius Rufus, one of the plebeian tribunes, to refrain from vetoing this bill.¹⁷¹ Hence we assume that Caesar left for Transalpine Gaul on c. 1 March (9 Feb., Jul.), almost immediately after receiving news of Pompey's election.

¹⁶⁶ We estimate c. 20 days for Caesar's travel from his departure (6.44.3), probably in mid-Dec. Caesar's opening sentence at 7.1.1 (... *ut constituerat, in Italiam ad conventus agendos proficiscitur*) echoes the final words of book 6 (44.3: ... *ut instituerat, in Italiam ad conventus agendos profectus est*) in reporting his departure from Gaul for the Cisalpine province. He then states that he was informed of Clodius' murder (*ibi cognoscit de Clodii caede*), which suggests that the news reached him close to the date of his arrival. If, on the contrary, he had been in northern Italy for some time, he might have expressed himself as he does at the beginning of book 2: 'While Caesar was in Cisalpine Gaul' (*cum esset Caesar in citeriore Gallia*), he learned...

¹⁶⁷ See n. 95. Caesar was at Ravenna when he met with Cicero approximately two months later (see n. 171), while Florus (1.45 (3.10).22) attests that Ravenna was Caesar's headquarters for a levy of troops in early 52.

¹⁶⁸ A highly irregular magistracy in lieu of a dictatorship and designed to maintain a semblance of constitutional propriety; see Ramsey (2016) 308–18.

¹⁶⁹ Date given by Asc. 36 Clark.

¹⁷⁰ The debate on this bill in the Senate, where Cato employed the tactic of a filibuster to prevent its endorsement (mentioned by Caesar at *Civ.* 1.32.3), could have taken place as early as 2 March (10 Feb., Jul.), and the bill could have passed in the assembly on 26 March (6 March, Jul.); see Ramsey (2016) 311 n. 50.

¹⁷¹ *Cic. Att.* 7.1.4. For the likely date of that meeting (sometime towards the middle of the intercalary month), see Ramsey (2016) 312 n. 51, 321.

The Gallic revolt and the defence of the Roman province (52 BCE)

The outbreak of the Gallic revolt. The events in Rome had momentous repercussions in Gaul. Gallic leaders, who had been contemplating and attempting rebellion ever since the previous winter (54/3), must have received news about the political crisis that had erupted in Rome on 19 January about 20 days later, around 9 February, at the earliest.¹⁷² They were convinced that this crisis would prevent Caesar from reacting quickly to a major uprising (7.1.2–3). First, scattered meetings were held (7.1.4–8), followed by a central meeting in the territory of the Carnutes (7.2), at which the date for the revolt was set. This might have taken just under two weeks. Perhaps on 21 February, the rebellion began with a massacre of Romans at Cenabum (7.3), followed immediately by an uprising led by Vercingetorix among the Arverni, his consolidation of leadership (7.4), and an attack on the Bituriges (7.5). These events will have consumed at least two more weeks (21 Feb.–10 Intercal. = 9–22 Jan., Jul.).

Caesar's legates in Gaul had their ears to the ground and were in constant touch by messengers with Caesar in Ravenna. News of the massacre at Cenabum on c. 21 February must have reached Agedincum, where six legions were stationed in winter quarters,¹⁷³ by 23 February since the two towns were within c. 105 km of each other as the crow flies (c. 195 km by road, augmented by 25 per cent). If a messenger left Agedincum late in the evening of 23 February (11 Jan., Jul.), Caesar in Ravenna could have learned about the massacre by 17 Intercal. (29 Jan., Jul.), 19 days later.¹⁷⁴ Ten days later still, by 27 Intercal. (8 Feb., Jul.), after receiving further reports from subsequent messengers, he must have been aware of Vercingetorix' activities and fully understood the seriousness of the situation—just when the resolution of the crisis in Rome made it possible for him finally to leave Ravenna.

The date of Caesar's departure from Transalpine Gaul. At 7.32.1–2 is found the first even vague piece of information in the entire seventh book that permits us to determine roughly the time of year. It is a reference to the transition from

¹⁷² The distance from Rome to Agedincum (the winter quarters of six legions) is c. 1,550 km (c. 965 mi, including augmentation for the segment outside the province). A messenger traveling at an average speed of 80 km per day could have covered the distance in 19.4 days. It is quite possible—perhaps almost required by time constraints—and even suggested by some of Caesar's formulations (esp. 7.1.3) that Gallic leaders began deliberations about a great revolt long before they received news from Rome about Clodius' death. If so, Caesar deliberately shaped his narrative to support his claim (7.1.1–2) that Gaul had really quieted down and that only turmoil in Rome had caused renewed troubles abroad. We thank Christopher Krebs for this interpretation, which will be substantiated in his commentary on *Gal* 7.

¹⁷³ 6.44.3.

¹⁷⁴ The distance from Agedincum to Ravenna is c. 1,440 km (c. 895 mi). A messenger traveling 80 km per day could have covered the distance even in 18 days.

winter to a new campaign season. Caesar writes that after the conquest of the Gallic town of Avaricum (Bourges), where he remained for several days, the winter (that is, the season unsuitable for campaigning) was nearly over, and ‘the time of the year in itself called for the opening of a new campaign’. By this he refers to the fact that fodder could by then be found in fields and woods. This, as earlier references suggest, probably was around early June, Jul. (late June in the Roman calendar of 52). Assuming that it was c. 1 June, Jul. (22 June Roman), we can calculate back from that date.¹⁷⁵ Considering all the marches and sieges Caesar undertook until he conquered Avaricum (detailed below), we calculate that he must have left Vienna (Vienne) in Transalpine Gaul on c. 15 April (26 Mar., Jul.) for a rapid dash to the territory of the Lingones, where two of his legions were wintering. Before we unravel that sequence of events, we need to look at Caesar’s travel to the Province and his activities there.

Caesar organizes the defence of the province. Leaving Ravenna on c. 1 March (see above), Caesar traveled with a small cavalry escort to Narbo Martius (Narbonne), the capital of the province of Transalpine Gaul. Given the time of the year, Caesar could not use any of the Alpine passes. As he had done in the spring of 55, he must have traveled through the Po valley, crossed the coastal mountains to modern Genua, and followed the coastal road to its intersection with the Rhone at Arelate (Arles). The distance from Ravenna to Arelate is 866 km (541 mi). For about half of that distance, the road leads through mountains along the coast of what is now the Italian and French Riviera, forcing Caesar to slow down somewhat. But he clearly was in a hurry. We thus assume that he reached Arelate in 11 days. The distance from there to Narbo (165 km (c. 103 mi)) consumed another two days. Caesar thus arrived in Narbo on c. 13 March. He must have stayed there a few days, organising the defense of the province and ordering forces to the territory of the Helvii to counter a possible invasion from the area of the Arverni (7.7.3–5, 8.1). He then moved as fast as possible to a place from where he could invade the territory of the Arverni himself. Most likely, this was Alba Helviorum (near modern Alba-la-Romaine and the confluence of the Ardèche and Rhone). The distance to Alba is 235 km (c. 147 mi). Since infantry troops were involved, even if they covered 40 km per day, this march may have taken six days. From there, leaving around 25 March, Caesar undertook a daring winter march across the Cevennes into

¹⁷⁵ Cf. 2.2.2: *cum primum pabuli copia esse inciperet*. This date (1 June) may be too early by several days. If it is (which we cannot know, since the rest of Caesar’s campaign report yields no fixed date), additional days could be assigned to Caesar’s movements and measures in the province (with a correspondingly later departure date from Vienna (see below)) and/or to the march of Caesar’s legions from the territory of the Treveri to Agedincum (see n. 176 below).

Arvernian territory (7.8.2–3), 100–50 km (c. 63–94 mi) in distance and obstructed by deep snow. By the speed of his advance he caught the enemy completely off guard and forced Vercingetorix to break off his campaign farther north and return to Arvernian territory (7.8.4). Spending only two days there, Caesar returned to the Rhone valley, most likely by the same route that he had already opened, although for his purposes it was a detour. This route is also suggested by the reason he gave (and made sure the enemy heard) for his departure—namely, to fetch additional troops, which were stationed in the territory of the Helvii (7.7.5, 7.9.1). From Alba, he went to Vienna (130 km or c. 81 mi distant) and from there, on c. 15 April (above), with a well-rested and sizable cavalry escort into hostile Gaul (7.9.3–4).

We have no way of accurately calculating times after Caesar's departure from Alba to cross the Cevennes. But if he left Alba around 25 March, he had three weeks to complete this mission and reach Vienna to collect his cavalry escort. This seems possible, but there is not much time to spare. In sum, assuming minimal times spent at various locations and close to the fastest possible traveling speeds, we can fit Caesar's actions and movements into the assumed time frame but only if he left Ravenna on c. 1 March (9 Feb., Jul.), as soon as he learned of Pompey's election to the consulship on 24 Intercal. (5 Feb., Jul.).

The first part of Caesar's campaign (52 BCE)

On c. 15 April, Caesar left Vienna with cavalry, traveled day and night, and reached his two legions in the territory of the Lingones (7.9.3), most likely somewhere around Andematunnum (Langres, later the capital of the Lingones). The total distance is 245 km (153 mi), but 210 km lie outside the Province and thus must be augmented, which gives a total of c. 300 km (c. 185 mi). Traveling at top speed (c. 80 km per day) and with only short interruptions, Caesar will have arrived in four days, on c. 18 April. He alerted his other legions, departed on c. 19 April, and reached Agedincum (distance 205 km, augmented c. 255 km or 160 mi) on c. 25 April, at the very earliest. The legions wintering on the borders of the Treveri, alerted in advance by a messenger (7.9.5) and moving in forced marches, might have covered the 260 km (enhanced 325 km or 203 mi) in eight days and arrived at Agedincum on 29 April, at the earliest. Caesar's army was now united (7.9.5).¹⁷⁶

By then Caesar had devised his plan to counter Vercingetorix' move against the Boii (7.9.6–10.3). He left the entire army's baggage in Agedincum under the protection of two legions (7.10.4) and, on c. 2 May, left Agedincum.

¹⁷⁶ These marches by the legions which had to take their baggage train along, may have taken a few days longer. If so, Caesar must have left Vienna correspondingly earlier (which is not impossible). For an alternative, see n. 175 above.

It was still too early for a normal campaign season to begin (7.10.1), but Vercingetorix' revolt did not allow any delay. On the second day he reached Vellaunodunum, a town of the Senones, took two days to prepare a siege, and secured the surrender on the third day, 6 May (7.11.1–2). He immediately went on to Cenabum, reached it in two days, captured and plundered it the third day, 9 May (7.11.5–9), and marched to Noviodunum, a town of the Bituriges, where he arrived after two days (45 km, augmented 56 km or 35 mi), on 11 May, and began preparations for a siege. After some complications, the town capitulated (7.12.2–13.2), perhaps on 14 May. Without pausing, Caesar left for Avaricum (7.13.3), which he will have reached on 17 May (covering 90, augmented 112 km or c. 70 mi) in three days. Now began one of the most difficult sieges in the entire war (7.17–28). Still no fodder was available in the countryside (7.14.3–4); the army was dealing with major supply problems, and it took 25 days to build an enormous siege ramp (7.24.1). Yet the army persevered and, around 15 June, Avaricum was taken (7.27–8). Caesar stayed there for several days, drawing on the supplies of the captured town, and giving his soldiers time to recover (7.32.1). And now 'the winter was nearly over' (7.32.2). Around 22 June (1 June, Jul.), Caesar departed from Avaricum.

Failure at Gergovia (52 BCE)

Just when Caesar was ready to resume campaigning (7.32.1–2), the Aedui asked for his mediation in a serious internal conflict. Caesar went to Decetia, examined the issue, announced his decision (7.32.2–34.1), and returned to Avaricum. The distance from Avaricum to Decetia is 95 km (augmented almost 120 km or 74 mi). Including two days at Decetia, this detour will have taken six days. Upon returning, Caesar divided his army, perhaps on 28 June: he sent Labienus to the territories of the Senones and Parisii (below), while he himself took his campaign to Gergovia (near later Augustonemetum, modern Clermont-Ferrand), the centre of the Arvernians (7.34.2–3). He reached the Elaver (Allier) River after two days (55 km, augmented almost 70 km or 43 miles) but was prevented from crossing it because Vercingetorix had destroyed all bridges. The armies marched on opposite sides of the river. After, say, two days, Caesar deceived the enemy, rebuilt one of the bridges, and brought his army across (7.35). This maneuver cost two days. From there, Caesar reached Gergovia in five days (7.36.1), on c. 10 July. Perhaps on 14 July, Caesar ejected an enemy garrison from a hill near the town, occupied the hill with a smaller camp, and then connected the two camps by a protected path (7.36.5–6).

In the meantime, Aeduan leaders had conspired to bring their nation into the war. This threat, combined with another, that 10,000 Aeduan infantry, who were on the way to join Caesar at Gergovia, might be persuaded to defect to the other side (7.37–8), prompted Caesar to rush with four legions to meet the Aeduan army. He encountered it 25 R mi (23 mi or 37 km) from Gergovia,

refuted the lies the Aeduan soldiers had been fed by the conspirators, sent them on their way to Gergovia, let his soldiers rest for three hours, and marched back to Gergovia in the same night, arriving just in time to save his camp and the legions left behind that were under fierce attack by Vercingetorix' army (7.40–1). Considering the time it must have taken this Aeduan army to be assembled and to reach the point where Caesar met it, this event might be dated to the end of July. Receiving more bad news from the Aedui (hence again a few days later), Caesar began planning to withdraw from Gergovia and to reunite his army (7.43.5–6). To dispel suspicions that his withdrawal was motivated by fear, he seized an opportunity for a demonstrative but limited action against Gergovia. This operation, however, ended in disaster and serious losses (7.44–51). On the next day, Caesar held an assembly to restore the army's morale (7.52). On that and the following day, he offered battle but received no response; on the day after that, perhaps on 11 August, he departed from Gergovia. Vercingetorix did not pursue him.

Caesar reached the Elaver River on the third day, crossed it, and led the army into Aeduan territory (7.53). By this time, the Aedui had actually defected and concluded a formal alliance with Vercingetorix. Noviodunum (an important supply base for Caesar's operations) had been sacked (7.54–5).¹⁷⁷ Caesar marched day and night, reached the Liger (Loire) a few miles downstream from Noviodunum, and forded it (7.56.3–5), perhaps on 17 August. At this point, he found grain in the fields (7.56.5).¹⁷⁸ Presumably after a rest day, Caesar marched to the territory of the Senones, now in much less of a hurry (7.56.5). After about five days, three days shy of Agedincum, he stopped to wait for Labienus, with whom he must have been in touch through messengers. Labienus, after passing through Agedincum and picking up the army's baggage train and its guard (7.62.10), joined Caesar and his forces around 27 August 27 (see next section below).

Labienus' campaign against the Parisii, Senones, and Bellovaci (52 BCE)

Labienus had left Avaricum around 28 June with two legions (7.34.2). He first went to Agedincum, picked up the two legions stationed there, and charged reinforcements that had recently arrived from the Province with guarding the army's baggage train (7.57.1).¹⁷⁹ He would have covered the distance of 180 km

¹⁷⁷ This Noviodunum was an Aeduan town, not to be confused with Noviodunum of the Bituriges mentioned at 7.12.2.

¹⁷⁸ 17 Aug. corresponds to 26 July, Jul. The grain was ripe around the same time in earlier years (see text at n. 158 above). Our chronology thus seems roughly correct.

¹⁷⁹ These units, which had been levied during the last winter in Cisalpine Gaul (7.1.1), had initially been used to protect the Roman province (7.7.5), and had in the meantime

(augmented 225 km or 140 mi) in eight days and left Agedincum perhaps three days later, on 10 July. Marching toward Lutetia (Paris; 7.57.1–2), he reached the Essonne River valley at its confluence with the Sequana (Seine), c. 30 km southeast of Paris, after about three days. There the enemy had occupied positions to block his passage (7.57.4–58.1). Labienus outmaneuvered them in the area between Metiosedum (Melun) and Lutetia (7.58), but by the time he had circumvented the blockade set up by the enemy, he began receiving news about Caesar's withdrawal from Gergovia. In addition, there were alarming rumors about the Aeduians' efforts to block Caesar at the Liger and about his supposed forced retreat to the Roman province of Transalpine Gaul (7.59.1). Since Caesar left Gergovia around 11 August, such news and rumors, traveling fast, could have reached Labienus perhaps 5–6 days later.¹⁸⁰ His campaign, compressed in Caesar's report to a few crucial and dramatic events, had thus lasted more than a month. At this point Labienus decided to turn back (7.59.3–5). In another deceptive maneuver, he crossed the Sequana and defeated in battle the enemies who had been joined by the Bellovaci (7.60–62.9), perhaps on 19 or 20 August, then returned to Agedincum, picked up the baggage train and guard, and marched on toward Caesar, whom he met on the third day after leaving Agedincum (7.62.10), perhaps on 27 August.

The Siege of Alesia and the collapse of the Gallic revolt (52 BCE)

For this part of the campaign we have as our only time marker the time-span of slightly more than 30 days between the evacuation of Vercingetorix' cavalry from Alesia and the arrival of the Gallic relief army. This helps us determine, at least roughly, how long the siege lasted before the final battle decided the war's outcome.

Now that the Aedui had joined the war, Vercingetorix was forced to reassert his leadership. Having achieved this, he prepared with renewed urgency for the war (7.63–4); this must have taken several weeks, from Caesar's departure from Gergovia around 11 August until around the middle of September. Meanwhile Caesar organized counter-measures to protect the Roman province (Transalpine Gaul), and hired German cavalry and light infantry (7.65). He moved from the territory of the Senones into that of the Lingones (7.63.7), where he must have spent some time. By the time Vercingetorix' army had assembled (7.66.1–2), Caesar was marching toward the territory of the Sequani (to be closer to his province). Somewhere along that route, Vercingetorix launched a cavalry attack on Caesar's marching column but was defeated with great losses (7.66.2–67.7). Demoralized, Vercingetorix withdrew to Alesia

arrived in Agedincum, where Caesar had left the army's entire baggage train (7.10.4). Newly recruited troops were typically assigned guard duty while they were being trained.

¹⁸⁰ See 7.3.2–3 and text at nn. 52–3 above for the speed with which important news could travel.

(7.68), probably still in the second half of September. Caesar followed him, established his camp, and started to build a circumvallation. Within a few days, a major cavalry battle in the plain below Alesia again ended in a Gallic disaster (7.70). Some time later, before Caesar closed the eleven mile-long ring, Vercingetorix evacuated his cavalry and called for a general mobilization of all Gauls. At that time, perhaps around 5 October, he had supplies for barely 30 days, a little longer with rationing (7.71).

While Caesar was completing a second ring of outer fortifications and placing trenches and obstacles in front of both walls (7.72–4), a huge relief army was assembled, consisting of contingents of all nations that were involved in the war (7.75–6). Just after the defenders of Alesia had used up most of their supplies and ejected the local population in order to stretch their few remaining resources (7.77–8), the relief army arrived (7.79). This may have been around 7 November. On the next day (c. 8 Nov.), a cavalry battle was fought that was again won by Caesar's German horsemen (7.80). After one day of preparations, the Gauls launched a night attack on the plain that faltered in Caesar's fields of hidden obstacles (7.81–2). Perhaps two days later (on c. 12 Nov.), the Gauls sent a large elite force to assault the most exposed of Caesar's camps. This attack, seconded on the inside by a massive sortie of the Alesian defenders, developed into a dramatic battle that brought Caesar's army to the brink of defeat but in the end was won by the Romans' discipline, experience in siege warfare, and superior tactical skills. The Gauls were defeated, and the rest of the army fled (7.83–8). On the next day (c. 13 Nov.) Alesia capitulated, Vercingetorix handed himself over to Caesar, and most of the defenders of Alesia were distributed to the soldiers as war booty (7.89).

Caesar then marched the short distance to the territory of the Aedui and there accepted the surrender of the Aedui and Arverni (7.90.1–3). He distributed his legions in several winter camps (7.90.4–7) and decided to spend the winter at Bibracte (90.7). When his report was discussed by the Senate in Rome in December, another extended thanksgiving celebration was decreed (7.90.8).

Gallic War, Book 8: 51–50 BCE

This book, covering two years, was written by Caesar's legate and trusted aide, Aulus Hirtius. It begins with a precise date for the beginning of a winter campaign against the Bituriges (8.2.1) and gives the duration of that campaign (8.4.1), as well as the interval before the next expedition (8.4.3), but no precise date is offered in all the rest of the book. Nor does Hirtius indicate the seasonal changes that serve as helpful time markers in earlier books. Rather, he merely lists the sequence of events and suggests that during the summer several campaigns were unfolding simultaneously. Their duration remains unknown. The

chronology we are able to reconstruct for this book is therefore even more uncertain than those of earlier books.

Winter and spring campaigns against Bituriges, Carnutes, and Bellovaci (51 BCE)

On 29 December 52, the last day of the year according to the Roman civil calendar,¹⁸¹ Caesar started a surprise campaign of deterrence and devastation throughout the entire land of the Bituriges (8.2.1–3.4). He secured their renewed submission (8.3.5), brought the legions back to their winter quarters, and returned to Bibracte on the fortieth day after setting out (8.4.1), on 10 February 51. After spending no more than 18 days there, on 28 February, he launched another campaign against the Carnutes who had started a war against the Bituriges (8.4.2–3). He dispersed the Carnutes and inflicted great losses on them; then he stationed the two legions involved at Cenabum (8.5.1–6.1). This campaign may have taken 30 days, to 31 March.

Receiving information that the Bellovaci and some of their neighbors were preparing for war and an invasion of the territory of the Suessiones and possibly Remi (8.6.2), Caesar assembled a strike force of four legions (8.6.3–4) in the territory of the Suessiones, probably in the eastern part, close to the Remi, where two legions were wintering. It was still the winter season (8.6.3–4, 7.7). One of those legions came from Labienus' camp among the Sequani.¹⁸² Until this legion had received its marching orders and reached the assembly area, almost three weeks must have passed. Hence by c. 21 April, Caesar was ready to march. Scholars think that the Bellovaci had already invaded the territory of the Suessiones and established their camp on Mont-Saint-Marc in the forest of Compiègne.¹⁸³ Caesar learned the camp's location from captive enemy scouts, after invading the territory of the Bellovaci. He thus had to reverse his route. By the time he found the enemy, perhaps almost another week had passed (8.7–8). Hence it was late April when Caesar arrived at the site where he placed his camp opposite the camp of the Bellovaci. So far, our chronology is likely to be at least roughly correct.¹⁸⁴ From now on, we can only guess.

The campaign must have consumed considerable time (8.7–23). Caesar built a camp with exceptionally strong and elaborate fortifications (8.9.2–4). Skirmishes with the enemy and the latter's strong position convinced him, after

¹⁸¹ For the correlation of the traditional Roman dates with those of the reformed Julian calendar, see Ramsey and Raaflaub (2017) Chronological Table 8.

¹⁸² On the distribution of the winter camps, see 7.90.4–7.

¹⁸³ See Kraner et al. (1960b) 11, based on the detailed discussion of Holmes (1911) 826–30.

¹⁸⁴ A letter written by M. Caelius Rufus in Rome to Cicero on c. 26 May (*Fam.* 8.1.4) confirms that at least by that date Caesar was reported to be in serious trouble caused by the Bellovaci. Such news from Gaul would have taken almost three weeks to reach Rome.

perhaps a week, that he needed more troops. Hence he summoned Gaius Trebonius with three legions (two stationed in Cenabum and one among the Bituriges (8.11.1). Meanwhile, the days were filled with skirmishes and attempts to set ambushes for foragers and cavalry protecting them. The approach of Trebonius' army after perhaps another two weeks caused the enemy to plan to withdraw to another, even safer camp site (8.14.1). Caesar maneuvered his troops into a position from which they could attack the Gallic troops that were covering the retreat of the others, but the enemy used cunning (a fire and smoke screen) to prevent the Romans from doing so. In the end, they staged a successful withdrawal and built a new camp 10 R mi away (8.14–16). From there they set ambushes for foragers and caused the Romans considerable losses. Eventually, the enemy leader planned a large-scale ambush that ended in a Gallic disaster because Caesar, informed by a captive, had been able to take adequate counter-measures; thousands of elite Gallic infantry and cavalry were killed together with their leader (8.17–19). The Bellovaci and their allies now surrendered (8.20–23.2). It probably was early June.

Dealing with various troubles and the siege of Uxellodunum (51 BCE)

The defeat of Dumnacus of the Andes. Caesar now divided his army (8.24.1): Caninius Rebilus, who was already in the territory of the Ruteni near the Roman province, and Gaius Fabius were to conduct a campaign 'in a very different region', apparently primarily protecting the province and watching the nations along the Atlantic Ocean (8.24.2), while Caesar himself resumed the war against the Eburones and Ambiorix. Upon completion of that campaign, he sent Labienus with two legions into the territory of the Treveri (8.24.4–25). Rebilus first responded to a call for support by Duratius, leader of the Pictones, who was under siege at Lemonum (Poitiers) by Dumnacus, leader of the Andes (8.26). Moving rapidly on the most direct route from the Ruteni to Lemonum, Rebilus would have covered around 335 km (augmented c. 420 km or 260 mi) in about 12 days. Fabius was marching in his direction, accepting the submission of nations along his way. He was in touch with Rebilus and anticipated that Dumnacus, trying to avoid being squeezed between two Roman forces, would attempt to cross the Liger (Loire) on the only bridge available in the area, perhaps that located at later Caesarodunum (Tours). The distance from the area of the war with the Bellovaci to that bridge would have been at the very least 330 km (augmented 415 km or 258 mi). Fabius initially was not in a hurry but rushed in the end and was fast enough to catch Dumnacus before he reached the bridge. If he left Caesar's army around June 10, he would have arrived at Caesarodunum around 26 June. His cavalry defeated Dumnacus' army (inflicting massive casualties) and captured his entire baggage train (8.27–

9). He then departed to accept the submission of the Carnutes and Armorican nations; Dumnacus was exiled (8.31).

The siege of Uxellodunum. Soon after that battle, Rebilus received news that Drappes of the Senones was taking a substantial force of survivors southward to join Lucterius of the Cadurci in an attack on the Province (8.30).¹⁸⁵ Leaving Lemonum perhaps on 1 July, Rebilus pursued him with two legions. Realizing that Rebilus was approaching (8.31), Drappes and Lucterius now occupied the town of Uxellodunum, bringing the townspeople to their side (8.32). Rebilus would have covered the 290 km (augmented 365 km or 227 mi) in ten days, arriving around 10 July. Uxellodunum was in a superbly defensible position, impregnable to direct attack. Rebilus began to build a circumvallation, thwarted Lucterius' efforts to bring additional food supplies into the town, and in a surprise attack eliminated the supply base guarded by a substantial force under the command of Drappes (8.33–6). With this outside threat removed, he completed the circumvallation, assisted, later in July, by Fabius and his legions (8.37).

Meanwhile, Caesar had left his quaestor Marcus Antonius with 15 cohorts in the territory of the Bellovaci (8.38.1) and once again had devastated the territory of the Eburones (8.24.4–25). He then engaged in a goodwill tour among the defeated nations, trying to restore trust and positive relations (8.38.2). While he was among the Carnutes, he learned about the events at Uxellodunum. Finding it necessary, for the sake of deterrence, to set an example (8.39.1–3), he hurried with his cavalry to join Rebilus at Uxellodunum and had two legions follow him 'by normal daily marches' (8.39.4). He probably arrived in early August. Since the town could not be taken by assault and was well-supplied, he decided to cut off its water supply. It was easy to prevent the townspeople from descending to the river (8.40). To keep them from using a big spring some way below their town wall, he had his soldiers build a huge ramp (that eventually reached 60 feet in elevation) and placed on it a ten-stories high tower from which his soldiers showered the spring area with missiles. At the same time, his soldiers dug tunnels to reach the spring and divert it (8.41).¹⁸⁶ Despite the 'immense labor' required and the townspeople's brave resistance, these efforts eventually succeeded: the spring dried up and the town capitulated (8.42–3). At Avaricum, the construction of an even larger siege ramp had consumed 25 days but under much less constrained topographical conditions.¹⁸⁷ We estimate that the town surrendered by the end of August (8.44.1).

¹⁸⁵ In the previous year, Vercingetorix had sent Lucterius to invade the Province, a threat that Caesar had been able to counter in time by stationing troops near the Province's border (7.5.1, 7.1–8.1).

¹⁸⁶ For details, see Raaflaub (2017) Appendix RR.

¹⁸⁷ 7.24.1.

The end of the campaign season (51 BCE)

In the meantime, Labienus had once more defeated the Treveri and forced their leaders to submit (8.45). This rounded out Caesar's success on all fronts: the country was 'defeated and subdued' (8.46.1). Having never visited Aquitania in person, Caesar spent the final part of the campaign season (perhaps the month of September) there, receiving envoys and hostages from all the nations (8.46.2). He then sent his legions north under the command of his legates, distributing them in a way that 'every single part of Gaul should be secured by the presence of an army' (8.46.3–4). While they marched to their winter quarters and settled in, Caesar himself made the judicial circuit of the Transalpine Province and distributed rewards for faithful service, before returning to the territory of the Belgae and spending the winter in Nemetocenna (Arras; 8.46.5–6).

Highlights of the year 50 BCE

This was the last year of Caesar's governorship. He spent the winter among the Belgae, and in the spring he toured Gaul, establishing good relations with the elites of the subjected nations, lightening their burdens, and laying foundations for lasting peace (8.49). Three issues require detailed discussion: the date of the Senate decree concerning two legions for the Parthian war; the date of Antonius' election as augur, which makes it possible to calculate the date of Caesar's first trip to Cisalpine Gaul; and the date of Caesar's final return to Ravenna in late autumn.

The legions for the Parthian war. Toward the end of his narrative (8.54.1), Hirtius reports a senatorial decree that required Caesar and Pompey to contribute one legion each to reinforce the troops in Syria, which was under attack by the neighboring Parthians. That decree must have been passed in the spring of the year,¹⁸⁸ certainly no later than c. 15 May, since by the first week in July, at the latest, Cicero, who at the time was governor of Cilicia, was aware of the Senate's plans for the legions,¹⁸⁹ and it must have taken a minimum of roughly 50

¹⁸⁸ The notice of the decree comes two chapters after Caesar's review of his forces which was most likely conducted in mid-Oct. 50 (8.52.1–2). As Sanford (1911) 331–2 has perceptively parsed Hirtius' narrative, at 8.52.3, immediately after covering the troop review, Hirtius embarks on a digression treating opposition to Caesar by his political enemies in Rome. Chapter 53 is a flashback describing a failed attempt by the consul M. Marcellus 'in the previous year' (51) to terminate Caesar's provincial command prematurely. The word 'next' (*deinde*) at the beginning of chapter 54 marks the transition to early in the following year, 50, when the decree was passed. Then finally, at 8.54.4, Hirtius resumes his account of Caesar's activities in Oct.–Nov. 50, which was temporarily interrupted at 8.52.3.

¹⁸⁹ *Fam.* 2.17.5 of c. 18 July indicates that prior to learning of the unexpected retreat of the Parthians from Syria, Cicero knew of the Senate's decree. If news of the Parthians' withdrawal, which occurred c. 1 July, reached Cicero at Tarsus four or five days after it

days for the news to have reached Cicero.¹⁹⁰ The date of the decree, however, is likely to have been about a month earlier than 15 May because we must allow sufficient time for the troops to be called up and transported to Syria in time to play a role in combating the menace posed by the Parthians. The time required for the legion farthest afield to reach Syria was approximately five months,¹⁹¹ and so, if the decree was passed c. 15 Apr., shortly before the Senate's traditional spring recess,¹⁹² the troops could have landed in Syria by c. 10 September. Admittedly, 10 September is late in the year by the calendar, but since in 50 10 September was equivalent to 28 July of the solar year, there would have been at least three months remaining in the campaign season. Looked at from a different perspective, the decree is unlikely to have been passed much earlier than 15 Apr. because ultimately the mission was aborted, and the legions were held back in Italy. This indicates that their arrival at Brundisium occurred after news of the unexpected Parthian withdrawal (c. 1 July) reached Italy and provided justification for canceling the sailing orders. That change in plans could have been carried out if the troops reached Brundisium on c. 30 July (see n. 191), and news of peace restored to Syria arrived just a day or two earlier.¹⁹³

took place, then by 4 July at the latest Cicero had knowledge of the plans to send troops. Of course, he could easily have received that news days, or even weeks earlier.

¹⁹⁰ Holmes (1923) II.323 estimated that 'a month or more' would have been required for word to travel to Cicero at Tarsus. The time needed is probably closer to two months (50 days at the minimum), since 46 days of travel is characterized as a 'fast' rate (*celeriter*) for news from Rome to reach Cicero at his camp near Cybistra in Sept. 51 (*Att.* 5.19.1), and in late Apr. 50, the latest news Cicero had from Rome covered events only up to 7 Mar. (*Att.* 6.2.6), a good 50 days or more earlier. We thank Andy Dyck for discussing this problem with us by email.

¹⁹¹ If we assume that Caesar's 1st legion, which he contributed, was stationed in the camp closest to Italy (among the Aedui), then c. 24 days (16 Apr.–10 May) would have been required for a messenger to travel from Rome to Caesar at Nemetocenna (covering 1,900 km (1,180 mi) including augmentation), by the coastal route at 80 km per day; c. nine days (11–19 May) for a messenger sent by Caesar from Nemetocenna to reach the camp among the Aedui (725 km (450 mi) augmented), at 80 km per day; c. 70 days (20 May–30 July, including 11 rest days) for the legion to march from its camp to Brundisium (1,750 km (1,087 mi), augmented for the portion outside the Roman empire), at 30 km per day (a 25 per cent faster than average pace), and finally, a minimum of c. 40 days (31 July–10 Sept.) for the sea voyage from Brundisium to Seleucia Pieria in Syria. The entire journey would have lasted 143 days.

¹⁹² The recess (*discessus*) typically lasted from mid-April to mid-May (Stein (1930) 110–11). In view of the grave nature of the crisis posed by the Parthians, it would have been highly irresponsible of the Senate to have postponed action until it reconvened.

¹⁹³ Cicero (*Att.* 11.20.1) attests that the journey from the Syrian port of Seleucia Pieria to Brundisium could be made in 27 days, meaning that the Parthians' withdrawal on c. 1 July

Assuming that the Senate's decree was passed c. 15 Apr., Caesar could have learned of its terms on c. 10 May (see n. 191). To meet his obligation, Pompey chose to recall the legion he had lent Caesar in the winter of 54/3,¹⁹⁴ and so Caesar was forced to surrender not one but two legions (the 1st and 15th). One of those legions (the 15th), was stationed in Cisalpine Gaul (8.54.3), but the other (the 1st) had to march from Transalpine Gaul to Italy. By 2 Dec., at the latest, the two legions were to be found at Capua. (Since a minimum of 70 days would have been required for a legion taking part in the review among the Treveri in mid-October to cover the distance to Capua, it could never have reached that town by 2 December.¹⁹⁵ We thus have an additional, cogent reason for not putting the decree after the troop review, as its placement in Hirtius' account might lead us to do.¹⁹⁶)

Antonius' augural election, Caesar's first trip to Cisalpine Gaul, and the army review. The narrative of the campaign season proper begins with the report that at the conclusion of winter Caesar hurried to Cisalpine Gaul, contrary to his usual practice.¹⁹⁷ He did so with the express purpose of supporting Antonius' bid for election as augur (8.50.1) but, before he reached the province, he heard of Antonius' success in the election (8.50.3). It is possible to determine the approximate dates of Caesar's journey (16–28 July) by first working out the likely date of Antonius' departure from Caesar's headquarters at Nemetocenna and the date of his later summons of Caesar. Contrary to the impression given by Hirtius, Antonius' decision to stand for the augurate was not what motivated him to journey to Rome. Rather, he went there with the intention of standing for

could easily have been made known in Italy shortly before the legions reached Brundisium and completed preparations for embarkation.

¹⁹⁴ See 6.1.2–4.

¹⁹⁵ Fifty-eight days of marching at c. 30 km per day (a 25 per cent faster than average pace) + 11 days of rest would have been required to cover the c. 1,760 km (1,093 mi) from the likely locale of the review (Augusta Treverorum) to Capua.

¹⁹⁶ Possibly Hirtius chose to report the decree later in his narrative, as part of a digression (see n. 188), to make it harmonize with his view that the Senate's act was hostile to Caesar. Actually, when the Senate voted in April, Pompey was not yet prepared to break with Caesar, and the Senate's decision could easily have been justified as a sensible, even necessary measure of national defense aimed at repelling a grave threat on the eastern frontier. It was a measure to which even Caesar's most ardent supporters could not have objected. By the spring of 50 Gaul was pacified, and Caesar could easily spare the troops to reinforce the army facing the Parthians in Syria.

¹⁹⁷ 'Winter' in the sense of 'non-campaigning season'. This must be the meaning of 'when the time in the winter quarters was over' (*hibernis peractis*, 8.50.1). Caesar's usual practice had been to spend the winters in Cisalpine Gaul.

election to the plebeian tribunate (a detail not mentioned by Hirtius),¹⁹⁸ and presumably he planned to arrive in Rome in time to announce his candidacy a *trinundinum* (three market-days) in advance of the earliest date on which the tribunician elections were likely to be held (14 July).¹⁹⁹ Hence he will have wanted to arrive a day or two before 24 June, the first of three market-days (24 June, 3 July, and 11 July) falling before 14 July. In order to do so, he doubtless left Nemetocenna by c. 16 May (5 Apr., Jul.), at the latest, since the journey required roughly 38 days of travel (16 May–22 June).²⁰⁰ Upon his arrival in Rome, Antonius will have learned of the vacancy on the Board of Augurs resulting from the death of the orator Q. Hortensius Hortalus in the first half of June.²⁰¹ Assuming that on the day after his arrival Antonius sent a fast messenger to Caesar to summon his aid, Caesar could have received Antonius' message by 15 July.²⁰² Presumably, in late June there was a possibility that the augural election would not be held until August because otherwise there would not have been sufficient time for Caesar to arrive in the province soon enough to bring his influence to bear.

If Caesar set out from Nemetocenna the next day (16 July), traveling 'by the longest travel stages' (8.50.1), at c. 80 km per day, he could have reached Cisalpine Gaul on c. 28 July.²⁰³ The fact that even before Caesar reached the province a messenger from Rome brought him news of Antonius' success in the augural election (8.50.3) makes it possible to place the election on c.

¹⁹⁸ An office to which Antonius was elected before he successfully stood for the augurate (Plut. *Ant.* 5.1).

¹⁹⁹ 14 July is the first comitial day (day on which an assembly could vote) after the conclusion of the *ludi Apollinares* on 13 July, and typically the tribunician elections were completed in the latter half of July, soon after the games honoring Apollo ended. Although candidates for the tribunate may not have been required, as other candidates were, to announce their candidacy a *trinundinum* in advance (Earl (1965) 331), it makes sense for them to have voluntarily followed the standard practice in giving several weeks' notice of their intention to stand.

²⁰⁰ Assuming Antonius covered the c. 1,900 km (c. 1,190 mi) at an average speed of 50 km per day.

²⁰¹ Hortensius was close to death in early June (Cic. *Fam.* 8.13.2), and Cicero received news of his death when he reached Rhodes on c. 3 Aug. (*Brutus* 1). If news of Hortensius' death reached Antonius while still en route, he could conceivably have made his decision to stand for the augurate slightly earlier than the date of his arrival in Rome. However, the timing of Caesar's receipt of the news of Antonius' success (on c. 27 July, see below) favors a date of c. 22 June for Antonius to learn of the vacancy.

²⁰² The distance of roughly 1,750 km (1,090 mi) via the more direct route over the Little St Bernard Pass (which was open by 23 June (13 May, Jul.)) could have been covered in c. 22 days of travel at 80 km per day.

²⁰³ Approx. 13 days would have been required to cover, by way of the Little St Bernard Pass, the c. 1,030 km (640 mi, including augmentation) to Augusta Praetoria (Aosta).

17 July.²⁰⁴ The reasoning is as follows: a messenger leaving Rome on 18 July could have arrived at Augusta Praetoria (Aosta) on c. 26 July;²⁰⁵ if that messenger intercepted Caesar on the next day (27 July), the news will have greeted him, as described, before he arrived in Cisalpine Gaul (on c. 28 July). Probably soon thereafter Caesar learned the results of the consular and praetorian elections, which doubtless took place a few days after Antonius' election to the augurate.²⁰⁶ Those elections resulted in a near-total success of Caesar's opponents (8.50.4). Caesar thus had good reason to canvass the townships in Cisalpine Gaul to seek support for his prospective candidacy in 49 for the consulship of 48 (8.51).

After completing a triumphant tour of the entire province, which consumed perhaps the whole of August (20 June–18 July, Jul.), since the circuit traveled was approximately 1,500 km (c. 940 mi), Caesar returned 'at top speed' to Nemetocenna (8.52.1). If he left the province from Augusta Praetoria on 1 September, this journey would have consumed approximately 13 days.²⁰⁷ Presumably at the time of his departure he dispatched messengers to all the camps and ordered all legions out of their winter quarters to the territory of the Treveri, where he conducted a formal review (*lustratio*) of the army (8.52.1). No doubt his aim was to put on a demonstration of success, power, and unity that would have the effect of impressing both the Gauls and his enemies at Rome. Given the location of the winter quarters,²⁰⁸ this review can hardly have taken place earlier than c. 15 October (31 Aug., Jul.).²⁰⁹ Subsequently, Caesar

²⁰⁴ 17 July was the next comitial day after the 14th (the likely date of the tribunician elections). The prevailing view for more than a century and a half has been that augurs were elected after consuls and before praetors (e.g., Linderski (1972) 190–3), which would force us to find room for the election of consuls before the augural election. However, Ryan (2003) 1–2 has convincingly demonstrated that it is equally plausible, and perhaps even more likely, that vacancies on priesthoods were filled before curule magistrates were elected for the coming year. The timing of Caesar's receipt of the news of Antonius' success (a day or two, perhaps, before his expected arrival in Cisalpine Gaul on c. 28 July) favors the date of 17 July. Certainly the election could not have taken place many days later because sufficient time must have elapsed (a minimum of c. 11 days) after Antonius' election for Sex. Peducaeus to be tried (most likely for a role in promoting Antonius' election) and acquitted by c. 8 Aug. (Cic. *Fam.* 8.14.1).

²⁰⁵ Approx. nine days of travel, at 80 km per day, to cover the c. 720 km (447 mi) from Rome.

²⁰⁶ See n. 204 above.

²⁰⁷ Covering the c. 1,030 km (640 mi) at 80 km per day.

²⁰⁸ See 8.46.3–4: territories of Belgae, Aedui, Turoni, and Lemovices.

²⁰⁹ The date of the review can be estimated by taking into account the length of time needed by messengers sent by Caesar to reach the camps of the legions with orders to assemble (6–10 days from 1 Sept.) and the length of time (c. 28–34 days) needed by the eight legions to reach Augusta Treverorum (Trier), a likely place of the review (Sanford (1911) 320–1): a total of 44 days, at the maximum (1 Sept.–15 Oct.). Possibly the muster, if it was

moved some legions around, changing the locations of their camps (8.52.3). Unfortunately we do not know how or precisely why and how far he moved in this period from the locale of the review.²¹⁰ At last he assigned winter quarters to his legions north of the Alps, stationing four under Gaius Trebonius in the territory of the Belgae and four under Gaius Fabius among the Aedui (8.54.3–4).²¹¹

Caesar's final return to Ravenna. Caesar then returned to Cisalpine Gaul (8.54.5–55.1). Since achieving their success in the elections to the higher magistracies in the summer, his enemies in Rome had been intensifying their efforts to thwart his plans and draw Pompey to their side. Fears of an impending civil war increased and prompted hectic maneuvering in the Senate (8.52.2–5). On the assumption that on the day after his arrival at Augusta Praetoria Caesar dispatched Hirtius to Rome to explore the possibility of resolving the escalating crisis, we can estimate 25 November as the date of Caesar's arrival in the province. This follows from the fact that Hirtius reached Rome on the evening of 6 December;²¹² and since it would have taken him approximately ten days to cover the distance,²¹³ he must have set out from Augusta Praetoria on 26 November.

Hirtius however, unexpectedly abandoned his mission and left Rome on the same night he arrived (after midnight on the night of 6/7 Dec.) to rejoin Caesar, failing to attend a meeting scheduled with Pompey's father-in-law Metellus Scipio.²¹⁴ The most likely explanation for the abrupt change in plan is that upon his arrival in Rome Hirtius learned that the consul C. Marcellus had charged Pompey with assuming command of the two legions withdrawn from Caesar in the spring and retained in Italy—an action that profoundly changed the political situation.²¹⁵ The likely date of Marcellus' action is c. 2

announced for 15 Oct., gave rise to the false report in Rome in Sept. that Caesar was intending to transfer four legions from Transalpine Gaul to Placentia on 15 Oct. (Cic. *Att.* 6.9.5; cf. 7.1.1).

²¹⁰ Hirtius' text suggests that some earlier locations had not been suitable because conditions were deemed unhealthy; see discussion in Kraner et al. (1960b) 77–8.

²¹¹ Perhaps at Matisco. One other legion, the 13th had earlier, probably in late May (see n. 191), been sent to Cisalpine Gaul to replace the 15th, which was one of the two legions called up by the Senate's decree to reinforce troops in Syria. Rumors about major and potentially threatening troop movements on Caesar's part had circulated in Rome already in Sept. See n. 209 and Gelzer (1968) 184–5.

²¹² Cic. *Att.* 7.4.2.

²¹³ Approx. 720 km (447 mi) at an average speed of 70 km per day.

²¹⁴ Cic. *Att.* 7.4.2.

²¹⁵ News that greeted Caesar after his return to Italy (8.55.1); cf. App. *BC* 2.31; Plut. *Pomp.* 59.1; Dio 40.65–6. For an interpretation of Marcellus' act, see Raaflaub (1974) 33–55.

December, a mere four days before Hirtius' arrival, for the following reasons. Word of that hostile act must have been carried swiftly to Caesar, and receipt of that disturbing news is doubtless what triggered Caesar's summons of the 8th and 12th legions to Cisalpine Gaul.²¹⁶ Since the marching orders for those two legions must have been dispatched from Ravenna no later than 8 December,²¹⁷ the messenger from Rome must have brought the news about Marcellus' act to Caesar by 7 December, at the latest. This in turn means that he departed from Rome no later than 3 December.²¹⁸

Possibly, Caesar arrived at Ravenna on 7 December as well, on the same day as the messenger from Rome, if Caesar set out from Augusta Praetoria on 26 November and covered the c. 530 km (329 mi) at the comfortable pace of c. 50 km, while holding the assizes along the way.²¹⁹ Hirtius could have re-joined Caesar at Ravenna on c. 11 December, having left Rome in the early morning hours of 7 December. Then, on c. 14 December, the ex-tribune C. Curio arrived at Ravenna,²²⁰ having left Rome on 10 December, the day after the term of his office expired, which he had employed in defence of Caesar's interests. The remaining two weeks of December were filled with intensive negotiations before two declared enemies of Caesar assumed the consulship on 1 January 49.

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²¹⁶ At *Civ* 1.7.8–8.1, Caesar gives the impression that the summons was not issued until much later, after the first of the new year.

²¹⁷ 8 Dec. is the latest date for the summons to have been sent for the following reasons: a minimum of 15 days (8–22 Dec.) would have been required for fast a messenger to cover the c. 1,175 km (730 mi) from Ravenna to the closest winter camp (at Matisco in Aeduan country), at an av. speed of 80 km per day. The 12th legion that caught up with Caesar first (on c. 8 Feb. at Firmum) cannot have departed later than 23 Dec., since approximately 44 days were required for the march from Matisco to Firmum (23–9 Dec. = 7 days + 1–29 Jan. + 1–8 Feb. = 44): 37 days of fast marching at an average speed of 35 km per day + 7 days of rest, to cover the c. 1,285 km (798 mi) down the Saône and Rhone valleys to Arelate (Arles), along the coastal road to Genua (the Alpine passes being closed in Dec.) and from there to Ariminum and Firmum.

²¹⁸ Just over four days will have been required to cover the c. 350 km (218 mi) from Rome, at 80 km per day.

²¹⁹ Suet. *Jul.* 30.1.

²²⁰ App. *BC* 2.32.

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