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The Prodigious of the Ancient Roman Republic and their Chronology.

A Resource for Modern Science.

VOLUME ONE

Submitted for Degree of Doctor of Philosophy

by

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Summary

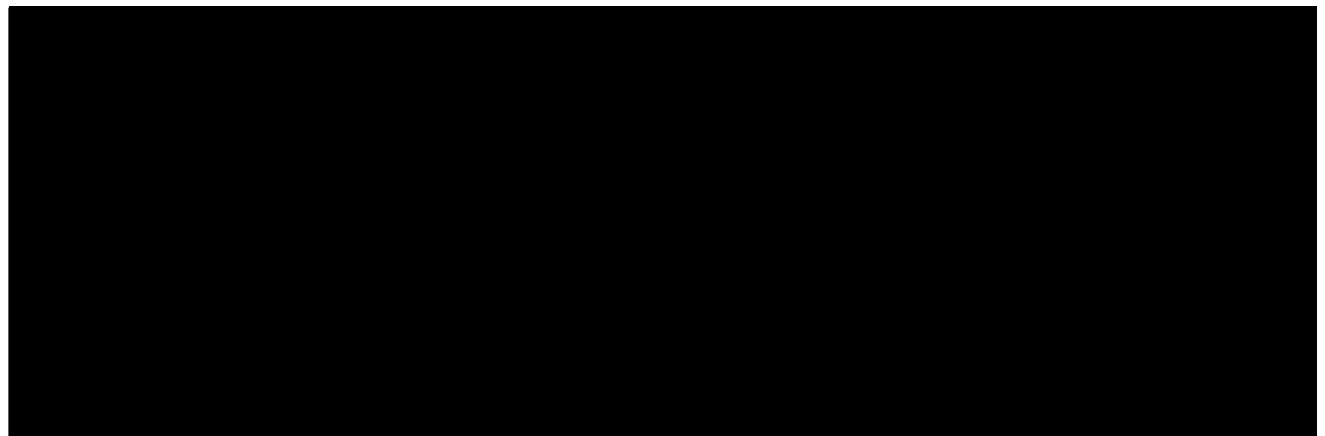
During the period of the Republic the religious authorities of ancient Rome paid considerable attention to *prodigia*, to them enigmatic phenomena considered to reflect the disposition of the gods. Reports of prodigies accepted and expiated were preserved in the official archives and such primary records are the basis of secondary accounts that appear in literary works of different genres.

Many of the phenomena regarded as *prodigia* are of considerable interest to multiple branches of modern science and scientists themselves have duly sought to exploit the extant evidence. So far, most efforts in this direction have been seriously undermined by a number of contributing factors. These include incompleteness of the data bank deployed, oblivion to serious chronological difficulties, unfamiliarity with the background and mindset of the authors in whose works prodigies are listed, and unawareness of allusions and representations in a variety of ancient writings that bear in one way or another on matters of interpretation.

The principal aim of the present thesis, part of an ongoing project on a broader canvas, is to provide scientists, and others, aware of the astronomical, meteorological and other significance of prodigial records with a comprehensive collection of source material relating to the period 218-167 BCE together with other resources essential towards avoidance of pitfalls insufficiently apparent to previous exploiters.

Statement

This thesis contains no material which has been accepted for the award of any other degree or diploma in any University; nor, to the best of my knowledge and belief, does it contain any material previously published or written by another person, except when due reference is made in the text of the thesis.



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I acknowledge with gratitude the assistance of Gavin Betts who checked my ancient Greek. Any errors that may remain are wholly mine.

I should also like to thank Saul Bastomsky, and all the generous assistance he gave to me when he was Head of the Department of Classics and Archaeology.

Finally, much gratitude goes to my parents who supported me in many different ways during the gestation period of this thesis, who listened with apparent interest to (no doubt) sometimes tedious explanations, who exhibited enthusiasm to match my own and who offered encouragement when I needed it. Also, of course, to Cody, and he knows why.

Referencing, Abbreviations and Conventions

In referring to primary works in the main text and footnotes I have used the Oxford Latin Dictionary abbreviations of ancient works (with a few minor exceptions) and the mode of citation, by and large, recommended by the Oxford University Press. Full details appear in the first part of the bibliography. Collections of ancient material, such as inscriptions, are referred to by their full title in the first instance and then by the abbreviation assigned in brackets after it. More modern words are cited in text and notes simply by author, year and page(s). Full details are set out in the second part of the bibliography.

Generally, the names of ancient Greek writers are given in the Latinized form.

For the most part I have made use of the Oxford Text of Livy for Books 21-35 and the Teubner text of John Briscoe thereafter. In respect of other ancient writers I have drawn upon the Loeb text where there is one and the Teubner text where there is not.

Given the thrust and intended beneficiaries of the work, translations of almost all quotations from ancient texts are provided. In the case of passage directly concerned with specific prodigies the translations are essentially my own. Elsewhere I have printed, with occasional modifications, Loeb translations where such exist. Other translations are credited to those responsible in the context of citation.

The sporadic illustrations, included for entertainment's sake rather than to throw light on the phenomena concerned, are reproductions of the quaint woodcuts in Lykosthenes *de Prodigis*.

The map accompanying the gazetteer on pp. 580-1 is adapted from H.H. SCULLARD, *A History of the Roman World from 753 to 146 B.C.* (Methuen & Co., Ltd, London, 1961 [3rd ed.])

Where journal titles are not given in full, the abbreviations used as those of *L'Année Philologique*.

Part One

Introduction

Chapter One

Prodigia, Science and Programme

A. Roman Religion and the *Pax Deorum*

The gods of the ancient Romans impinged upon their public and private lives in many ways, both subtle and blatant. A farmer, for example, would pray and offer sacrifice to specific deities for protection of his sown fields, for a healthy crop and a successful harvest. From his perspective, nature's workings were far from a matter of law-governed science but reflected at various levels the gods' ongoing and direct involvement. At the political level, senatorial meetings could only take place in a building designated as a *templum* and business always began with religious matters. The entry upon office of each year's consuls was marked by sacrifice and expiation of the accepted prodigies. Although the gods were an integral part of Roman lives, the Romans did not have a structured, ideological religious framework. Roman religion did not require belief. It was dependant not on thought but on feeling.¹ It has never been the primary purpose of religion to provoke thought, and this is quite evident in the Roman religion where the application of prescribed rites and ceremonies, coupled with the strict observance of them by the populace, held pride of place. Emphasis was on the meticulous performance of the rites, on scrupulousness rather than on faith or good moral behaviour.² For centuries

¹ Nock (1963), p. 504.

² Weber (1965), p. 12 puts the situation well: "The Roman was centrally concerned with questions of legal etiquette, not questions of sin, punishment, penitence, and salvation." This certainly stands in stark contradistinction to religions of today, such as the Christian religion, where individuals must repent of their sins and follow an ideal way of life governed by morality and Commandments, in order finally to achieve their salvation and Eternal Life. This was not the sort of religious instinct possessed by the Romans until the passing of many centuries. Their religion was more concerned with successful enterprise rather than personal and individual goodness. Its thrust is well reflected at Cicero, *N.D.* 3,87, where the writer explains, *lovemque optimum et maxumum ob eas res appellant, non quod nos iustos temperatos sapientes efficiat, sed quod salvos*

there was no especially moral element in the religion of the Romans because they believed that a man was born with an immutable character, and there was no way that any change to it could be other than extremely ephemeral.³ As Ogilvie⁴ puts it, in the Roman view prayers would be heard if they were correctly formulated rather than if they came from a contrite and unselfish heart. According to Nock,⁵

two religious emotions and two only were valued, the *religio* of just scruples against breaking an oath and its positive complement, *pietas*, a strict and loyal readiness to perform all the obligations of a Roman and a son.

Pietas has a more diffuse meaning than is encapsulated by our *piety*; it included the acceptance of obligations to the gods, the State, and the family, in that order. Likewise, *religio* is insufficiently and inaccurately translated as *religion*. Its basic ambience is quite remote from what we regard as that word's connotation. Overall, it was the core 'religious' preoccupation of the Romans both to avoid the wrath of the gods, and to secure their favour.⁶

It was an undeniable and unquestionable axiom for the Roman people, if not for all ancient civilizations, that the gods were solely responsible for the wellbeing of their city and country, as well as themselves:

incolumis opulentos copiosos (the reason why men give to Jupiter the titles of Best and Greatest is not that they think that he makes us just, temperate or wise, but safe, secure, wealthy and opulent).

³ OGILVIE (1969), p. 18.

⁴ *ibid.*, p. 19.

⁵ NOCK (1963), p. 465.

⁶ SCHILLING (1987), p. 203.

Un des traits essentiels des religions antiques était l'idée d'un lien entre les groupements humains et des divinités attachées à chacun d'eux. Les dieux de la cité combattaient pour elle, avec elle.⁷

Not only good came from them, however; as Livy explains, *omnium secundorum adversorumque causas in deos verterent* (men attributed to the gods the causes of everything fortunate and unfortunate).⁸ The gods of Rome were all-powerful entities, collectively close to omniscient and omnipotent, present in every aspect of human life and aware of every decision made by humans, and their latent potentiality. The world was an arena in which all action was divinely instigated and mediated, and all thought and decision ultimately supernaturally influenced. Powerful and knowledgeable though they were, the gods were effectively ascribed at times the irascibility of old men and the caprice of children. Consequently they were comprehensively indulged by worshippers who pandered to their whims and sought to avoid, often through very elaborate measures, incurring their displeasure. Their wrath could be devastating but as a counterbalance their favour could be extremely advantageous to the State and, to some extent, individuals.

A covenant has for a long time been the main link between man and his god or gods, regardless, often, of pantheon and locale. According to Exodus,⁹ the twelve tribes of Israel made a covenant with their God, sealed by Moses with the blood of sacrificed oxen. The ancient Romans, likewise, had a covenant with their gods, sealed by copious sacrificial offerings and maintained by prescribed rites and authorized actions. This

⁷ BERGSON (1961), p. 332.

⁸ LIVY, 28,11.1.

⁹ EXODUS 24.5-8: "Then he directed certain young Israelites to offer holocausts and to immolate bullocks to Yahweh as communion sacrifices. Half of the blood Moses took up and put into basins, the other half he cast on the altar. And taking the Book of the Covenant he read it to the listening people, and they said, "We will observe all that Yahweh has decreed; we will obey." Then Moses took the blood and cast it towards the people. "This," he said, "is the blood of the Covenant that Yahweh has made with you, containing all these rules."

covenant was known as the *pax deorum* - the Peace of the Gods, and it was through maintenance of this peace that Rome, to her perception, became as mighty as she did, with her people the rulers of most of the Mediterranean world.

It would be a mistake to infer that the Romans felt confident of an ability to control their gods, or to take from them what was not voluntarily given. There was never a compulsory reciprocity between the people and their gods. Regardless of what rites and ceremonies were performed, the gods could not be forced into doing anything.¹⁰ There existed rather a sense of loose obligation, epitomized in the pervasive theme of *do ut des* (I give [to you] so that you may give [to me]). In a nutshell, I, a human, have given a certain thing, an offering, have fulfilled a certain promise, in the hopes that you, a god, will answer my prayer, give me what I desire, fulfil your part of the bargain. If the gods failed to keep their part of this bargain, however, no ultimate blame or censure could be ascribed to them. As more puissant, superior beings they were not obliged to respond to any form of coercion or persuasion on the part of mere mortals. It was perfectly within their rights to refuse to comply with any request made. By and large, no diminution of the respect habitually accorded the gods resulted, regardless of their actions. As Fowler¹¹ notes,

the farthest the Romans ever went in condemning their gods was when misfortune persuaded them that they were become indifferent or useless; then they began to neglect them, and to turn to other gods.

¹⁰ WEBER (1965), p. 28, makes an interesting observation vis-à-vis the definition of "gods" and "demons" based on this inability of the Romans to coerce their gods, forced instead to approach them with only gifts and pleas. He writes that "the relationship of men to supernatural forces which take the forms of prayer, sacrifice and worship may be termed "cult" and "religion," as distinguished from "sorcery," which is magical coercion. Correspondingly, those beings that are worshipped and entreated religiously may be termed "gods," in contrast to "demons," which are magically coerced and charmed."

¹¹ FOWLER (1922), p. 203.

On a State, rather than an individual, level, it was the duty of the priests and magistrates to present requests and perform appropriate rituals, and thereby keep the Roman gods on the Romans' side.¹² This was an exacting task, requiring strict adherence

¹² NORTH (1989), p. 593. There was also a rite that could be performed to gain the favour and support of other people's gods. *Evocatio* was the Roman means by which the gods of an enemy could be wooed away from them. They were promised worship, continuance of their cults, and even a temple in Rome if they withdrew their support from Rome's enemies. A very good example of the formula employed for this *evocatio*, apparently from a book by Furius, can be found in MACROBIUS, *Sat.* 3,9.7-8:

est autem carmen huius modi quo di evocantur cum oppugnatione civitas cingitur: Si deus, si dea est, cui populus civitasque Carthaginensis est in tutela, teque maxime, ille qui urbis huius populique tutelam recepisti, precor venerorque veniamque a vobis peto ut vos populum civitatemque Carthaginensem deseratis, loca templa sacra urbemque eorum relinquatis, absque his abeatis eique populo civitati metum formidinem oblivionem iniciatis, proditque Romam ad me meosque veniatis, nostraque vobis loca templa sacra urbs acceptior probatioque sit, mihi populoque Romano militibusque meis praepositi sitis ut sciamus intellegamusque. si ita feceritis, voveo vobis templa ludosque factorum (the formula to call forth the gods of a besieged city runs as follows: "To any god, to any goddess, under whose protection are the people and state of Carthage, and chiefly to you who are charged with the protection of this city and people, I make prayer and do reverence and ask grace of you all, that you abandon the people and state of Carthage, forsake their places, temples, shrines, and city, and depart therefrom; and that upon that people and state you bring fear and terror and oblivion; that once put forth you come to Rome, to me and to mine; and that our places, temples, shrines, and city may be more acceptable and pleasing to you; and that you take me and the Roman people and my soldiers under your charge; that we may know and understand the same. If you shall so have done, I vow to you temples and solemn games.")

This formula was not a standard, however, according to Livy's account of the attack by the dictator, M. Furius Camillus, on Veii in 396 BCE [5,21.1-5]. Camillus addressed Juno, goddess of Veii, in simple and brief terms, promising her merely a temple in Rome. The Veientes, however, were apparently unaware that, *iam in partem praedae suae vocatos deos, alios votis ex urbe sua evocatos hostium templa novasque sedes spectare* (some of the gods had already been invited to share in their despoiling, while others having been entreated to quit their city were beginning to look to new homes in the temples of their enemies); they fought against the Romans and were ultimately defeated. The process of removing gods and goddesses to Rome was done reverently, *colentium magis quam rapientium modo* (more in the manner of worshippers than of pillagers) [LIVY, 5,22.3]. Livy tells that the youths allocated this duty were loath to touch the goddess for fear of displaying disrespect. *dein cum quidam seu spiritu divino tactus seu iuvenali ioco, "Visne Romam ire, Iuno?" dixisset, adnuisse ceteri deam conclamaverunt. inde fabulae adiectum est vocem quoque dicentis velle auditam* (when one of the youths, whether divinely inspired or out of youthful jocularity, asked, "Will you go, Juno, to Rome?", whereat all the others cried out that the goddess had nodded assent. It was afterwards added to the story that she had also been heard to say that she was willing) [LIVY, 5,22.5]. So, almost paradoxically, though the Roman religion was strictly circumscribed and allowed no provision for the abandonment of early and successful, but ultimately meaningless, rites, it was plastic enough to allow inclusion of new deities and their concomitant ceremonies, a reflexion, clearly, of the Romans' strong feelings about

to traditional rites. Any error in these could lead to voidance, necessitating an *instauratio*, repetition of part, or the whole, of the ceremony. The Romans clung to their religious ceremonies with limpet-like tenacity, preserving the customs that had been handed down through the generations, and in this respect, the middle and, to a certain extent, the late Roman republic can be seen as a byword for the maintenance of old, out-dated, and half-forgotten rituals. The Romans were a people extremely conservative of their religious traditions, and they endeavoured to preserve and continue the rituals and ceremonies instituted by their ancestors, on the grounds that it would be an eminently dangerous thing to abandon deliberately any of the gods, goddesses, sacred sites, or ritual acts that had been bequeathed to them. The traditional observances were not lightly tampered with; eventual incongruity notwithstanding they persisted because the Romans lacked an ideological framework that would have made possible growth and reformation of their religious system.¹³ Ultimately, perennial reluctance to relinquish hold of the ancient observances meant that the religious corpus of the Romans was replete with no longer understood ceremonies and traditions, whose true origins were more often than not lost to memory and so had become the stuff of legend rather than history. The only veridical knowledge the Romans often possessed regarding any rite was that it had been observed by their ancestors and good fortune had resulted. As North puts it,¹⁴

fulfilling their vows, of their dedication to *pietas*.

¹³ NORTH (1976), p. 1.

¹⁴ NORTH (1976), p. 1. His view is also held by WEBER (1965), p. 7, who writes, "every purely magical act that had proven successful in a naturalistic sense was of course repeated in the form once established as effective. This principle extended to the entire domain of symbolic significance, since the slightest deviation from the ostensibly successful method might render the procedure inefficacious". Such adherence to established ceremonies was not a purely Roman tradition but applied (and in some cases still applies) to most, if not every, religion.

For the Romans of any generation, the real validation of their religion lay in the fact that it had worked: that their ancestors had won battles, survived crises, eaten dinners, begotten children and expanded their power by the practice of the self-same rites and ceremonies as they practised themselves.

Once some religious act had proven itself effective in the appeasement of the gods, it was carried out integrally and not tampered with not because of any aesthetic or other form of attraction that was conceived for the rite by its performers (in some cases, certainly, some might have existed) but rather because "the slightest deviation from the ostensibly successful method might render the procedure inefficacious."¹⁵

The Romans were able to continue with these often meaningless (insofar as the meaning or motivation behind the act had been forgotten)¹⁶ ceremonies precisely because the system was not based on worshippers' personal credos but on these ritual acts. The religion of the Romans, to repeat, was not one possessed of particular ideologies, with a philosophy and teachings, such as modern religions like Islam or Christianity which assume to exert some direct influence on the personal lives and conduct of adherents. Due to the circumscription of public religion by often arcane ritual and tradition, with its ceremonies by and large the province of specialist sacerdotal colleges, the ordinary Roman citizen had little personal participation in intercourse with the State gods, and was generally intimately involved only with private rites, such as prayers in the morning and offerings to his household gods, etc.¹⁷ The masses generally came into contact with the

¹⁵ WEBER (1965), p. 7.

¹⁶ The common Roman was content to see something being done to protect him and his, and it was really only in this way that many religious rites held any meaning for him.

¹⁷ Every household had its own *lar* and *penates*, every male his own *genius*. In addition some 'minor' deities received their worship from individuals. The *paterfamilias* was concerned with his morning prayers, and libations to the *penates*, with prayers to the myriad gods of the fields or woods or livestock; but his dealings with the state gods were entirely through the authorities set above him, and his sole duty in regard to them was to keep free from all civic transactions those days which had been decreed to be of religious importance (*nefas*). Unfortunately, private religion

gods of the State only at times of annual, organized ceremonies, such as, for example, the *Ludi Romani*, or on occasions of disruption and alarm, often featuring prodigies. Although not involved with the actual performance of prescribed rites, they remained acutely aware of their importance. Bailey¹⁸ claims that the populace was content to relinquish the practice of the maintenance and repair of the *pax deorum* entirely to those appointed to such duties, leaving it on the whole "unconcerned" about them, except for abstaining from work while the ceremonies were performed. Hallward¹⁹ however challenges this view, arguing that,

the masses - *moti in religionem* - received a powerful impulse towards every kind of religious observance in the desperate desire to obtain that *pax deorum* which the succession of disasters showed had been somehow violated.

The lives and well-being of the general populace depended heavily on satisfied gods, on obeying them and heeding their warnings,²⁰ simply because, as Livy explains, *invenietis omnia prospera evenisse sequentibus deos, adversa spernentibus* (you will find that all things turn out well when we obey the gods, and ill when we spurn them).²¹

Any system that consisted so completely of constricting and immutable performative regulations was inevitably dependant on the expert authority of leading figures. Religious

is well outside of the scope of this thesis and so cannot be examined here. For treatment of private religion, see MANTELL (1979) and LACEY (1996), pp. 170-81.

¹⁸ BAILEY (1932), p. 127f.

¹⁹ HALLWARD (1954), p. 114f.

²⁰ This oft-repeated belief is best encapsulated by Raymond Bloch (1963), p. 83, where he writes that, "La cité devait avant tout rechercher la *pax Deum*, la paix avec les Dieux, garants des succès individuels et collectifs." Ruptures in the *pax* were indeed taken very seriously, and genuine overall popular concern is reflected in Livy, 3.5.14: *...portentaque alia aut obversata oculis aut vanas exterritis ostentavere species. his avertendis terroribus in triduum feriae indictae, per quas omnia delubra pacem deum exposcentium virorum mulierumque turba implebantur.*

²¹ LIVY, 5.51.5.

duties in Rome were shared by several sacerdotal colleges - each with its own particular area of expertise, whom the Senate would consult and, if necessary, to whose authority it would defer. Ultimate religious responsibility cannot be attributed solely to one person or group.²² The key collegiates together with their duties were as follows.

The *Pontifices* were concerned largely with administrative matters, with the conservation of religious traditions, with sacred laws and actions reflecting on them, with the performance of the various *ludi*, and with the burial laws. They were responsible for the discharging of any sacred obligations incurred by the State. They were also in charge of the maintenance of the calendar, supervision of adoptions, and were responsible for the keeping of annual records.²³ The *collegium pontificum* included besides the *pontifices*, the *flamines* and Vestal Virgins. Its head and the head of the whole State clergy was the

²² It is not within the scope of this chapter, or indeed this thesis, to delve into specific duties of the personnel within these various colleges. Such matters have been well explicated by such authorities as SZEMLER (1971) and BEARD (1988).

²³ NORTH (1989), p. 586. Note in particular LIVY, 1,20.5-7: *pontificem deinde Numam Marcium Marci filium ex patribus legit eique sacra omnia exscripta exsignataque attribuit, quibus hostiis, quibus diebus, ad quae templa sacra fierent atque unde in eos sumptus pecunia erogaretur. cetera quoque omnia publica privataque sacra pontificis scitis subiecit, ut esset quo consultum plebes veniret, ne quid divini iuris neglegendo patrios ritus peregrinosque adsciscendo turbaretur; nec caelestes modo caerimonias, sed iusta quoque funebria placandosque manes ut idem pontifex edoceret, quaeque prodigia fulminibus aliove quo visu missa susciperentur atque curarentur* (he next chose as *pontifex* Numa Marcius, son of Marcus, one of the senators, and to him he entrusted written directions, full and accurate, for performing the rites of worship; with what victims, on what days, and from what sources money was to be disbursed to pay their cost. All other public and private sacrifices he likewise made subject to the decrees of the *pontifex*, that there might be someone to whom the commons could come for advice, lest any confusion should arise in the religious law through the neglect of ancestral rites and the adoption of strange ones. And not merely ceremonies relating to the gods above, but also proper funeral observances and the propitiation of the spirits of the dead were to be taught by the *pontifex* as well, and also what prodigies manifested by lightning or other visible signs were to be taken in hand and averted).

CICERO *Har.* 14: *pontifices...quorum auctoritati, fidei, prudentiae maiores nostri sacra religionesque et privatas et publicas commendarunt (...pontifices ...to whose authority, loyalty, and wisdom our ancestors entrusted all matters of religion and of private and public observance).*

Pontifex Maximus, elected by 17 of Rome's 35 tribes and holding office, like his colleagues, for life.

The *Augurs*, eventually 16 in number, were charged with the responsibility of the maintenance of traditional rites, and with the interpretation of the attitude of the gods towards Rome as insinuated through such familiar phenomena as the flights of birds, and thunder claps. Certain signs considered to be against the natural order of things also fell under their authority. Livy²⁴ well conveys the influence that the college acquired:

auguriis certe sacerdotioque augurum tantus honos accessit ut nihil belli domique postea nisi auspicato gereretur, concilia populi, exercitus vocati, summa rerum, ubi aves non admisissent, dirimerentur (however this may be, auguries and the augural priesthood so increased in honour that nothing was afterwards done, in the field or at home, unless the auspices had first been taken: popular assemblies, musterings of the army, acts of supreme importance - all were put off when the birds refused their consent).

Not as prestigious as the colleges of the *pontifices* and augurs but significant at times when the *pax deorum* was perceived as disrupted were the *decemviri* (increased in Sulla's time to *quindecimviri*) *sacris faciundis*. Technically minor magistrates, these *decemviri* were the guardians and consultants of the Sibylline Books,²⁵ prophetic

²⁴ LIVY, 1,36.6.

²⁵ These books possessed a chequered history indeed. Reputed to have been obtained by Tarquinius Priscus, there were originally nine of them, but through Tarquinius' folly, this total was reduced to three. (The story of the books may be found at PLINY, *N.H.* 13.88 and DIONYSIUS OF HALICARNASSUS, 4,62.1-6.) The books were then placed under the charge of the *Xviri Sacris Faciundis* (initially only *duumviri*), the only men allowed to consult them, until 83 BCE when they were destroyed in the burning of the Capitol. It was necessary then for another collection of oracles to be compiled from various sources outside Rome, from Italy, Greece, and the East, because the Romans had become in a manner of speaking addicted to the prophecies they contained. From exactly where the original verses came, or how, it is impossible to know, but the Romans carefully preserved and consulted them because "ils passaient pour contenir les secrets grâce auxquels pouvait se développer la puissance romaine." [BLOCH, (1984), p. 80.] The verses, according to CICERO *Div.* 2.112, were written in Greek hexameters and authenticated by the presence of anacrostics. The letters of the first line of a verse group were identical to the initial letters of each line of the group, enabling the same words to be read vertically as well as horizontally. Any non-original or interpolated line would break this pattern, which may have been deliberately established to deter tampering. It seems clear that the original books must have

compilations which, legend had it, were purchased in the time of Rome's Kings and which were regularly consulted when remedial action was required for the expiation of prodigies.²⁶ These books generally offered one of two, or occasionally multiple, remedies. These included ceremonies to heal the rift between man or gods, the introduction of a foreign cult into Rome, such as those of the Idaean Magna Mater in 205 BCE and the Epidaurian Aesculapius in 292 BCE, or the incorporation of new rites such as the *lectisternium* into the religious framework.²⁷ It was also the duty of the *Xviri* to be the overseers of religious imports and innovations.

Also with an eventual high profile in respect of the *pax deorum* was the *ordo haruspicum*,²⁸ diviners imported into Rome from Etruria. By the late republic there were

consisted primarily of a series of instructions along the lines of, "In the event of a rain of stones..." and that the *Xviri*, on being ordered by the Senate to furnish an expiation for a particular phenomenon, browsed through the books until they found the phenomenon in question with its set remedy. NORTH (1989), p. 617-8, is also of the opinion that the books contained sets of *remedia*, and he adds that, "it was in this context that the Books suggested new cults and rituals, providing legitimation by their antiquity and their foreignness." We learn from Livy that the Sibylline Books also included prophecies, such as the one of 205 BCE which caused the Magna Mater to be relocated to Rome: *civitatem eo tempore repens religio invaserat invento carmine in libris Sibyllinis propter crebrius eo anno de caelo lapidatum inspectis, quandoque hostis alienigena terrae Italiae bellum intulisset, eum pelli Italia vincique posse, si mater Idaea a Pessinunte Romam advecta foret* (at the same time religious scruples had suddenly assailed the citizens because in the Sibylline books, which were consulted on account of the frequent showers of stones that year, an oracle was found that, if ever a foreign foe should invade the land of Italy, he could be driven out of Italy and defeated if the Idaean Mother should be brought from Pessinus to Rome) [29,10.4-5].

²⁶ LIVY, 10,8.2: *decemviros sacris faciundis, carminum Sibyllae ac fatorum populi huius interpretes, antistites eosdem Apollinaris sacri caerimoniarumque aliarum plebeios videmus* (we shall see that plebeians are *Xviri* charged with the sacred rites, interpreters of the Sibylline oracles and the destinies of this people, the same being also overseers of Apollo's ritual and of other ceremonies).

²⁷ PARKE (1988), p. 192.

²⁸ *Haruspices* were not generally considered as belonging to a priestly college *per se*, and historians such as SZEMLER (1971) and NORTH (1989) tend not to include them under this umbrella. OGILVIE (1969) p. 65, clearly states that they were never an official priesthood in Rome. WEBER (1965) pp. 28-9, experiences difficulty in defining a priest but finally concludes (p. 30), "It is more correct for our purposes, in order to do justice to the diverse and mixed manifestations of this phenomenon, to set up as the crucial feature of the priesthood the

60 *haruspices* headed by a *summus haruspex*. The *Etruria disciplina* of which the *haruspices* were practitioners revolved around the interpretation of *exta*, entrails; *monstra*, abnormal phenomena and teratologies; and lightning and its effects. With increasing frequency during the middle republic, *haruspices* were called on in addition to other authorities by the Senate to assist in the expiation of *prodigia*, *monstra* in the *haruspices'* own parlance. Thus, for example, *à propos* the expiation of the prodigies in 207 BCE, Livy at 27,37.6 spells out a significant haruspical rôle.

It was unnecessary for members of religious bodies to possess religious beliefs, or, with the exception of the *haruspices*, to have acquired any special training. Entry by an individual into the college of *pontifices* was elsewhere dependant on the fulfilment of certain criteria: the candidate had to be a Roman citizen, of free birth, and without bodily defect,²⁹ and he also had to be free of personal enmity towards any other member of the body concerned.³⁰ Yet despite possessing all of these admirable and necessary qualities, a man might still find himself rejected for what amounted to political reasons due to the lack of some unspecified characteristic or qualification. Comparatively early, the Roman priesthood in particular emerged as the first rung on the ladder of political advancement. As Hahm³¹ explains:

A priesthood may well have been a form of political patronage, in which the new priest was bound to friendship with the man already in the college. In exchange for his support of fellow-priests in the *comitia* and on the senate floor, a new priest could expect backing when his own turn came to

specialization of a particular group of persons in the continuous operation of a cultic enterprise, permanently associated with particular norms, places and times, and related to specific social groups."

²⁹ DIONYSIUS OF HALICARNASSUS, 2,21.3.

³⁰ CICERO, *Fam.* 3,9.

³¹ HAHM (1963), p. 82f.

run for office. With some of the most influential men of the Roman nobility behind him, he was virtually guaranteed a successful political career.

Men whose political ideas were in any way at variance with those of the existing college members were highly unlikely to be co-opted into the pontificate.

It was in the hands, then, of often politically-motivated groups that the responsibility of the maintenance of the *pax deorum* really lay, and if, by some chance, the *pax* were ruptured, it was incumbent on one or all of them to effect a repair and re-establish the peace on whose maintenance it was believed the whole city and her people were dependent.

B. *Prodigia* and their Processing

Rupture of the *pax deorum* was most conspicuously evidenced by the appearance of *prodigia*, manifestations which appeared to violate the natural order of the world as the Romans conceived it. "Leur vision de l'Univers était concrète, pragmatiste," as Bloch³² expresses it, and these occurrences struck them as bizarre, symptomatic of extreme dislocation, and therefore profoundly threatening. *Prodigia* ranged from such common and, to us, natural occurrences like lightning strikes and birth defects through more complex and weird, but still basically real, phenomena such as 'blood' and stone rains and armies battling in the sky, to patently counterfactual reported wonders such as talking cows.

Far from being prefigurative signs, messages in a kind of code from the gods to man, regarding either the near or distant future,³³ *prodigia* were originally regarded

³² BLOCH (1963), p. 83.

³³ There were other methods familiar to the Romans conducive to discerning the will of the gods and discovering whether or not their support would be forthcoming for a particular enterprise (see CICERO, *Div.* 1.93). One such was taking *auspicia*, signs obtained through observations of birds, their song and the speed and direction of their flight. This later developed to include the study of birds' eating habits (*ex tripudiis*), particularly those of the sacred chickens who either ate or refused to eat by way of indicating that the gods approved or disapproved of any specific course of action. A striking and unusual example of defiance of *auspicia* is recorded at SUETONIUS, *Tib.* 2.2: *Claudius Pulcher apud Siciliam non pascentibus in auspicando pullis ac per contemptum religionis mari demersis, quasi ut biberent quando esse nollent, proelium navale iniit* (Claudius Pulcher began a sea-fight off Sicily, though the sacred chickens would not eat when he took the auspices, throwing them into the sea in defiance of the omen, and saying that they might drink, since they would not eat). Appropriately, the battle culminated in Roman defeat. A counterpart of taking auspices, the province of the augurs, was inspection of entrails, the specialism of the *haruspices*. As interesting as such methods of attempting to learn the gods' wills may be, they generally involved conscious efforts on the part of man, the gods' will was there to be read if one was prepared to search for specific signs. As such, they were open to exploitation and invention.

simply as expressions of the gods' anger, of the disruption of their *pax*.³⁴ Fundamentally negative, they were conceived of as non-specific warnings from the gods of incipient misfortune, unless appropriate placatory measures were taken.³⁵

The whole process from observation and reportage of prodigies through to their expiation (*procuratio prodigiorum*) was lengthy and involved. It comprised the passage of testimonies from around the country to the officials in Rome, meeting of the consuls with the Senate, interviews of witnesses, consultation of experts, and finally the actual expiatory ceremonies which could sometimes take almost a year to complete.³⁶

Prodigia could be observed by anyone, common citizen, official, or priest. They were then announced to appropriate officials (*nuntiatio*). At the beginning of each year, according to standard practice reflected in Livy,³⁷ one or both of the consuls would read these collected reports to the Senate (*relatio*). Since consular presence and supervision were apparently essential, this had to be done before the consuls left for their provinces. On occasion, processing of *prodigia* held consuls back.³⁸ After *relatio*, the consuls then

³⁴ BLOCH (1963), p. 82.

³⁵ LEVENE (1993), p. 4.

³⁶ The expiatory processes of 217 BCE were detailed and involved, occupying a great deal of time. Indeed, Livy (22,1.19-20) writes, *postremo Decembri iam mense ad aedem Saturni Romae immolatum est lectisterniumque imperatum ... et convivium publicum, ac per urbem Saturnalia diem ac noctem clamata* (finally, the month was now December, victims were slain at the temple of Saturn in Rome and a *lectisternium* was ordered... and a public feast, and throughout the City for a day and a night "Saturnalia" was cried). The Saturnalia was an annual festival connected with the dedication of the temple of Saturn on 19th December, 497 BCE.

³⁷ See LIVY, 22,1.14: *his sicut erant nuntiata expositis auctoribusque in curiam introductis consul de religione patres consuluit* (when the consul had laid these reports before the Senate exactly as they had come to him and had introduced into the Curia the men who vouched for their truth, he consulted the Fathers regarding their religious import). The setting is the beginning of 217 BCE.

³⁸ A case in point is that of T. Quinctius, cos. 198 [LIVY, 32,9.1]: *consulem T. Quinctium ... properantem in provinciam prodigia nuntiata atque eorum procuratio Romae tenuerunt* (the consul Titus Quinctius... was hastening his departure for his province and was detained by reports of

conferred with the Senate (*consulere senatum de prodigiis*). Following due consideration, the Senate then voted on which public prodigies would be accepted and expiated in the name of the State (*suscipere prodigia*). There were two criteria in accordance with which the Senate could legitimately refuse to accept reported *prodigia*. The first was if the prodigy did not concern the entire city, having occurred either on private or foreign land.³⁹ In this case, a *procuratio privata* was deemed sufficient, performed by the individual or group who had been witness to the unnatural phenomenon. The second related to the establishment of the authenticity of the reported *prodigium*. If there had been only one witness, or if the witnesses were not considered to be wholly trustworthy, the report was rejected.⁴⁰ The Senate was ultimately responsible for organization of the ceremonies required for expiation of those prodigies that were accepted.⁴¹

It has been suggested by Ruoff-Väänänen⁴² that, "it was in the interest of the Senate to accept as few *prodigia* as possible, because they always alarmed the citizens and were easily interpreted as signs of the gods not being favourably disposed to its policy." If so, only the more striking and unnerving prodigies would be likely to survive a pragmatic cull. Be this as it may, the appearance of prodigies reflective of the *ira deorum* did not mean that disaster was inevitable, and that all man could do was passively wait for

prodigies and by their expiation).

³⁹ LIVY, 43,13.6: *duo non suscepta prodigia sunt, alterum quod in privato loco factum esset, ... alterum quod in loco peregrino* (two prodigies were not treated as public matters, the one because it took place in a privately-owned spot, ... the other because it occurred in a non-Roman place).

⁴⁰ LIVY, 5,15.1: *prodigia interim multa nuntiari, quorum pleraque, et quia singuli auctores erant, parum credita spreataque* (meanwhile many prodigies were reported, most of which, because they had only one witness each to vouch for them, obtained no credence and were slighted).

⁴¹ BLOCH (1963), pp. 120-1.

⁴² RUOFF-VÄÄNÄNEN (1972), p. 141.

catastrophe to befall him. There would have been no use even in reporting the phenomena concerned let alone elaborate procedures involving Senate, magistrates and religious authorities if the evil they presaged was unable to be averted. Strenuous effort on the part of appropriate functionaries to perform expiatory ceremonies correctly, and on that of the common citizen to abstain from work while these were being executed, could turn the threatened tide of trouble from them. To this end, the details of the accepted *prodigia* were submitted to all the principal religious groups, the *pontifices*, the *Xviri Sacris Faciundis* and, on occasion, the *haruspices*.

It was the responsibility of the religious authorities eventually evoked to decipher the *prodigia*. The gods, Cicero explains, partly reflecting a Stoic viewpoint, not only sent signs to man to reveal their designs,⁴³ gave them the ability to determine the correct expiatory procedures by way of consultation of whatever sources were available and unique to them. The procedures once determined, the Senate was duly informed. It could then choose to accept or reject all or some of the religious authorities' prescriptions, since, although the latter had the right and expertise to prescribe religious ceremonies and institutions, they did not have the final authority to impose them on the State.⁴⁴

⁴³ CICERO, *Div.* 2.102: *neque nostra nihil interest scire ea quae futura sunt (erimus enim cautiore, si sciemus); neque hoc alienum ducunt maiestate sua (nihil est enim beneficentia praestantius) ... significant ergo; et non, si significant futura, nullas dant vias nobis ad significationem scientiam (frustra enim significarent)* (nor is it true that it is of no advantage to us to know what is going to happen (for man would be more prudent if he knew); nor is it true that the gods think it inconsistent with their dignity to give forecasts of the future (for there is no more excellent quality than kindness) ... therefore they give us signs; and it is not true, if they give us such signs, that they give us no means of understanding those signs, otherwise their signs would be useless).

⁴⁴ Even so, SZEMLER (1972), p. 36, contends that the expiatory prescriptions given by the priests to the Senate were not simply suggestions. He says that the "weight and importance [of the offered advice] rested in the Romans' view of gods and *religio*, a culmination of which was expressed in the late Republic" by Cicero at *Har.* 19: *quam volumus licet, patres conscripti, ipsi nos amemus, tamen nec numero Hispanos nec robore Gallos nec calliditate Poenos nec artibus Graecos nec denique hoc ipso huius gentis ac terrae domestico nativoque sensu Italos ipsos ac*

Expiation was far from an easy process of routine execution. Some phenomena warranted their own special forms of expiation, whilst general unspecified forms sufficed for others. Methods effective in the past could be regularly reapplied, such as the *novendiale sacrum*, the standard expiatory nostrum employed after a rain of stones. Involved was an expiatory period of nine days during which no public business could be transacted; the consequent dislocation might be compounded if such showers were immediately successive.⁴⁵ Other occurrences elicited different responses on different occasions, though generally there was a sacrifice of suckling (*lactantes*) and/or fully-grown (*maiores*) victims, such as in 217 BCE when, it was decreed *ut ea prodigia partim maioribus hostiis, partim lactentibus procurarentur...* (that these prodigies should be expiated, in part with greater, in part with lesser victims).⁴⁶ Common responses, too, were ritual processions of the entire, or groups of, the populace and the *lectisternium*, involving setting offerings of food before the images of the gods placed upon cushioned couches. When there were prodigies which had not been previously encountered, or when the methods employed were deemed to have failed, more specialized authorities than the

Latinos, sed pietate ac religione atque hac una sapientia, quod deorum numine omnia regi gubernarique perspeximus, omnes gentes nationesque superavimus (however good by our conceit of ourselves, conscript fathers, we have excelled neither Spain in population, nor Gaul in vigour, nor Carthage in versatility, nor Greece in art, nor indeed Italy and Latium itself to the innate sensibility characteristic of this land and its peoples; but in piety, in devotion to religion, and in that special wisdom which consists in the recognition of the truth that the world is swayed and directed by divine disposal, we have excelled every race and every nation).

⁴⁵ See especially, CICERO, *Q. fr.* 3,5.1. The first recorded occurrence of a rain of stones appears in the reign of King Tullus, and LIVY, 1,31.4 tells that, *Romanis quoque ab eodem prodigio novendiale sacrum publice susceptum est... mansit certe sollemne, ut quandoque idem prodigium nuntiaretur, feriae per novem dies agerentur* (the Romans also, in consequence of the same portent, undertook an official nine days' celebration ...at all events it remained a regular custom that whenever the same prodigy was reported there should be a nine days' observance).

⁴⁶ LIVY, 22,1.15.

pontifices were likely to be called in: the *Xviri Sacris Faciundis*, keepers of the Sibylline Books, and/or the *haruspices*.

On occasion, when consulted for the same prodigy or set of prodigies, *Xviri* and *haruspices* would dictate very different rites and ceremonies, offering interpretations that were at times quite at variance with each other. Rivalry is in clear evidence.⁴⁷ An arresting case of such can be found in Livy's account of a prodigy of 172 BCE. At a time when the State was at fever-pitch because of the Macedonian war, the Senate ordained that the phenomenon concerned - a destructive lightning strike to the *columna rostra* - be handled by both the *haruspices* and the *Xviri*. The latter were instructed to consult the Sibylline Books. Interpretations of the *prodigia* and proposed expiations had nothing in common with each other:

decemviri lustrandum oppidum, supplicationem obsecrationemque habendam, victimis maioribus sacrificandum et in Capitolio Romae et in Campania ad Minervae promunturium renuntiarunt; ludos per decem dies Iovi optimo maximo primo quoque die faciendos. ea omnia cum cura facta. haruspices in bonum versum id prodigium, prolationemque finium et interitum perduellium portendi responderunt, quod ex hostibus spolia fuissent ea rostra, quae tempestas disiecisset (the *Xviri* reported back that the city should be purified, that a period of supplication and prayer should be held and that sacrifices of full-grown victims should be offered both on the Capitoline at Rome and in Campania at the promontory of Minerva; further, that at the earliest possible moment games for ten days should be celebrated in honour of Jupiter Optimus Maximus. All these directions were scrupulously obeyed. The *haruspices* pronounced that this omen would turn out for the best, and that an extension of frontiers and the destruction of the enemy were foretold, because those beaks which the storm had overthrown had been spoils taken from the enemy).⁴⁸

⁴⁷ MACBAIN (1982), pp. 82-106, presents an appendix at the end of his book which shows which priesthood was involved in the expiatory processes of the prodigies listed in the books of ancient authors from the reign of King Tullus Hostilius to 363 CE. His table is set out clearly and is well worth careful study.

⁴⁸ LIVY, 42,20.3-4.

This is a particularly interesting incident because up until this time, a prodigy had always been considered a foreboding sign, indicative of divine anger. From the interplay of sacerdotal rivalry, there now emerges the concept of a 'good' prodigy, a phenomenon that promises success rather than foreshadows potential disaster.

The prescriptions of the *pontifices* could also be at odds with those of the *haruspices*, especially when particularly striking *prodigia* required extraordinary and extreme reaction. In 207 BCE, when an hermaphrodite was discovered at Frusino,

id ve. haruspices ex Etruria aditi foedum ac turpe prodigium dicere: extorrem agro Romano, procul terrae contactu, alto mergendum. vivum in arcam condidere provectumque in mare proiecerunt. decrevere item pontifices ut virgines ter novenae per urbem euntes carmen canerent (in fact, the *haruspices* summoned from Etruria said it was a terrible and loathsome prodigy; it must be removed from Roman territory, far from contact with earth, and drowned in the sea. They put it alive into a chest, carried it out to sea and threw it overboard. The *pontifices* likewise decreed that thrice nine maidens should sing a hymn as they marched through the city).⁴⁹

Despite these differences, there appears to have been no open warfare between the groups, and the religious dictates of one carried as much weight with the Senate as those of the other.

It would be erroneous to assume that merely because the correct rites and rituals were undertaken at the right time by the right people to the right gods without any errors (the recognition of such would have required an *instauratio*, a matter of complete and hopefully now faultless repetition), the *pietas* was automatically and instantly restored. Sometimes restoration could take considerable time,⁵⁰ and, as it was necessary

⁴⁹ LIVY, 27,37.6-7.

⁵⁰ LIVY, 27,23.4: *horum prodigiorum causa diem unum supplicatio fuit. per dies aliquot hostiae maiores sine litatione caesae, diuque non impetrata pax deum* (on account of the prodigies prayers were offered for one day. For several days full-grown victims were slain without a favourable result, and for a long time the peace of the gods was not secured).

for the consuls to discharge their religious responsibilities with respect to the prodigies before leaving for their provinces,⁵¹ there are instances when departure had to be postponed.⁵² Once the expiatory measures had been duly taken, and patently accepted by the gods, the city and her people were free to return to normal, secure in the knowledge that they had appeased their gods and the *pax deorum* had been repaired. The city was safe.

⁵¹ Livy provides several references in his history to the consuls' having to perform expiations before departing Rome: e.g. 33,26.6: *priusquam aut hi praetores ad bellum prope novum... proficiscerentur, aut ipsi consules ab urbe moverent, procurare ut adsolet prodigia quae nuntiabantur iussi* (before either these praetors departed for a war nearly new, because for the first time the Spaniards, without any Punic army or leader had taken to arms on their own account, or the consuls themselves moved from the city, they were ordered to expiate, as usual, the prodigies that had been announced).

⁵² See above, n. 38.

C. *Prodigia* and Ancient and Modern Science.

The profile of *prodigia* at Rome was highest in the late early and middle republican periods. In the republic's late period, with its institutions in decline, one can observe a distinct decrease in prodigies accepted and recorded. For all their defectiveness, the lists of *prodigia* collected by Julius Obsequens from the lost books of Livy from 46 onwards tell a clear story. After the Social War in particular, prodigies are increasingly few and far between. By Imperial times such reporting and processing of prodigies as took place was more a matter of antiquarian tradition than genuine religious concern. At one level concern for greater administrative efficiency may have contributed to a long process of attrition. Realizing that magistrates and religious personnel could spend an inordinate amount of time on prodigial expiation the Senate increasingly leaned in the direction of curtailment of those accepted and processed. A climate conducive to such a strategy cannot but have been furnished by growth of sophistication in natural history.

As time passed and scientific knowledge increased, some phenomena which had previously been counted as prodigies came to be recognized as normal and natural occurrences. Lunar eclipses are a case in point. Their graduation, not only in intellectual circles, from portent to routine astronomical occurrences is reflected in Paullus' exploitation of such an eclipse on the eve of the battle of Pydna in 168 BCE. Livy⁵³ provides the following account:

C. Sulpicius Gallus... consulis permissu ad contionem militibus vocatis pronuntiavit, nocte proxima, ne quis id pro portento acciperet, ab hora

⁵³ LIVY, 44,37.5-7.

secunda usque ad quartam horam noctis lunam defecturam esse. id quia naturali ordine statis temporibus fiat, et sciri ante et praedici posse. itaque quem ad modum, quia certi solis lunaeque et ortus et occasus sint, nunc pleno orbe, nunc senescentem exiguo cornu fulgere lunam non mirarentur, ita ne obscurari quidem, cum condatur umbra terrae, trahere in prodigium debere (Caius Sulpicius Gallus... summoned the soldiers to an assembly by permission of the consul, and announced that no one should regard it as a bad omen when on the following night an eclipse of the moon would take place from the second to the fourth hour of the night. Since this occurred in the regular order of nature at certain times, said Sulpicius, it could be calculated ahead of time and foretold. Therefore just as they were not surprised - inasmuch as the risings and the settings of the sun and moon are well understood - when they saw the moon shining now full, now during its wane with a narrow arc, no more ought they to count it a prodigy that the moon is darkened whenever it is hidden in the shadow of the earth).

In Cicero's *de Republica*, 1.23-4, Scipio tells Tubero of the events that Livy thus came to record. The latter is prompted to ask if Gallus had been able to convince *homines agrestes* of this scientific ability to foretell the occurrence of an eclipse. Scipio replies that not only had he succeeded, but at the same time, *rem enim magnam adsecutus, quod hominibus perturbatis inanem religionem timoremque deiecerat* (he accomplished a very important result in relieving the troubled minds of the soldiers from foolish superstitious fear).

While ancient science may have contributed to a progressive devaluation of *prodigia* within their own cultural environment, exploitation of items in the prodigial records has become a significant preoccupation of its contemporary counterpart. Once historians such as Krauss⁵⁴ and Newton⁵⁵ had carried out pilot examinations and classifications of Livian and other prodigy lists it became clear that while not a few prodigies reflected deluded credulity (talking cows are a case in point) or even fraud

⁵⁴ KRAUSS (1930).

⁵⁵ NEWTON (1966). As will emerge below, other authors have chosen to concentrate on certain phenomena rather than pursue comprehensiveness.

(weeping statues may exemplify this category), others were a matter of remarkable observations grounded in reality. Persistently impervious to explanation in the context of ancient natural history and so readily interpretable by the Romans as manifestations of divine ire, the reported occurrences concerned clearly included instances of significant and sometimes rare natural phenomena that deserve serious scientific attention.

For example, at least some rains of stones regarded as *prodigia* might be identifiable as meteorite showers such as that which fell on the Ugandan village of Mbale in August 1992.⁵⁶ Partly on the basis of such evidence, Rasmussen⁵⁷ has sought to compile a list of accretionary events on earth between 700 BCE and 1850 CE and claimed that a 1050-year periodicity is demonstrated, a result that could not have been obtained in the absence of observations from the ancient Roman world. Again, and possibly more far-reaching, many prodigial notices suggest that the witnesses may have observed displays of the aurora borealis. Since aurorae at minauroral latitudes such as those of Italy calibrate with peaks of solar activity, both D. J. Schove⁵⁸ and Richard Stothers⁵⁹ have

⁵⁶ BETLAM (1993), pp. 96-7; JENNISKENS *et al.* (1994), pp. 246-54.

⁵⁷ RASMUSSEN (1990).

⁵⁸ See, for example, SCHOVE (1948) and (1951).

⁵⁹ STOTHERS, (1979b). His article is headed by a neat summary which it is well to reproduce here both to illustrate what scientists have attempted to prove, and to demonstrate the scientific applications to which a section of classical literature can be put by those outside of the field of classical studies:

"Early accounts of phenomena that may be identified as auroral displays have been abstracted from reports of unusual celestial prodigies in the classical literature. An extensive catalog of ancient aurorae and a new mathematical method of analyzing fragmentary time series of observations have been used to demonstrate, provisionally, that an auroral cycle actually existed in antiquity, at least during the 2nd century BC, and that it had an average length and amplitude comparable with those of the modern auroral cycle. On the reasonable assumption that solar activity has always been the factor responsible for aurorae, it can be concluded that the solar cycle two millennia ago was very similar to what it is today."

set out to deploy the reports concerned towards establishing maxima and minima of the solar cycle of the ancient past. The results of such projects may turn out to have major significance in respect of solar physics and climate modelling. Yet again, prodigial reports that suggest observations of comets⁶⁰ may contribute important data towards understanding the behaviour of such bodies in general, towards establishing relative frequencies of past and present visitations, towards comparison of past and recent phenomenologies, and, finally, towards more accurate determination of the periodicities of relatively short-term comets such as the well-know P-Halley. Even, to conclude a list of examples that could be easily extended, records of lightning strikes and storms have a valuable rôle to play as barometers of ancient weather conditions and patterns. In a nutshell, scientific exploration and deployment of the Roman prodigial records is indisputably capable of yielding valuable contributions to astronomy and meteorology, not to mention seismology and vulcanology (earthquakes and eruptions features conspicuously among them), our knowledge of the fauna and flora of the ancient Mediterranean world, and, not least, to the frequency, symptoms and morbidity of plagues and epidemics at Rome and beyond.

Although the potential yield of scientific studies relating to prodigial records is undeniably immense, there are some fundamental problems with the effective exploitation of such material that are insufficiently appreciated and acknowledged by the scientists so far involved. First, none of those whose work I have encountered demonstrates comprehensive knowledge of the available data base. In the absence of such, some, if not all, investigations involving exploitation of *prodigia*, not to mention other ancient reports

⁶⁰ For a collection, going beyond prodigial material, of probable, possible and doubtful reports of ancient cometary observations, see BARRETT (1978). His concluding remarks show that he at least is well aware of the need for caution in using such data.

bearing on phenomena of scientific interest, cannot but be severely compromised. If, for example, the aim is to reconstruct the solar cycle in remote periods on the basis of prodigial notices and related records, then it is essential that no data of relevance should be omitted. The fact is that comprehensive data assembly is no easy matter. Few scientists are aware of the variety of ancient texts in which items of significance are embedded and consequently their search for material tends to be confined to mainstream writers, who are also the most likely to find translators. If collection for scientific purposes of data drawn from the works of Greek and Roman antiquity is to be truly exhaustive, then it is essential to draw upon the expertise of specialists in the classical world equipped with knowledge of its key languages.

A second problem with attempted exploitation by scientists of prodigial records arises from insufficient awareness of or inattention to the purport of significant details in the direct accounts of portents assembled, and, simultaneously, oblivion to representations of relevance in other ancient writings. Stothers' efforts to deploy reports of aurorae towards reconstruction of the solar cycle in ancient times feature a striking case in point. A *prodigium* noted in all periods is blood rain. Influenced by the fact that aurorae observed at minauroral latitudes are commonly red, Stothers⁶¹ insists that most cases at least of blood rain reflect witnesses' reports of such displays. This interpretation fails to take into account that the prodigial notices concerned give no indication that whatever phenomenon was in question took place during the night, that some blood rains are confined to tiny areas like temple precincts and therefore more likely to be a matter of

⁶¹ STOTHERS (1979a), p. 90. SCHOVE (1948) countenances a similar view.

some kind of purported deposit on the ground than a manifestation in the sky,⁶² that in one case it is spelled out directly that the blood rain consisted of blood-coloured droplets,⁶³ and, finally, that Cicero's rationalist explanation of blood rains at *de divinatione*, 2.58 as due to discolouration as a result of some kind of mineral contamination (*decoloratio quaedam ex aliqua contagione terrena*) takes for granted that they were some kind of precipitation.⁶⁴ Stothers' failure to take the Cicero passage into account provides a further illustration of the necessity for ensuring the comprehensiveness of one's data bank.

A third problem facing would-be exploiters of prodigial notices and other ancient records of significant natural phenomena is that of chronological precision. To ensure the maximum utility of such data it is essential to be certain of at least the year in which a phenomenon of interest occurred and preferable to be in a position to pin it down even further, to a particular month or even day. Unfortunately, while books and articles by historians of the Roman republic give the impression that Roman civil and consular years have precise proleptic julian equivalents, this is far from the case. Even in respect of the first few decades after the Julian calendar's inception, a period, to be precise, extending from 45 BCE to 7 CE, calibration of julian and Roman civil years is not completely certain due to pontifical miscalculations, and for the whole period of the republic prior to the reform undertaken by Caesar in 46 BCE, the discrepancy between consular and seasonal years may at times amount to many months. It is essential to grasp that for the

⁶² See, for example, LIVY, 39,46.5: *per biduum pluvisset in area Volcani* (for two days it had rained blood in the precinct of Vulcan).

⁶³ See LIVY, 34,45.6: *in foro et comitio et Capitolio sanguinis guttae visae sunt* (in the Forum and the comitium and on the Capitoline drops of blood were seen).

⁶⁴ Compare TATLOCK (1914), p. 442.

superficially most tractable republican sub-period from 153 BCE - 46 BCE, during which the consular year commenced on the Kalends of January of the Roman civil calendar, rather than, as previously, the Ides of March, there is not a single consular year which does not to a greater or lesser extent straddle two proleptic julian counterparts. The majority of those who have sought to make scientific use of prodigial notices are oblivious to the difficulties concerned,⁶⁵ as also, one suspects, are many specialists in ancient history, culture and literature who ought to know better.

Fourth, and finally, it is important that those who work with prodigial material not be completely lacking in acquaintance with the background and mindset of the ancient writers who are the principal providers.

⁶⁵ Exceptionally SCHOVE (1948), p. 180, acknowledges that there are problems with Roman chronology. His attitude seems to be that in the absence of dateable parallel records from another culture, one is forced to opt for one of a pair of proleptic julian years by something approaching an act of faith.

D. Present Programme

If records of *prodigia* are to be exploited scientifically to maximum effect, then it is essential that the astronomers, meteorologists, earth scientists and so forth concerned have at their disposal both a complete data base with no pertinent related information lacking and the best possible equipment for calibrating Roman civil and consular years with proleptic julian counterparts. My eventual aim is to provide both of these requirements in respect of the entire period of the Roman republic. The present work is the first instalment of an ongoing project to this end. Encompassed is the period from 218 - 167 BCE inclusive.

This initial choice has been dictated by the circumstances that the prodigial record for these years is likely to come closest to being complete. The reason for the period's privileged status in this respect is bound up with the Roman historian Livy who, during the reign (31 BCE - 14 CE) of the first Roman emperor Augustus, compiled a massive narrative history of Rome in 142 books that commenced with the city's foundation and had reached 9 BCE at the time of the historian's death. Livy is our principal source for prodigial records. Of his 142 books, only 1-10 and 21-45 completely, or almost completely, survive.⁶⁶ 1-10 whose subject matter is Rome's early years are as much mythical as historical in content and contain few trustworthy records of any kind. 21-45 relate to the period 218 - 167 for which Livy had at his disposal adequate source material

⁶⁶ Books 41-45 survive only by way of a single manuscript which has suffered some unfortunate losses.

and which feature copious *prodigia* as well as other material going back ultimately to early records compiled by the *pontifices* and other functionaries.

After 167 we are reliant for subsequent Livian prodigial material for the most part on the shadowy Julius Obsequens and to a much lesser extent on Orosius. Sometime in the fourth century CE, the former set out to compile consular annual lists of prodigies from the books of Livy all still extant in his time, covering the period from the 55th year (approximately equivalent to 249 BCE) after Rome's founding⁶⁷ until the end of the republic and a little beyond. The first part of Obsequens' work is lost and from the portion that survives several blocks of material are missing. In addition, from comparison of his extracts with the original Livian lists in books 37-45 it emerges that Obsequens was a somewhat careless and slipshod compiler. In the fifth century CE, Orosius wrote a work entitled *Histories against the Pagans* that commenced with the creation of the world and eventually followed the fortunes of Rome down to 417 CE. Orosius' account of the republican period is basically an epitome of Livy and from time to time particularly striking lists of prodigies are inserted in the narrative.

Turning to structural particulars, the main body of the thesis falls into two parts. In the first I attempt to construct new, best fit calibration tables for Roman consular years and proleptic julian counterparts for the period 218 - 167 BCE in the first place and then, as an adjunct, down further until 153 BCE when the start of the consular year was shifted from the Ides of March to the Kalends of January. There have, of course, been many previous attempts to calibrate the Roman republic and proleptic julian calendars, but in my view all of these are vitiated to a greater or lesser extent by flawed methodology and disregard for parts of the evidence available. I have dealt with calendrical matters prior

⁶⁷ It is something of a mystery why Obsequens selected this particular starting point.

to setting out the ancient data relating to *prodigia* from 218 - 167 BCE since the comments on some items involve chronological matters and discussion is conditioned on occasion by calendrical results.

In the second part I endeavour to present all extant data bearing on *prodigia* observed in the years 218 - 167 BCE inclusive. The focus of the first section is Livy, as already indicated, our main source and authority. Following some introductory material on the historian and his probable immediate and ultimate sources, his prodigial lists are set out year by year. Included are not only the prodigial notices themselves but also reported details, sometimes extensive, concerning expiation. While not normally the subject of later comment, the latter material deserves inclusion nevertheless since the greater or lesser extent of expiatory measures provides a useful gauge with respect to the relative seriousness with which the Romans regarded various manifestations. To the Livian excerpts I had added, for the sake of completeness, derivative lists of prodigies from Julius Obsequens and Orosius, whose epitomes have been referred to above. Comparison of extracts with originals provides salutary indications of the caution with which both writers must be approached in respect of the many years where Livy's primary account is no longer available. The Livian and derivative prodigial material for each year is followed by brief comments that relate to matters of significance to potential scientific exploiters. Some comments revolve around chronological matters, others relate in various ways to identification of phenomena and others again draw attention to comparative and elucidatory material in other ancient sources. While, to repeat, there are comments dealing with identification of phenomena, it should be emphasised at once that I have not sought to identify definitively each and every *prodigium* likely to be of scientific interest. In many cases such activity is best left to scientific experts themselves.

In the second section of part 2, prodigial notices for the period 218 - 167 BCE in ancient sources other than Livy are collected in chronological order. The writers concerned are Valerius Maximus, the elder Pliny, Plutarch and Cassius Dio, either directly or through a Byzantine epitomator, Zonaras. In each case again, as for Livy, introductory material on the writer concerned is followed by reports of *prodigia* set out year by year, and then brief comments. A significant proportion of the comments is bound up with the important matters of the reliability and comprehensiveness of the Livian lists. Did Livy seek to provide a complete and scrupulously accurate record of prodigies accepted and processed in each year, or was he to a greater or lesser degree careless and selective, leaving out, for example, items that he considered trivial, or suppressing various items for dramatic reasons? The answer to such questions is obviously of considerable importance to anyone using the Livian lists of prodigies for scientific purposes. If the lists are demonstrably far from complete, then, for example, an attempt to reconstruct solar cycles on the basis of prodigies reflecting aurorae would be compromised due to possible absence of part of the evidence.

An obvious approach towards assessing Livy's accuracy and comprehensiveness, or lack of them, is to compare his annual lists of prodigies with those in other writers. Are there or are there not *prodigia* recorded by the latter of which Livy makes no mention? To anticipate a little, it will emerge that while almost all of the prodigies listed elsewhere have precise counterparts in Livy, there appear to be one or two items that differ in respect of some detail or other and one or two again that appear to have no counterpart at all. In a final subsection I shall suggest that some at least of the discrepancies are apparent rather than real and that the Livian lists are as likely as not to be more or less complete. If so, it would follow, for example, that variations in the

annual number of prodigies listed by Livy reflect the true situation rather than the historian's artifice or inconsistency. It would follow too that scientific exploiters could have a fair degree of confidence in the comprehensiveness of the prodigial data base for the years 218-167 BCE inclusive.

Part Two

Roman Consular Years
from 218-167 BCE
and
the Proleptic Julian
Calendar

Chapter Two

The Roman Republican Year



A. The Basis of the Calendar

The design of a calendar is determined by the use to which it is to be put. The precision with which it measures time is dictated by need. Man's first divisions of time were seasonal - when snow would be coming, how long between harvests, when to sow. Nature, he found, had provided the perfect means by which these divisions could be reckoned in the regular recurrence of obvious phenomena, the most conspicuous of which were the risings and settings of the sun, the phases of the moon, and the heliacal and other risings and settings of fixed stars. Of these, the most pragmatically reliable for measuring the seasons are stellar risings and settings. The stars change their position during the course of the tropical year, but appear in approximately the same place at approximately the same time every year. Farmers in particular were concerned with the calendrical indications of the stars, and Varro and Columella¹ above all illustrate such preoccupation in their agricultural treatises.

As man's society developed beyond a simple subsistence stage, the need arose for smaller subdivisions of time. Since this was not fulfilled by the stars, another method by which the passage of time could be marked was required. Observance of the sun and the moon afforded this.

¹ See, for example, VARRO, *Rust.*, 1,28: *dies primus est veris in aquario, aestatis in tauro, autumnus in leone, hiemis in scorpione* (the first day of spring occurs [when the sun is] in Aquarius, that of summer when it is in Taurus, of autumn when it is in Leo, of winter when it is in Scorpio). In book 11 of his *de Re Rustica*, COLUMELLA sets out the entire year's agricultural tasks with clear and exact reference to risings and settings of stars and constellations.

The solar year is marked by the passage of the sun along the ecliptic, with the seasons being dependent on its place there with reference to the equinoxes.² The length of time taken by the sun to cross the vernal equinox twice, called the *tropical year*, is 365^d 5^h 48^m 46^s.0 of mean solar time. If, due to an inability to deal with the fraction, ancient man had taken as his tropical year one that was 365 days in length, then he would thus have lost one day in every four years. Such a loss would have been barely noticeable in a lifetime, but after a period of 730 years, winter would have occurred in the months that were supposed to be summer.

The tropical year could conveniently be divided into roughly equal seasonal parts as the sun took approximately 94 days to travel from vernal equinox to summer solstice, 92 days from summer solstice to autumnal equinox, 89 days from autumnal equinox to winter solstice, and 90 days from winter solstice to return to vernal equinox.³ Even though now a person could know with greater accuracy in approximately how many days he could sow, or perform certain ceremonies, there was still no useable subdivision of the year larger than a day but smaller than a season. This was provided by the moon.

A *sidereal month*, the length of time it takes the moon to complete a circuit of the ecliptic, is on average about 27 $\frac{1}{3}$ days. As the earth itself has moved in relation to the

² SAMUEL (1972), p. 3.

³ DICKS (1970), p. 24. See also VARRO, *Rust.*, 1,28.2: *suptilius descriptis temporibus observanda quaedam sunt, eaque in partes VIII dividuntur: primum a favonio ad aequinoctium verum [20 March] dies XLV, hinc ad vergiliarum exortum dies XLIV, ab hoc ad solstitium [21 June] dies XLIX, inde ad caniculae signum dies XXVII, dein ad aequinoctium autumnale [22 Sept.] dies LXVII, exin ad vergiliarum occasum dies XXXII, ab hoc ad brumam [22 Dec.] dies LVII, inde ad favonium dies XLV* (but in the more exact divisions certain things are to be taken into account, which cause an eightfold division: the first from the rising of the west wind to the vernal equinox, 45 days, thence to the rising of the Pleiades 44 days, thence to the solstice 48 days, thence to the rising of the Dog Star 27 days, thence to the autumnal equinox 67 days, from there to the setting of the Pleiades 32 days, hence to the winter solstice 57 days, and back to the rising of the west wind 45 days).

sun, after completing a sidereal month, the moon is no longer in the same position with regard to the earth-moon-sun line. In order to catch up with the sun's passage along the ecliptic, it is necessary for two more days to pass until the moon is again in conjunction with the sun. The period between the two conjunctions of the sun and moon is a *synodic month*, and it is this month that is used in lunar calendars.⁴

This synodic (or lunar) month is approximately $29^d 12^h 44^m 2^s.78$ long, and is therefore much more convenient as a subdivision of time than a solar year due to its shortness, its determinable beginning and end, and its distinct phases that recur at regular intervals - the new moon, the half moons, and the full moon. While theoretically a month should commence with the new moon in the strict sense, it was easier for man, reliant on empirical observation, to use the first visibility of the crescent moon as the actual starting-point. As with all empirical observation, sighting of the lunar crescent was subject to human fallibility and the vagaries of nature. Atmospheric conditions contributing to poor visibility of the moon could delay the official beginning of a month by one or two days, rarely more because through experience men would have learnt that lunar months were 29 or 30 days long, and never less. Unfortunately, the number of whole lunar months that can fit into a tropical year of $365 \frac{1}{4}$ days is 12, which equals only, on average, 354 days, a little more than 11 days too few. Consequently, if a repeating cycle of 12 lunar months were used to define a 'year', the calendar would move ahead of the seasons by 11 days each year. Such discrepancy being intolerable, it was necessary to adjust the calendar to the solar year by a process of *intercalation*, adding a certain number of extra days to a 'year' at regular intervals. The realization of the possibility and plausibility of such a

⁴ SAMUEL (1972), p. 5.

technique would have occurred through recognition of the accidental addition of one or two days when the beginning of the month was wholly reliant upon empirical observation.

A calendar that was based on the solar year and day, but also used the subdivisions provided by the moon, is called a *luni-solar* (or lunar) calendar. The months can be kept in correct relation with the phases of the moon by the process of intercalating a day, and the year can be kept in correct relation with the season by intercalating a whole month at determined and irregular intervals. In order to determine these intervals, it is necessary to discover a number of years and a number of months for both of which the number of days is the same.

By empirical observation of the equinoxes or solstices, and of the moon, one can find out that 8 solar years contain 99 lunar months. If then, over a period of 8 years, one adds 3 months to the 96 months contained in 8 lunar years, one should be able to keep the calendar regulated by both sun and moon,

states Michels⁵ and then goes on to add that "actually this system will never work exactly because of the incommensurability of the day, the month, and the year." This rough and ready system could be made to work relatively well by occasional correction, but always required the intercalation of months and of individual days. Ultimately, sophisticated calendar makers availed themselves of the so-called Metonic and Callippean cycles involving recognition, respectively, that 19 tropical years contain very close to 235 synodic lunar months and 76 tropical years even closer to 940 synodic lunar months.

Regardless of the method used to construct a calendar, it only had one purpose. In the words of A. E. Samuel,⁶

⁵ MICHELS (1967), p. 14f.

⁶ SAMUEL (1972), p. 11.

A calendar is a device for applying manipulation to the counting of months and years in order to provide some standard for recording the passing of time and for designating days and months by agreed terminology.

Every calendar endeavoured to achieve this end one way or another, and the Roman calendar was certainly no exception.

B. The Roman Civil Year

The calendar of the Roman republic comprised twelve months: Ianuarius, Februarius, Martius, Aprilis, Maius, Junius, Quintilis (eventually renamed Julius), Sextilis (in the Imperial period renamed Augustus), September, October, November, and December. Martius, Maius, Quintilis, and October were thirty-one days in length, Februarius of twenty-eight, and the other months of twenty-nine days. The 355 days of this year strongly suggest that it was originally based on the lunar year, but months of thirty-one days, twenty-nine days, twenty-eight days, and an intercalary block of twenty-two or -three days show that the calendar of this period was not intended to maintain a strict relation with the moon, and had broken away from the lunar cycle.⁷ Six of these months are numbered rather than named, from which it may be inferred that an official or religious year once began in March.⁸ After a period of mobility,⁹ the Roman republican consular year came to commence on the Ides of this originally inceptive month; however, the religious and political year was usually counted from January. In 153 BCE,

⁷ The *Fasti Antiates Maiores*, most accessible in A. DEGRASSI's *Inscriptiones Italiae* (II) XIII.2, painted in red and black letters on white plaster and the only surviving pre-Julian *Fasti*, confirm these lengths later described by several literary sources. An example of one such source is MACROBIUS, *Sat.* 1.13.6-7: *Ianuarius igitur Aprilis Iunius Sextilis September November December undetriceis censebantur diebus et quintanas nonas habebant... Martius vero Maius Quintilis et October dies triceas singulos possidebant... sed solus Februarius viginti et octo retinuit dies...* (and so it was ordained that January, April, June, Sextilis, September, November, and December should be months of twenty-nine days each... but March, May, Quintilis and October had thirty-one days... February alone kept its twenty-eight days...

⁸ A lengthy analysis of evidence pertaining to a putative ten-month year can be found in SAMUEL (1972), pp. 167-70. Since it is a feature of a period remote from the middle republic, the topic requires no discussion in the present context.

⁹ For some details, see chapter 3 below.

the consular year and the calendar counterparts were brought into line. Consequently, as neatly explained by Michels,¹⁰

When a Roman historian refers to an event prior to 153 B.C. as taking place at the beginning or end of the year, he is thinking in terms of the consular year. The calendar year, on the other hand, contains no variable elements, but is valid for any year. Its function is to provide dates within any one year, or dates which recur in a regular cycle. The dates of religious observances are determined by the calendar year, as are those of business transactions. In treaties between Roman and other states periods of time were defined in terms of the calendar year.

For the Romans, then, there were, in a manner of speaking, two beginnings to the year, one bound up with the entry of magistrates into office, the other with all other religious and official circumstances.

Each month consisted of three unequal divisions. The first day of the first division and of the month as a whole was the *Kalendae*, or Kalends. The second division commenced with the *Nonae*, or Nones, the fifth or seventh day of the whole month depending on its length. The third division began with the *Idus*, or Ides, the thirteenth or fifteenth day of the whole month, again depending on its length. On Kalends, Nones, and Ides certain ceremonies occurred,¹¹ and it has been claimed¹² that the three divisions owed their origin to the phases of the moon: the Kalends was the day after the first visibility of the new crescent moon, the Nones was the first quarter, and the Ides the full moon. If this is indeed the case, then the divisions must have been carried over from the time when the Romans had a true lunar calendar.

¹⁰ MICHELS (1967), p. 98.

¹¹ Cf. MICHELS (1967), pp. 20f for discussion of these ceremonies.

¹² *ibid.*, p. 21.

Unlike our own calendar, the Roman republican counterpart did not attach sequential or recurring names to successive days. Certain days could be referred to by the festivals that occurred on them providing that the festivals concerned were fixed, and not moveable.¹³ Other days, as noted immediately above, were named on the basis of a former lunar division. It is from these named days that other days found their designation.

The Romans employed the peculiar system of counting backwards from the three divisional days. The count was inclusive, a practice to be born in mind at all times when dealing with Roman calculations. What the modern calendar would call the 10th of April, the Roman civil calendar would describe as *ante diem iv Idus Aprilis* (*a.d. iv Id. Ap.*). Days after the Ides of one month were counted back from the Kalends of the next, so that, for example, the 29th of April would have been *ante diem iii Kalendae Maiiae* (*a.d. iii Kal. Mai*), and the 30th of April *pridie Kalendae Maiiae* (*prid. Kal. Mai*).

A key but vexatious problem must now be confronted. The 355-day year of the Romans was out of calibration with the tropical year of approximately 365 $\frac{1}{4}$ days and so it was necessary to add from time to time a number of days to the year sufficient to compensate for the imbalance. In accordance with what principles and rules, if any, were these intercalary years determined?

¹³ The so-called *feriae stativae*, whose dates emerge from the *Fasti Antiates Maiores* and later counterparts. There were two other groups of festivals, the *feriae conceptivae* and the *feriae imperativae*. The former were moveable feasts, held annually, but on dates determined each year by the appropriate officials. Festivals of this kind included the *feriae Latinae*, whose date was fixed at the beginning of the consular year by the newly incumbent consuls and usually celebrated before they departed for their provinces. The *feriae imperativae* were totally irregular feasts, announced by consuls, dictators, or praetors, in the event of victories or emergencies, or in expiation of certain prodigies. An example of the latter category is the *novendiale* performed to expiate a rain of stones. On all these matters, see, for example, SCULLARD (1981), p. 39.

C. The Intercalary Years

1. Preface

The only ancient writer who attempted to describe the Roman practice of intercalation with real comprehensiveness is the late, (possibly) African, Ambrosius Theodosius Macrobius, *floruit c. 400 CE*.¹⁴ The work in question is the *Saturnalia*, an academic symposium compiled for the author's son's education as a gentleman, and comprising methodically arranged philosophical, historical and scientific topics. The *Saturnalia* includes a lengthy section on the Roman republican calendar. Macrobius' account of intercalation being the basis of the present, as of previous, discussions, the relevant passage is quoted in full, both in Latin and in the English translation of P. V. Davies.¹⁵

Macrobius, *Saturnalia* 1,12.28-13.21:

(1,12.38) Haec fuit a Romulo annua ordinata dimensio qui, sicut supra iam diximus, annum decem mensium, dierum vero quattuor et trecentorum habendum esse constituit, mensesque ita disposuit ut quattuor ex his tricenos singulos, sex vero tricenos haberent dies. (39) sed cum is numerus neque solis cursui neque lunae rationibus conveniret, non numquam usu veniebat ut frigus anni aestivis mensibus et contra calor hiemalibus proveniret, quod ubi contigisset, tantum dierum sine ullo mensis nomine patiebantur absumi quantum ad id anni tempus adduceret quo caeli habitus instanti mensi aptus inveniretur.

¹⁴ While relatively forthcoming, the third century CE grammarians, CENSORINUS (*de die natali* 20,1-10) and SOLINUS (1,34-47) do not match Macrobius in respect of detail.

¹⁵ DAVIES (1969), pp. 90-95.

(1,13.1) Sed secutus Numa, quantum sub caelo rudi et saeculo adhuc impolito solo ingenio magistro comprehendere potuit, vel quia Graecorum observatione forsitan instructus est, quinquaginta dies addidit, ut in trecentos quinquaginta et quattuor dies, quibus duodecim lunae cursus confici credidit, annus extenderetur. (2) atque his quinquaginta diebus a se additis adiecit alios sex retractos illis sex mensibus qui triginta habebant dies, id est de singulis singulos, factosque quinquaginta et sex dies in duos novos menses pari ratione divisit, (3) ac de duobus priorem Ianuarius nuncupavit primumque anni esse voluit, tamquam bicipitis dei mensem, respicientem ac prospicientem transacti anni finem futurique principia; secundum dicavit Februo deo, qui lustrationum potens creditur. lustrari autem eo mense civitatem necesse erat, quo statuit ut iusta dis Manibus solverentur. (4) Numae ordinationem finitimi mox secuti totidem diebus totidemque mensibus ut Pompilio placuit annum suum computare coeperunt; sed hoc solo discrepabant, quod menses undetricenum tricenumque numero alternaverunt. (5) paulo post Numa in honorem imparis numeri, secretum hoc et ante Pythagoram parturiente natura, unum adiecit diem quem Ianuario dedit, ut tam in anno quam in mensibus singulis praeter unum Februarium impar numerus servaretur. nam quia duodecim menses, si singuli aut pari aut impari numero putarentur, consummationem parem facerent, unus pari numero institutus universam putationem imparem fecit. (6) Ianuarius igitur Aprilis Iunius Sextilis September November December undetricenis censebantur diebus et quintanas nonas habebant, ac post idus in omnibus a. d. septimum decimum kalendas computabatur. (7) Martius vero Maius Quintilis et October dies tricenos singulos possidebant. nonae in his septimanae erant similiterque post idus decem septem dies in singulis usque ad sequentes kalendas putabantur, sed solus Februarius viginti et octo retinuit dies quasi inferis et deminutio et par numerus conveniret. (8) cum ergo Romani ex hac distributione Pompilii ad lunae cursum sicut Graeci annum proprium computarent, necessario et intercalarem mensem instituerunt more Graecorum. (9) nam et Graeci cum animadverterent temere se trecentis quinquaginta quattuor diebus ordinasse annum - quoniam appareret de solis cursu, qui trecentis sexaginta quinque diebus et quadrante zodiacum conficit, deesse anno suo undecim dies et quadrantem - intercalares stata ratione commenti sunt, ita ut octavo quoque anno nonaginta dies, ex quibus tres menses tricenum dierum composuerunt, intercalarent. (10) id Graeci fecerunt, quoniam operosum erat atque difficile omnibus annis undecim dies et quadrantem intercalare. itaque maluerunt hunc numerum octies multiplicare, et nonaginta dies, qui nascuntur si quadrans cum diebus undecim octies componatur, inserere in tres menses, ut diximus, distribuendos. hos dies *ὑπερβαίνοντας*, menses vero *ἐμβολίμους* appellabant. (11) hunc ergo ordinem Romanis quoque imitari placuit, sed frustra, quippe fugit eos diem unum, sicut supra admonuimus, additum a se ad Graecum numerum in honorem imparis numeri. ea re per octennium convenire numerus atque ordo non poterat. (12) sed nondum hoc errore comperto per octo annos nonaginta quasi superfundendos Graecorum exemplo computabant dies, alternisque annis binos et vicanos, alternis ternos vicanosque intercalantes expensabant intercalationibus quattuor. sed

octavo quoque anno intercalares octo affluebant dies ex singulis quibus vertentis anni numerum apud Romanos super Graecum abundasse iam diximus. (13) hoc quoque errore iam cognito haec species emendationis inducta est. tertio quoque octennio ita intercalandos dispensabant dies, ut non nonaginta sed sexaginta sex intercalarent, compensatis viginti et quattuor diebus pro illis qui per totidem annos supra Graecorum numerum creverant. (14) omni autem intercalationi mensis Februarius deputatus est quoniam is ultimus anni erat, quod etiam ipsum de Graecorum imitatione faciebant. nam et illi ultimo anni sui mensi superfluos interserebant dies, ut refert Glaucippus qui de sacris Atheniensium scripsit. verum una re a Graecis differebant. (15) nam illi confecto ultimo mense, Romani non confecto Februario sed post vicesimum et tertium diem eius intercalabant, Terminalibus scilicet iam peractis. deinde reliquos Februarii mensis dies, qui erant quinque, post intercalationem subiungebant, credo vetere religionis suae more, ut Februarium omni modo Martius consequeretur. (16) sed cum saepe eveniret ut nundinae modo in anni principem diem, modo in nonas caderent - utrumque autem perniciosum rei publicae putabatur - remedium quo hoc averteretur excogitatum est, quod aperiemus si prius ostenderimus cur nundinae vel primis kalendis vel nonis omnibus cavebantur. (17) nam quotiens incipiente anno dies coepit qui addictus est nundinis, omnis ille annus infaustis casibus luctuosus fuit, maximeque Lepidiano tumultu opinio ista firmata est. (18) nonis autem conventus universae multitudinis vitandus existimabatur, quoniam populus Romanus exactis etiam regibus diem hunc nonarum maxime celebrabat quem natalem Servii Tullii existimabat quia, cum incertum esset quo mense Servius Tullius natus fuisset, nonis tamen natum esse constaret, omnes nonas celebri notitia frequentabant: veritos ergo qui diebus praeerant, nequid nundinis collecta universitas ob desiderium regis novaret, cavisse ut nonae a nundinis segregarentur. (19) unde dies ille, quo abundare annum diximus, eorum est permissus arbitrio qui fastis praeerant, uti, cum vellent, intercalaretur, dum modo eum in medio Terminaliorum vel mensis intercalaris ita locarent, ut a suspecto die celebritatem averteret nundinarum. atque hoc est quod quidam veterum rettulerunt non solum mensem apud Romanos verum etiam diem intercalarem fuisse. (20) quando autem primum intercalatum sit varie refertur. et Macer quidem Licinius eius rei originem Romulo adsignat. Antias libro secundo Numam Pompilium sacrorum causa id invenisse contendit. Iunius Servium Tullium regem primum intercalasse commemorat, a quo et nundinas institutas Varroni placet. (21) Tuditanus refert libro tertio Magistratum decem viros, qui decem tabulis duas addiderunt, de intercalando populum rogasse. Cassius eosdem scribit auctores. Fulvius autem id egisse M'. Acilium consulem dicit ab urbe condita anno quingentesimo sexagesimo secundo, inito mox bello Aetolico. sed hoc arguit Varro scribendo antiquissimam legem fuisse incisam in columna aerea a L. Pinario et Furio consulibus, cui mensis intercalaris adscribitur. haec de intercalandi principio satis relata sint.

(1,12.38) Such were the rules made by Romulus to measure the year. By his arrangement it was, as I have already said, a year of ten months and of

three hundred and four days; the months being so disposed that four had thirty-one days each and six had thirty. (39) But, since this method of reckoning agreed neither with the course of the sun nor the phases of the moon, it sometimes happened that the cold season fell in the summer months and, on the other hand, the hot season in the winter months; and, on these occasions, as many days were allowed to pass unassigned to any named month as were needed to make the current month fit the season of the year and the appearance of the sky.

(1,13.1) Romulus was succeeded by Numa. From such knowledge as he could acquire with only his natural genius to teach him - living, as he did, in an unkindly climate and in an age that was still uncivilized - or perhaps learning something from the practice of the Greeks, Numa added fifty days to the year, to enlarge it to three hundred and fifty-four days, the period which he believed to correspond with the completion of twelve circuits of the moon. (2) To these fifty additional days he added six others, by taking one from each of the six months which had thirty days apiece, and the fifty-six days thus made available he divided equally to make two new months. (3) The first of these two months he named January and made it the first month of the year, as the month of the two-faced god who looks back to the year that is past and forward to the beginnings of the year to come. The second month he dedicated to Februus, the god who is believed to have charge over ceremonies of purification; for it was necessary that the city should be purified in the month in which Numa ordained the payment of due rites to the departed spirits. (4) Afterward the neighboring peoples followed Numa's arrangement and began to reckon their year with the same number of days and months as he, but with this single difference, that they made their months consist of twenty-nine and thirty days alternately. (5) A little later, in honor of the odd number (a mystery which nature had brought to light even before the time of Pythagoras) Numa added a day to the year and assigned this day to January, in order that the principle of the odd number might be preserved and both the year and each month, with the sole exception of February, consist of an odd number of days. For, in a series of twelve months, if each month contained either an even or an odd number of days, the total number of days would be an even number, but to give one of the months an even number of days made the total of the number of days in the year an odd number. (6) And so it was ordained that January, April, June, Sextilis, September, November, and December should be months of twenty-nine days each, with the Nones falling on the fifth day of the month, and, in all of them, the day after the Ides being reckoned the seventeenth day before the next Kalends; (7) but March, May, Quintilis, and October had thirty-one days, with the Nones falling on the seventh day of the month, and in each of these months too (as in the other seven months) the period after the Ides up to [and including] the following Kalends comprising seventeen days. February alone kept its twenty-eight days, as though the shortness of the month and the even number of its days befitted the denizens of the world below. (8) In consequence of this division of the year by Numa Pompilius the Romans were now calculating the length of their own year, like the Greeks, by the course of the moon. And so, like the Greeks,

they had to provide an intercalary month. (9) For, when the Greeks noticed that they had been careless in fixing the number of days in a year at three hundred and fifty-four (since the sun takes three hundred and sixty-five and a quarter days to complete its course through the zodiac, and it was therefore clear that their year was eleven and a quarter days too short) they devised a regular system of intercalation by which they inserted ninety days, arranged in three months of thirty days apiece, in each period of eight years. (10) The Greeks adopted this plan because it was troublesome and difficult to intercalate eleven and a quarter days each year, and they therefore preferred to multiply this number by eight and to insert the ninety days (which represent the product of eleven and a quarter days multiplied by eight) distributed into three months, as I have said. These days the Greeks used to call "supernumerary" and the months "intercalary". (11) The Romans resolved to follow this system too, but they were not successful, since they overlooked the fact that, as I have already reminded you, they had added one day to the Greek reckoning out of respect of the odd number, with the result that over the period of eight years there could be no conformity with the true position either in the number of the intercalated days or in their place in the calendar. (12) However, before the mistake was discovered, they calculated that in each period of eight years ninety days were to be reckoned as supernumerary, in accordance with the example of the Greeks, and they distributed these intercalary days by means of four intercalations, of twenty-two and twenty-three days alternately, every two years. But after every eighth year there was a surplus of eight intercalary days, the product of the single days by which, as we have said, the Roman reckoning of the length of their common year exceeded that of the Greeks. (13) When this error, too, was recognized, it was corrected as follows: in every third period of eight years sixty-six intercalary days were inserted, instead of ninety, to make up for the twenty-four days by which the Roman reckoning had exceeded the Greek in that number of years. (14) Intercalation was always made in the month of February, as the last month of the year; and here too the Romans followed the example of the Greeks, who also used to insert the supernumerary days in the last month of their year, as Glaucippus tells us, the author of an account of the sacred rites of the Athenians. But in one respect the Roman practice differed from the Greeks, (15) for, whereas the Greeks inserted these days at the end of the last month of the year, the Romans made the intercalation not at the end of February but after the twenty-third day of that month, that is to say, after the celebration of the festival of the Terminalia was over. They made the five remaining days of February follow the intercalation, in accordance, I take it, with their old religious custom, namely, to ensure that March should in any case come immediately after February. (16) However, it often happened that the market days would fall sometimes on the first day of the year and sometimes on the Nones of a month; and, since either event was thought to be disastrous for the state, a means to prevent such coincidence was devised, as I shall explain later, after I have shown why the holding of a market on the first Kalends of the year or on the Nones of any month used to be avoided. (17) Whenever the day with which a year began was

a market day, the whole of the year was one of unhappy occurrences and full of sorrow; and the disturbance for which Lepidus was responsible strongly supports this belief. (18) As for the Nones, it was considered that a meeting of the whole population should be avoided on that day because the Roman people, even after the expulsion of the kings, paid particular honor to the Nones, which they believed to be the birthday of Servius Tullius. For, although the month of his birth was uncertain, it was generally agreed that he was born on the Nones, and noticeably large crowds used therefore to collect every month to celebrate that day; and, since those who had charge of the calendar were afraid that, if the whole population assembled for market on those days, regret for the monarchy might lead to an attempt at revolution, they took care that the Nones and market days should not coincide. (19) Hence it came about that the disposal of that extra day, which, as I had said, was added to the year, was left to the discretion of the superintendents of the calendar to insert it where they would, the only proviso being that the day should be placed in the middle [sic] of the festival of the Terminalia, or of an intercalary month, in such a way as to ensure that a market day with its crowds should not fall on a day which was regarded with mistrust. And that is why certain of the old authorities have said that the Romans had not only an intercalary month but an intercalary days as well. (20) Different accounts are given of the beginning of the practice of intercalation. Licinius Macer attributes its origin to Romulus. Antias, in his second Book, maintains that it was the invention of Numa Pompilius and that the reason for it was connected with the celebration of religious rites. Junius says that the practice was begun by King Servius Tullius, who, according to Varro, also instituted the market day. (21) Tuditanus, in the third Book of his *Magistracies*, records that the decemvirs who added two to the Ten Tables of the Law brought a bill relating to it before the people; and Cassius writes that the same authorities were responsible for the practice. Fulvius, however, said that it was the work of the consul Manius Acilius in 562 A.U.C., just before the beginning of the Aetolian War, but Varro traverses this statement with a reference to an ancient law (engraved on a bronze column by the consuls Lucius Pinarius and Furius) to which the intercalary month is ascribed. Such, then, are the accounts which have been given of the practice of intercalation.

2. The Intercalary Month

As indicated above, the Romans used a calendrical system based on a 355-day year. Consequently, the calendar year was perpetually out of step with the tropical year, moving increasingly ahead, in advance, of the seasons with each subsequent year.¹⁶ Aware of this fact, the Romans sought to bring their year into line with the seasons by attaching 22 or 23 extra days to certain years determined by the *pontifices*.¹⁷ The precise procedure involved, which emerges above all from the *Antistes Maiores* (henceforward *Ant. Mai.*), is complex. Depending upon whether 22 or 23 days were to be intercalated, the final five or four days of February were first isolated from the rest of the month which then ended on its 23rd day, that of the *Terminalia*, or the 24th, associated with the *Regifugium*. The detached five or four February days were then added, respectively, to the 22 or 23 intercalary days, to conclude the *mensis*, month, *intercalaris* which consisted always of 27 days. Hence, the appearance in the final column of the *Ant. Mai.*, after the twelve normal months, of an intercalary counterpart of such length.¹⁸ According to Michels,¹⁹ the

¹⁶ Since the concept of calendrical advance and its counterpart, retard, confuses some, the following by way of explanation. If the Roman calendar shows Kal. Aprilis but the julian equivalent is 31st March or earlier, then the calendar is in advance of the seasons. If the Roman calendar shows Kal. Aprilis but the julian equivalent is 2nd April or later, then the calendar is in retard of the seasons.

¹⁷ MACROBIUS, *Sat.* 1,12.38.

¹⁸ There exists a contention (LEUZE, [1930], pp. 132f) that the final column of the *Ant. Mai.* as preserved is actually the penultimate column and that an intercalary month of the alternative length of 28 days was displayed in the true final column. The rationale behind the proposal is the feeling that in all intercalary years, whether 22 or 23 were inserted, February should have concluded on the same date, the 24th. Although the *Ant. Mai.* is incomplete in some respects a fourteenth column is unlikely and intercalary months of 28 as well as 27 days are not readily compatible with LIVY, 43,11.13 and 45,44.3.

¹⁹ MICHELS (1967), p. 17.

inventors of the eventual republican calendar, confronted by the difficulty in determining the exact length of the tropical year, must have been confident that, by beginning the intercalary month after either the 23rd or 24th of February, they could accommodate any error generated by such lack of precision. The two possibilities emerge most clearly from Livy, 43,11.13 and 45,44.3. According to the former: *hoc anno intercalatum est: tertio die post Terminalia Kalendae intercalariae fuere* (In this year there was an intercalation; the additional month began on the third day after the *Terminalia*). According to the latter: *intercalatum eo anno; postridie Terminalia Kal. intercalariae fuerunt* (There was an intercalation in this year; the day after the *Terminalia* was the first day of the intercalary month). The *Terminalia*, to reiterate, was celebrated on the 23rd of February.

According to Macrobius,²⁰ intercalation was normally biennial with 22 and 23 day insertions alternating. There were, he goes on, scheduled omissions in each twenty-four year period designed to eliminate accumulated imbalances. The alternation of 22 and 23 day intercalations and the further refinements that Macrobius envisages quite possibly, although not necessarily, represent wisdom of hindsight, and to reflect a precision and contrivance absent from actual procedure.²¹

The motivation behind the effective placement of an intercalary month in the latter part of the last month of the eventual Roman consular year is a baffling thing. Logic would decree that any added days be positioned between the unequivocal last day of one month and the first day of another, but, as has been seen, intercalary blocks were inserted

²⁰ MACROBIUS, *Sat.* 1,13.11-13.

²¹ It is conceivable that some of the ultimate fine tuning that Macrobius reports was implemented in the period running from 153 BCE, when the commencement day of the consular year was shifted to January 1, to the late 60s, prior to the escalating disorder which led to the Julian reform.

after the *Terminalia* (23rd February) or after the *Regifugium* (24th February). The Romans, then, were *not* logical. Obviously something other than logic prompted such a move.

It has been proposed that Terminus was initially recognized as the god not simply of boundaries, but of endings in general,²² and that the *Terminalia* was once upon a time, therefore, the last day of the year. Later this rôle was forgotten in favour of the one restricting Terminus to land boundaries.

It is not too much to affirm, therefore, that the ancient testimony is entirely in favor of the proposition that Terminalia was at a very early time the last day of the year. This time must of course have antedated the permanent addition to the year of five more days at the end of February, and the beginning of the correction of the annual calendar by intercalations... The intercalations were added to the original end of the year, as we should a priori expect would be the case.²³

Merrill avers that the day after the *Terminalia*, the *Regifugium*, was historically not viewed as an integral annual component, but stood detached from both the end of the old and the beginning of the new year.²⁴ This was the day on which the *rex sacrorum*, not to be confused with the ruling kings of Rome, was immolated, having completed a full year's reign. The four days following, Merrill asserts, were similarly perceived as divorced from the year proper and existing for the sole purpose of the new King's securing divine approval before his inauguration on the first of March.²⁵

But if there was an intercalation at the end of the year, it of course came immediately after Terminalia, and formed a part of the [old] year. The

²² MERRILL (1924), p. 29.

²³ *ibid.*, p. 30. Merrill refutes claims to the contrary - such as that of FOWLER (1899) - by mildly observing that "an explanation is not properly an object of suspicion because it explains and does it well and simply." (p. 31)

²⁴ *ibid.*, p. 37.

²⁵ *ibid.*

King would therefore be allowed those extra days of life, and the Regifugium would follow immediately thereafter.²⁶

Merrill does not absorb the reality that intercalation could occur either after the 23rd or after the 24th of February, depending on how many days it was necessary to intercalate.

Alternatively, it has been claimed that the last few days of February were transplanted to the end of the intercalated block in order to keep the religious festivals that had to occur on these days, the Regifugium (24th) and the Equirria (27th), closely associated with those of March.²⁷ As the first festival in March was also called Equirria, this hypothesis has quite some merit.

Macrobius' discussion, it needs to be added, raises the spectre of single intercalary days. Such addition could occur, we are told, if a market day was going to fall on the Kalends of the new year or on the Nones of any month, *utrumque autem perniciosum rei publicae putabatur*.²⁸ The situation so created was one to be avoided at all costs. Macrobius claims that the intercalated day could be inserted either in an intercalary month or in *medio Terminaliorum*.²⁹ The Latinity of this phrase has been the cause of much confusion as the Terminalia was of only one day's duration. It has been suggested³⁰ that the Terminalia known to Macrobius embraced all the *feriae* of the surrounding period,

²⁶ *ibid.*, p. 38.

²⁷ MACROBIUS, *Sat.*, 1,13.15: *deinde reliquos Februarii mensis dies, qui erant quinque, post intercalationem subiungebant, credo vetere religionis suae more, ut Februarium omni modo Martius consequeretur* (they made the five remaining days of February follow the intercalation, in accordance, I take it, with their old religious custom, namely to ensure that March should in any case come immediately after February).

See MICHELS (1962), p. 174.

²⁸ MACROBIUS, *Sat.*, 1,13.16: *...since either event was thought to be disastrous for the State.*

²⁹ MACROBIUS, *Sat.*, 1,13.19.

³⁰ See MICHELS (1967), p. 166 n. 12.

enabling the purported intercalary day to be inserted in the middle of this collectivity. Dio too dilates on coincidence of a *nundinae* with the first Kalends or any Nones, and claims that such had occurred in 52 BCE³¹ and would have happened again in 40 BCE had not an extra day been intercalated.³²

In support of baleful consequences of coincidence of the Kalends of January and *nundinae*, Macrobius cites the events of 78 BCE, when M. Aemilius Lepidus, in defiance of Sulla's constitutional arrangements, marched on Rome and endeavoured to obtain a second consulship.³³ A similar coincidence, again unchecked, occurred sixteen years later.³⁴ These two unprevented instances strongly suggest that the superstition and its remedy did not in fact exist prior to the period after the adoption of Julius Caesar's calendrical reform. If so, during the period of the middle republic there were no single intercalary days.

To refute further the claim made by Dio and Macrobius that the Romans intercalated single days prior to the Julian reform, attention may be drawn to a passage in

³¹ DIO, 40,47.1: Κάκ τούτου οὔτε τι ἄλλο χρηστὸν συνέβη, καὶ ἡ ἀγορὰ ἡ διὰ τῶν ἐννέα ἀεὶ ἡμερῶν ἀγομένη ἐν αὐτῇ τῇ τοῦ Ἰανουαρίου νομηνίᾳ ἤχθη (no good came of all this, and among other things the market that was held on every ninth day, came on the very first day of January).

³² DIO, 48,33.4: Καὶ ἡμέρα ἐμβόλιμος παρὰ τὰ καθεστηκότα ἐνεβλήθη, ἵνα μὴ ἡ νομηνία τοῦ ἐχόμενου ἔτους τὴν ἀγορὰν τὴν διὰ τῶν ἐννέα ἡμερῶν ἀγομένην λάβῃ, ὅπερ ἀπὸ τοῦ πάνυ ἀρχαίου σφόδρα ἐφυλάσσετο (and an intercalary day had been inserted, contrary to the rule, in order that the first day of the succeeding year should not coincide with the market held every nine days - a clash which had always been strictly guarded against from very early times).

³³ MACROBIUS, *Sat.*, 1,13.17: *nam quotiens incipiente anno dies coepit qui addictus est nundinis, omnis ille annus infaustis casibus luctuosus fuit, maximeque Lepidiano tumultu opinio ista firmata est* (whenever the day with which a year began was a market day, the whole of that year was one of unhappy disturbances and full of sorrow; and the disturbance for which Lepidus was responsible strongly supports this belief). Lepidus was driven out of Italy by Catulus with the help of Pompey.

³⁴ See above, n. 31.

which Cicero discusses the Greek custom of lengthening and shortening months by one or two days.³⁵ If a similar system had been employed by the Romans by 70 BCE, then Cicero would not have needed to provide such a detailed explanation of it, nor have attributed the custom solely to the Greeks. Moreover, Michels observes that,

writers of the Empire would be all the more prepared to accept this idea [of an added day], because, in the Julian calendar, the single intercalary day, the *bisextum* were inserted between the Terminalia and the Regifugium.³⁶

3. Intercalation

Intercalation is the ever-present *bête noire* of those seeking a relatively accurate chronology for otherwise floating events in ancient history. Unfortunately for the modern scholar, and indeed perhaps for the relatively ancient one too, most of the years in which there existed an intercalary month are largely unknown. A number of reasons is probably responsible for this lack of knowledge, the chief being that our key sources for the early and middle republican period were by and large at work after the inception of the Julian calendar and consequently unfamiliar with its predecessor. The circumstances compounds the difficulty experienced by the modern historian who seeks to throw light on a situation that was already in darkness when his primary sources were endeavouring to do the same.

³⁵ CICERO, *Ver.* 2,2.129: *est consuetudo Siculorum ceterorumque Graecorum, quod suos dies mensesque congruere volunt cum solis lunaeque ratione, ut non numquam, si quid discrepet, eximant unum aliquem diem, aut summum biduum, ex mense, quod illi exaeresimos dies nominant; item non numquam uno die longiorem mensem faciunt aut biduo* (it is the custom of the Sicilian as of all other Greeks, as they like to secure the agreement of their days of the month with the motions of the sun and moon, to correct and occasional discrepancy by shortening a month by some one day, or two days at most, days which they term "eliminated"; also, they sometimes lengthen a month by one day, or by two days).

³⁶ MICHELS (1967), p. 167.

Various modern authorities have undertaken to create complex hypotheses which determine the years in which there were intercalations. As often as not these theories create difficulties in themselves, being unable to account for every known instance of intercalation or to cope with the number of intercalations in a certain period that simple arithmetic has shown must exist. Despite the painstaking research involved and the complicated schemes adopted in the attempt to solve the problem of intercalation, there have been few areas of agreement between competing systems. The present day historians whose work touches even remotely on the topic of chronology are forced to choose arbitrarily one over another. Michels suggests that, "this lack of agreement in a field that has been studied for centuries suggests that the evidence now available is inadequate for a solution."³⁷ The evidence "now available" is possibly not much less than it was when many ancient authors were discussing the calendar for one reason or another.

Intercalation was often clearly unsystematic, lacking any predictable patterns.³⁸ At times it could be manipulated by the *pontifices*,³⁹ or neglected by them,⁴⁰ or otherwise deliberately omitted due to 'religious scruples'.⁴¹ Michels comes to the defence

³⁷ MICHELS (1967), p. 168.

³⁸ SAMUEL (1972), p. 162.

³⁹ AMMIANUS MARCELLINUS, 26,1.12: *tunc magis errorum profunda caligine fluctuabant, cum in sacerdotes potestatem transtulissent interkalandi, qui licenter gratificantes publicanorum vel litigantium commodis, ad arbitrium suum subtrahebant tempora vel augebant* (they wandered in still deeper darkness of error when they gave over the power of intercalation to the priests, who lawlessly served the advantage of tax-collectors or of parties in litigation by arbitrarily subtracting or adding days).

⁴⁰ CICERO, *Leg.* 2,12.29: *...quod institutum perite a Numa posteriorum pontificum negligentia dissolutum est* (...a custom which was wisely instituted by Numa, but has now become obsolete through the neglect of the pontiffs of later periods).

⁴¹ MACROBIUS, *Sat.*, 1,14.1: *verum fuit tempus cum propter superstitionem intercalatio omnia omissa est* (but, nevertheless, religious scruples at times led to the omission of all intercalation).

of the maligned *pontifices*, claiming that, had they consistently intercalated biennially, the calendar would have moved ahead of the tropical year three days in every four years, gradually leading to a discernible dislocation.⁴² Deliberate omission was therefore a necessary device. Rather than consistently endeavouring to counteract this perceived error by way of the rigid prescriptions outlined by Macrobius,⁴³ and thereby attain a system relatively constant in relation to the tropical year, the pontiffs were evidently capable of adopting what must have been an easier method: the more or less random omission of an intercalation every now and then to eliminate calendrical advance and maintain a close link between the republican and seasonal calendars.⁴⁴

Over certain periods, intercalation was omitted altogether and so, for example, in 190 BCE, the calendar led the tropical year by four months. Such major omissions have been attributed mainly to awkwardness. The *pontifices* had until the eleventh hour to declare whether or not there was to be an intercalation.

This would be inconvenient enough when Rome's activities were limited to a fairly small area, but when she began to acquire increasing territories, the inconvenience must have increased accordingly. Generals commanding areas overseas and provincial governors would not hear of the pontifices' decision for weeks or months after the fact.⁴⁵

⁴² MICHELS (1967), p. 169.

⁴³ MACROBIUS, *Sat.*, 1,13.13: *hoc quoque errore iam cognito haec species emendationis inducta est. tertio quoque octennio ita intercalandos dispensabant dies, ut non nonaginta sed sexaginta sex intercalarent, compensatis viginti et quattuor diebus pro illis qui per totidem annos supra Graecorum numerum creverant* (when this error, too, was recognized, it was corrected as follows: in every third period of eight years sixty-six intercalary days were inserted, instead of ninety, to make up for the twenty-four days by which the Roman reckoning had exceeded the Greek in that number of years).

⁴⁴ MICHELS (1967), p. 169.

⁴⁵ *ibid.*, p. 170.

Plans based on a normal year would have had to have been revised; arrangements rearranged; social, political, and religious preparations altered. As will emerge below,⁴⁶ Cicero attests such difficulties and complains about the determinants of calendrical confusion in several of his letters.

Michels concludes that it is not possible to produce an exact table of proleptic julian equivalents for dates in the Roman republican calendar due to the paucity of information regarding intercalation. She tabulates the directly attested intercalations and further postulates that when the *Fasti Triumphales* record a triumph as having occurred on the Quirinalia or Terminalia "instead of dating them in the usual way", this is indicative of an intercalation.⁴⁷ To support this theory, she points out that no other *feriae* are marked in this way and insists that there had to have been a reason. She uses as a further justification Livy's dating of a triumph on the Quirinalia coupled with his later mentioning that the year was intercalary.⁴⁸ This theory is plausible at first glance, but Michels has failed to consider the possibility that the *feriae* concerned were used as calendrical indications simply because it was easier than writing *XIII a.d. kal. Mar.* Most Australians today refer to Christmas or Anzac Day rather than the actual dates. Michels herself has admitted earlier that, "the names of the most popular of these [festival] days are often used by Roman writers instead of dates."⁴⁹ Further, the triumph might have been deliberately scheduled to coincide with these particular *feriae*, again solely for convenience.

⁴⁶ See below, p. 83.

⁴⁷ MICHELS (1967), p. 171.

⁴⁸ *ibid.* See LIVY, 45,43.1 and 45,44.3.

⁴⁹ MICHELS (1967), p. 21.

Samuel is prepared to countenance proleptic julian equivalents for republican dates only where clear astronomical synchronisms are available. In respect of intercalation, he refrains even from mention of Michel's theory regarding the *feriae*. Endorsing her basic agnosticism, he confines himself to the observation that,

it is not safe to give a julian date to any date in the Roman republican calendar unless there is a fixed point in the Roman calendar very near to that date, and even then the julian date can only be approximate.⁵⁰

Though most dates can, ultimately, be only relative,⁵¹ it is a worthwhile and, indeed, essential exercise to endeavour to establish some sort of coherent, best-fit chronology for the Roman republic. Among the several methods so far employed towards the establishment of such a chronology have been attempts to reconstruct in the minutest detail the movements of Romans acting in an official capacity - be it as ambassadors or commanders with their armies in the field. Such a project is fraught with the dangers of subjectivity and insufficient knowledge of conditions: of weather and terrain, of the travelling speed of armed men and pack animals, of the resources and stamina of enemies and the recalcitrance of prospective allies. It is a project, in short, demanding virtual omniscience in respect of Roman military and political conditions.

These comments are by no means meant as a dismissal of the hard work and meticulous research of those who have endeavoured to produce definitive reconstructions

⁵⁰ SAMUEL (1972), p. 164.

⁵¹ Not all dates are subject to the subjective approximation that Samuel implies. Those years in which there is found an astronomical synchronism can confidently be assumed to be completely accurate from the kalends of March to the 23rd of February. If there were evidence from historical sources that a year concerned was intercalary, and the number of days intercalated was stated, that would add another accurate year to our reconstructed calendar. The situation is not quite as hopeless as Samuel intimates.

along such lines.⁵² Indeed, they are pursued to a certain extent in the reconstruction of Chapter 4. It must be recognized, however, that no reconstruction can be free from some margin of error. It is to be hoped that the error margin in what follows will turn out to be minimal. Taking account of previous reconstructions and their underlying hypotheses, then, I shall attempt primarily to establish best-fit proleptic julian calendrical equivalents for all days of the republican civil year from 218-167 inclusive. It will be convenient to divide the period into three parts: first, 190-167, for which astronomical synchronisms give fixed termini; second, 203-191; and finally 218-204. Before proceeding to 190-167, a short chapter on the fundamental module of the reconstruction, the consular year.

⁵² DEROW (1976), pp. 265-81, and WARRIOR (1992), pp. 119-44, in particular have struggled with the reconstruction of military movements.

Chapter Three

The Consular Year

WOLFE
LISBON

The Consular Year

A year is a period of time of a designated duration. Since modern man's evolution, this period of time has been calculated by numerous methods, resulting in years of differing lengths. Our year, the Gregorian year, product of a reform by Pope Gregory XIII of the Julian year, promulgated by bull on 24th February, 1582, is the total number of days taken by the earth to complete one revolution of the sun, approximately 365 days. This calendar year commences on the first day of January and concludes on the final day of December, but this is not the only type of year to which we refer. There also exist, among others,¹ the fiscal year and the ecclesiastical year, identical in length to the Gregorian calendar year, but commencing and concluding on different dates. The Romans of the republic also had more than one 'year'.

In addition to the 'normal' or calendar year of the Roman republic, there existed the consular year, whose commencement date varied initially before eventual stabilization. The consular year was the period of time in which any one pair of consuls held office. As eponyms, consular pairs were used to identify years and set them in correct order. Throughout the period under review here, Roman consuls entered into office on the Ides of March.²

¹ Some of these others are the Moslem year, the Chinese year, and the Hebrew year, all of which are reckoned from different dates, and, to some extent, are of varying lengths. The academic year, different even in different countries that follow the Gregorian calendar, is shorter than the normal year.

² For consular assumption of office on this day in March, see, for example, LIVY, 22,1.4: *per idem tempus Cn. Servilius consul Romae idibus Martiis magistratum iniit* (on the Ides of March, Cnaeus Servilius entered on his consulship at Rome). [217 BCE]

During the early republic, the consular years' commencement date was not yet fixed. Variations are immense,³ and no determining system is either suggested by the sources or the dates of entry preserved.

Many authorities have had the Romans starting out with a ten-month year.⁴ This year commenced in March, the beginning of spring, and ended with December, the tenth month reckoning from March. Romulus, when setting the calendar in order, allegedly decreed that it possess *menses quinque bis*,⁵ but Numa, *nec Ianum nec avitas praeterit umbras*,⁶ prefixed two months to the Romulan calendar, so that March became the third month.⁷ It might be considered as a natural consequence of the original commencement

³ What follows is only a partial list of the known dates of the entry into office of the Roman consuls, selected to show the different possible dates of entry and the years in which entry was effected on these dates. For a comprehensive list, see BROUGHTON (1952) pp. 637-9.

D.H., 6,49.2: οὗτοι παραλαμβάντες τὴν ἀρχὴν καλάνδαις Σεπτεμβρίαις θάττον ἢ τοῖς προτέροις ἔθος ἦν... (upon assuming office on the Kalends of September, earlier than had been customary with the former consuls... [493 BCE])

LIVY, 3,6.1: *kal. Sextilibus, ut tunc principium anni agebatur, consulatum ineunt* (on the first of August, then the beginning of the year, they entered office). [463 BCE]

LIVY, 3,36.3: *idus tum Maiæ sollemnes ineundis magistratibus erant* (the Ides of May were at that time the traditional date for beginning a term of office). [450 BCE]

D.H., 11,63.1: Τῷ δ' ἐξῆς ἐνιαυτῷ πάλιν ὑπάτους ψηφισαμένου τοῦ δήμου κατασταθῆναι παραλαμβάνουσι τὴν ὑπατον ἀρχὴν τῇ διχομήνιδι τοῦ Δεκεμβρίου μηνὸς Μάρκος Γεγάριος Μακερίνος τὸ δεύτερον καὶ Τίτος Κοῖντιος Καπιτωλῖνος τὸ πέμπτον (the following year, the people having voted that consuls should again be appointed, Marcus Geganius Macerinus (for the second time) and Titus Quintius Capitolinus (for the fifth time) entered upon the consulship on the Ides of December). [443 BCE]

LIVY, 8,20.3: *extemplo igitur consules novi L. Aemilius Mamercinus et C. Plautius, eo ipso die, Kalendis Quinctilibus, quo magistratum inierunt...* (accordingly, without a moment's hesitation, the new consuls, Lucius Aemilius Mamercinus and Caius Plautius, were directed, on the very day on which they entered office, the Kalends of July... [329 BCE])

⁴ For an encapsulation of modern opinion, see SAMUEL (1972), pp. 167-70. For eventual ancient convictions on such lines, see, for example, GELLIUS, *N.A.* 3,16.16, and LYDUS, *de Mens.* 1,16.

⁵ OVID, *Fast.* 1,28.

⁶ OVID, *Fast.* 1,43.

⁷ cf. CICERO, *Leg.* 2,54; OVID, *Fast.* 1,27-28, 39-44; VARRO, *L.* 6,33-4; CENSORINUS, *D. N.* 20,3-5, among others.

date of the year in March that the consuls entered upon their term of office on the Ides of that month, initially the time of the full moon. It is unfortunate for such a reasonable hypothesis that the ancient sources do not suggest this to have been the case⁸ but that the consuls only entered office in March at a time when the beginning of the year had been firmly fixed on the first of January. As Michels notes⁹ the Roman year must have begun in January at least by the early 2nd century BCE or the *Fasti* of Fulvius Nobilior (cos. 189) would not have opened with that month. It is highly unlikely that the circumstances of 189 reflect relatively recent calendrical rearrangement. The beginning of the calendrical cycle at the time of year concerned is logical in the eyes of Plutarch who writes that it is best to commence a year after the winter solstice as the length of the day starts to increase and, conversely, that of the night to decrease from this point.¹⁰

Eventually, in 153 BCE, the inauguration date for the consuls was moved from the Ides of March to the Kalends of January. This was probably done for logistical convenience and very likely had little or no impact on the timing of the current civil and religious observances of the Roman people. The immediate catalyst for the change was,

⁸ See above n. 3.

⁹ MICHELS (1967), p. 98, n. 15.

¹⁰ PLUTARCH, *Q. R.* 19 (268 D): ἄριστα δ' οἱ τὴν μετὰ τροπὰς χειμερινὰς λαμβάνοντες, ὁπηνίκα τοῦ πρόσω βαδίζειν πεπαυμένος ὁ ἥλιος ἐπιστρέφει καὶ ἀνακάμπει πάλιν πρὸς ἡμᾶς. γίνεται γὰρ ἀνθρώποις τρόπον τινα κατὰ φύσιν τὸν μὲν τοῦ φωτὸς αὐξάνουσα χρόνον ἡμῖν, μειοῦσα δὲ τὸν τοῦ σκότους, ἐγγυτέρω δὲ ποιοῦσα τὸν κύριον καὶ ἡγεμόνα τῆς 'ρευστῆς οὐσίας ἀπάσης (they do best, however, who adopt the beginning after the winter solstice, when the sun has ceased to advance, and turns about and retraces his course toward us. For this beginning of the year is in a certain way natural to mankind, since it increases the amount of light that we receive and decreases the amount of darkness, and brings nearer to us the lord and leader of all mobile matter).

in the opinion of Mommsen, the incursion of the Lusitanians and their allies into Roman territories. He claims¹¹ that,

in order to accelerate the despatch of aid [to Spain], they even made the new consuls enter on office two months and a half before the legal time. For this reason the day for the consuls entering on office was shifted from the 15th of March to the 1st of January.

Administrative convenience of some kind at various levels, possibly triggered by a catalyst such as Mommsen envisages, is a plausible enough explanation for the transference of the consular entry date, but then the original question returns: why did the consuls once enter office on the Ides of March instead of at the beginning of the calendar year? For a positive answer, we are left wanting. Perhaps it was a matter of a typically Roman reluctance to reject wholly an ancient custom, a reversion to the start of some sort of year in March. The civic and religious years were dated from the 1st of January; let the consular year commence in the month of the original new year. Perhaps also it was because March was named for Mars, the god of war, a deity more compatible with military chief magistrates, the distribution of provinces and attendant levies, than was Janus, the statesman and husbandman god for whom January was named.¹²

Whatever the reason, for the period under review, the consular year runs from the Ides of March, year x to the day before the Ides of March, year $x+1$.

Each consular year consequently falls across two proleptic julian years. In practice, it turns out that a consular year consists of a small part of proleptic julian year $x+1$ or $x-1$, and a larger part of proleptic julian year x . The means of expressing this are often the cause of much confusion for the unwary, as recent historians have failed to adopt a

¹¹ MOMMSEN (1901) vol. III, p. 215.

¹² cf. PLUTARCH, *Q. R.* 19 (268 B-C); 22 (269 A).

satisfactory convention for assigning BCE equivalents to Roman republican consular years. Briscoe,¹³ to take one example, dates each consular year by the two proleptic julian years it would have straddled had the julian 15th March of the first of the two years coincided with the Ides of March of the Roman consular year concerned. Since coincidence was not the case, we encounter such daunting statements as the consuls of 195/4 entered office on 24 November, 196, or those of 194/3 entered office on 14 November 195.¹⁴ Derow,¹⁵ whose reconstructions will be further considered below, creates even more confusion by effectively designating consular years which it would be natural to regard as odd ones on the basis of their majority proleptic julian component as even. Marchetti¹⁶ refers to varronian *ab urbe condita* years as well as julian years, but fails to distinguish the two clearly. Others, like Warrior,¹⁷ prefer to operate purely with consular years, a system which seems to me to have greater merit than confusing counterparts. In what follows consular years are defined as consular (C) x , with x representing the proleptic julian year with which the larger part of the consular year coincided.

¹³ BRISCOE (1981), pp. 17-26.

¹⁴ See BRISCOE (1981), p. 26.

¹⁵ DEROW (1973), pp. 345-56.

¹⁶ MARCHETTI (1973), pp. 473-96.

¹⁷ Cf. for example, WARRIOR (1991), pp. 80-7.

Chapter Four

Consular Years and the Proleptic Julian Equivalents



A. A Reconstruction of C190 - C167

The purpose of this section is to propose plausible julian equivalents for the Roman consular years 190-167. Towards this end, brief critical examinations of previous work concerned with the relevant area of Roman republican chronology will first be presented. After this preliminary review, I turn to my own system of julian equivalents, proposing likely intercalary years and suggesting, with supportive argument, that the third Macedonian war was a turning-point in the process of intercalation.

I have chosen to begin the tentative establishment of proleptic julian equivalents for days and months of Roman consular years with the second half of the period of middle Republican history covered by the existing books of Livy because it is neatly bounded on either side by two fixed dates.

In 190 BCE, there occurred a solar eclipse which Livy claims to have occurred on the 11th of Quinctilis.¹ Modern astronomy has calculated this eclipse as having taken place on the 14th of March, 190, showing that the Roman calendar at the time was out of step with the seasonal year by almost four months.

The second fixed date for this period falls in 168 BCE. In that year there was a total eclipse which modern astronomical methods date to the 21st of June, and which

¹ LIVY, 37,4.4: *a. d. quintum idus Quinctiles caelo sereno interdiu obscurata lux est, cum luna sub orbem solis subisset* (on the fifth day before the Ides of Quintilis, in a clear sky, during the day, the light was dimmed since the moon passed before the circle of the sun).

Livy² places in the night of the 3rd of September. In 168 BCE then, the Roman year was still a daunting 2½ months ahead of the seasons.

For the consular years spanning the period 190-168, conformity with Macrobius' basic formula³ and intercalation every second year would have involved a total of eleven intercalary months, adding 247 or 248 days to the 7810 days of the 22-year period, making 8057 or 8058 days altogether. Such neat reconstruction is excluded on two counts.

First, for the consular years running across the period 190-167 BCE, the four directly attested intercalations fell in consular 189,⁴ consular 177,⁵ consular 170,⁶ and consular 167.⁷ The appearance of 170 rules out a sequence of biennial intercalations in each odd year beginning with consular 189. Second, the two fixed dates that we have for this period accurately indicate to us an exact number of Roman republican calendar days which turn out to be more than the above method would give us. Working backwards from each of these fixed dates, the Ides of March (the beginning of the Roman consular year) in 190 fell on the 18th November, 191 proleptic julian, and in 168 on the 4th of

² LIVY, 44,37.8: *nocte quam pridie nonas Septembres insecuta est dies, edita hora luna cum defecisset...* (on the night which was followed by the day before the nones of September, when the moon was eclipsed at the predicted hour...)

³ MACROBIUS, *Sat.*, 1,13.12-13.

⁴ LIVY, 37,59.2: *triumphavit mense intercalario pridie Kal. Martias* (he triumphed during the intercalary month on the day before the Kalends of March).

⁵ FASTI TRIUMPHALES CAPITOLINI, 25: [C. Claudius Ap. f. P.] *n. Pulcher cos. [de Histreis et] Liguribus k. Interk.*

⁶ LIVY, 43,11.13: *hoc anno intercalatum est: tertio die post Terminalia Kalendae intercalariae fuere* (in this year there was an intercalation; the additional month began on the third day after the Terminalia).

⁷ LIVY, 45,44.3: *intercalatum eo anno; postridie Terminalia kal. intercalariae fuerunt* (there was an intercalation in this year; the day after the Terminalia was the first day of the intercalary month).

January, 168 julian. The number of julian days between these two dates is 8083, showing a discrepancy of 273 days between this and the total number of days in terms of non-intercalated Roman civil years. To make up for this shortfall, it was necessary for the Romans to have intercalated into the 22-year period concerned twelve intercalary blocks, nine consisting of 23 days, and three of 22 days.

Apart from the known years of intercalation, placement of the intercalations remaining cannot but be to greater or lesser extent arbitrary, prompting some historians to diagnose that,

there is not enough evidence to support even a tentative complete system of equivalents between dates in the pre-Julian Roman calendar on the one hand and dates in an extrapolated julian calendar on the other.⁸

A complete and *exact* system of equivalents for this period is certainly not possible but a helpful provisional system can certainly be constructed. The two fixed dates give definite termini between which a known number of days are fitted. The years directly attested as containing intercalary months also decrease the possibility of wild inaccuracies occurring. The datum may be thrown in that consular 166 was another year with an intercalary month.⁹ Following consular 166, the years in which there were intercalary months indeed become, eventually, a largely unknown quantity. Even the Italians themselves were at times ignorant of when intercalation was to be effected as the *pontifices*, responsible for the maintenance of the calendar, would wait almost to the last moment before announcing their decision. Such ignorance emerges forcefully from a letter

⁸ DEROW (1973), p. 345.

⁹ FASTI TRIUMPHALES CAPITOLINI, 27: [M. Cla]udius M. f. M. n. Marcellus cos. a DXXCVII [de G]alleis Contrub[r]ieis et Liguribus [Elea]tibusque [k.] Interk.

written by Cicero to Atticus¹⁰ in 50 BCE: *cum scies, Romae intercalatum sit necne, velim ad me scribas certum, quo die mysteria futura sint.* (when you know whether there are to be additions to the calendar at Rome or not, please write me positive news as to the date of the Mysteries). By 46 BCE when Julius Caesar introduced his calendrical system, rejecting the old 355-day calendar in preference of a 365-day one, the civil calendar was so at variance with the seasons that ninety days had to be added to bring it back in line with the tropical year. That year then consisted of 445 days¹¹ instead of the usual 355, making it the *annus confusionis ultimus*.¹²

To return, though, to our earlier *anni confusionis*, there is yet to be formulated a method by which the missing intercalations can be found to have been incorporated into the Roman calendar. In order to achieve an approach to this, it is a valuable and necessary exercise to examine the methods and opinions of two modern historians who have treated the subject of Roman chronology and intercalation in great depth.¹³

¹⁰ CICERO, *Att.* 5,21.14.

¹¹ CENSORINUS, *D. N.* 20,8: ... *faceretque eum annum dierum CCCCXLV.* According to Macrobius (see below), it was 443 days.

¹² MACROBIUS, *Sat.*, 1,14.3: *ergo C. Caesar exordium novae ordinationis initurus dies omnes qui adhuc confusionem poterant facere consumpsit, eaque re factum est ut annus confusionis ultimus in quadringentos quadraginta tres dies protenderetur* (Caesar therefore began the new arrangement of the calendar by using up all the days which could still have caused confusion, with the result that the last of the years of uncertainty was prolonged to one of four hundred and forty-three days).

¹³ An examination of the works of every historian who has looked at intercalation would require much more room than can be provided here. For each of the sections, two theories will be discussed in depth with a view to pointing out prime merits and flaws, with other works being referred to *en passant*.

1. The Derow System (1)

Derow¹⁴ follows Macrobius' claims¹⁵ that the Romans, in accordance with the Greek example, intercalated every second year, alternating between 22 and 23 additional days. After inserting these biennial intercalary blocks, Derow finds that 24 days are left over in the period 190-167 and so superfluously proposes that the consular year 170¹⁶ contained an intercalation of 23 days, a circumstance already clearly recorded by Livy.¹⁷ To dispose of the single day remaining, he tacks it offhandedly onto the intercalary month of the preceding year, declaring that this must remain a margin of error as the correct placement of this extra day (or the subsequent intercalary block of 23 days by his reckoning) is unknown. In this way he neatly slots in the number of days that he has calculated as being necessary to fill the gap between the two astronomical synchronisms, the eclipses of 190 and 168. As a further support for his system, Derow examines both the Livian and Polybian accounts of the Lycian embassy to Rome in consular 178, using the seasonal references therein as confirmation of his own correct placement of the intercalary months. Concluding his paper, Derow says,

¹⁴ DEROW (1973), p. 346.

¹⁵ MACROBIUS, *Sat.*, 1,13.12: *per octo annos nonaginta quasi superfundendos Graecorum exemplo computabant dies, alternisque annis binos et vicanos, alternis ternos vicanosque intercalantes expensabant intercalationibus quattuor* (in each period of eight years ninety days were to be reckoned as supernumerary, in accordance with the example of the Greeks, and they distributed these intercalary days by means of four intercalations, of twenty-two and twenty-three days alternately, every two years).

¹⁶ In an attempt to avoid confusion, Derow's years have been converted to the consular years used throughout this work.

¹⁷ LIVY, 43,11.13.

All of this, I would suggest, warrants confidence not only in the present table of equations but also in the Roman dates given by Livy and the *Fasti Triumphales*, at least for the years here under review.¹⁸

With this exhortation to confidence ringing in the ears, it is a shame then that examination of Derow's skeleton table of equivalents¹⁹ fails to inspire such an investment. Simply by taking the time to build upon them, one brings to light as many as ten internal errors, four of which occur in Derow's 187, two in 183, and one each in 185, 180, 176, and 171. In the following list, the first date shown is the one provided in Derow's table, the second is the correct date calculated from his earlier dates.

187 - 17 iii 187 = 27 iii 187
15 iv 187 = 25 iv 187
14 vi 187 = 24 vi 187
13 vii 187 = 23 vii 187
186 - 30 x 186 = 29 x 186
183 - 28 ii 183 = 29 ii 183
17 vii 183 = 27 vii 183
180 - 15 ix 181 = 25 ix 181
176 - 19 ix 177 = 29 ix 177
170 - 14 v 170 = 24 v 170

Most of these can charitably be attributed to typographical errors. For example, Derow claims that the Kalends of Sextilis in 187 civil was on the 17th March, 187 julian when in actual fact, using his own system, it can be shown to have occurred on the 27th. No such charity can be afforded the two dates that are out by a single day.

¹⁸ DEROW (1973), p. 355.

¹⁹ For the period 190-168, Derow presents a table of the Kalends of each month equated with julian dates.

Such mistakes, typographical or otherwise, aside, a fundamental flaw lies in Derow's placement of the extrapolated leap years for the period under discussion. "For the purpose of extrapolation, note that leap years in this period are 187, 183, etc."²⁰ This presents Derow with five leap years over this period, rather than the actual six. Had Derow positioned the leap years correctly (in 189, 185, etc.) he would have found that, instead of being left with a surplus of 24 days, he had 25, necessitating yet another 23-day intercalation. Conceivably, realization of this necessity might have led Derow to frame a new programme for reconstruction; as matters stand, his misidentification of leap years, together with other errors, removes any possibility of utilising his tables for anything approaching an accurate dating system.

One may add that, though Derow permits three successive intercalary years, he offers no explanation of them, which is disappointing, especially in light of his assessment of the *lex Acilia*.²¹

What makes Derow's work even less user-friendly than it might otherwise have been is his failure to appreciate that it is easier, and perhaps more accurate, to date an intercalation by the *consular* year [15 March - 14 March] in which it occurred, rather than the Roman civil year [1 January - 29 December]. He does explain his convention in a lengthy foot-note, stating that "the intercalation in 190 fell in the term of office of the consuls of 191 (in consular 191)",²² but there is the occasional instance when he writes

²⁰ DEROW (1973), p. 346, n. 3.

²¹ *ibid.*, p. 348f: "It is fair to expect that the Lex Acilia aimed at guaranteeing that intercalation would henceforth be regularly performed."

²² *ibid.*, p. 346, n. 3.

of *consular years* and one is left wondering why he declined to adopt a less confusing system consistently.

2. The Warrior System

Warrior opens her 1991 article on intercalation²³ with a condemnation of Derow's efforts.²⁴ She sees his table of equivalents as "a conveniently tempting tool"²⁵ - nothing more - but deplores his failure "to note that other patterns of intercalation could equally well fit the pattern."²⁶ She herself fails to note any of Derow's proliferous casual errors, concentrating more on the general features of his study than the details.

In the article, Warrior tackles the problem of the determination of intercalary years not by complex calculation but by examination of the terminology employed for the dating of certain events. As an "interesting case", she brings up the two triumphs of 322 BCE, one of which was scheduled for the Quirinalia, the other for *a.d. XII k. Mart.*²⁷ If the year in question had not been intercalary, these triumphs would have been celebrated on successive days. The fact that the consuls to whom there had been awarded triumphs had both fought in the same region would not counterindicate such a possibility, but then

²³ WARRIOR (1991) pp. 80-87.

²⁴ DEROW (1973).

²⁵ WARRIOR (1991), p. 80.

²⁶ *ibid.*, p. 81.

²⁷ *ibid.*, p. 85.

Warrior questions why the first triumph had not been dated to *a.d. XIII k. Mart.*²⁸ As mentioned earlier,²⁹ this may well have been for sheer convenience, but Warrior regards it as proof positive that the former was held in February, the latter in the intercalary month. A fuller discussion of this alleged dating convention is to be found in a later article³⁰ which will be examined next.

In this second article addressing the problem of intercalation, Warrior presents a clear and coherent case for the dating of days in the intercalary month from *kal. Mart.*, and those of February from *fest. als.* Dating forward to the kalends of March was used in years in which there was intercalation whereas dating events after the Ides of February by February festivals occurred in both normal and intercalary years.³¹ By this method, she seeks to identify two hitherto unrecognized intercalary years in this period - consular 188 (*a.d. XIII kal. Martias*) and 172 (*a.d. XII kal. Martias*).³² My objection to these will be considered later.

Before examining the effects of the *lex Acilia*, Warrior expounds on the rôle of the *pontifices* in the maintenance of the calendar and the inclusion of intercalary months. *Pontifices*, she states,³³ most likely always had control of the civil calendar. This

²⁸ *ibid.*

²⁹ See above, p. 70.

³⁰ WARRIOR (1992) pp. 119-44.

³¹ *ibid.*, p. 144. This theory was earlier proposed by SOLTAU (1889) pp. 39ff.

³² *ibid.*, p. 141. Cf. WARRIOR (1991), p. 82.

³³ *ibid.*, p. 126.

opposes the views held by Broughton and Scullard.³⁴ From the earliest time, when oral announcements would still have been a viable means of disseminating information, the *pontifices* would make last-minute declarations pertaining to intercalation. Though there is, as Warrior acknowledges, no direct evidence to support this, the overall impression is of the *pontifices* giving an announcement as late as mid-February.³⁵ With the expansion of Rome's power and acquisition of provinces would have come the difficulty of getting such information to provincial governors and magistrates, as well as those engaged in military manœuvres abroad. To overcome such difficulty, Warrior says that an early decision regarding intercalation would have been necessary.³⁶ She asserts that such early notification is in evidence in the actions of Fulvius in 189. By extending his consulship, intercalation enabled Fulvius to conclude his affairs in Greece and then arrive at Rome in time to conduct the annual elections for 188. She continues that neither Livy nor modern historians have noted the implications of Fulvius' extended consulship.

Modern scholars consider Fulvius' movements mainly from the perspective of events in Greece. Apparently for that reason, they also fail to take full account of the possibilities opened up by the intercalation of 189.³⁷

With the end of the consular year at this period being close on the toes of the end of the campaigning season, failure to intercalate in 189 would have deprived Fulvius of sufficient

³⁴ BROUGHTON (1951) p. 352: "Acilius may have carried the Lex Acilia which placed intercalation under the power of the Pontifices."

SCULLARD (1973) p. 28, n.3 claims that the *lex Acilia* "empowered the pontiffs to intercalate the calendar at their discretion."

Intercalation would have been necessary even in a lunar calendar to maintain a correct relationship between the calendar and the year. The lunisolar calendar of the Roman republic had an equal need of intercalation.

³⁵ WARRIOR (1992), p. 129.

³⁶ *ibid.*, p. 131.

³⁷ WARRIOR (1988) p. 327-8.

time to return to Rome for the elections. Nor, if the *pontifices* were retaining their custom of announcing intercalations at the eleventh hour, would there have been enough time for the news to reach Fulvius in Greece before he had already concluded his business and set off back to Rome. Therefore, granted that there was intercalation in 189, in order for Fulvius to have taken advantage of the extra time (allowing Warrior's unsupported contention that he did so), the decision to intercalate must have been made before Fulvius set out for his province.³⁸ Warrior suggests that, mandated by Acilius as part of the *lex Acilia*, for at least the first three years under the law, intercalation was thereafter always to be decided early in order that magistrates outside the immediate environs of Rome might arrange their affairs accordingly.³⁹

Unfortunately for Warrior, Michels⁴⁰ has plausibly argued that it was from the observance of the winter solstice that the *pontifices* were able to calculate whether their calendar was running ahead or behind the tropical year, and then decide to include or omit intercalation that year. She observes that an unobstructed view of the east and west horizons is easily achievable from the northeast end of the Capitoline Hill, where other calendar related rites were performed. As the days grew shorter, a watch, she suggests, would have been kept to note the day on which the sun rose almost in line with the Via Sacra. This date would indicate whether there was an advance or a retard of the calendar, and hence whether or not an intercalation was warranted. With the winter solstice occurring on 24/25th December, any decision to intercalate or not would necessarily have been late and could *not* have been made *before* a consul left for his province - despite

³⁸ *ibid.*, p. 338.

³⁹ WARRIOR (1992), p. 139.

⁴⁰ MICHELS (1967), p. 100f.

Warrior's claim, unless the decision to intercalate referred not to the coming February, but to the one following, a whole year later. Consequently, if the *pontifices* divined the need for an intercalation at the end of 189 by the winter solstice and were able to give warning far in advance of the proposed added month, that warning would have had to have been conditioned by the solstice of 190 BCE and therefore the consul, Fulvius, would have known of it before even entering office. As no ancient author even hints of an intercalation being announced for the *next* rather than the current year, this is all conjecture, possibly quite wild, and at the very least questionable.

The *lex Acilia* of 191, according to Warrior, prescribed "rapid correction" of the four month dislocation between the calendar and the tropical year.⁴¹ With the undeniable exception of C190, where intercalation would have prematurely ended all military campaigns,⁴² she proposes, every year after the *lex* was intercalary until C185, and then intercalation was "intermittent".⁴³ Such eventual intermittent intercalation achieved, over the next seventeen years, an ongoing discrepancy between civil calendar and seasons of approximately 2½ months. Subsequent to these biennial intercalations came the known intercalations of C167 and C166, indicating to Warrior a resurgence in intercalation.⁴⁴ Yet two questions arise from this: 1. if "rapid correction" was desired, why was 190 not intercalary? and 2. if "rapid correction" was intended, why were successive years after 186 not intercalated until the short-fall had been made up?

⁴¹ WARRIOR (1992), p. 120.

⁴² *ibid.*, p. 139.

⁴³ *ibid.*, p. 143.

⁴⁴ *ibid.*

In answer to the first question, Warrior proposes that the negotiations with Antiochus, occurring towards the end of the campaigning season, made the decision not to intercalate that year most acceptable, indeed, even desirable, but she acknowledges that it is only with the wisdom of hindsight that these negotiations are inferred,⁴⁵ and if early decisions as to intercalation were in vogue at this period, intercalation would have been scheduled long before any dealings with Antiochus were in the wind.

As to the second question, Warrior fails to offer any adequate, let alone convincing, explanation of alleged cessation of successive remedial intercalations in C185. It is puzzling that she fails even to consider the possibility of alternate intercalations, as Macrobius, in the period and it seems as though she, just as she accuses Derow of doing,⁴⁶ has set her eyes on a particular scenario and gone on to gloss over those awkward facts which do not fit it.

⁴⁵ *ibid.*, p. 139.

⁴⁶ WARRIOR (1991), p. 81: "Upon closer examination, however, one finds that Derow has a single-minded focus on this one hypothesis to the exclusion of all others."

3. Accelerated Intercalation and the Third Macedonian War; towards a new system of equivalences.

Macrobius⁴⁷ says that, in ancient times, before the eventual calendar of the Republic was established and well-known, it was the duty of a *pontifex minor* to watch for the crescent moon which would herald the first day of the new month and report this to the *rex sacrorum*. In turn, the *rex* would then inform the people on what day the Nones would be, and when would come the Ides. The implication of this is clear enough - the calendar was in the hands of the priests from its inception, and the priests would have been the ones to recognize that their calendar was at variance with the seasons and understand the need and the method for correcting this defect. Therefore, to claim, as does Broughton⁴⁸ among others, that it was the *lex Acilia* of 191 BCE that gave the power of intercalation to the *pontifices* is to make a vast, unsubstantiated assumption based only on Macrobius' short and opaque reference to it which suggests nothing of the kind.⁴⁹ Granted that the *pontifices* were responsible for intercalation long before Acilius' law and the accumulated discrepancy by C191 between civil year and seasons, the *lex Acilia* was

⁴⁷ MACROBIUS, *Sat.*, 1,15.9: *priscus ergo temporibus, antequam fasti a Cn. Flavio scriba invitis patribus in omnium notitiam proderentur, pontifici minori haec provincia delegabatur ut novae lunae primum observaret aspectum visamque regi sacrificulo nuntiaret* (in early times, then, before the clerk Cnaeus Flavius (against the wishes of the Senate) had published the calendar there used to be assigned to a minor priest the duty of watching for the first appearance of the new moon and reporting its appearance to the high priest).

⁴⁸ See above, p. 89, n. 34.

⁴⁹ MACROBIUS, *Sat.*, 1,13.21.

very probably more concerned with the resumption of regular intercalation than anything else.⁵⁰

With this in mind, then, it is out of the question that there was failure to intercalate at the end of the very year in which the law was carried.⁵¹ Equally, it strikes me as highly improbable that, immediately after the recommencement of intercalation, it would have been resorted to in successive years given Macrobius' insistence that biennial insertions were the norm. Consequently, Warrior's careful examination of the crossing of the Hellespont in 190⁵² to prove that there was no intercalation in this year, though interesting, is probably superfluous.

If intercalation for this period indeed followed the principles recorded by Macrobius, then, presuming that the year in which the *lex Acilia* was carried was the first of the regular intercalations, all uneven, from a proleptic julian perspective, consular years down to and including 169 are to be considered intercalary. This positions eleven of the twelve intercalations necessary for C190-C168, with the known intercalations fitting in perfectly, except for one. Livy states that C170 was intercalary.⁵³ While from one perspective a fly in the ointment, this, once included in an overall distribution, provides

⁵⁰ LINTOTT (1968) p. 190 proposes that the *lex Acilia* "possibly permitted increased intercalation so as to bring the calendar back into correspondence with the solar year." Such a proposal would be valid *if* intercalation had been occurring at all during this time.

⁵¹ Cf. BRISCOE (1981), p. 19: "Since the consuls entered office on the Ides of March the first intercalation that can have taken place after the passage of the law would have been that after 23/24 February in the year 191/190. It would, I think, be virtually impossible to argue that there was not an intercalation at that time."

MARCHETTI (1973), p. 476: "Il est possible que les pontifes réintroduisirent l'usage du mois intercalaire l'année même de la promulgation de la loi *de intercalando*."

⁵² WARRIOR (1988), pp. 331-7.

⁵³ LIVY, 43,11.13.

the extra, twelfth, intercalation required.⁵⁴ Nevertheless, the question arises of the rationale of this departure from regular biennial intercalations.

By 168, as has already been shown, the Roman calendar was approximately 2½ months ahead of the seasons. Fifteen years later, in 153, when the beginning of the consular year was changed from the Ides of March to the first of January, the calendar is likely to have been even more in accord with the tropical year. Hence, the shift of the beginning of the consular year to the Kalends of January, a move calculated to provide key magistrates with sufficient time to transact public business prior to the campaign season.⁵⁵ It was necessary then for there to have been a sufficient number of intercalations to effect this correction. As there are known intercalations for C167 and C166, and, if one follows a plausible suggestion of Michels,⁵⁶ one in C164, it becomes attractive to propose that the *pontifices*, eventually finding it unacceptable that renewed biennial intercalation was *maintaining* the calendar rather than significantly contributing to correction of the discrepancy that existed, decided that for a period intercalation be performed *every year* until the calendar was no longer at gross variance with the seasons. An hypothesis along these lines involving successive intercalations at the end of consular 169, 168, 167, 166, 165, 164 and 163 would also explain the intercalation of C170 if, as I should like to suggest, such a decision was reached in C171. One wonders, then, what occurred in 171 to cause the *pontifices* to take action.

⁵⁴ By this system, the intercalary years are consular 189, 187, 185, 183, 181, 179, 177, 175, 173, 171, 170, and 169.

⁵⁵ For further, see section C below.

⁵⁶ MICHELS (1967), p. 171.

The responsibility for a temporary functional change from biennial to annual intercalation may possibly be laid at the feet of Cn. Domitius Ahenobarbus. Co-opted into the priesthood at the end of 172 or early in 171 to replace Q. Fulvius Flaccus, who had hanged himself and therefore died *foeda morte*, Domitius Ahenobarbus was, as Livy⁵⁷ put it, *oppido adulescens sacerdos*. Little is known about this Cn. Domitius Ahenobarbus other than that he was probably a praetor in C170,⁵⁸ and a suffect-consul in C162.

According to the *lex Villia* of 180 BCE, a man had to have attained the age of 42 before he could hold a consulship. As the *Fasti* list Cn. Domitius Ahenobarbus as having held the position of suffect-consul in 162, and since it is extremely unlikely that a suffect-consul was permitted to be under the required age of a consul, it may be assumed that by this time Domitius Ahenobarbus was at least 42. Therefore, ten years earlier when he was co-opted into the priesthood, he would have been at least 32 which was about the average age of priests. Pontifical colleges, Hahn⁵⁹ demonstrates, "seldom co-opted men who had already held the consulship, and they seemed to prefer men who had never held any high political office." Consequently, Hahn concludes, new priests were mostly young men under thirty-six. If he is right, Livy's comment on Domitius Ahenobarbus' age is peculiar, since he does not appear to have been an exceptionally young man. Conceivably, Livy was not referring so much to Ahenobarbus' physical age as to the age of his thinking; his ideas were youthful almost, refreshingly new after the stultifying inactivity of those in the same office. Domitius was *oppido adulescens sacerdos* in spirit, if not in calendar age.

⁵⁷ LIVY, 42,28,23.

⁵⁸ LIVY, 44,18,5.

⁵⁹ HAHN (1963) p. 76.

The injection of new blood into the priesthood at this period may well have been responsible for the realization that, unless drastic measures were taken, the Roman calendar would continue *ad infinitum* to be at inconvenient variance with the tropical year. The measures adopted, as proposed above, were to increase the frequency of intercalation by temporarily making it annual rather than biennial with the result that the Roman calendar gradually moved back in line with the tropical year.

It is difficult, however, to assume that a new face in the pontifical college was the only determinant of such a change. There was likely some motivating force, some pressing immediate circumstance which prompted Cn. Domitius Ahenobarbus' revision of the system of intercalation (assuming that he was the main architect) and the decision of the other *pontifices* to accept and implement it. To find such a catalyst, one has merely to turn to the exigencies arising in particular from the remote theatre of campaign of the Third Macedonian War.

The military campaigning season of this period of the Republic concluded with the army's going into winter quarters. There does not appear to have been an exact date for this occurrence, but according to both Columella and Varro,⁶⁰ (although they are relatively late authors using the julian calendar, it is unlikely that notions about seasons' beginnings in terms of risings and settings of stars would have altered significantly since the middle republic) the start of winter was the tenth of November. Assuming, then, that a consul quartered his army for winter not long after this date during a year in which civil

⁶⁰ COLUMELLA, 11,2.84: *IV idus Novembres hiemis initium* (on the fourth day from the Ides of November is the beginning of winter).

VARRO, *Rust.* 1,28.3: *primi...hiberni ex a.d. IV id. Nov* (the first day... of winter is on the fourth day before the Ides of November).

year and seasons coincided, he would have had plenty of time to return from his province to hold the elections at Rome in the middle of February.

If one of the problems generated by the Romans' neglect of intercalations was that consuls, to fulfil requirements of their office, such as presiding over elections, were obliged to leave armies and return to Rome before the end of the campaigning season, then exceptional difficulties must have arisen in the first year of the war against Perseus. When the war began in C171, the calendar must have been out of step with the tropical year by approximately $3\frac{1}{2}$ months, the Ides of March falling on the 29th of November, proleptic julian. The beginning of the next consular year was on the 11th December, 170 julian, but it must be borne in mind that there had been an intercalary month at the end of consular 171. Mid-February, the time when the consul would have been expected to be in Rome for the elections, would have fallen not in late winter by the seasonal calendar, but instead in the middle of autumn (mid-October, proleptic julian). It is natural to assume that the conclusion of the campaigning season would come when the weather deteriorated to such an extent that military actions were obstructed; in other words, at a time dictated by the seasons, rather than a calendar date for the inception of winter such as that indicated by Columella and Varro.

If such a calendar date had been irrationally and rigidly used, the Roman army would have been snugly tucked up in winter quarters sometime around late July or early August, which would have been summer. Having disposed of his army in this way at this time, the consul would have had a few months clear in which to return to the capital to discharge his obligations, and therefore any contention that the consul had to leave his army before the conclusion of the campaigning season would have been groundless. If, on the other hand, the consul had continued with military manoeuvres until the weather

called a halt,⁶¹ then he would have lacked sufficient time to return to Rome. It may be concluded then that this latter situation was the one facing the Romans. Before the end of the campaigning season, determined by the weather, the consul would have been forced either to leave his army to execute the obligations of his office, or to put them in winter quarters while the weather continued fair and suitable for armed encounters.

The third Macedonian war was regarded by the Romans as a grave matter,⁶² and several innovations were decreed: for example, experienced soldiers up to fifty years of age might serve in the army, and tribunes, instead of being chosen by vote, might be selected by the consuls and praetors.⁶³ To postulate a further innovation - an amendment to the current system of intercalation - is far from far-fetched. Concerned by the situation faced by the consul, P. Licinius Crassus, (and perhaps inflamed by the defeat at Peneus; by Perseus' repeated offers of indemnity; and by the lack of decisive confrontations, excepting the accidental meeting near Phalanna), the *pontifices* were impelled to seek a

⁶¹ If the earliest date for this is determined as the 10th November, proleptic julian, then the equivalent civil calendar date is 11th day of the intercalary month, 170.

⁶² Indeed, it was not only the Romans who were of this opinion as LIVY tells [42,29.1]: *non urbs tantum Roma nec terra Italia, sed omnes reges civitatesque quae in Europa quaeque in Asia erant converterant animos in curam Macedonici ac Romani belli* (not only the city of Rome and the land of Italy, but also all kings and states both in Europe and Asia, had turned their minds to concern over the war between Macedonia and Rome).

Particular Roman concern is evident not only in the innovations decreed (to be examined below) but also in a later passage of LIVY [42,35.3]: *quo maturius in provincias magistratus proficiscerentur, Latinae kalendis Iuniis fuere* (in order that the magistrates might set out sooner for their provinces, the Latin Festival was held on the Kalends of June). Very possibly the Roman mind believe that the sooner the army was gone, the sooner they could destroy the Macedonian threat.

⁶³ LIVY, 42,31.4-5: ... *ut centuriones militesque veteres scriberet quos vellet consul usque ad quinquaginta annos. ... ne tribuni militum eo anno suffragiis crearentur, sed consulem praetorumque in iis faciendis iudicium arbitriumque esset.* (...that the consul might at his discretion enrol former centurions and soldiers up to fifty years of age. ...that tribunes of the soldiers should not be chosen by vote for this year but that the consuls and praetors should exercise their judgment and choice in appointing them).

solution, one that would keep their consul in the field with his army until the conclusion of the campaigning season but that still permitted him to discharge his other consular responsibilities. A panacea proposed by Cn. Domitius Ahenobarbus, an innovative young man new to public office, suited them well.



B. Reconstruction of C203 - C191

In the previous section I sought to establish a relative chronology for C190 - C167 and a little beyond on the basis of astronomical synchronisms, seasonal references in the ancient texts, and the suggestions and observations of modern researchers. In what follows, I shall deal with the period C203 - C191 on similar lines, calibrating consular years with proleptic julian counterparts and suggesting which of the former are likely to have been intercalary. Chronological works of P. S. Derow and P. Brind'Amour will again have a high profile, as will also the question of whether the battle of Zama can be found to have a secure proleptic julian equivalent, established by way of extrapolation from information relating to the Roman republican date for the defeat of Vermina.

In the case of C190 - C167 calendrical calibration was facilitated by the availability of two solid *termini*, the solar eclipse of 190 and the eclipse of the moon of 168. Confronting the would-be calibrator of C203 - C191 is the presence of only one constructional constraint, namely the proleptic julian equivalent for C190. More use, consequently, needs to be made of controlled conjecture and even greater reliance placed on seasonal markers in ancient texts. An inherent danger of overdependence on such allusions is that it can sometimes be shown that the authors concerned were capable of compressing events for dramatic or other subjective purposes.

The eclipse synchronisms of 190 BCE and 167 BCE made it possible to number the civil days and the julian days between them, and reconciliation was achieved by interposition of biennial and then successive intercalary blocks. Regrettably, it is by no means relatively simple to calculate the number of days for the earlier period, despite its

comparative shortness. If the Roman republican days from 15 March, 203 to 14 March 190 civil are counted, ignoring for the interim any intercalations, then the result comes to 4615 days. In the context of the reconstruction of the previous section, the julian equivalent of the day prior to the Ides of March 190 has been established, but there is no obvious reference point available towards establishing the equivalent of the Ides of March, 203. It follows that it is extremely hard to achieve a systematic calibration on the basis of the number of intercalations and intercalary months and days. It is necessary, in fact, to admit the impossibility of establishing with adamant certainty how many days were intercalated into the Roman civil calendar to bring it to the stage when in 190 BCE it was approximately four months ahead of the tropical year. A relatively satisfactory proposal can be put forward, but a margin of error must perforce be present, and allowance made for the accommodation of such.

In order to achieve a best fit equation of the Roman civil years of our period with proleptic julian years, examination of the ancient sources must be meticulous; all significant clues have to be gleaned regarding the chronology of the era, and inferences drawn which may seem presumptuous at first sight but will, on closer examination, it is hoped, be perceived to have a high degree of plausibility.

1. The Derow System (2)

Derow's second article¹ is what he calls a "retrogressive continuation" of the earlier paper discussed in the previous section. It is unfortunate, and one might go on to

¹ DEROW (1976), pp. 265-81.

add remarkable, that the types of error present in that first study appear again in this one, such as the incorrect placement of proleptic julian leap years.²

In order to establish the chronology of 203, Derow goes into an in-depth reconstruction of military events; in particular, the confrontation between the armies of Scipio, Syphax, and Hasdrubal. In so doing he draws especially on the accounts of Polybius and Livy. Though his time frames may be seen as very tight, his calculations agree with those of Soltau³ in claiming that the defeat of Syphax at Cirta, occurring, according to Ovid,⁴ on 22 Junius in the consulship of Cn. Servilius Caepio and C. Servilius Geminus, fell on the proleptic julian date of 23rd May, 203 BCE.⁵ If this date were accurate, then it could be safely asserted that between 203 and the eclipse of 190, there were two intercalations. Derow's view that there was one at the end of consular 191 because of the *lex Acilia* is consistent with general opinion.⁶ His next step is to locate the year of the second intercalation.

² For this period, Derow places the leap years in 203, 199, 195 and 191. The correct proleptic julian leap years are 201, 197, and 193. There is more accuracy in his table, at least for this later period, with only one other error, presumably typographical:

20 ii 191 should read 21 ii 191.

³ SOLTAU (1889), p. 195.

⁴ OVID, *Fast.* 6,765-770:

*sint tibi Flaminius Trasimenaque litora testes,
per volucres aequos multa monere deos.
tempora si veteris quaeris temeraria damni,
quintus ab extremo mense bis ille dies.
postera lux melior: superat Masinissa Syphacem,
et cecidit telis Hasdrubal ipse suis.*

(be Flaminius and the Trasimenian shores your witness that the kind gods give many warnings by means of birds. If you ask the date of that ancient disaster, incurred through recklessness, it was the tenth day from the end of the month. The next day is luckier: on it Masinissa defeated Syphax, and Hasdrubal fell by his own sword).

⁵ DEROW (1976), p. 267.

⁶ *ibid.*, p. 268. cf. also BRISCOE (1981), p. 19.

Derow rejects Marchetti's suggestion that the intercalation occurred in consular 194, rather than before, in order to lessen the impact of the *ver sacrum* celebrated earlier that year,⁷ not on the grounds of the hypothesis' implausibility, but rather due to disbelief that the intercalation could have occurred so late.⁸ Again using Polybius and Livy, Derow outlines the events of late C198 and early C197, focussing on the conference between Flaminius and Philip and the truce between the two nations,⁹ and assessing the length of time likely to have elapsed between key events. He concludes that the time limits are again very, even unnecessarily, tight, not so much on the basis of information provided by ancient authors (he highlights in particular Livy's¹⁰ assertion that *hiems iam eo tempore erat*), as on the deductions of modern critics, such as Holleaux. In a footnote,¹¹

⁷ MARCHETTI, (1973), pp. 495-6. The date of the celebration of this 'sacred spring' can be found in LIVY, 34,44.3, where he writes that: *ver sacrum videri pecus quod natum esset inter kal. Martias et pridie kal. Maias P. Cornelio et Ti. Sempronio consulibus* (the 'sacred spring' was defined as including all animals born between the Kalends of March and the day preceding the Kalends of May in the consulship of Publius Cornelius and Tiberius Sempronius), an event which would have crossed the last days of one consulship and the first of another. If an intercalation is not allowed between those of C203 and C194, then the *ver sacrum*, scheduled to fall between 1st March and 29th April, would have in truth occurred between 21st October and 19th December, 194 proleptic julian. The terms of the *ver sacrum* were such that all animals born during spring were to be sacrificed to a selected god, commonly Jupiter. If such an event had occurred at the seasonally proscribed time of year, then goats (VARRO, 2,3.8; COLUMELLA, 7,6.6), cows (VARRO, 2,5.13), and horses (VARRO, 2,7.7) would have been sacrificed, if the farmers of the republic had been following the breeding seasons described by imperial authors. By time-tabling the ceremony to occur in a 'spring' that was in actuality late autumn/early winter, the impact on farmers would have been considerably lessened, as only sheep (VARRO, 2,2.13; COLUMELLA, 7,3.11) were born at this time of year, and so cows, pigs, horses and goats could have been spared. If, on the other hand, an intercalation had occurred before the *ver sacrum* of 194, then the celebration would have been held between 13th November, 194 and 11th January, 193 proleptic julian. The difference in the number of animals sacrificed would not have been very great, and therefore Marchetti's basing of his theory on such an event is not particularly compelling.

⁸ DEROW (1976), p. 268.

⁹ *ibid.*, pp. 269-71.

¹⁰ LIVY, 32,32.1.

¹¹ DEROW (1976), p. 269f, n. 16.

Derow apportions "30-35 days [of the truce] for the envoys to get to Rome; 5-10 days in Rome; 20 days for the return trip." He admits that the schedule was restrictive, and that it is quite possible that the times taken were in fact longer (especially that of the return trip, which, curiously, he makes 10-15 days shorter than the trip out) or that there might have been intervals, unreflected in the ancient accounts, between key events. From Derow's discussion, two possible dates (16 or 17 December, 198 BCE and 7 January, 197 BCE) emerge for the Ides of March of consular 197, depending on whether there was one or no intercalation between the conference and 190. Derow favours the latter alternative, but there seems no solid evidence whatsoever for dismissing the former. Derow goes on to conclude that the second intercalation overall is to be assigned either to 202 or 201, that is, consular 203 or consular 202.

Derow avers that it is possible to draw a close relation between the advent of the Mater Idaea at Rome in 204, which Livy claims to have happened on 4 Aprilis,¹² and the vernal equinox which fell that year on 24th March, proleptic julian.¹³ Such a nexus between the Mater Idaea and the vernal equinox is found, according to Derow, at Pliny, *N.H.* 18,16, where the polymath writes: *quo verum anno Mater deum advecta Romam est, maiorem ea aestate messem quam antecedentibus annis decem factam esse tradunt.* (then it is recorded that in the summer of the year in which the Mother of the Gods was carried to Rome there was a larger harvest than in the preceding ten years). Since the passage

¹² LIVY, 29,10.4-11.9; 14.5-14. There has been minor controversy over the correct date of the Idaean Mother's arrival in Rome. Some text have it as *pridie Idus Aprilis*, but others give *pridie Nonas Aprilis*. Most historians tend to prefer the latter reading, among whom is SCULLARD (1981), p. 97. The sacred stone of the Goddess arrived in Rome on 4th April, 191 BCE and was installed in the temple of Victory on 10th April. Scullard tells that an annual festival, the Megalesia, grew out of her worship.

¹³ DEROW (1976), pp. 272-3.

makes no obvious specific reference to the vernal equinox, it is extremely difficult to see how such a connexion could possibly be drawn. Nonetheless, Derow draws it and goes on to state that if consular 203 had been intercalary, then 12 Aprilis would have fallen on 25th March, 204 proleptic julian. His final conclusions are that the Ides of March, C203 fell on the 15th of February, 203 BCE, and that there were no intercalations between the one of C202 and that of C190.¹⁴

2. The Brind'Amour System (1)

In Brind'Amour's invaluable work on the Roman calendar,¹⁵ the years under examination are neatly grouped into blocks of varying lengths. Perhaps a draw-back of his system is that the blocks are not presented in chronological order. However, within each block, each year is clearly and comprehensively examined on the basis of seasonal references and astronomical synchronisms.

As far as the equation of 22 Junius, C203 with 23rd May, 203 BCE proleptic julian as painstakingly calculated by Derow is concerned, Brind'Amour finds himself unable to accord acceptance to such precision, the available evidence being what it is.

Malgré les quelques indications précises que comportent nos sources, leur silence en d'autres endroits ne permet pas une reconstitution bien assurée. Combien de temps fallut-il à Syphax vaincu, par exemple, pour se refaire une armée de nouvelles recrues, avant sa défaite définitive?¹⁶

¹⁴ *ibid.*, p. 274. (It must always be borne in mind that when Derow uses a date such as '202', he means 'consular 203'.)

¹⁵ BRIND'AMOUR (1983).

¹⁶ *ibid.* pp. 166-7.

Brind'Amour goes on to suggest that the eclipse which Zonaras,¹⁷ epitomizing Cassius Dio, associates with the eve of the battle of Zama in C202 and which has commonly been identified with that of 19th October 202 BCE, is in actuality a reflex of that of 6th May, 203 BCE. He makes this proposal on the basis of an examination of the magnitudes of the eclipses for an observer in north Africa. The earlier eclipse, though hardly total, was of greater magnitude than the one that occurred in 202 BCE which was of such low magnitude that "il est difficile de croire que cette éclipse, avec la magnitude qu'on lui découvre dans la région de Carthage et partout sur la côte africaine, ait pu seulement être observée."¹⁸ Consequently, Brind'Amour considers the report from Cassius Dio to be more literary fiction than historical fact; a matter of synchronising a key politico-military event with an astronomical one that in fact preceded it. He concludes that it is not possible to date the battle of Zama by the eclipse synchronism of Zonaras,¹⁹ and instead goes on to employ other methods.

During the final year of the second Punic war, according to Livy, Ti. Claudius Nero set out for Africa with a fleet to assist Scipio Africanus. Storms forced him to stop at Sardinia to repair his ships. While he was there, winter and the turn of the year

¹⁷ ZONARAS, 9,14: Συνέβαλον οὖν οἱ μὲν Ῥωμαῖοι συντεταγμένοι καὶ πρόθυμοι, Ἀννίβας δὲ καὶ οἱ Καρχηδόνιοι ἀπρόθυμοί τε καὶ καταπεπληγμένοι καὶ δι' ἕτερα καὶ ὅτι καὶ ὁ ἥλιος σύμπας ἐξέλιπεν (accordingly, the Romans entered the conflict well marshalled and eager, but Hannibal and the Carthaginians listless and dejected. This was owing in part to a total eclipse of the sun). It is difficult to assess to what extent Zonaras was capable of garbling Cassius Dio, whose histories he was epitomizing.

¹⁸ BRIND'AMOUR (1983), p. 169.

¹⁹ BRIND'AMOUR (1983), p. 169.

overtook him and since no-one sought to prolong his command, it was as a private citizen that he brought the fleet back to Rome.²⁰

Brind'Amour claims that it is not necessary to interpret the Livian *circumactum anni tempus* (the turn of the year) as betokening correspondence with onset of winter, and that Livy merely compressed events.²¹ Cassius Dio as relayed by Zonaras expands in some respects and differs from Livy's account of events. He records that after progressing to Sicily, Ti. Claudius went no further because there was no need; news had reached him of Scipio's decisive victory over Hannibal.²² Focussing upon the synchronism, Brind'Amour states that, "la bataille de Zama et la naufrage du consul Claudius se seraient déroulés au début de l'hiver, pas mal de temps avant la fin de l'année civil."²³

Further towards establishing an exact date for the final major battle of the second Punic war, Brind'Amour turns to the defeat of Vermina, the son of Syphax, which Livy dates to the 17th December, 202 civil.²⁴ The time of the battle of Zama, which occurred not long before the defeat of Vermina, he decides was mid-December, and by so

²⁰ LIVY, 30,39.3: *ubi dum subductae reficiuntur naves, hiems oppressit circumactumque anni tempus, et nullo prorogante imperium privatus Ti. Claudius classem Romanam reduxit* (there, while the beached ships were undergoing repairs, winter and the turn of the year overtook him, with no-one seeking to prolong his command, it was as a private citizen that Tiberius Claudius brought the fleet back to Rome).

²¹ BRIND'AMOUR (1983), p. 172.

²² ZONARAS, 9,14: *εἶτα οὐδὲ περαιτέρω τῆς Σικελίας ἐχώρησε, κεκρατηκότα μαθὼν τὸν Σκιπίωνα* (after that he progressed no further than Sicily, for he learned that Scipio had proved the victor).

²³ BRIND'AMOUR (1983), p. 173.

²⁴ LIVY, 30,36.8: *pars exercitus cum omni equitatu Saturnalibus primis agmen adgressa Numidarum levi certamine fudit* (part of the infantry and all the cavalry attacked the column of the Numidians on the first day of the Saturnalia, and routed it after a slight engagement). The Saturnalia was celebrated from 17 to 23 December. This exact dating by Livy for a minor event is unusual but need not be rejected as spurious because there are later examples of precise dates for minor events in Livy, such as the return of the Roman emissaries from Carthage on the Nones of June, 174 civil [LIVY, 41,22.1].

concluding fails to endorse the ten-day interval between the two events estimated by Marchetti.²⁵ Since Zama occurred around the beginning of winter, it follows for that Brind'Amour the calendar was somewhat in advance of the seasons.²⁶ He proposes that there was an intercalation in consular 193 since in that case, the Ides of December 202 would correspond to the end of October, proleptic julian, and thus the setting of the Pleiades which signalled the beginning of winter.²⁷

As a further proof that the calendar was in advance of the seasons, Brind'Amour cites a passage of Polybius²⁸ which suggests that Publius Sulpicius was made consul during winter, implying that the Ides of March did not fall in the spring of that year.

Like Derow, Brind'Amour investigates the truce between the Romans and the Macedonians and surrounding events in 198 and 197. From these he deduces that the Ides of March, 198 civil, was in the middle of winter, and that therefore, "l'avance calendaire, dans tout cela, est incontestable."²⁹ To focus on 197, the Romans achieved a military success over Philip and the Macedonians at Cynoscephalae in Thessaly, around the time of the harvest, a setting implied, if not specifically stated, by both Polybius³⁰ and

²⁵ See p. 112f below for further discussion of this point.

²⁶ BRIND'AMOUR (1983), p. 174.

²⁷ *ibid.*

²⁸ POLYBIUS, 16,24.1: ὁ βασιλεὺς τοῦ χειμῶνος ἤδη καταρχομένου, καθ' ὃν Πόπλιος Σολπίκιος ὑπατος κατεστάθη ἐν Ῥώμῃ... (at the beginning of the winter in which Publius Sulpicius was appointed consul in Rome...)

²⁹ BRIND'AMOUR (1983), p. 141.

³⁰ POLYBIUS, 18,20.3: ὁ δὲ Τίτος ὑποπτεύσας τὸ μέλλον ἐκίνει τὴν δύναμιν ἅμα τῷ Φιλίππῳ, σπεύδων προκαταφθεῖραι τὸν ἐν τῇ Σκοτουσσαίᾳ σῖτον (but Titus [Flaminius], suspecting his purpose, put his army in motion at the same time as Philip with the object of destroying the corn in the territory of Scotusa before his adversary could get there).

Livy.³¹ If this is so, the victory must have been achieved in late June or July julian.³² Flamininus despatched a letter to Rome to relay the news of his success and Livy records that the document concerned arrived at Rome *exitu ferme anni* (almost at the end of the year).³³ The Ludi Romani were celebrated with greater than usual splendour that year in celebration of the victory,³⁴ and from this Brind'Amour concludes that the outcome of the battle must have been known at Rome by September, civil; in this case, Livy's claim that the letter had come at the end of the year has to be erroneous. Brind'Amour continues that had the calendar been in retard at this point, the battle of Cynoscephalae would have occurred in April or May, civil, and the "manifestations d'enthousiasme et de gaieté" that Livy associated with the Games would have had to have been held over for about six months - a period sufficient for such effervescence to have evanesced. On the other hand, with the calendar in advance, the battle would have been fought in August, civil, and the news of it still fresh in the mind of the Romans when the Ludi Romani fell due.³⁵

³¹ LIVY, 33,6.8: *itaque pariter ducibus consilium fuit excedendi ea regione, et velut ex praedicto ambo Scotusam petierunt, Philippus spe frumentandi inde, Romanus ut progressus corrumperet hosti frumenta* (both commanders therefore reached the same decision, to retire from this country, and as if by agreement both marched in the direction of Scotusa, Philip hoping to find food there, the Roman by his advance to destroy the enemy's grain-supply).

³² VARRO, *Rust.* 1,32.1: *inter solstitium et caniculam plerique messem faciunt, quod frumentum dicunt quindecim diebus esse in vaginis, quindecim florere, quindecim exarescere, cum sit maturum* (between the solstice and the Dog Star, most farmers harvest, because it is a saying that the grain is in the sheath for fifteen days, blooms for fifteen days, dries for fifteen days, and is then ripe).

COLUMELLA, 2,30.1: *sed cum matura fuerit seges, ante quam torreatur vaporibus aestivi sideris, qui sunt vastissimi per exortum Caniculae, celeriter demetatur* (but when the grain is ripe it should be quickly harvested before it can be parched by the heat of the summer sun, which is most severe at the rising of the Dog Star).

³³ LIVY, 33,24.3.

³⁴ LIVY, 33,25.1.

³⁵ BRIND'AMOUR (1983), p. 142.

Having shown that the calendar was in advance by about four months in this period, and claiming that there had to have been an intercalation somewhere between C203 and C191, Brind'Amour goes on to explain why, like Briscoe,³⁶ he selects consular 193. Though agreeing with Briscoe as to the year of the intercalation, he disagrees with two of Briscoe's three arguments:³⁷ those revolving around the eclipse of 202 BCE, and the *ver sacrum* of 194. The third argument, however, he finds convincing. Livy recounts how, at Rome in C193, it was determined that *socii* who had lent money to Roman citizens after the Feralia should publicly declare the debts concerned.³⁸ Brind'Amour follows Briscoe in endorsing the view of Michels³⁹ to the effect that "l'indication d'une date en fin de février par référence à une fête religieuse plutôt que par rapport aux Calendes de mars suivantes indique souvent la présence d'une intercalation quelques jours après."⁴⁰

³⁶ BRISCOE (1981), p. 21.

³⁷ *ibid.*, pp. 21-24.

³⁸ LIVY, 35,7.3: *cuius coercendi cum ratio quaereretur, diem finiri placuit Feralia quae proxime fuissent, ut, qui post eam diem socii civibus Romanis credidissent pecunias profiterentur, et ex ea die pecuniae creditae, quibus debitor vellet legibus, ius creditori diceretur* (when a method of curbing this practice was sought, it was determined that a day should be fixed, namely the next occurrence of the festival of the *Feralia*, that whatever allies should have, after that date, loaned money to Roman citizens, should make a public statement to that effect, and that proceedings regarding money so loaned after that date should be governed by the laws of whichever state the debtor should elect). The Feralia was held on the 21st February.

³⁹ See above, p. 70, n. 47.

⁴⁰ BRIND'AMOUR (1983), p. 143.

3. Intercalation, the Battle of Zama, and the state of the calendar from C203-191

There had been no regular intercalation in the period immediately before 190 BCE. Two significant facts point to this: first, there was a dislocation of approximately four months between the Roman civil calendar and the tropical year; and second, the *lex Acilia* was passed. The exact details of this *lex* are entirely unknown, but at the very least it may be assumed that its promulgation was mandated by this calendrical dislocation, and that the law was concerned at least with the arrest of it and probably, to some extent, to its repair.

In the absence of other obvious usable fixed dates, the eclipses of 203 and 202 BCE have been used by various people to support various arguments. One of these is Patrick Marchetti.

Marchetti trustingly accepts Cassius Dio's/Zonaras'⁴¹ claim that the eclipse of 19th October, 202 BCE was visible to the Carthaginian general just before his ultimate battle. By following the movements of the Roman general, Scipio, he comes to the conclusion that the defeat of Vermina occurred approximately ten days after the eclipse and the battle of Zama,⁴² a defeat dated by Livy to 17 December, C202, and by Marchetti to 1st November, proleptic julian.⁴³ In the table⁴⁴ reproduced below, he lists equivalents for the Ides of March C203-C190 based on zero, one, two, and three intercalations during this period, viz:

⁴¹ ZONARAS, 9,14.

⁴² MARCHETTI (1973), p. 484.

⁴³ *ibid.*, p. 486.

⁴⁴ *ibid.*, p. 477.

Id. Mars des années varr.	I Aucune intercal.	II Une intercal.: 563	III Deux intercal.: 561 et 563	IV Trois intercal.: 553, 557 et 561
551 =	31 mars 203	8 mars 203	14 févr. 203	22 janv. 203
552 =	21 mars 202	26 févr. 202	4 févr. 202	12 janv. 202
553 =	11 mars 201	16 févr. 201	25 janv. 201	2 janv. 201*
554 =	29 févr. 200	6 févr. 200	15 janv. 200	15 janv. 200
555 =	18 févr. 199	26 janv. 199	4 janv. 199	4 janv. 199
556 =	8 févr. 198	16 janv. 198	25 déc. 199	25 déc. 199
557 =	29 janv. 197	6 janv. 197	15 déc. 198	15 déc. 198**
558 =	19 janv. 196	27 déc. 197	5 déc. 197	27 déc. 197
559 =	8 janv. 195	16 déc. 196	24 nov. 196	16 déc. 196
560 =	29 déc. 195	6 déc. 195	14 nov. 195	6 déc. 195
561 =	19 déc. 194	26 nov. 194	4 nov. 194**	26 nov. 194*
562 =	9 déc. 193	16 nov. 193	16 nov. 193	9 déc. 193
563 =	28 nov. 192	5 nov. 192	5 nov. 192*	28 nov. 192
564 =	18 nov. 191	18 nov. 191	18 nov. 191	18 nov. 191

note: *: intercalation de 23 jours (années de 378 jours)

** : intercalation de 22 jours (années de 377 jours)

On the basis of the lengths of months of the republican calendar, the defeat of Vermina occurred 84 days before the Ides of March, C201, and so Marchetti counts back that number to present us with another table⁴⁵ wherein he has calculated the equivalent dates of the defeat from each hypothesized Ides of March, C201 as listed above:

I	II	III	IV
16 décembre	23 novembre	1 novembre	9 octobre

From these calculations, he concludes that the result in the third column, the one with two intercalations, fits his hypothesis. "Dans le troisième cas, le délai entre la date de l'éclipse signalée par Zonaras (19 octobre) et la défaite de Vermina (1 novembre) est identique à l'intervalle qui a dû séparer la bataille et l'écrasement des renforts de Vermina. Est-ce une simple coïncidence ou la preuve de ce que la troisième hypothèse correspond à la

⁴⁵ *ibid.*, p. 485.

réalité?"⁴⁶ It is in fact much more likely to be a matter of coincidence, as Marchetti's time frames are very tight, and such reconstructions are highly vulnerable to almost inevitable temptation to compress or expand time factors to suit a favoured theory. In addition, there are significant points overlooked by Marchetti in his exposition.

Contrary to Marchetti's belief, the eclipse mentioned by Zonaras in connexion with Zama could not possibly be the same as the one included by Livy⁴⁷ in the prodigy list of the year in which the battle was fought, since the prodigies concerned, processed immediately after the consuls took office, must have been reported in the consular year that preceded it. Consequently, the diminution of the sun witnessed in Cumae must have been the result of the eclipse of 6th May, 203 BCE, rather than that of 19th October, 202 BCE. Not only did the earlier eclipse, as observed at Cumae, have a magnitude of approximately 38% as opposed to the approximately 5% of the later eclipse but it was of longer overall duration, a factor further contributing to visibility. Consequently, Marchetti's precise dating of the defeat of Vermina to 1st November, 202 proleptic julian, (c. ten days after the eclipse and the defeat of Hannibal at Zama) cannot be given credence.

The eclipse that allegedly occurred before the battle of Zama is recorded only in the twelfth century epitome by Zonaras of Cassius Dio, himself a rather late (2/3 century) writer and otherwise completely unsubstantiated. Likelihood is that Brind'Amour is correct in discounting it and that for dramatic purposes, believing that an eclipse seen by a doomed general just before his final and disastrous battle was suitably apocalyptic, Dio or his source synchronised the two events. Working from recognition that the eclipse

⁴⁶ *ibid.* p. 486.

⁴⁷ Livy, 30,38.8.

mentioned by Livy in the list of 202 is not the same as that noted by Dio/Zonaras just before the battle of Zama, and that the magnitude of the eclipse of 202 was in fact of such a degree as to guarantee inobservability, it emerges that there is nothing formally to preclude the conclusion that there was but a single intercalation between C203 and C191, and Marchetti's argument⁴⁸ finally collapses.

Most chronologists agree that, regardless of how many intercalations there may have been during this period and in which years they were situated, the year in which the *lex Acilia* was promulgated was intercalary.⁴⁹ To repeat, although the details of this law are unknown, general opinion has it that, at a time when there was a significant dislocation between the Roman civil and the tropical years, any law concerned with intercalation would have been likely to have been put into effect the very year of its promulgation. If the situation were desperate enough to necessitate such measures being taken, then the situation was desperate enough for those measures to have been immediately implemented. C191, then, was certainly an intercalary year. What other years, if any, in our period were intercalary?

It has already been observed that Brind'Amour finds in C193 a prime candidate for intercalation, based solely upon the fact that a festival in late February was used as a terminal date⁵⁰ - the Feralia on 21 February. Michels proposes that such dating could be the result of lack of knowledge concerning either the chance of there being an intercalation that year, or the number of days to be intercalated, confronting a Roman

⁴⁸ See above, p. 112f.

⁴⁹ See above, p. 94, n. 51.

⁵⁰ BRIND'AMOUR (1983), p. 143.

who, nonetheless, needed to describe a date in some way.⁵¹ Whatever one's view of Michels' criterion, there is another consideration that can be adduced in favour of intercalation at the end of consular 193. According to Livy, towards the end of the year, the electoral canvassing was pursued with more vigour than usual, with many men, patrician and plebeian, vying for selection.⁵² Such frenzied activity might very well have led to a delay in the election process, necessitating an intercalation to provide more time between its commencement and the Ides of March.

To sum up, it is my conclusion that in the period C203-191 that there were only two intercalary years - C193 and C191. The discrepancy between the Roman calendrical year and the tropical year that emerges from the circumstances of the eclipse of 190 BCE was too great for there to have been anything approaching systematic intercalation prior to that event. Intercalation was devised to maintain a correct relation between the natural seasonal and artificial civil years. Any failure to apply this device in the proper manner would cause a progressive break-down in the relationship and a widening gap between the calendrical and tropical years. Remarkably, by 190, calendrical chaos had been allowed to become endemic. Only in C171, if the proposal of the previous section is correct, were serious steps finally taken to remedy the situation. Since the Ides of March of consular 203 fell on 14th Feb, 203 julian, regular intercalation must have already ceased prior to that year. When and how the seeds of calendrical confusion may have been sown will emerge in the following section.

⁵¹ MICHELS (1967), p. 171.

⁵² LIVY, 35,10.1: *ambitio magis quam umquam alias exarsent consularibus comitiis* (the canvassing at the consular election was more spirited than ever before).

C. A Reconstruction of C218 - C204

The remaining period, C218-C204, embracing most of the second Punic war, is particularly intractable given the lack of guaranteed *termini* both at beginning and end. It is small wonder that few modern researchers have cared to examine the period in as much depth as, for example, the clearly defined counterpart of C190-C167. The starting point of any investigation, obviously, must be the Zama related initial *terminus* established for the period C203-C190 in the previous section. With no clearcut astronomical synchronisms available for use, further backward reconstruction must be based largely on seasonal references provided by Livy and Polybius, both of whom, some have suspected,¹ have allowed dramatic considerations to override at times strict chronological accuracy. Apparent timetables of military manoeuvres must be scrutinized with particular care, bearing in mind that a degree of unavoidable subjectivity with regard to allotment of time for various operations may inject a margin of error into the best meant calculation.

¹ *inter al.* WALBANK (1957), p. 36: "Polybius wrote... without any consistent and rigid chronological scheme. Normally he closed his olympiad years with the end of the year's campaigning and the retirement of the troops to winter quarters... However, this system was capable of modification. The third book, for instance, ends virtually with the battle of Cannae, for obvious reasons; and such incidents as are appended in iii.118 are selected to confirm the impression of overwhelming disaster, despite the fact that the revolt of Tarentum did not take place until 213... Similarly in book xv, which contained the events of Ol. 114, 2 = 203/2, Polybius included the peace negotiations after Zama, because, though they belonged to the end of 202 or even early 201, they rounded off his account of the battle and the war. In this way Polybius was ready to modify his olympiad system for dramatic or other reasons."

CLAUSS (1987), p. 67: "Although his account of the outbreak of the Second Punic War is seriously flawed, especially in terms of chronology both in general and even within the passage under construction [21.16], nevertheless in having the senate believe that Hannibal was coming to Italy and would soon fight before the walls of Rome, Livy himself makes no error nor slavishly adapts some vitiated source. The despair experienced by the senate is meant to be ironic and prophetic; moreover, it reflects the historian's peripatetic tastes and moral agenda."

In a nutshell, calibration of proleptic julian and Roman republican calendars for 218-204 bristles with difficulties. Nevertheless, the information available is not necessarily so unsatisfactory as to dictate complete agnosticism, let alone despair.

1. The Derow System (3)

The second part of Derow's 1976 article² covers the period currently under discussion: 218-204 BCE. Earlier in the article, he sought to establish that consular 203 (Derow's 202) was the final year of anything approaching regular intercalation. Following Macrobius' insistence that normally intercalation was biennial, Derow postulates such intercalations from the end of consular 219 to consular 205. Unfortunately, in his treatment of these years, Derow does not deem it necessary to provide a detailed justification of his choice of intercalary years nor a systemic integration of seasonal indications with diagnosed intercalary blocks. If a reader is solely in pursuit of a rough and ready dating for a few Hannibalic battles, then Derow's equations may offer a functional nostrum, but if the requirement is something approaching a clear, convincing, coherent and accurate reconstruction of the middle Republican calendar, they are of little use.

It is to be noted that Derow's table of equivalent julian dates for this period again contains palpable errors,³ some of which can be attributed, no doubt, to typographical

² DEROW (1976), pp. 274-81.

³ Though there are fewer errors in this table than in the table devised for the period 190-167, one of those that Derow failed to eliminate is quite dramatic. As before, the first date shown is the one provided in Derow's table, the second is the correct equivalence calculated internally from

carelessness; fortunately, these appear to have little effect on overall results. Once again, in addition, Derow wrongly identifies proleptic julian leap years. Instead of 219, 215, 211, 207, and 203, these should be 217, 213, 209, and 205.

In nuce, using the few supplied Roman civil dates and the seasonal references carefully gleaned from the texts of Livy and Polybius, Derow comes to the conclusion that at the beginning of the Second Punic War, the Roman calendar was in advance of the tropical year by approximately one month.⁴

Derow embarks on justification of his julian equivalents for the Roman civil dates concerned with an examination of the various seasonal references made in connexion with the Roman disaster of 217 BCE - the battle of Trasimene, for which Ovid provides a civil calendar date amounting to 21 Junius.⁵ Derow equates this with the 9th of May, 217 BCE.⁶

The first indication that this battle was fought in early May Derow finds in Hannibal's premature departure from his winter quarters in Cisalpine Gaul, approximately one month after which the battle allegedly took place.⁷ Difficulty with Derow's diagnosis to such effect will be discussed in a later section. While such is the sole forward-moving pointer that Derow uses, he claims that the same conclusion can be drawn by working

surrounding dates.

219 - 2 xi 219 = 9 xi 219
31 xii 219 = 8 xii 219
215 - 19 vii 215 = 18 vii 215
12 xi 215 = 13 xi 215
209 - 25 v 209 = 26 v 209

⁴ DEROW (1976), p. 274.

⁵ OVID, *Fast.* 6,763-768.

⁶ DEROW (1976), p. 275.

⁷ *ibid.*

backwards from reported circumstances of Hannibal's arrival at Gerunium.⁸ According to Polybius,⁹ the weather at the time was very conducive to agricultural activities involving produce. Assuming a reference to the high summer grain harvest, Derow sets Hannibal's appearance at Gerunium in late July or early August.¹⁰

After enumerating and assessing the time-frame of events between the battle at lake Trasimene, and Hannibal's arrival at Gerunium, Derow estimates that 84 days had passed.¹¹ Shortly after the battle, Hannibal moved to the Adriatic coast, marching for 10 days. Once there, he allowed time for his army to recuperate, and Derow considers that a minimum of three weeks would have been required.¹² Hannibal then proceeded to plunder other territories, crossed the Apennines, and moved through Samnium and Campania, to Gerunium, a journey which Derow estimates as consuming a further 40 days or more.¹³ This furnishes him with his 84 days and he observes that "the first of August is 84 days after 9 May and corresponds quite well to Polybius' notice in 3.100.8."¹⁴

Derow then goes on to consider the dictatorship of Quintus Fabius Maximus which began shortly after the Roman defeat at Trasimene, on, according to Derow's calculations,

⁸ *ibid.*

⁹ POLYBIUS, 3,100.8: οὐσης δὲ τῆς μὲν χώρας τῆς πλείστης εὐεφόδου καὶ πεδιάδος, τῶν δὲ συναγόντων ὥς ἔπος εἰπεῖν ἀναριθμήτων, ἔτι δὲ τῆς ὥρας ἀκμαζούσης πρὸς τὴν συγκομιδὴν, ἅπλετον συνέβαινε καθ' ἑκάστην ἡμέραν ἀθροίζεσθαι τοῦ σίτου τὸ πλῆθος (as most of the country was flat and easy to overrun, and the foragers were, so to speak, infinite in number, and the weather was very favourable for fetching in the grain, an enormous quantity was collected every day).

¹⁰ DEROW (1976), p. 275.

¹¹ *ibid.*

¹² *ibid.* p. 276.

¹³ *ibid.*

¹⁴ *ibid.*

the Kalends of Quinctilis, equivalent to the 18th May, 217 BCE.¹⁵ When his six-month tenure of authority was coming to an end, the dictator turned his armies over to the consuls¹⁶ who then carried on the war according to his directions until the end of autumn.¹⁷ If Fabius had assumed the dictatorship in mid-May, then his six-month *imperium* would expire in mid-November. Had he relinquished his armies to the consuls in the last month of his office, there would still have been some autumn left. Derow proposes that had the battle at Trasimene been much later than 9th May, autumn would have already been over.¹⁸

The only counterindication¹⁹ to his dating of Trasimene that Derow perceives is a statement in Polybius, the source he has followed so unswervingly up until this point. According to Polybius, 5,101.6,²⁰ Philip learnt of the battle after watching the Nemean

¹⁵ *ibid.*

¹⁶ LIVY, 22,31.7: *ipse per Siciliam pedibus profectus freto in Italiam itaiecit, litteris Q. Fabi accitus et ipse et collega eius M. Atilius, ut exercitus ab se exacto iam prope semestri imperio acciperent* ([the consul] himself proceeded overland through Sicily to the straits, where he crossed in Italy. He and his colleague Marcus Atilius had been sent for by way of letters from Quintus Fabius so that they could take over the armies of the dictator whose six month *imperium* was coming to an end).

¹⁷ LIVY, 22,32.1: *consules Atilius Fabiano, Geminus Servilius Minuciano exercitu accepto, hibernaculis mature communitis, quod reliquum autumnus erat Fabi artibus cum summa inter se concordia bellum gesserunt* (the consuls - Atilius taking over the army of Fabius and Geminus Servilius that of Minucius - constructed a winter camp betimes, and carried on the war for the rest of the autumn with the greatest harmony, on the lines laid down by Fabius).

¹⁸ DEROW (1976), p. 276.

¹⁹ This objection Derow appears not to have taken very seriously, broaching the subject in a footnote - a lengthy footnote, it is true, but a footnote, nonetheless.

²⁰ ἄρτι δ' αὐτοῦ θεωμένου τὸν ἀγῶνα τὸν γυμνικόν, παρῆν ἐκ Μακεδονίας γραμματοφόρος διασαφῶν ὅτι λείπονται Ῥωμαῖοι μάχῃ μεγάλη καὶ κρατεῖ τῶν ὑπαίθρων Ἀννίβας (a little after he had taken his place to witness the games a courier arrived from Macedonia bringing the intelligence that the Romans had been defeated in a great battle, and that Hannibal was master of the open country).

games, held on the 12th of the Argive month of Panamos. Though attempts²¹ have been made to equate this month with the Attic Hekatombaion, Derow asserts that this identification is incorrect and that the Attic month of Skirophorion is the more likely equivalent. As this Attic month began on the last new moon before the summer solstice, an equation with Panamos would have the Nemean games fall on 19th June, proleptic julian. Derow expresses a note of uncertainty about "the reliability of Polybius' whole account" and questions the "chronological usefulness" of the passage.²² It is remarkable that, while impugning the "chronological usefulness" of one passage which unfavourably impinges on his calculations, Derow has no such doubts in respect of others in Polybius that suit his reconstruction.

Moving from Trasimene to Cannae, Derow recalls the Roman civil date of the battle, preserved by Macrobius,²³ which was 2 Sextilis. This Derow equates with 1 July, 216 BCE.²⁴ The determining factor for this equation is, it appears, a statement in Polybius to the effect that Hannibal was induced to leave Gerunium because the season was advanced enough for there to be crops available to feed his army.²⁵ Derow embraces this representation without question and goes on to claim that it testifies that Hannibal set out from Gerunium at the end of May, the time of year when an army was able to provision

²¹ e.g. UNGER (1884), pp. 545-64; DE SANCTIS (1968).

²² DEROW (1976), p. 277, n. 36.

²³ MACROBIUS, *Sat.* 1,16.26: *cladem illam vastissimam pugnae Cannensis factam refert ante diem quartum nonas Sextiles* (the overwhelming disaster of the battle of Cannae occurred on the fourth day before the Nones of Sextilis).

²⁴ DEROW (1976), p. 277.

²⁵ POLYBIUS, 3,107.1: ἤδη δὲ παραδιδόντος τοῦ καιροῦ τὴν ἐκ τῶν ἐπετείων καρπῶν χορηγίαν, ἐκίνει τὴν δύναμιν ἐκ τοῦ περὶ τὸ Γερούνιον χάρακος Ἀννίβας (it was not until the season was advanced enough for them to get supplies from the year's crops that Hannibal moved his forces out of the camp near Gerunium).

itself from the field.²⁶ Alarmed by Hannibal's capture of the Roman supply depot at Cannae, the commanders in the field apprised Rome of the situation and were informed that the consuls were being despatched to Cannae to assist them. Derow insists that it was within two weeks of this despatch that the battle was fought. "Events, in a word, moved along quickly once Hannibal left Gerunium: from then until the battle itself there elapsed perhaps a month or slightly more";²⁷ hence Derow's setting the battle at the beginning of July, 216 BCE.

To Derow's mind, further corroboration that such calibration is on the right lines is provided by Fabius' proclamation the following year that the grain be brought from the fields into the city before the Kalends of Junius.²⁸ Derow regards this as referring not, as Livy's words appear to suggest, to an early grain harvest in 215 but rather to grain long stock-piled in storage in vulnerable rural areas.²⁹ The measure was taken, according to Derow, to deprive Hannibal of supplies. He maintains that this decree was passed at the beginning of the campaigning season, and his table equates kal. Jun. with 20 April, "which is about as late as one can go."³⁰

The only other Roman civil date known for the period is that of the battle at the Metaurus. According to Ovid, this encounter between Hasdrubal and the two Roman

²⁶ DEROW (1976), p. 278.

²⁷ *ibid.*

²⁸ LIVY, 23,32.14-15: *Q. Fabius, consulto prius senatu, ut frumenta omnes ex agris ante kal. Iunia primas in urbes munitas conveherent* (Quintus Fabius, after first consulting the Senate, gave orders that all should bring their grain crops from the farms into fortified cities before the next Kalends of June).

²⁹ DEROW (1976), p. 278.

³⁰ *ibid.*, p. 279.

consuls fell on 22 Junius,³¹ the day after the date of the Roman defeat at Trasimene. By Derow's table of equivalents, this works out to the 19th of May, 207 proleptic julian.

Derow maintains that in 207 BCE, Hasdrubal made his Alpine crossing early in the year.³² From various classical sources it is known that this was earlier and accomplished with greater ease than expected by both the Romans and Hannibal.³³ Derow calibrates the beginning of the consular year concerned, the Ides of March, with 13th Feb., proleptic julian. Shortly after crossing the Alps, Hasdrubal began the siege of Placentia, and, knowing this, his brother lingered in his winter camp, well aware how much time sieges could consume. Finally abandoning the fruitless investment of Placentia, Hasdrubal sent some horsemen with a letter to his brother, who at that time, shadowed by Roman forces, began a withdrawal to Metapontum. The distance to be covered by the horsemen was great, they were apprehended by Roman soldiery,³⁴ and the letter was brought to the

³¹ OVID, *Fast.* 6,769-770:

*Postera lux melior: superat Masinissa Syphacem,
et cecidit telis Hasdrubal ipse suis*

(the next day [IX Kal. Jun.] is luckier: on it Masinissa defeated Syphax, and Hasdrubal fell by his own sword).

³² DEROW (1976), p. 280.

³³ POLYBIUS, 11,1.1: 'Αλλὰ πολὺ ῥαδιεστέραν καὶ συντομωτέραν συνέβη γενέσθαι τὴν Ἀσδρούβου παρουσίαν εἰς Ἰταλίαν (Hasdrubal's arrival in Italy was much easier and more rapid than Hannibal's had been).

LIVY, 27,39.4: *etsi ea aestate transiturum in Italiam fratrem crediderat* (he had believed, indeed, that his brother would come over into Italy that summer).

APPIAN, *Hann.*, 52: 'Εν τούτῳ δὲ καὶ Ἀσδρούβας ὁ ἀδελφός Ἀννίβου, τὴν στρατιὰν ἣν ἐξενάγησεν ἐν τοῖς Κελτίβηρσιν ἔχων, διέβαιναν ἐς τὴν Ἰταλίαν, καὶ Κελτῶν φιλίως αὐτὸν δεχομένων τὰ Ἀλπεῖα ὄρη, ὠδοποιημένα πρότερον ὑπὸ Ἀννίβου, διώδευε δύο μηνί, ὅσα τέως Ἀννίβας ἐξ διήλθεν (in the meantime his brother Hasdrubal, with the army he had enlisted in Celtiberia, marched to Italy. Being received in a friendly way by the Gauls he passed over the Alps by the road that Hannibal had opened, accomplishing in two months the journey which had previously taken Hannibal six).

³⁴ LIVY, 27,43.1-2: *cum per medios hostes totam ferme longitudinem Italiae emensi essent ... a vagis per agros pabulatoribus Romanis ad Q. Claudium propraeotem deducuntur* (when they had already traversed nearly the whole length of Italy through the midst of the enemy... they were brought by Roman foragers who roamed about the country to the midst of Quintus Claudius, the

consul, C. Claudius Nero, at Canusium. On receipt of the intelligence contained therein, Claudius devised the audacious plan of dividing his army, some of whom would remain to fool Hannibal into believing that the entire force still remained, while he led the rest to join the other consul, M. Livius Salinator.³⁵

Derow proposes that Hasdrubal's messengers were captured at the end of April and that Claudius, consequently, will have embarked on his extraordinary march on or very close to the first of May.³⁶ "This last is what matters for dating the battle," asserts Derow, and, attributing without qualms to Claudius Nero and his soldiers a march of some 402km (the distance from Canusium to Sena Gallica) in what has to have been substantially less than 20 days,³⁷ he proceeds to claim with confidence that the battle of Metaurus

propraetor).

³⁵ LIVY, 27,43.11-12: *ipse de toto exercitu civium sociorumque quod roboris erat delegit, sex milia peditum, mille equites; pronuntiat occupare se in Lucanis proximam urbem Punicumque in ea praesidium velle; ut ad iter parati omnes essent. profectus nocte flexit in Picenum. et consul quidem quantis maximis itineribus poterat ad conlegam ducebat, relicto Q. Catio legato qui castris praeesset* (as for himself, out of the whole army he chose the best soldiers, citizens and allies, six thousand infantry, a thousand cavalry. He announced that he intended to seize the nearest city in Lucania and its Carthaginian garrison; that they must all be ready for the march. Setting out at night, he changed his direction to that of Picenum. The consul in reality was leading his army to his colleague by the longest of forced marches, having left Quintus Catus, his lieutenant, to command the camp).

³⁶ DEROW (1976), p. 280-1.

³⁷ The speed of travel of Roman armies is a contentious matter. NICHOLS (1978), p. 41, thinks it inconceivable that legionaries could consistently have marched more than 25km per day for any length of time and suggests that the 20km per day of armies of the 19th and early 20th centuries is a more probable paradigm. Despite Livy's emphasis [27,45.11] of extraordinary circumstances - *nihil morari, nec abire ab signis nec subsistere nisi cibum capientes; diem ac noctem ire; vix quod satis ad naturale desiderium corporum esset, quieti dare* (there was no loitering, no halt except while taking food; they marched day and night; they gave to rest hardly enough time for the needs of their bodies) - it is not easy to believe that over more than two weeks they covered at least 25km a day.

would have taken place in the third week of May, supporting his proposed equation of the Ovidian date of 22 Junius with 19th May, proleptic julian.³⁸

Derow highlights one other chronological indication in the sources which, he admits, "may not go very far."³⁹ The year concerned is 206. Livy notes that the consuls, L. Veterius Philo and Q. Caecilius Metellus, left Rome *principio veris*.⁴⁰ Derow observes that it was not possible for the consuls to have entered office, celebrated the Latin games, and then departed from Rome by *principio veris*.⁴¹ He goes on to contemplate the possibility that *principio veris* might be a conventional phrase, meaning early in the consular year, but admits that "there is, to be sure, no particular reason to believe this is the case."⁴² In Livy's account there is no mention of the Latin games and conceivably, with the State in such a condition, it was considered more expedient to get the consuls out where they were required than to hold games, or perhaps, and perhaps preferably, the games were dealt with very speedily, as the essential part of the ceremony occupied only one day.⁴³

³⁸ DEROW (1976), p. 281.

³⁹ *ibid.*, p. 279.

⁴⁰ LIVY, 28,11.11: *principio deinde veris et ipsi ad bellum profecti sunt* (then at the beginning of spring they also set out for the field).

⁴¹ DEROW (1976), p. 279.

⁴² DEROW (1976), p. 279, n. 45.

⁴³ SCULLARD (1981), p. 114.

2. The Brind'Amour System (2)

Brind'Amour's penultimate section of his work on the Republican calendar deals with the years of the Second Punic War.⁴⁴ For the first year of the war, 219 BCE, he notes that Polybius provides a seasonal reference, claiming that the departure of the consul L. Aemilius for Illyria was just before the beginning of summer.⁴⁵ Due, however, to the paucity of detail and lack of corroboration from any other ancient source, he hesitates to base any far-reaching hypothesis upon it.⁴⁶ He then proceeds to an examination of seasonal allusions in the accounts of Livy and Polybius in relation to the events of 218 BCE, a year of which Derow fails to take account.

At the beginning of spring, 218 BCE, Hannibal left New Carthage to advance on Italy, reaching it after five months.⁴⁷ Brind'Amour calculated that his arrival took place at the end of November (the Alpine crossing having occupied fifteen days from the setting of the Pleiades)⁴⁸ and that it must therefore have begun towards the end of June, julian.⁴⁹ In support of this conclusion, he adduces the fact that at the time of the revolt

⁴⁴ It must be noted and constantly borne in mind that Brind'Amour does not use consular years but rather the calendrical year from January to December, and so references to intercalations relate to the previous year.

⁴⁵ POLYBIUS, 3,16.7: οὐ μὴν ἀλλὰ τούτοις χρησάμενοι τοῖς διαλογισμοῖς 'Ρωμαῖοι μὲν ὑπὸ τὴν ὥραίαν Λεύκιον τὸν Αἰμίλιον ἐξαπέστειλαν μετὰ δυνάμεως ἐπὶ τὰς κατὰ τῆς Ἰλλυρίδα πράξεις κατὰ τὸ πρῶτον ἔτος τῆς ἐκατοστῆς καὶ τετταρακοστῆς ὀλυμπιάδος (however, the Romans now moved by these considerations dispatched a force under Lucius Aemilius just before summer in the first year of the 140th Olympiad to operate in Illyria).

⁴⁶ BRIND'AMOUR (1983), p. 157.

⁴⁷ LIVY, 21,15.3: *quinto deinde mense quam ab Carthagine profectus sit in Italiam pervenisse* (after leaving New Carthage, he arrived in the fifth month in Italy).

⁴⁸ LIVY, 21,35.6; 21,38.1.

⁴⁹ BRIND'AMOUR (1983), p. 157.

of the Cisalpine Gauls, the Romans were aware of no more of Hannibal's movements than his crossing of the Ebro. The cause of the revolt was Rome's planting of colonies at Placentia and Cremona in Gallic territory.⁵⁰ For the foundation of Placentia, Asconius provides the date of the Kalends of June.⁵¹ Brind'Amour estimates that the Gallic revolt occurred some time after the Kalends of June, civil, approximately at the time when the news of Hannibal's crossing had become known at Rome, dated by him to the end of June, julian, and so "le calendrier est donc, *grosso modo*, en accord avec les saisons, bien qu'on puisse imaginer, dans un sens ou dans l'autre, un léger écart."⁵²

Brind'Amour then examines Hannibal's subsequent movements, and those of the Roman consuls in connexion with the Roman defeats at the Ticinus and the Trebia, the latter of which was incurred at the time of the winter solstice,⁵³ after which the defeated consul Sempronius went to Rome to hold the elections, and then returned to his troops in Placentia to establish winter quarters. On the basis of the request to Sempronius from the consul designate, Flaminius, that Sempronius' troops arrive at Ariminum by the Ides of March when and where Flaminius would assume office, Brind'Amour states that "les Ides

⁵⁰ LIVY, 21,25.1-2: *in Italiam nihil ultra quam Hiberum transisse Hannibalem a Massiliensium legatis Romam perlatum erat, cum perinde ac si Alpes iam transisset, Boi sollicitatis Insubribus defecerunt nec tam ob veteres in populum Romanum iras quam quod nuper circa Padum Placentiam Cremonamque colonias in agrum Gallicum deductas aegre patiebantur* (in Italy, meanwhile nothing more was known than that Hannibal had crossed the Ebro - which was the news that Massiliot envoys brought to Rome - when, as though he had already crossed the Alps, the Boi, after rousing up the Insubres, revolted. To this they were incited not so much by their old animosity against the Roman People as by vexation at the recent establishment of colonies in Gallic territory, near the Po, at Placentia and Cremona).

⁵¹ ASCONIUS, in *Pisonianam*, 2.

⁵² BRIND'AMOUR (1983), p. 157.

⁵³ POLYBIUS, 3,72.3: οὐσης δὲ τῆς ὥρας περὶ χειμερινῆς τροπᾶς (the time of year was about the winter solstice).

LIVY, 21,54.7: *erat forte brumae tempus* (it chanced to be the time of year around the winter solstice).

de mars 217 correspondent à un moment où les troupes occupent encore les quartiers d'hiver, ou s'apprêtent les quitter."⁵⁴ The calendar was therefore pretty much in accord with the tropical year, possibly even slightly in advance, though "un retard, en tout cas, paraît impossible."⁵⁵ Therefore, to Brind'Amour's mind, there would have been no intercalation at the end of consular 218.

The end of consular 217 is a different case. From the beginning of spring when Hannibal left his winter camp⁵⁶ to the Roman defeat at lake Trasimene, Brind'Amour proposes to allow "au plus, un ou deux mois."⁵⁷ We already know from Ovid⁵⁸ on what civil date this disaster fell, and so, as the previous year was allegedly in relative accord with the seasons, the case must be the same for the present one, though an advance is still possible, "mais un retard est, cette fois encore, impossible."⁵⁹

The solar eclipse of 11 February, 217 BCE julian is another occurrence, according to Brind'Amour, which prevents the possibility of the calendar having been behind the seasons. This eclipse, partial for Rome and Italy, features in a list of prodigies processed according to Livy shortly after the consuls' entry into office that year.⁶⁰ Brind'Amour

⁵⁴ BRIND'AMOUR (1983), p. 158.

⁵⁵ *ibid.*

⁵⁶ LIVY, 22,1.1: *iam ver adpetebat; itaque Hannibal ex hibernis movit* (spring was now drawing on; and accordingly Hannibal moved out of his winter encampment).

⁵⁷ BRIND'AMOUR (1983), p. 158.

⁵⁸ OVID, *Fasti* 6,768.

⁵⁹ BRIND'AMOUR (1983), p. 158.

⁶⁰ LIVY, 22,1.9: *solis orbem minui visum ... et Arpis ... pugnantem cum luna solem* (the sun's disc had seemed to be contracted... and at Arpi... the sun had seemed to be fighting with the moon).

rejects Derow's tacit supposition that the eclipse occurred *after* the consuls entered office⁶¹ on the grounds that "il contredit ... le donné historique."⁶² This "historical fact" is the announcement to the newly incumbent consuls of the prodigies "qui avaient marqué les derniers mois de l'année précédente."⁶³ Brind'Amour is prepared to countenance that the calendar could be slightly in advance of the seasonal year.

Like Derow,⁶⁴ Brind'Amour discusses the Polybian report that Philip allegedly received news of the battle at Trasimene during the Neinean games, the principal day of which, he notes, has been identified as either the 12th or the 18th of the Argive month of Panamos. He does not deem it necessary to establish irrefutably the relative order and correspondence of Peloponnesian Spartan and Athenian months, but rather to appreciate that Philip received the news on the 12th or 18th day of a (supposedly) lunar month, and that "l'événement historique se produisit quelques jours avant un 12^e ou un 18^e jour de la lune."⁶⁵ The 12th day of Panamos, he concludes, would correspond to the 20th or 21st of June, and the 18th of Panamos to the 26th or 27th of June, julian. Brind'Amour follows a scholiast to Pindar who places the Nemean games on the 18th of Panamos, and so he decides that, as the calendar was neither in retard nor indeed very far in advance of the seasonal year, the proleptic julian date of Trasimene was 22nd June: "c'est un 14^e jour de la lune, quatre jours par conséquent avant les Jeux néméens du 18 panamos."⁶⁶

⁶¹ DEROW (1976), p. 272-3. This event is not specifically addressed in Derow's text as mentioned earlier, but the date can be ascertained from his table of equivalents on these pages.

⁶² BRIND'AMOUR (1983), p. 160.

⁶³ *ibid.*

⁶⁴ DEROW (1976), p. 277, n. 36.

⁶⁵ BRIND'AMOUR (1983), p. 161.

⁶⁶ *ibid.* For the Pindar scholia concerned, see *Hyp. Nem. d* and *e*.

Going on to consider the dictatorship of Q. Fabius Maximus, Brind'Amour observes that for there to have been some autumn left when he handed over his armies to the consuls,⁶⁷ the battle of Trasimene would have had to have been fought "très, très tôt" in spring, a circumstance which an analysis of the preceding events refutes.⁶⁸ If, he says, Livy set the beginning of winter on the traditional date of 1st November, and six months were counted back, then Fabius would have entered his consulship around 1st May. If another couple of days were subtracted because Fabius did not become dictator immediately after the defeat, then it would mean that the battle at Trasimene occurred around mid-April, julian, at the earliest.⁶⁹ This would indicate a calendrical advance of more than two months, contrary to Brind'Amour's steadfast insistence that the maximum possible advance in this year was a fortnight. Accordingly, Brind'Amour has to insist that "le reseignement de Tite-Live, dans l'état où il nous est parvenu, n'est donc pas fiable,"⁷⁰ and to place strong emphasis on a passage in Polybius which clearly has the dictator relinquishing his command on the entry into office of the consuls of 216.⁷¹ He concludes that Livy attributed actions of the dictator and the master of the horse to the new consuls, confusing the two pairs.⁷²

⁶⁷ LIVY, 22,32.1: *quod reliquum autumnus erat.*

⁶⁸ *ibid.*, p. 162.

⁶⁹ *ibid.*

⁷⁰ *ibid.*

⁷¹ POLYBIUS, 3,106.1: ὧν κατασταθέντων οἱ μὲν δικτάτορες ἀπέθεντο τὴν ἀρχήν (on their appointment, the Dictators laid down their office...)

⁷² BRIND'AMOUR (1983), p. 162.

Regarding Hannibal's relocation to Gerunium at a time when Polybius says that the weather was favourable for gathering produce (*συγκομιδῆν*),⁷³ Brind'Amour rejects the possibility of the context being the period close to the summer solstice, the typical time of the grain harvest,⁷⁴ as this was far too early for Hannibal even to be considering moving into winter quarters. The reference is not the grain harvest, asserts Brind'Amour,⁷⁵ but rather autumnal produce, such as grapes, picked in September, October, or even November; "Il n'y a pas moyen de douter que c'est ainsi qu'il faille interpréter le texte."⁷⁶

For Brind'Amour, consular 217 concluded with an intercalary block.⁷⁷

In 216 BCE, Hannibal left Gerunium around the time of the harvest,⁷⁸ and took Cannae, the Romans' granary. As mentioned above in the Derow discussion, the battle of Cannae fell on 2 Sextilis, civil. Brind'Amour holds that if the equivalents obtained from the preceding year are used, the civil date would correspond to 23 July if C217 were not intercalary, or 14 August if it were.⁷⁹ As earlier events, and even later events, show, the year must have been intercalary and so the later date for Cannae is to be preferred.

⁷³ POLYBIUS, 3,100.8.

⁷⁴ Cf. p. 110, n. 32.

⁷⁵ BRIND'AMOUR (1983), p. 162.

⁷⁶ *ibid.*

⁷⁷ The tables of julian equivalents constructed by Brind'Amour run from civil January to civil December, rather than consular year March to March. As a consequence, the intercalary month of C217 is to be found between February and March of the year headed 216. Likewise, that which appears under 215 belongs to the previous year.

⁷⁸ POLYBIUS, 3,107.1: ἤδη δὲ παραδιδόντος τοῦ καιροῦ τὴν ἐκ τῶν ἐπετείων καρπῶν χορηγίαν, ἐκίνει δύνανται ἐκ τοῦ περὶ τὸ Γερούνιον χάρακος Ἀννίβας (it was not until the season was advanced enough for them to get supplies from the year's crops that Hannibal moved his forces out of the camp near Gerunium).

⁷⁹ BRIND'AMOUR (1983), p. 163.

Brind'Amour believes that the decree of Q. Fabius that the grain be brought to the cities before the Kalends of June⁸⁰ specifically points to a calendrical retard of one month in C215, effected by insertion of an intercalary block at the end of consular 216.⁸¹ He submits that if C215 were not intercalary, the Kalends of June 215 would correspond to 4 June julian; to 27 June julian if it were. As this latter date fits the situation better, he declares that "l'an 215 [C216] fut donc, comme l'an 216 [C217], intercalaire."⁸² He disagrees with Derow who is of the opinion that the orders of Fabius relate to grain reserves, claiming that *frumenta ex agris* could only refer to grain freshly harvested.

The letter written by M. Marcellus in his Sicilian winter quarters and read to the Senate by the new consuls⁸³ of C212 is indicative, according to Brind'Amour, of the fact that there had been no intercalation since that at the end of C216. He notes that at the time of the receipt of the letter, the calendar was either in accord with or slightly in advance of the seasons.⁸⁴

He then turns to the statement of Livy that the Latin festival, *feriae conceptivae*, detained the consuls in Rome until the 26th of April, C212⁸⁵ after which they departed to Samnium. At this time, the Capuans, suffering from hunger, applied to Hannibal for help.

⁸⁰ LIVY, 23,32.14.

⁸¹ BRIND'AMOUR (1983), p. 163.

⁸² *ibid.*, p. 164.

⁸³ LIVY, 25,5.10: *eodem tempore* [this being the time of the military levy conducted after the induction of the new consuls] *ex Sicilia litterae Marci Marcelli ... in senatu recitatae sunt* (at the same time a letter from Marcus Marcellus... was read in the Senate).

⁸⁴ BRIND'AMOUR (1983), p. 164.

⁸⁵ LIVY, 25,12.1: *Romae consules praetoresque usque ad ante diem quintum kal. Maias Latinae tenuerunt* (at Rome the consuls and praetors were detained by the Latin festival until the fifth day prior to the Kalends of May).

Hanno was despatched, and when he was near Beneventum, he ordered that grain be collected from neighbouring allies to be brought to the Capuans;⁸⁶ the clear implication being that the grain was that of the previous year. Q. Fulvius Flaccus, on hearing of the Carthaginians' movements, left Samnium and shortly after routed Hanno and his soldiery. Brind'Amour points out that the consuls were in Samnium in May civil, corresponding to the end of June, proleptic julian, as the harvest of 212 BCE had not yet taken place.⁸⁷ Subsequently, the consuls relocated to Campania, *non ad frumenta modo, quae iam in herbis erant, corrumpenda, sed ad Capuam oppugnandam* (not merely to ruin the grain, which was by now green, but also to besiege Capua).⁸⁸ Brind'Amour notes that the grain was *in herbis* at the time, corresponding to April and May julian, "ce qui permet de constater que le calendrier était à peu près en accord avec les saisons."⁸⁹

Focussing upon Derow's detection⁹⁰ of a possible chronological reference point in 206 BCE, when Livy has the consuls set out for their provinces *principio veris*,⁹¹ Brind'Amour postulates that their departure from the city was no later than mid-April civil, indicating a slight calendrical advance. Eventually, he feels obliged to admit, like Derow, that really this reference has no precise chronological implications.⁹²

⁸⁶ LIVY, 25,13.5: *inde ex sociis circa populis, quo aestate comportatum erat, devehit frumentum in castra iussit* (then he ordered grain to be brought into camp from allied peoples of the neighbourhood, among whom it had been garnered in the summer).

⁸⁷ BRIND'AMOUR (1983), p. 165.

⁸⁸ LIVY, 25,15.18.

⁸⁹ BRIND'AMOUR (1983), p. 165.

⁹⁰ DEROW (1976), p. 279.

⁹¹ LIVY, 28,11.11.

⁹² BRIND'AMOUR (1983), p. 165.

Whereas Derow alleges a relationship between the spring equinox of 204 BCE and the coming to Rome of the Mater Idæa,⁹³ Brind'Amour observes that the Plinian passage cited by Derow contains no mention of the spring equinox whatsoever. The only reasonable deduction from the passage, he concludes, is that when Cybele was introduced to Rome on 4 April, C204, the harvest had not yet taken place.⁹⁴

Overall, in respect of the period under discussion, Brind'Amour concludes that intercalary blocks can be definitely inserted in 216 BCE and 215 BCE, that is consular 217 and 216. The tables at the back of his book spell out his proposed calibration. For the years 211 BCE to 203 BCE inclusive, Brind'Amour refrains from tabulating equivalences on the grounds that precise identification of intercalated years is extremely hazardous, if not impossible. It is, however, possible to establish how many intercalations are required for the years concerned. The number of julian days from the Kalends of January, C211 to the final day of December, C203, working from the equivalents provided by Brind'Amour, equals 3262, whilst the number of civil days for the same period equals 3195. Simple subtraction reveals the shortfall to be 67 days. Therefore, in this nine-year period, there were three intercalations, two of 23 days and one of 22 days. To repeat, Brind'Amour is reluctant to attempt to guess in which years these intercalary blocks were actually placed.

Whereas Derow, inspired by Macrobius, proposes seven intercalations for our period, Brind'Amour has only five. My reconstruction, which will be explained in the following section, allows also for only five intercalations between 218 BCE and 204 BCE.

⁹³ DEROW (1976), p. 273.

⁹⁴ BRIND'AMOUR (1983), p. 166.

3. Intercalation and the Second Punic War

To repeat what was emphasized earlier, there are very few seasonal references available for use with respect to the period C218-204 to assist calibration of Roman republican years with proleptic julian counterparts. As has been seen above, beginning with C219, Derow intercalates every second year down to C203, something that I consider unwarranted and insupportable. Brind'Amour, on the other hand, has more realistically concluded that there were somewhat fewer intercalations in the same period. That there must have been some intercalations is quite clear, particularly if one accepts my proleptic julian equivalent for the Ides of March, 203 civil, and works backwards from it.

If there had been no intercalations in the period under discussion, the julian equivalents of the Ides of March for these years would have been as follows:

218 =	17 July, 218	210 =	27 April, 210
217 =	7 July, 217	209 =	16 April, 209
216 =	27 June, 216	208 =	6 April, 208
215 =	17 June, 215	207 =	27 March, 207
214 =	6 June, 214	206 =	17 March, 206
213 =	27 May, 213	205 =	6 March, 205
212 =	17 May, 212	204 =	24 Feb., 204
211 =	7 May, 211		

The consuls, for several years, would have been entering into office in the middle of the tropical year. The few seasonal references that we have for the period's earlier years emphatically exclude such a possibility.

In the previous section we tentatively established one *terminus* for the final year of this period, consular 204. The final day of consular 204 corresponded to 13th February, proleptic julian 203 BCE. If consular 204 had been intercalary, the Ides of March would have fallen on the 2nd Feb., 203 BCE, allowing for insertion of 22 days, a block preferred to 23 days on the grounds that 23 days rather than 22 were added to consular 193, the next

year to be intercalated. If C204 had not been an intercalary year, then the Ides of March would be equated with the proleptic julian date of 24th February, 203 BCE. The choice between the dates is formally not easy as there are no precise seasonal references by which one can be guided.

Although it has been claimed that there was a relationship between the coming to Rome of the Mater Idaea and the spring equinox of 204 BCE,⁹⁵ such a precise nexus cannot be justified. All that can be assumed is that on 4 Aprilis, 204 civil when Cybele was introduced at Rome, the harvest had not yet begun. The range of dates available is consequently rather large, but, moving backwards from the calculations of the subsequent year (which will be expounded later) and forward from the previous year, I propose that 4 Aprilis corresponds with 16th March, julian; and that the Ides of March, C204, was therefore the 24th February, 204 BCE, with the effect that the Roman calendar was at this stage almost one month ahead of the seasons. Subsequent failure to intercalate widened this gap until by C189 it was about four months in length.

To leap backwards now to 217 BCE, a natural first step is the solar eclipse, partial as viewed from Italy, of 11th February. Observations of this eclipse feature without any special prominence among the prodigies⁹⁶ recorded by Livy that were due to be expiated, after their entry upon office, by the consuls of 217. Curiously, Derow refrains from mentioning the eclipse in his text; even more curiously his table of equivalents shows that he has placed it *after* the consular year's commencement. It was the duty of the newly incumbent consuls to expiate those prodigies which had been reported, verified, and accepted between the last expiatory rites performed by their predecessors and their own

⁹⁵ See DEROW (1976), p. 273.

⁹⁶ See chapter 6 below, the Livian prodigies 6 and 9 for the year concerned.

entry into office. Therefore, to assume that the reported, verified, and accepted prodigies connected with the eclipse occurred on the 25th of March, C217, even if only ten days after the inauguration of the consuls, is clearly illogical. As Livy claims that the consul presented the prodigies to the senate as they had come to him,⁹⁷ it is not out of the question to understand that as meaning 'in the order in which they had come to him', though admittedly no solid conclusions can be drawn from the order of the prodigies in Livy's lists. Still, if the eclipse had been a last hurried addition to the prodigy list just prior to the consul's *relatio*, one could legitimately expect to find it in a place of prominence, either first or last, but this does not prove to be the case, implying that the eclipse had not been an extremely recent occurrence. Brind'Amour's system places it on the 15th February, civil, allowing at this point for the calendar to be very slightly in advance of the tropical year.⁹⁸ My own calculations, it will emerge, calibrate it with the 8th February, civil.

No investigation of 217 BCE can avoid consideration of the circumstances of the battle of Trasimene. Derow alleges that in C217, Hannibal left his winter quarters early and approximately one month later emerged victorious from the battle at Trasimene. The julian equivalent of Ovid's date for the battle, 21st Junius, civil, is, according to Derow, 9th May.⁹⁹ This assertion is indeed remarkable because, although Derow claims support from passages in both Polybius and Livy, there is little real indication in either that

⁹⁷ LIVY, 22,1.14: *his sicut erant nuntiata expositis auctoribusque in curiam introductis consul de religione patres consuluit* (when the consul had laid these reports before the Senate exactly as they had come to him and had introduced into the Curia the men who vouched for their truth, he consulted the Fathers regarding their religious import).

⁹⁸ BRIND'AMOUR (1983), p. 160.

⁹⁹ DEROW (1976), p. 275.

Hannibal moved from his winter quarters with any exceptional celerity.¹⁰⁰ Indeed, Polybius does not have him explicitly decamping at all, merely enquiring as to an appropriate route. Livy's use of the word *itaque* may be said to imply that Hannibal left at the usual time. It is true that a little further on, Livy notes that Hannibal left *maturius*, but it is possible to propose that his movements were determined by the weather conditions at the time, rather than being bound up with the general time of year. Such an hypothesis could find basis in an earlier section of Livy, referring to the same movements, when Hannibal struck camp *ad prima ac dubia signa veris* (on the first doubtful signs of spring).¹⁰¹ Hannibal had to ensure that the passes through the mountains were clear of snow before he attempted a crossing, and "it is pertinent to note that in some years skiing in the higher Apennine resorts such as Abetone can go on into May."¹⁰² If such extreme weather conditions had been present at this time, Hannibal may have had to have remained in Bologna for longer than normal in relation to the Roman civil calendar, but moved the very moment the weather ameliorated sufficient for travel, hence the *maturius*.

The Polybian passage (3.78.8) continues:

διαδοθείσης δὲ τῆς φήμης ἐν τῷ στρατοπέδῳ διότι μέλλει διὰ τινῶν
ἐλῶν ἄγειν αὐτοὺς ὁ στρατηγός, πᾶς τις εὐλαβῶς εἶχε πρὸς τὴν
πορείαν, ὑφορώμενος βάραθρα καὶ τοὺς λιμνώδεις τῶν τόπων (when the

¹⁰⁰ POLYBIUS, 3,78.6: διόπερ ἅμα τῇ τὴν ὥραν μεταβάλλειν, πυνθανόμενος τῶν μάλιστα τῆς χώρας δοκούντων ἐμπειρεῖν, τὰς μὲν ἄλλας ἐμβολὰς τάς εἰς τὴν πολεμίαν μακρὰς εὔρισκε καὶ προδήλους τοῖς ὑπεναντίοις (as soon, then, as the weather began to change he ascertained by inquiring from those who knew the country best that the other routs were both long and obvious to the enemy...)

LIVY, 22,1.1: *iam ver adpetebat; itaque Hannibal ex hibernis movit* (spring was now drawing on, and accordingly Hannibal moved out of his winter encampment).

¹⁰¹ LIVY, 21,58.1-2: *haud longi inde temporis dum intolerabilia frigora erant, quies militi data est, et ad prima ac dubia signa veris profectus ex hibernis in Etruriam ducit* (for no long time thereafter, while the cold was still unbearable, he allowed his men to rest, and on the first doubtful signs of spring broke up his winter quarters and marched towards Etruria).

¹⁰² DOREY & DUDLEY (1971), p. 51.

news spread in the camp that the general was going to lead them through marshes, everyone was very reluctant to start, imagining that there would be deep bogs and quagmires).

From this it may be assumed that the inquiries made by Hannibal were not instantly followed by the movement of his troops. Also, the adverse conditions experienced by the men clearly indicate that winter had not recently passed but that the muddiness of spring was well advanced.¹⁰³

Both Derow¹⁰⁴ and Brind'Amour¹⁰⁵ allow only a short interval between Hannibal's departure from his winter quarters in 217 BCE and the battle at Trasimene: all up, no more than two months, and I see no compelling need to challenge this. Allowing then, that Hannibal struck camp at the earliest in late April or more likely, to be certain that the passes through the Apennines were traversable, early May, julian, equating his removal with around mid-April, civil, the battle, fought approximately two months later, on 21st June, civil, occurred by my reckoning on 14th July, julian. If so, the calendar

¹⁰³ POLYBIUS, 3,79.8-10: πάντες μὲν οὖν ἐκακοπάθουν, καὶ μάλιστα διὰ τὴν ἀγρυπνίαν, ὥς ἂν ἐξῆς ἡμέρας τέτταρας καὶ τρεῖς νύκτας συνεχῶς δι' ὕδατος ποιούμενοι τὴν πορείαν. διαφερόντως γὰρ μὴν ἐπόνουν καὶ κατεφθείρονθ' ὑπὲρ τοὺς ἄλλους οἱ Κελτοί. τῶν δ' ὑποζυγίων αὐτοῦ τὰ πλείστα πίπτοντα διὰ τοὺς πηλοὺς ἀπώλλυντο, μίαν παρεχόμενα χρείαν ἐν τῷ πεσεῖν τοῖς ἀνθρώποις. καθεζόμενοι γὰρ ἐπ' αὐτῶν καὶ τῶν σκευῶν σωρηδὸν ὑπὲρ τὸ ὑγρὸν ὑπερεῖχον, καὶ τῷ τοιούτῳ τρόπῳ βραχὺ μέρος τῆς νυκτὸς ἀπεκοιμῶντο (all the army indeed suffered much, and chiefly from want of sleep, as they had to march through water for three continuous days and nights, but the Celts were much more worn out and lost more men than the rest. Most of the pack-animals fell and perished in the mud, the only service they rendered being that when they fell the men piled the packs on their bodies and lay upon them, being thus out of the water and enabled to snatch a little sleep during the night).

This is further supported by Livy's mention of the recent flood of the Arno, 22,2.2: *...paludes ...qua fluvius Arnus per eos dies solito magis inundaverat* (marshes... which the river Arno had lately flooded to an unusual extent).

Both of these passages are implications of a thaw not simply beginning but well underway.

¹⁰⁴ DEROW (1976), p. 275.

¹⁰⁵ BRIND'AMOUR (1983), p. 158.

was not in advance of the seasons as Derow claims¹⁰⁶ nor even in accord as Brind'Amour concludes¹⁰⁷ but instead approximately three weeks behind.

With respect to the Polybian passage regarding Philip's learning of the Roman defeat at Trasimene during the Nemean games, since counterparts within other Greek calendars for the Argive month of Panamos are not yet irrefutably established, and since too there is a strong possibility that the calibration of many local Greek calendars with the tropical year varied considerably, it is probably best to refrain from attempting to prove an advance, retard or concordance of the civil calendar with the tropical year on this basis.

As far as Derow's estimation of the interval between the battle at Trasimene and Hannibal's encampment in Gerunium¹⁰⁸ is concerned, the time-periods given are extremely subjective and could vary significantly in either direction. Supposing we follow his contention, however, that 84 days had passed, and add these days to my determination for the battle of Trasimene, then it emerges that Hannibal had established himself in Gerunium by mid-September, 217 BCE proleptic julian. This is neatly consistent with Brind'Amour's suggestion¹⁰⁹ that the Polybian reference at 3,100.8 to produce is apropos autumnal agricultural activities, rather than the summer harvest.

The order of dates I have proposed is further supported by two other passages in Polybius. The first concerns the activities of the dictator, Q. Fabius Maximus (Cunctator).

¹⁰⁶ His dating system puts the calendar approximately 1½ months ahead of the seasons.

¹⁰⁷ His system shows the discrepancy between the two to consist of a mere day.

¹⁰⁸ DEROW (1976), p. 275: "The time taken for this can of course be only approximately estimated, but by the time he [Hannibal] moved from the resting place on the Adriatic something like forty days must have elapsed since the battle (a week or so in Etruria, the ten days for the march, and some three weeks, surely a minimum, for the army to spend recuperating). For the ensuing peregrinations it seems not unreasonable to allow another forty days, or perhaps slightly longer."

¹⁰⁹ BRIND'AMOUR (1983), p. 162.

Granted *imperium* after the tremendous Roman defeat lake Trasimene, Fabius took to shadowing the Punic enemy at a discrete distance, despite the fact that his tactics of avoiding confrontation made him despised by his own countrymen. He refused to engage Hannibal in battle, and could afford such hanging back, according to Polybius, due to the inexhaustible supply of both men and provisions that was available to him.¹¹⁰ The natural inference here is not that harvest was only just begun, but that it was in fact well over. The summer harvest, as mentioned earlier,¹¹¹ generally took place around the time of the summer solstice - late June. If Derow's early date for the battle is to be used, then there would have been more than a month to wait before the grain ripened sufficiently to be harvested.

The second indication that my proposed calendrical retard is more plausible than any advance is found at Polybius, 3,100.1,¹¹² only a few sections before the one on which Derow bases his claim. Here it is clearly stated that Hannibal's thoughts were turning to winter quarters. It is almost incredible that anyone could represent him as thus preoccupied in late spring/early summer.

¹¹⁰ POLYBIUS, 3,89.9: ἦν δὲ τὰ προτερήματα Ῥωμαίων ἀκατάτριπτα χορήγια καὶ χειρῶν πλῆθος (these advantages of the Romans lay in inexhaustible supplies of provisions and men). Note also 3,90.2, where Fabius and his men have a plentiful store of provisions (τὰς χορηγίας ἀφθόρους) and so have no need to forage, unlike Hannibal's men.

¹¹¹ Cf. p. 110, n. 32.

¹¹² ὁ δὲ στρατηγὸς Ἀννίβας, ὅθεν ἀπελίπομεν, πυνθανόμενος παρὰ τῶν κατασκόπων πλείστον ὑπάρχειν σίτον ἐν τῇ περὶ τὴν Λουκαρίαν καὶ τὸ καλούμενον Γερούνιον χώρα, πρὸς δὲ τὴν συναγωγὴν εὐφύως ἔχειν τὸ Γεπούνιον, κρίνας ἐκεῖ ποιέσθαι τὴν παραχειμασίαν, προῆγε ποιούμενος τὴν πορείαν παρὰ τὸ Λίβυρνον ὄρος ἐπὶ τοὺς προειρημένους τόπους (Hannibal, whom we left in Italy looking out for winter quarters, learning from his scouts that there was plenty of corn in the country round Luceria and Gerunium, and that the best place for collecting supplies was Gerunium, decided to winter there and advanced to this district, marching past Mount Libyrnus).

There are still further indications that the battle at Trasimene occurred in the summer months. These are to be found in the narrative of Livy. According to that historian, Fabius adopted a non-confrontational policy regarding Hannibal, and continuing in this way *aestatis reliquum extraxit* (played out the rest of summer) until eventually Hannibal, disappointed in his hopes of a pitched battle, *hibernis locum circumspectaret* (was looking for a site for winter quarters).¹¹³ Fabius had spent the summer frustrating the Punic invaders, and when Hannibal began casting around for suitable winter quarters, Fabius harassed him in, so that he was confronted by the unpleasant prospect of spending winter in a hostile and unprovisioned region.¹¹⁴ This realization impelled him into action and he broke through the Roman cordon, the overall implication being that the need to locate appropriate winter quarters and sufficient provisions for his army was becoming pressing, not something many months away but required in the fairly immediate future. The natural inference is that tropical year was well advanced at this time:

It is the view of Derow, incompatible with the above and in conformity with his early date for Trasimene, that when Fabius' tenure of authority was over and he handed his armies over to the consuls, they fought against the Africans for the rest of autumn. Derow's general picture of Fabius' dictatorship involves commencement in mid-May, after Trasimene which he dates, to re-iterate, to the 9th May, 217 BCE. Several comments in the narrative of Livy militate against the possibility of Fabius' appointment having been effected so swiftly. For several days, he writes, the senate stayed in session from sun-up

¹¹³ LIVY, 22,15.1-2.

¹¹⁴ LIVY, 22,16.4: *Poenus inter Formiana saxa ac Literni arenas stagnaque et per horridas silvas hibernaturus esset* (the Phoenicians faced the prospect of passing the winter between the cliffs of Formiae and the sands and marshes of Liternum, and amid tangled forests).

to sundown, considering their options.¹¹⁵ Before any decision could be reached came the news that the force under C. Centenius had turned aside at Umbria after hearing of the defeat at Trasimene, and had fallen into Hannibal's hands.¹¹⁶ Only after this was a dictator created. This was effected by popular election, an unprecedented measure, because of the absence of the surviving consul who was the only one empowered to nominate a dictator, and because conditions at the time were against getting either a courier or a letter to him.¹¹⁷ For the news of the battle to reach Rome; for the news of the subsequent defeat in Umbria; for consideration of candidates worthy, and capable, of wielding dictatorial power (an important matter considering the nature of the power accorded to the successful candidate); not to mention the election itself, a not inconsiderable amount of time after the disastrous Trasimene defeat would have been required. Though Derow feels able to place the election of Fabius on the 18th May (Kal. Quinct. by his reckoning), it is more than difficult to see the above events and processes as having consumed less than two weeks, perhaps even as many as three. Six months of office after Fabius' elevation to the dictatorship would then take us to the *end* of

¹¹⁵ LIVY, 22,7.14: *senatum praetores per dies aliquot ab orto usque ad occidentem solem in curia retinent, consultantes quonam duce aut quibus copiis resisti victoribus Poenis posset* (for some days the praetors kept the Senate in session in the Curia, from sunrise to sunset, deliberating with what possible commander or what forces they could withstand the victorious Phoenicians).

¹¹⁶ LIVY, 22,8.1: *quattuor milia equitum cum C. Centenio propraetore missa ad collegam ab Servilio consule in Umbria, quo post pugnam ad Trasumennum auditam averterant iter, ad Hannibale circumventa* (four thousand horse under the propraetor Caius Centenius had been sent by the consul Servilius to join his colleague; but on hearing of the battle at Trasimene they had turned aside into Umbria, and had there fallen into the hands of Hannibal).

¹¹⁷ LIVY, 22,8.5-6: *et quia et consul aberat, a quo uno dici posse videbatur, nec per occupatam armis Punicis Italiam facile erat aut nuntium aut litteras mitti, quod nunquam ante eam diem factum erat, dictatorem populus creavit Q. Fabium Maximum* (and because the consul, who alone was supposed to possess the power to nominate one, was absent, and because it was no easy matter, when Italy was beset with Punic arms, to get a courier or a letter through to him, they did what had never been done before until that day, the people created Quintus Fabius Maximus as dictator).

November, and even if the dictator had relinquished his army during the last month of his *imperium* there would have been precious little of autumn left.

As Fabius' policy of waiting, rather than actively engaging Hannibal in battle, was unpopular with the Romans, it is admittedly conceivable that external pressure from the senate who preferred a more aggressive course of action, and internal pressure from the disgruntled and openly-hostile Master of the Horse and the soldiery combined to force Fabius to end his *imperium* prematurely. A dictator was only ever in office for a maximum of six months due to fear that the unlimited power that he wielded would corrupt him and cause him to contemplate perpetuation of sole leadership and thus effective assumption of the rôle of Rome's ancient kings.¹¹⁸ Six months was not a compulsory term, and many sources simply refer to the dictatorship as not being permitted to *exceed* this length of time. Although, however, it was not unusual for a dictator to relinquish his *imperium* before its compulsory termination, dictators were certainly not expected to lay down their office prematurely if the business for which they had been elected had not been brought to an end.¹¹⁹

Yet, although it is just conceivable and possibly not unprecedented for Fabius to have relinquished his dictatorship at some time before the end of his term of office, postulating such a circumstance takes little realistic account of Livy's statement that Fabius' *semestre imperium* was near its conclusion: *litteris Q. Fabi accitus et ipse*

¹¹⁸ ZONARAS, 7,13: οὐκ ἐπὶ πλέον δὲ τῶν ἑξ μηνῶν ἢ τῆς δικτατορίας ἀρχὴ παρτείνεται, ἵνα μὴ τις αὐτῶν ἐν τοσούτῳ κράτει καὶ ἐξουσίᾳ ἀκράτῳ χρονίσας ὑπερφρονήσῃ καὶ πρὸς ἔρωτα μοναρχίας ἐκκυλισθῇ (the office of dictator extended for a period of not more than six months, in order that no such official by lingering on in the midst of so great power and unhampered authority should become haughty and be carried away by a passion for sole leadership).

¹¹⁹ See, for example, ABBOTT (1963), p. 183.

[Servilius] et collega eius M. Atilius, ut exercitus ab se exacto iam prope semestri imperio acciperent ([Servilius] himself and his colleague Marcus Atilius had been sent for by way of letters from Quintus Fabius so that they could take over the armies of the dictator whose six month *imperium* was coming to an end).¹²⁰ It might be hypothesized that the use of *prope* fails to exclude that Fabius was in the last month or so of dictatorial power, but even so, there would have been no autumn remaining had he been elected to the dictatorship in early August, proleptic julian. It is difficult, therefore, to accept Derow's treatment of Fabius' dictatorship as a viable chronological determinant, and Brind'Amour's suggestion that Livy confused the actions of the two pairs of magistrates¹²¹ can be accepted with a fair degree of confidence. Not only does it allow the dictator to reign on after autumn, it is also eminently compatible with Polybius' clear statement that it was on the election of the consuls for 216 that both the dictator and the Master of the Horse (who wielded power together with Fabius) relinquished their *imperium*.¹²² Fabius, then, continued as dictator until consular election time but as there are no clear further seasonal indications, in respect of 217, other than simple references to wintering troops, no other precise calibrations for that year can be forthcoming.

The consuls of C216, according to Polybius,¹²³ bringing with them new forces, joined, in due course, the army which had been encamped opposite Hannibal all winter and spring. Sections of Hannibal's army were at this stage becoming openly mutinous for

¹²⁰ LIVY, 22,31.7.

¹²¹ BRIND'AMOUR (1983), p. 162.

¹²² POLYBIUS, 3,106.1.

¹²³ POLYBIUS, 3,107.1: Τὸν μὲν οὖν χειμῶνα καὶ τὴν ἐαρινὴν ὥραν διέμειναν ἀντιστρατοπεδεύοντες ἀλλήλοις (all through the winter and spring the two armies remained encamped opposite each other).

want of food, so by means of a ruse, the Punic force left their winter camp for Apulia where, as Livy explains, the harvest was reputedly earlier since the climate was more temperate.¹²⁴ Given the circumstances of the appearance of the newly-incumbent consuls and their army, the Polybian reference to spring, and the Livian reference to the imminent Apulian harvest, not to mention the time wasted by the thwarted ambush of the Roman forces, this move could not have been effected much earlier than the May of the Roman civil calendar. Even allowing for a warmer climate, the harvest in Apulia would not have taken place more than a month earlier than in most other parts of Italy, and as it would have taken at least a week for the Carthaginian army to cover the distance from Gerunium to Cannae, its departure could even be put a little later.

At this point my calendar is only two weeks in retard of the tropical year. Brind'Amour claims that Hannibal left Gerunium "vers la fin de juin".¹²⁵ He takes no account of Livy's mention of an earlier Apulian harvest, and bases his reconstruction on the assumption that all grain harvests in Italy normally took place in late June, julian. Polybius, significantly, makes no mention of an early Apulian harvest but merely suggests that Hannibal broke camp when the season was advanced enough for harvested grain to be available.¹²⁶ Can Livy's deviant insinuations about a providentially precocious harvest only some 60 miles south of Hannibal's winter quarters be accepted as either veracious or pertinent? Surely not. Hannibal seized Cannae, clearly his target from the start, which was the Roman granary and where, as Polybius says, grain from all the

¹²⁴ LIVY, 22,43.5: *movere inde statuit in calidiora atque eo maturiora messibus Apuliae loca* (to move from his present quarters to Apulia, where the climate was warmer and in consequence for this the harvest earlier).

¹²⁵ BRIND'AMOUR (1983), p. 163.

¹²⁶ POLYBIUS, 3,107.1.

country around Canusium was collected.¹²⁷ The date of this action has to be set at some time after the summer solstice, allowing sufficient time for all harvesting to have been done, and for the harvested grain to have been transported to the granaries in Cannae. Polybius implies that the Romans had completed collection of harvested grain prior to the commencement of piecemeal transport to their camp. It would have been gathered and placed in storage early to mid Quintilis (mid to late July, julian). Not many more than a few weeks later, the battle of Cannae was fought. As we have seen,¹²⁸ Macrobius tells us that the fateful day was 2 Sextilis, civil. I concur with Brind'Amour in equating this with the 14th of August, julian, with the calendar just two weeks behind the seasons.

Q. Fabius' decree in C215 that all grain be brought to fortified cities before the Kalends of June¹²⁹ is the only available seasonal allusion in respect of this year. Likelihood is that the *frumenta* of the edict relate to the harvest of 215 BCE; accordingly, the Kalends of June must have fallen after the summer solstice. It is necessary to insert an intercalation at the end of consular 216 for this to have been the case. Failure to intercalate in C216 would have the Kalends of June C215 fall in early June julian. Those who ascribe to the belief that the Fabian decree refers to the grain stores of C216 rather than the new harvest of C215¹³⁰ fail to take into account the fact that Hannibal lingered in the same district for quite some time. He would certainly have been there over the

¹²⁷ POLYBIUS, 3,107.3: ...εἰς γὰρ ταύτην συνέβαινε τὸν τε σῖτον καὶ τὰς λοιπὰς χορηγίας ἀθροίζεσθαι τοῖς Ῥωμαίοις ἐκ τῶν περὶ Κανύσιον τόπων. ἐκ δὲ ταύτης ἀεὶ πρὸς τὴν χρεῖαν ἐπὶ τὸ στρατοπέδον παρακομίζεσθαι ([Cannae] in which the Romans had collected the corn and other supplies from the country round Canusium, conveying hence to their camp periodically enough to supply their wants).

¹²⁸ See above, n. 24.

¹²⁹ LIVY, 23,32.14.

¹³⁰ *inter al.* DEROW (1976), pp. 278-9; CORNELIUS (1932), pp. 2-9.

harvest period, if the Kalends of June fell early in the Julian year. In that case, Fabius' decree would not have prevented Hannibal from obtaining supplies from the harvest, unless no crops were planted for it, or unless the grain was picked green. The former situation not only requires there to have been prior knowledge of the edict in order for there to have been no sowing the previous autumn, but would also involve severe hardship in the area, of which there is no evidence. At this point then, the calendar was almost one month behind the seasons, with an intercalation at the end of consular 216.

Dealing with early C212, Livy notes that the consuls were detained in Rome until 26 Aprilis, after which they set out for their provinces.¹³¹ In terms of my calibration, this would have meant that the consuls set out for Samnium after the 14th May, Julian, having been detained for just over one month by the Latin festival and other duties. At about this time, the Campanians, suffering from hunger, requested aid from Hannibal who despatched Hanno to Campania. Hanno ordered grain to be collected from those nearby allies who had stored it from last summer, and then transported to Capua.¹³² The consuls, learning of this plan, attacked and defeated the Punic forces under Hanno, and proceeded to destroy the local grain crop which, as Livy tells, was *in herbis*.¹³³ Such a situation could exist until mid-June, Julian, about one month after the consuls left Rome for Samnium. It is true that if events are to conform with this time-frame they would have had to have moved quickly, but if Hanno had been despatched shortly after the consuls'

¹³¹ LIVY, 25,12.1: *Romae consules praetoresque usque ad ante diem quintum kal. Maias Latinae tenuerunt. eo die perpetrato sacro in monte in suas quisque provincias proficiscuntur* (at Rome the consuls and praetors were detained by the Latin festival until the fifth day before the Kalends of May. After performing the rites on that day on the Mount, each set out for his assignment).

¹³² LIVY, 25,13.1-5.

¹³³ LIVY, 25,15.18.

arrival in Samnium and immediately set about arranging aid for the starving Capuans, by necessity the consuls would also have had to have acted with great speed to prevent him from bringing his plan to fruition. A two-week discrepancy between the seasons and the calendar is not counter-indicated by these events.

In order for the events concerned to have occurred in accordance with my calendrical system, it is necessary for an intercalation month to have been inserted in either consular 215, 214, or 213. There are no firm indications to point to any of these three years being the correct one, but if we adhere at this point to Macrobius' prescription for biennial intercalations, 22 days would have been intercalated towards the end of C214. Was there then an intercalation in C212 in accordance with the same pattern? It is my contention that it did, and there was an intercalary block of 23 days at the end of this year. Further considerations to such effect will be given later. As I have already proposed that C216, C214, and C212 were intercalary, is it possible to project backwards and make the same proposal regarding C218, the first year of the period under review?

In the view of Brind'Amour, Hannibal's crossing of the Ebro and a revolt of the Cisalpine Gauls occurred almost concurrently. This puts the crossing some time in June, julian, most likely towards the end of the month. Livy tells how it took the African force five months to make the journey, with fifteen days apparently devoted to the Alpine crossing itself. So it was towards the end of C218 that Hannibal reputedly began his ascent, allegedly at the setting of the Pleiades,¹³⁴ just as the weather started to

¹³⁴ POLYBIUS, 3,54.1: τῆς δὲ χιόνος ἤδη περὶ τοὺς ἄκρους ἀθροισμένης διὰ τὸ συνάπτειν τὴν τῆς Πλειάδος δύσιν (as it was now close on the setting of the Pleiades snow had already gathered on the summit).

LIVY, 21,35.6: *fessis taedio tot malorum nivis etiam casus occidente iam sidere Vergiliarum ingentem terrorem adiecit* (exhausted and discouraged as the soldiers were by many hardships, a snow-storm - for the constellation of the Pleiades was now setting - threw them into great fear).

deteriorate. Though Brind'Amour believes that it took the Carthaginian invaders fifteen days to traverse the Alps,¹³⁵ he begins the count at the actual morning setting of the Pleiades around the 7-9th November, and as a consequence has Hannibal arriving in Italy at the end of that month. Walbank claims that the setting of the constellation heralded the approach of winter,¹³⁶ implying that it was simply a recurrent celestial event exploited by farmers and so forth to provide a rough guide to seasonal change than an official astronomically recognisable date. He goes on to say that "the fact that new snow had just fallen suggests that Hannibal was on the summit about the third week in September,"¹³⁷ but this cannot be the case without the calendar being two months in retard of the seasons, a condition which later circumstances prove highly improbable.

According to the Livian account of the Alpine crossing, which may owe much to Fabius Pictor, after nine days Hannibal and his troops were on the summit where they rested for two days. When they began the downward journey, they moved slowly (*segniter*), and they were dejected and despairing. The descent proved much more difficult than the ascent,¹³⁸ and the overall impression left by the tale of their hardships is that

¹³⁵ These fifteen days are themselves cause for contention. WALBANK (1957) breaks down Hannibal's movements from his leaving of the Isère (called by Polybius simply ποταμός). "This calculation allows three days more than the fifteen of 56. 3, two more if Hannibal reached the plain on day 17, one more if the two days on the summit include that on which Hannibal arrived." (p. 392) The Livian account adds up to eighteen days, though he too declared *quinto decimo die Alpibus superatis*. This one incident and the descriptions relating to it are indicative of the problems facing anyone trying seriously to date events with any accuracy, even for a period where there is a relative abundance of good source material.

¹³⁶ WALBANK (1957), p. 390.

¹³⁷ *ibid.*

¹³⁸ LIVY, 21,35.11: *ceterum iter multo quam in ascensu fuerat, ut pleraque Alpium ab Italia sicut breviora ita arrectiora sunt, difficilissimum fuit* (but the way was much more difficult than the ascent had been, as indeed the slope of the Alps on the Italian side is in general more precipitous in proportion as it is shorter).

quite a number of days were spent toiling along the treacherous and frozen mountain even before the four days spent at the cliff where they constructed a road, and the three days taken to complete the final stage of the descent.¹³⁹ I would estimate the actual crossing of the Alps as taking at least three weeks to accomplish, resulting in Hannibal's arrival in Italy early in December, proleptic julian (late November, civil).

The Alps crossed, Hannibal defeated the Roman forces near lake Ticinus.¹⁴⁰ Another victorious battle for the Carthaginians followed shortly afterwards, this time at the Trebia.¹⁴¹ Polybius tells us that the latter encounter took place around the χειμερινὰ τροπαί, and Livy concurs, noting that this was the time of year when the days were shortest. We are thus provided with a relatively solid seasonal allusion.

But was there an intercalation in C218? Certainly the circumstances of none of the events described is dependent on there having been an intercalation. Brind'Amour, perhaps accordingly, does not insert one and the eclipse of February 11th, 217 BCE in his table of equivalences still falls, as it falls for me, prior to the entrance of the new consuls into office. Yet, stubbornly perhaps, I find it difficult to resist adding a further biennial intercalation to the sequence 212, 214, 216 and so am driven to diagnose C218 as also intercalary.

If there were indeed intercalations in C216, C214, and C212, we would be confronted with an apparently systematic pattern of, from a proleptic julian perspective, 'even year' intercalations. The long term existence of such a pattern is further supported

¹³⁹ LIVY, 21,35-37.

¹⁴⁰ LIVY, 21,45-46; POLYBIUS, 3,65.

¹⁴¹ LIVY, 21,52-56; POLYBIUS, 3,70-75.

by indications that C236 and still further back C260 were intercalary years.¹⁴² The pattern is of the kind to which Macrobius makes reference in his dissertation on intercalation. Minimal departures, scheduled or *ad hoc*, will have been dictated by the otherwise inevitable forward creep of the civil calendar ahead of the tropical year noted on p. 69 above. If biennial 'even year' intercalations was the rule by C218, intercalation that year would have been automatic, despite the *pontifices* in charge of the calendar having observed from the winter solstice that the calendar was in relative accord with the seasons. It is just conceivable that, noting fairly close concurrence, they could have decided to forego an intercalation, yet, if tradition were not a strong enough deterrent to routine, military matters could have been. It would certainly have been to Roman advantage for a system of regular intercalation to have continued this year.

The two consuls and their forces were facing the Carthaginian invaders, and it was felt that the safety of Rome was dependent on their success.¹⁴³ After the first brief encounter at the Trebia, the Romans were counted victorious in a manner of speaking because they had suffered fewer casualties. The consul Ti. Sempronius was eager to effect another engagement. His impatience, so Livy claims,¹⁴⁴ was increased by the imminence of the elections and the fear that the conclusion of this war would be the achievement of the new consuls with the resultant glory theirs rather than his own. Awareness of

¹⁴² ACTA TRIUMPHORUM CAPITOLINA, 21: *P. Cornelius L. f. Ti. n. Lentulus Caudinus cos. de Ligurib. idib. Inter[kalar]*.

ACTA TRIUMPHORUM CAPITOLINA, 20: *C. Duilius M. f. M. n. cos. primus navalem de Sicul(is) et classe Poenica egit k. Interkalar*.

¹⁴³ LIVY, 21,52.1: *iam ambo consules et quidquid Romanarum virium erat Hannibali oppositum aut illis copiis defendi posse Romanum imperium aut spem nullum aliam esse satis declarabat* (now that both the consuls and all the forces which the Romans could muster were opposing Hannibal, it was obvious enough either that the troops there under arms were able to defend Rome's empire or that her case was hopeless).

¹⁴⁴ LIVY, 21,53.6.

Sempronius' disposition may have provided *pontifices* factionally sympathetic towards him with a further reason than biennial routine to go ahead with intercalation. Alternatively, an entirely unbiased assessment of military exigencies may have ruled out pontifical consideration of departure from intercalary norm. There may have been many at Rome who considered it sensible and rational to allow the outgoing consuls the maximum possible time for implementing their plans for instant rout of the Punic invaders than to compel one of them to return to Rome prematurely for the holding of consular and other elections. If Hannibal could be defeated without the confusion bound to arise from the transference of armies to new consuls, such potential chaos was best avoided.

As a result of intercalation in C218, upon which, I would insist, the Ides of March of C217 fell on 8th April, 217 BCE proleptic julian. As already insinuated, regular biennial intercalation continued until at least C212. Some time after that consular year, the system of biennial 'even year' intercalations broke down.

Given all indications for C218 - C204, the best fit solution, on the basis of Occam's razor, the principle of opting for the least complexification, would be to insert a further intercalation in the next 'even year' in the series after C212, that is in C210, and to go on to suppose that there was a lapse of regular intercalation until C193, two years before the *lex Acilia* of 191 BCE. My table of julian equivalence for C218 - C204 is based on such being the case.

Yet what evidence do we have for the period after C210 that points in the direction of my system of equivalence as opposed to the others that have been proposed? Unfortunately, Brind'Amour's reconstruction ceases at the end of 212 BCE and resumes only at the beginning of 202 BCE, and so no comparison can be drawn there. Derow does

continue on through this period, within which, for him, only C207 provides any usable seasonal and military allusions.

C207 brought further fear to the Romans as Hasdrubal left Spain and moved to join his brother in Italy. Derow claims that Hasdrubal crossed the Alps "quite early in the year".¹⁴⁵ The question is, what does Derow mean by year in this context? As already mentioned, Derow's Ides of March, the beginning of the consular year, coincides with 13th February, proleptic julian, whereas mine corresponds to 27th March, 207 on the same system. It is possible, however, that Derow is referring to the January beginning of the Roman civil/religious year, which he calibrates with 2nd December, 208 proleptic julian, as opposed to my 15th January, 207. Either way, if Hasdrubal had left his winter quarters as early as Derow has proposed, then the passes through the Alps would have been so blocked with snow as to be untraversable, and therefore it is not possible that he crossed "quite early in the year", whether consular, Roman civil/religious, or tropical. Also, according to Livy's account, the letter bearing the report from the praetor, L. Porcius, concerning Hasdrubal's movements, arrived at Rome not merely after the Ides of March when the consuls entered office, but also after two *novendiales*,¹⁴⁶ atonement for the accepted prodigies,¹⁴⁷ removal of an hermaphrodite,¹⁴⁸ and a procession and sacrifice to Juno.¹⁴⁹ At the time the letter arrived, the levy was being conducted, with the exemptions claimed by the seaboard colonies examined. This involved each state

¹⁴⁵ DEROW (1976), p. 280.

¹⁴⁶ LIVY, 27,37.1, 4.

¹⁴⁷ LIVY, 27,37.4.

¹⁴⁸ LIVY, 27,37.5-6.

¹⁴⁹ LIVY, 27,37.11-15.

concerned being ordered to appear before the senate with its case.¹⁵⁰ On receipt of the letter, the levy was hastened and the consuls departed for their provinces earlier than planned.¹⁵¹

The length of time taken for the letter to reach Rome from Gaul can, of course, only be roughly estimated, but in Imperial times it was possible for written communications to be relayed as fast as 150-200km per day.¹⁵² If the bearers of L. Porcius' letter had been urged and were able to achieve close to the maximum speed which is likely to have been the case given that the information it contained was highly important, then it may be estimated that between despatch and receipt there was a separation at the most of little more than a week. Moreover, the letter received stated that Hasdrubal *was crossing* the Alps, not that he *had crossed*.¹⁵³ The passage took him only two months as opposed to Hannibal's five, but was the letter despatched at the beginning or middle of this period? If it can be accepted that Hasdrubal crossed the Alps in late April, tropical and proleptic julian, allowing about one month for the abortive siege of Placentia, his horsemen would have been captured by the Romans in June, and the battle at the Metaurus would have been fought in early July, only a little more than one week later than the civil date provided by Ovid, indicating that at this point the calendar was only slightly in retard of the tropical year. In my table of equivalences such is the case.

¹⁵⁰ LIVY, 27,38.3-5.

¹⁵¹ LIVY, 27,39.3: *hae litterae consules raptim confecto dilectu maturius quam constituerant exire in provincias coegerunt ea mente* (this letter constrained the consuls to complete the levy in haste and to leave for their provinces earlier than they had planned).

¹⁵² NICHOLS (1978), p. 41.

¹⁵³ LIVY, 27,39.2: *...et iam Alpes transire*.

Livy states that in 206, the consuls set out for their provinces *principio veris*.¹⁵⁴ There is no other seasonal allusions anywhere in respect of this year and the 'beginning of spring' is vague. Although my calendar at this point is still slightly in retard of the seasons, unlike those of Derow and Brind'Amour (by extension), I see no reason for disquiet. Livy could have been using early spring to connote late March, or early April, or simply the period of time immediately following the induction of the new consuls.

Only one other, rather major, problem remains to be addressed: why after C210 did the Romans cease regular intercalation and allow an enormous discrepancy to build up between the civil and seasonal years? I propose that the system of biennial intercalation came to be dropped for reasons bound up with the efficient discharge of public business of Rome.

A good *ad hoc* reason for the failure to intercalate in C208 when the next biennial intercalation was due is clearly evident from the narrative of Livy. It was in this year that the two consuls were killed, one directly in battle, the other dying later of his wounds. A dictator was appointed by the latter before his demise to hold elections and games.¹⁵⁵ Livy¹⁵⁶ relates: *ceterum cum duo consulares exercitus tam prope hostem sine ducibus essent, omnibus aliis omissis una praecipua cura patres populumque incessit consules primo quoque tempore creandi* (but inasmuch as two consular armies were so near the enemy without their commanders, the Senate and the people, neglecting everything else, were possessed by one particular concern - to elect consuls at the first possible moment). Here was reason enough for regular intercalation to have been suspended once. The

¹⁵⁴ LIVY, 28,11.11.

¹⁵⁵ LIVY, 27,33.6.

¹⁵⁶ LIVY, 27,33.9.

sources suggest no obvious reason for non-intercalation to have persisted and in default of helpful indication one is thrown back upon conjecture. The counsel of despair is to envisage the *pontifices* simply not bothering to resume the system of intercalation until a sizeable gap appeared which cried out for correction. A more positive explanation would be that in or after 208, the political and religious establishment become attracted by the idea of increasing the interval between the commencement of the consular year and that of the campaigning season. The effect of such increase would be to provide the consuls in particular with a greater amount of time for discharging public business before departing from Rome. One way of gaining the desired effect would have been to shift the consular year's beginning from the Ides of March to the Kalends of January, a solution actually adopted in 153, some time after the civil calendar had been brought back in line with the seasons. The alternative was to abandon intercalation until the gap between the Ides of March and the campaigning season's beginning had reached the required extent. It was the latter expedient that was adopted. For whatever reason (one suspects that the cut and thrust of political point scoring may have been a major factor), reimplementation of intercalation after the suspension proved difficult to effect. What started out as a device calculated to create more time for public business early in the consular year turned into a veritable Frankenstein's monster that eventually brought the civil calendar into grotesque rather than functionally tolerable discalibration with the seasons. It was not until C191 that the first serious steps were taken towards reversing a process that had got out of hand. By the end of the 170s, a further administrative crisis, this time bound up with the return to Rome for the holding of elections of consuls engaged in campaign on remote theatres of war, dictated more drastic corrective measures.

To summarize, had there been no intercalation at all from the commencement of the Second Punic War until C203, the discrepancy between the calendar year and the tropical year would have been much greater, as I have pointed out at the beginning of this section. Therefore, there cannot but have been some intercalations in this period. But for how long were intercalary blocks regularly inserted, and were the insertions regular and systematic? One possibility is that intercalation was regular and biennial at one stage, conforming with Macrobius' prescription. The other is that intercalations were resorted to at arbitrary intervals. In my judgement the picture clearly most compatible with all of the admittedly jejune and unsatisfactory evidence is that intercalation was systematic at the beginning of the Second Punic War with C218, C216, C214, C212, and C210 all including intercalary months. After C210, intercalation was abandoned until C193, and in C191, with the discalibration now dauntingly massive, the *lex Acilia* was devised and passed in order to reinstate definitively the intercalary process. It ought to follow that there were regular biennial style intercalations prior to C218. This is difficult to demonstrate given a virtual evidential vacuum, but there is, at least, indication to the effect that C236 was intercalary, and, somewhat further back, C260.

Calibration Tables

A. Range

The tables that follow have been extended beyond the period C218-C167 that is the subject matter of the by and large complete books 21-45 of Livy's history. In the first place it was natural to provide proleptic julian equivalences for consular 166, 165, 164, and 163, the post-C167 components of a prolonged series of successive extraordinary intercalations which, it was proposed in section 2A above, commenced in C170 after a 'normal' biennial intercalation in C171. In the second, on the predication that biennial intercalation became the rule again after C163, I have ventured to add equivalences from C162 to C154, the final year on which the consuls entered office on the Ides of March. Assignment of 22 and 23 days insertions to years after C166, in which 23 days were intercalated, is controlled by the assumption that strict alternation between the two lengths was maintained. Hence 22 days were intercalated in C165, 23 in C164, 22 in C163, 23 in C161 and so on.

B. Structure

To maximize user-friendliness, proleptic julian equivalents for each and every day of each consular year have been tabulated.

The table for each year is preceded by a *C* to indicate that it is the *consular* year (15th March year x to 14th March year $x+1$), and the consuls are named to facilitate identification. The Roman numerals in the column on the left refer to the Roman days. The months along the top are the pre-julian Roman months. The proleptic julian year equivalents are in the row beneath the months and care must be taken when using the tables as the julian year is specified inside it only when the year changes. The number of days intercalated is stated on the top right, following the consuls' names. Where the intercalation is extrapolated, the number of days and the month in the chart appear in italics; when the intercalation is attested in the ancient sources, both appear in normal font.

C. Astronomical Data

The tables incorporate indication of vernal and autumnal (fall) equinoxes, the summer and winter solstices, new and full moons, and solar and lunar eclipses visible either in totality or partiality at Rome and in Roman spheres of interest elsewhere in the Mediterranean world.

Below is a key to the symbols and abbreviations employed:

Symbol	Meaning
●	New moon
○	Full moon
SE	Solar Eclipse
LE	Lunar Eclipse
VE	Vernal Equinox
SS	Summer Solstice
AE	Autumn Equinox
WS	Winter Solstice

Towards compilation of all astronomical data use has been two computer programmes published by the Zephyr corporation. These are Lodestar plus II and Calmaster 2000.

C218 Consuls: P. Cornelius Scipio, Ti. Sempronius Longus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	218	218	218	218	218	218	218
I		14/4	13/5	13/6	12/7	12/8	10/9
II		15	14	14	13	13	11
III		16	15	15	14	14	12
IV		17	16	16	15	15	13
V		18	17	17	16	16	14
VI		19	18	18	17	17	15
VII		20	19	19	18	18 •	16
VIII		21	20	20 •	19	19	17 •
IX		22 •	21 •	21	20 •	20	18
X		23	22	22	21	21	19
XI		24	23	23	22	22	20
XII		25	24	24	23	23	21
XIII		26	25	25	24	24	22
XIV		27	26	26	25	25	23
XV	28/3	28	27	ss 27	26	26	24
XVI	29	29	28	28	27	27	25
XVII	30	30	29	29	28	28	26
XVIII	31	1/5	30	30	29	29	AE 27
XIX	1/4	2	31	1/7	30	30	28
XX	2	3	1/6	2	31	31	29
XXI	3	4	2	3	1/8	1/9 ○	30
XXII	4	5	3	4 ○	2	2	1/10 ○
XXIII	5	6	4	5	3 ○	3	2
XXIV	6	7 ○	5 ○	6	4	4	3
XXV	7	8	6	7	5	5	4
XXVI	8 ○	9	7	8	6	6	5
XXVII	9	10	8	9	7	7	6
XXVIII	10	11	9	10	8	8	7
XXIX	11	12	10	11	9	9	8
XXX	12		11		10		
XXXI	13		12		11		

C218 Consuls: P. Cornelius Scipio, Ti. Sempronius Longus

(intercal. 22)

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	218	218	218/7	217	217	217	217
I	9/10	9/11	8/12	6/1	4/2	27/2	25/3
II	10	10	9	7	5	28	26
III	11	11	10	8	6	29	27 ○
IV	12	12	11	9	7	1/3	28
V	13	13	12	10	8	2	29
VI	14	14	13	11 •	9	3	30
VII	15	15 •	14 •	12	10	4	31
VIII	16 •	16	15	13	SE 11 •	5	1/4
IX	17	17	16	14	12	6	2
X	18	18	17	15	13	7	3
XI	19	19	18	16	14	8	4
XII	20	20	19	17	15	9	5
XIII	21	21	20	18	16	10	6
XIV	22	22	21	19	17	11 •	7
XV	23	23	22	20	18	12	
XVI	24	24	23	21	19	13	
XVII	25	25	24	22	20	14	
XVIII	26	26	ws25	23	21	15	
XIX	27	27	26	24	22	16	
XX	28	28	27	25	23	17	
XXI	29	29 ○	28	26	24	18	
XXII	30 ○	30	29 ○	27	25	19	
XXIII	31	1/12	30	28 ○	26 ○	20	
XXIV	1/11	2	31	29		21	
XXV	2	3	1/1/217	30		22	
XXVI	3	4	2	31		23	
XXVII	4	5	3	1/2		VE 24	
XXVIII	5	6	4	2			
XXIX	6	7	5	3			
XXX	7						
XXXI	8						

C217 Consuls: Cn. Servilius Geminus, C. Flaminius

	MAR	APR	MAI	JUN	QUI	SEX
	217	217	217	217	217	217
I		25/4 ○	24/5	24/6	23/7	23/8
II		26	25 ○ ss	25	24	24
III		27	26	26	25	25
IV		28	27	27	26	26
V		29	28	28	27	27
VI		30	29	29	28	28
VII		1/5	30	30	29	29
VIII		2	31	1/7	30	30
IX		3	1/6	2	31	31
X		4	2	3	1/8	1/9
XI		5	3	4	2	2
XII		6	4	5	3	3
XIII		7	5	6	4	4
XIV		8	6	7	5	5 •
XV	8/4	9 •	7	8 •	6 •	6
XVI	9	10	8 •	9	7	7
XVII	10 •	11	9	10	8	8
XVIII	11	12	10	11	9	9
XIX	12	13	11	12	10	10
XX	13	14	12	13	11	11
XXI	14	15	13	14	12	12
XXII	15	16	14	15	13	13
XXIII	16	17	15	16	14	14
XXIV	17	18	16	17	15	15
XXV	18	19	17	18	16	16
XXVI	19	20	18	19	17	17
XXVII	20	21	19	20	18	18
XXVIII	21	22	20	21	19	19 ○
XXIX	22	23	21	22 ○	20	20
XXX	23		22		21 ○	
XXXI	24		23 ○		22	

C217 Consuls: Cn. Servilius Geminus, C. Flaminius

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	217	217	217	217/6	216	216	216
I	21/9	20/10	20/11	19/12	17/1	15/2 ○	15/3
II	22	21	21	20	18	16	16 ○
III	23	22	22	21	19	17	17
IV	24	23	23	22	20	18	18
V	25	24	24	23	21	19	19
VI	26	25	25	ws 24	22	20	20
VII	27	26	26	25	23	21	21
VIII	28	27	27	26	24	22	22
IX	29	28	28	27	25	23	23
X	30	29	29	28	26	24	24
XI	1/10	30	30	29	27	25	25
XII	2	31	1/12	30	28	26	26
XIII	3	1/11	2	31	29	27	27
XIV	4	2	3 •	1/1/216•	30	28	28
XV	5 •	3 •	4	2	31 •	1/3 •	
XVI	6	4	5	3	1/2	2	
XVII	7	5	6	4	2	3	
XVIII	8	6	7	5	3	4	
XIX	9	7	8	6	4	5	
XX	10	8	9	7	5	6	
XXI	11	9	10	8	6	7	
XXII	12	10	11	9	7	8	
XXIII	13	11	12	10	8	9	
XXIV	14	12	13	11	9	10	
XXV	15	13	14	12	10	11	
XXVI	16	14	15	13	11	12	
XXVII	17	15	16	14	12	13	
XXVIII	18	16	17 ○	15	13	14	
XXIX	19 ○	17 ○	18	16 ○	14		
XXX		18					
XXXI		19					

C216 Consuls: C. Terentius Varro, L. Aemilius Paullus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	216	216	216	216	216	216	216
I		15/4 ○	14/5 ○	14/6	13/7	13/8	11/9
II		16	15	15	14	14	12
III		17	16	16	15	15	13
IV		18	17	17	16	16	14
V		19	18	18	17	17	15
VI		20	19	19	18	18	16
VII		21	20	20	19	19	17
VIII		22	21	21	20	20	18
IX		23	22	22	21	21	19
X		24	23	23	22	22	20
XI		25	24	24	23	23	21
XII		26	25	25	24	24	22
XIII		27	26	ss 26	25	25 •	23
XIV		28	27	27 •	26 •	26	24 •
XV	29/3	29 •	28 •	28	27	27	25
XVI	30 •	30	29	29	28	28	AE 26
XVII	31	1/5	30	30	29	29	27
XVIII	1/4	2	31	1/7	30	30	28
XIX	2	3	1/6	2	31	31	29
XX	3	4	2	3	1/8	1/9	30
XXI	4	5	3	4	2	2	1/10
XXII	5	6	4	5	3	3	2
XXIII	6	7	5	6	4	4	3
XXIV	7	8	6	7	5	5	4
XXV	8	9	7	8	6	6	5
XXVI	9	10	8	9	7	7	6
XXVII	10	11	9	10	8	8	7
XXVIII	11	12	10	11	9	9 ○	8 ○
XXIX	12	13	11	12 ○	10 ○	10	9
XXX	13		12		11		
XXXI	14		13 ○		12		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	216	216	216/5	215	215	215	215
I	10/10	10/11	9/12	7/1	5/2	1/3	28/3
II	11	11	10	8	6	2	29
III	12	12	11	9	7	3	30
IV	13	13	12	10	8	4	31
V	14	14	13	11	9	5 ○	1/4
VI	15	15	14	12	10	6	2
VII	16	16	15	13	11	7	3
VIII	17	17	16	14	12	8	4 ○
IX	18	18	17	15	13	9	5
X	19	19	18	16	14	10	6
XI	20	20	19	17	15	11	7
XII	21	21	20	18	16	12	8
XIII	22	22 •	21	19	17	13	9
XIV	23 •	23	22 •	20 •	18	14	10
XV	24	24	23	21	19 •	15	
XVI	25	25	ws24	22	20	16	
XVII	26	26	25	23	21	17	
XVIII	27	27	26	24	22	18	
XIX	28	28	27	25	23	19	
XX	29	29	28	26	24	20 •	
XXI	30	30	29	27	25	21	
XXII	31	1/12	30	28	26	22	
XXIII	1/11	2	31	29	27	23	
XXIV	2	3	1/1/215	30	28	ve 24	
XXV	3	4	2	31		25	
XXVI	4	5	3	1/2		26	
XXVII	5	6 ○	4	2		27	
XXVIII	6	7	5 ○	3			
XXIX	7 ○	8	6	4 ○			
XXX	8						
XXXI	9						

C215 Consuls: L. Postumius Albinus, Ti. Sempronius Gracchus

	MAR	APR	MAI	JUN	QUI	SEX
	215	215	215	215	215	215
I		28/4	27/5	27/6	26/7	26/8
II		29	28	28	27	27
III		30	29	29	28	28
IV		1/5	30	30	29	29 ○
V		2	31	1/7	30	30
VI		3	1/6	2 ○	31 ○	31
VII		4 ○	2 ○	3	1/8	1/9
VIII		5	3	4	2	2
IX		6	4	5	3	3
X		7	5	6	4	4
XI		8	6	7	5	5
XII		9	7	8	6	6
XIII		10	8	9	7	7
XIV		11	9	10	8	8
XV	11/4	12	10	11	9	9
XVI	12	13	11	12	10	10
XVII	13	14	12	13	11	11
XVIII	14	15	13	14	12	12
XIX	15	16	14	15	13	13 ●
XX	16	17	15	16 ●	14 ●	14
XXI	17	18 ●	16 ●	17	15	15
XXII	18 ●	19	17	18	16	16
XXIII	19	20	18	19	17	17
XXIV	20	21	19	20	18	18
XXV	21	22	20	21	19	19
XXVI	22	23	21	22	20	20
XXVII	23	24	22	23	21	21
XXVIII	24	25	23	24	22	22
XXIX	25	26	24	25	23	23
XXX	26		25		24	
XXXI	27		ss 26		25	

C215 Consuls: L. Postumius Albinus, Ti. Sempronius Gracchus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	215	215	215	215/4	214	214	214
I	24/9	23/10	23/11	22/12	20/1	18/2	18/3
II	25	24	24	23	21	19	19
III	26	25	25	ws 24	22	20	20
IV	AE 27	26	26 ○	25 ○	23	21	21
V	28 ○	27 ○	27	26	24 ○	22 ○	22
VI	29	28	28	27	25	23	23
VII	30	29	29	28	26	24	24 ○
VIII	1/10	30	30	29	27	25	VE 25
IX	2	31	1/12	30	28	26	26
X	3	1/11	2	31	29	27	27
XI	4	2	3	1/1/214	30	28	28
XII	5	3	4	2	31	1/3	29
XIII	6	4	5	3	1/2	2	30
XIV	7	5	6	4	2	3	31
XV	8	6	7	5	3	4	
XVI	9	7	8	6	4	5	
XVII	10	8	9	7	5	6	
XVIII	11	9	10	8	6	7	
XIX	12 •	10	11 •	9	7	8	
XX	13	11 •	12	10 •	8 •	9	
XXI	14	12	13	11	9	10 •	
XXII	15	13	14	12	10	11	
XXIII	16	14	15	13	11	12	
XXIV	17	15	16	14	12	13	
XXV	18	16	17	15	13	14	
XXVI	19	17	18	16	14	15	
XXVII	20	18	19	17	15	16	
XXVIII	21	19	20	18	16	17	
XXIX	22	20	21	19	17		
XXX		21					
XXXI		22					

C214 Consuls: Q. Fabius Maximus, M. Claudius Marcellus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	214	214	214	214	214	214	214
I		18/4	17/5	17/6	16/7	16/8	14/9
II		19	18	18	17	17	15
III		20	19	19	18	18	16
IV		21	20	20	19	19 ○	17 ○
V		22	21	21 ○	20 ○	20	18
VI		23 ○	22 ○	22	21	21	19
VII		24	23	23	22	22	20
VIII		25	24	24	23	23	21
IX		26	25	25	24	24	22
X		27	26	26	25	25	23
XI		28	27	ss 27	26	26	24
XII		29	28	28	27	27	25
XIII		30	29	29	28	28	26
XIV		1/5	30	30	29	29	AE 27
XV	1/4	2	31	1/7	30	30	28
XVI	2	3	1/6	2	31	31	29
XVII	3	4	2	3	1/8	1/9	30
XVIII	4	5	3	4	2	2 •	1/10
XIX	5	6	4	5 •	3 •	3	2 •
XX	6	7 •	5	6	4	4	3
XXI	7	8	6 •	7	5	5	4
XXII	8 •	9	7	8	6	6	5
XXIII	9	10	8	9	7	7	6
XXIV	10	11	9	10	8	8	7
XXV	11	12	10	11	9	9	8
XXVI	12	13	11	12	10	10	9
XXVII	13	14	12	13	11	11	10
XXVIII	14	15	13	14	12	12	11
XXIX	15	16	14	15	13	13	12
XXX	16		15		14		
XXXI	17		16		15		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	214	214	214/3	213	213	213	213
I	13/10	13/11	12/12	10/1	8/2	2/3	29/3
II	14	14	13	11	9	3	30
III	15	15 ○	14	12	10	4	31
IV	16	16	15 ○	13 ○	11	5	1/4
V	17 ○	17	16	14	12 ○	6	2
VI	18	18	17	15	13	7	3
VII	19	19	18	16	14	8	4
VIII	20	20	19	17	15	9	5
IX	21	21	20	18	16	10	6
X	22	22	21	19	17	11	7
XI	23	23	22	20	18	12 ○	8
XII	24	24	23	21	19	13	9
XIII	25	25	24	22	20	14	10
XIV	26	26	ws25	23	21	15	11 ○
XV	27	27	26	24	22	16	
XVI	28	28	27	25	23	17	
XVII	29	29	28	26	24	18	
XVIII	30	30 •	29	27	25	19	
XIX	31 •	1/12	30 •	28	26	20	
XX	1/11	2	31	29 •	27 •	21	
XXI	2	3	1/1/213	30	28	22	
XXII	3	4	2	31	29	23	
XXIII	4	5	3	1/2	1/3	VE 24	
XXIV	5	6	4	2		25	
XXV	6	7	5	3		26	
XXVI	7	8	6	4		27	
XXVII	8	9	7	5		28 •	
XXVIII	9	10	8	6			
XXIX	10	11	9	7			
XXX	11						
XXXI	12						

C213 Consuls: Q. Fabius Maximus, Ti. Sempronius Gracchus

	MAR	APR	MAI	JUN	QUI	SEX
	213	213	213	213	213	213
I		29/4	28/5	28/6	27/7	27/8
II		30	29	29	28	28
III		1/5	30	30	29	29
IV		2	31	1/7	30	30
V		3	1/6	2	31	31
VI		4	2	3	1/8	1/9
VII		5	3	4	2	2
VIII		6	4	5	3	3
IX		7	5	6	4	4
X		8	6	7	5	5
XI		9	7	8	6	6 ○
XII		10 ○	8	9 ○	7 ○	7
XIII		11	9 ○	10	8	8
XIV		12	10	11	9	9
XV	12/4	13	11	12	10	10
XVI	13	14	12	13	11	11
XVII	14	15	13	14	12	12
XVIII	15	16	14	15	13	13
XIX	16	17	15	16	14	14
XX	17	18	16	17	15	15
XXI	18	19	17	18	16	16
XXII	19	20	18	19	17	17
XXIII	20	21	19	20	18	18
XXIV	21	22	20	21	19	19
XXV	22	23	21	22	20	20 ●
XXVI	23	24	22	23 ●	21 ●	21
XXVII	24	25 ●	23	24	22	22
XXVIII	25	26	24 ●	25	23	23
XXIX	26 ●	27	25	26	24	24
XXX	27		ss 26		25	
XXXI	28		27		26	

C213 Consuls: Q. Fabius Maximus, Ti. Sempronius Gracchus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	213	213	213	213/2	212	212	212
I	25/9	24/10	24/11	23/12	21/1	19/2	19/3
II	AE 26	25	25	ws 24	22	20	20
III	27	26	26	25	23	21	21
IV	28	27	27	26	24	22	22
V	29	28	28	27	25	23	23
VI	30	29	29	28	26	24	VE 24
VII	1/10	30	30	29	27	25	25
VIII	2	31	1/12	30	28	26	26
IX	3	1/11	2	31	29	27	27
X	4	2	3 ○	1/1/212	30	28	28
XI	5 ○	3	4	2 ○	31 ○	1/3	29
XII	6	4 ○	5	3	1/2	2 ○	30
XIII	7	5	6	4	2	3	31 ○
XIV	8	6	7	5	3	4	1/4
XV	9	7	8	6	4	5	
XVI	10	8	9	7	5	6	
XVII	11	9	10	8	6	7	
XVIII	12	10	11	9	7	8	
XIX	13	11	12	10	8	9	
XX	14	12	13	11	9	10	
XXI	15	13	14	12	10	11	
XXII	16	14	15	13	11	12	
XXIII	17	15	16	14	12	13	
XXIV	18	16	17	15	13	14	
XXV	19 ●	17	18 ●	16	14	15	
XXVI	20	18 ●	19	17 ●	15 ●	16	
XXVII	21	19	20	18	16	17 ●	
XXVIII	22	20	21	19	17	18	
XXIX	23	21	22	20	18		
XXX		22					
XXXI		23					

C212 Consuls: Q. Fulvius Flaccus, Ap. Claudius Pulcher

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	212	212	212	212	212	212	212
I		19/4	18/5	18/6	17/7	17/8	15/9
II		20	19	19	18	18	16
III		21	20	20	19	19	17
IV		22	21	21	20	20	18
V		23	22	22	21	21	19
VI		24	23	23	22	22	20
VII		25	24	24	23	23	21
VIII		26	25	25	24	24	22
IX		27	26	ss 26	25	25	23
X		28	27	27	26	26 ○	24
XI		29	28	28 ○	27 ○	27	25 ○
XII		30 ○	29 ○	29	28	28	AE 26
XIII		1/5	30	30	29	29	27
XIV		2	31	1/7	30	30	28
XV	2/4	3	1/6	2	31	31	29
XVI	3	4	2	3	1/8	1/9	30
XVII	4	5	3	4	2	2	1/10
XVIII	5	6	4	5	3	3	2
XIX	6	7	5	6	4	4	3
XX	7	8	6	7	5	5	4
XXI	8	9	7	8	6	6	5
XXII	9	10	8	9	7	7	6
XXIII	10	11	9	10	8	8	7
XXIV	11	12	10	11	9	9 •	8
XXV	12	13	11	12	10	10	9 •
XXVI	13	14	12	13 •	11 •	11	10
XXVII	14	15 •	13 •	14	12	12	11
XXVIII	15	16	14	15	13	13	12
XXIX	16 •	17	15	16	14	14	13
XXX	17		16		15		
XXXI	18		17		16		

C212 Consuls: Q. Fulvius Flaccus, Ap. Claudius Pulcher

(intercal. 23)

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	212	212	212/1	211	211	211	211
I	14/10	14/11	13/12	11/1	9/2	5/3	1/4
II	15	15	14	12	10	6 •	2
III	16	16	15	13	11	7	3
IV	17	17	16	14	12	8	4
V	18	18	17	15	13	9	5 •
VI	19	19	18	16	14	10	6
VII	20	20	19	17	15	11	7
VIII	21	21	20	18	16	12	8
IX	22	22	21	19	17	13	9
X	23	23 ○	22	20	18	14	10
XI	24 ○	24	23 ○	21 ○	19 ○	15	11
XII	25	25	ws24	22	20	16	12
XIII	26	26	25	23	21	17	13
XIV	27	27	26	24	22	18	14
XV	28	28	27	25	23	19	
XVI	29	29	28	26	24	20	
XVII	30	30	29	27	25	21 ○	
XVIII	31	1/12	30	28	26	22	
XIX	1/11	2	31	29	27	23	
XX	2	3	1/1/211	30	28	VE 24	
XXI	3	4	2	31	1/3	25	
XXII	4	5	3	1/2	2	26	
XXIII	5	6	4	2	3	27	
XXIV	6	7 •	5	3	4	28	
XXV	7 •	8	6 •	4 •		29	
XXVI	8	9	7	5		30	
XXVII	9	10	8	6		31	
XXVIII	10	11	9	7			
XXIX	11	12	10	8			
XXX	12						
XXXI	13						

C211 Consuls: Cn. Fulvius Centumalus, P. Sulcius Galba

	MAR	APR	MAI	JUN	QUI	SEX
	211	211	211	211	211	211
I		2/5	31/5	1/7	30/7	30/8 •
II		3	1/6	2 •	31	31
III		4 •	2	3	1/8 •	1/9
IV		5	3 •	4	2	2
V		6	4	5	3	3
VI		7	5	6	4	4
VII		8	6	7	5	5
VIII		9	7	8	6	6
IX		10	8	9	7	7
X		11	9	10	8	8
XI		12	10	11	9	9
XII		13	11	12	10	10
XIII		14	12	13	11	11
XIV		15	13	14	12	12
XV	15/4	16	14	15	13	13
XVI	16	17	15	16 ○	14	14 ○
XVII	17	18 ○	16	17	15 ○	15
XVIII	18	19	17 ○	18	16	16
XIX	19 ○	20	18	19	17	17
XX	20	21	19	20	18	18
XXI	21	22	20	21	19	19
XXII	22	23	21	22	20	20
XXIII	23	24	22	23	21	21
XXIV	24	25	23	24	22	22
XXV	25	26	24	25	23	23
XXVI	26	27	25	26	24	24
XXVII	27	28	ss 26	27	25	
XXVIII						
XXIX						
XXX						
XXXI						

C211 Consuls: Cn. Fulvius Centumalus, P. Sulpicius Galba

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	211	211	211	211/10	210	210	210
I	28/9	27/10	27/11	26/12 •	24/1	22/2	22/3
II	29 •	28 •	28	27	25 •	23 •	23
III	30	29	29	28	26	24	24
IV	1/10	30	30	29	27	25	VE 25 •
V	2	31	1/12	30	28	26	26
VI	3	1/11	2	31	29	27	27
VII	4	2	3	1/1/210	30	28	28
VIII	5	3	4	2	31	1/3	29
IX	6	4	5	3	1/2	2	30
X	7	5	6	4	2	3	31
XI	8	6	7	5	3	4	1/4
XII	9	7	8	6	4	5	2
XIII	10	8	9	7	5	6	3
XIV	11	9	10	8	6	7	4
XV	12	10	11	9	7	8	
XVI	13 ○	11	12 ○	10	8	9	
XVII	14	12 ○	13	11 ○	9 ○	10 ○	
XVIII	15	13	14	12	10	11	
XIX	16	14	15	13	11	12	
XX	17	15	16	14	12	13	
XXI	18	16	17	15	13	14	
XXII	19	17	18	16	14	15	
XXIII	20	18	19	17	15	16	
XXIV	21	19	20	18	16	17	
XXV	22	20	21	19	17	18	
XXVI	23	21	22	20	18	19	
XXVII	24	22	23	21	19	20	
XXVIII	25	23	24	22	20	21	
XXIX	26	24	25	23	21		
XXX		25					
XXXI		26 •					

C210 Consuls: M. Claudius Marcellus, M. Valerius Laevinus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	210	210	210	210	210	210	210
I		22/4	21/5	21/6	20/7	20/8 •	18/9 •
II		23 •	22	22 •	21 •	21	19
III		24	23 •	23	22	22	20
IV		25	24	24	23	23	21
V		26	25	25	24	24	22
VI		27	26	26	25	25	23
VII		28	27	ss 27	26	26	24
VIII		29	28	28	27	27	25
IX		30	29	29	28	28	26
X		1/5	30	30	29	29	AE 27
XI		2	31	1/7	30	30	28
XII		3	1/6	2	31	31	29
XIII		4	2	3	1/8	1/9	30
XIV		5	3	4	2	2	1/10
XV	5/4	6	4	5	3	3 ○	2 ○
XVI	6	7	5	6 ○	4 ○	4	3
XVII	7	8 ○	6 ○	7	5	5	4
XVIII	8	9	7	8	6	6	5
XIX	9 ○	10	8	9	7	7	6
XX	10	11	9	10	8	8	7
XXI	11	12	10	11	9	9	8
XXII	12	13	11	12	10	10	9
XXIII	13	14	12	13	11	11	10
XXIV	14	15	13	14	12	12	11
XXV	15	16	14	15	13	13	12
XXVI	16	17	15	16	14	14	13
XXVII	17	18	16	17	15	15	14
XXVIII	18	19	17	18	16	16	15
XXIX	19	20	18	19	17	17	16
XXX	20		19		18		
XXXI	21		20		19		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	210	210	210/09	209	209	209	209
I	17/10	17/11	16/12●	14/1 ●	12/2 ●	6/3	2/4
II	18 ●	18	17	15	13	7	3
III	19	19	18	16	14	8	4
IV	20	20	19	17	15	9	5
V	21	21	20	18	16	10	6
VI	22	22	21	19	17	11	7
VII	23	23	22	20	18	12	8
VIII	24	24	23	21	19	13 ●	9
IX	25	25	ws24	22	20	14	10
X	26	26	25	23	21	15	11
XI	27	27	26	24	22	16	12 ●
XII	28	28	27	25	23	17	13
XIII	29	29	28	26	24	18	14
XIV	30	30	29	27	25	19	15
XV	31	1/12 ○	30	28	26	20	
XVI	1/11 ○	2	31 ○	29 ○	27	21	
XVII	2	3	1/1/209	30	28 ○	22	
XVIII	3	4	2	31	29	23	
XIX	4	5	3	1/2	1/3	ve 24	
XX	5	6	4	2	2	25	
XXI	6	7	5	3	3	26	
XXII	7	8	6	4	4	27	
XXIII	8	9	7	5	5	28 ○	
XXIV	9	10	8	6		29	
XXV	10	11	9	7		30	
XXVI	11	12	10	8		31	
XXVII	12	13	11	9		1/4	
XXVIII	13	14	12	10			
XXIX	14	15	13	11			
XXX	15						
XXXI	16 ●						

C209 Consuls: Q. Fabius Maximus, Q. Fulvius Flaccus

	MAR	APR	MAI	JUN	QUI	SEX
	209	209	209	209	209	209
I		3/5	1/6	2/7	31/7	31/8
II		4	2	3	1/8	1/9
III		5	3	4	2	2
IV		6	4	5	3	3
V		7	5	6	4	4
VI		8	6	7	5	5
VII		9	7	8	6	6
VIII		10	8	9 •	7	7 •
IX		11 •	9	10	8 •	8
X		12	10 •	11	9	9
XI		13	11	12	10	10
XII		14	12	13	11	11
XIII		15	13	14	12	12
XIV		16	14	15	13	13
XV	16/4	17	15	16	14	14
XVI	17	18	16	17	15	15
XVII	18	19	17	18	16	16
XVIII	19	20	18	19	17	17
XIX	20	21	19	20	18	18
XX	21	22	20	21	19	19
XXI	22	23	21	22	20	20
XXII	23	24	22	23	21	21 ○
XXIII	24	25	23	24 ○	22 ○	22
XXIV	25	26 ○	24 ○	25	23	23
XXV	26	27	25	26	24	24
XXVI	27 ○	28	ss 26	27	25	25
XXVII	28	29	27	28	26	AE 26
XXVIII	29	30	28	29	27	27
XXIX	30	31	29	30	28	28
XXX	1/5		30		29	
XXXI	2		1/7		30	

C209 Consuls: Q. Fabius Maximus, Q. Fulvius Flaccus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	209	209	209	209/8	208	208	208
I	29/9	28/10	28/11	27/12	25/1	23/2	23/3
II	30	29	29	28	26	24	VE 24
III	1/10	30	30	29	27	25	25
IV	2	31	1/12	30	28	26	26
V	3	1/11	2	31	29	27	27
VI	4	2	3	1/1/208	30	28	28
VII	5	3	4 •	2	31	1/3	29
VIII	6 •	4	5	3 •	1/2 •	2 •	30
IX	7	5 •	6	4	2	3	31
X	8	6	7	5	3	4	1/4 •
XI	9	7	8	6	4	5	2
XII	10	8	9	7	5	6	3
XIII	11	9	10	8	6	7	4
XIV	12	10	11	9	7	8	5
XV	13	11	12	10	8	9	
XVI	14	12	13	11	9	10	
XVII	15	13	14	12	10	11	
XVIII	16	14	15	13	11	12	
XIX	17	15	16	14	12	13	
XX	18	16	17	15	13	14	
XXI	19	17	18	16	14	15	
XXII	20 ○	18	19 ○	17	15	16	
XXIII	21	19 ○	20	18 ○	16 ○	17	
XXIV	22	20	21	19	17	18 ○	
XXV	23	21	22	20	18	19	
XXVI	24	22	23	21	19	20	
XXVII	25	23	ws24	22	20	21	
XXVIII	26	24	25	23	21	22	
XXIX	27	25	26	24	22		
XXX		26					
XXXI		27					

C208 Consuls: M. Claudius Marcellus, T. Quinctius Crispinus

	MAR	APR	MAI	JUN	QUI	SEX
	208	208	208	208	208	208
I		23/4	22/5	22/6	21/7	21/8
II		24	23	23	22	22
III		25	24	24	23	23
IV		26	25	25	24	24
V		27	26	ss 26	25	25
VI		28	27	27	26	26
VII		29	28	28 •	27	27 •
VIII		30 •	29	29	28 •	28
IX		1/5	30 •	30	29	29
X		2	31	1/7	30	30
XI		3	1/6	2	31	31
XII		4	2	3	1/8	1/9
XIII		5	3	4	2	2
XIV		6	4	5	3	3
XV	6/4	7	5	6	4	4
XVI	7	8	6	7	5	5
XVII	8	9	7	8	6	6
XVIII	9	10	8	9	7	7
XIX	10	11	9	10	8	8
XX	11	12	10	11	9	9
XXI	12	13	11	12	10	10 ○
XXII	13	14	12	13 ○	11	11
XXIII	14	15	13	14	12 ○	12
XXIV	15	16 ○	14 ○	15	13	13
XXV	16 ○	17	15	16	14	14
XXVI	17	18	16	17	15	15
XXVII	18	19	17	18	16	16
XXVIII	19	20	18	19	17	17
XXIX	20	21	19	20	18	18
XXX	21		20		19	
XXXI	22		21		20	

C208 Consuls: M. Claudius Marcellus, T. Quinctius Crispinus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	208	208	208	208/7	207	207	207
I	19/9	18/10	18/11	17/12	15/1	13/2	13/3
II	20	19	19	18	16	14	14
III	21	20	20	19	17	15	15
IV	22	21	21	20	18	16	16
V	23	22	22	21	19	17	17
VI	24	23	23	22	20	18	18
VII	25 •	24	24 •	23 •	21	19	19
VIII	AE 26	25 •	25	WS 24	22 •	20 •	20
IX	27	26	26	25	23	21	21 •
X	28	27	27	26	24	22	22
XI	29	28	28	27	25	23	23
XII	30	29	29	28	26	24	VE 24
XIII	1/10	30	30	29	27	25	25
XIV	2	31	1/12	30	28	26	26
XV	3	1/11	2	31	29	27	
XVI	4	2	3	1/1/207	30	28	
XVII	5	3	4	2	31	1/3	
XVIII	6	4	5	3	1/2	2	
XIX	7	5	6	4	2	3	
XX	8	6	7	5	3	4	
XXI	9	7	8 ○	6	4	5	
XXII	10 ○	8 ○	9	7 ○	5 ○	6	
XXIII	11	9	10	8	6	7	
XXIV	12	10	11	9	7	8	
XXV	13	11	12	10	8	9	
XXVI	14	12	13	11	9	10	
XXVII	15	13	14	12	10	11	
XXVIII	16	14	15	13	11	12	
XXIX	17	15	16	14	12		
XXX		16					
XXXI		17					

C207 Consuls: C. Claudius Nero, M. Livius Salinator

	MAR	APR	MAI	JUN	QUI	SEX
	207	207	207	207	207	207
I		13/4	12/5	12/6	11/7	11/8
II		14	13	13	12	12
III		15	14	14	13	13
IV		16	15	15	14	14
V		17	16	16	15	15
VI		18	17	17	16	16 •
VII		19	18	18 •	17 •	17
VIII		20 •	19 •	19	18	18
IX		21	20	20	19	19
X		22	21	21	20	20
XI		23	22	22	21	21
XII		24	23	23	22	22
XIII		25	24	24	23	23
XIV		26	25	25	24	24
XV	27/3	27	26	ss 26	25	25
XVI	28	28	27	27	26	26
XVII	29	29	28	28	27	27
XVIII	30	30	29	29	28	28
XIX	31	1/5	30	30	29	29
XX	1/4	2	31	1/7	30	30
XXI	2	3	1/6	2	31	31 ○
XXII	3	4	2	3 ○	1/8 ○	1/9
XXIII	4	5 ○	3	4	2	2
XXIV	5	6	4 ○	5	3	3
XXV	6 ○	7	5	6	4	4
XXVI	7	8	6	7	5	5
XXVII	8	9	7	8	6	6
XXVIII	9	10	8	9	7	7
XXIX	10	11	9	10	8	8
XXX	11		10		9	
XXXI	12		11		10	

C207 Consuls: C. Claudius Nero, M. Livius Salinator

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	207	207	207	207/6	206	206	206
I	9/9	8/10	8/11	7/12	5/1	3/2	3/3
II	10	9	9	8	6	4	4
III	11	10	10	9	7	5	5
IV	12	11	11	10	8	6	6
V	13	12	12	11	9	7	7
VI	14	13	13 •	12	10	8	8
VII	15 •	14 •	14	13 •	11 •	9	9
VIII	16	15	15	14	12	10 •	10
IX	17	16	16	15	13	11	11 •
X	18	17	17	16	14	12	12
XI	19	18	18	17	15	13	13
XII	20	19	19	18	16	14	14
XIII	21	20	20	19	17	15	15
XIV	22	21	21	20	18	16	16
XV	23	22	22	21	19	17	
XVI	24	23	23	22	20	18	
XVII	25	24	24	23	21	19	
XVIII	26	25	25	ws 24	22	20	
XIX	AE 27	26	26	25	23	21	
XX	28	27	27 ○	26	24	22	
XXI	29 ○	28	28	27 ○	25 ○	23	
XXII	30	29 ○	29	28	26	24 ○	
XXIII	1/10	30	30	29	27	25	
XXIV	2	31	1/12	30	28	26	
XXV	3	1/11	2	31	29	27	
XXVI	4	2	3	1/1/206	30	28	
XXVII	5	3	4	2	31	1/3	
XXVIII	6	4	5	3	1/2	2	
XXIX	7	5	6	4	2		
XXX		6					
XXXI		7					

C206 Consuls: L. Veterius Philo, Q. Caecilius Metellus

	MAR	APR	MAI	JUN	QUI	SEX
	206	206	206	206	206	206
I		3/4	2/5	2/6	1/7	1/8
II		4	3	3	2	2
III		5	4	4	3	3
IV		6	5	5	4	4
V		7	6	6	5	5 •
VI		8	7	7 •	6 •	6
VII		9 •	8	8	7	7
VIII		10	9 •	9	8	8
IX		11	10	10	9	9
X		12	11	11	10	10
XI		13	12	12	11	11
XII		14	13	13	12	12
XIII		15	14	14	13	13
XIV		16	15	15	14	14
XV	17/3	17	16	16	15	15
XVI	18	18	17	17	16	16
XVII	19	19	18	18	17	17
XVIII	20	20	19	19	18	18
XIX	21	21	20	20	19	19
XX	22	22	21	21	20	20 ○
XXI	23	23	22	22	21	21
XXII	VE 24	24 ○	23	23 ○	22 ○	22
XXIII	25	25	24 ○	24	23	23
XXIV	26 ○	26	25	25	24	24
XXV	27	27	26	26	25	25
XXVI	28	28	27	SS 27	26	26
XXVII	29	29	28	28	27	27
XXVIII	30	30	29	29	28	28
XXIX	31	1/5	30	30	29	29
XXX	1/4		31		30	
XXXI	2		1/6		31	

C206 Consuls: L. Veterius Philo, Q. Caecilius Metellus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	206	206	206	206	206/5	205	205
I	30/8	28/9	29/10	27/11	26/12	24/1	21/2
II	31	29	30	28	27	25	22
III	1/9	30	31	29	28	26	23
IV	2	1/10	1/11	30	29	27	24
V	3	2	2 •	1/12	30	28	25
VI	4 •	3 •	3	2 •	31	29	26
VII	5	4	4	3	1/1/205•	30 •	27
VIII	6	5	5	4	2	31	28
IX	7	6	6	5	3	1/2	29 •
X	8	7	7	6	4	2	1/3
XI	9	8	8	7	5	3	2
XII	10	9	9	8	6	4	3
XIII	11	10	10	9	7	5	4
XIV	12	11	11	10	8	6	5
XV	13	12	12	11	9	7	
XVI	14	13	13	12	10	8	
XVII	15	14	14	13	11	9	
XVIII	16	15	15	14	12	10	
XIX	17	16	16	15	13	11	
XX	18	17	17 ○	16 ○	14	12	
XXI	19 ○	18 ○	18	17	15 ○	13 ○	
XXII	20	19	19	18	16	14	
XXIII	21	20	20	19	17	15	
XXIV	22	21	21	20	18	16	
XXV	23	22	22	21	19	17	
XXVI	24	23	23	22	20	18	
XXVII	25	24	24	23	21	19	
XXVIII	26	25	25	ws 24	22	20	
XXIX	AE 27	26	26	25	23		
XXX		27					
XXXI		28					

C205 Consuls: P. Cornelius Scipio Africanus, P. Licinius Crassus

	MAR	APR	MAI	JUN	QUI	SEX
	205	205	205	205	205	205
I		23/3	21/4	22/5	20/6	21/7
II		VE 24	22	23	21	22
III		25	23	24	22	23
IV		26	24	25	23	24 •
V		27	25	26	24	25
VI		28	26	27 •	25 •	26
VII		29 •	27 •	28	SS 26	27
VIII		30	28	29	27	28
IX		31	29	30	28	29
X		1/4	30	31	29	30
XI		2	1/5	1/6	30	31
XII		3	2	2	1/7	1/8
XIII		4	3	3	2	2
XIV		5	4	4	3	3
XV	6/3	6	5	5	4	4
XVI	7	7	6	6	5	5
XVII	8	8	7	7	6	6
XVIII	9	9	8	8	7	7
XIX	10	10	9	9	8	8
XX	11	11	10	10	9	9 ○
XXI	12	12 ○	11	11 ○	10 ○	10
XXII	13	13	12 ○	12	11	11
XXIII	14 ○	14	13	13	12	12
XXIV	15	15	14	14	13	13
XXV	16	16	15	15	14	14
XXVI	17	17	16	16	15	15
XXVII	18	18	17	17	16	16
XXVIII	19	19	18	18	17	17
XXIX	20	20	19	19	18	18
XXX	21		20		19	
XXXI	22		21		20	

C205 Consuls: P. Cornelius Scipio Africanus, P. Licinius Crassus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	205	205	205	205/4	204	204	204
I	19/8	17/9	18/10	16/11	15/12	13/1	10/2
II	20	18	19	17	16	14	11
III	21	19	20	18	17	15	12
IV	22	20	21 •	19	18	16	13
V	23 •	21 •	22	20 •	19	17	14
VI	24	22	23	21	20 •	18 •	15
VII	25	23	24	22	21	19	16
VIII	26	24	25	23	22	20	17 •
IX	27	25	26	24	23	21	18
X	28	AB 26	27	25	WS 24	22	19
XI	29	27	28	26	25	23	20
XII	30	28	29	27	26	24	21
XIII	31	29	30	28	27	25	22
XIV	1/9	30	31	29	28	26	23
XV	2	1/10	1/11	30	29	27	
XVI	3	2	2	1/12	30	28	
XVII	4	3	3	2	31	29	
XVIII	5	4	4	3	1/1/204	30	
XIX	6	5	5 ○	4	2	31	
XX	7 ○	6	6	5 ○	3 ○	1/2	
XXI	8	7 ○	7	6	4	2 ○	
XXII	9	8	8	7	5	3	
XXIII	10	9	9	8	6	4	
XXIV	11	10	10	9	7	5	
XXV	12	11	11	10	8	6	
XXVI	13	12	12	11	9	7	
XXVII	14	13	13	12	10	8	
XXVIII	15	14	14	13	11	9	
XXIX	16	15	15	14	12		
XXX		16					
XXXI		17					

C204 Consuls: M. Cornelius Cethegus, P. Sempronius Tuditanus

	MAR	APR	MAI	JUN	QUI	SEX
	204	204	204	204	204	204
I		13/3	11/4	12/5	10/6	11/7
II		14	12	13	11	12
III		15	13	14	12	13
IV		16	14	15	13	14 •
V		17	15	16 •	14	15
VI		18	16	17	15 •	16
VII		19 •	17 •	18	16	17
VIII		20	18	19	17	18
IX		21	19	20	18	19
X		22	20	21	19	20
XI		23	21	22	20	21
XII		VE 24	22	23	21	22
XIII		25	23	24	22	23
XIV		26	24	25	23	24
XV	24/2	27	25	26	24	25
XVI	25	28	26	27	25	26
XVII	26	29	27	28	SS 26	27
XVIII	27	30	28	29	27	28
XIX	28	31	29	30	28	29 ○
XX	1/3	1/4	30	31 ○	29 ○	30
XXI	2	2 ○	1/5 ○	1/6	30	31
XXII	3 ○	3	2	2	1/7	1/8
XXIII	4	4	3	3	2	2
XXIV	5	5	4	4	3	3
XXV	6	6	5	5	4	4
XXVI	7	7	6	6	5	5
XXVII	8	8	7	7	6	6
XXVIII	9	9	8	8	7	7
XXIX	10	10	9	9	8	8
XXX	11		10		9	
XXXI	12		11		10	

C204 Consuls: M. Cornelius Cethegus, P. Sempronius Tuditanus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	204	204	204	204	204/3	203	203
I	9/8	7/9	8/10	6/11	5/12	3/1	31/1
II	10	8	9	7	6	4	1/2
III	11	9	10 •	8	7	5	2
IV	12 •	10	11	9 •	8	6	3
V	13	11 •	12	10	9 •	7 •	4
VI	14	12	13	11	10	8	5
VII	15	13	14	12	11	9	6 •
VIII	16	14	15	13	12	10	7
IX	17	15	16	14	13	11	8
X	18	16	17	15	14	12	9
XI	19	17	18	16	15	13	10
XII	20	18	19	17	16	14	11
XIII	21	19	20	18	17	15	12
XIV	22	20	21	19	18	16	13
XV	23	21	22	20	19	17	
XVI	24	22	23	21	20	18	
XVII	25	23	24	22	21	19	
XVIII	26	24	25	23	22	20	
XIX	27	25	26 ○	24 ○	23	21	
XX	28 ○	AE 26 ○	27	25	ws 24 ○	22 ○	
XXI	29	27	28	26	25	23	
XXII	30	28	29	27	26	24	
XXIII	31	29	30	28	27	25	
XXIV	1/9	30	31	29	28	26	
XXV	2	1/10	1/11	30	29	27	
XXVI	3	2	2	1/12	30	28	
XXVII	4	3	3	2	31	29	
XXVIII	5	4	4	3	1/1/203	30	
XXIX	6	5	5	4	2		
XXX		6					
XXXI		7					

C203 Consuls: Cn. Servilius Caepio, C. Servilius Geminus

	MAR	APR	MAI	JUN	QUI	SEX
	203	203	203	203	203	203
I		3/3	1/4	2/5	31/5	1/7
II		4	2	3	1/6	2
III		5	3	4	2	3
IV		6	4	5	3	4 •
V		7	5	SE 6 •	4 •	5
VI		8 •	6	7	5	6
VII		9	7 •	8	6	7
VIII		10	8	9	7	8
IX		11	9	10	8	9
X		12	10	11	9	10
XI		13	11	12	10	11
XII		14	12	13	11	12
XIII		15	13	14	12	13
XIV		16	14	15	13	14
XV	14/2	17	15	16	14	15
XVI	15	18	16	17	15	16
XVII	16	19	17	18	16	17
XVIII	17	20	18	19	17	18 ○
XIX	18	21	19	20 ○	18 ○	19
XX	19	22 ○	20 ○	21	19	20
XXI	20	23	21	22	20	21
XXII	21 ○	VE 24	22	23	21	22
XXIII	22	25	23	24	22	23
XXIV	23	26	24	25	23	24
XXV	24	27	25	26	24	25
XXVI	25	28	26	27	25	26
XXVII	26	29	27	28	SS 26	27
XXVIII	27	30	28	29	27	28
XXIX	28	31	29	30	28	29
XXX	1/3		30		29	
XXXI	2		1/5		30	

C203 Consuls: Cn. Servilius Caepio, C. Servilius Geminus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	203	203	203	203	203	203/2	202
I	30/7	28/8	28/9	27/10	25/11	ws 24/12	21/1
II	31	29	29	28	26	25	22
III	1/8	30	30 •	29 •	27	26	23
IV	2 •	31 •	1/10	30	28 •	27	24
V	3	1/9	2	31	29	28	25
VI	4	2	3	1/11	30	29	26 •
VII	5	3	4	2	1/12	30	27
VIII	6	4	5	3	2	31	28
IX		5	6	4	3	1/1/202	29
X		6	7	5	4	2	30
XI	9	7	8	6	5	3	31
XII	10	8	9	7	6	4	1/2
XIII	11	9	10	8	7	5	2
XIV	12	10	11	9	8	6	3
XV	13	11	12	10	9	7	
XVI	14	12	13	11	10	8	
XVII	15	13	14	12	11	9	
XVIII	16	14	15 ○	13	12	10	
XIX	17 ○	15 ○	16	14 ○	13 ○	11	
XX	18	16	17	15	14	12 ○	
XXI	19	17	18	16	15	13	
XXII	20	18	19	17	16	14	
XXIII	21	19	20	18	17	15	
XXIV	22	20	21	19	18	16	
XXV	23	21	22	20	19	17	
XXVI	24	22	23	21	20	18	
XXVII	25	23	24	22	21	19	
XXVIII	26	24	25	23	22	20	
XXIX	27	25	26	24	23		
XXX		26					
XXXI		AE 27					

C202 Consuls: M. Servilius Geminus, Ti. Claudius Nero

	MAR	APR	MAI	JUN	QUI	SEX
	202	202	202	202	202	202
I		21/2	22/3	22/4	21/5	21/6
II		22	23	23	22	22
III		23	VE 24	24	23	23 •
IV		24	25	25 •	24	24
V		25 •	26	26	25 •	25
VI		26	27 •	27	26	26
VII		27	28	28	27	SS 27
VIII		28	29	29	28	28
IX		1/3	30	30	29	29
X		2	31	1/5	30	30
XI		3	1/4	2	31	1/7
XII		4	2	3	1/6	2
XIII		5	3	4	2	3
XIV		6	4	5	3	4
XV	4/2	7	5	6	4	5
XVI	5	8	6	7	5	6
XVII	6	9	7	8	6	7 ○
XVIII	7	10	8	9 ○	7	8
XIX	8	11	9	10	8 ○	9
XX	9	12 ○	10 ○	11	9	10
XXI	10 ○	13	11	12	10	11
XXII	11	14	12	13	11	12
XXIII	12	15	13	14	12	13
XXIV	13	16	14	15	13	14
XXV	14	17	15	16	14	15
XXVI	15	18	16	17	15	16
XXVII	16	19	17	18	16	17
XXVIII	17	20	18	19	17	18
XXIX	18	21	19	20	18	19
XXX	19		20		19	
XXXI	20		21		20	

C202 Consuls: M. Servilius Geminus, Ti. Claudius Nero

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	202	202	202	202	202	202/1	201
I	20/7	18/8	18/9	17/10	15/11	14/12	11/1
II	21	19	19 •	18	16	15	12
III	22	20	20	SE 19 •	17 •	16	13
IV	23 •	21 •	21	20	18	17 •	14
V	24	22	22	21	19	18	15 •
VI	25	23	23	22	20	19	16
VII	26	24	24	23	21	20	17
VIII	27	25	25	24	22	21	18
IX	28	26	26	25	23	22	19
X	29	27	AE 27	26	24	23	20
XI	30	28	28	27	25	ws 24	21
XII	31	29	29	28	26	25	22
XIII	1/8	30	30	29	27	26	23
XIV	2	31	1/10	30	28	27	24
XV	3	1/9	2	31	29	28	
XVI	4	2	3	1/11	30	29	
XVII	5	3	4 ○	2	1/12	30	
XVIII	6 ○	4 ○	5	3 ○	2	31	
XIX	7	5	6	4	3 ○	1/1/201○	
XX	8	6	7	5	4	2	
XXI	9	7	8	6	5	3	
XXII	10	8	9	7	6	4	
XXIII	11	9	10	8	7	5	
XXIV	12	10	11	9	8	6	
XXV	13	11	12	10	9	7	
XXVI	14	12	13	11	10	8	
XXVII	15	13	14	12	11	9	
XXVIII	16	14	15	13	12	10	
XXIX	17	15	16	14	13		
XXX		16					
XXXI		17					

C201 Consuls: Cn. Cornelius Lentulus, P. Aelius Paetus

	MAR	APR	MAI	JUN	QUI	SEX
	201	201	201	201	201	201
I		11/2	11/3	11/4	10/5	10/6
II		12	12	12	11	11
III		13	13	13 •	12	12 •
IV		14 •	14	14	13 •	13
V		15	15 •	15	14	14
VI		16	16	16	15	15
VII		17	17	17	16	16
VIII		18	18	18	17	17
IX		19	19	19	18	18
X		20	20	20	19	19
XI		21	21	21	20	20
XII		22	22	22	21	21
XIII		23	23	23	22	22
XIV		24	VE 24	24	23	23
XV	25/1	25	25	25	24	24
XVI	26	26	26	26	25	25
XVII	27	27	27	27	26	SS 26 ○
XVIII	28	28	28	28 ○	27 ○	27
XIX	29	29 ○	29	29	28	28
XX	30	1/3	30 ○	30	29	29
XXI	31 ○	2	31	1/5	30	30
XXII	1/2	3	1/4	2	31	1/7
XXIII	2	4	2	3	1/6	2
XXIV	3	5	3	4	2	3
XXV	4	6	4	5	3	4
XXVI	5	7	5	6	4	5
XXVII	6	8	6	7	5	6
XXVIII	7	9	7	8	6	7
XXIX	8	10	8	9	7	8
XXX	9		9		8	
XXXI	10		10		9	

C201 Consuls: Cn. Cornelius Lentulus, P. Aelius Paetus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	201	201	201	201	201	201	201/200
I	9/7	7/8	7/9	6/10	4/11	3/12	31/12
II	10	8	8 •	7	5	4	1/1/200
III	11 •	9	9	8 •	6 •	5 •	2
IV	12	10 •	10	9	7	6	3
V	13	11	11	10	8	7	4 •
VI	14	12	12	11	9	8	5
VII	15	13	13	12	10	9	6
VIII	16	14	14	13	11	10	7
IX	17	15	15	14	12	11	8
X	18	16	16	15	13	12	9
XI	19	17	17	16	14	13	10
XII	20	18	18	17	15	14	11
XIII	21	19	19	18	16	15	12
XIV	22	20	20	19	17	16	13
XV	23	21	21	20	18	17	
XVI	24	22	22 ○	21	19	18	
XVII	25 ○	23	23	22 ○	20	19	
XVIII	26	24 ○	24	23	21 ○	20	
XIX	27	25	25	24	22	21 ○	
XX	28	26	AE 26	25	23	22	
XXI	29	27	27	26	24	23	
XXII	30	28	28	27	25	ws 24	
XXIII	31	29	29	28	26	25	
XXIV	1/8	30	30	29	27	26	
XXV	2	31	1/10	30	28	27	
XXVI	3	1/9	2	31	29	28	
XXVII	4	2	3	1/11	30	29	
XXVIII	5	3	4	2	1/12	30	
XXIX	6	4	5	3	2		
XXX		5					
XXXI		6					

C200 Consuls: P. Sulpicius Galba, C. Aurelius Cotta

	MAR	APR	MAI	JUN	QUI	SEX
	200	200	200	200	200	200
I		31/1	1/3	1/4	30/4	31/5
II		1/2	2	2 •	1/5	1/6 •
III		2 •	3	3	2 •	2
IV		3	4 •	4	3	3
V		4	5	5	4	4
VI		5	6	6	5	5
VII		6	7	7	6	6
VIII		7	8	8	7	7
IX		8	9	9	8	8
X		9	10	10	9	9
XI		10	11	11	10	10
XII		11	12	12	11	11
XIII		12	13	13	12	12
XIV		13	14	14	13	13
XV	14/1	14	15	15	14	14
XVI	15	15	16	16	15	15 ○
XVII	16	16	17	17	16	16
XVIII	17	17	18	18 ○	17 ○	17
XIX	18	18 ○	19 ○	19	18	18
XX	19 ○	19	20	20	19	19
XXI	20	20	21	21	20	20
XXII	21	21	22	22	21	21
XXIII	22	22	23	23	22	22
XXIV	23	23	VE 24	24	23	23
XXV	24	24	25	25	24	24
XXVI	25	25	26	26	25	25
XXVII	26	26	27	27	26	ss 26
XXVIII	27	27	28	28	27	27
XXIX	28	28	29	29	28	28
XXX	29		30		29	
XXXI	30		31		30	

C200 Consuls: P. Sulpicius Galba, C. Aurelius Cotta

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	200	200	200	200	200	200	200/199
I	29/6	28/7	28/8 • AE	26/9	25/10	23/11	21/12
II	30 •	29	29	27 •	26	24	22
III	1/7	30 •	30	28	27 •	25 •	23
IV	2	31	31	29	28	26	ws 24
V	3	1/8	1/9	30	29	27	25 •
VI	4	2	2	1/10	30	28	26
VII	5	3	3	2	31	29	27
VIII	6	4	4	3	1/11	30	28
IX	7	5	5	4	2	1/12	29
X	8	6	6	5	3	2	30
XI	9	7	7	6	4	3	31
XII	10	8	8	7	5	4	1/1/199
XIII	11	9	9	8	6	5	2
XIV	12	10	10	9	7	6	3
XV	13	11	11 ○	10	8	7	
XVI	14	12	12	11 ○	9	8	
XVII	15 ○	13 ○	13	12	10 ○	9 ○	
XVIII	16	14	14	13	11	10	
XIX	17	15	15	14	12	11	
XX	18	16	16	15	13	12	
XXI	19	17	17	16	14	13	
XXII	20	18	18	17	15	14	
XXIII	21	19	19	18	16	15	
XXIV	22	20	20	19	17	16	
XXV	23	21	21	20	18	17	
XXVI	24	22	22	21	19	18	
XXVII	25	23	23	22	20	19	
XXVIII	26	24	24	23	21	20	
XXIX	27	25	25	24	22		
XXX		26					
XXXI		27					

C199 Consuls: L. Cornelius Lentulus, P. Villius Tappulus

	MAR	APR	MAI	JUN	QUI	SEX
	199	199	199	199	199	199
I		21/1	19/2	22/3	20/4	21/5 •
II		22	20	23 •	21 •	22
III		23 •	21 •	VE 24	22	23
IV		24	22	25	23	24
V		25	23	26	24	25
VI		26	24	27	25	26
VII		27	25	28	26	27
VIII		28	26	29	27	28
IX		29	27	30	28	29
X		30	28	31	29	30
XI		31	1/3	1/4	30	31
XII		1/2	2	2	1/5	1/6
XIII		2	3	3	2	2
XIV		3	4	4	3	3
XV	4/1	4	5	5	4	4
XVI	5	5	6	6	5	5 ○
XVII	6	6	7	7 ○	6	6
XVIII	7	7 ○	8	8	7 ○	7
XIX	8 ○	8	9 ○	9	8	8
XX	9	9	10	10	9	9
XXI	10	10	11	11	10	10
XXII	11	11	12	12	11	11
XXIII	12	12	13	13	12	12
XXIV	13	13	14	14	13	13
XXV	14	14	15	15	14	14
XXVI	15	15	16	16	15	15
XXVII	16	16	17	17	16	16
XXVIII	17	17	18	18	17	17
XXIX	18	18	19	19	18	18
XXX	19		20		19	
XXXI	20		21		20	

C199 Consuls: L. Cornelius Lentulus, P. Villius Tappulus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	199	199	199	199	199	199	199
I	19/6 •	18/7	18/8 •	16/9 •	15/10	13/11	11/12
II	20	19 •	19	17	16 •	14	12
III	21	20	20	18	17	15 •	13
IV	22	21	21	19	18	16	14 •
V	23	22	22	20	19	17	15
VI	24	23	23	21	20	18	16
VII	25	24	24	22	21	19	17
VIII	ss 26	25	25	23	22	20	18
IX	27	26	26	24	23	21	19
X	28	27	27	25	24	22	20
XI	29	28	28	26	25	23	21
XII	30	29	29	AE 27	26	24	22
XIII	1/7	30	30	28	27	25	23
XIV	2	31	31	29	28	26	ws 24
XV	3	1/8	1/9 ○	30	29	27	
XVI	4 ○	2	2	1/10 ○	30 ○	28	
XVII	5	3 ○	3	2	31	29 ○	
XVIII	6	4	4	3	1/11	30	
XIX	7	5	5	4	2	1/12	
XX	8	6	6	5	3	2	
XXI	9	7	7	6	4	3	
XXII	10	8	8	7	5	4	
XXIII	11	9	9	8	6	5	
XXIV	12	10	10	9	7	6	
XXV	13	11	11	10	8	7	
XXVI	14	12	12	11	9	8	
XXVII	15	13	13	12	10	9	
XXVIII	16	14	14	13	11	10	
XXIX	17	15	15	14	12		
XXX		16					
XXXI		17					

C198 Consuls: Sex. Aelius Paetus Catus, T. Quinctius Flaminius

	MAR	APR	MAI	JUN	QUI	SEX
	199/8	198	198	198	198	198
I		11/1	9/2	12/3 •	10/4	11/5
II		12	10	13	11 •	12
III		13 •	11 •	14	12	13
IV		14	12	15	13	14
V		15	13	16	14	15
VI		16	14	17	15	16
VII		17	15	18	16	17
VIII		18	16	19	17	18
IX		19	17	20	18	19
X		20	18	21	19	20
XI		21	19	22	20	21
XII		22	20	23	21	22
XIII		23	21	VE 24	22	23
XIV		24	22	25	23	24
XV	25/12	25	23	26	24	25
XVI	26	26	24	27	25	26 ○
XVII	27	27 ○	25	28 ○	26 ○	27
XVIII	28 ○	28	26 ○	29	27	28
XIX	29	29	27	30	28	29
XX	30	30	28	31	29	30
XXI	31	31	1/3	1/4	30	31
XXII	1/1/198	1/2	2	2	1/5	1/6
XXIII	2	2	3	3	2	2
XXIV	3	3	4	4	3	3
XXV	4	4	5	5	4	4
XXVI	5	5	6	6	5	5
XXVII	6	6	7	7	6	6
XXVIII	7	7	8	8	7	7
XXIX	8	8	9	9	8	8
XXX	9		10		9	
XXXI	10		11		10 •	

C198 Consuls: Sex. Aelius Paetus Catus, T. Quinctius Flaminius

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	198	198	198	198	198	198	198
I	9/6 •	8/7 •	8/8	6/9	5/10 •	3/11	1/12
II	10	9	9	7	6	4 •	2
III	11	10	10	8	7	5	3
IV	12	11	11	9	8	6	4 •
V	13	12	12	10	9	7	5
VI	14	13	13	11	10	8	6
VII	15	14	14	12	11	9	7
VIII	16	15	15	13	12	10	8
IX	17	16	16	14	13	11	9
X	18	17	17	15	14	12	10
XI	19	18	18	16	15	13	11
XII	20	19	19	17	16	14	12
XIII	21	20	20	18	17	15	13
XIV	22	21	21	19	18	16	14
XV	23	22	22 ○	20 ○	19	17	
XVI	24 ○	23 ○	23	21	20 ○	18 ○	
XVII	25	24	24	22	21	19	
XVIII	ss 26	25	25	23	22	20	
XIX	27	26	26	24	23	21	
XX	28	27	AE 27	25	24	22	
XXI	29	28	28	26	25	23	
XXII	30	29	29	27	26	24	
XXIII	1/7	30	30	28	27	25	
XXIV	2	31	31	29	28	26	
XXV	3	1/8	1/9	30	29	27	
XXVI	4	2	2	1/10	30	28	
XXVII	5	3	3	2	31	29	
XXVIII	6	4	4	3	1/11	30	
XXIX	7	5	5 •	4	2		
XXX		6					
XXXI		7 •					

C197 Consuls: C. Cornelius Cethegus, Q. Minucius Rufus

	MAR	APR	MAI	JUN	QUI	SEX
	198	197	197	197	197	197
I		1/1/197	30/1	1/3 •	30/3 •	30/4
II		2 •	31	2	31	1/5
III		3	1/2 •	3	1/4	2
IV		4	2	4	2	3
V		5	3	5	3	4
VI		6	4	6	4	5
VII		7	5	7	5	6
VIII		8	6	8	6	7
IX		9	7	9	7	8
X		10	8	10	8	9
XI		11	9	11	9	10
XII		12	10	12	10	11
XIII		13	11	13	11	12
XIV		14	12	14	12	13
XV	15/12	15	13	15	13	14 ○
XVI	16	16 ○	14	16 ○	14 ○	15
XVII	17	17	15 ○	17	15	16
XVIII	18 ○	18	16	18	16	17
XIX	19	19	17	19	17	18
XX	20	20	18	20	18	19
XXI	21	21	19	21	19	20
XXII	22	22	20	22	20	21
XXIII	23	23	21	23	21	22
XXIV	ws 24	24	22	ve 24	22	23
XXV	25	25	23	25	23	24
XXVI	26	26	24	26	24	25
XXVII	27	27	25	27	25	26
XXVIII	28	28	26	28	26	27
XXIX	29	29	27	29	27	28 •
XXX	30		28		28	
XXXI	31		29		29 •	

C197 Consuls: C. Cornelius Cethegus, Q. Minucius Rufus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	197	197	197	197	197	197	197
I	29/5	27/6	28/7	26/8	24/9	23/10 •	20/11
II	30	28	29	27	25	24	21
III	31	29	30	28	AE 26	25	22 •
IV	1/6	30	31	29	27	26	23
V	2	1/7	1/8	30	28	27	24
VI	3	2	2	31	29	28	25
VII	4	3	3	1/9	30	29	26
VIII	5	4	4	2	1/10	30	27
IX	6	5	5	3	2	31	28
X	7	6	6	4	3	1/11	29
XI	8	7	7	5	4	2	30
XII	9	8	8	6	5	3	1/12
XIII	10	9	9	7	6	4	2
XIV	11	10	10 ○	8	7	5	3
XV	12 ○	11	11	9 ○	8 ○	6	
XVI	13	12 ○	12	10	9	7 ○	
XVII	14	13	13	11	10	8	
XVIII	15	14	14	12	11	9	
XIX	16	15	15	13	12	10	
XX	17	16	16	14	13	11	
XXI	18	17	17	15	14	12	
XXII	19	18	18	16	15	13	
XXIII	20	19	19	17	16	14	
XXIV	21	20	20	18	17	15	
XXV	22	21	21	19	18	16	
XXVI	23	22	22	20	19	17	
XXVII	24	23	23	21	20	18	
XXVIII	25	24	24 •	22	21	19	
XXIX	ss 26 •	25	25	23 •	22		
XXX		26 •					
XXXI		27					

C196 Consuls: L. Furius Purpurio, M. Claudius Marcellus

	MAR	APR	MAI	JUN	QUI	SEX
	197	197/6	196	196	196	196
I		21/12 •	19/1	19/2 •	20/3 •	20/4
II		22	20 •	20	21	21
III		23	21	21	22	22
IV		ws 24	22	22	23	23
V		25	23	23	VE 24	24
VI		26	24	24	25	25
VII		27	25	25	26	26
VIII		28	26	26	27	27
IX		29	27	27	28	28
X		30	28	28	29	29
XI		31	29	1/3	30	30
XII		1/1/196	30	2	31	1/5
XIII		2	31	3	1/4	2
XIV		3	1/2	4	2	3 ○
XV	4/12	4	2	5 ○	3 ○	4
XVI	5	5 ○	3 ○	6	4	5
XVII	6 ○	6	4	7	5	6
XVIII	7	7	5	8	6	7
XIX	8	8	6	9	7	8
XX	9	9	7	10	8	9
XXI	10	10	8	11	9	10
XXII	11	11	9	12	10	11
XXIII	12	12	10	13	11	12
XXIV	13	13	11	14	12	13
XXV	14	14	12	15	13	14
XXVI	15	15	13	16	14	15
XXVII	16	16	14	17	15	16
XXVIII	17	17	15	18	16	17
XXIX	18	18	16	19	17	18 •
XXX	19		17		18 •	
XXXI	20		18		19	

C196 Consuls: L. Furius Purpurio, M. Claudius Marcellus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	196	196	196	196	196	196	196
I	19/5	17/6	18/7	16/8	14/9	13/10	10/11 •
II	20	18	19	17	15	14	11
III	21	19	20	18	16	15	12
IV	22	20	21	19	17	16	13
V	23	21	22	20	18	17	14
VI	24	22	23	21	19	18	15
VII	25	23	24	22	20	19	16
VIII	26	24	25	23	21	20	17
IX	27	25	26	24	22	21	18
X	28	ss 26	27	25	23	22	19
XI	29	27	28	26	24	23	20
XII	30	28	29	27	25	24	21
XIII	31	29	30	28	AE 26	25	22
XIV	1/6 ○	30	31 ○	29 ○	27	26	23
XV	2	1/7 ○	1/8	30	28 ○	27 ○	
XVI	3	2	2	31	29	28	
XVII	4	3	3	1/9	30	29	
XVIII	5	4	4	2	1/10	30	
XIX	6	5	5	3	2	31	
XX	7	6	6	4	3	1/11	
XXI	8	7	7	5	4	2	
XXII	9	8	8	6	5	3	
XXIII	10	9	9	7	6	4	
XXIV	11	10	10	8	7	5	
XXV	12	11	11	9	8	6	
XXVI	13	12	12	10	9	7	
XXVII	14	13	13	11	10	8	
XXVIII	15	14	14 •	12 •	11	9	
XXIX	16 •	15 •	15	13	12 •		
XXX		16					
XXXI		17					

C195 Consuls: L. Valerius Flaccus, M. Porcius Cato

	MAR	APR	MAI	JUN	QUI	SEX
	196	196/5	195	195	195	195
I		11/12	9/1 •	9/2	10/3 •	10/4
II		12	10	10	11	11
III		13	11	11	12	12
IV		14	12	12	13	13
V		15	13	13	14	14
VI		16	14	14	15	15
VII		17	15	15	16	16
VIII		18	16	16	17	17
IX		19	17	17	18	18
X		20	18	18	19	19
XI		21	19	19	20	20
XII		22	20	20	21	21
XIII		23	21	21	22	22 ○
XIV		ws 24	22	22 ○	23	23
XV	24/11	25 ○	23	23	ve 24 ○	24
XVI	25	26	24 ○	24	25	25
XVII	26 ○	27	25	25	26	26
XVIII	27	28	26	26	27	27
XIX	28	29	27	27	28	28
XX	29	30	28	28	29	29
XXI	30	31	29	1/3	30	30
XXII	1/12	1/1/195	30	2	31	1/5
XXIII	2	2	31	3	1/4	2
XXIV	3	3	1/2	4	2	3
XXV	4	4	2	5	3	4
XXVI	5	5	3	6	4	5
XXVII	6	6	4	7	5	6
XXVIII	7	7	5	8	6	7 •
XXIX	8	8	6	9	7	8
XXX	9		7		8 •	
XXXI	10 •		8 •		9	

C195 Consuls: L. Valerius Flaccus, M. Porcius Cato

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	195	195	195	195	195	195	195
I	9/5	7/6	8/7	6/8	4/9	3/10	31/10 •
II	10	8	9	7	5	4	1/11
III	11	9	10	8	6	5	2
IV	12	10	11	9	7	6	3
V	13	11	12	10	8	7	4
VI	14	12	13	11	9	8	5
VII	15	13	14	12	10	9	6
VIII	16	14	15	13	11	10	7
IX	17	15	16	14	12	11	8
X	18	16	17	15	13	12	9
XI	19	17	18	16	14	13	10
XII	20	18	19	17	15	14	11
XIII	21	19	20 ○	18 ○	16	15	12
XIV	22 ○	20 ○	21	19	17 ○	16	13
XV	23	21	22	20	18	17 ○	
XVI	24	22	23	21	19	18	
XVII	25	23	24	22	20	19	
XVIII	26	24	25	23	21	20	
XIX	27	25	26	24	22	21	
XX	28	ss 26	27	25	23	22	
XXI	29	27	28	26	24	23	
XXII	30	28	29	27	25	24	
XXIII	31	29	30	28	AE 26	25	
XXIV	1/6	30	31	29	27	26	
XXV	2	1/7	1/8	30	28	27	
XXVI	3	2	2	31	29	28	
XXVII	4	3	3 •	1/9	30	29	
XXVIII	5	4	4	2 •	1/10 •	30	
XXIX	6 •	5 •	5	3	2		
XXX		6					
XXXI		7					

C194 Consuls: P. Cornelius Scipio Africanus, Ti. Sempronius Longus

	MAR	APR	MAI	JUN	QUI	SEX
	195	195	195/4	194	194	194
I		1/12	30/12	30/1	28/2	31/3
II		2	31	31	1/3	1/4
III		3	1/1/194	1/2	2	2
IV		4	2	2	3	3
V		5	3	3	4	4
VI		6	4	4	5	5
VII		7	5	5	6	6
VIII		8	6	6	7	7
IX		9	7	7	8	8
X		10	8	8	9	9
XI		11	9	9	10	10
XII		12	10	10	11	11 ○
XIII		13	11	11	12	12
XIV		14	12	12 ○	13 ○	13
XV	14/11	15 ○	13 ○	13	14	14
XVI	15 ○	16	14	14	15	15
XVII	16	17	15	15	16	16
XVIII	17	18	16	16	17	17
XIX	18	19	17	17	18	18
XX	19	20	18	18	19	19
XXI	20	21	19	19	20	20
XXII	21	22	20	20	21	21
XXIII	22	23	21	21	22	22
XXIV	23	ws 24	22	22	23	23
XXV	24	25	23	23	ve 24	24
XXVI	25	26	24	24	25	25
XXVII	26	27	25	25	26	26
XXVIII	27	28	26	26	27	27 ●
XXIX	28	29 ●	27	27 ●	28 ●	28
XXX	29 ●		28 ●		29	
XXXI	30		29		30	

CI94 Consuls: P. Cornelius Scipio Africanus, Ti. Sempronius Longus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	194	194	194	194	194	194	194
I	29/4	28/5	28/6	27/7	25/8	23/9	21/10
II	30	29	29	28	26	24	22
III	1/5	30	30	29	27	25	23
IV	2	31	1/7	30	28	26	24
V	3	1/6	2	31	29	AE 27	25
VI	4	2	3	1/8	30	28	26
VII	5	3	4	2	31	29	27
VIII	6	4	5	3	1/9	30	28
IX	7	5	6	4	2	1/10	29
X	8	6	7	5	3	2	30
XI	9	7	8	6	4	3	31
XII	10	8	9 ○	7 ○	5	4	1/11
XIII	11 ○	9 ○	10	8	6 ○	5	2
XIV	12	10	11	9	7	6 ○	3
XV	13	11	12	10	8	7	
XVI	14	12	13	11	9	8	
XVII	15	13	14	12	10	9	
XVIII	16	14	15	13	11	10	
XIX	17	15	16	14	12	11	
XX	18	16	17	15	13	12	
XXI	19	17	18	16	14	13	
XXII	20	18	19	17	15	14	
XXIII	21	19	20	18	16	15	
XXIV	22	20	21	19	17	16	
XXV	23	21	22	20	18	17	
XXVI	24	22	23	21	19	18	
XXVII	25	23	24 ●	22 ●	20	19	
XXVIII	26 ●	24	25	23	21 ●	20 ●	
XXIX	27	25 ●	26	24	22		
XXX		ss 26					
XXXI		27					

CI93 Consuls: L. Cornelius Merula, Q. Minucius Thermus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	194	194	194/3	193	193	193	193
I		21/11	20/12	20/1	18/2	20/3	18/4
II		22	21	21	19	21	19
III		23	22	22	20	22	20
IV		24	23	23	21	23	21
V		25	ws24	24	22	VE 24	22
VI		26	25	25	23	25	23
VII		27	26	26	24	26	24
VIII		28	27	27	25	27	25
IX		29	28	28	26	28	26
X		30	29	29	27	29	27
XI		1/12	30	30	28	30	28
XII		2	31	31	29	31 ○	29 ○
XIII		3	1/1/193	1/2 ○	1/3	1/4	30
XIV		4 ○	2	2	2 ○	2	1/5
XV	4/11	5	3 ○	3	3	3	2
XVI	5 ○	6	4	4	4	4	3
XVII	6	7	5	5	5	5	4
XVIII	7	8	6	6	6	6	5
XIX	8	9	7	7	7	7	6
XX	9	10	8	8	8	8	7
XXI	10	11	9	9	9	9	8
XXII	11	12	10	10	10	10	9
XXIII	12	13	11	11	11	11	10
XXIV	13	14	12	12	12	12	11
XXV	14	15	13	13	13	13	12
XXVI	15	16	14	14	14	14	13
XXVII	16	17	15	15	15	15 ●	14
XXVIII	17	18 ●	16	16 ●	16 ●	16	15 ●
XXIX	18	19	17 ●	17	17	17	16
XXX	19 ●		18		18		
XXXI	20		19		19		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	193	193	193	193	193	193	193
I	17/5	17/6	16/7	14/8	12/9	6/10	2/11
II	18	18	17	15	13	7	3
III	19	19	18	16	14	8	4
IV	20	20	19	17	15	9 •	5
V	21	21	20	18	16	10	6
VI	22	22	21	19	17	11	7 •
VII	23	23	22	20	18	12	8
VIII	24	24	23	21	19	13	9
IX	25	25	24	22	20	14	10
X	26	ss 26	25	23	21	15	11
XI	27	27 ○	26	24	22	16	12
XII	28	28	27 ○	25 ○	23	17	13
XIII	29 ○	29	28	AE 26	24 ○	18	14
XIV	30	30	29	27	25	19	15
XV	31	1/7	30	28	26	20	
XVI	1/6	2	31	29	27	21	
XVII	2	3	1/8	30	28	22	
XVIII	3	4	2	31	29	23	
XIX	4	5	3	1/9	30	24 ○	
XX	5	6	4	2	1/10	25	
XXI	6	7	5	3	2	26	
XXII	7	8	6	4	3	27	
XXIII	8	9	7	5	4	28	
XXIV	9	10	8	6	5	29	
XXV	10	11	9	7		30	
XXVI	11	12	10	8		31	
XXVII	12	13 •	11 •	9 •		1/11	
XXVIII	13 •	14	12	10			
XXIX	14	15	13	11			
XXX	15						
XXXI	16						

C192 Consuls: L. Quinctius Flaminius, Cn. Domitius Ahenobarbus

	MAR	APR	MAI	JUN	QUI	SEX
	193	193	192	192	192	192
I		3/12	1/1/192	1/2	2/3	2/4
II		4	2	2	3	3
III		5	3	3	4	4 •
IV		6	4	4 •	5 •	5
V		7 •	5 •	5	6	6
VI		8	6	6	7	7
VII		9	7	7	8	8
VIII		10	8	8	9	9
IX		11	9	9	10	10
X		12	10	10	11	11
XI		13	11	11	12	12
XII		14	12	12	13	13
XIII		15	13	13	14	14
XIV		16	14	14	15	15
XV	16/11	17	15	15	16	16
XVI	17	18	16	16	17	17
XVII	18	19	17	17	18	18
XVIII	19	20	18	18	19	19 ○
XIX	20	21	19	19 ○	20	20
XX	21	22 ○	20	20	21 ○	21
XXI	22	23	21 ○	21	22	22
XXII	23 ○	ws 24	22	22	23	23
XXIII	24	25	23	23	ve 24	24
XXIV	25	26	24	24	25	25
XXV	26	27	25	25	26	26
XXVI	27	28	26	26	27	27
XXVII	28	29	27	27	28	28
XXVIII	29	30	28	28	29	29
XXIX	30	31	29	1/3	30	30
XXX	1/12		30		31	
XXXI	2		31		1/4	

C192 Consuls: L. Quinctius Flaminius, Cn. Domitius Ahenobarbus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	192	192	192	192	192	192	192
I	1/5	30/5	30/6	29/7	27/8	25/9	23/10
II	2	31	1/7	30	28	AE 26	24
III	3	1/6	2 •	31	29	27	25
IV	4 •	2 •	3	1/8 •	30 •	28	26
V	5	3	4	2	31	29 •	27
VI	6	4	5	3	1/9	30	28 •
VII	7	5	6	4	2	1/10	29
VIII	8	6	7	5	3	2	30
IX	9	7	8	6	4	3	31
X	10	8	9	7	5	4	1/11
XI	11	9	10	8	6	5	2
XII	12	10	11	9	7	6	3
XIII	13	11	12	10	8	7	4
XIV	14	12	13	11	9	8	5
XV	15	13	14	12	10	9	
XVI	16	14	15	13	11	10	
XVII	17	15	16 ○	14 ○	12	11	
XVIII	18 ○	16	17	15	13 ○	12	
XIX	19	17 ○	18	16	14	13 ○	
XX	20	18	19	17	15	14	
XXI	21	19	20	18	16	15	
XXII	22	20	21	19	17	16	
XXIII	23	21	22	20	18	17	
XXIV	24	22	23	21	19	18	
XXV	25	23	24	22	20	19	
XXVI	26	24	25	23	21	20	
XXVII	27	25	26	24	22	21	
XXVIII	28	ss 26	27	25	23	22	
XXIX	29	27	28	26	24		
XXX		28					
XXXI		29					

C191 Consuls: P. Cornelius Scipio, M'. Acilius Glabrio

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	192	192	192/1	191	191	191	191
I		23/11	22/12	22/1	20/2	23/3	21/4
II		24	23	23	21	24 •	22
III		25	ws24	24 •	22	25	23 •
IV		26 •	25	25	23 •	26	24
V		27	26 •	26	VE 24	27	25
VI		28	27	27	25	28	26
VII		29	28	28	26	29	27
VIII		30	29	29	27	30	28
IX		1/12	30	30	28	31	29
X		2	31	31	1/3	1/4	30
XI		3	1/1/191	1/2	2	2	1/5
XII		4	2	2	3	3	2
XIII		5	3	3	4	4	3
XIV		6	4	4	5	5	4
XV	6/11	7	5	5	6	6	5
XVI	7	8	6	6	7	7	6
XVII	8	9	7	7	8	8	7
XVIII	9	10	8	8	9	9 ○	8 ○
XIX	10	11 ○	9	9 ○	10 ○	10	9
XX	11 ○	12	10 ○	10	11	11	10
XXI	12	13	11	11	12	12	11
XXII	13	14	12	12	13	13	12
XXIII	14	15	13	13	14	14	13
XXIV	15	16	14	14	15	15	14
XXV	16	17	15	15	16	16	15
XXVI	17	18	16	16	17	17	16
XXVII	18	19	17	17	18	18	17
XXVIII	19	20	18	18	19	19	18
XXIX	20	21	19	19	20	20	19
XXX	21		20		21		
XXXI	22		21		22		

C191 Consuls: P. Cornelius Scipio, M'. Acilius Glabrio

(Intercal.22)

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	191	191	191	191	191	191	191
I	20/5	20/6	19/7	17/8	15/9	8/10	4/11
II	21	21 •	20	18	16	9	5
III	22 •	22	21 •	19 •	17	10	6
IV	23	23	22	20	18 •	11	7
V	24	24	23	21	19	12	8
VI	25	25	24	22	20	13	9
VII	26	ss 26	25	23	21	14	10
VIII	27	27	26	24	22	15	11
IX	28	28	27	25	23	16	12
X	29	29	28	26	24	17	13
XI	30	30	29	27	25	18 •	14
XII	31	1/7	30	28	AE 26	19	15
XIII	1/6	2	31	29	27	20	16 •
XIV	2	3	1/8	30	28	21	17
XV	3	4	2	31	29	22	
XVI	4	5	3	1/9	30	23	
XVII	5	6 ○	4 ○	2 ○	1/10	24	
XVIII	6 ○	7	5	3	2 ○	25	
XIX	7	8	6	4	3	26	
XX	8	9	7	5	4	27	
XXI	9	10	8	6	5	28	
XXII	10	11	9	7	6	29	
XXIII	11	12	10	8	7	30	
XXIV	12	13	11	9		31	
XXV	13	14	12	10		1/11 ○	
XXVI	14	15	13	11		2	
XXVII	15	16	14	12		3	
XXVIII	16	17	15	13			
XXIX	17	18	16	14			
XXX	18						
XXXI	19						

C190 Consuls: L. Cornelius Scipio, C. Laelius

	MAR	APR	MAI	JUN	QUI	SEX
	191	191/190	190	190	190	190
I		5/12	3/1	3/2	4/3	4/4
II		6	4	4	5	5
III		7	5	5	6	6
IV		8	6	6	7	7
V		9	7	7	8	8
VI		10	8	8	9	9
VII		11	9	9	10	10
VIII		12	10	10	11	11
IX		13	11	11	12	12 •
X		14	12	12 •	13	13
XI		15	13	13	TSE 14 •	14
XII		16 •	14 •	14	15	15
XIII		17	15	15	16	16
XIV		18	16	16	17	17
XV	18/11	19	17	17	18	18
XVI	19	20	18	18	19	19
XVII	20	21	19	19	20	20
XVIII	21	22	20	20	21	21
XIX	22	23	21	21	22	22
XX	23	ws 24	22	22	23	23
XXI	24	25	23	23	VE 24	24
XXII	25	26	24	24	25	25
XXIII	26	27	25	25	26	26
XXIV	27	28	26	26	27	27
XXV	28	29	27	27	28	28 ○
XXVI	29	30 ○	28	28 ○	29 ○	29
XXVII	30 ○	31	29 ○	1/3	30	30
XXVIII	1/12	1/1/190	30	2	31	1/5
XXIX	2	2	31	3	1/4	2
XXX	3		1/2		2	
XXXI	4		2		3	

C190 Consuls: L. Cornelius Scipio, C. Laelius

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	190	190	190	190	190	190	190
I	3/5	1/6	2/7	31/7	29/8	AE 27/9	25/10
II	4	2	3	1/8	30	28	26
III	5	3	4	2	31	29	27
IV	6	4	5	3	1/9	30	28
V	7	5	6	4	2	1/10	29
VI	8	6	7	5	3	2	30
VII	9	7	8	6	4	3	31
VIII	10	8	9	7	5	4	1/11
IX	11	9	10 •	8 •	6	5	2
X	12 •	10 •	11	9	7 •	6	3
XI	13	11	12	10	8	7 •	4
XII	14	12	13	11	9	8	5 •
XIII	15	13	14	12	10	9	6
XIV	16	14	15	13	11	10	7
XV	17	15	16	14	12	11	
XVI	18	16	17	15	13	12	
XVII	19	17	18	16	14	13	
XVIII	20	18	19	17	15	14	
XIX	21	19	20	18	16	15	
XX	22	20	21	19	17	16	
XXI	23	21	22	20	18	17	
XXII	24	22	23	21	19	18	
XXIII	25	23	24	22	20	19	
XXIV	26	24	25 ○	23 ○	21 ○	20	
XXV	27 ○	25 ○	26	24	22	21 ○	
XXVI	28	ss 26	27	25	23	22	
XXVII	29	27	28	26	24	23	
XXVIII	30	28	29	27	25	24	
XXIX	31	29	30	28	26		
XXX		30					
XXXI		1/7					

C189 Consuls: M. Fulvius Nobilior, Cn. Manlius Volso

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	190	190	190/189	189	189	189	189
I		25/11	ws 24/12	24/1	22/2	VE 24/3	22/4
II		26	25	25	23	25	23
III		27	26	26	24	26	24
IV		28	27	27	25	27	25
V		29	28	28	26	28	26
VI		30	29	29	27	29	27
VII		1/12	30	30	28	30	28
VIII		2	31	31	29	31	29
IX		3	1/1/189	1/2	1/3	1/4 •	30 •
X		4	2	2 •	2 •	2	1/5
XI		5 •	3	3	3	3	2
XII		6	4 •	4	4	4	3
XIII		7	5	5	5	5	4
XIV		8	6	6	6	6	5
XV	8/11	9	7	7	7	7	6
XVI	9	10	8	8	8	8	7
XVII	10	11	9	9	9	9	8
XVIII	11	12	10	10	10	10	9
XIX	12	13	11	11	11	11	10
XX	13	14	12	12	12	12	11
XXI	14	15	13	13	13	13	12
XXII	15	16	14	14	14	14	13
XXIII	16	17	15	15	15	15	14
XXIV	17	18	16	16	16	16 ○	15
XXV	18	19 ○	17	17 ○	17 ○	17	16 ○
XXVI	19 ○	20	18 ○	18	18	18	17
XXVII	20	21	19	19	19	19	18
XXVIII	21	22	20	20	20	20	19
XXIX	22	23	21	21	21	21	20
XXX	23		22		22		
XXXI	24		23		23		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	189	189	189	189	189	189	189
I	21/5	21/6	20/7	18/8	16/9	10/10 ○	6/11
II	22	22	21	19	17	11	7
III	23	23	22	20	18	12	8 ○
IV	24	24	23	21	19	13	9
V	25	25	24	22	20	14	10
VI	26	ss 26	25	23	21	15	11
VII	27	27	26	24	22	16	12
VIII	28	28 •	27 •	25	23	17	13
IX	29 •	29	28	26 •	24	18	14
X	30	30	29	27	25 •	19	15
XI	31	1/7	30	28	AE 26	20	16
XII	1/6	2	31	29	27	21	17
XIII	2	3	1/8	30	28	22	18
XIV	3	4	2	31	29	23	19
XV	4	5	3	1/9	30	24	
XVI	5	6	4	2	1/10	25 •	
XVII	6	7	5	3	2	26	
XVIII	7	8	6	4	3	27	
XIX	8	9	7	5	4	28	
XX	9	10	8	6	5	29	
XXI	10	11	9	7	6	30	
XXII	11	12	10	8	7	31	
XXIII	12	13 ○	11	9	8	1/11	
XXIV	13	14	12 ○	10 ○	9	2	
XXV	14 ○	15	13	11		3	
XXVI	15	16	14	12		4	
XXVII	16	17	15	13		5	
XXVIII	17	18	16	14			
XXIX	18	19	17	15			
XXX	19						
XXXI	20						

C188 Consuls: M. Valerius Messalla, C. Livius Salinator

	MAR	APR	MAI	JUN	QUI	SEX
	189	189/8	188	188	188	188
I		7/12 ○	5/1	5/2 ○	6/3 ○	6/4
II		8	6 ○	6	7	7
III		9	7	7	8	8
IV		10	8	8	9	9
V		11	9	9	10	10
VI		12	10	10	11	11
VII		13	11	11	12	12
VIII		14	12	12	13	13
IX		15	13	13	14	14
X		16	14	14	15	15
XI		17	15	15	16	16
XII		18	16	16	17	17
XIII		19	17	17	18	18
XIV		20	18	18	19	19
XV	20/11	21	19	19	20	20 ●
XVI	21	22	20	20 ●	21 ●	21
XVII	22	23 ●	21	21	22	22
XVIII	23 ●	ws 24	22 ●	22	23	23
XIX	24	25	23	23	ve 24	24
XX	25	26	24	24	25	25
XXI	26	27	25	25	26	26
XXII	27	28	26	26	27	27
XXIII	28	29	27	27	28	28
XXIV	29	30	28	28	29	29
XXV	30	31	29	1/3	30	30
XXVI	1/12	1/1/188	30	2	31	1/5
XXVII	2	2	31	3	1/4	2
XXVIII	3	3	1/2	4	2	3
XXIX	4	4	2	5	3	4
XXX	5		3		4	
XXXI	6		4		5 ○	

C188 Consuls: M. Valerius Messalla, C. Livius Salinator

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	188	188	188	188	188	188	188
I	5/5 ○	3/6 ○	4/7	2/8	31/8 ○	29/9 ○	27/10
II	6	4	5	3	1/9	30	28
III	7	5	6	4	2	1/10	29 ○
IV	8	6	7	5	3	2	30
V	9	7	8	6	4	3	31
VI	10	8	9	7	5	4	1/11
VII	11	9	10	8	6	5	2
VIII	12	10	11	9	7	6	3
IX	13	11	12	10	8	7	4
X	14	12	13	11	9	8	5
XI	15	13	14	12	10	9	6
XII	16	14	15	13	11	10	7
XIII	17	15	16	14	12	11	8
XIV	18	16	SE 17 ●	15 ●	13	12	9
XV	19 ●	17 ●	18	16	14 ●	13	
XVI	20	18	19	17	15	14 ●	
XVII	21	19	20	18	16	15	
XVIII	22	20	21	19	17	16	
XIX	23	21	22	20	18	17	
XX	24	22	23	21	19	18	
XXI	25	23	24	22	20	19	
XXII	26	24	25	23	21	20	
XXIII	27	25	26	24	22	21	
XXIV	28	SS 26	27	25	23	22	
XXV	29	27	28	26	24	23	
XXVI	30	28	29	27	25	24	
XXVII	31	29	30	28	AE 26	25	
XXVIII	1/6	30	31	29	27	26	
XXIX	2	1/7	1/8 ○	30	28		
XXX		2					
XXXI		3 ○					

C187 Consuls: M. Aemilius Lepidus, C. Flaminius

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	188	188	188/7	187	187	187	187
I		27/11 ^o	26/12	26/1	24/2 ^o	27/3	25/4
II		28	27 ^o	27	25	28	26
III		29	28	28	26	29	27
IV		30	29	29	27	30	28
V		1/12	30	30	28	31	29
VI		2	31	31	1/3	1/4	30
VII		3	1/1/187	1/2	2	2	1/5
VIII		4	2	2	3	3	2
IX		5	3	3	4	4	3
X		6	4	4	5	5	4
XI		7	5	5	6	6	5
XII		8	6	6	7	7	6
XIII		9	7	7	8	8	7
XIV		10	8	8	9	9 [•]	8
XV	10/11	11	9	9	10	10	9 [•]
XVI	11	12 [•]	10	10 [•]	11 [•]	11	10
XVII	12 [•]	13	11 [•]	11	12	12	11
XVIII	13	14	12	12	13	13	12
XIX	14	15	13	13	14	14	13
XX	15	16	14	14	15	15	14
XXI	16	17	15	15	16	16	15
XXII	17	18	16	16	17	17	16
XXIII	18	19	17	17	18	18	17
XXIV	19	20	18	18	19	19	18
XXV	20	21	19	19	20	20	19
XXVI	21	22	20	20	21	21	20
XXVII	22	23	21	21	22	22	21
XXVIII	23	ws24	22	22	23	23	22
XXIX	24	25	23	23	VE 24	24 ^o	23 ^o
XXX	25		24		25 ^o		
XXXI	26		25 ^o		26		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	187	187	187	187	187	187	187
I	24/5	24/6	23/7	21/8	19/9 ○	13/10	9/11
II	25	25	24	22	20	14	10
III	26	ss 26	25	23	21	15	11
IV	27	27	26	24	22	16	12
V	28	28	27	25	23	17	13
VI	29	29	28	26	24	18 ○	14
VII	30	30	29	27	25	19	15
VIII	31	1/7	30	28	AE 26	20	16
IX	1/6	2	31	29	27	21	17 ○
X	2	3	1/8	30	28	22	18
XI	3	4	2	31	29	23	19
XII	4	5	3	1/9	30	24	20
XIII	5	6 •	4	2	1/10	25	21
XIV	6	7	5 •	3 •	2	26	22
XV	7 •	8	6	4	3 •	27	
XVI	8	9	7	5	4	28	
XVII	9	10	8	6	5	29	
XVIII	10	11	9	7	6	30	
XIX	11	12	10	8	7	31	
XX	12	13	11	9	8	1/11 •	
XXI	13	14	12	10	9	2	
XXII	14	15	13	11	10	3	
XXIII	15	16	14	12	11	4	
XXIV	16	17	15	13	12	5	
XXV	17	18	16	14		6	
XXVI	18	19	17	15		7	
XXVII	19	20	18	16		8	
XXVIII	20	21	19	17			
XXIX	21	22 ○	20 ○	18			
XXX	22 ○						
XXXI	23						

C186 Consuls: Sp. Postumius Albinus, Q. Marcius Philippus

	MAR	APR	MAI	JUN	QUI	SEX
	187	187/6	186	186	186	186
I		10/12	8/1	8/2	9/3	9/4
II		11	9	9	10	10
III		12	10	10	11	11
IV		13	11	11	12	12
V		14	12	12	13	13 ○
VI		15	13	13 ○	14 ○	14
VII		16 ○	14	14	15	15
VIII		17	15 ○	15	16	16
IX		18	16	16	17	17
X		19	17	17	18	18
XI		20	18	18	19	19
XII		21	19	19	20	20
XIII		22	20	20	21	21
XIV		23	21	21	22	22
XV	23/11	ws 24	22	22	23	23
XVI	24	25	23	23	ve 24	24
XVII	25	26	24	24	25	25
XVIII	26	27	25	25	26	26
XIX	27	28	26	26	27	27
XX	28	29	27	27	28	28 ●
XXI	29	30	28	28 ●	29	29
XXII	30	31 ●	29	1/3	30 ●	30
XXIII	1/12 ●	1/1/186	30 ●	2	31	1/5
XXIV	2	2	31	3	1/4	2
XXV	3	3	1/2	4	2	3
XXVI	4	4	2	5	3	4
XXVII	5	5	3	6	4	5
XXVIII	6	6	4	7	5	6
XXIX	7	7	5	8	6	7
XXX	8		6		7	
XXXI	9		7		8	

C186 Consuls: Sp. Postumius Albinus, C. Flaminius

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	186	186	186	186	186	186	186
I	8/5	6/6	7/7	5/8	3/9	2/10	30/10
II	9	7	8	6	4	3	31
III	10	8	9	7	5	4	1/11
IV	11	9	10	8	6	5	2
V	12 ○	10	11 ○	9 ○	7	6	3
VI	13	11 ○	12	10	8 ○	7	4
VII	14	12	13	11	9	8 ○	5
VIII	15	13	14	12	10	9	6 ○
IX	16	14	15	13	11	10	7
X	17	15	16	14	12	11	8
XI	18	16	17	15	13	12	9
XII	19	17	18	16	14	13	10
XIII	20	18	19	17	15	14	11
XIV	21	19	20	18	16	15	12
XV	22	20	21	19	17	16	
XVI	23	21	22	20	18	17	
XVII	24	22	23	21	19	18	
XVIII	25	23	24	22	20	19	
XIX	26	24	25 ●	23	21	20	
XX	27	25	26	24 ●	22 ●	21	
XXI	28 ●	ss 26 ●	27	25	23	22 ●	
XXII	29	27	28	26	24	23	
XXIII	30	28	29	27	25	24	
XXIV	31	29	30	28	26	25	
XXV	1/6	30	31	29	AE 27	26	
XXVI	2	1/7	1/8	30	28	27	
XXVII	3	2	2	31	29	28	
XXVIII	4	3	3	1/9	30	29	
XXIX	5	4	4	2	1/10		
XXX		5					
XXXI		6					

C185 Consuls: Ap. Claudius Pulcher, M. Sempronius Tuditanus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	186	186	186/5	185	185	185	185
I		30/11	29/12	29/1	27/2	29/3	27/4
II		1/12	30	30	28	30	28
III		2	31	31	29	31	29
IV		3	1/1/185	1/2	1/3	1/4 ○	30
V		4	2	2	2	2	1/5 ○
VI		5	3	3 ○	3 ○	3	2
VII		6 ○	4 ○	4	4	4	3
VIII		7	5	5	5	5	4
IX		8	6	6	6	6	5
X		9	7	7	7	7	6
XI		10	8	8	8	8	7
XII		11	9	9	9	9	8
XIII		12	10	10	10	10	9
XIV		13	11	11	11	11	10
XV	13/11	14	12	12	12	12	11
XVI	14	15	13	13	13	13	12
XVII	15	16	14	14	14	14	13
XVIII	16	17	15	15	15	15	14
XIX	17	18	16	16	16	16	15
XX	18	19	17	17	17	17 ●	16 ●
XXI	19	20 ●	18	18 ●	18 ●	18	17
XXII	20 ●	21	19 ●	19	19	19	18
XXIII	21	22	20	20	20	20	19
XXIV	22	23	21	21	21	21	20
XXV	23	ws24	22	22	22	22	21
XXVI	24	25	23	23	23	23	22
XXVII	25	26	24	24	VE 24	24	23
XXVIII	26	27	25	25	25	25	24
XXIX	27	28	26	26	26	26	25
XXX	28		27		27		
XXXI	29		28		28		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	185	185	185	185	185	185	185
I	26/5	ss26/6	25/7	23/8	21/9	15/10	11/11
II	27	27	26	24	22	16	12
III	28	28	27	25	23	17	13
IV	29	29 ○	28 ○	26	24	18	14
V	30 ○	30	29	27 ○	25	19	15
VI	31	1/7	30	28	AE 26 ○	20	16
VII	1/6	2	31	29	27	21	17
VIII	2	3	1/8	30	28	22	18
IX	3	4	2	31	29	23	19
X	4	5	3	1/9	30	24	20
XI	5	6	4	2	1/10	25 ○	21
XII	6	7	5	3	2	26	22
XIII	7	8	6	4	3	27	23
XIV	8	9	7	5	4	28	24 ○
XV	9	10	8	6	5	29	
XVI	10	11	9	7	6	30	
XVII	11	12	10	8	7	31	
XVIII	12	13	11	9	8	1/11	
XIX	13	14 ●	12 ●	10	9	2	
XX	14	15	13	11 ●	10 ●	3	
XXI	15 ●	16	14	12	11	4	
XXII	16	17	15	13	12	5	
XXIII	17	18	16	14	13	6	
XXIV	18	19	17	15	14	7	
XXV	19	20	18	16		8	
XXVI	20	21	19	17		9 ●	
XXVII	21	22	20	18		10	
XXVIII	22	23	21	19			
XXIX	23	24	22	20			
XXX	24						
XXXI	25						

C184 Consuls: P. Claudius Pulcher, L. Porcius Licinus

	MAR	APR	MAI	JUN	QUI	SEX
	185	185/4	184	184	184	184
I		12/12	10/1	10/2	11/3	11/4
II		13	11	11	12	12
III		14	12	12	13	13
IV		15	13	13	14	14
V		16	14	14	15	15
VI		17	15	15	16	16
VII		18	16	16	17	17
VIII		19	17	17	18	18
IX		20	18	18	19	19
X		21	19	19	20	20 ○
XI		22	20	20	21	21
XII		23	21	21 ○	22 ○	22
XIII		ws 24 ○	22 ○	22	23	23
XIV		25	23	23	ve 24	24
XV	25/11	26	24	24	25	25
XVI	26	27	25	25	26	26
XVII	27	28	26	26	27	27
XVIII	28	29	27	27	28	28
XIX	29	30	28	28	29	29
XX	30	31	29	1/3	30	30
XXI	1/12	1/1/184	30	2	31	1/5
XXII	2	2	31	3	1/4	2
XXIII	3	3	1/2	4	2	3
XXIV	4	4	2	5	3	4
XXV	5	5	3	6	4	5
XXVI	6	6	4	7 ●	5	6 ●
XXVII	7	7 ●	5	8	6 ●	7
XXVIII	8 ●	8	6 ●	9	7	8
XXIX	9	9	7	10	8	9
XXX	10		8		9	
XXXI	11		9		10	

C184 Consuls: P. Claudius Pulcher, L. Porcius Licinus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	184	184	184	184	184	184	184
I	10/5	8/6	9/7	7/8	5/9	4/10	1/11
II	11	9	10	8	6	5	2
III	12	10	11	9	7	6	3
IV	13	11	12	10	8	7	4
V	14	12	13	11	9	8	5
VI	15	13	14	12	10	9	6
VII	16	14	15	13	11	10	7
VIII	17	15	16	14	12	11	8
IX	18	16	17	15	13	12	9
X	19	17	18 ○	16	14	13	10
XI	20 ○	18 ○	19	17	15 ○	14 ○	11
XII	21	19	20	18	16	15	12
XIII	22	20	21	19	17	16	13 ○
XIV	23	21	22	20	18	17	14
XV	24	22	23	21	19	18	
XVI	25	23	24	22	20	19	
XVII	26	24	25	23	21	20	
XVIII	27	25	26	24	22	21	
XIX	28	ss 26	27	25	23	22	
XX	29	27	28	26	24	23	
XXI	30	28	29	27	25	24	
XXII	31	29	30	28	AE 26	25	
XXIII	1/6	30	31	29	27	26	
XXIV	2	1/7	1/8	30	28	27	
XXV	3	2	2 •	31 •	29	28	
XXVI	4 •	3	3	1/9	30 •	29 •	
XXVII	5	4 •	4	2	1/10	30	
XXVIII	6	5	5	3	2	31	
XXIX	7	6	6	4	3		
XXX		7					
XXXI		8					

C183 Consuls: M. Claudius Marcellus, Q. Fabius Labeo

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	184	184	184/3	183	183	183	183
I		2/12	31/12	31/1	1/3	1/4	30/4
II		3	1/1/183	1/2	2	2	1/5
III		4	2	2	3	3	2
IV		5	3	3	4	4	3
V		6	4	4	5	5	4
VI		7	5	5	6	6	5
VII		8	6	6	7	7	6
VIII		9	7	7	8	8	7
IX		10	8	8	9	9	8
X		11	9	9	10	10 ○	9 ○
XI		12	10	10 ○	11	11	10
XII		13 ○	11	11	12 ○	12	11
XIII		14	12 ○	12	13	13	12
XIV		15	13	13	14	14	13
XV	15/11	16	14	14	15	15	14
XVI	16	17	15	15	16	16	15
XVII	17	18	16	16	17	17	16
XVIII	18	19	17	17	18	18	17
XIX	19	20	18	18	19	19	18
XX	20	21	19	19	20	20	19
XXI	21	22	20	20	21	21	20
XXII	22	23	21	21	22	22	21
XXIII	23	ws24	22	22	23	23	22
XXIV	24	25	23	23	ve 24	24	23
XXV	25	26	24	24 ●	25	25 ●	24 ●
XXVI	26	27 ●	25	25	26 ●	26	25
XXVII	27	28	26 ●	26	27	27	26
XXVIII	28 ●	29	27	27	28	28	27
XXIX	29	30	28	28	29	29	28
XXX	30		29		30		
XXXI	1/12		30		31		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	183	183	183	183	183	183	183
I	29/5	29/6	28/7	26/8	24/9	18/10	14/11
II	30	30	29	27	25	19 •	15
III	31	1/7	30	28	AE 26	20	16
IV	1/6	2	31	29	27	21	17 •
V	2	3	1/8	30	28	22	18
VI	3	4	2	31	29	23	19
VII	4	5	3	1/9	30	24	20
VIII	5	6	4	2	1/10	25	21
IX	6	7 ○	5 ○	3	2	26	22
X	7	8	6	4 ○	3	27	23
XI	8 ○	9	7	5	4 ○	28	24
XII	9	10	8	6	5	29	25
XIII	10	11	9	7	6	30	26
XIV	11	12	10	8	7	31	27
XV	12	13	11	9	8	1/11	
XVI	13	14	12	10	9	2 ○	
XVII	14	15	13	11	10	3	
XVIII	15	16	14	12	11	4	
XIX	16	17	15	13	12	5	
XX	17	18	16	14	13	6	
XXI	18	19	17	15	14	7	
XXII	19	20	18	16	15	8	
XXIII	20	21	19	17	16	9	
XXIV	21	22 •	20	18	17	10	
XXV	22	23	21 •	19 •		11	
XXVI	23 •	24	22	20		12	
XXVII	24	25	23	21		13	
XXVIII	25	26	24	22			
XXIX	ss 26	27	25	23			
XXX	27						
XXXI	28						

C182 Consuls: Cn. Baebius Tamphilus, L. Aemilius Paullus

	MAR	APR	MAI	JUN	QUI	SEX
	183	183/2	182	182	182	182
I		15/12	13/1	13/2	14/3	14/4 •
II		16	14	14 •	15 •	15
III		17 •	15 •	15	16	16
IV		18	16	16	17	17
V		19	17	17	18	18
VI		20	18	18	19	19
VII		21	19	19	20	20
VIII		22	20	20	21	21
IX		23	21	21	22	22
X		WS 24	22	22	23	23
XI		25	23	23	VE 24	24
XII		26	24	24	25	25
XIII		27	25	25	26	26
XIV		28	26	26	27	27
XV	28/11	29	27	27	28	28
XVI	29	30	28	28	29	29 ○
XVII	30	31	29	1/3 ○	30	30
XVIII	1/12	1/1/182○	30	2	31 ○	1/5
XIX	2 ○	2	31 ○	3	1/4	2
XX	3	3	1/2	4	2	3
XXI	4	4	2	5	3	4
XXII	5	5	3	6	4	5
XXIII	6	6	4	7	5	6
XXIV	7	7	5	8	6	7
XXV	8	8	6	9	7	8
XXVI	9	9	7	10	8	9
XXVII	10	10	8	11	9	10
XXVIII	11	11	9	12	10	11
XXIX	12	12	10	13	11	12
XXX	13		11		12	
XXXI	14		12		13	

C182 Consuls: Cn. Baebius Tamphilus, L. Aemilius Paullus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	182	182	182	182	182	182	182
I	13/5 •	11/6	12/7	10/8 •	8/9	7/10	4/11
II	14	12 •	13	11	9 •	8 •	5
III	15	13	14	12	10	9	6
IV	16	14	15	13	11	10	7 •
V	17	15	16	14	12	11	8
VI	18	16	17	15	13	12	9
VII	19	17	18	16	14	13	10
VIII	20	18	19	17	15	14	11
IX	21	19	20	18	16	15	12
X	22	20	21	19	17	16	13
XI	23	21	22	20	18	17	14
XII	24	22	23	21	19	18	15
XIII	25	23	24	22	20	19	16
XIV	26	24	25	23	21	20	17
XV	27	25	26 ○	24 ○	22	21	
XVI	28 ○	ss 26	27	25	23 ○	22 ○	
XVII	29	27 ○	28	26	24	23	
XVIII	30	28	29	27	25	24	
XIX	31	29	30	28	26	25	
XX	1/6	30	31	29	AE 27	26	
XXI	2	1/7	1/8	30	28	27	
XXII	3	2	2	31	29	28	
XXIII	4	3	3	1/9	30	29	
XXIV	5	4	4	2	1/10	30	
XXV	6	5	5	3	2	31	
XXVI	7	6	6	4	3	1/11	
XXVII	8	7	7	5	4	2	
XXVIII	9	8	8	6	5	3	
XXIX	10	9	9	7	6		
XXX		10					
XXXI		11 •					

CI81 Consuls: P. Cornelius Cethegus, M. Baebius Tamphilus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	182	182/1	181	181	181	181	181
I		5/12	3/1	3/2 •	3/3	3/4	2/5 •
II		6 •	4	4	4 •	4	3
III		7	5 •	5	5	5	4
IV		8	6	6	6	6	5
V		9	7	7	7	7	6
VI		10	8	8	8	8	7
VII		11	9	9	9	9	8
VIII		12	10	10	10	10	9
IX		13	11	11	11	11	10
X		14	12	12	12	12	11
XI		15	13	13	13	13	12
XII		16	14	14	14	14	13
XIII		17	15	15	15	15	14
XIV		18	16	16	16	16	15
XV	18/11	19	17	17	17	17	16
XVI	19	20	18	18 ○	18	18 ○	17 ○
XVII	20	21 ○	19	19	19 ○	19	18
XVIII	21 ○	22	20 ○	20	20	20	19
XIX	22	23	21	21	21	21	20
XX	23	ws24	22	22	22	22	21
XXI	24	25	23	23	23	23	22
XXII	25	26	24	24	VE 24	24	23
XXIII	26	27	25	25	25	25	24
XXIV	27	28	26	26	26	26	25
XXV	28	29	27	27	27	27	26
XXVI	29	30	28	28	28	28	27
XXVII	30	31	29	29	29	29	28
XXVIII	1/12	1/1/181	30	1/3	30	30	29
XXIX	2	2	31	2	31	1/5	30
XXX	3		1/3		1/4		
XXXI	4		2		2 •		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	181	181	181	181	181	181	181
I	31/5 •	1/7	30/7	28/8 •	AE 26/9	20/10	16/11
II	1/6	2	31	29	27 •	21	17
III	2	3	1/8	30	28	22	18
IV	3	4	2	31	29	23	19
V	4	5	3	1/9	30	24	20
VI	5	6	4	2	1/10	25	21
VII	6	7	5	3	2	26 •	22
VIII	7	8	6	4	3	27	23
IX	8	9	7	5	4	28	24
X	9	10	8	6	5	29	25 •
XI	10	11	9	7	6	30	26
XII	11	12	10	8	7	31	27
XIII	12	13	11	9	8	1/11	28
XIV	13	14	12	10	9	2	29
XV	14	15 ○	13 ○	11 ○	10	3	
XVI	15 ○	16	14	12	11 ○	4	
XVII	16	17	15	13	12	5	
XVIII	17	18	16	14	13	6	
XIX	18	19	17	15	14	7	
XX	19	20	18	16	15	8	
XXI	20	21	19	17	16	9 ○	
XXII	21	22	20	18	17	10	
XXIII	22	23	21	19	18	11	
XXIV	23	24	22	20	19	12	
XXV	24	25	23	21		13	
XXVI	25	26	24	22		14	
XXVII	ss 26	27	25	23		15	
XXVIII	27	28	26	24			
XXIX	28	29 •	27	25			
XXX	29						
XXXI	30 •						

C180 Consuls: A. Postumius Albinus, C. Calpurnius Piso

	MAR	APR	MAI	JUN	QUI	SEX
	181	181/0	180	180	180	180
I		17/12	15/1	15/2	16/3	16/4
II		18	16	16	17	17
III		19	17	17	18	18
IV		20	18	18	19	19
V		21	19	19	20	20
VI		22	20	20	21	21 •
VII		23	21	21 •	22	22
VIII		ws 24	22	22	23 •	23
IX		25 •	23 •	23	ve 24	24
X		26	24	24	25	25
XI		27	25	25	26	26
XII		28	26	26	27	27
XIII		29	27	27	28	28
XIV		30	28	28	29	29
XV	30/11	31	29	1/3	30	30
XVI	1/12	1/1/180	30	2	31	1/5
XVII	2	2	31	3	1/4	2
XVIII	3	3	1/2	4	2	3
XIX	4	4	2	5	3	4
XX	5	5	3	6	4	5
XXI	6	6	4	7	5	6 ○
XXII	7	7	5	8 ○	6	7
XXIII	8	8 ○	6 ○	9	7 ○	8
XXIV	9 ○	9	7	10	8	9
XXV	10	10	8	11	9	10
XXVI	11	11	9	12	10	11
XXVII	12	12	10	13	11	12
XXVIII	13	13	11	14	12	13
XXIX	14	14	12	15	13	14
XXX	15		13		14	
XXXI	16		14		15	

C180 Consuls: A. Postumius Albinus, C. Calpurnius Piso

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	180	180	180	180	180	180	180
I	15/5	13/6	14/7	12/8	10/9	9/10	6/11
II	16	14	15	13	11	10	7
III	17	15	16	14	12	11	8
IV	18	16	17	15	13	12	9
V	19	17	18 •	16	14	13	10
VI	20 •	18	19	17 •	15	14	11
VII	21	19 •	20	18	16 •	15 •	12
VIII	22	20	21	19	17	16	13
IX	23	21	22	20	18	17	14 •
X	24	22	23	21	19	18	15
XI	25	23	24	22	20	19	16
XII	26	24	25	23	21	20	17
XIII	27	25	26	24	22	21	18
XIV	28	ss 26	27	25	23	22	19
XV	29	27	28	26	24	23	
XVI	30	28	29	27	25	24	
XVII	31	29	30	28	AE 26	25	
XVIII	1/6	30	31	29	27	26	
XIX	2	1/7	1/8	30	28	27	
XX	3	2	2	31	29	28	
XXI	4	3	3 ○	1/9 ○	30	29	
XXII	5 ○	4 ○	4	2	1/10 ○	30 ○	
XXIII	6	5	5	3	2	31	
XXIV	7	6	6	4	3	1/11	
XXV	8	7	7	5	4	2	
XXVI	9	8	8	6	5	3	
XXVII	10	9	9	7	6	4	
XXVIII	11	10	10	8	7	5	
XXIX	12	11	11	9	8		
XXX		12					
XXXI		13					

C179 Consuls: Q. Fulvius Flaccus, L. Manlius Acidinus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	180	180/79	179	179	179	179	179
I		7/12	5/1	5/2	6/3	6/4	5/5
II		8	6	6	7	7	6
III		9	7	7	8	8	7
IV		10	8	8	9	9	8
V		11	9	9	10	10	9
VI		12	10	10	11	11 •	10 •
VII		13	11	11 •	12 •	12	11
VIII		14 •	12	12	13	13	12
IX		15	13 •	13	14	14	13
X		16	14	14	15	15	14
XI		17	15	15	16	16	15
XII		18	16	16	17	17	16
XIII		19	17	17	18	18	17
XIV		20	18	18	19	19	18
XV	20/11	21	19	19	20	20	19
XVI	21	22	20	20	21	21	20
XVII	22	23	21	21	22	22	21
XVIII	23	ws24	22	22	23	23	22
XIX	24	25	23	23	VE 24	24	23
XX	25	26	24	24	25	25 ○	24
XXI	26	27	25	25 ○	26	26	25 ○
XXII	27	28 ○	26	26	27 ○	27	26
XXIII	28 ○	29	27 ○	27	28	28	27
XXIV	29	30	28	28	29	29	28
XXV	30	31	29	1/3	30	30	29
XXVI	1/12	1/1/179	30	2	31	1/5	30
XXVII	2	2	31	3	1/4	2	31
XXVIII	3	3	1/2	4	2	3	1/6
XXIX	4	4	2	5	3	4	2
XXX	5		3		4		
XXXI	6		4		5		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	179	179	179	179	179	179	179
I	3/6	4/7	2/8	31/8	29/9	23/10	19/11
II	4	5	3	1/9	30	24	20
III	5	6	4	2	1/10	25	21
IV	6	7	5	3	2	26	22
V	7	8 •	6 •	4	3	27	23
VI	8 •	9	7	5 •	4 •	28	24
VII	9	10	8	6	5	29	25
VIII	10	11	9	7	6	30	26
IX	11	12	10	8	7	31	27
X	12	13	11	9	8	1/11	28
XI	13	14	12	10	9	2	29
XII	14	15	13	11	10	3 •	30
XIII	15	16	14	12	11	4	1/12
XIV	16	17	15	13	12	5	2
XV	17	18	16	14	13	6	
XVI	18	19	17	15	14	7	
XVII	19	20	18	16	15	8	
XVIII	20	21	19	17	16	9	
XIX	21	22	20	18	17	10	
XX	22	23 ○	21	19	18	11	
XXI	23	24	22 ○	20 ○	19	12	
XXII	24 ○	25	23	21	20 ○	13	
XXIII	25	26	24	22	21	14	
XXIV	ss 26	27	25	23	22	15	
XXV	27	28	26	24		16	
XXVI	28	29	27	25		17	
XXVII	29	30	28	AE 26		18 ○	
XXVIII	30	31	29	27			
XXIX	1/7	1/8	30	28			
XXX	2						
XXXI	3						

C178 Consuls: M. Iunius Brutus, A. Manlius Uulso

	MAR	APR	MAI	JUN	QUI	SEX
	179	179/8	178	178	178	178
I		20/12	18/1	18/2	19/3	19/4
II		21	19	19	20	20
III		22	20	20	21	21
IV		23	21	21	22	22
V		ws 24	22	22	23	23
VI		25	23	23	ve 24	24
VII		26	24	24	25	25
VIII		27	25	25	26	26
IX		28	26	26	27	27
X		29	27	27	28	28
XI		30	28	28	29	29
XII		31	29	1/3	30	30 •
XIII		1/1/178	30	2 •	31 •	1/5
XIV		2 •	31 •	3	1/4	2
XV	3/12 •	3	1/2	4	2	3
XVI	4	4	2	5	3	4
XVII	5	5	3	6	4	5
XVIII	6	6	4	7	5	6
XIX	7	7	5	8	6	7
XX	8	8	6	9	7	8
XXI	9	9	7	10	8	9
XXII	10	10	8	11	9	10
XXIII	11	11	9	12	10	11
XXIV	12	12	10	13	11	12
XXV	13	13	11	14	12	13
XXVI	14	14	12	15	13	14 ○
XXVII	15	15	13	16 ○	14	15
XXVIII	16	16 ○	14 ○	17	15 ○	16
XXIX	17 ○	17	15	18	16	17
XXX	18		16		17	
XXXI	19		17		18	

C178 Consuls: M. Iunius Brutus, A. Manlius Uulso

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	178	178	178	178	178	178	178
I	18/5	16/6	17/7	15/8	13/9	12/10	9/11
II	19	17	18	16	14	13	10
III	20	18	19	17	15	14	11
IV	21	19	20	18	16	15	12
V	22	20	21	19	17	16	13
VI	23	21	22	20	18	17	14
VII	24	22	23	21	19	18	15
VIII	25	23	24	22	20	19	16
IX	26	24	25	23	21	20	17
X	27	25	26	24	22	21	18
XI	28	ss 26	27 •	25 •	23	22	19
XII	29 •	27 •	28	26	24 •	23 •	20
XIII	30	28	29	27	25	24	21
XIV	31	29	30	28	26	25	22 •
XV	1/6	30	31	29	AE 27	26	
XVI	2	1/7	1/8	30	28	27	
XVII	3	2	2	31	29	28	
XVIII	4	3	3	1/9	30	29	
XIX	5	4	4	2	1/10	30	
XX	6	5	5	3	2	31	
XXI	7	6	6	4	3	1/11	
XXII	8	7	7	5	4	2	
XXIII	9	8	8	6	5	3	
XXIV	10	9	9	7	6	4	
XXV	11	10	10	8	7	5	
XXVI	12	11	11 ○	9	8	6	
XXVII	13 ○	12 ○	12	10 ○	9 ○	7	
XXVIII	14	13	13	11	10	8 ○	
XXIX	15	14	14	12	11		
XXX		15					
XXXI		16					

C177 Consuls: C. Claudius Pulcher, Ti. Sempronius Gracchus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	178	178/7	177	177	177	177	177
I		10/12	8/1	8/2	8/3	8/4	7/5
II		11	9	9	9	9	8
III		12	10	10	10	10	9
IV		13	11	11	11	11	10
V		14	12	12	12	12	11
VI		15	13	13	13	13	12
VII		16	14	14	14	14	13
VIII		17	15	15	15	15	14
IX		18	16	16	16	16	15
X		19	17	17	17	17	16
XI		20	18	18	18	18 •	17
XII		21	19	19 •	19	19	18 •
XIII		22 •	20	20	20 •	20	19
XIV		23	21 •	21	21	21	20
XV	23/11	ws24	22	22	22	22	21
XVI	24	25	23	23	23	23	22
XVII	25	26	24	24	VE 24	24	23
XVIII	26	27	25	25	25	25	24
XIX	27	28	26	26	26	26	25
XX	28	29	27	27	27	27	26
XXI	29	30	28	28	28	28	27
XXII	30	31	29	29	29	29	28
XXIII	1/12	1/1/177	30	1/3	30	30	29
XXIV	2	2	31	2	31	1/5	30
XXV	3	3	1/2	3	1/4	2 ○	31
XXVI	4	4	2	4 ○	2	3	1/6 ○
XXVII	5	5	3	5	3 ○	4	2
XXVIII	6	6 ○	4 ○	6	4	5	3
XXIX	7 ○	7	5	7	5	6	4
XXX	8		6		6		
XXXI	9		7		7		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	177	177	177	177	177	177	177
I	5/6	6/7	4/8	2/9	1/10	25/10	21/11
II	6	7	5	3	2	26	22
III	7	8	6	4	3	27 ○	23
IV	8	9	7	5	4	28	24
V	9	10	8	6	5	29	25
VI	10	11	9	7	6	30	26 ○
VII	11	12	10	8	7	31	27
VIII	12	13	11	9	8	1/11	28
IX	13	14	12	10	9	2	29
X	14	15 ●	13	11	10	3	30
XI	15	16	14 ●	12 ●	11	4	1/12
XII	16 ●	17	15	13	12 ●	5	2
XIII	17	18	16	14	13	6	3
XIV	18	19	17	15	14	7	4
XV	19	20	18	16	15	8	
XVI	20	21	19	17	16	9	
XVII	21	22	20	18	17	10 ●	
XVIII	22	23	21	19	18	11	
XIX	23	24	22	20	19	12	
XX	24	25	23	21	20	13	
XXI	25	26	24	22	21	14	
XXII	ss 26	27	25	23	22	15	
XXIII	27	28	26	24	23	16	
XXIV	28	29	27	25	24	17	
XXV	29	30 ○	28	AE 26		18	
XXVI	30 ○	31	29 ○	27 ○		19	
XXVII	1/7	1/8	30	28		20	
XXVIII	2	2	31	29			
XXIX	3	3	1/9	30			
XXX	4						
XXXI	5						

C176 Consuls: Cn. Cornelius Scipio, Q. Petilius Spurius

	MAR	APR	MAI	JUN	QUI	SEX
	177	177/6	176	176	176	176
I		22/12	20/1	20/2	21/3	21/4
II		ws 23	21	21	22	22 ○
III		24	22	22 ○	23 ○	23
IV		25 ○	23	23	ve 24	24
V		26	24 ○	24	25	25
VI		27	25	25	26	26
VII		28	26	26	27	27
VIII		29	27	27	28	28
IX		30	28	28	29	29
X		31	29	1/3	30	30
XI		1/1/176	30	2	31	1/5
XII		2	31	3	1/4	2
XIII		3	1/2	4	2	3
XIV		4	2	5	3	4
XV	5/12	5	3	6	4	5
XVI	6	6	4	7	5	6
XVII	7	7	5	8	6	7 ●
XVIII	8	8	6	9 ●	7	8
XIX	9	9 ●	7 ●	10	8 ●	9
XX	10 ●	10	8	11	9	10
XXI	11	11	9	12	10	11
XXII	12	12	10	13	11	12
XXIII	13	13	11	14	12	13
XXIV	14	14	12	15	13	14
XXV	15	15	13	16	14	15
XXVI	16	16	14	17	15	16
XXVII	17	17	15	18	16	17
XXVIII	18	18	16	19	17	18
XXIX	19	19	17	20	18	19
XXX	20		18		19	
XXXI	21		19		20	

C176 Consuls: Cn. Cornelius Scipio, Q. Petilius Spurius

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	176	176	176	176	176	176	176
I	20/5	18/6	19/7 ○	17/8	15/9	14/10	11/11
II	21 ○	19	20	18 ○	16 ○	15	12
III	22	20 ○	21	19	17	16 ○	13
IV	23	21	22	20	18	17	14
V	24	22	23	21	19	18	15 ○
VI	25	23	24	22	20	19	16
VII	26	24	25	23	21	20	17
VIII	27	25	26	24	22	21	18
IX	28	ss 26	27	25	23	22	19
X	29	27	28	26	24	23	20
XI	30	28	29	27	25	24	21
XII	31	29	30	28	AE 26	25	22
XIII	1/6	30	31	29	27	26	23
XIV	2	1/7	1/8	30	28	27	24
XV	3	2	2	31	29	28	
XVI	4	3	3 ●	1/9	30	29	
XVII	5	4	4	2 ●	1/10 ●	30	
XVIII	6 ●	5 ●	5	3	2	31 ●	
XIX	7	6	6	4	3	1/11	
XX	8	7	7	5	4	2	
XXI	9	8	8	6	5	3	
XXII	10	9	9	7	6	4	
XXIII	11	10	10	8	7	5	
XXIV	12	11	11	9	8	6	
XXV	13	12	12	10	9	7	
XXVI	14	13	13	11	10	8	
XXVII	15	14	14	12	11	9	
XXVIII	16	15	15	13	12	10	
XXIX	17	16	16	14	13		
XXX		17					
XXXI		18					

C175 Consuls: P. Mucius Scaevola, M. Aemilius Lepidus

	MAR	APR	MAI	JUN	QUI	SEX	SÈP
	176	176/5	175	175	175	175	175
I		12/12	10/1	10/2	11/3	11/4 ○	10/5
II		13	11	11	12	12	11 ○
III		14	12	12 ○	13 ○	13	12
IV		15 ○	13 ○	13	14	14	13
V		16	14	14	15	15	14
VI		17	15	15	16	16	15
VII		18	16	16	17	17	16
VIII		19	17	17	18	18	17
IX		20	18	18	19	19	18
X		21	19	19	20	20	19
XI		22	20	20	21	21	20
XII		23	21	21	22	22	21
XIII		ws24	22	22	23	23	22
XIV		25	23	23	VE 24	24	23
XV	25/11	26	24	24	25	25	24
XVI	26	27	25	25	26	26 ●	25
XVII	27	28	26	26 ●	27	27	26 ●
XVIII	28	29 ●	27 ●	27	28 ●	28	27
XIX	29 ●	30	28	28	29	29	28
XX	30	31	29	1/3	30	30	29
XXI	1/12	1/1/175	30	2	31	1/5	30
XXII	2	2	31	3	1/4	2	31
XXIII	3	3	1/2	4	2	3	1/6
XXIV	4	4	2	5	3	4	2
XXV	5	5	3	6	4	5	3
XXVI	6	6	4	7	5	6	4
XXVII	7	7	5	8	6	7	5
XXVIII	8	8	6	9	7	8	6
XXIX	9	9	7	10	8	9	7
XXX	10		8		9		
XXXI	11		9		10		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	175	175	175	175	175	175	175
I	8/6	9/7	7/8 ○	5/9	4/10	27/10	25/11
II	9 ○	10	8	6 ○	5 ○	28	24
III	10	11	9	7	6	29	25
IV	11	12	10	8	7	30	26
V	12	13	11	9	8	31	27
VI	13	14	12	10	9	1/11	28
VII	14	15	13	11	10	2	29
VIII	15	16	14	12	11	3	30
IX	16	17	15	13	12	4 ○	1/12
X	17	18	16	14	13	5	2
XI	18	19	17	15	14	6	3
XII	19	20	18	16	15	7	4 ○
XIII	20	21	19	17	16	8	5
XIV	21	22	20	18	17	9	6
XV	22	23	21	19	18	10	
XVI	23	24 ●	22 ●	20	19	11	
XVII	24	25	23	21 ●	20 ●	12	
XVIII	25 ●	26	24	22	21	13	
XIX	ss 26	27	25	23	22	14	
XX	27	28	26	24	23	15	
XXI	28	29	27	25	24	16	
XXII	29	30	28	AE 26	25	17	
XXIII	30	31	29	27	26	18	
XXIV	1/7	1/8	30	28		19 ●	
XXV	2	2	31	29		20	
XXVI	3	3	1/9	30		21	
XXVII	4	4	2	1/10		22	
XXVIII	5	5	3	2			
XXIX	6	6	4	3			
XXX	7						
XXXI	8 ○						

C174 Consuls: Sp. Postumius Albinus, Q. Mucius Scaevola

	MAR	APR	MAI	JUN	QUI	SEX
	175	175/4	174	174	174	174
I		ws24/12	22/1	22/2	23/3	23/4
II		25	23	23	VE 24	24
III		26	24	24	25	25
IV		27	25	25	26	26
V		28	26	26	27	27
VI		29	27	27	28	28
VII		30	28	28	29	29
VIII		31	29	1/3	30	30 ○
IX		1/1/174	30	2	31	1/5
X		2	31	3 ○	1/4 ○	2
XI		3 ○	1/2 ○	4	2	3
XII		4	2	5	3	4
XIII		5	3	6	4	5
XIV		6	4	7	5	6
XV	7/12	7	5	8	6	7
XVI	8	8	6	9	7	8
XVII	9	9	7	10	8	9
XVIII	10	10	8	11	9	10
XIX	11	11	9	12	10	11
XX	12	12	10	13	11	12
XXI	13	13	11	14	12	13
XXII	14		12	15	13	14
XXIII	15	15	13	16	14	15 ●
XXIV	16	16	14	17 ●	15 ●	16
XXV	17	17 ●	15 ●	18	16	17
XXVI	18 ●	18	16	19	17	18
XXVII	19	19	17	20	18	19
XXVIII	20	20	18	21	19	20
XXIX	21	21	19	22	20	21
XXX	22		20		21	
XXXI	23		21		22	

C174 Consuls: Sp. Postumius Albinus, Q. Mucius Scaevola

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	174	174	174	174	174	174	174
I	22/5	20/6	21/7	19/8	17/9	16/10	13/11
II	23	21	22	20	18	17	14
III	24	22	23	21	19	18	15
IV	25	23	24	22	20	19	16
V	26	24	25	23	21	20	17
VI	27	25	26	24	22	21	18
VII	28	ss 26	27 ○	25	23	22	19
VIII	29	27	28	26 ○	24 ○	23	20
IX	30 ○	28 ○	29	27	25	24 ○	21
X	31	29	30	28	26	25	22
XI	1/6	30	31	29	AE 27	26	23 ○
XII	2	1/7	1/8	30	28	27	24
XIII	3	2	2	31	29	28	25
XIV	4	3	3	1/9	30	29	26
XV	5	4	4	2	1/10	30	
XVI	6	5	5	3	2	31	
XVII	7	6	6	4	3	1/11	
XVIII	8	7	7	5	4	2	
XIX	9	8	8	6	5	3	
XX	10	9	9	7	6	4	
XXI	11	10	10	8	7	5	
XXII	12	11	11	9	8	6	
XXIII	13	12	12 ●	10 ●	9	7	
XXIV	14 ●	13 ●	13	11	10 ●	8 ●	
XXV	15	14	14	12	11	9	
XXVI	16	15	15	13	12	10	
XXVII	17	16	16	14	13	11	
XXVIII	18	17	17	15	14	12	
XXIX	19	18	18	16	15		
XXX		19					
XXXI		20					

C173 Consuls: L. Postumius Albinus, M. I. Spilius Laenas

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	174	174/3	173	173	173	173	173
I		14/12	12/1	12/2	12/3	12/4	11/5
II		15	13	13	13	13	12
III		16	14	14	14	14	13
IV		17	15	15	15	15	14
V		18	16	16	16	16	15
VI		19	17	17	17	17	16
VII		20	18	18	18	18	17
VIII		21	19	19	19	19 ○	18 ○
IX		22	20	20 ○	20	20	19
X		23 ○	21 ○	21	21 ○	21	20
XI		ws 24	22	22	22	22	21
XII		25	23	23	ve 23	23	22
XIII		26	24	24	24	24	23
XIV		27	25	25	25	25	24
XV	27/11	28	26	26	26	26	25
XVI	28	29	27	27	27	27	26
XVII	29	30	28	28	28	28	27
XVIII	30	31	29	29	29	29	28
XIX	1/12	1/1/173	30	1/3	30	30	29
XX	2	2	31	2	31	1/5	30
XXI	3	3	1/2	3	1/4	2	31
XXII	4	4	2	4	2	3 ●	1/6
XXIII	5	5	3	5 ●	3	4	2 ●
XXIV	6	6 ●	4	6	4 ●	5	3
XXV	7	7	5 ●	7	5	6	4
XXVI	8 ●	8	6	8	6	7	5
XXVII	9	9	7	9	7	8	6
XXVIII	10	10	8	10	8	9	7
XXIX	11	11	9	11	9	10	8
XXX	12		10		10		
XXXI	13		11		11		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	173	173	173	173	173	173	173
I	9/6	10/7	8/8	6/9	5/10	29/10	25/11
II	10	11	9	7	6	30	26 •
III	11	12	10	8	7	31	27
IV	12	13	11	9	8	1/11	28
V	13	14	12	10	9	2	29
VI	14	15	13	11	10	3	30
VII	15	16 ○	14 ○	12	11	4	1/12
VIII	16	17	15	13 ○	12 ○	5	2
IX	17 ○	18	16	14	13	6	3
X	18	19	17	15	14	7	4
XI	19	20	18	16	15	8	5
XII	20	21	19	17	16	9	6
XIII	21	22	20	18	17	10	7
XIV	22	23	21	19	18	11 ○	8
XV	23	24	22	20	19	12	
XVI	24	25	23	21	20	13	
XVII	25	26	24	22	21	14	
XVIII	ss 26	27	25	23	22	15	
XIX	27	28	26	24	23	16	
XX	28	29	27	25	24	17	
XXI	29	30	28	AE 26	25	18	
XXII	30	31 •	29	27	26	19	
XXIII	1/7 •	1/8	30 •	28 •	27	20	
XXIV	2	2	31	29	28 •	21	
XXV	3	3	1/9	30		22	
XXVI	4	4	2	1/10		23	
XXVII	5	5	3	2		24	
XXVIII	6	6	4	3			
XXIX	7	7	5	4			
XXX	8						
XXXI	9						

C172 Consuls: C. Popillius Laenas, P. Aelius Ligus

	MAR	APR	MAI	JUN	QUI	SEX
	173	173/2	172	172	172	172
I		26/12 •	24/1 •	24/2	25/3	25/4
II		27	25	25	26	26
III		28	26	26	27	27
IV		29	27	27	28	28
V		30	28	28	29	29
VI		31	29	1/3	30	30
VII		1/1/172	30	2	31	1/5
VIII		2	31	3	1/4	2
IX		3	1/2	4	2	3
X		4	2	5	3	4
XI		5	3	6	4	5
XII		6	4	7	5	6
XIII		7	5	8	6	7
XIV		8	6	9	7	8 ○
XV	9/12	9 ○	7	10 ○	8	9
XVI	10	10	8 ○	11	9 ○	10
XVII	11 ○	11	9	12	10	11
XVIII	12	12	10	13	11	12
XIX	13	13	11	14	12	13
XX	14	14	12	15	13	14
XXI	15	15	13	16	14	15
XXII	16	16	14	17	15	16
XXIII	17	17	15	18	16	17
XXIV	18	18	16	19	17	18
XXV	19	19	17	20	18	19
XXVI	20	20	18	21	19	20
XXVII	21	21	19	22	20	21
XXVIII	22	22	20	23	21	22 •
XXIX	ws 23	23	21	ve 24 •	22 •	23
XXX	24		22		23	
XXXI	25		23 •		24	

C172 Consuls: C. Popillius Laenas, P. Aelius Ligus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	172	172	172	172	172	172	172
I	24/5	22/6	23/7	21/8	19/9	18/10	15/11
II	25	23	24	22	20	19	16 •
III	26	24	25	23	21	20	17
IV	27	25	26	24	22	21	18
V	28	ss 26	27	25	23	22	19
VI	29	27	28	26	24	23	20
VII	30	28	29	27	25	24	21
VIII	31	29	30	28	AE 26	25	22
IX	1/6	30	31	29	27	26	23
X	2	1/7	1/8	30	28	27	24
XI	3	2	2	31	29	28	25
XII	4	3	3	1/9	30	29	26
XIII	5	4	4 ○	2 ○	1/10	30	27
XIV	6 ○	5	5	3	2 ○	31 ○	28
XV	7	6 ○	6	4	3	1/11	
XVI	8	7	7	5	4	2	
XVII	9	8	8	6	5	3	
XVIII	10	9	9	7	6	4	
XIX	11	10	10	8	7	5	
XX	12	11	11	9	8	6	
XXI	13	12	12	10	9	7	
XXII	14	13	13	11	10	8	
XXIII	15	14	14	12	11	9	
XXIV	16	15	15	13	12	10	
XXV	17	16	16	14	13	11	
XXVI	18	17	17	15	14	12	
XXVII	19	18	18 •	16	15	13	
XXVIII	20 •	19	19	17 •	16	14	
XXIX	21	20 •	20	18	17 •		
XXX		21					
XXXI		22					

CI71 Consuls: P. Licinius Crassus, C. Cassius Longinus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	172	172/1	171	171	171	171	171
I		16/12	14/1 •	14/2	15/3	15/4	14/5
II		17	15	15	16	16	15
III		18	16	16	17	17	16
IV		19	17	17	18	18	17
V		20	18	18	19	19	18
VI		21	19	19	20	20	19
VII		22	20	20	21	21	20
VIII		23	21	21	22	22	21
IX		ws24	22	22	23	23	22
X		25	23	23	ve 24	24	23
XI		26	24	24	25	25	24
XII		27	25	25	26	26	25
XIII		28	26	26	27	27 ○	26
XIV		29 ○	27	27 ○	28	28	27 ○
XV	29/11	30	28 ○	28	29 ○	29	28
XVI	30 ○	31	29	1/3	30	30	29
XVII	1/12	1/1/171	30	2	31	1/5	30
XVIII	2	2	31	3	1/4	2	31
XIX	3	3	1/2	4	2	3	1/6
XX	4	4	2	5	3	4	2
XXI	5	5	3	6	4	5	3
XXII	6	6	4	7	5	6	4
XXIII	7	7	5	8	6	7	5
XXIV	8	8	6	9	7	8	6
XXV	9	9	7	10	8	9	7
XXVI	10	10	8	11	9	10	8
XXVII	11	11	9	12	10	11 •	9
XXVIII	12	12	10	13	11	12	10 •
XXIX	13	13	11	14 •	12 •	13	11
XXX	14		12 •		13		
XXXI	15 •		13		14		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	171	171	171	171	171	171	171
I	12/6	13/7	11/8	9/9	8/10	31/10	27/11
II	13	14	12	10	9	1/11	28
III	14	15	13	11	10	2	29
IV	15	16	14	12	11	3	30
V	16	17	15	13	12	4	1/12
VI	17	18	16	14	13	5 •	2
VII	18	19	17	15	14	6	3
VIII	19	20	18	16	15	7	4
IX	20	21	19	17	16	8	5 •
X	21	22	20	18	17	9	6
XI	22	23	21	19	18	10	7
XII	23	24	22	20	19	11	8
XIII	24	25 ○	23 ○	21 ○	20	12	9
XIV	25 ○	26	24	22	21 ○	13	10
XV	ss 26	27	25	23	22	14	
XVI	27	28	26	24	23	15	
XVII	28	29	27	25	24	16	
XVIII	29	30	28	AE 26	25	17	
XIX	30	31	29	27	26	18	
XX	1/7	1/8	30	28	27	19 ○	
XXI	2	2	31	29	28	20	
XXII	3	3	1/9	30	29	21	
XXIII	4	4	2	1/10	30	22	
XXIV	5	5	3	2		23	
XXV	6	6	4	3		24	
XXVI	7	7	5	4		25	
XXVII	8	8 •	6 •	5		26	
XXVIII	9 •	9	7	6 •			
XXIX	10	10	8	7			
XXX	11						
XXXI	12						

C170 Consuls: A. Hostilius Mancinus, A. Atilius Serranus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	171	171/0	170	170	170	170	170
I		28/12	26/1	26/2	27/3	27/4	26/5
II		29	27	27	28	28	27
III		30	28	28	29	29	28
IV		31	29	1/3	30	30	29
V		1/1/170	30	2	31	1/5 •	30 •
VI		2	31	3 •	1/4	2	31
VII		3 •	1/2	4	2 •	3	1/6
VIII		4	2 •	5	3	4	2
IX		5	3	6	4	5	3
X		6	4	7	5	6	4
XI		7	5	8	6	7	5
XII		8	6	9	7	8	6
XIII		9	7	10	8	9	7
XIV		10	8	11	9	10	8
XV	11/12	11	9	12	10	11	9
XVI	12	12	10	13	11	12	10
XVII	13	13	11	14	12	13	11
XVIII	14	14	12	15	13	14	12
XIX	15	15	13	16	14	15	13
XX	16	16	14	17	15	16 ○	14
XXI	17	17 ○	15	18 ○	16 ○	17	15 ○
XXII	18	18	16 ○	19	17	18	16
XXIII	19 ○	19	17	20	18	19	17
XXIV	20	20	18	21	19	20	18
XXV	21	21	19	22	20	21	19
XXVI	22	22	20	23	21	22	20
XXVII	23	23	21	VE 24	22	23	21
XXVIII	WS 24	24	22	25	23	24	22
XXIX	25	25	23	26	24	25	23
XXX	26		24		25		
XXXI	27		25		26		

C170 Consuls: A. Hostilius Mancinus, A. Atilius Serranus

(Intercal. 23)

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	170	170	170	170	170	170	170
I	24/6	25/7	23/8	21/9	20/10	13/11	10/12
II	25	26	24	22	21	14	11
III	ss 26	27	25	23	22	15	12
IV	27	28 •	26	24	23	16	13
V	28	29	27 •	25 •	24	17	14
VI	29 •	30	28	26	25 •	18	15
VII	30	31	29	AE 27	26	19	16
VIII	1/7	1/8	30	28	27	20	17
IX	2	2	31	29	28	21	18
X	3	3	1/9	30	29	22	19
XI	4	4	2	1/10	30	23	20
XII	5	5	3	2	31	24 •	21
XIII	6	6	4	3	1/11	25	22
XIV	7	7	5	4	2	26	23
XV	8	8	6	5	3	27	
XVI	9	9	7	6	4	28	
XVII	10	10	8	7	5	29	
XVIII	11	11	9	8	6	30	
XIX	12	12	10	9	7	1/12	
XX	13	13 ○	11 ○	10	8	2	
XXI	14 ○	14	12	11 ○	9 ○	3	
XXII	15	15	13	12	10	4	
XXIII	16	16	14	13	11	5	
XXIV	17	17	15	14	12	6	
XXV	18	18	16	15		7	
XXVI	19	19	17	16		8 ○	
XXVII	20	20	18	17		9	
XXVIII	21	21	19	18			
XXIX	22	22	20	19			
XXX	23						
XXXI	24						

C169 Consuls: Q. Marcius Philippus, Cn. Servilius Caepio

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	170/69	169	169	169	169	169	169
I		10/1	8/2	10/3	8/4	9/5	7/6
II		11	9	11	9	10	8
III		12	10	12	10	11	9
IV		13	11	13	11	12	10
V		14	12	14	12	13	11
VI		15	13	15	13	14	12
VII		16	14	16	14	15	13
VIII		17	15	17	15	16	14
IX		18	16	18	16	17	15
X		19	17	19	17	18	16
XI		20	18	20	18	19 •	17 •
XII		21	19	21 •	19	20	18
XIII		22 •	20	22	20 •	21	19
XIV		23	21 •	VE 23	21	22	20
XV	W 24/12 •	24	22	24	22	23	21
XVI	25	25	23	25	23	24	22
XVII	26	26	24	26	24	25	23
XVIII	27	27	25	27	25	26	24
XIX	28	28	26	28	26	27	SS 25
XX	29	29	27	29	27	28	26
XXI	30	30	28	30	28	29	27
XXII	31	31	29	31	29	30	28
XXIII	1/1/169	1/2	1/3	1/4	30	31	29
XXIV	2	2	2	2	1/5	1/6	30
XXV	3	3	3	3	2	2	1/7
XXVI	4	4	4	4 ○	3	3 ○	2 ○
XXVII	5	5 ○	5	5	4 ○	4	3
XXVIII	6	6	6 ○	6	5	5	4
XXIX	7 ○	7	7	7	6	6	5
XXX	8		8		7		
XXXI	9		9		8		

C169 Consuls: Q. Marcius Philippus, Cn. Servilius Caepio

(Intercal. 22)

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	169	169	169	169	169	169	169/8
I	6/7	6/8	4/9	3/10	1/11	24/11	21/12
II	7	7	5	4	2	25	22
III	8	8	6	5	3	26	ws 23
IV	9	9	7	6	4	27 ○	24
V	10	10	8	7	5	28	25
VI	11	11	9	8	6	29	26
VII	12	12	10	9	7	30	27 ○
VIII	13	13	11	10	8	1/12	28
IX	14	14	12	11	9	2	29
X	15	15 •	13 •	12	10	3	30
XI	16	16	14	13 •	11	4	31
XII	17 •	17	15	14	12 •	5	1/1/168
XIII	18	18	16	15	13	6	2
XIV	19	19	17	16	14	7	3
XV	20	20	18	17	15	8	
XVI	21	21	19	18	16	9	
XVII	22	22	20	19	17	10	
XVIII	23	23	21	20	18	11 •	
XIX	24	24	22	21	19	12	
XX	25	25	23	22	20	13	
XXI	26	26	24	23	21	14	
XXII	27	27	25	24	22	15	
XXIII	28	28	AE 26	25	23	16	
XXIV	29	29	27	26		17	
XXV	30	30 ○	28	27		18	
XXVI	31	31	29 ○	28		19	
XXVII	1/8 ○	1/9	30	29 ○		20	
XXVIII	2	2	1/10	30			
XXIX	3	3	2	31			
XXX	4						
XXXI	5						

CI68 Consuls: L. Aemilius Paullus, C. Licinius Crassus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	168	168	168	168	168	168	168
I		21/1	19/2	22/3	20/4	21/5	19/6
II		22	20	23	21	22	20
III		23	21	VE 24	22	23 ○	TLE 21 ○
IV		24	22	25 ○	23 ○	24	22
V		25 ○	23 ○	26	24	25	23
VI		26	24	27	25	26	24
VII		27	25	28	26	27	25
VIII		28	26	29	27	28	SS 26
IX		29	27	30	28	29	27
X		30	28	31	29	30	28
XI		31	1/3	1/4	30	31	29
XII		1/2	2	2	1/5	1/6	30
XIII		2	3	3	2	2	1/7
XIV		3	4	4	3	3	2
XV	4/1	4	5	5	4	4	3
XVI	5	5	6	6	5	5	4
XVII	6	6	7	7	6	6	5
XVIII	7	7	8	8	7	7 ●	6 ●
XIX	8	8	9	9 ●	8	8	7
XX	9	9 ●	10	10	9 ●	9	8
XXI	10 ●	10	11 ●	11	10	10	9
XXII	11	11	12	12	11	11	10
XXIII	12	12	13	13	12	12	11
XXIV	13	13	14	14	13	13	12
XXV	14	14	15	15	14	14	13
XXVI	15	15	16	16	15	15	14
XXVII	16	16	17	17	16	16	15
XXVIII	17	17	18	18	17	17	16
XXIX	18	18	19	19	18	18	17
XXX	19		20		19		
XXXI	20		21		20		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	168	168	168	168	168	168/7	167
I	18/7	18/8	16/9	15/10	13/11	7/12	3/1
II	19	19	17	16	14	8	4
III	20	20 ○	18 ○	17	15	9	5
IV	21 ○	21	19	18 ○	16	10	6
V	22	22	20	19	17 ○	11	7
VI	23	23	21	20	18	12	8
VII	24	24	22	21	19	13	9
VIII	25	25	23	22	20	14	10
IX	26	26	24	23	21	15	11
X	27	27	25	24	22	16 ○	12
XI	28	28	AE 26	25	23	17	13
XII	29	29	27	26	24	18	14
XIII	30	30	28	27	25	19	15 ○
XIV	31	31	29	28	26	20	16
XV	1/8	1/9	30	29	27	21	
XVI	2	2	1/10	30	28	22	
XVII	3	3 ●	2 ●	31	29	23	
XVIII	4	4	3	1/11 ●	30	ws 24	
XIX	5 ●	5	4	2	1/12 ●	25	
XX	6	6	5	3	2	26	
XXI	7	7	6	4	3	27	
XXII	8	8	7	5	4	28	
XXIII	9	9	8	6	5	29	
XXIV	10	10	9	7	6	30 ●	
XXV	11	11	10	8		31	
XXVI	12	12	11	9		1/1/167	
XXVII	13	13	12	10		2	
XXVIII	14	14	13	11			
XXIX	15	15	14	12			
XXX	16						
XXXI	17						

C167 Consuls: Q. Aelius Paetus, M. Iunius Pennus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	167	167	167	167	167	167	167
I		3/2	4/3	4/4	3/5	3/6	2/7
II		4	5	5	4	4	3
III		5	6	6	5	5	4
IV		6	7	7	6	6	5
V		7	8	8	7	7	6
VI		8	9	9	8	8	7
VII		9	10	10	9	9	8
VIII		10	11	11	10	10	9
IX		11	12	12	11	11 ○	10 ○
X		12	13	13 ○	12 ○	12	11
XI		13 ○	14 ○	14	13	13	12
XII		14	15	15	14	14	13
XIII		15	16	16	15	15	14
XIV		16	17	17	16	16	15
XV	17/1	17	18	18	17	17	16
XVI	18	18	19	19	18	18	17
XVII	19	19	20	20	19	19	18
XVIII	20	20	21	21	20	20	19
XIX	21	21	22	22	21	21	20
XX	22	22	23	23	22	22	21
XXI	23	23	VE 24	24	23	23	22
XXII	24	24	25	25	24	24	23
XXIII	25	25	26	26	25	25	24
XXIV	26	26	27	27	26	SS 26 ●	25 ●
XXV	27	27	28	28 ●	27	27	26
XXVI	28	28 ●	29 ●	29	28 ●	28	27
XXVII	29 ●	1/3	30	30	29	29	28
XXVIII	30	2	31	1/5	30	30	29
XXIX	31	3	1/4	2	31	1/7	30
XXX	1/2		2		1/6		
XXXI	2		3		2		

C167 Consuls: Q. Aelius Paetus, M. Iunius Pennus

(Intercal. 22)

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	167	167	167	167	167	167/6	166
I	31/7	31/8	29/9	28/10	26/11	19/12	15/1
II	1/8	1/9	30	29	27	20 •	16
III	2	2	1/10	30	28	21	17
IV	3	3	2	31	29	22	18
V	4	4	3	1/11	30	23	19
VI	5	5	4	2	1/12	ws 24	20
VII	6	6	5	3	2	25	21
VIII	7	7 ○	6	4	3	26	22
IX	8	8	7 ○	5	4	27	23
X	9 ○	9	8	6 ○	5	28	24
XI	10	10	9	7	6 ○	29	25
XII	11	11	10	8	7	30	26
XIII	12	12	11	9	8	31	27
XIV	13	13	12	10	9	1/1/166	28
XV	14	14	13	11	10	2	
XVI	15	15	14	12	11	3	
XVII	16	16	15	13	12	4 ○	
XVIII	17	17	16	14	13	5	
XIX	18	18	17	15	14	6	
XX	19	19	18	16	15	7	
XXI	20	20	19	17	16	8	
XXII	21	21	20	18	17	9	
XXIII	22	22 •	21	19	18	10	
XXIV	23	23	22 •	20 •		11	
XXV	24 •	24	23	21		12	
XXVI	25	25	24	22		13	
XXVII	26	AE 26	25	23		14	
XXVIII	27	27	26	24			
XXIX	28	28	27	25			
XXX	29						
XXXI	30						

C166 Consuls: M. Claudius Marcellus, C. Sulpicius Galus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	166	166	166	166	166	166	166
I		15/2	16/3	16/4	15/5	15/6 •	14/7
II		16	17	17 •	16	16	15 •
III		17 •	18	18	17 •	17	16
IV		18	19 •	19	18	18	17
V		19	20	20	19	19	18
VI		20	21	21	20	20	19
VII		21	22	22	21	21	20
VIII		22	23	23	22	22	21
IX		23	VE 24	24	23	23	22
X		24	25	25	24	24	23
XI		25	26	26	25	25	24
XII		26	27	27	26	SS 26	25
XIII		27	28	28	27	27	26
XIV		28	29	29	28	28	27
XV	29/1	1/3	30	30	29	29 ○	28
XVI	30	2	31	1/5	30	30	29 ○
XVII	31	3	1/4	2 ○	31 ○	1/7	30
XVIII	1/2	4 ○	2 ○	3	1/6	2	31
XIX	2	5	3	4	2	3	1/8
XX	3 ○	6	4	5	3	4	2
XXI	4	7	5	6	4	5	3
XXII	5	8	6	7	5	6	4
XXIII	6	9	7	8	6	7	5
XXIV	7	10	8	9	7	8	6
XXV	8	11	9	10	8	9	7
XXVI	9	12	10	11	9	10	8
XXVII	10	13	11	12	10	11	9
XXVIII	11	14	12	13	11	12	10
XXIX	12	15	13	14	12	13	11
XXX	13		14		13		
XXXI	14		15		14		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	166	166	166	166	166	165	165
I	12/8	12/9 •	11/10•	9/11	8/12	1/1/165	28/1
II	13 •	13	12	10 •	9 •	2	29
III	14	14	13	11	10	3	30
IV	15	15	14	12	11	4	31
V	16	16	15	13	12	5	1/2
VI	17	17	16	14	13	6	2
VII	18	18	17	15	14	7	3
VIII	19	19	18	16	15	8 •	4
IX	20	20	19	17	16	9	5
X	21	21	20	18	17	10	6 •
XI	22	22	21	19	18	11	7
XII	23	23	22	20	19	12	8
XIII	24	24	23	21	20	13	9
XIV	25	25	24	22	21	14	10
XV	26	26 ○	25	23	22	15	
XVI	27 ○	AE 27	26 ○	24	23	16	
XVII	28	28	27	25 ○	ws 24 ○	17	
XVIII	29	29	28	26	25	18	
XIX	30	30	29	27	26	19	
XX	31	1/10	30	28	27	20	
XXI	1/9	2	31	29	28	21	
XXII	2	3	1/11	30	29	22	
XXIII	3	4	2	1/12	30	23 ○	
XXIV	4	5	3	2	31	24	
XXV	5	6	4	3		25	
XXVI	6	7	5	4		26	
XXVII	7	8	6	5		27	
XXVIII	8	9	7	6			
XXIX	9	10	8	7			
XXX	10						
XXXI	11						

C165 Consuls: T. Manlius Torquatus, Cn. Octavius

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	165	165	165	165	165	165	165
I		28/2	28/3	28/4	27/5	27/6	26/7
II		29	29	29	28	28	27
III		1/3	30	30	29	29	28
IV		2	31	1/5	30	30	29
V		3	1/4	2	31	1/7	30
VI		4	2	3	1/6	2	31
VII		5	3	4	2	3 •	1/8
VIII		6	4	5 •	3 •	4	2 •
IX		7 •	5 •	6	4	5	3
X		8	6	7	5	6	4
XI		9	7	8	6	7	5
XII		10	8	9	7	8	6
XIII		11	9	10	8	9	7
XIV		12	10	11	9	10	8
XV	11/2	13	11	12	10	11	9
XVI	12	14	12	13	11	12	10
XVII	13	15	13	14	12	13	11
XVIII	14	16	14	15	13	14	12
XIX	15	17	15	16	14	15	13
XX	16	18	16	17	15	16	14
XXI	17	19	17	18	16	17 ○	15
XXII	18	20	18	19	17	18	16 ○
XXIII	19	21	19	20 ○	18 ○	19	17
XXIV	20	22 ○	20 ○	21	19	20	18
XXV	21	23	21	22	20	21	19
XXVI	22 ○	24	22	23	21	22	20
XXVII	VE 23	25	23	24	22	23	21
XXVIII	24	26	24	25	23	24	22
XXIX	25	27	25	26	24	25	23
XXX	26		26		SS 25		
XXXI	27		27		26		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	165	165	165	165	165/4	164	164
I	24/8	24/9	23/10	21/11	20/12	12/1	8/2
II	25	25	24	22	21	13	9
III	26	AE 26	25	23	22	14	10 o
IV	27	27	26	24	ws 23	15	11
V	28	28	27	25	24	16	12
VI	29	29	28	26	25	17	13
VII	30	30 •	29 •	27	26	18	14
VIII	31 •	1/10	30	28 •	27 •	19	15
IX	1/9	2	31	29	28	20	16
X	2	3	1/11	30	29 .	21	17
XI	3	4	2	1/12	30	22	18
XII	4	5	3	2	31	23	19
XIII	5	6	4	3	1/1/164	24	20
XIV	6	7	5	4	2	25	21
XV	7	8	6	5	3	26 •	
XVI	8	9	7	6	4	27	
XVII	9	10	8	7	5	28	
XVIII	10	11	9	8	6	29	
XIX	11	12	10	9	7	30	
XX	12	13	11	10	8	31	
XXI	13	14 o	12	11	9	1/2	
XXII	14 o	15	13 o	12 o	10	2	
XXIII	15	16	14	13	11 o	3	
XXIV	16	17	15	14		4	
XXV	17	18	16	15		5	
XXVI	18	19	17	16		6	
XXVII	19	20	18	17		7	
XXVIII	20	21	19	18			
XXIX	21	22	20	19			
XXX	22						
XXXI	23						

C164 Consuls: A. Manlius Torquatus, Q. Cassius Longinus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	164	164	164	164	164	164	164
I		11/3	9/4	10/5	8/6 ○	9/7	7/8
II		12 ○	10 ○	11	9	10	8
III		13	11	12	10	11	9
IV		14	12	13	11	12	10
V		15	13	14	12	13	11
VI		16	14	15	13	14	12
VII		17	15	16	14	15	13
VIII		18	16	17	15	16	14
IX		19	17	18	16	17	15
X		20	18	19	17	18	16
XI		21	19	20	18	19	17
XII		22	20	21	19	20	18
XIII		23	21	22	20	21	19
XIV		VE 24	22	23	21	22 ●	20 ●
XV	22/2	25	23	24 ●	22 ●	23	21
XVI	23	26 ●	24 ●	25	23	24	22
XVII	24 ●	27	25	26	24	25	23
XVIII	25	28	26	27	25	26	24
XIX	26	29	27	28	SS 26	27	25
XX	27	30	28	29	27	28	26
XXI	28	31	29	30	28	29	27
XXII	1/3	1/4	30	31	29	30	28
XXIII	2	2	1/5	1/6	30	31	29
XXIV	3	3	2	2	1/7	1/8	30
XXV	4	4	3	3	2	2	31
XXVI	5	5	4	4	3	3	1/9
XXVII	6	6	5	5	4	4	2
XXVIII	7	7	6	6	5	5 ○	3
XXIX	8	8	7	7	6	6	4 ○
XXX	9		8		7 ○		
XXXI	10		9 ○		8		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	164	164	164	164	163	163	163
I	5/9	6/10	4/11	3/12	1/1/163	25/1	21/2
II	6	7	5	4	2	26	22
III	7	8	6	5	3	27	23
IV	8	9	7	6	4	28	24
V	9	10	8	7	5	29	25
VI	10	11	9	8	6	30 ○	26
VII	11	12	10	9	7	31	27
VIII	12	13	11	10	8	1/2	28
IX	13	14	12	11	9	2	1/3 ○
X	14	15	13	12	10	3	2
XI	15	16	14	13	11	4	3
XII	16	17	15	14	12	5	4
XIII	17	18	16	15	13	6	5
XIV	18	19 ●	17 ●	16	14	7	6
XV	19 ●	20	18	17 ●	15 ●	8	
XVI	20	21	19	18	16	9	
XVII	21	22	20	19	17	10	
XVIII	22	23	21	20	18	11	
XIX	23	24	22	21	19	12	
XX	24	25	23	22	20	13	
XXI	25	26	24	23	21	14 ●	
XXII	AE 26	27	25	WS 24	22	15	
XXIII	27	28	26	25	23	16	
XXIV	28	29	27	26	24	17	
XXV	29	30	28	27		18	
XXVI	30	31	29	28		19	
XXVII	1/10	1/11	30	29		20	
XXVIII	2	2 ○	1/12 ○	30			
XXIX	3 ○	3	2	31 ○			
XXX	4						
XXXI	5						

C163 Consuls: Ti. Sempronius Gracchus, M'. Iuventius Thalna

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	163	163	163	163	163	163	163
I		VE24/3	22/4	23/5	21/6	22/7	20/8
II		25	23	24	22	23	21
III		26	24	25	23	24	22
IV		27	25	26	24	25	23
V		28	26	27	25	26 ○	24 ○
VI		29	27	28 ○	SS 26	27	25
VII		30 ○	28	29	27 ○	28	26
VIII		31	29 ○	30	28	29	27
IX		1/4	30	31	29	30	28
X		2	1/5	1/6	30	31	29
XI		3	2	2	1/7	1/8	30
XII		4	3	3	2	2	31
XIII		5	4	4	3	3	1/9
XIV		6	5	5	4	4	2
XV	7/3	7	6	6	5	5	3
XVI	8	8	7	7	6	6	4
XVII	9	9	8	8	7	7	5
XVIII	10	10	9	9	8	8	6
XIX	11	11	10	10	9	9 ●	7
XX	12	12	11	11 ●	10	10	8 ●
XXI	13	13 ●	12	12	11 ●	11	9
XXII	14	14	13 ●	13	12	12	10
XXIII	15 ●	15	14	14	13	13	11
XXIV	16	16	15	15	14	14	12
XXV	17	17	16	16	15	15	13
XXVI	18	18	17	17	16	16	14
XXVII	19	19	18	18	17	17	15
XXVIII	20	20	19	19	18	18	16
XXIX	21	21	20	20	19	19	17
XXX	22		21		20		
XXXI	23		22		21		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	163	163	163	163/2	162	162	162
I	18/9	19/10	17/11	16/12	14/1	6/2	5/3 •
II	19	20	18	17	15	7	6
III	20	21	19	18	16	8	7
IV	21	22 ○	20	19	17	9	8
V	22	23	21 ○	20 ○	18	10	9
VI	23 ○	24	22	21	19 ○	11	10
VII	24	25	23	22	20	12	11
VIII	25	26	24	23	21	13	12
IX	AE 26	27	25	WS 24	22	14	13
X	27	28	26	25	23	15	14
XI	28	29	27	26	24	16	15
XII	29	30	28	27	25	17	16
XIII	30	31	29	28	26	18 •	17
XIV	1/10	1/11	30	29	27	19	18
XV	2	2	1/12	30	28	20	
XVI	3	3	2	31	29	21	
XVII	4	4	3	1/1/162	30	22	
XVIII	5	5	4	2	31	23	
XIX	6	6	5	3	1/2	24	
XX	7	7 •	6 •	4	2	25	
XXI	8 •	8	7	5 •	3 •	26	
XXII	9	9	8	6	4	27	
XXIII	10	10	9	7	5	28	
XXIV	11	11	10	8		1/3	
XXV	12	12	11	9		2	
XXVI	13	13	12	10		3	
XXVII	14	14	13	11		4	
XXVIII	15	15	14	12			
XXIX	16	16	15	13			
XXX	17						
XXXI	18						

CI62 Consuls: P. Cornelius Scipio Nasica, C. Marcius Figulus

	MAR	APR	MAI	JUN	QUI	SEX
	162	162	162	162	162	162
I		5/4	4/5	4/6	3/7	3/8
II		6	5	5	4	4
III		7	6	6	5	5
IV		8	7	7	6	6
V		9	8	8	7	7
VI		10	9	9	8	8
VII		11	10	10	9	9
VIII		12	11	11	10	10
IX		13	12	12	11	11
X		14	13	13	12	12
XI		15	14	14	13	13
XII		16	15	15	14	14 ○
XIII		17	16	16 ○	15	15
XIV		18 ○	17	17	16 ○	16
XV	19/3 ○	19	18 ○	18	17	17
XVI	20	20	19	19	18	18
XVII	21	21	20	20	19	19
XVIII	22	22	21	21	20	20
XIX	23	23	22	22	21	21
XX	VE 24	24	23	23	22	22
XXI	25	25	24	24	23	23
XXII	26	26	25	25	24	24
XXIII	27	27	26	SS 26	25	25
XXIV	28	28	27	27	26	26
XXV	29	29	28	28	27	27
XXVI	30	30	29	29	28	28 •
XXVII	31	1/5	30	30	29	29
XXVIII	1/4	2 •	31	1/7	30 •	30
XXIX	2	3	1/6 •	2	31	31
XXX	3 •		2		1/8	
XXXI	4		3		2	

C162 Consuls: P. Cornelius Scipio Nasica, C. Marcius Figulus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	162	162	162	162	162/1	161	161
I	1/9	30/9	31/10	29/11	28/12	26/1	23/2
II	2	1/10	1/11	30	29	27	24
III	3	2	2	1/12	30	28	25
IV	4	3	3	2	31	29	26
V	5	4	4	3	1/1/161	30	27
VI	6	5	5	4	2	31	28
VII	7	6	6	5	3	1/2	29
VIII	8	7	7	6	4	2	1/3
IX	9	8	8	7	5	3	2
X	10	9	9	8	6	4	3
XI	11	10	10 ○	9	7	5	4
XII	12 ○	11	11	10 ○	8 ○	6	5
XIII	13	12 ○	12	11	9	7 ○	6
XIV	14	13	13	12	10	8	7 ○
XV	15	14	14	13	11	9	
XVI	16	15	15	14	12	10	
XVII	17	16	16	15	13	11	
XVIII	18	17	17	16	14	12	
XIX	19	18	18	17	15	13	
XX	20	19	19	18	16	14	
XXI	21	20	20	19	17	15	
XXII	22	21	21	20	18	16	
XXIII	23	22	22	21	19	17	
XXIV	24	23	23	22	20	18	
XXV	25	24	24	23	21	19	
XXVI	26	25	25 •	ws 24	22	20	
XXVII	AE 27 •	26	26	25 •	23	21	
XXVIII	28	27 •	27	26	24 •	22 •	
XXIX	29	28	28	27	25		
XXX		29					
XXXI		30					

C161 Consuls: M. Valerius Messalla, C. Fannius Strabo

	MAR	APR	MAY	JUN	QUI	SEX	SEP
	161	161	161	161	161	161	161
I		25/3	23/4	24/5	22/6	23/7	21/8
II		26	24	25	23	24	22
III		27	25	26	24	25	23
IV		28	26	27	ss 25	26	24
V		29	27	28	26	27	25
VI		30	28	29	27	28	26
VII		31	29	30	28	29	27
VIII		1/4	30	31	29	30	28
IX		2	1/5	1/6	30	31	29
X		3	2	2	1/7	1/8	30
XI		4	3	3	2	2	31
XII		5	4	4 ○	3	3 ○	1/9 ○
XIII		6 ○	5	5	4 ○	4	2
XIV		7	6 ○	6	5	5	3
XV	8/3	8	7	7	6	6	4
XVI	9	9	8	8	7	7	5
XVII	10	10	9	9	8	8	6
XVIII	11	11	10	10	9	9	7
XIX	12	12	11	11	10	10	8
XX	13	13	12	12	11	11	9
XXI	14	14	13	13	12	12	10
XXII	15	15	14	14	13	13	11
XXIII	16	16	15	15	14	14	12
XXIV	17	17	16	16	15	15	13
XXV	18	18	17	17	16	16 •	14
XXVI	19	19	18	18	17	17	15 •
XXVII	20	20	19	19 •	18 •	18	16
XXVIII	21	21 •	20 •	20	19	19	17
XXIX	22	22	21	21	20	20	18
XXX	VE 23 •		22		21		
XXXI	24		23		22		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	161	161	161	161/0	160	160	160
I	19/9	20/10	18/11	17/12	15/1	8/2	7/3
II	20	21	19	18	16	9	8
III	21	22	20	19	17	10	9
IV	22	23	21	20	18	11 •	10
V	23	24	22	21	19	12	11
VI	24	25	23	22	20	13	12 •
VII	25	26	24	WS 23	21	14	13
VIII	AE 26	27	25	24	22	15	14
IX	27	28	26	25	23	16	15
X	28	29	27	26	24	17	16
XI	29	30 ○	28 ○	27	25	18	17
XII	30	31	29	28 ○	26 ○	19	18
XIII	1/10 ○	1/11	30	29	27	20	19
XIV	2	2	1/12	30	28	21	20
XV	3	3	2	31	29	22	
XVI	4	4	3	1/1/160	30	23	
XVII	5	5	4	2	31	24	
XVIII	6	6	5	3	1/2	25 ○	
XIX	7	7	6	4	2	26	
XX	8	8	7	5	3	27	
XXI	9	9	8	6	4	28	
XXII	10	10	9	7	5	1/3	
XXIII	11	11	10	8	6	2	
XXIV	12	12	11	9	7	3	
XXV	13	13 •	12	10		4	
XXVI	14	14	13 •	11		5	
XXVII	15 •	15	14	12 •		6	
XXVIII	16	16	15	13			
XXIX	17	17	16	14			
XXX	18						
XXXI	19						

C160 Consuls: L. Ancius Gallus, M. Cornelius Cethegus

	MAR	APR	MAI	JUN	QUI	SEX
	160	160	160	160	160	160
I		7/4	6/5	6/6	5/7	5/8
II		8	7	7	6	6 •
III		9	8	8 •	7	7
IV		10	9	9	8 •	8
V		11 •	10 •	10	9	9
VI		12	11	11	10	10
VII		13	12	12	11	11
VIII		14	13	13	12	12
IX		15	14	14	13	13
X		16	15	15	14	14
XI		17	16	16	15	15
XII		18	17	17	16	16
XIII		19	18	18	17	17
XIV		20	19	19	18	18
XV	21/3	21	20	20	19	19
XVI	22	22	21	21	20	20
XVII	23	23	22	22	21	21 ○
XVIII	VE 24	24	23	23 ○	22	22
XIX	25	25 ○	24 ○	24	23 ○	23
XX	26 ○	26	25	25	24	24
XXI	27	27	26	ss 26	25	25
XXII	28	28	27	27	26	26
XXIII	29	29	28	28	27	27
XXIV	30	30	29	29	28	28
XXV	31	1/5	30	30	29	29
XXVI	1/4	2	31	1/7	30	30
XXVII	2	3	1/6	2	31	31
XXVIII	3	4	2	3	1/8	1/9
XXIX	4	5	3	4	2	2
XXX	5		4		3	
XXXI	6		5		4	

C160 Consuls: L. Ancius Gallus, M. Cornelius Cethegus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	160	160	159	160	160/59	159	159
I	3/9	2/10	2/11	1/12	30/12	28/1	25/2
II	4 •	3	3 •	2 •	31	29	26
III	5	4 •	4	3	1/1/159•	30	27
IV	6	5	5	4	2	31 •	28
V	7	6	6	5	3	1/2	1/3
VI	8	7	7	6	4	2	2 •
VII	9	8	8	7	5	3	3
VIII	10	9	9	8	6	4	4
IX	11	10	10	9	7	5	5
X	12	11	11	10	8	6	6
XI	13	12	12	11	9	7	7
XII	14	13	13	12	10	8	8
XIII	15	14	14	13	11	9	9
XIV	16	15	15	14	12	10	10
XV	17	16	16	15	13	11	
XVI	18	17	17	16	14	12	
XVII	19	18	18 ○	17	15	13	
XVIII	20 ○	19 ○	19	18 ○	16 ○	14 ○	
XIX	21	20	20	19	17	15	
XX	22	21	21	20	18	16	
XXI	23	22	22	21	19	17	
XXII	24	23	23	22	20	18	
XXIII	25	24	24	23	21	19	
XXIV	AE 26	25	25	WS 24	22	20	
XXV	27	26	26	25	23	21	
XXVI	28	27	27	26	24	22	
XXVII	29	28	28	27	25	23	
XXVIII	30	29	29	28	26	24	
XXIX	1/10	30	30	29	27		
XXX		31					
XXXI		1/11					

C159 Consuls: Cn. Cornelius Dolabella, M. Fulvius Nobilior

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	159	159	159	159	159	159	159
I		28/3	26/4	27/5	25/6	26/7	24/8
II		29	27	28	ss 26	27 •	25 •
III		30	28	29 •	27 •	28	26
IV		31 •	29	30	28	29	27
V		1/4	30 •	31	29	30	28
VI		2	1/5	1/6	30	31	29
VII		3	2	2	1/7	1/8	30
VIII		4	3	3	2	2	31
IX		5	4	4	3	3	1/9
X		6	5	5	4	4	2
XI		7	6	6	5	5	3
XII		8	7	7	6	6	4
XIII		9	8	8	7	7	5
XIV		10	9	9	8	8	6
XV	11/3	11	10	10	9	9	7
XVI	12	12	11	11	10	10 ○	8
XVII	13	13	12	12 ○	11	11	9 ○
XVIII	14	14 ○	13	13	12 ○	12	10
XIX	15	15	14 ○	14	13	13	11
XX	16 ○	16	15	15	14	14	12
XXI	17	17	16	16	15	15	13
XXII	18	18	17	17	16	16	14
XXIII	19	19	18	18	17	17	15
XXIV	20	20	19	19	18	18	16
XXV	21	21	20	20	19	19	17
XXVI	22	22	21	21	20	20	18
XXVII	23	23	22	22	21	21	19
XXVIII	ve 24	24	23	23	22	22	20
XXIX	25	25	24	24	23	23	21
XXX	26		25		24		
XXXI	27		26		25		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	159	159	159	159/8	158	158	158
I	22/9	23/10●	21/11●	20/12	18/1	10/2	9/3
II	23 ●	24	22	21 ●	19	11	10
III	24	25	23	22	20 ●	12	11
IV	25	26	24	23	21	13	12
V	AE 26	27	25	WS 24	22	14	13
VI	27	28	26	25	23	15	14
VII	23	29	27	26	24	16	15
VIII	29	30	28	27	25	17	16
IX	30	31	29	28	26	18	17
X	1/10	1/11	30	29	27	19 ●	18
XI	2	2	1/12	30	28	20	19
XII	3	3	2	31	29	21	20 ●
XIII	4	4	3	1/1/158	30	22	21
XIV	5	5	4	2	31	23	22
XV	6	6	5	3	1/2	24	
XVI	7	7 ○	6	4	2	25	
XVII	8	8	7 ○	5	3	26	
XVIII	9 ○	9	8	6 ○	4 ○	27	
XIX	10	10	9	7	5	28	
XX	11	11	10	8	6	1/3	
XXI	12	12	11	9	7	2	
XXII	13	13	12	10	8	3	
XXIII	14	14	13	11	9	4	
XXIV	15	15	14	12		5 ○	
XXV	16	16	15	13		6	
XXVI	17	17	16	14		7	
XXVII	18	18	17	15		8	
XXVIII	19	19	18	16			
XXIX	20	20	19	17			
XXX	21						
XXXI	22						

C158 COnsuls: M. Aemilius Lepidus, C. Popillius Laenas

	MAR	APR	MAI	JUN	QUI	SEX
	158	158	158	158	158	158
I		8/4	7/5	7/6	6/7	6/8
II		9	8	8	7	7
III		10	9	9	8	8
IV		11	10	10	9	9
V		12	11	11	10	10
VI		13	12	12	11	11
VII		14	13	13	12	12
VIII		15	14	14	13	13
IX		16	15	15	14	14
X		17	16	16	15	15 •
XI		18	17	17 •	16 •	16
XII		19 •	18	18	17	17
XIII		20	19 •	19	18	18
XIV		21	20	20	19	19
XV	22/3	22	21	21	20	20
XVI	23	23	22	22	21	21
XVII	VE 24	24	23	23	22	22
XVIII	25	25	24	24	23	23
XIX	26	26	25	25	24	24
XX	27	27	26	SS 26	25	25
XXI	28	28	27	27	26	26
XXII	29	29	28	28	27	27
XXIII	30	30	29	29	28	28
XXIV	31	1/5	30	30	29	29 ○
XXV	1/4	2	31	1/7 ○	30 ○	30
XXVI	2	3 ○	1/6 ○	2	31	31
XXVII	3	4	2	3	1/8	1/9
XXVIII	4 ○	5	3	4	2	2
XXIX	5	6	4	5	3	3
XXX	6		5		4	
XXXI	7		6		5	

C158 Consuls: M. Aemilius Lepidus, C. Popillius Laenas

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	158	158	158	158	158/7	157	157
I	4/9	3/10	3/11	2/12	31/12	29/1	26/2
II	5	4	4	3	1/1/157	30	27
III	6	5	5	4	2	31	28
IV	7	6	6	5	3	1/2	29
V	8	7	7	6	4	2	1/3
VI	9	8	8	7	5	3	2
VII	10	9	9	8	6	4	3
VIII	11	10	10	9	7	5	4
IX	12	11	11 •	10 •	8	6	5
X	13 •	12	12	11	9 •	7	6
XI	14	13 •	13	12	10	8 •	7
XII	15	14	14	13	11	9	8 •
XIII	16	15	15	14	12	10	9
XIV	17	16	16	15	13	11	10
XV	18	17	17	16	14	12	
XVI	19	18	18	17	15	13	
XVII	20	19	19	18	16	14	
XVIII	21	20	20	19	17	15	
XIX	22	21	21	20	18	16	
XX	23	22	22	21	19	17	
XXI	24	23	23	22	20	18	
XXII	25	24	24	23	21	19	
XXIII	AE 26	25	25	WS 24	22	20	
XXIV	27	26	26 ○	25	23	21	
XXV	28 ○	27	27	26 ○	24	22	
XXVI	29	28 ○	28	27	25 ○	23 ○	
XXVII	30	29	29	28	26	24	
XXVIII	1/10	30	30	29	27	25	
XXIX	2	31	1/12	30	28		
XXX		1/11					
XXXI		2					

C157 Consuls: Sex. Iulius Caesar, L. Aurelius Orestes

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	157	157	157	157	157	157	157
I		28/3	26/4	27/5	ss 25/6	26/7	24/8
II		29	27	28	26	27	25
III		30	28	29	27	28	26
IV		31	29	30	28	29	27
V		1/4	30	31	29	30	28
VI		2	1/5	1/6	30	31	29
VII		3	2	2	1/7	1/8	30
VIII		4	3	3	2	2	31
IX		5	4	4	3	3 •	1/9
X		6	5	5 •	4	4	2 •
XI		7 •	6	6	5 •	5	3
XII		8	7 •	7	6	6	4
XIII		9	8	8	7	7	5
XIV		10	9	9	8	8	6
XV	11/3	11	10	10	9	9	7
XVI	12	12	11	11	10	10	8
XVII	13	13	12	12	11	11	9
XVIII	14	14	13	13	12	12	10
XIX	15	15	14	14	13	13	11
XX	16	16	15	15	14	14	12
XXI	17	17	16	16	15	15	13
XXII	18	18	17	17	16	16	14
XXIII	19	19	18	18	17	17 ○	15
XXIV	20	20	19	19 ○	18	18	16 ○
XXV	21	21	20	20	19 ○	19	17
XXVI	22	22 ○	21 ○	21	20	20	18
XXVII	ve 23 ○	23	22	22	21	21	19
XXVIII	24	24	23	23	22	22	20
XXIX	25	25	24	24	23	23	21
XXX	26		25		24		
XXXI	27		26		25		

C157 Consuls: Sex. Iulius Caesar, L. Aurelius Orestes

(Intercal. 23)

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	157	157	157	157/6	156	156	156
I	22/9	23/10	21/11	20/12	18/1	11/2	10/3
II	23	24	22	21	19	12 ○	11
III	24	25	23	22	20	13	12
IV	25	26	24	ws 23	21	14	13 ○
V	AE 26	27	25	24	22	15	14
VI	27	28	26	25	23	16	15
VII	28	29	27	26	24	17	16
VIII	29	30	28	27	25	18	17
IX	30	31 ●	29 ●	28	26	19	18
X	1/10 ●	1/11	30	29 ●	27 ●	20	19
XI	2	2	1/12	30	28	21	20
XII	3	3	2	31	29	22	21
XIII	4	4	3	1/1/156	30	23	22
XIV	5	5	4	2	31	24	23
XV	6	6	5	3	1/2	25	
XVI	7	7	6	4	2	26 ●	
XVII	8	8	7	5	3	27	
XVIII	9	9	8	6	4	28	
XIX	10	10	9	7	5	1/3	
XX	11	11	10	8	6	2	
XXI	12	12	11	9	7	3	
XXII	13	13	12	10	8	4	
XXIII	14	14 ○	13	11	9	5	
XXIV	15	15	14 ○	12	10	6	
XXV	16 ○	16	15	13 ○		7	
XXVI	17	17	16	14		8	
XXVII	18	18	17	15		9	
XXVIII	19	19	18	16			
XXIX	20	20	19	17			
XXX	21						
XXXI	22						

C156 Consuls: L. Cornelius Lentulus Lupus, C. Marcius Figulus

	MAR	APR	MAI	JUN	QUI	SEX
	156	156	156	156	156	156
I		10/4	9/5	9/6 ○	8/7 ○	8/8
II		11 ○	10	10	9	9
III		12	11 ○	11	10	10
IV		13	12	12	11	11
V		14	13	13	12	12
VI		15	14	14	13	13
VII		16	15	15	14	14
VIII		17	16	16	15	15
IX		18	17	17	16	16
X		19	18	18	17	17
XI		20	19	19	18	18
XII		21	20	20	19	19
XIII		22	21	21	20	20
XIV		23	22	22	21	21
XV	VE 24/3	24	23	23	22	22 •
XVI	25	25	24	24 •	23	23
XVII	26	26 •	25 •	25	24 •	24
XVIII	27 •	27	26	ss 26	25	25
XIX	28	28	27	27	26	26
XX	29	29	28	28	27	27
XXI	30	30	29	29	28	28
XXII	31	1/5	30	30	29	29
XXIII	1/4	2	31	1/7	30	30
XXIV	2	3	1/6	2	31	31
XXV	3	4	2	3	1/8	1/9
XXVI	4	5	3	4	2	2
XXVII	5	6	4	5	3	3
XXVIII	6	7	5	6	4	4
XXIX	7	8	6	7	5	5 ○
XXX	8		7		6	
XXXI	9		8		7 ○	

C156 Consuls: L. Cornelius Lentulus Lupus, C. Marcius Figulus

	SEP	OCT	NOV	DEC	JAN	FEB	MAR
	156	156	156	156/5	155	155	155
I	6/9	5/10 ○	5/11	4/12	2/1 ○	31/1	28/2
II	7	6	6	5	3	1/2 ○	1/3
III	8	7	7	6	4	2	2 ○
IV	9	8	8	7	5	3	3
V	10	9	9	8	6	4	4
VI	11	10	10	9	7	5	5
VII	12	11	11	10	8	6	6
VIII	13	12	12	11	9	7	7
IX	14	13	13	12	10	8	8
X	15	14	14	13	11	9	9
XI	16	15	15	14	12	10	10
XII	17	16	16	15	13	11	11
XIII	18	17	17	16	14	12	12
XIV	19	18	18	17	15	13	13
XV	20	19	19 •	18 •	16	14	
XVI	21 •	20 •	20	19	17 •	15 •	
XVII	22	21	21	20	18	16	
XVIII	23	22	22	21	19	17	
XIX	24	23	23	22	20	18	
XX	25	24	24	23	21	19	
XXI	AE 26	25	25	WS 24	22	20	
XXII	27	26	26	25	23	21	
XXIII	28	27	27	26	24	22	
XXIV	29	28	28	27	25	23	
XXV	30	29	29	28	26	24	
XXVI	1/10	30	30	29	27	25	
XXVII	2	31	1/12	30	28	26	
XXVIII	3	1/11	2	31	29	27	
XXIX	4	2	3 ○	1/1/155	30		
XXX		3 ○					
XXXI		4					

C155 Consuls: P. Cornelius Scipio Nasica, M. Claudius Marcellus

	MAR	APR	MAI	JUN	QUI	SEX	SEP
	155	155	155	155	155	155	155
I		31/3	29/4	30/5 ○	28/6 ○	29/7	27/8
II		1/4 ○	30 ○	31	29	30	28
III		2	1/5	1/6	30	31	29
IV		3	2	2	1/7	1/8	30
V		4	3	3	2	2	31
VI		5	4	4	3	3	1/9
VII		6	5	5	4	4	2
VIII		7	6	6	5	5	3
IX		8	7	7	6	6	4
X		9	8	8	7	7	5
XI		10	9	9	8	8	6
XII		11	10	10	9	9	7
XIII		12	11	11	10	10	8
XIV		13	12	12	11	11 ●	9
XV	14/3	14	13	13 ●	12	12	10 ●
XVI	15	15 ●	14 ●	14	13 ●	13	11
XVII	16 ●	16	15	15	14	14	12
XVIII	17	17	16	16	15	15	13
XIX	18	18	17	17	16	16	14
XX	19	19	18	18	17	17	15
XXI	20	20	19	19	18	18	16
XXII	21	21	20	20	19	19	17
XXIII	22	22	21	21	20	20	18
XXIV	23	23	22	22	21	21	19
XXV	VE 24	24	23	23	22	22	20
XXVI	25	25	24	24	23	23	21
XXVII	26	26	25	25	24	24	22
XXVIII	27	27	26	SS 26	25	25	23
XXIX	28	28	27	27	26	26 ○	24 ○
XXX	29		28		27 ○		
XXXI	30		29		28		

	OCT	NOV	DEC	JAN	FEB	INTERK	MAR
	155	155	155	155/4	154	154	154
I	25/9	26/10	24/11	23/12	21/1 ○	13/2	12/3
II	AE 26	27	25	WS 24	22	14	13
III	27	28	26	25	23	15	14
IV	28	29	27	26	24	16	15
V	29	30	28	27	25	17	16
VI	30	31	29	28	26	18	17
VII	1/10	1/11	30	29	27	19 ○	18
VIII	2	2	1/12	30	28	20	19
IX	3	3	2	31	29	21	20
X	4	4	3	1/1/154	30	22	21 ○
XI	5	5	4	2	31	23	22
XII	6	6	5	3	1/2	24	23
XIII	7	7	6	4	2	25	VE 24
XIV	8	8 ●	7	5	3	26	25
XV	9	9	8 ●	6 ●	4	27	
XVI	10 ●	10	9	7	5 ●	28	
XVII	11	11	10	8	6	1/3	
XVIII	12	12	11	9	7	2	
XIX	13	13	12	10	8	3	
XX	14	14	13	11	9	4	
XXI	15	15	14	12	10	5	
XXII	16	16	15	13	11	6 ●	
XXIII	17	17	16	14	12	7	
XXIV	18	18	17	15		8	
XXV	19	19	18	16		9	
XXVI	20	20	19	17		10	
XXVII	21	21	20	18		11	
XXVIII	22	22 ○	21	19			
XXIX	23	23	22 ○	20			
XXX	24 ○						
XXXI	25						

C154 Consuls: Q. Opimius, L. Postumius Albinus

	MAR	APR	MAI	JUN	QUI
	154	154	154	154	154
I		12/4	11/5	11/6	10/7
II		13	12	12	11
III		14	13	13	12
IV		15	14	14	13
V		16	15	15	14
VI		17	16	16	15
VII		18	17	17	16
VIII		19	18	18 ○	17 ○
IX		20 ○	19 ○	19	18
X		21	20	20	19
XI		22	21	21	20
XII		23	22	22	21
XIII		24	23	23	22
XIV		25	24	24	23
XV	26/3	26	25	25	24
XVI	27	27	26	ss 26	25
XVII	28	28	27	27	26
XVIII	29	29	28	28	27
XIX	30	30	29	29	28
XX	31	1/5	30	30	29
XXI	1/4	2	31	1/7	30
XXII	2	3	1/6	2 ●	31 ●
XXIII	3	4 ●	2 ●	3	1/8
XXIV	4 ●	5	3	4	2
XXV	5	6	4	5	3
XXVI	6	7	5	6	4
XXVII	7	8	6	7	5
XXVIII	8	9	7	8	6
XXIX	9	10	8	9	7
XXX	10		9		8
XXXI	11		10		9

C154 Consuls: Q. Opimius, L. Postumius Albinus

	SEX	SEP	OCT	NOV	DEC
	154	154	154	154	154/3
I	10/8	8/9	7/10	7/11	6/12
II	11	9	8	8	7
III	12	10	9	9	8
IV	13	11	10	10	9
V	14	12	11	11	10
VI	15 ○	13	12	12 ○	11 ○
VII	16	14 ○	13 ○	13	12
VIII	17	15	14	14	13
IX	18	16	15	15	14
X	19	17	16	16	15
XI	20	18	17	17	16
XII	21	19	18	18	17
XIII	22	20	19	19	18
XIV	23	21	20	20	19
XV	24	22	21	21	20
XVI	25	23	22	22	21
XVII	26	24	23	23	22
XVIII	27	25	24	24	23
XIX	28	AE 26	25	25	WS 24
XX	29	27	26	26	25
XXI	30 ●	28	27	27 ●	26
XXII	31	29 ●	28 ●	28	27 ●
XXIII	1/9	30	29	29	28
XXIV	2	1/10	30	30	29
XXV	3	2	31	1/12	30
XXVI	4	3	1/11	2	31
XXVII	5	4	2	3	1/1/153
XXVIII	6	5	3	4	2
XXIX	7	6	4	5	3
XXX			5		
XXXI			6		

Appendix:

Julian Days (C218-C154)

Julian Days (C218-C154)

In 1582, Joseph Scaliger created a continuous dating system whose measurement unit was a so-called julian day that ran from noon to noon UT. Largely for astronomical reasons the base date chosen was January 1, 4713 BCE. Julian day 0 commenced, then at noon UT on this day, julian day 1 at noon UT on January 2, 4713 BCE, julian day 2 at noon UT on January 3, 4713 BCE, and so on and so forth. Given the utility of julian day as absolute chronological markers, I have tabulated in what follows those that would correspond, given the correctness of my calendrical calibrations, to the Ides of March and the Kalends of all months of all Roman consular years from C218 to C154 inclusive.

CON. YEAR	IDES MAR.	KAL. APR.	KAL. MAY	KAL. JUN.	KAL. JUL.	KAL. AUG.	KAL. SEP.	KAL. OCT.	KAL. NOV.	KAL. DEC.	KAL. JAN.	KAL. FEB.	KAL. INT.	KAL. MAR.
218	1641885	1641902	1641931	1641962	1641991	1642022	1642051	1642080	1642111	1642140	1642169	1642198	1642221	1642248
217	1642262	1642279	1642308	1642339	1642368	1642399	1642428	1642457	1642488	1642517	1642546	1642575		1642603
216	1642617	1642634	1642663	1642694	1642723	1642754	1642783	1642812	1642843	1642872	1642901	1642930	1642954	1642983
215	1642995	1643012	1643041	1643072	1643101	1643132	1643161	1643190	1643221	1643250	1643279	1643308		1643336
214	1643350	1643367	1643396	1643427	1643456	1643487	1643516	1643545	1643576	1643605	1643634	1643663	1643686	1643713
213	1643727	1643744	1643773	1643804	1643833	1643864	1643893	1643922	1643953	1643982	1644011	1644040		1644068
212	1644082	1644099	1644128	1644159	1644188	1644219	1644248	1644277	1644308	1644337	1644366	1644395	1644419	1644446
211	1644460	1644477	1644506	1644537	1644566	1644597	1644626	1644655	1644686	1644715	1644744	1644773		1644801
210	1644815	1644832	1644861	1644892	1644921	1644952	1644981	1645010	1645041	1645070	1645099	1645128	1645151	1645178
209	1645192	1645209	1645238	1645269	1645298	1645329	1645358	1645387	1645418	1645447	1645476	1645505		1645533
208	1645547	1645564	1645593	1645624	1645653	1645683	1645713	1645742	1645773	1645802	1645831	1645860		1645888
207	1645902	1645919	1645948	1645979	1646008	1646039	1646068	1646097	1646128	1646157	1646186	1646215		1646243
206	1646257	1646274	1646303	1646334	1646363	1646394	1646423	1646452	1646483	1646512	1646541	1646570		1646598
205	1646612	1646629	1646658	1646689	1646718	1646749	1646778	1646807	1646838	1646867	1646896	1646925		1646953
204	1646967	1646984	1647013	1647044	1647073	1647104	1647133	1647162	1647193	1647222	1647251	1647280		1647308
203	1647322	1647339	1647368	1647399	1647428	1647459	1647488	1647517	1647548	1647577	1647606	1647635		1647663
202	1647677	1647694	1647723	1647754	1647783	1647814	1647843	1647872	1647903	1647932	1647961	1647990		1648018
201	1648032	1648049	1648078	1648109	1648138	1648169	1648198	1648227	1648258	1648287	1648316	1648345		1648373
200	1648387	1648404	1648433	1648464	1648493	1648524	1648553	1648582	1648613	1648642	1648671	1648700		1648728

CON. YEAR	IDES MAR.	KAL. APR.	KAL. MAY	KAL. JUN.	KAL. JUL.	KAL. SEX.	KAL. SEP.	KAL. OCT.	KAL. NOV.	KAL. DEC.	KAL. JAN.	KAL. FEB.	KAL. INT.	KAL. MAR.
199	1648742	1648759	1648788	1648819	1648848	1648879	1648895	1648937	1648968	1648997	1649026	1649055		1649083
198	1649097	1649114	1649143	1649173	1649203	1649234	1649263	1649292	1649323	1649352	1649381	1649410		1649438
197	1649452	1649469	1649498	1649529	1649558	1649589	1649618	1649647	1649678	1649707	1649736	1649765		1649793
196	1649807	1649824	1649853	1649884	1649913	1649944	1649973	1650002	1650033	1650062	1650091	1650120		1650148
195	1650162	1650179	1650208	1650239	1650268	1650299	1650328	1650357	1650388	1650417	1650446	1650475		1650503
194	1650517	1650534	1650563	1650594	1650623	1650654	1650683	1650712	1650743	1650772	1650801	1650830		1650858
193	1650872	1650889	1650918	1650949	1650978	1651009	1651038	1651067	1651098	1651127	1651156	1651185	1651209	1651236
192	1651250	1651267	1651296	1651327	1651356	1651387	1651416	1651445	1651476	1651505	1651534	1651563		1651591
191	1651605	1651622	1651651	1651682	1651711	1651742	1651771	1651800	1651831	1651860	1651889	1651918	1651941	1651968
190	1651982	1651999	1652028	1652059	1652088	1652119	1652148	1652177	1652208	1652237	1652266	1652295		1652323
189	1652337	1652354	1652383	1652414	1652443	1652474	1652503	1652531	1652562	1652591	1652620	1652649	1652673	1652701
188	1652715	1652732	1652761	1652792	1652821	1652850	1652881	1652910	1652941	1652970	1652999	1653028		1653056
187	1653070	1653087	1653116	1653147	1653176	1653207	1653236	1653265	1653296	1653325	1653354	1653383	1653407	1653434
186	1653448	1653465	1653494	1653525	1653554	1653585	1653614	1653643	1653674	1653703	1653732	1653761		1653789
185	1653803	1653820	1653849	1653880	1653909	1653940	1653969	1653998	1654029	1654058	1654087	1654116	1654140	1654167
184	1654181	1654198	1654227	1654258	1654287	1654318	1654347	1654376	1654407	1654436	1654465	1654494		1654522
183	1654536	1654553	1654582	1654613	1654642	1654673	1654702	1654731	1654762	1654791	1654820	1654849	1654873	1654900
182	1654914	1654931	1654960	1654991	1655020	1655051	1655080	1655109	1655140	1655169	1655198	1655227		1655255
181	1655269	1655286	1655315	1655346	1655375	1655406	1655435	1655464	1655495	1655524	1655553	1655582	1655606	1655633

CON. YEAR	IDES MAR.	KAL. APR.	KAL. MAY	KAL. JUN.	KAL. QUI.	KAL. SEX.	KAL. SEP.	KAL. OCT.	KAL. NOV.	KAL. DEC.	KAL. JAN.	KAL. FEB.	KAL. INT.	KAL. MAR.
180	1655647	1655664	1655693	1655724	1655753	1655784	1655813	1655842	1655873	1655902	1655931	1655960		1655988
179	1656002	1656019	1656048	1656079	1656108	1656139	1656168	1656197	1656228	1656257	1656286	1656315	1656339	1656366
178	1656380	1656397	1656426	1656457	1656486	1656517	1656546	1656575	1656606	1656635	1656664	1656693		1656721
177	1656735	1656752	1656781	1656812	1656841	1656872	1656901	1656930	1656961	1656990	1657019	1657048	1657072	1657099
176	1657113	1657130	1657159	1657190	1657219	1657250	1657279	1657308	1657339	1657368	1657397	1657426		1657454
175	1657468	1657485	1657514	1657545	1657574	1657605	1657634	1657663	1657694	1657723	1657752	1657781	1657804	1657831
174	1657845	1657862	1657891	1657922	1657951	1657982	1658011	1658040	1658071	1658099	1658129	1658158		1658186
173	1658200	1658217	1658246	1658277	1658307	1658337	1658366	1658395	1658426	1658455	1658484	1658513	1658537	1658564
172	1658578	1658595	1658624	1658655	1658684	1658715	1658744	1658773	1658804	1658833	1658862	1658891		1658919
171	1658933	1658950	1658979	1659010	1659039	1659070	1659099	1659128	1659159	1659188	1659217	1659246	1659269	1659296
170	1659310	1659327	1659356	1659387	1659416	1659447	1659476	1659505	1659536	1659565	1659594	1659623	1659647	1659674
169	1659688	1659705	1659734	1659763	1659794	1659825	1659854	1659883	1659914	1659943	1659972	1660001	1660024	1660051
168	1660065	1660082	1660111	1660142	1660171	1660202	1660231	1660260	1660291	1660320	1660349	1660378	1660402	1660429
167	1660442	1660460	1660489	1660520	1660549	1660580	1660609	1660638	1660669	1660698	1660727	1660756	1660779	1660806
166	1660820	1660837	1660866	1660897	1660926	1660957	1660986	1661015	1661046	1661075	1661104	1661133	1661157	1661184
165	1661198	1661215	1661244	1661275	1661304	1661335	1661364	1661393	1661424	1661453	1661482	1661511	1661534	1661561
164	1661575	1661582	1661621	1661652	1661681	1661712	1661741	1661770	1661801	1661830	1661859	1661888	1661912	1661939
163	1661953	1661970	1661999	1662030	1662059	1662090	1662119	1662148	1662179	1662208	1662237	1662266	1662286	1662316
162	1662330	1662347	1662376	1662407	1662436	1662467	1662496	1662525	1662556	1662585	1662614	1662643		1662671

CON. YEAR	IDES MAR.	KAL. APR.	KAL. MAI	KAL. JUN.	KAL. QUI.	KAL. SEX.	KAL. SEP.	KAL. OCT.	KAL. NOV.	KAL. DEC.	KAL. JAN.	KAL. FEB.	KAL. INT.	KAL. MAR.
161	1662685	1662702	1662731	1662762	1662791	1662822	1662851	1662880	1662911	1662940	1662969	1662998	1663022	1663049
160	1663063	1663080	1663109	1663140	1663169	1663200	1663229	1663258	1663289	1663318	1663347	1663376		1663404
159	1663411	1663435	1663464	1663495	1663524	1663555	1663584	1663613	1663644	1663673	1663702	1663731	1663754	1663781
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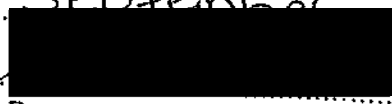
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The Prodigious of the Ancient Roman Republic and their Chronology.

A Resource for Modern Science.

VOLUME TWO

Submitted for Degree of Doctor of Philosophy

by

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Monash University, 1999.

Part Three

The Prodigious Record
218-167 BCE

Section One

Livy

Chapter Five

Livy, the *Ab Urbe Condita Libri*,
the prodigy lists for 218-167 BCE,
and their origin and completeness

A. Preface

As already noted, our main source, directly or indirectly, for *prodigia* reported, processed and expiated during the period of the Roman republic is the historian Livy. The content of Livy's *prodigia* lists for the period 218-167 BCE inclusive, together with comments, is presented in chapter 6. The purposes of the present chapter are to provide some basic data about Livy himself (section B) and his massive narrative history of Rome entitled *ab urbe condita libri* (Books from the Foundation of the City) (section C), to draw attention to some general features of the lists of prodigies that are contained in books 21-45 (section D.1), to consider the crucial question of Livy's source or sources for his prodigial material (section D.2) and, lastly, to broach the question of its completeness or otherwise (section D.3).

B. The Historian

On the basis of representations by the late chronographer Jerome, it is often stated that Livy, Titus Livius (no *cognomen* is recorded), was born in 59 BCE and died in 17 CE. Ogilvie¹ argues that a lifespan of 64 BCE to 12 CE is more likely. The latter of the two revisionist dates would be ruled out if we could trust a note in manuscripts of the *Periochae*, ancient summaries of each book of Livy's history, to the effect that book 121 was published by the author after Augustus' death, which took place in 14 CE. In the absence of any direct counterindication, the epitomator's statement is to be accorded provisional belief.

Livy's birthplace was Patavium (modern Padua), in the period of Augustus an important and flourishing city in the north of Italy. The rhetorician Quintilian, who supplies this information,² goes on to note that C. Asinius Pollio, one of Livy's contemporaries and a fellow historian, mocked his *Patavinitas*, his Paduanity. Exactly what Pollio had in mind is unclear, though attempts have been made to reach some conclusion.³

Patavium was possessed of a strict sense of morality,⁴ and his parents and

¹ OGILVIE (1965), p. 1.

² 1.5.56.

³ It has been suggested that this comment of Pollio is heavily reliant upon Greek models for understanding, and that he was hinting that Livy's work lacked *urbanitas* and *Latinitas*. For further on this topic, see K. LATTE (1940) and E. S. RAMAGE (1973), pp. 109-110. This may also be a jibe at his inherent religiosity (see below).

⁴ PLINY THE YOUNGER, *Ep.* 1.14.6: *habet aviam maternam Serranam Proculam e municipio Patavio. nosti loci mores: Serrana tamen Patavinis quoque severitatis exemplum est*

grandparents were likely to have taught the young Titus Livius the ways and beliefs with which they were totally familiar and to which they were firmly committed. Only when he came to Rome would he have been exposed to the indifference to the traditional Roman gods and ancestral ways which, to judge from the opinions expressed openly or obliquely in his writing, apparently offended his great and strong sense of morality. He was scornful of the abandonment and rejection of the old ways for new non-Roman philosophical systems and doggedly continued to record particulars connected to the ancient religion, berating his readers for their faithlessness to the forms that had made Rome great:

haec, etsi omnis divini humanique moris memoria abolevit nova peregrinaque omnia priscis ac patriis praeferendo, haud ab re duxi cerbis quoque ipsis, ut tradita nuncupataque sunt, referre (these particulars, even though the memory of every religious and secular usage has been wiped out by men's preference of the new and outlandish to the ancient and homebred, I had thought it not foreign to my purpose to repeat, and in the very words in which they were formulated and handed down).⁵

Livy's gravestone survives.⁶ We learn from it that his wife was Cassia Prima and that there were two sons. Either before or after his marriage Livy settled in Rome, where, clearly, he came to have an amicable relationship with Rome's first emperor, Augustus (31 BCE - 14 CE).⁷ His closeness to the imperial court is certified

(his maternal grandmother, Serrano Procula, comes from the town of Patavium, whose reputation you know; but Serrana is a model of propriety even to the Patavians).

MARTIAL, 11,16.7-8, also makes a remark about Patavium and its proverbial morality:

ti quoque nequitas nostri lususque libelli

uda, puella, leges, sis Patavina licet

(You also, my girl, will not be dry as you read the naughty jests of my little book, though you come from Patavium).

⁵ LIVY, 8,11.1.

⁶ See H. DESSAU, *Inscriptiones Latinae Selectae (ILS)*, Berlin 1892-1916, no. 2919.

⁷ TACITUS, *Annals* 4,34.

by his being in a position to encourage the future emperor Claudius to write history.⁸ Proximity to Augustus did not compromise Livy's independence of judgement and expression. After noting the emperor's own self-interested, propagandist account of an achievement of A. Cornelius Cossus, a legendary hero of Rome's past, he went on to present his own version.⁹ Again, the motivation for the reduction of the number of senators attributed to Tarquinius Superbus by Livy¹⁰ could tacitly reflect the widespread, negative view, shared by the historian, of a similar act by the *princeps* when, in 29 BCE, he reduced the size of the Senate by one hundred and ninety men.¹¹ An equally great historian of Rome, Tacitus (c. 56-120 CE), who was sensitive about such matters, duly praised Livy's concern for candour and truth.¹²

The provenance of Livy's gravestone, mentioned above, indicates that the historian died at Padua, not at Rome. While his departure back north may reflect no more than an old man's desire for a quieter environment and a return to the place of his childhood, it is possible, too, that Livy found the political and cultural climate

⁸ Suetonius, *Claudius* 41.1.

⁹ Livy, 4,20.5-11.

¹⁰ Livy, 1,49.6-7: *praecipue its patrum numero imminuto statuit nullos in patres legere, quo contemptior paucitate ipsa ordo esset, minusque per se nihil agi indignarentur. his enim regum primus traditum a prioribus morem de omnibus senatum consulendi solvit, domesticis consiliis rem publicam administravit; bellum, pacem, foedera, societates per si ipse, cum quibus voluit, iniussu populi ac senatus, fecit diremitque* (it was chiefly the senators whose numbers were reduced by this procedure, and Tarquinius determined to make no new appointments to the order, that it might be the more despised for its very paucity, and might chafe less at being ignored in all business of state. For this king was the first to break with the custom handed down by his predecessors, of consulting the senate on all occasions, and governed the nation without other advice than that of his own household. War, peace, treaties, and alliances were entered upon or broken off by the monarch himself, with whatever states he wished, and without the decree of people or senate).

¹¹ Dio, 52,42.1-3.

¹² Tacitus, *Annals* 4.34: *eloquentiae ac fides praestatur in primis* (distinguished to an outstanding degree of his eloquence and respect for truth).

under Tiberius, who became emperor in 14 CE after Augustus' death, less compatible and comfortable than that of the reign of his predecessor.

C. The History

At the time of his death, Livy had written 142 books of his *ab urbe condita libri* which covered the history of Rome from foundation to 9 BCE. Although some books are shorter than others, variations in length are not enormous. The sheer magnitude of Livy's enterprise can be gauged from the fact that the Loeb Classical Library English translation of books 21 and 22 requires 195 pages. Only books 1-10 and 21-45 are extant and portions of 41 and 43-45 are missing due to loss of leaves of the sole manuscript in which books 41-45 are preserved. A conspectus of contents of the last books is found in the *Periochae*, summaries, alluded to in the previous section. As mentioned in the first chapter, an epitome of much of Livy's missing narrative is provided by the *History Against The Pagans*, composed by the Christian writer, Orosius, in the fifth century CE. Orosius relays a few prodigy lists for the periods covered by books 11-120 and 46 onwards respectively. Many others belonging to the years from 166 BCE onwards come down to us, as again pointed out in the first chapter, in what remains of a fourth century CE collection of prodigies by Julius Obsequens. Even if Obsequens' work had still existed in its entirety, it is doubtful whether all the Livian lists beyond 167 BCE would be in our possession. Material culled by Obsequens overlays the surviving Livian books 37-45 and comparison reveals that the excerpter was either careless, selective or both.

Books 1-10 of Livy's history deal with the period from Rome's foundation until 292 BCE, with much of the earlier part of the narrative reflecting legend rather than reality. The prodigy lists contained are few and far between and there are some who

have queried, wrongly in my opinion, their authenticity.¹³ Books 21-45 cover the period 218-167 inclusive with prodigy lists now commanding a high profile. The structure of Livy's history is annalistic throughout with the annual module being the Roman consular year.

Indications in the text¹⁴ show that books 1-5 were completed between 27 and 25 BCE. As already indicated, the emperor Augustus was dead when Livy published book 121. Given composition of book 6-121, 116 books in all, over the four decades from 25 BCE to 14 CE, Livy's rate of composition would have been close to a remarkable three books in a year. Such speed may or may not have bearing upon the scrupulousness of Livy's research and the breadth of his source material.

Since the present work is not concerned with history or history writing *per se*, it is inappropriate to dwell at great length on Livy's style, strengths and weaknesses in his narrative, and his philosophy of history. Suffice it to say, in the first place, that many criticisms of all sorts have been levelled at Livy, some of them justly, and some of them not so justly. One class of gaffs in his work relates to military matters. A particularly amusing example, attributed by Walsh to carelessness, appears at 38.7.10 where Livy has apparently mistranslated Polybius' *θυρεούς* (shields) as *θύρας* (doors) and sees nothing incongruous in the image of soldiers blocking tunnels with *doors*! Walsh accuses him of showing his 'civilian's mind'.¹⁵ At another level, Livy has attracted criticism for detrimental obsession with Roman virtues, *gravitas* in

¹³ Compare OGILVIE (1965), pp. 403 and 415.

¹⁴ For a list of the passages concerned see OGILVIE (1965), p. 2.

¹⁵ WALSH (1958), p. 87.

particular.¹⁶ Hence an arguably regrettable excision of much of the humour reflected, for example, in Polybius' account of the interactions between Flaminius and Philip¹⁷, and Piso's portrayal of the reaction of the curule aedile, Cn. Flavius, to the conduct of the nobles.¹⁸ As a consequence of Livy's diagnosis that *gravitas*, not *levitas*, is the appropriate companion of *dignitas*, Romans tend to emerge in his work by and large as a rather dour and humourless crew. To the Romans of old, the virtues *dignitas*, *pietas*, *fides*, *disciplina*, *clementia*, *virtus* and *pudicitia* are routinely ascribed. Their negative counterparts, *levitas*, *impietas*, *ambitio*, *luxuria*, *avaritia*, *libido*, are attributed correspondingly to Rome's enemies and it is only when Livy's narrative approaches his own time that such baneful traits begin to be reflected in the Roman character too.¹⁹ Such distortion of truth (if one can use such a word as 'truth' in a context where little is really known) is a clear contrivance on Livy's part, not done subconsciously, but deliberately, to promote the ideal and resurrect, as it were, the *mos maiorum*, to emphasize to his readers those qualities that, to Livy's mind, had made Rome what she was.²⁰

¹⁶ Note, in this connexion, Livy's view (32,34.3) that kings should be above facetiousness and refrain from jesting.

¹⁷ POLYBIUS, 18,6.1 and LIVY, 32,34.4; POLYBIUS, 18,6.4 and LIVY, 32,34.10.

¹⁸ PISO (*ap.* GELLIUS, 7,9) and LIVY, 9,46.9.

¹⁹ Four of the listed character flaws are said by LEVICK (1982), p. 53, to have been ascribed by ancient authors as the cause of the decline of Rome in the last century of the Republic.

²⁰ SACKS (1981), p. 5, in his discussion of the motivations behind ancient historians includes this point when he writes, "[the historian] may be more interested in selecting and organizing the material in such a way as to prove a point or teach a lesson to the reader rather than tell a simple story." Livy himself promotes such a view in his preface: *hoc illud est praecipue in cognitione rerum salubre ac frugiferum, omnis te exempli documenta in inlustrata posita monumento intueri; inde tibi tuaeque rei publicae quod imitere capias, inde foedum inceptu, foedum exitu, quod vites* (what chiefly makes the study of history wholesome and

Overall, to go on by sharpening the focus on ethos and leitmotifs, Livy's history is profoundly didactic, presenting moral lessons through description of historical acts and contrasting the greatness that was early Rome with the aimlessness and dissolution of the late republic. His despair of what Romans had become finds a suitable mouthpiece in the aged and doomed Hannibal, poisoned in 183 BCE:

"Liberemus" inquit "diuturna cura populum Romanum, quando mortem senis expectare longum censent. nec magnam nec memorabilem ex inerni proditoque Flaminius victoria, fecit. mores quidem populi Romani quantum mutaverint, vel hic dies argumento erit. horum patres Pyrrho regi, hosti armato, exercitum in Italia habenti ut a veneno caveret praefixerunt: hi legatum consularem, qui auctor esset Prusiae per scelus occidendi hospitis, miserunt." ("Let us," he said, "relieve the Roman people of their long anxiety, since they find it tedious to wait for the death of an old man. Neither magnificent nor memorable will be the victory which Flaminius will win over a man unarmed and betrayed. How much the manners of the Roman people have changed, this day in truth will prove. Their fathers sent word to King Pyrrhus, an enemy in arms, commanding an army in Italy, warning him to beware of poison: these Romans have sent an ambassador of consular rank to urge upon Prusias the crime of murdering his guest.")²¹

Of greatest importance is the telling line *mores quidem populi Romani Quantum mutaverint, vel hic dies argumento erit*. Basic morality had been abandoned for the sake of expediency. Rejection of the *mos maiorum* had resulted in a character traditionally despised by the Romans and attributed only to their enemies or to barbarians, but now this unworthy character was possessed by the Romans themselves and it was not to their credit. A change, a reversion to the old ways, was required, but

profitable is this, that you behold the lessons of every kind of experience set forth as on a conspicuous monument; from these you may choose for yourself and for your own state what to imitate, from these mark for avoidance what is shameful in the conception and shameful in the result).

²¹ LIVY, 39,51.9-11.

to achieve this, someone had to show the Romans what they had been and what they had become. As Jimenez Delgado²² puts it,

En todas partes se revela la rectitud e intención moralizadora de Livio, quien, con nobleza y rectitud, trata de hacer revivir en su obra el ambiente de intensa religiosidad que es una de las características de la Roma Antigua, frente a la indiferencia religiosa y al escepticismo práctico de su época, que junto con el afán de riquezas y placeres, iba minando los cimientos del Imperio.

Livy's hope was to demonstrate that a return to moral rectitude would bring about a return to Rome's former glory. The key to a better, brighter, more moral Rome was Augustus. The decline of Roman morality called for strong leadership which would advocate and implement a return to old and largely neglected traditions. Within such a programme a revival of religion was palpably considered by Livy to be a prime catalyst towards regeneration.²³ Accordingly, Livy was undoubtedly in favour of Augustus' religious policy.

During the emperor's reign, more than eighty temples were reputedly restored.²⁴ That there were so many in need of restoration was evidence of a neglect

²² JIMENEZ DELGADO (1961), p. 37.

²³ A clear example of the manner by which religion and the ascription to a religious way of life was able to transform a dissolute and irresponsible individual into a confident and useful member of society is presented at LIVY, 27,8.5-6: *ob adulescentiam neglegentem luxuriosamque C. Flaccus flamen captus a P. Licinio pontifice maximo erat, L. Flacco fratri germano cognatisque aliis ob eadem vitia invisus. is ut animum eius cura sacrorum et caerimoniarum cepit, ita repente exiit antiquos mores ut nemo tota iuventute haberetur prior nec probatior primoribus patrum, suis pariter alienisque, esset* (because of his irresponsible and dissipated youth Caius Flaccus, who was odious to his own brother, Lucius Flaccus, and other relatives on account of the same vices, had been seized upon as flamen by Publius Licinius, *pontifex maximus*. As soon as the charge of rites and ceremonies took possession of his mind, Caius so suddenly put off his old character that no one among all the young men stood higher in the estimation and approval of the leading senators, both of his own family and of strangers alike).

²⁴ AUGUSTUS, *Res Gestae* 20.4: *duo et octoginta templa deum in urbe consul sex(tum ex decreto) senatus refeci, nullo praetermisso quod e(o) temp(ore) refici debebat* (in my sixth consulship, in accordance with a decrees of the Senate, I rebuilt in the city eighty-two temples of the gods, omitting none which at that time stood in need of repair). Prior to this declaration,

of the gods that, in the emperor's view, could not but be to Rome's detriment. As Galinsky emphasises, the gods protected the Roman community. The survival of that community depended in turn on correct moral behaviour. Those things that had been devoted to the gods - cults, rites, buildings - were calculated to enhance that behaviour. Dilapidation and negligence had the reverse effect.²⁵

Significantly, Horace's Ode 3,6.1-8 begins:

*delicta maiorum immeritus lues
Romane, donec templa refeceris,
aedesque labentes deorum et
foeda nigro simulacra fumo.*

*dis te minorem quod geris, imperas;
hinc onne principium; huc refer exitum,
di multa neglecti dederunt
Hesperiae mala luctuosae.*

(Your fathers' sins, O Roman, you, though guiltless, shall expiate, till you do restore the crumbling temples and shrines of the gods and their statues soiled with grimy smoke. It is by holding yourself the servant of the gods that you do rule; with them all things begin; to them ascribe the outcome. Outraged, they have visited unnumbered woes on sorrowing Hesperia.)

Was Augustus trying to restore what he saw as a lost balance, to make things right for the gods so that they would in turn make things right for Rome and her citizens who had suffered so much during the civil wars that ended the republic?

The practice of monitoring the gods' wills during the last century of the republic, particularly its last decades, had gradually fallen into near desuetude; there are fewer and fewer prodigies recorded, with the exception of a brief revival after the assassination of Julius Caesar. Subsequent to that, until the reign of Claudius,

at 19, Augustus claimed to have built several temples, such as the temple of Apollo on the Palatine, but several mentioned were only restorations of earlier temples. Nonetheless, this building and restoration appears to have been important to Augustus.

²⁵ See GALINSKY (1996), pp. 289-90.

prodigies recorded focussed on the Imperial family rather than on the Roman State.²⁶ It has been suggested that prodigies, contrary to expectation, were not revived by Augustus because, towards the end of the republic, some of the few noted had been flagrantly exploited for political purposes,²⁷ and that Augustus was concerned primarily with those institutions that had "a commitment to traditional piety while also providing the opportunity for ongoing adaptation".²⁸ This particular policy appears to have had no restricting influence on Livy for whom the prodigies of two centuries earlier were an important and integral part of the religious and social life of the Romans. As such they necessarily claimed a place in his history. It has been claimed²⁹ that Livian scepticism with respect to *prodigia* is certified by use of *oratio obliqua* and it is true that he often appears to excuse the prodigy lists and fantastic stories with the words *dicitur* or *nuntiatum est*. Scepticism may have not in fact have been complete but rather feigned on occasion by Livy in order to remove himself from the path of derision. It was not necessarily solely for the purpose of disavowing responsibility for the content of the prodigy lists that Livy adopted this convention. His treatment could be viewed as an expression of unwillingness to affirm that such events actually occurred, given a contemporary sceptical climate *à propos* of religion in

²⁶ The prodigies recorded by Suetonius concern the *princeps* or the Imperial family. With the advent of the Empire and the assumption by the *princeps* of the rôle of *Pontifex Maximus*, these prodigies came to have a different relevance and expiation than formally. Emperor worship had come to the forefront and the practice of recording and treating State *prodigia* fell into desuetude. It was only under Claudius that the religion and customs of the republic, such as the consultation of the *haruspices*, were ephemerally resurrected, but unfortunately this phase lasted only as long as his reign.

²⁷ The mysterious sounds of 56 BCE around which Cicero's *de haruspicum responsis* revolves are a striking case in point.

²⁸ GALINSKY (1996), pp. 293-4.

²⁹ LEVENE (1993); WALSH (1961).

general and prodigies in particular. Levene³⁰ avers that "through *oratio obliqua* [Livy] indicates his scepticism without having to advertise it explicitly on every occasion," but any writer who included material in his *magnus opus* simply because *quaedam religio* inclined him not to reject what *prudentissimi viri* of old had considered worthy of public regard must surely have been far indeed from a radical sceptic.

Religion, I believe it close to the truth to say, was above all Livy's concern. How else can be explained his comment at 9,30.5 that he would have ignored a particular incident but for its religious bearing (*..ni ad religionem visa esset pertinere*)? There is no parallel comment in relation to politics, treaties, health, the Senate, agricultural matters, or anything else. For Livy the history of Rome was the framework around which to build the history of Roman religion. In view of the overwhelming and (perhaps) inflated importance of religion in Livy's work, it is not at all plausible to propose that Livy was mendacious and/or manipulative in his treatment of any of its aspects.

³⁰ LEVENE (1993), p. 20.

D. The Prodigy Lists

1. General Features

Almost invariably in books 21-45, Livy's account of a consular year commences with a record of official transactions, by and large a matter of routine, that preceded the departure of the consuls for their provinces. The record begins with a direct statement to the effect that consuls *x* and *y* entered office and goes on to include the assignment of consular provinces and of duties to other curule magistrates, the distribution of armies, the holding of military levies, attention to other pressing secular matters and performance of important religious duties. Included amongst these are the celebration of the Latin games and, more often than not, the processing and expiation of prodigies.

Where prodigy lists are thus incorporated, it is usually made clear that the prodigies concerned were processed almost immediately upon the consuls' taking office. It ought to follow that they had been reported during the previous consular year with the reports aggregated for consideration by the new consuls. Livy's account of the inception of C206 provides one of many examples. The consuls L. Veturius Philo and Q. Caecilius Metellus receive their provinces and the praetors are assigned their duties. Existing armies are distributed and new forces enrolled. A list of *prodigia* follows (28,10.8 - 11.7) together with a brief account of the modes of expiation.

On comparatively rare occasions we encounter prodigy lists recorded elsewhere than at the beginning of a year and associated with a particular season. At 21,62.1-5,

towards the end of Livy's account of the events of C218, we find a list of prodigies said to have occurred *ea hieme*, that winter. It will emerge later that Livy probably included a list of prodigies processed at the beginning of C218 in the lost book 20. Another consular year for which there are two prodigy lists, one at the year's beginning and one later, although not in these cases associated with a season, is C216, in which the battle of Cannae was fought (22,36.7-8 and 22,57.2-4). At 27,4.11-14, in Livy's narrative of the events of C211, prodigies are listed which are said to have occurred *aestate*, during summer. In the case of this year there is no up-front list of *prodigia* expiated in the wake of the consuls entering upon office.

In addition to the blocks of prodigies placed at the beginning of a consular year and those, whether or not seasonally associated, that have a clear context within Livy's narrative, there are chronologically vague lists of prodigies said simply to have occurred *eodem* or *eo anno*, in the same or in that year. Examples are the list, close to the end of Livy's account of C211, at 26,23.4-5 (*eodem anno*) and that, in his narrative of the events of C181, at 40,19.1-3 (*eo anno*).

2. The source of Livy's prodigy lists

The following passages provide the core primary material bearing on this major question.

1. Cicero, *de oratore* 2,52

erat enim historia nihil aliud nisi annalium confectio, cuius rei, memoriaeque publicae retinendae causa, ab initio rerum Romanarum usque ad P. Mucium pontificem maximum, res omnes singulorum annorum mandabat litteris pontifex maximus, referebatque in album, et proponebat tabulat domi, potestas ut esset populo cognoscendi, hique etiam nunc Annales maximi nominantur.

History was once nothing more than a compilation of year by year events, for which reason, and for the purpose of preserving the memory of public transactions, from the beginning of Roman affairs until the time when P. Mucius was *pontifex maximus*, each successive *pontifex maximus* committed to writing all the events of each particular year of his period of office and reproduced them on the whitened surface of a board that he set up on from of his residence so that the whole populace might be able to have access to their content. The records concerned are called the *Annales Maximi*.

2. Cicero, *de legibus* 1,2.6.

...Annales pontificum maximorum, quibus nihil potest esse ieiunis.

...the *Annales* of the *pontifices maximi*, than which nothing could be more stylistically unornamented.³¹

³¹ The sense of *ieiunius* is put beyond doubt by the overall context of Cicero's description.

3. Servius, *Commentary on Vergil's Aeneid*³² 1,373.

ita autem annales confiscebantur; tabulam dealbatam quotannis pontifex maximus habuit, in qua praescriptis consulum nominibus et aliorum magistratuum digna memoratu notare consueverat domi militiaeque terra marique gesta per singulos dies, cuius diligentiae annuos commentarios in octaginta libros veteres retulerunt eosque a pontificibus maximus a quibus fiebant, Annales Maximus appellarunt.

The year by year records of events were progressively collected in the following manner. Every year the *pontifex maximus* had a whitened board headed with the names of the consuls and other magistrates. On this he was accustomed to record, day by day, official transactions at home and in theatres of war by land and by sea. The annual inventories of events put together with such application were collected by our forefathers into 80 books. From the *pontifices maximi* who were responsible for the material they contained, these were called by their compilers the *Annales Maximi*.

4. Aulus Gellius, *Noctes Atticae*³³ 2,28.

verba Catonis ex Originum quarto haec sunt: non lubet scribere quod in tabula apud pontificem maximum est, quotiens annona cura, quotiens lunae aut solis lumine caligo aut quid obstiterit.

Cato writes as follows in the fourth books of his *Origines*: "I have no interest in writing down what is recorded on the board of the *pontifex maximus*; for example, how often the price of grain was high, or how often vapour or whatever obstructed the light of the moon of the sun."

5. Livy, 6,1.1-3.

quae ab condita urbe Roma ad captam eamden Romani... gessere... quinque libris exposui, res cum vetustate nimia obscuras... tum quod parvae et rarae per eadem tempora litterae fuere... et quod, etiamsi quae in commentariis pontificum aliisque publicis privatisque erant monumentis, incensa urbe pleraeque interiire.

³² The extract derives from the Danielis version of Servius' commentary. Servius derived his information from an earlier commentary on Vergil compiled by Aelius Donatus in the fourth century CE.

³³ Consensus is that Gellius' work was published close to 180 CE.

I have set out in five books the history of the Romans from their city's foundation to the capture of the same <by the Gauls>... The matters concerned are obscure not only by reason of their great distance in time... but also because in those days of old commitment to writing was short and intermittent... and because, too, even such records as existed in the commentaries of the *pontifices maximi* and in other public and private documents perished for the most part in the burning of the city.

6. Livy, 43,16 1-2.

non sum nescius ab eadem negligentia qua nihil deos portendere vulgo nunc credunt, neque nuntiari admodum ullā prodigia in publicum neque in annales referri. ceterum et mihi vetustas res scribenti nescio quo pacto antiquus fit animus et quaedam religio tenet, quae illi prudentissimi viri publice suscipienda censuerint, ea pro indignis habere, quae in meos annales referam.

I am not oblivious to the fact that as a consequence of the same negligence that leads people by and large in these times to believe that the gods foreshadow nothing, no *prodigia* are now brought to public notice and that none is recorded in contemporary annals. However, as I write of what happened in the old time past, in some strange manner my mind takes on an ancient mould and simultaneously a kind of religious awe holds me back from considering what those most experienced men of earlier times deemed a matter of public concern unworthy to be included in my own annals.

A vast amount, much of it more confusing than illuminating, has been written about the chronicling activities of the *pontifices* and the *Annales Maximi*.³⁴ For all the

³⁴ A list of all those who have expounded on these subjects would be very long indeed. The mention of a mere handful will be enough to illustrate the point.

At what time of the year were the annals written? Whereas VERBRUGGHE (1989), p. 213, claims that the *Pontifex Maximus* would, as a religious authority, have used the religious year (beginning on first January) for the starting point for the yearly chronicle, FRIER (1979), p. 88, earlier proposed that each tablet was headed with the names of the consuls, which is more plausible as prodigies were treated within the context of the consular and not the religious year.

On what material were they written? Both CRAKE (1940) and FRIER (1979) are of the opinion that the *tabulae dealbatae*, the tablets on which the chronicles were initially written prior to transference into the *Annales Maximi*, were made of wood, but this is strongly refuted by BUCHER (1987 [1995]), p. 38 who claims that "we ought, I think, to envision the pontifical chronicle as a gigantic, poorly formatted, difficult to read, inscription on bronze, probably

tortuous complexity of scholarly interpretation and argument, the indications of the first three passages above seem fairly clear. Well before the capture of Rome by the Gauls, somewhere in the vicinity of 390 BCE, the *pontifices maximi* ensured commitment to a permanent written record a concise, unadorned encapsulation of all events and transactions of public significance that occurred with each consular year during their terms of office. In addition, as they unfolded within each consular year, the same events and transactions were inscribed day by day on a whitened board, recycled annually,³⁵ on public display in front of the chief *pontifex*' residence.

Such activity on the part of the *pontifices maximi* came to an end during the pontificate of P. Mucius Scaevola, plebeian tribune in 141 BCE and consul in 133.³⁶ Scaevola was certainly *pontifex maximus* by 123³⁷ but unfortunately we do not know exactly when he obtained the office, or the year of his death. His predecessor, P. Licinius Crassus Mucianus entered office in 132³⁸ and his successor L. Caecilius

consisting of several individual bronze *tabulae* incised by a variety of hands."

Did they survive the sacking of Rome by the Gauls in 387 BCE? According to ROBERTS (1918), WESTRUP (1969), and others, the answer is no. For FRANK (1924), it is a possibility. WALSH (1970), p. 111, proclaims proudly that "it is now generally accepted that the state archives were not totally destroyed by the Gallic sack in 390."

FRIER (1979), SOLTAU (1896), WESTRUP (1969) and FRACCARO (1957), all assume that there was an earlier redaction of the *tabulae dealbatae* prior to the formation of the *Annales Maximi*. Scathingly condemnatory of this idea, JACOBY (1949), p. 283, n. 64, claims that, "in my opinion it replaced clear evidence by fantasies, is completely unsound in the argumentation, and judges the relations between the pre-literary annual records and those of the literary annalists with prejudice and wrongly."

³⁵ This will be the significance of the description of the board at DIONYSIUS OF HALICARNASSUS, *Ant. Rom.* 1.74.3 as the 'one and only' (πίνακος ἑνὸς καὶ μόνου).

³⁶ See BROUGHTON (1951), pp. 477 and 492.

³⁷ See CICERO, *pro domo* 53, 136.

³⁸ See BROUGHTON (1951), p. 499.

Metellus Delmaticus died in 114.³⁹ As a consequence of Scaevola's initiative, the keeping of detailed public records passed into different hands. It can hardly have been abandoned.⁴⁰ The authorities who took over from the pontifical college are likely to have been civil rather than religious.

Eventually collation and publication of the catalogues of annual events in the pontifical archives was set in motion. The 80 books of records that eventually emerged were collectively labelled *Annales Maximi* after the religious figures responsible for their compilation. Completion of the project must have been earlier than 55 BCE, the year in which Cicero finished his *de oratore*.⁴¹

From the *Origines* of Marcus Porcius Cato the Elder, commenced in 168 BCE and not yet complete at the time of its author's death in 149,⁴² we learn that the whitened board set up each year by the *pontifices maximi* and hence the permanent catalogues of the same transactions stored in the pontifical archives contained reports of obscuration of the moon and sun. By informed circles in Cato's day, eclipses were no longer regarded as prodigies.⁴³ If they were recorded nonetheless, it can be taken for granted that the pontifical chroniclers did not fail to list all unusual phenomena that

³⁹ See BROUGHTON (1951), p. 534.

⁴⁰ Ingrained habit and a belief in the value - both religious and social - of the record probably prompted the *pontifices* to continue their work even after the initial compilation of the *Annales*. These, being important to the Romans, had to have been continued in some format or other because, as ALFONSI (1971), p. 119, says, "gli *Annales Maximi* erano una cronaca cittadina con il dichiarato impegno di esporre e tramandare tutti i fatti (*cuius sei memoriaeque publicae retinendae causa!*), sancita dalla più alta autorità religiosa: una specie di *Historia sacra* dunque, anche se riguardava contemporanee realtà umane, e ad uso dei *cives Romani*."

⁴¹ See CICERO, *ad Atticum* 4,13.2 and *ad Fam.* 1,9.23.

⁴² See NEPOS, *Cato* 3,3.

⁴³ See above, pp. 34.

were indisputably prodigial.⁴⁴ Such attention would be natural given that the *pontifex maximus* above all was responsible for maintenance of the *pax deorum* and that he and the rest of the pontifical college were the ultimate overseers of the expiation of prodigies. By recording the manner of expiation of each prodigy in addition to the prodigy itself, the *pontifices* were able to ensure possession by their successors of future generations of an indispensable guide to handling future similar occurrences.

The common view, almost certainly correct,⁴⁵ is that the *Annales Maximi* were the ultimate source for lists of prodigies and their expiations until some time in the pontificate of Scaevola. For the period prior to the burning by the Gauls of most of Rome's buildings and their contents, the pontifical record overall was partial and disjointed due to the fire's ravages. Thereafter, for over 250 consular years, which include C218-C167, it will have been complete.

⁴⁴ As noted below (see n. 45), there has been some conjecture that the *Annales Maximi* were not the source of the prodigy lists, but, as WOOD (1981), p. 44, observes, "to conclude that the extant prodigy reports do not faithfully reflect their primary source [the *Annales Maximi*], or that they do not come directly from it, is in effect to deny that there is any good evidence at all that prodigies were routinely recorded in the pontiff's chronicle."

⁴⁵ ELIZABETH RAWSON's attempt (1971) to insinuate to the contrary has been adequately rebutted by, for example, EVA RUOFF-VÄÄNÄNEN (1972) and JOHN BRISCOE (1973). In particular and without sufficient evidence to support her, Rawson seeks to prove the existence of special collections that were compiled by those who had a particular interest in doing so. Her claim is largely based on the number of mule and horse deformities reported from Reate, but as this was a famous breeding-ground with consequently a high density of such animals, there is a great probability of an equally high frequency of deformities, particularly if the gene pool were not constantly being added to by horses and donkeys from other regions. Inbreeding encourages genetic defects. As the breeding-ground provided the livelihood for the people of Reate, deformities would be sure to be noticed and reported for expiation in order to placate the gods and stop, or at least lessen, the incidents. In this case, there would be no need for special collections to be compiled, for each occurrence to be carefully sought out and recorded. Necessity and belief would dictate that these be reported to Rome for expiation as they occurred, or at least in the same year. Moreover, the agriculturalist Varro, himself a native of Reate, makes no mention at all of deformities in the principle export of the city, and surely such could be expected if special collections had been made and were available for consultation, both as it was his home town and as he dilated at length on agricultural matters.

The penultimate passage set out above shows that Livy was familiar with the *Annales Maximi*. The question is did he make direct use of this definitive source in putting together his list of prodigies. The archaic language in which so many of the *prodigia* that he records are couched is compatible with his having done so, but obviously not probative.⁴⁶ Livy could have drawn on an intermediate annalist who reproduced the prodigial content of the *Annales Maximi* verbatim.

The final passage reveals an attitude on Livy's part towards *prodigia* that comes across as close to reverential but is compatible with recognition that some reports were matters of delusions of eyes and ears accepted as real (*ludibria oculorum auriumque credita pro veris*; 24,44.8) and belief that religious fears generated in times of crisis were capable of driving up the number of prodigies announced.⁴⁷ On occasion Livy found it difficult to judge whether a report or a cluster of reports reflected contagious religious hysteria or something more profound.⁴⁸ Livy's seriousness about *prodigia* is again consistent with his going to the most authentic source for information, but still not probative. While the absence of any decisive counter-indication to direct Livian deployment of the *Annales Maximi* is significant, we are still left short of absolute proof of first hand consultation. Although, regrettably, such proof is unlikely to be forthcoming, the balance of probability, in my view, inclines more than weakly in

⁴⁶ For an indepth examination of the material used by Livy, see CRAKE (1939).

⁴⁷ See 28,11.1: *in civitate tanto discrimine belli sollicita cum omnium secundorum adversorumque causas in deos verteret, multa prodigia nuntiabantur* (in the State disturbed by such a crisis-point in the war, when they were attributing the causes of all that went right and wrong to the gods, prodigies were being announced).

⁴⁸ See 21,62.1: *Romae aut circa urbem multa ea hieme [C218] prodigia facta aut, quod evenire solet motis semel in religionem animis, multa nuntiata et temere credita sunt* (at Rome or around the city, many prodigies occurred that winter, or as usually happens when men's thoughts are once turned to religion, many were reported and too easily credited).

favour of Livy's having drawn his lists of prodigies from the fountainhead, rather than having trustful recourse to the second-hand reportage of L. Calpurnius Piso, C. Licinius Crassus, Valerius Antias,⁴⁹ or whomever. The onus of demonstration is very much on those who would maintain the opposite.

3. The completeness of Livy's prodigy lists

Assuming that Livy drew his lists of *prodigia* from the *Annales Maximi*, are they exhaustive or do they reflect some kind of process of selection either regular or occasional? This is an important question for a scientist seeking, for example, to establish variations in solar activity on the basis of prodigial reports involving observation of the aurora borealis. Unfortunately it is not easy to give a confident answer.

At 21,62.1-5, Livy lists the locales in which prodigies associated with the winter of C218 occur in the order Rome, Lanuvium, Amiternum, Picenum, Caere and Gaul. It is unlikely, if not completely out of the questions that the compiler of the pontifical record concerned was responsible for the neat progression from Rome to remote Gaul. At 22,1.1-12, the order of the locales of the prodigies processed at the beginning of C217 is Sicily, Sardinia, Praeneste, Arpi, Capena, Antium, Falerii, Rome, Capua.

⁴⁹ The generally accepted view has been that Livy's prodigy reports were primarily culled from the work of Valerius Antias, certainly at least for the third decade. It is pretty much taken on trust, as LUTERBACHER (1880), p.44, notes, "dass Valerius Antias Hauptquelle des Livius für die Prodigienverzeichnisse sei, obwohl über Prodigienangaben bei Valerius so gut wie nichts bekannt ist."

Here the basic geographical procession is in the opposite direction, from periphery to Rome, but there is one exception, Capua, which appears last. Capua was soon to shift from its allegiance to Rome and become the base of Hannibal's operations. Such palpable contrivance is even less likely to be a feature of the pontifical chronicles reproduced in the stylistically unadorned *Annales Maximi*.

From the fact that Livy was capable of reordering prodigial material culled from the *Annales* to achieve geographic coherence or for dramatic reasons, we cannot immediately jump to the conclusion that his redactory activities might have included omission of items incompatible with the message of a part or the whole of his work. The seriousness about prodigies noted in the previous section ought to have militated against leaving out any significant prodigies and Livy's inclusion in the prodigy list of C217 two items that he goes out of his way to describe as trivial⁵⁰ could be regarded as *prima facie* evidence in favour of comprehensiveness.

Some kind of objective means of testing Livy's completeness is clearly desirable. An obvious procedure is to compare Livian lists of prodigies for particular years with single items or groups for the same years attested by other writers. Does Livy include *prodigia* assigned to this or that consular year by Pliny or Cassius Dio, for example, or are they missing from his clusters? To a limited extent such comparison is possible. The results emerge in Part 3 section 2. By and large, they are compatible with the conclusion that Livy was close to exhaustive.

⁵⁰ See 22,1.13: *inde minoribus dictu prodigiis fides habita: capras lanatas quisbusdam factas, et gallinam in marem, gallum in feminam sese vertisse* (and then trust was placed even in prodigies more trivial for telling: some people's goats had been made woolly, and a hen had changed into a cock and a cock into a hen). Livy relates the trivia nonetheless.

Chapter Six

The prodigies and their expiations:
text, translations and comments

Preface

For each consular year, the same mode of presentation is adopted. First, the Livian prodigy list or lists together with details of expiatory measures are set out in the original Latin with each successive prodigy allocated a number. An English translation follows. If there are directly derivative prodigial lists for the year concerned in Julius Obsequens, Orosius, or both, these appear next again in both the original Latin and English translation. Last come comments relating to both the Livian primary versions and the derivatives. There are divided into three groups. The first group relates to context within that consular year and other general circumstances. The second group comprises annotations in respect of each *prodigium* with the number preceding each item representing that assigned within the text sub-section. The third group of notes, kept to a minimum, relates to expiations.

C218 = 28/3/218-7/4/217 BCEJ

Consuls: P. Cornelius Scipio, Ti. Sempronius Longus.

LIVY, 21,62.1-11:

Romae aut circa urbem multa *ea hieme* prodigia facta aut, quod evenire solet motis semel in religionem animis, multa nuntiata et temere credita sunt, in quibus

1. ingenuum infantem semestrem in foro holitorio triumphum clamasse
2. et in foro boario bovem in tertiam contignationem sua sponte escendisse atque inde tumultu habitatorum territum sese deiecisse
3. et navium speciem de caelo adfulsisse
4. et aedem Spei, quae est in foro holitorio, fulmine ictam
5. et Lanuvi hastam se commovisse
6. et corvum in aedem Iunonis devolasse atque in ipso pulvinario consedissee
7. et in agro Amiternino multis locis hominum specie procul candida veste visos nec cum ullo [illos] congressos
8. et in Piceno lapidibus pluvisse
9. et Caere sortes extenuatas
10. et in Gallia lupum vigili gladium ex vagina raptum abstulisse

ob cetera prodigia libros adire decemviri iussi; quod autem lapidibus pluvisset in Piceno, novendiale sacrum edictum, et subinde aliis procurandis prope tota civitas operata fuit. iam primum omnium urbs lustrata est hostiaeque maiores quibus editum est dis caesae, et donum ex auri pondo quadraginta Lanuvium Iunoni portatum est, et signum aeneum matronae Iunoni in Aventino dedicaverunt, et lectisternium Caere, ubi sortes adtenuatae erant, imperatum et supplicatio Fortunae in Algido; Romae quoque et lectisternium Iuventati et supplicatio ad aedem Herculis nominatim, deinde universo populo circa omnia pulvinaria indicta, et Genio maiores hostiae caesae quinque, et C. Atilius Serranus praetor vota suscipere iussus, si in decem annos res publica eodem stetisset statu. haec procurata vota ex libris Sibyllinis magna ex parte levaverant religione animos.

Translation:

At Rome or around the city, many prodigies occurred that winter, or as usually happens when men's minds are once turned to religion, many were reported and too easily credited, among which

1. a free-born infant of six months had cried "Triumph!" in the Forum Holitorium
2. in the Forum Boarium an ox had climbed, of its own accord, to the third storey of a house and then, terrified by the outcry of the occupants, had thrown itself down
3. the semblance of ships shone forth from the sky
4. the temple of Hope, which is in the Forum Holitorium, was struck by a lightning bolt
5. at Lanuvium the spear had moved itself
6. a raven had flown down into the temple of Juno and sat on her very couch
7. in the territory of Amiternum, in many places, entities had been seen some distance off with the appearance of humans with white garments but [they] did not meet with anybody
8. in the Picentine country it had rained with stones
9. at Caere the lots had shrunk
10. in Gaul in the case of a sentry, a wolf had seized his sword from its sheath and carried it off

On account of the other prodigies the *Xviri* were ordered to consult the books; on the grounds that it had rained with stones in Picenum, a *novendiale* was decreed; and immediately almost the whole citizen body was occupied in expiating the other prodigies. First of all the city was cleansed and full-grown victims were slain for the gods to whom it was prescribed, a gift of 40 pounds of gold was carried to Lanuvium for Juno and on the Aventine the matrons dedicated a bronze statue to Juno. A *lectisternium* was ordered at Caere where the lots shrank, and a *supplicatio* at Algidus. At Rome again both a *lectisternium* for Juventas and *supplicatio* at the temple of Hercules were specifically decreed. Then, for the whole population, another *supplicatio* was ordered around all *pulvinaria*. To the Genius five full-grown victims were slain, and the praetor C. Atilius Serranus was ordered to undertake a vow in return for the republic remaining in the same condition for ten years. The carrying out of these expiations and vows on the basis of the Sibylline books succeeded in relieving minds from religious awe for the most part.

Comments:

A. Context

Normally accumulated prodigial reports were processed only once annually, at the consular year's beginning as soon as feasible prior to the consuls' departure for their provinces. On occasion, in times of crisis or other special circumstances, prodigies received attention at other times of year. The reason for fast-track processing late in C218 of *prodigia* that occurred in or close to winter was no doubt the fear inspired at Rome by the spectre of Hannibal.

Levene (1993), p. 38, has suggested for dramatic purposes (in particular to emphasize the impiety of Caius Flaminius), Livy displaced to the end of C218 prodigies actually processed at the consular year's beginning. This speculation, conveniently facilitated by the loss of Livy's account of events at the beginning of C218, can be safely dismissed.

B. Prodigies

1. Generally for a free-born child to cry out "Triumph" would portend a notable Roman military success on a civic level. Given, however, the fourth prodigy, a Hannibalic victory rather than a Roman one might be felt to be signified on this particular occasion.

2. According to Cassius Dio/Zonaras 8,22, the bull's ascent and fall, which resulted in its death, took place ἐν τῇ τῶν Ῥωμαίων πανηγύρει. Livy has omitted some

details from the account in the *Annales Maximi* (see further, the following section). The *Ludi Romani*, in honour of Jupiter Optimus Maximus, were celebrated in the first half of September. Either Livy's *hieme* is used in a rather broad sense or the season specified is linked more closely with the expiation of the prodigies concerned than their actual occurrence.

This *prodigium* occurred in the Forum Boarium, a market place around which was centred the worship of Hercules, the patron of trade, and a demi-god who would bring financial and commercial success to his devotees. Since a greater part of the early Romans' wealth was in oxen and sheep, it is natural to find him in this busy market-place [WARDE FOWLER (1922), p. 231]. Such a *prodigium* then could be an indication of an imminent financial or commercial crisis. In the present instance, however, other connotations are likely to have been uppermost in Roman minds. Hercules figured as Victor and Triumphalis and in the Circus Maximus a temple was consecrated to him as Invictus [SMITH (1873), p. 813], all of which stress his martial aspect. It is plausible to infer that this particular *prodigium* indicated that some military calamity was impending. Expiatory supplication was made at a temple of Hercules, possibly the oldest and most important one, the Magna Ara Herculis, but this was not considered sufficient in view of the fear inspired by such a singular prodigy and further rites were ordered. This leads then to the hypothesis that the *prodigium* was observed after the defeats of C218 at the rivers Ticinus and Trebia, and the Roman people were seeking desperately to avert any similar occurrences. If this were the case, then it also supports the thesis that this prodigy list was the second one to be provided by Livy for this year.

In C191, a similar occurrence does not appear to have been accorded the status of a prodigy; war hysteria, association with the *Ludi Romani*, together with the locale will have contributed to the different treatment on this occasion.

3. Unfortunately the prodigial records very rarely indicate whether phenomena were witness during day or night. Had this

prodigium been observed at night, it could quite conceivably have been an aurorae, some of which look remarkably like the sails of a ship; but on the other hand, had it occurred during the day, it might possibly have been a mirage.

As Campbell (1988), p. 4, explains, "a mirage is an atmospheric phenomenon caused by the almost total reflection... of light at a boundary



between air at different temperatures (a thermocline). In effect the thermocline acts as a mirror and will reflect whatever is in the line of sight at the right angle. ... More rarely a thermocline will form in the air above us when a temperature inversion occurs. The result can be mirage images in the air."

4. The Roman belief that lightning foretold the future is well-reflected at Seneca, *QNat.* 2,32.2:

hoc inter nos et Tuscos, quibus summa est fulgurum persequendorum scientia, interest: nos putamus, quia nubes collisae sunt, fulmina emitti; ipsi existimant nubes collidi ut fulmina emittantur; nam, cum omnia ad deum referent, in ea opinione sunt tamquam non, quia facta sunt, significant, sed quia significatura sunt, fiant. (This is the difference between us and the Etruscans, who have consummate skill in interpreting lightning: we think that because clouds collide

lightning is emitted; they believe that clouds collide in order that lightning may be emitted. Since they attribute everything to divine agency they are of the opinion that things do not reveal the future because they have occurred, but that they occur because they are meant to reveal the future.)

It was believed by the Romans that lightning was sent by the gods, primarily by Jupiter, and that it portended some action, either for the benefit or ruin of private individuals or the public State, dependent on when, where, and what it struck. It was a sign of the gods' benevolence or ire.

5. The MSS all read *hostiam*, victim. Alteration to *hastam*, spear, was proposed by Sabellicus on the grounds that whereas a moving victim would be unique, prodigial moving spears are relatively commonplace (see, for example, LIVY, 24,10.10 and 40,19.2).

The temple and grove of Juno Sospita were important to the Roman people because, after their conquest of Lanuvium, it was decreed that these places should be common to both peoples [DOUGLAS (1913), p. 61]. Many of the reported *prodigia* from Lanuvium are related to these sacred areas. If *hostiam* is read then it could be presumed that the victim was either not dead or that this was a case of post mortem convulsions. On the other hand, if *hastam* is chosen then wind blowing through the temple, or minor earth tremors, or even something like the brushing against the spears by small animals such as mice could be responsible for the incident.

6. From earliest times, the ancient Romans looked to the sky with a view to divining their future. It was believed that the will of the gods was to be read in the movements of the birds, which flew close to the domain of the sky-gods. At *Div.* 1,28, Cicero

tells of this means of augury: *nam ut nunc extis (quamquam id ipsum aliquanto minus quam olim), sic tum avibus magnae res impetrari solebant* (for just as today on important occasions we make use of entrails in divining (though even they are employed to a lesser extent than formerly), so in the past, resort was usually have to divination by means of birds).

Douglas (1913), p. 62, claims that, together with a serpent, Juno Sospita had a bird, perhaps a crow or raven, as an attribute. Only entry by the goddess' own bird would be worthy of note. Ravens are usually ominous. Pliny, *N.H.* 10,33, tells that:

corvi in auspiciis soli videntur intellectum habere significationum suarum; nam cum Medi hospites occisi sunt, omnes a Peloponneso et Attica regione volaverunt. pessima eorum significatio cum glutiunt vocem velut strangulati. (Ravens seem to be the only birds that have an understanding of the meanings that they convey in auspices, for when the guests of Medus were murdered, all the ravens in the Peloponnese and Attica flew away. It is a specially bad omen when they gulp down their croak as if they were choking.)

7. This phenomenon must be an earth-based one. The words *cum ullo congressos*, imply that the apparitions were capable of meeting other people had they 'chosen' to do so. It is common for mirages to be seen on a hard flat surface, so this could therefore be an example of an inferior mirage [CAMPBELL, 1988].

8. A rain of stones is a relatively common item in the prodigy lists. In the view, derived ultimately from Aristotle, of Pliny the Elder (*N.H.* 2,104), stones could be caught up somehow by violent winds and then deposited in a solid shower. The most reasonable *prima facie* explanation from a modern perspective would be fallout from a disintegrating meteorite (see above, p. 36 for a recent occurrence at Mbale) which modern research shows as being more likely witnessed in the warmer months, between

April and mid-October, than the winter months [HUGHES, (1981), p. 270] and volcanic ejecta. Pliny the Younger's description (*Epist.* 6,16) of the 79 CE eruption of Vesuvius shows that possible volcanic origin of falling stones was taken for granted in imperial times. Presumably, volcanic bombardment from Etna, for example, was familiar in the republican period; however, volcanism has to be ruled out in the present case because there were no active volcanoes in Picenum in the third century BCE.

According to Livy, 1,31.1-4, the first purported occurrence of a rain of stones was during the reign of Tullus Hostilius. In the historian's own words:

nuntiatum regi patribusque est in monte Albano lapidibus pluvisse. quod cum credi vix posset, missis ad id visendum prodigium, in conspectu haud aliter quam cum grandinem venti glomeratam in terras agunt, crebri cecidere caelo lapides... Romanis quoque ab eodem prodigio novendiale sacrum publice susceptum est... mansit certe sollemne, ut quandoque idem prodigium nuntiaretur, feriae per novem dies agerentur. (It was reported to the king and senators that there had been a rain of stones on the Alban Mount. As this could scarce be credited, envoys were dispatched to examine the prodigy, and in their sight there fell from the sky, like hail-stones which the wind piles in drifts upon the ground, a shower of pebbles... The Romans also, in consequence of [this] portent, undertook an official nine days' observance... It remained a regular custom that whenever the same prodigy was reported, there should be a nine days' observance.)

An active volcano in the remote past, the Alban Mount had been inert for millennia prior to Rome's foundation.

The phenomenon described by Livy on the present occasion does not accord particularly well with a meteoric event. Overall, portentous rains of stone present formidable problems of identification.

9. The lots were small tablets of either wood or bronze. On these were written proverbial phrases, and one or two of them were drawn for the purpose of seeking advice or guidance. They are associated with Caere, Praeneste, Falerii, and Patavium.

Their diminishing could be an indication of bad luck. There is a story at Pliny, *N.H.*

34,137, about a coin that grew and shrank:

Serviliorum familia habet trientem sacrum quotannis faciunt. quem ferunt alias crevisse, alias decrevisse videri et ex eo aut honorem aut deminutionem familiae significare. (The family of the Servilii has a holy coin to which every year they perform sacrifices with the greatest devotion and splendour; and they say that this coin seems to have on some occasions grown bigger and on other occasions smaller, and that thereby it portends either the advancement or the decadence of the family.)

10. An unlikely occurrence. It is tempting but not compulsory to envisage a sort of parable. The wolf was sacred to Mars, as evidence by Horace, *Odes* 1,17.9, who was the god of war; the soldier's sword was a weapon of war. This could then be a call to arms, Mars leading the way, or it could signal defeat, the weapon of war being stolen from the Romans through the agency of Mars himself.

Despite a positive attitude to prodigies, Livy concedes that some reflect credulity on the part of the observers.

In quis does not necessarily imply that the prodigies that Livy records are a selection from a larger number of items in the *Annales Maximi*. The real purport is more likely to be that the authorities of Rome were unwilling to accord prodigial status to many of the reports that were received.

C. Expiations

novendiale: As already noted (C218, 8), suspension of all public business for nine days was involved. The inconvenience would be compounded by multiple showers of rain close in time since each occurrence had, strictly, to be expiated separately.

C217 = 8/4/217-28/3/216 BCEJ

Consuls: Cn. Servilius Geminus, C. Flaminius.

1. LIVY, 22,1.1-20:

iam ver adpetebat; itaque Hannibal ex hibernis movit... per idem tempus Cn. Servilius consul Romae idibus Martiis magistratum iniit. ibi de re publica rettulisset, redintegrata in C. Flaminium invidia est... augebant metum prodigia ex pluribus simul locis nuntiata:

1. in Sicilia militibus aliquot spicula
2. in Sardinia autem in muro circumeunti vigilas equiti scipionem quem manu tenuerat arsisse
3. et litora crebris ignibus fulsisse
4. et scuta duo sanguine sudasse
5. et milites quosdam ictos fulminibus
6. et solis orbem minui visum
7. et Praeneste ardentis lapides caelo cecidisse
8. et Arpis parmas in caelo visas
9. pugnantesque cum luna solem
10. et Capenae duas interdu lunas ortas
11. et aquas Caeretes sanguine mixtas fluxisse
12. fontemque ipsum Herculis cruentis manasse respersum maculis
13. in Antiati metentibus cruentas in corbem spicas cecidisse
14. et Faleriis caelum findi velut magno hiatu visum, quaque patuerit ingens lumen effulsisse
15. sortes sua sponte adtenuatas unamque excidisse ita scriptam: "Mavors telum suum concutit."
16. et per idem tempus Romae signum Martis Appia via ac simulacra luporum sudasse
17. et Capuae speciem caeli ardentis fuisse
18. lanaeque inter imbrem cadentis

inde minoribus etiam dictu prodigiis fides habita:

19. capras lanatas quibusdam factas

20. et gallinam in marem, gallum in feminam sese vertisse

his, sicut erant nuntiata, expositis auctoribusque in curiam introductis consul de religione patres consuluit. decretum, ut ea prodigia partim maioribus hostiis partim lactentibus procurarentur et uti supplicatio per triduum ad omnia pulvinaria haberetur; cetera, cum decemviri libros inspecissent, ut ita fierent, quem ad modum cordi esse divis divinis <e> carminibus praefarentur. decemvirorum monitu decretum est, Iovi primum donum fulmen aureum pondo quinquaginta fieret, Iunoni Minervaeque ex argento dona darentur, et Iunoni reginae in Aventino Iunonique Sospitae Lanuvii maioribus hostiis sacrificaretur, matronaeque pecunia conlata, quantum conferre cuique commodum esset, donum Iunoni reginae in Aventinum ferrent, lectisterniumque fieret, et ut libertinae et ipsae, unde Feroniae donum daretur, pecuniam pro facultatibus suis conferrent. haec ubi facta, decemviri Ardeae in foro maioribus hostiis sacrificarunt. postremo Decembri iam mense ad aedem Saturni Romae immolatum est lectisterniumque imperatum - et eum lectum senatores straverunt - et convivium publicum, ac per urbem Saturnalia diem ac noctem clamata, populusque eum diem festum habere ac servare in perpetuum iussus.

Translation:

Now spring was approaching and so Hannibal moved out of his winter quarters... Around the same time on the Ides of March Cnaeus Servilius entered on his consulship at Rome. Upon his referring the state of the republic to the Senate, resentment against C. Flaminius was rekindled... Prodigies having been announced from rather many places at the same time increased fear:

1. in Sicily in the case of several soldiers javelins caught fire
2. in Sardinia, in the case of a cavalryman going the round of the patrol on the wall, the baton which he had been holding in his hand caught fire
3. and the shore shone with frequent fires
4. and two shields sweated with blood
5. and some soldiers were struck by a lightning bolt
6. and the orb of the sun was seen to be diminished
7. at Praeneste glowing stones had fallen from the sky
8. at Arpi shields had been seen in the sky
9. and the sun fighting with the moon
10. at Capena two moons rose during the day

11. the waters of Caere flowed mixed with blood
 12. and the very spring of Hercules had flowed sprinkled with bloody flecks
 13. in the Antiate territory bloody ears of corn fell into the baskets of the harvesters
 14. at Falerii the sky was seen to be split as if with a great gaping and where it opened up a huge light shone out
 15. lots shrank of their own accord and one fell out written thus: "Mars shakes his spear."
 16. around the same time at Rome the statue of Mars on the Appian Way and the images of the wolves sweated
 17. at Capua there had been the appearance of a sky burning
 18. and the appearance of wool falling amid a shower
- And then trust was placed even in prodigies more trivial for telling:
19. some people's goats had been made woolly
 20. and a hen had changed into a cock and a cock into a hen

And these having been spelled out as they had been announced and the authors having been introduced into the senate-house the consul consulted the fathers concerning performance of rites. It was decreed that these prodigies be expiated partly with full-grown, partly with suckling victims, and that *supplicatio* for three days be had at all *pulvinaria*; in addition, when the *Xviri* should have consulted the books, it was decreed that such rites should take place as they should prescribe on the basis of the divine verses to be pleasing to the gods. On the advice of the *Xviri* it was decreed to Jupiter first of all there should be a gift in the shape of a golden thunderbolt fifty pounds in weight, it was decreed to Juno and Minerva gifts of silver should be given; that for Juno Regina on the Aventine and Juno Sospita at Lanuvium there should be a sacrifice in each case of greater victims, and it was decreed that the matrons, money having been collected as much as each individual could contribute, should carry it as a gift to Juno Regina on the Aventine, and it was decreed that there should be a *lectisternium*; and that even the very freed-women should contribute money in accordance with their means, whence a gift might be given to Feronia. When those things were done, the *Xviri* sacrificed at Ardea in the market-place with full-grown victims. Finally, now in the month of December, there was a sacrifice at Rome at the temple of Saturn and a *lectisternium* was ordered, and the senators themselves spread the couch, and a public banquet was decreed, and throughout the city during the day and the night "Saturnalia" was cried, and the people were bidden to have that day as a holiday and preserve it as such in perpetuity.

Comments:

A. Context

The twenty prodigies are an aggregation processed immediately after the consuls of C217 took office. All the reports concerned should have been made in the period between processing of the C218 *hieme* accumulation and the beginning of C217. As will emerge there is one curious exception.

B. Prodigies

1. This and the following prodigy are likely to be examples of St Elmo's Fire (coronal point discharge). "When the negative charge at the bottom of a thunderstorm attracts positive ions on the earth beneath it, they tend to congregate at the peaks of the highest available objects. That static charge sometimes illuminates in a pale, blue, hissing glow at the tops of trees and buildings, the ice-picks of mountaineers, the wings of airplanes, and the rigging of ships." [DENNIS (1992), p. 129].
3. This could be the result of pockets of gas or oil along the shore suddenly igniting, but the prodigy report says that these fires were frequent in which case these 'fires' might be attributable to the bioluminescence of small algae, washed up to the shore, perhaps during particularly stormy weather.
4. The simple explanation of this phenomenon would be that the dye was running from leather-bound shields. It would, however, have had a strong effect on the ancient

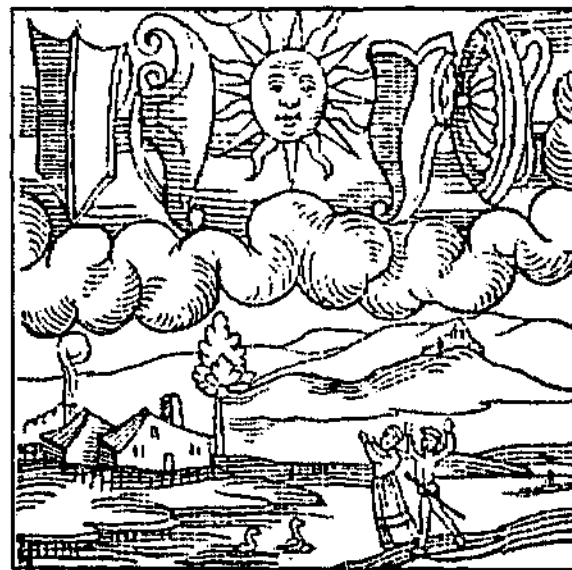
Roman. For most ancient peoples, blood was considered the stuff of life, and was given as an offering to the gods - the Greeks poured blood on the ground to feed the spirits of the dead so that they might think and speak (HOMER *Od.* 11,34-50). The Aztecs gave the blood of human sacrifices to the sun-god [FAGAN (1984), pp. 228-33]; and in the OT there are many instances in which priests sprinkled blood on altars (Exodus, 24:6; 29:16; Leviticus, 1:5; 4:5-7; *passim*). For blood suddenly to appear on a shield could be interpreted as either a good or a bad omen, depending on which side of the shield it was, but none of the reports indicates which. If it were on the outside, the side facing the enemy, it could be a good omen, indicating victory, the death of foes; on the other hand, if it were on the side facing the soldier, it could only portend death and defeat.

5. Lightning striking down soldiers cannot be viewed as a positive event. "Without a doubt, superstitious minds read into physical occurrences such as these a direct warning from heaven that the gods were arrayed against the martial success of the nation." [KRAUSS (1930), p. 38]

6 and 9. The natural candidate for identification in both cases is the solar eclipse of 11/02/217 BCE extrapolated julian, partial for both Sardinia and the region of Italy where Arpi is situated. As viewed from Arpi, culmination will have occurred close to 5:00pm local time with 65% of the solar disc obscured. The relatively late hour will have assisted observability to which weather conditions could have made a further contribution. In terms of the Roman republican calendar, the eclipse occurred on

Februarius 8 in the consular year of P. Cornelius Scipio and Ti. Sempronius Longus (C218).

7. This is a most singular prodigy. As so often, it is a pity that day or night is not spelled out. It is not the regulation rain of stones because the present ones are described as *ardentes*, and rather than *pluisse*, invariably applied to the motion of stones requiring a *novendiale* for their expiation, they are said *cecidisse*. If falling in this context does not mean falling to the ground (a *sine qua non* for a *novendiale*?), the bodies concerned could be linked conceivably with the aerial *parmae* of Arpi (8) and perhaps even the two moons reported from Capena (10). If so, it could be a question of meteoric fireballs observed from different locales. Praeneste and Arpi are along an east-west axis, and it is conceivable that bolides, if the phenomenon was indeed meteoric, followed such a trajectory.



The Capena observation could be assimilated as the town is north-west of Praeneste. An astronomical phenomenon observable at any one of the three places ought to have been observable at the others given conducive weather conditions.

A different diagnosis has the stones to be of volcanic origin. Stothers and Rampino (1983), p. 6360, claim that the stones, diminution of the sun (6) and the fiery sky at Capua (17) are indicative of an eruption of Vesuvius, included in a sensational list of Second Punic War prodigies by the first century CE poet, Silius Italicus [*Punica*, 8.622-655]. In view of 9, the year's partial solar eclipse is a far more likely explanation of

6. Forsyth (1990), p. 5, rightly argues that "Livy's assertions in this passage provide no credible evidence for an eruption of Vesuvius, which, had it actually happened, *ought* to have been mentioned in and of itself as a truly remarkable prodigy." She notes that the evidence in Livy points against an eruption, rather than for one, because this was the well-documented period of the Second Punic War, and Hannibal, the following year, was able to make his winter camp at Capua and there was enough grain to feed his large army, impossible had there been an eruption the year before. She concludes, (1990), p. 9, "the literary sources, when critically examined, thus present no credible evidence for an eruption of Vesuvius in 217 B.C. In addition, the geological and archaeological evidence also weighs against the thesis of Stothers and Rampino... All evidence considered, then, we should expunge from the record an eruption of Mount Vesuvius in 217 B.C.". There can be little doubt that the bulk of the prodigies listed by Silius are his own lurid invention. Inclusion of a Vesuvius eruption was inspired by the poet's familiarity with the paroxysm of 79 CE.

Drakenborch urged emendation of *lapides*, stones, to *lampades*, torches. If one were to follow his recommendation, the case for a meteoric explanation would be strengthened; however, one would not expect to find a Greek word in a prodigial report but rather the Latin term *faces*.

10. For a possible approach see on 7. An optical phenomenon, the moon and a single paraselenon, is ruled out by occurrence during the day. Some kind of mirage may have been involved.

11. This and the following two prodigies may involve minerals, such as iron oxides, contaminating the water. As this does not appear to have been a constant phenomenon, it is likely to have occurred when the water level was low, with red earth on the river bed causing the appearance of red water, or when there had been heavy rains bringing down red materials from the soil upriver, or when diatomaceous earth was churned up by heavy falls, giving the appearance of blood to the water.

It may have been believed that after great battles involving great bloodshed, blood was drawn up into the clouds and then deposited elsewhere. At *Div.* 2,58, Cicero with impatient rationalism, attempts a scientific explanation of bloody springs, rains and so forth: *sed et decoloratio quaedam ex aliqua contagione terrena maxime potest sanguini similis esse* (An effect strikingly like blood is produced by the admixture of water with certain kinds of soil).

12. See on 11.

13. The *prodigium* has to have occurred at harvest time, somewhere between the summer solstice (25th June) and the heliacal rising of the dog star, Sirius (26th July) (VARRO, *Rust.* 1,32.1). This raises a chronological problem. Why was the prodigy not a member of the aggregation processed in the winter in C218? The answer can only be that the report was not accepted at the time, that



the Antiates protested as its dismissal, and that their protest was eventually upheld by the sacerdotal authorities at Rome.

The original attitude at Rome will have been dictated by the fact that the infection of grain at harvest time by various fungi was a rather routine occurrence. The commonest infection was corn-rust, *robigo*. On 25th April (VII. KAL MAI) the Romans held the Festival of the Robigalia in honour of the god Robigus, or goddess Robigo - Mildew. Sacrifices were offered so that Mildew might not blight the crops. A flamen would offer the sacrifice and then say,

*"aspera Robigo, parcas Cerialibus herbis,
et termat in summa leve cacumen humo.
tu sata sideribus caeli nutrita secundis
crescere, dum fiant falcibus apta, sinas.
vis tua non levis est: quae tu frumenta notasti,
maestus in amissis illa colonus habet.
nec venti tantum Cereri nocuere nec imbres,
nec si marmoreo pallet adusta gelu,
quantum, si culmos Titan ancalfacit udos;
tunc locus est irae, dive timenda, tuae.
parce, precor, scabrasque manus a messibus aufer."*

("Scaly Mildew, spare the sprouting corn, and let the smooth top quiver on the surface of the ground. O let the crops, nursed by the heaven's propitious stars, grow until they are ripe for the sickle. No feeble power is yours: the corn on which you have set your mark, the sad husbandman gives up for lost. Nor winds, nor showers, nor glistening frost, that nips the fallow corn, harm it so much as when the sun warms the wet stalks; then, dread goddess, is the hour to wreak your wrath. Oh spare, I pray, and take your scabby hands from off the harvest!") (Ovid, *Fast.* 4,911-22).

It is difficult to say what motivated the Antiates to be so insistent that the rust that affected their harvest in C218 was a prodigy. Part of the answer could lie in war hysteria.

14. All the MSS of Livy read *Falernis*, which is impossible. *Faleriis* is the most economical emendation and supported by Plutarch (see the following Section).

However, in view of Orosius, some consideration has to be given to *Faliscis*. The *Falisci* were the inhabitants of the *ager Faliscis*, the principal city of which was Falerii.

If the display took place at night (yet again the *Annales* are irritatingly unspecific) this is an example of an aurora. In Italy, aurorae are not a common phenomenon, generally occurring only once or twice every ten years [STOTHERS (1979a), p. 85]. Given this rarity, it is understandable that the reports of auroral displays should be allusive and difficult to interpret. Stothers (1979a), p. 90, attributes many celestial phenomenon recorded by ancient authors as aurorae: for example, *hiatus* (14 - C217), *caelum ardens* (17 - C217), as well as *pluvia sanguinea* (5 - C214) and *pluvia lactea* (10 - C209). Other interpretations are not to be ruled out.

15. See on C218, 9. Were the religious authorities at Falerii concerned not to be left behind by their colleagues in Caere?!

16. The temple of Mars on the Via Appia contained a statue of Mars and of wolves as wolves were sacred to him. Natural condensation, in this case, could have been mistaken as sweat. Cold stone or metal could easily become wet though humidity. As the sceptical Cicero, *Div.* 2,58, once again explains: *umor adlapsus extrinsecus, ut in tectoriis videmus austro, sudorem videtur imitari* (the moisture which forms on the outside of objects, as we see it on our plastered walls when the south wind blows, seems to resemble sweat).

17. The Capuan report may relate to an auroral display also witnessed at Falerii (see on 14).

18. Although all the MSS have *lunaeque*, which would involve a report of the moon falling, Drakenborch's emendation *lanaeque* is more than worth considering. One could compare *Praeneste lana volitarit* (at Praeneste wool flew) at Obsequens, 52 (C93). The substance observed will have been gossamer, airborne thread of linyphiid spiders. The commonest time of occurrence extends from autumn into early winter. The report will have been too late to have been taken into consideration with the C218 *hieme* group.

19. Perhaps these goats had a kind of hair that, when it grew long or become damp, curled like sheep's wool.

20. This could simply be a case of the owner of the birds having put them in the wrong cages one night and in the morning erroneously thinking that they had swapped sex. Small wonder, therefore, that Livy relegated this report to the trivial category.

The fact that Livy includes the last two items at all tells strongly in favour of a basic urge towards comprehensiveness in his reproduction of prodigial material from the *Annales Maximi*.

C. Expiations

In setting out the procedural details on the basis of the pontifical records, Livy follows strict chronological order. The day sacred to Juno of the Aventine was 1st

September. That of Feronia was 13th November. The last prescription related, as spelled out, to December [See WARDE FOWLER (1911), p. 316].

The time consumed in expiating the prodigies accumulated between winter C218 and the beginning of C217 is quite remarkable.

II. OROSIUS, 4.15.1:

Diris tunc etiam Romani prodigiis territi sunt:

1. nam et solis orbis minui visus est
2. et apud Arpos parmae in caelo visae
3. sol quoque pugnasse cum luna
4. apud Capenas interdiu duas lunas ortas
5. in Sardinia sanguine duo scuta sudasse
6. Faliscis caelum scindi velut magno hiato visum
7. apud Antium metentibus cruentas spicas in corbem decidisse

Translation:

At that time also the Romans were terrified by dreadful prodigies:

1. for the orb of the sun was seen to be diminished
2. and in the territory of Arpi shields had been seen in the sky
3. also the sun had fought with the moon
4. in the territory of Capena during the day two moons rose
5. in Sardinia two shields sweated with blood

6. at Falerii the sky was seen to be cut asunder as if with a great gaping
7. in the territory of Antium bloody ears of corn fell into the baskets of the harvesters

Comment:

The seven items selected by Orosius are presumably those which he considered the most striking and preternatural.

C216 = 29/3/216-10/4/215 BCEJ

Consuls: C. Terentius Varro, L. Aemilius Paullus

1. LIVY, 22,36.6-9:

ceterum priusquam signa ab urbe novae legiones moverent, decemviri libros adire atque inspicere iussi propter territos vulgo homines novis prodigiis.

1. nam et Romae in Aventino
2. et Ariciae nuntiatum erat sub idem tempus lapidibus pluvisse
3. et multo cruore signa in Sabinis
4. Caeretesque aquas [fonte callidos] manasse - id quidem etiam, quod saepius acciderat, magis terrebat
5. et in via fornicata, quae ad Campum erat, aliquot homines de caelo tacti exanimatique fuerant

ea prodigia ex libris procurata.

Translation:

But before the new legions were to move their standards from the City, the *Xviri* were ordered to access and consult the Books, on account of people generally terrified by new prodigies.

1. for both at Rome on the Aventine
2. and at Aricia it was announced about the same time that it had rained stones
3. amongst the Sabines the images of the gods ran with much blood
4. and so too the waters of Caere - an occurrence all the more terrifying because it had happened with some frequency
5. in the arched way, which used to lead to the Campus, some people had been hit from the sky and killed

These prodigies were expiated in accordance with the Books

Comments:

A. Context

Livy has noted the election of Varro and Paullus as consuls for C216 at 22,35. They led out the legions when civil and religious duties had been performed. The five prodigies are those accepted for processing and expiation out of all reports accumulated since early C217. The tiny number does not necessarily conflict with Livy's assessment (28,11.1), already noted, that in times of great crisis the number of prodigial announcements increased greatly. It may reflect wholesale culling of the reports in hand. It is natural to suspect that the impatient and irreligious Varro was the figure ultimately responsible. Significantly, there is no indication of a *novendiale* being used in connexion with either of the rains of stones. Even a single nine day delay of public business and war preparation would have been incompatible with Varro's temperament.

B. Prodigies

1 and 2. For the phenomenon, see on C218, 8.

3. Statues that bled, talked, and sweated, were not an uncommon occurrence, even through to the Middle Ages. This phenomenon could be attained by drilling small holes throughout the statue, through which water or blood could flow. An early example of a statue adapted for this kind of religious propaganda can be found in the Ny Karlsberg Epicurus of the first century CE, which has holes allowing the

introduction of a speaking tube through the underside of the bust to the mouth [POULSEN (1947), pp. 181-2], remarkable in view of the Epicurean efforts to expose the conjuring apparatus of such charlatans as Alexander of Abonoteichus (see LUCIAN 'Ἀλέξανδρος ἡ ψευδόμαντις). Speaking statues were not as common as those that sweated or bled, and there seem to be no examples of speaking statues in the Livian *prodigia* lists where one would most expect to find them. In the Middle Ages it was believed that there was nothing more healing than the blood that flowed from the crucifixion wounds in Christ's hands and feet, or the tears shed by his sorrowing Mother [POULSEN (1947), p. 192]. The holy image of Januarius of Naples, every year on his celebration day, sweats blood [POULSEN, (1947), p. 194]. Such phenomena continue even today, as the case of the bleeding Madonna of Civitavecchia (1995) shows. Images sweat or bleed or even move not only for religious reasons - desires for oracles, prayers for healing, good crop yields - but also for political purposes. Disadvantageous military manoeuvres, illness or death of a ruler, or even treacherous allies make 'living' statues react.

4. The MSS give the first word as *caedes*. *Caeretes* (Gronovius) or *Caere* (Perizonius) are obvious alternative emendations. I have adopted the former and added *-que* without which the transition from 3 would be rather harsh. Whether or not a gloss, the corrupt *fonte callidos* of the best MSS must be corrected to *fonte calido*. Alschefski proposed *fonte calido [gelidas]*.

5. See on C217, 5. Hit from the sky by lightning. The striking of individuals could, like that of walls and gates (see on C214, 10), be taken to signify divine displeasure

with the community to which the victim belonged. In terms of a more particularist line of interpretation, the individuals struck down were the objects of the gods' wrath.

C. Expiation

At least one, probably two *novendialibus* should have been essential for correct expiation of the accepted prodigies. See A above for a suggestion as to the reason for omission.

II. LIVY, 22,57.2-6:

6. territi etiam super tantas clades cum ceteris prodigiis
(6) tum quod duae Vestales eo anno, Opimia atque Floronia, stupri compertae et altera sub terra, ut mos est, ad portam Collinam necata fuerat, altera sibimet ipsa mortem consciverat.

hoc nefas cum inter tot, ut fit, clades in prodigium versum esset, decemviri libros adire iussi sunt et Q. Fabius Pictor Delphos ad oraculum missus est sciscitatum quibus precibus supplicisque deos possent placare et quaenam futura finis tantis cladibus foret. interim ex fatalibus libris sacrificia aliquot extraordinaria facta; inter quae Gallus et Galla, Graecus et Graeca in foro boario sub terra vivi demissi sunt in locum saxo consaeptum, iam ante hostiis humanis, minime Romano sacro, imbutum.

Translation:

6. They were terrified on top of such great defeats both by other prodigies
(6) and because two Vestals, Opimia and Floronia, had in that year been convicted of unchastity. Of these one had been buried alive, as the custom is, near the Colline Gate, and the other had killed herself.

Since in the midst of so many horrible things this corruption had been converted into a portent, the *Xviri* were commanded to consult the Books, and Quintus Fabius Pictor was sent to Delphi, to enquire of the oracle with what prayers and supplications they might propitiate the gods, and what would be the end of all their calamities. In the meantime, by the direction of the Books

of Fate, some unusual sacrifices were offered; amongst others a Gaulish man and woman and a Greek man and woman were buried alive in the Cattle Market, in a place walled in with stone, which even before this time had been defiled with human victims, a type of sacrifice only marginally compatible with the Roman spirit.

Comments:

A. Context and Related Matters

The setting is the immediate aftermath of the battle of Cannae. Since it is unlikely that the other prodigies, *ceteris prodigiis*, referred to are the five expiated prior to the consuls' departure from Rome, the question arises whether Livy has failed to reproduce a batch of *prodigia*, duly processed and expiated, recorded in the *Annales Maximi* alongside the unchastity of two of the Vestals. Although not beyond the bounds of possibility this is improbable. Rather, *ceteris prodigiis* may reflect Livian assimilation of Polybius who relates (3,112) that shortly before engagement at Cannae, the whole of Rome was in a state of heightened excitement and fear with all the oracles were delivered in people's mouths and every temple and every house full of signs and prodigies so that prayers and sacrifices and supplications and petitions to the gods permeated the city:

ὀρθὴ καὶ περίφοβος ἦν ἡ πόλις... πάντα δ' ἦν τὰ παρ' αὐτοῖς λόγια
πᾶσι τότε διὰ στόματος, σημείων δὲ καὶ τεράτων πᾶν μὲν ἱερόν, πᾶσα δ'
ἦν οἰκία πλήρης, ἐξ ὧν εὐχαὶ καὶ θυοίαι καὶ θεῶν ἱκετηρία καὶ δεήσεις
ἐπεΐχον τὴν πόλιν.

The portentous appearances and occurrences alluded to are clearly not prodigies in the official sense but reflections of the hysterical credulity of local religious congregations and private families. The ritual responses listed are not public expiations overseen by

the pontifices but again a matter of local and private reaction. The same passage of Polybius may be behind elements in a detached excerpt from the account of the second Punic war in Cassius Dio. The germane part of the passage (14,7 = M.151; Loeb edition, p. 102) runs as follows:

πολλὰ τέρατα τὰ μὲν ὡς ἀληθῶς συμβάντα, τὰ δὲ καὶ μάτην θρυλούμενα ἐλογοποιήθη... ἐθύοντο οὖν αἱ θυσίαι καὶ τὰλλα ὅσα οἱ ἄνθρωποι πρὸς τὴν τοῦ παρόντος δεινοῦ σφισιν ἄκεσιν καὶ πρὸς τὴν τοῦ ὑποπτευομένου διάφευξιν εἰώθασιν ποιεῖν ἐγίγνετο... εἰ καὶ μᾶλλον διὰ τοῦ προσδοκωμένου κινδύνου μέγεθος ἐνόμιζον ὅτι καὶ τὸ τραχύτατον αὐτοῖς συμπέσαι, ὅμως ἤλπιζον μὴ ἡττηθῆσεσθαι. (Many prodigies, some of which had really occurred and others which were idle chatter became subjects of conversation... As a result, sacrifices and all the other rituals were performed to which people are accustomed to have recourse as an anodyne for their terror of the moment and as a means of eluding what they anticipate... Even if, due to the magnitude of the peril expected, they believed all the more that the harshest circumstances would befall, nevertheless they continued to hope that they would not be defeated.)

A prodigy as momentous as the Vestals' infidelity could not be held over for processing until the next consular year.

B. Comment

6. This report, placed immediately after the devastating defeat at Cannae, seems to be used as an explanation for it.

The first interment of a Vestal Virgin, Tuccia, occurred in 230 BCE. The Vestal was buried alive in a small underground chamber containing a bed, and the bare necessities of life such as bread, water, milk, and oil, possibly because the Romans shrank from murdering a woman who had been consecrated to the service of Vesta. The fact that the woman starved to death did not seem to disturb the Romans as her death was not on their hands. It was also believed that if a Vestal had been adjudged incorrectly and was in fact still virgin, those bits of food would sustain her until the

goddess herself rescued the girl, proving her to have retained her vows and her virginity. The ceremony surrounding the punishment of the unchaste Virgin was exact and fairly complex, as described by Plutarch, *Num.*, 10,6-7:

αὐτὴν δὲ τὴν κολαζομένην εἰς φορεῖον ἐνθέμενοι καὶ καταστεγάσαντες ἐξῶθεν καὶ καταλαβόντες ἱμάσιν, ὥς μηδὲ φωνὴν ἐξάκουστον γενέσθαι, κομίζουσι δι' ἀγορᾶς. ἐξίστανται δὲ πάντες σιωπῇ καὶ παραπέμπουσιν ἄφθογγοι μετὰ τινος δεινῆς κατηφείας· οὐδὲ ἐστὶν ἕτερον θέαμα φρικτότερον, οὐδ' ἡμέραν ἢ πόλιν ἄλλην ἄγει στυγνοτέραν ἐκείνης. ὅταν δὲ πρὸς τὸν τόπον κομισθῇ τὸ φορεῖον, οἱ μὲν ὑπηρέται τοὺς δεσμοὺς ἐξέλυσαν, ὁ δὲ τῶν ἱερέων ἐξαρχος εὐχὰς τινὰς ἀπορρήτους ποιησάμενος καὶ χεῖρας ἀνατείνας θεοῖς πρὸ τῆς ἀνάγκης, ἐξάγει συγκεκαλυμμένην καὶ καθίστησιν ἐπὶ κλίμακος εἰς τὸ οἶκημα κάτω φερούσης. εἶτα αὐτὸς μὲν ἀποτρέπεται μετὰ τῶν ἄλλων ἱερέων· τῆς δὲ καταβάσης ἢ τε κλίμαξ ἀναιρεῖται καὶ κατακρύπτεται τὸ οἶκημα γῆς πολλῆς ἄνωθεν ἐπιφορουμένης, ὥστε ἰσόπεδον τῷ λοιπῷ χώματι γενέσθαι τὸν τόπον. οὕτω μὲν αἱ προέμεναι τὴν ἱερὴν παρθενίαν κολάζονται. (The culprit herself is placed on a litter, over which coverings are thrown and fastened down with cords so that not even a cry can be heard from within, and carried through the forum. All the people there silently make way for the litter, and follow it without uttering a sound, in a terrible depression of soul. No other spectacle is more appalling, nor does any other day bring more gloom to the city than this. When the litter reaches its destination, the attendants unfasten the cords of the coverings. Then the high-priest, after stretching his hands towards heaven and uttering certain mysterious prayers before the fatal act, brings forth the culprit, who is closely veiled, and places her on the steps leading down into the chamber. After this he turns away his face, as do the rest of the priests, and when she has gone down, the steps are taken up, and great quantities of earth are thrown into the entrance of the chamber, hiding it away, and making the place level with the rest of the mound. Such is the punishment of those who break their vows of virginity.)

It has been suggested by several scholars [HARRISON (cited by MERRILL (1914), pp. 318-22); LAMBRECHTS (cited by PORTE (1984), p. 237)] that this tomb of the Vestal was indeed her bridal chamber. She was Proserpine returning to her infernal spouse, Pluto, king of Hades. This is not a generally held view because, as Porte writes, (1984), p. 237, "curieux cortège nuptial, en vérité, que cette procession en deuil escortant la litière hermétiquement close où gît la prêtresse dépouillée de ses parures rituelles, rendue muette et immobile par des moyens brutaux...".

According to Ovid (*Fast.* 6,459-60), a Vestal was buried underground because of the relationship between Vesta and the Earth:

*sic incesta perit, quia quam violavit, in illam
conditur, et Tellus Vestaque numen idem.*

(This is the doom of her who proves unchaste; because she is put away in the earth which she contaminated, since Earth and Vesta are one and the same deity.)

C. Expiation

Once the Vestals' behaviour had been identified as an official, public *prodigium*, burial alive of those directly involved was no longer a sufficient means of dealing with the atrocity. Appropriate expiatory measures became mandatory. The Sibylline Books were consulted and one of the response was gruesomely drastic, the human sacrifice, by burial alive in the Forum Boarium, of two Greeks and two Gauls, in both cases one of each sex, noted by Plutarch, *Quaest. Rom.* 283:

εὐρεθῆναι δέ φασι χρησμούς ταῦτά τε προδηλοῦντας ὥς ἐπὶ κακῶ
γενησόμενα, καὶ προστάττοντας ἀλλοκότοις τισὶ δαίμοσι καὶ ξένοις
ἀποτροπῆς ἕνεκα τοῦ ἐπιόντος προέσθαι δύο μὲν Ἑλλήνας, δύο δὲ
Γαλάτας ζῶντας αὐτόθι κατορυγέοντας. (they say that oracles were found
foretelling that these events would come to pass for the bane of the Romans,
and enjoining on them that, to avert the impending disaster, they should offer
as a sacrifice to certain strange and alien spirits two Greeks and two Gauls,
buried alive on the spot.)

In 228 BCE came the first instance of human sacrifices by burial alive, thereby 'defiling' the Forum Boarium initially. As Dio/Zonaras explains it at 8,19:

Λογίου δέ ποτε τοῖς Ῥωμαίοις ἐλθόντος καὶ Ἑλλήνας καὶ Γαλάτας τὸ
ἄστυ καταλήψεσθαι, Γαλάται δύο καὶ Ἑλληνες ἕτεροι ἕκ τε τοῦ ἄρρενος
καὶ τοῦ θήλεος γένους ζῶντες ἐν τῇ ἀγορᾷ κατωρύγχσαν, ἵν' οὕτως
ἐπιτελὲς τὸ πεπρωμένον γενέσθαι δοκῇ, καὶ τι κατέχειν τῆς πόλεως
κατορωρυγμένοι νομίζονται. (Inasmuch as an oracle had once come to the
Romans that Greek and Gauls should occupy the city, two Gauls and likewise

two Greeks, male and female, were buried alive in the Forum, in order that in this way destiny might seem to have fulfilled itself, and these foreigners, thus buried there, might be regarded as possessing a part of the city.)

Reid (1912), p. 39, questions the necessity of the burial of foreigners in this case, claiming that the suffering undergone by the erring Vestals would have been sufficient to expiate their sin, but the two separate burials, that of the Vestals and that of the two couples, should not be seen as part of each other; rather the Vestal scandal was a *prodigium* that prompted the Senate to consult the Books, and this consultation brought about the sacrifices of the Greeks and Gauls.

The question that remains is, why Greeks and Gauls?

Initially scholars studying the human sacrifice phenomenon at Rome theorized that such occurred only when Rome was menaced by some great external threat, and that the burial of foreigners was an apotropaic way of obviating this threat. The victims were representatives of their nations, those currently hostile to Rome, and so the burial of living victims was a kind of *Kriegsoffer* [ECKSTEIN (1982), p. 69]. This theory is untenable because, while human sacrifices occurred in 228, 216, and 114/3, in none of these years was Rome at war with Greeks and/or Gauls. In fact, in 216, Rome's major ally against Carthage was Syracuse, at that time a Greek city state, and although the Macedonian war was in the wind, there is no evidence to link the sacrifices to the bellicose activities of Philip. Moreover, in each sacrifice the victims were Greeks and Gauls - it was not a case of the victims' being changed to suit the military and political situation. Eckstein proposes that "the use of Greeks and Celts may reflect the two great enemies of Rome's own legendary or semi-legendary past: the Greeks had sacked Troy, and the Romans were willing to claim descent from Trojan refugees; the Celts, nearer in time, had sacked Rome itself." (1982), p. 81.

If this were the case, that foreigners were sacrificed as traditional enemies, then why were the victims not solely men, the bearers of arms and the wagers of war? Why were woman also sacrificed?

Porte (1984), p. 241, suggests that, as the Romans had a predilection in their liturgies for rhythm and rhyme, the inclusion of women was motivated by purely poetic needs:

GRAECUS ET GRAECA,

GALLUS ET GALLA

She continues, "on peut expliquer leur choix par des raisons stylistiques, leurs noms composant une formula bien équilibrée." (1984), p. 241.

Whatever the reason for the choice of Greeks and Gauls, both male and female, rather than being a *Kriegsopfer*, the sacrifice was indicative of a State act designed to appease the Roman gods by restoring any rupture in the *pax deorum*, and to avert any threat that menaced the city.

Further living entombments occurred in 114/3 BCE, and Pliny (*N.H.* 28,12) also claims that: *boario vero in foro Graecum Graecamque defossos aut aliarum gentium cum quibus tum res esset etiam nostra aetas vidit* (Our own generation indeed even saw buried alive in the Cattle Market a Greek man and a Greek woman, and victims from other peoples with whom at the time we were at war). Interestingly, a little further he contradicts his earlier claim when he admits (30,12) that:

DCLVII demum anno urbis Cn. Cornelio Lentulo P. Licinio Crasso cos. senatusconsultum factum est ne homo immolaretur, palamque in tempus illud sacra prodigiosa celebrata. (It was not until the 657th year of the City [98 BCE] that in the consulship of Cn. Cornelius Lentulus and P. Licinius Crassus there was passed a *senatusconsultum* forbidding human sacrifices; so that down to that date it is manifest that such abominable rites were practised.)

C215 = 11/4/215-31/3/214 BCEJ

Consuls: L. Postumius Albinus, Ti. Sempronius Gracchus

LIVY, 23,30,17; 31.12-15; 32.13:

circumacto tertio anno Punici belli Ti. Sempronius consul idibus Martiis magistratum init. ...

postquam Marcellus ab exercitu rediit, comitia consuli uni rogando in locum L. Postumii edicuntur. creatur ingenti consensu Marcellus, qui extemplo magistratum occiperet. cui ineunti consulatum cum tonuisset, vocati augures vitio creatum videri pronuntiaverunt; volgoque patres ita fama ferebant, quod tum primum duo plebei consules facti essent, id deis cordi non esse. in locum Marcelli, ubi is se magistratu abdicavit, suffectus Q. Fabius Maximus tertium.

1. mare arsit eo anno
2. ad Sinuessam bos eculeum peperit
3. signa Lanuvii ad Iunonis Sospitae cruore manavere
4. lapidibusque circa id templum pluit

ob quem imbrem novendiale, ut adsolet, sacrum fuit, ceteraque prodigia cum cura expiata... et Romae consules transactis rebus quae in urbe agendaerant movebant iam sese ad bellum.

Translation:

The third year of the Punic War being at an end, Tiberius Sempronius entered upon office as consul on the Ides of March. ... After Marcellus returned from the army, an election to name one consul in place of Lucius Postumius [who had died] was ordered by edict. With great unanimity Marcellus was elected, to assume office at once. Just as he was entering upon his consulship it thundered, and thereupon the augurs, being summoned, declared that there seemed to be a defect in his election. And the fathers widely circulated the statement that it did not meet the approval of the gods that two plebians had then for the first time been elected consuls. In place of Marcellus, after he had abdicated, Quintus Fabius Maximus was substituted as consul for the third time.

1. the sea was aflame in the course of that year
2. at Sinuessa a cow gave birth to a colt
3. at the Temple of Juno Sospita at Lanuvium statues ran with blood
4. it rained stones around that Temple

on account of those stones, there was a sacred *novendiale*, as usual, and the rest of the portents were duly expiated... At Rome, after doing what had to be done in the city, the consuls were bestirring themselves for war.

Comments:

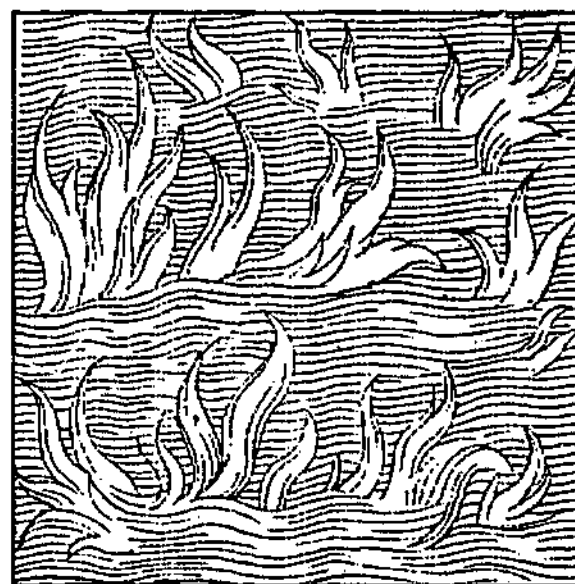
A. Context

The prodigies, listed immediately after the election of the consuls for C215 and processed prior to their departure from the city for war, will have been reported in between processing of the Vestal virgins *prodigium* the previous year and the beginning of the present one. It is possible, although not necessarily the case, that there was considerable culling of reports despite the atmosphere created by the devastating defeat at Cannae on 2 Sextilis. Religious and other authorities may well have felt that the disaster had been all but adequately expiated by the burial alive and suicide of Vestals and the sacrificial interment of living Gauls and Greeks.

B. Prodigies

1. Once again, the shortness of the report makes accurate identification difficult. There is no specific location provided to give any clue as to the cause of this appearance of 'fire'. In view of Dio's version (see next Section), this could be an example of marine bioluminescence. At night, luminous algae or plankton can create

the appearance of a sea on fire. Alternatively, if the phenomenon witnessed had been of a red colour, then submarine volcanism, especially if the affected area was in the vicinity of the Lipari islands, is another possibility.



2. Throughout the various *prodigia* lists there are mentions of unnatural animal births. These range from the abnormal but possible (for example, hermaphrodites and teratologies) to the impossible. On this occasion either a cow bore a calf so deformed that it looked like a colt, or some kind of fraudulent substitution was effected.

According to Columella (6,24.1), a preferred time for Italian farmers for the impregnation of cows was from mid-June to July. Calving would then take place ten months later, in May. Varro (*Rust.* 2,5.13) and Pliny (*N.H.* 8,177) allude to a different regime whereby mating occurred around the rising of the constellation Delphinus, which took place in January. In that case, November would be the month of calving. Since the present prodigy must have been reported later in C216 than the culmination of the Vestal affair, the cow concerned will have been impregnated in the context of the second system.

3. See on C216, 3.

4. See on C218, 8. If, as implied, the phenomenon was isolated to the immediate surrounds of the temple, the meteoric and volcanic fallout theories are impossibly strained. Even if the fall was dispersed over a wider area, but specifically reported to have fallen around the temple because it was the only important structure in the area, the latter explanation can be ruled out given Lanuvium's location.

C. Expiation

The expected *novendiale* is mentioned by Livy as having been the expiatory measure for the rain of stones. As far as the other prodigies are concerned, we know only that they were expiated, but not in what manner. There is no information pertaining to duration of expiation or to which god or gods entreaty was made, though one would consider it not unlikely that some form of offering was made to Juno Sospita given that two of the four prodigies occurred in her precinct.

C214 = 1/4/214-11/4/213 BCEJ

Consuls: Q. Fabius Maximus, M. Claudius Marcellus

LIVY, 24,10.1; 10,6-13:

quo dies magistratum inierunt consules, senatus in Capitolio est habitus... prodigia eo anno multa nuntiata sunt, quae quo magis credebant simplices ac religiosi homines, eo plura nuntiabantur.

1. Lanuvii in aede intus Sospitae Iunonis corvos nidum fecisse
 2. in Apulia palmam viridem arsisse
 3. Mantuae stagnum effusum Mincio amni cruentum visum
 4. et Calibus creta
 5. et Romae in foro bovario sanguine pluvisse
 6. et in vico Insteio fontem sub terra tanta vi aquarum fluxisse, ut serias doliaque, quae in eo loco erant, provoluta velut impetus torrentis tulerit
 7. tacta de caelo atrium publicum in Capitolio
 8. aedem in campo Vulcani
 9. vicum in Sabinis publicamque viam
 10. murum ac portam Gabiis
- iam alia vulgata miracula erant:
11. hastam Martis Praeneste sua sponte promotam
 12. bovem in Sicilia locutum
 13. infantem in utero matris in Marrucinis 'io triumphe' clamasse
 14. ex muliere Spoleti virum factum
 15. Hadriae aram in caelo speciesque hominum circum eam cum candida veste visas esse
 16. quin Romae quoque in ipsa urbe secundum apum examen in foro visum - quod mirabile est, quia rarum
 17. adfirmantes quidam legiones se armatas in Ianiculo videre concitaverunt civitatem ad arma, cum qui in Ianiculo essent negarent quemquam ibi praeter aduetos collis eius cultores apparuisse

haec prodigia hostiis maioribus procurata sunt ex haruspicum responso et supplicatio omnibus deis quorum pulvinaria Romae essent indicta est.

Translation:

On the day the consuls entered office, the Senate met on the Capitol... Many prodigies were reported in the year - and the more uncomplicated and superstitious men were believing them, the more of them used to be reported.

1. at Lanuvium in the temple of Juno Sospita inside ravens had made a nest
2. in Apulia a green palm took fire
3. at Mantua a swamp, representing the overflow of the river Mincius, appeared bloody
4. at Cales it rained with chalk
5. at Rome in the Cattle Market it rained with blood
6. and on the Vicus Insteius an underground spring flowed with a force of water so great that it carried small and large jars, which were in this place, rolled along just as if by the force of a rushing stream

Hit from the sky were

7. the Public Forecourt on the Capitol
8. the temple of Vulcan in the Campus
9. a row of houses and a public street in the Sabine country
10. the wall and a gate at Gabii

Moreover other marvels were circulated

11. the spear of Mars at Praeneste moved forward of its own accord
12. a cow in Sicily spoke
13. among the Marrucini an infant in its mother's womb shouted "Hail, triumph!"
14. at Spoleto a woman was changed into a man
15. at Hadria there were observed an altar in the sky and the appearance of men around it in shining white clothes
16. at Rome in the very city, following, a swarm of bees seen in the Forum - which is remarkable because it's rare

17. certain people stirred up the citizen body to arms, insisting that they were seeing armed legions on the Janiculum at the same time as those who were on the Janiculum were denying anyone had appeared there except the accustomed denizens of that hill

These prodigies were expiated with full-grown victims on the advice of the *haruspices*, and *supplicatio* was decreed for all the gods of whom there were couches at Rome.

Comments:

A. Context

These seventeen prodigies are an aggregation of those reported between early C215 and the entry into office of the consuls of C214. Livy's presentation of events at the beginning of the new consular year is compatible with their having been processed on the day the consuls entered office. The list is a relatively long one. The civil and religious authorities were evidently not prepared on this occasion to engage in heavy culling.

B. Prodigies

1. See on C218, 6.
2. See on C217, 1.
3. See on C217, 11.

4. This 'chalk' rain could have been the result of volcanic dust high in the atmosphere as Vulcano had erupted the previous year, there are no other records in the ancient literature redolent of volcanism. Vulcano erupted in 215 BCE [SIMKIN *et al.* (1981), p. 35] but the severity or otherwise of this submarine eruption is unknown. Alternatively, such fallout could reflect atmospheric pollution caused by bush fires but again there is no hint elsewhere of such an occurrence. Soils with a high salt content can appear chalky after heavy rain.

5. 'Blood' rains still fall in parts of Italy today, as well as in other parts of the world. If Cicero's observation that such incidents are a matter of rain showers affected by some kind of mineral contamination (*aliqua contagione terrena*) is correct, then Stother's (1979a), p. 90, claim that this phenomenon reflects observation of the aurora borealis can be safely rejected. While aurorae, particularly in minauroral latitudes, are frequently of a red colour, the phenomenon scarcely resembles rain. (See on C217, 14).

Saharan dust has been claimed as the culprit in European cases, a view too readily rejected by Ehrenberg [cited by TATLOCK (1914), p. 443] who asserted that the dust that mixed with water, thereby giving the appearance of diluted blood, lacked the characteristic African forms. Investigation into winds originating from Africa in fact supports the hypothesis that dust from the Saharan desert may be carried by winds in the direction of Italy and beyond, although thorough comparative scientific analysis of dust from the Sahara and particles deposited in Italy has yet to be carried out.

When serious atmospheric disturbances approach from the west, southerly winds cause the *Sirocco* to occur in southern Italy. This is a dry wind of African origin,

laden with sand and dust particles from the Sahara [FLOHN (1969), p. 169]. The depressions that traverse Libya and the Qattara Depression and are accompanied by these hot, dust-laden desert winds, occur 50% of the time in April and May, but are also known to appear in autumn. These masses of tropical air moving from North Africa to Italy acquire varying amounts of moisture, depending on how far the Sirocco has had to travel across the Mediterranean. This dust- and moisture-laden air brings to Italy warm, humid weather, often accompanied by rain. It may very well be such rain, reddened by Saharan dust, that was reported by the ignorant and superstitious in antiquity as 'blood rain'. Indeed, Corliss (1983), p. 84, claims quite unequivocally that "the European 'rains of blood', described since history began to be written down... can usually be blamed on dust blown north from Africa." African dust has allegedly been carried by winds as far afield as the Caribbean and Southern California, and French Guiana [PROSPERO & CARLSON (1981), pp. 677-91], proving that this is an extremely widespread phenomenon.

Another, and perhaps the earliest, explanation for rains of blood was offered by Nicolas Claude Fabri de Peiresc and Pierre Gassendi in the seventeenth century, and by Réaumur and Fontenelle in the eighteenth century, who ascribed them to butterflies [cited by SARTON (1947), pp. 96-8]. Unfortunately, the type of butterfly which caused the red spots from which Peiresc drew his conclusion has never been identified. Furthermore, enormous numbers of butterflies would be needed to produce enough red spots to be interpreted as a residue of blood rains. Such proliferation would be counted as a *prodigium* of itself.

Corliss (1983), p. 106, states that "the coloring matter in blood rains inevitably turns out to be reddish dust and organic matter". There are several theories regarding

the origins of these rains of organic matter, from birds fighting overhead to wind storms picking up the flesh of slaughtered animals and dropping it in its course, but the one that appears most able to account for an extensive fall of 'blood' is that which invoked vegetal matter.

The unicellular volvocalean green alga *haematococcus pluvialis*, when subjected to extreme environmental conditions such as dehydration, nutrient starvation, and nitrogen deficiency, transforms from a green, vegetative, motile cell to a red, nonmotile aplanospore capable to withstanding these unfavourable conditions [ZLOTNIK *et al.* (1993), p. 463] The production of secondary ketocaretenoids, in particular the red pigment astaxanthin, is not limited solely to the *haematococcus* but is mediated also by other species of algae such as the *chlamydomonas nivalis* (presumed to be the cause of 'blood snow') [CZYGAN (1970), p. 69], though this latter, as may be assumed from its effect, is active under chilling conditions. These coccoid chlorophytes and xanthophytes have been found to form colonies rapidly from windblown propagules [JOHANSEN (1993), p. 144] and this capacity for proliferation supports the theory that the red nonmotile aplanospores of the *H. Pluvialis* were carried by winds and brought down in rain over parts of Italy.

The area reported to be affected is very confined. Either part of a wider region is spelled out because of its especial significance or at least this blood rain is more fictive than real!

8. See on C218, 4.

9. For this first word the MSS offer the unintelligible *vocem* and *arcem*. Hertz conjectured a location, *Vacunae* which does not accord well with either of these readings. *Vicum* is the suggestion of Bicknell.

10. Lightning strikes to gates and walls could be indicative of divine attacks on a city's fortifications and as such would certainly require expiation to appease the gods and save the city. As Krauss (1930), p. 38f, observes, "the withdrawal of Jupiter's protection and his active hostility were seen when lightning leveled the defenses of towns and cities."

11. See on C218, 5. The spears of Mars were possibly the first embodiment of the god. Unlike the Greeks, the Romans were very slow to create anthropomorphic gods, as is evident in the worship of a fire in the temple of Vesta rather than a statue of the goddess.

12. That this was not considered a malignant *prodigium* is shown in the treatment of the animal afterwards. It was well-cared for, so it was not seen as an evil thing in itself but rather simply an instrument of the gods, notifying the Roman people that all was not well. Having been touched by the gods, having had, so it was supposed, a god speaking through it, the " " was treated almost as a divine object.

13. See on C217, 1.

14. Lack of a specified age for this unfortunate individual allows for two options for possible identification. The first is relevant only if the individual were young, a child approaching puberty. There is a medical condition which can result in the erroneous identification of a male child as a female child, an identification which is rapidly reversed with the onset of puberty,



sometimes causing, as perhaps in this case, great consternation for the parents and other adults. It is a pity that there is no information regarding the impact this re-identification had on the individual involved. "The hormonal defect in these male pseudohermaphrodites is caused by a genetic deficiency in the enzyme 4 steroid 5-alpha reductase, which impairs the metabolism of testosterone into dihydrotestosterone (DHT). Since DHT is the prenatal mediator of masculinization of external genitalia, such persons at birth are sexually ambiguous, with a marked bifid scrotum that appears labia-like, an absent or clitoris-like penis, undescended testes, and associated hermaphroditic traits." [HERDT (1990), p. 435]. If this condition is recognized, the individual may be reared as a male and no further complications arise, but more often it is not and the individual, though genetically male, is reared as a female. The problem becomes evident with the onset of puberty. "Because they are genetically normal males, with presumed prenatal exposure of the brain and CNS to testosterone, all 5-alpha reductase hermaphrodites begin to virilize again at puberty through the

peripheral timing effects of their own plasma testosterone. Hence, the voice deepens, muscles develop, the penis grows somewhat, and testes descend." [HERDT (1990) p. 436]. In such cases, the 'woman' becomes a man. Alternatively, if the woman concerned were menopausal, then the decrease of female hormones, coupled with an increase in male hormones, could have brought about the appearance of masculinity.

15. Yet again, unfortunately, we are not told whether the phenomenon was observed during the day or at night. If witnessed at night, the *prodigium* could reflect an aurora (see on C217, 14). Otherwise, the obvious candidate for identification is some kind of mirage.



16. From the section concerning bees at Pliny, *N.H.* 11,55 comes the following passage:

tunc ostenta faciunt privata ac publica uva dependente in domibus templisque, saepe expiata magnis eventibus. sedere in ore infantis tum etiam Platonis, suavitatem illam praedulcis eloquii portendentes; sedere in castris Drusi imperatoris cum prosperrime pugnatum apud Arbalonem est, haut quaquam perpetua harsupicum coniectura, qui dirum id ostentum existimant semper. (Moreover bees supply private and public portents when a cluster of them hangs suspended in houses and temples, portents that have often been expiated by great events. They alighted on the mouth of Plato even when he was still an infant, portending the charm of that matchless eloquence; and they alighted in the camp of the commander Drusus on the occasion of the very successful battle of Arbalo - as there are certainly exceptions to the interpretation of the augurs, who invariably think this a direful portent.)

Often in Livy they appear to be viewed as a *dirum ostentum* representative of forces hostile to Rome, and concerned to bring about its downfall. An early example of this can be found at Livy, 21,46.1, where he writes that a swarm of bees had settled in the tree which overhung the Scipio's tent in a military camp (*examen apum in arbore praetorio imminente consederat*). Even though Scipio performed the sacrifices which should have averted such an evil omen, the ensuing battle against Hannibal resulted in a Roman defeat.

At Cicero *Div.* 1,73, a passage relating to Siceliote Greek history, bees figure as a favourable omen in connexion with a major political figure:

Dionysius... qui, sum per agrum Leontinum iter faciens, equum ipse demisisset in flumen, sibmersus equus voraginibus non exstitit; quem cum maxima contentione non potuisset extrahere, discessit, ut ait Philistus, aegre ferens. cum autem aliquantum progressus ettet, subito exaudavit hinnitum respexitque et equum alacrem laetus aspexit, cuius in iuba examen apium consederat. quod ostentum habuit hanc vim, ut Dionysius paucis post diebus regnare coeperit. (Dionysius... was travelling through the Leontine district, and led his horse down into a river. The horse was engulfed in a whirlpool and disappeared. Dionysius did his utmost to extricate him but in vain and, so Philistus writes, went away greatly troubled. When he had gone on a short distance he heard a whinny, looked back and, to his joy, saw his horse eagerly following and with a swarm of bees in its mane. The sequel of this portent was that Dionysius began to reign within a few days.)

According to Columella (9,14.5), bees swarm from May to June: *ab exortu Vergiliarum ad solstitium, quod fit ultimo mense Iunio circa ocatvam partem Cancri, fere examinant alvi* (From the rising of the Pleiades [10th May] to the solstice, which takes place at the end of June in about the eighth degree of the Crab, the hives generally swarm). The prodigy concerned, then, is likely to have been announced many months before processing and expiation.

17. See on C218, 7.

C. Expiation

The *haruspices*, the Etruscan soothsayers, were consulted in respect these prodigies which do not strike one as especially unusual. One wonders who felt that the Roman *pontifices* were incapable of handling them and why.

C213 = 12/4/213-1/4/212 BCEJ

Consuls: Q. Fabius Maximus, Ti. Sempronius Gracchus.

LIVY, 24.44.8-9:

consules duabus urbanis legionibus scriptis supplementoque in alias lecto, priusquam ab urbe moverent, prodigia procurarunt quae nuntiata erant.

1. murus ac portae ...

2. et Ariciae etiam Iovis aedes de caelo tacta fuerat

et alia ludibria oculorum auriumque credita pro veris:

3. navium longarum species in flumine Tarracinae quae nulla <e> era<n>t visas

4. et in Iovis Vicilini templo, quod in Compsano agro est, arma concrepuisse

5. et flumen Amiterni cruentum fluxisse

his procuratis ex decreto pontificum profecti consules, Sempronius in Lucanos, in Apuliam Fabius.

Translation:

After two legions had been enrolled for the city and recruits enlisted to reinforce the others, the consuls, before they moved out from the city, expiated the prodigies which had been reported.

1. at ... the wall and gates

2. and at Aricia even the temple of Jupiter had been hit from the sky

Various deceptions of the eyes and ears were accepted as real:

3. in the river at Tarracina appearances of warships which were not really there had been seen

4. and in the temple of Jupiter Vicilinus, in the territory of Compsa, arms clashed together

5. and the river at Amiternum ran with blood

These having been expiated according to a decree of the *pontifices*, the consuls set out, Sempronius to Lucania, to Apulia, Fabius.

Comments:

A. Context

The five prodigies are processed between the election of the consuls for C213 and their departure to their respective theatres of war. The reports from which they were culled will have accumulated throughout the previous consular year.

B. Prodigies

1. See on C214, 10. The name of the town is missing from the MS. Luterbacher proposed *Caietae* to fill the lacuna though it is difficult to understand his confidence in his reconstruction.
2. See on C218, 4.
3. Given *visas*, an essential replacement for *visae* of the MSS, correction of *nulla erat* to *nullae erant* is obligatory.

This is probably a case of looming. As Humphreys (1964), p. 469, explains:

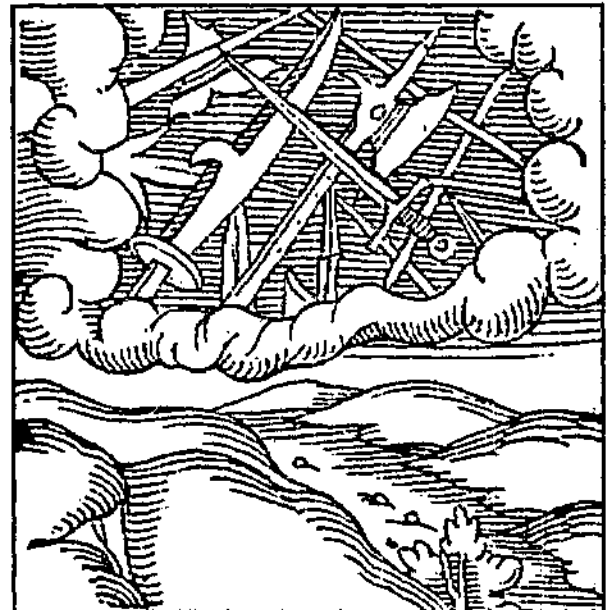
Since the extension of the actual, beyond the geometrical, horizon depends... upon the density decrease of the atmosphere with increase of elevation, it follows that any change in the latter must produce a corresponding variation of the former. An increase, for instance, in the normal rate of decrease, such as often happens over water in middle to high latitudes, produces the phenomenon of looming, or the coming into sight of objects normally below the horizon.

Here, the warship that were not there were probably moored below the horizon on the witness who then only saw an optical illusion.

4. This phenomenon is most simply explained as the consequence of a minor earth tremor, too minor in itself to be regarded or reported as a *prodigium*, or to cause any damage.

Pliny, *N.H.* 2,193, says of earthquakes:

praecedit vero comitaturque terribilis sonus, alias murmuri similis, alias mugitibus aut clamori humano armorumve pulsantium fragori, pro qualitate materiae excipientis formaque vel cavernarum vel cuniculi per quem meet



(They are however preceded or accompanied by a terrible sound, that sometimes resembles a rumble, sometimes the lowing of cattle or the shouts of human beings or the clash of weapons struck together, according to the nature of the material that receives the shock and the shape of the caverns or burrows through which it passes.)

Alternatively, since shields and spears were kept in many temples, the tremor might have noisily disturbed real weapons.

5. See on C217, 11.

C. Expiation

As usual, the *pontifices* were in charge of the expiation of these prodigies. No need was perceived to consult either the Sibylline books or the Etruscan *haruspices*. Either the *Annales Maximi* failed to record the directions of the *pontifices* or else Livy himself omitted them, perhaps due to their commonplaceness.

C212 = 2/4/212-14/4/211 BCEJ

Consuls: Q. Fulvius Flaccus, Ap. Claudius Pulcher

LIVY, 25,2.1; 7.7-9:

Q. Fulvius Flaccus tertiam Appius Claudius consulatem ineunt...

tempestates foedae fuere

1. in Albano monte biduum continenter lapidibus pluit

tacta de caelo multa

2. duae in Capitolio aedes

3. vallum in castris multis locis supra Suessulam et duo vigiles exanimati

4. murus turresque quaedam Cumis non ictae modo fulminibus sed etiam decussae

5. Reate saxum ingens visum volitare

6. sol rubere solito magis sanguineoque similis

horum prodigiorum causa diem unum supplicatio fuit; et per aliquot dies consules rebus divinis operam dederunt; et per eosdem dies sacrum novendiale fuit.

Translation:

Quintus Fulvius Flaccus, for the third time, and Appius Claudius entered upon their consulship...

There were dreadful storms;

1. on the Alban Mount it rained stones unremittingly for two days

Many things were hit from the sky:

2. two temples on the Capitol

3. the rampart of the camp above Suessula was hit in many places from the sky with two sentries losing their lives

4. at Cumae the walls and certain towers were not merely struck by lightning but even thrown down

5. at Reate a huge stone was observed flying
6. the sun seemed to be redder than usual and similar to a bloody one

By reason of these prodigies there was a *supplicatio*, and for several days the consuls gave attention to religious rites; and during the same time there was a sacred *novendiale*.

Comment:

A. Context

Prior to the processing of these six prodigies, Livy deals with a scandal involving tax-farmers. Then, while the consuls were endeavouring to raise recruits for the army, a letter was received in the Senate from Marcellus in Sicily, regarding those soldiers who had fought at Cannae. A delegation was despatched to Marcellus who, after hearing their case, sent another letter to the Senate. This was duly discussed and it appears that only after all this had occurred did the prodigies, collected between early C213 and early C212, finally receive attention.

B. Prodigies

Storms were sent by the gods, particularly Jupiter, the sky god, and were indicative of their displeasure which required placatory measures. At Cicero, *Div.* 1,16, Quintus declines to ascribe a divine origin to such phenomena, saying, *sic ventorum et imbrium signa, quae dixi, rationem quam habeant, non satis perspicio; vim et eventum agnosco,*

scio, approbo (thus as to the cause of those premonitory signs of winds and rains already mentioned I am not quite clear, but their force and effect I recognize, understand and vouch for). Intense storms could also be precursors of earthquakes: "a coming earthquake influences the atmospheric processes so powerfully that meteorological events are altered profoundly" [TRIBUTSCH (1983), p. 138]. This could also support the alternative explanation of 6.

As dreadful as they were, the storms themselves were not prodigies but their catastrophic effects were often seen as such.

1. See on C218, 8. The duration and localization of this fall do not accord well with the hypothesis of a meteorite shower. This is the location of the first recorded rain of stones, during the reign of Tullus Hostilius. It would be pleasant to hypothesize that the Alban Mount, while not actually erupting, did spit out a few stones, but unfortunately there is not the slightest possibility that the Alban Mount was active at this time. Newton (1966), p. 126, suggests that "perhaps the most likely source of volcanic showers in the neighbourhood of Rome is Monte Epomeo in the bay of Naples, which has always been the centre of volcanic activity when Vesuvius is inactive." Given that this mount is over 150 km from the Alban Mount and there are no reports around this period of volcanic activity in Epomeo's immediate vicinity [SIMKIN *et al.* (1981), pp. 33-7], this strange explanation can be confidently ruled out.

2. See on C218, 4.

3. In general, see on C214, 10. In respect of the sentries, see on C217, 5.

4. See again on C214, 10. The phraseology proves conclusively that *tactum de caelo* and *ictum fulminibus* are interchangeable.

5. If we suppose some exaggeration on the part of the observants, some sort of seismic phenomenon might be the best explanation. Obviously there is too little detail for a confident diagnosis. As so often we are not even informed as to whether the event took place during the day or at night.

6. One might plausibly expect "similar to a bloody x." This leads to the possibility of a word having dropped out of the text. This event was probably witnessed at Reate.

Clearly some kind of atmospheric pollution was involved, possibly caused by volcanic dust. Vulcano erupted, as has already been mentioned (C214, 4), in 215 BCE, but this seems a long time for resultant pollutants, if any, to have remained in the atmosphere. This pollution could have been caused by the smoke of forest fires.

Another possibility, if 5 has a seismic aetiology, is earthquake fog, one of the many phenomena associated with earthquakes [TRIBUTSCH (1983)]

C. Expiation

The 'religious rites' to which the consuls gave their attention are undocumented. The *novendiale* appears among the expiatory processes because of the rain of stones. *Supplicatio*: a day set aside for public prayer when men were garlanded and women wore their hair loose, and the whole population went around the city from temple to temple to offer prayers.

C211 = 15/4/211-4/4/210 BCEJ

Consuls: Cn. Fulvius Centumalus, P. Sulpicius Galba

LIVY, 26,23.4-6:

eodem anno prodigia aliquot visa nuntiataque sunt.

1. in aede Concordiae Victoria quae in culmine erat fulmine icta decussaque ad Victorias quae in antefixis erant haesit neque inde procidit
2. et Anagniae
3. et Fregellis nuntiatum est murum portasque de caelo tacta
4. et in foro Subertano sanguinis rivos per diem totum fluxisse
5. et Ereti lapidibus pluvisse
6. et Reate mulam peperisse

ea prodigia hostiis maioribus sunt procurata, et obsecratio in unum diem populo indicta et novendiale sacrum.

Translation:

In the same year several prodigies were observed and announced

1. at the Temple of Concord a Victory which was on top, having been struck by lightning and dislodged, was caught in the Victories which were on the antefixes and did not fall down from there
2. both at Anagnia
3. and at Fregellae it was announced the walls and gates had been hit from the sky
4. at the market-place in Subertanus streams of blood flowed for a whole day
5. at Eretum it rained stones
6. at Reate a mule had foaled

These prodigies were expiated with full-grown victims, and an *obsecratio* was proclaimed to the people for one day and a sacred *novendicle*.

Comments:

A. Context

This year opens at the beginning of book 26 yet the prodigies are only enumerated in chapter 23 in the wake of Livy's account of the consular and other actions for C211. Immediately prior to the prodigy list is mention of the decree to make the Ludi Apollinares a permanency, so that it may be observed in this and later years. As the games were celebrated from 6-13 Quintilis, the decree dates to June at the latest. It is highly unlikely that prodigies were held over for some months before being processed. Clearly, Livy's decision to make the Roman campaign to retake Capua the highlight and focus of his treatment of C211 led him not only to relegate other events to a minor status but also to tack some of them on as a sort of appendix to the mainstream narrative. Levene (1993), p. 58, suggests that Livy displaced the C211 prodigies for the dramatic purpose of keeping the year as free as possible from prodigies. In the absence of convincing explanation of Livy's motives, this is gratuitous.

B. Prodigies

1. In C216, Hiero sent to Rome as a gift a golden Victory, weighing two hundred and twenty pounds (LIVY, 22,37.5). This statue, gratefully accepted, was assigned the Capitol, the temple of Jupiter Optimus Maximus, as its seat. *In ea arce urbis Romanae sacratam, volentem propitiamque, firmam ac stabilem fore populo Romano* (established in that citadel of Rome she would be gracious and propitious, faithful and steadfast, to the Roman people) (LIVY 22,37.12). The striking down by Jupiter of one of his

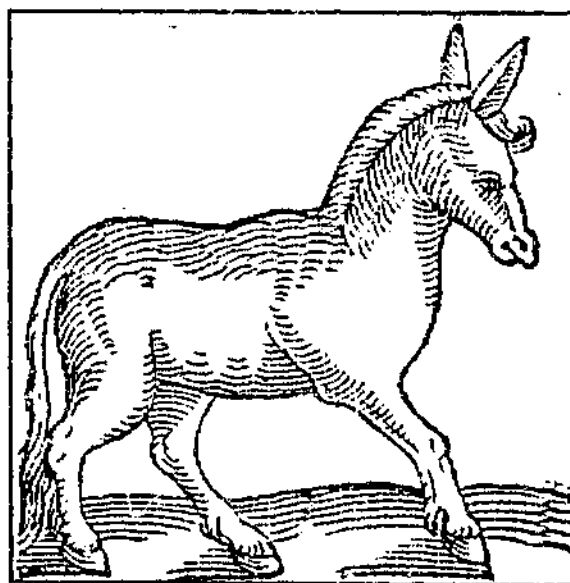
attendants, the one symbolizing and embodying victory, during a time of war could not fail to induce alarm in the Romans.

2 and 3. See on C214, 10.

4. See on C217, 11. Possibly heavy rains caused flooding and there was water contamination by infusoria in an unusual place. Alternatively, perhaps the local butchers had a busy day!

5. See on C218,8. Due to the distance of Eretum from any area of volcanism, volcanic ejecta must be rejected as the explanation. Given the absence of counter-indications such as extreme localization and prolongation, meteorites are the best provisional alternative.

6. A majority of the *prodigia* reported from Reate revolves around mules and their breeding. Rawson (1971), p. 164, finds this remarkable and uses it to support a contention that special collections of similar prodigies were made. In doing so, she fails to take into account the fact that Reate was the major breeding ground of mules, asses and horses in Italy. With such a high concentration of these animals in one place, and their husbandmen dependent on them for their livelihoods, it is natural that any abnormal occurrence be



reported and viewed with alarm. Varro, himself a Reatine, emphasizes (*Rust.* 2,1.14) the pecuniary value of the animals bred at Reate:

hoc nomine enim asini Arcadici in Graecia nobilitati, in Italia Reatini, usque eo ut mea memoria asinus venierit sestertiis milibus sexaginta et unae quadrigae Romae constiterint quadringentis milibus. (It is for this reason [breed] that in Greece the asses of Arcadia are noted, and in Italy those of Reate - so much so that within my recollection an ass fetched 60 000 sesterces, and one team of four at Rome sold for 400 000.)

(See also *Rust.* 2,6.2. Such valuable property would be carefully scrutinized for any defects.

It is possible that the animal concerned on this occasion was not actually a mule. Alternatively, while a mule, it was not barren. Whilst not a common occurrence, it is possible for a mule to bear offspring. A mule is the hybrid progeny of a mare and a jackass. A horse has a diploid set of 64 chromosomes, a donkey has only 62. As a consequence, the mare's egg will contain a haploid set of 32 chromosomes, while the sperm of the jack will contain a haploid set of 31 chromosomes, creating a mule with a diploid set of 63 chromosomes. Reproductive cells are produced by a process called meiosis during which each chromosome must pair. If the two sets of chromosomes are homologous then effective pairing at meiosis can occur; if the sets are not homologous, as they are in the case of a mule because not only the number but also the structure of horses' and donkeys' chromosomes are different, then the chromosomes are unable to pair up, meiosis is not completed and viable gametes are impossible. Through a genetic defect, bearing in mind that sperm and egg cells are the only haploid cells in a body comprising of diploid cells, meiosis may be completed after a fashion and fertility may be the result. Such fertility is very rare, but Travis (1990) notes that since 1527, 60 live foals have been born to mules. Cicero, ever the sceptic where supernatural origins are accorded unusual events, comments at *Div.* 2,61: *nam si, quod raro fit, id*

portentum putandum est, sapientem esse portentum est; saepius enim mulam peperisse arbitror quam sapientem fuisse (now if a thing is to be considered a portent because it is seldom seen, then a wise man is a portent; for as I think, it more often happens that a mule brings forth a colt than that nature produces a sage).

It is difficult to date this prodigy because mules would not be put with stallions or jackasses as they were considered always to be sterile. Horses, according to Pliny (*N.H.* 8,163), Columella (6,27.3), and Varro (*Rust.* 2,7.7), were mated at the time of the vernal equinox. Birth occurred twelve months later. Asses, on the other hand, were not to be bred at the same time as horses, but had to wait until the summer solstice (PLINY, *N.H.* 8,167; VARRO, *Rust.* 2,6.4).

C. Expiation

The expected *novendiale* is found amongst this year's prescriptions.

C210 = 5/4/210-15/4/209 BCEJ

Consuls: M. Claudius Marcellus, M. Valerius Laevinus

LIVY, 27.4.11-15:

multa *ea aestate* qua haec facta sunt ex propinquis urbibus argisque nuntiata sunt prodigia:

1. Tusculi agnum cum ubere lactenti natum
2. Iovis aedis culmen fulmine ictum ac prope omni tecto nudatum
3. iisdem ferme diebus Anagniae terram ante portam ictam diem ac noctem sine ullo ignis alimento arsisse
4. et aves ad compitum Anagninum in luco Dianae nidos in arboribus reliquisse
5. Tarracinae in mari haud procul portu angues magnitudinis mirae lascivientium piscium modo exsultasse
6. Tarquiniis porcum cum ore humano genitum
7. et in agro Capenate ad lucum Feroniae quattuor signa sanguine multo diem ac noctem sudasse

haec prodigia hostiis maioribus procurata decreto pontificum, et supplicatio diem unum Romae ad omnia pulvinaria, alterum in Capenati agro ad Feroniae lucum indicta.

Translation:

During the summer in which these events occurred, many prodigies were reported from neighbouring cities and from the country:

1. at Tusculum a lamb was born with an udder full of milk
2. the top of Jupiter's temple was struck by lightning and stripped of nearly all its roofing
3. at Anagnia roughly in the same period of days, ground in front of the gate was struck and burned for a day and a night without any fuel for the fire
4. at the crossroads near Anagnia, in the grove of Diana, birds deserted their nests in the trees
5. at Tarracina, in the sea not far from the harbour, serpents of remarkable size leaped about in the manner of fish frolicking

6. at Tarquinii a pig was born with a human face
7. and in the territory of Capena at the grove of Feronia, four statues sweated much blood for a day and a night

These prodigies were atoned for with full-grown victims by decree of the *pontifices*. And prayers were ordered for one day in Rome at all the *pulvinaria*, and for a second day at the grove of Feronia, in the territory of Capena.

Comments:

A. Context

Livy fails to record the processing of prodigies at the beginning of the consular year. Either no reports had been submitted to the authorities at Rome since early C211, which is unlikely, or all those received had been discarded as trivial, fraudulent or otherwise unsuitable for referral by the incoming consuls to a meeting of the Senate. Subsequent unease about the appropriateness of such a total cull may have contributed to a decision to process immediately some reports received during summer (*ea aestate*).

B. Prodigies

1. This lamb is a curious creature, being apparently male - *agnum* instead of *agnam*. The male sex could be attributed to an error on the part of the copyist. It is possible for a lamb to be born with what appears to be a milky udder though it is not actually able to produce milk like its mother. Alternatively, perhaps this report was seen as

prodigious because a *male* lamb was born with an udder, but in that case one might expect to find more mention of the lamb's gender.

The preferred time, for the Roman farmer, for lambing was autumn rather than spring (VARRO, *Rust.* 2,2.13-14; PLINY, *N.H.* 8,187; COLUMELLA, 7,3.11). The present prodigy would have been announced then at the end of summer in the broad sense rather than close to its beginning.

2. See on C218, 4.

3. The prodigy report specifies that there was no fuel for this fire, meaning that no wood or any other obviously combustible material located on the ground was present. Therefore, this lightning strike must have hit a pocket of natural gas or oil which, once ignited, burnt until it was depleted.



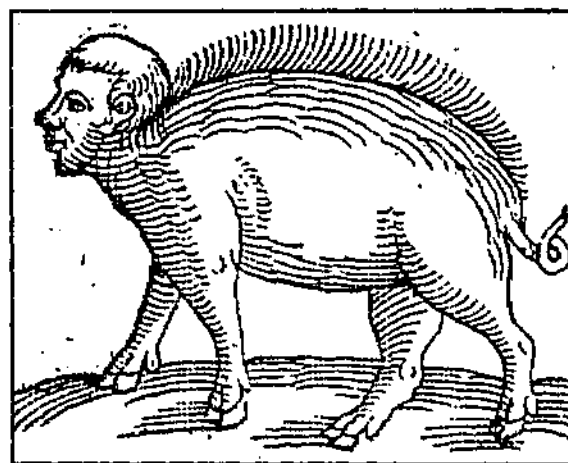
4. Birds, like other animals have been known to act strangely before an earthquake or tremor. Tributsch (1983), p. 6, presents the following tales about birds:

Two peasant women were talking between their houses when they noticed the noise made by a swarm of sparrows that were fluttering around one of the gables. One of the women remarked that she hoped this was not a sign of another impending earthquake. They had just changed the subject when the earth shook again. Another observation concerns the unusual behaviour of swallows. Having left on their fall migration several days before, they returned to the village and their nests on the morning of September 15. About half an hour before the quake, they all flew away again - this time for good.

It is a pity that the species of bird involved is not spelled out.

5. Krauss (1930), p. 113, flatly asserts that "these creatures were most probably nothing more than dolphins", yet the ancient Romans certainly knew what dolphins looked like, and one wonders if it were at all possible for them to have seen dolphins but not recognized them as such, even in a period of high stress/war psychosis. If not actual sea snakes, large eels will have been responsible for this report.

6. Natural occurrences, if they were not of the ordinary, were viewed with suspicion and deemed to portend some variety of evil. It is not surprising that a people such as the Romans, who saw omens and indications of divine presence in such things as lightning strikes and the flights of birds, should be so deeply affected by human and animal birth deformities and see in them bad omens [LEICHTY (1966), pp. 131-3]. Nature was straying from her normal, well-ordered path - a



clear sign that the gods felt angry and wronged. The Romans believed that appropriate expiations would right these wrongs.

The Roman farmer's preferred time for mating pigs was February/March. Farrowing, consequently, took place in July (VARRO, *Rust.* 2,4.7; COLUMELLA, 7,9.3; PLINY, *N.H.* 8,205).

7. See on C216, 3.

C. Expiation

Expiation was made not only at Rome but also at Capena, in the local grove of Feronia. Possibly an Etruscan goddess, Feronia had links with freedmen and women, and slaves. She came to have a grove at Rome. It is natural enough that expiation *in situ* should have been seen as appropriate.

Pulvinaria: On these things, see, in particular, SCULLARD (1981), p. 21. The *pulvinaria* were platforms on which statues of the gods were placed so that kneeling worshippers could adore them.

C209 = 16/4/209-5/4/208 BCEJ

Consuls: Q. Fabius Maximus, Q. Fulvius Flaccus

LIVY, 27,11.2-6:

prodigia quoque priusquam ab urbe consules proficiscerentur procurari placuit.

1. in Albano monte tacta de caelo erant signum Iovis arborque templo propinqua
2. et Ostiae lacus
3. et Capuae murus Fortunaeeque aedis
4. et Sinuessae murus portaque

haec de caelo tacta

5. cruentam etiam fluxisse aquam Albanam quidam auctores erant
6. et Romae intus in cella aedis Fortis Fortunaee de capite signum quod in corona erat in manum sponte sua prolapsum
7. et Priverni satis constabat bovem locutum
8. volturiumque frequenti foro in tabernam devolasse
9. et Sinuessae natum ambiguo inter marem ac feminam sexu infantem, quos androgynos volgus, ut pleraque faciliore ad duplicanda verba Graeco sermone, appellat
10. et lacte pluvisse
11. et cum elephantis capite puerum natum

ea prodigia hostiis maioribus procurata, et supplicatio circa omnia pulvinaria, obsecratio in unum diem indicta; et decretum ut C. Hostilius praetor ludos Apollini sicut iis annis voti factique erant voveret faceretque.

Translation:

It was decided that the prodigies be expiated before the consuls were to set out from the city

1. on the Alban Mount a statue of Jupiter and a tree near the temple had been hit from the sky
2. at Ostia a basin

3. at Capua the city wall and the temple of Fortune

4. at Sinuessa the wall and a gate

All these were hit from the sky

5. also certain people reported that the water at Alba flowed bloody

6. and that at Rome inside in the inner sanctuary of the Temple of Fors Fortuna an image which was in the garland on the statue's head fell into its hand of its own accord.

7. there was sufficient agreement that at Privernum a bull spoke

8. and that a vulture flew down into a shop when the forum was crowded

9. and that at Sinuessa a child was born of ambivalent sex, between male and female - which creatures people for the most part called androgynes, Greek speech being more amenable for making double-barrelled words

10. and that it rained milk

11. and that a child was born with the head of an elephant

These prodigies were atoned for with full-grown victims, and it was decreed that prayers were ordered at all the *pulvinaria*, and entreaties for one day; and it was decreed that C. Hostilius praetor vow and perform the games to Apollo just as they had been vowed and performed in recent years.

Comments:

A. Context

The prodigies of this year must have been collected between those reported and expiated *ea aestate* the previous year and the entry into office of the consuls of this year. As normal, it was decreed by the Senate that they be expiated prior to the consuls' leaving the city.

B. Prodigies

1 and 3. See on C218,4.

4. See on C214,10.

5. See on C217,11.

6. The most economical explanation of this occurrence would be a slight seismic disturbance possibly assisted by the precarious placement of the piece of statuary. Any prodigy occurring in the temple of Fortune, particularly those relating to falls, must have alarmed people as an omen of misfortune to come.

7. See on C214,12.

8. Vultures were seen by the Romans as birds of augury. Romulus and Remus had first used them to settle their quarrel about the site of their city. Plutarch, *Romulus*, 9,6, tells that the vulture is the least harmful of birds because it lives on carrion rather than killing other creatures or damaging grain or fruit trees. The vulture had a mystic aura about it: it was not like other birds in so many ways, as Plutarch, *Rom.* 9,7, goes on to explain:

ὁ δὲ γυνψ σπάνιον ἐστὶ θέαμα καὶ νεοσσοῖς γυπὸς οὐ ῥαδίως ἴσμεν ἐντετυχηκότες, ἀλλὰ καὶ παρέσχεν ἐνίοις ἄτοπον ὑπόνοιαν, ἔξωθεν αὐτοὺς ἀφ' ἐτέρας τινὸς γῆς καταίρειν ἐνταῦθα, τὸ σπάνιον καὶ μὴ συνεχές, οἷον οἱ μάντις ἀξιοῦσιν εἶναι τὸ μὴ κατὰ φύσιν μηδ' ἀφ' αὐτοῦ, πομπῇ δὲ θεία φαινόμενον. (the vulture is a rare sight, and it is not easy to come upon a vulture's young. Some men have been led into a strange suspicion that the birds come from some other and foreign land to visit us here, so rare and intermittent is their appearance, which the soothsayers think should

be true of what does not present itself naturally, nor spontaneously, but by a divine sending.)

On the part of those disposed to consider prodigies as more than simply signs of divine displeasure, the vulture's association with death and with another land might prompt interpretation of its appearance as being indicative of a threat to Rome coming from outside the State.

9. See on C214,14. In cases such as that described above, the genitalia of the infant may resemble more closely those of a female (hence later in life a "sex change") or they could, as in this case, be far more ambiguous, leading to identification of the child, who was most likely genetically male, as an hermaphrodite. This is another example of Nature's going ominously awry.

10. See on C214,4. Although it is specifically reported that *lac* rather than *creta* rained down on this occasion, in both cases the two substances are white and it is likely that the same phenomenon is concerned in both cases. The location is presumably Sinuessa again.

11. See on C210,6. It is unfortunate that the prodigy reports are often so bald as to make an accurate identification of the described phenomena close to impossible. This report is definitely one that eludes definite diagnosis of the condition. It could simply be that the child was born with large and/or prominent ears. Various types of medical condition can cause more serious enlargements or deformities of the head that might fit the context. One of these results in the appearance of lipomatous areas on the head, neck and paravertebral region, which are often accompanied by rugose and discoloured

skin and an absence of hair follicles, and hyperostosis of the skull. Tumours could further contribute to an elephantine appearance. Was this child then an unfortunate sufferer of encephalocraniocutaneous lipomatosis which "is characterized by craniocutaneous and central nervous system lipomas, various brain



malformations, mental deficiency, seizures, epibulbar dermoids, focal alopecia, and other abnormalities"? [RIZZO *et al.*, (1993), p. 653] Yet again, the location should be Sinuessa.

C. Expiation

The Ludi Apollinares had already been vowed to be celebrated in perpetuity back in C211 (26,23.3). It seems superfluous for them to have been vowed again.

C208 = 6/4/208-26/3/207 BCEJ

Consuls: M. Claudius Marcellus, T. Quinctius Crispinus

LIVY, 27,23.2-4:

praetores in provincias profecti; consules religio tenebat quod prodigiis aliquot nuntiatis non facile litabant.

1. et ex Campania nuntiata erant Capuae duas aedes, Fortunae et Martis, et sepulcra aliquot de caelo tacta
2. Cumis - adeo minimis etiam rebus prava religio inserit deos - mures in aede Iovis aurum rosisse
3. Casini examen apium ingens in foro consedisce
4. et Ostiae murum portamque de caelo tactam
5. Caere volturium volasse in aedem Iovis
6. Volsiniis sanguine lacum manasse

horum prodigiorum causa diem unum supplicatio fuit. per dies aliquot hostiae maiores sine litatione caesae diuque non impetrata pax deum. in capita consulum re publica incolumi exitiabilis prodigiorum eventus vertit.

Translation:

The praetors set out for their assignments, but the consuls were detained by religious scruples, because, several prodigies having been announced, they did not easily obtain successful result.

1. from Campania it had been announced that at Capua two temples, those of Fortune and of Mars, and a number of tombs were struck from the sky
2. at Cumae mice had gnawed the gold in the temple of Jupiter - to such an extent debase superstition involves divine agency in even the most trivial occurrences
3. at Casinum an enormous swarm of bees had settled in the forum
4. at Ostia the wall and a gate had been hit from the sky
5. at Caere a vulture had flown into the temple of Jupiter
6. at Volsinii the lake had flowed with blood

On account of these prodigies prayers were offered for one day. For several days full-grown victims were slain without favourable omens, and for a long time the peace of the gods was not achieved. The State being safe, the deadly outcome of the prodigies turned on the heads of the consuls.

Comments:

A. Context

These prodigies are an aggregate of those reported and accepted for expiation between early C209 and C208. The departure of both consuls from the city was held up by their processing.

B. Prodigies

1. See on C218, 4.

2. A trivial occurrence indeed. Despite his respectful attitude to prodigies in general, Livy cannot refrain from deprecation as far as this item is concerned. Conceivably he was influenced by the strictures of Cicero who notes at *Div.* 2,59, that it is a mouse's *raison d'être* to gnaw on things. He goes on to ridicule the possibility that such a prodigy could portend anything significant:

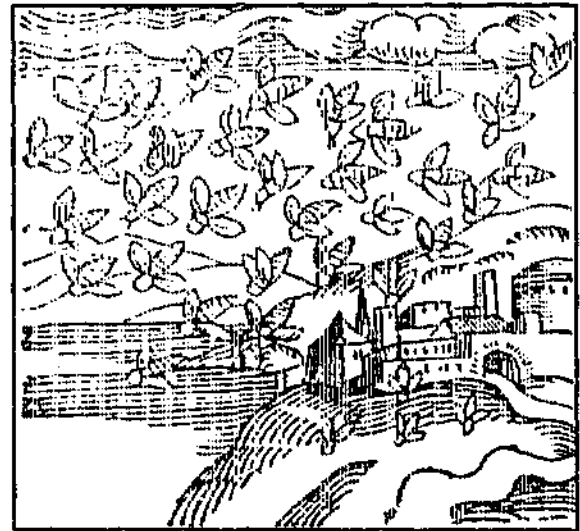
quasi vero quicquam intersit, mures diem noctem aliquid rodentes scuta an cribra correserint! nam si ista sequimur, quod Platonis Politian nuper apud me mures corroserunt de re publica debui pertimescere, aut, si Epicuri de Voluptate liber rosus esset, putarem annonam in macello cariorem fore! (As if it mattered a whit whether mice, which are gnawing something day and night, gnawed shields or sieves! Hence, by the same token, the fact that, at my house, mice recently gnawed my Plato's *Republic* should fill me with alarm for

the Roman republic; or if they had gnawed my Epicurus *On Pleasure* I should have expected a rise in the market price of food!)

It is easy for an educated man such as Cicero to deride this and similar prodigies, but for the uneducated and superstitious masses such an assault on gold, the symbol of power and leadership, may have been interpreted as an onslaught on the power and leadership of the Roman State itself.

3. See on C214, 16. Some of the MSS read *Casilini* instead of *Casini*.

4. See on C214, 10. Instead of *Ostia* some MSS have the meaningless *hostiae*. Such swarming of bees is most likely to occur in May and June. For Columella (9,14.5) the crucial time lies between the rising of the Pleiads (May 11th in his day) and the summer solstice.



5. See on C209, 8.

6. See on C217, 11.

C. Expiation

For as long as favourable omens were not obtained, it was incumbent upon the consuls to continue sacrificing until the peace of the gods should be indicated by a positive result.

C207 = 27/3/207-16/3/206 BCEJ

Consuls: C. Claudius Nero, M. Livius Salinator

LIVY, 27,37.1-15:

priusquam consules proficiscerentur novendiale sacrum fuit quia

1. Veiis de caelo lapidaverat

sub unius prodigii, ut fit, mentionem alia quoque nuntiata

2. Minturnis aedem Iovis

3. et lucum Maricae

4. item Atellae murum et portam

de caelo tactam

5. Minturnenses, terribilius quod esset, adiciebant sanguinis rivum in porta fluxisse

6. et Capuae lupus nocte portam ingressus vigilem laniaverat

haec procurata hostiis maioribus prodigia, et supplicatio diem unum fuit ex decreto pontificum.

inde iterum novendiale instauratum quod

7. in Armilustro lapidibus visum pluere

libertas religione mentes turbavit rursus nuntiatum

8. Frusinone natum infantem esse quadrimo parem, nec magnitudine tam mirandum quam quod is quoque, ut Sinuessae biennio ante, incertus mas an femina esset natus erat

id vero haruspices ex Etruria acciti foedum ac turpe prodigium dicere: extorrem agro Romano, procul terrae contactu alto mergendum. vivum in arcam condidere, provectumque in mare proiecerunt. decrevere item pontifices ut virgines ter novenae per urbem euntes carmen canerent. id cum in Iovis Statoris aede discerent conditem ab Livio poeta carmen

9. tacta de caelo aedis in Aventino Iunonis reginae

prodigiumque id ad matronas pertinere haruspices cum respondissent donoque divam placandam esse, aedilium curulium edicto in Capitolium convocatae quibus in urbe Romana intraque decimum lapidem ab urbe domicilia essent, ipsae inter se quinque et viginti delegerunt ad quas ex dotibus stipem conferrent; inde donum pelvis aurea facta lataque in Aventinum, pureque et caste a matronis sacrificatum. confestim ad aliud sacrificium eidem divae ab decemviris edicta dies, cuius ordo talis fuit. ab aede Apollinis boves feminae albae duae porta Carmentali in

urbem ductae; post eas duo signa cupressea Iunonis reginae portabantur. tum septem et viginti virgines longam indutae vestem, carmen in Iunonem reginam canentes ibant, illa tempestate forsitan laudabile rudibus ingeniis, nunc abhorrens et inconditum si referatur. virginum ordinem sequebantur decemviri coronati laurea praetextatique. a porta Iugario vico in forum venere; in foro pompa constitit, et per manus recte data virgines sonum vocis pulsu pedum modulantes incesserunt.

inde vico Tusco Velabroque per bovarium forum in clivum Publicium atque aedem Iunonis reginae perrectum. ibi duae hostiae ab decemviris immolatae, et simulacra cupressea in aedem inlata.

Translation:

Before the consuls set out there was a sacred *novendiale* because

1. at Veii it had rained stones

With the mention of one prodigy, as happens, others had been announced too

2. at Minturnae the Temple of Jupiter
3. and the grove of Marica
4. likewise at Atella the city wall and a gate

were hit from the sky

5. the men of Minturnae added, to make the situation all the more terrible, that there had been a stream of blood at the gate
6. at Capua a wolf, having entered a gate by night, mangled a sentry

By a decree of the pontiffs, these prodigies were atoned for with full-grown victims, and a one-day *supplicatio* was observed.

Then the *novendiale* were repeated again because

7. on the Armilustrum it had been observed to rain with stones

Liberated from religious fear, minds were perturbed again when it was announced that

8. at Frusino that there had been born a child equal in size to a four-year-old, and not so much a wonder for size as because this child too had been born in such a condition that it was uncertain where male or female, as at Sinuessa two years before

The *haruspices* summoned from Etruria pronounced that it was a foul and disgusting prodigy; it must be removed from Roman territory, far from contact with earth, and drowned in the sea. They deposited it alive into a chest and conveyed forth, they threw it into the sea. In the same respect, the pontiffs decreed that thrice nine maidens, marching through the city, should sing a

hymn as they marched through the city. While they were learning the hymn that had been composed by the poet Livius in the temple of Juno Sospita

9. the Temple of Juno the Queen on the Aventine was hit from the sky

When the *haruspices* had replied that that prodigy was pertinent to the matrons and that the goddess was to be pleased with a gift, the matrons domiciled in the city of Rome or within ten miles of it were summoned by an edict of the curule aediles to the Capitol. And from their own number they themselves chose twenty-five, to whom they should bring a contribution from their dowries. From what they brought a gift in the form of a golden bowl was made as a gift and carried to the Aventine, and the matrons after due purification offered sacrifice. Straightaway a day was decreed by the *Xviri* for another sacrifice to the same goddess; and the arrangement of which was as follows: from the Temple of Apollo two white cows were led through the Porta Carmentalis into the city; behind them were carried two statues of Juno the Queen in cypress wood. Then the seven and twenty maidens, in long robes, proceeded, singing their hymn to Juno the Queen, in that age perhaps praiseworthy to unsophisticated minds, but which would seem repellent and unrefined if repeated. Behind the company of maidens followed the *Xviri* wearing laurel garlands and purple-bordered togas. From the gate they came to the forum by way of the Vicus Iugarius. In the Forum the procession halted, and passing a rope from hand to hand the maidens advanced, accompanying the sound of the voice with the beat of their feet.

Then by way of the Tuscan quarter and the Velabrum then through the Forum Boarium progress was made to the Clivus Publicius and the Temple of Juno the Queen. There the two victims were sacrificed by the *Xviri* and the cypress statues were carried into the temple.

Comments:

A. Context

The prodigies are listed immediately after the elections of the magistrates and the allotment of provinces. 1-6 were aggregated between early C208 and the entry into office of the consuls of C207. 7 and 8, which occurred during the expiation of 1-6, were considered sufficiently serious to necessitate instantaneous expiation. 9 was reported while expiation of 8 was underway; in this case too immediate attention was felt to be required. An overall result was extra delay to the consuls' departure from the city.

B. Prodigies

1. See on C218, 8.

2 and 3. See on C218, 4. Marica was an important local goddess at Minturnae. Even if her grove had been struck during the same storm as the temple of Jupiter the occurrence would have been treated as a *prodigium* in its own right.

4. See on C214, 10.

5. See on C211, 4.

6. See on C218, 10. Possibly this prodigy was inspired by the problems that the Romans had had with the Capuans who had sided with Hannibal in C216 but had been recaptured by the Romans a few years later. Presumably the wolf concerned was extremely hungry, a condition that suggests that the incident occurred in winter.



7. The Armilustrum was both a place on the Aventine and a ceremony for the purification of the army and its arms, to protect it "from the dangerous infection that it may have incurred from contact with bloodshed and strangers" [SCULLARD (1981), p. 195]. Since the stone rain concerned allegedly occurred early in the consular year in

connotes a spatial rather than temporal location. The Armilustrum festival took place in October. The spatial confinement of the claimed phenomenon is once again peculiar. Fraud cannot be ruled out; see further below on expiation.

8. See on C209, 9.

9. See on C218, 4.

C. Expiation

A second *novendiale* must have been inconvenient indeed, given the military situation. It is conceivable that the second shower of stones expiated was fictive, a matter of one political faction seeking to harass another.

C206 = 17/3/206-5/3/205 BCEJ

Consuls: L. Veturius Philo, Q. Caecilius Metellus.

LIVY, 28,11.1-7:

in civitate tanto discrimine belli sollicita, cum omnium secundorum adversorumque causas in deos verterent, multa prodigia nuntiabantur:

1. Tarracinae Iovis aedem
2. Satrici Matris Matutae de caelo tactam
3. Satricanos haud minus terrebant in aedem Iovis foribus ipsis duo perlapsi angues
4. ab Antio nuntiatum est cruentas spicas metentibus visas esse
5. Caere porcus biceps
6. et agnus mas idem feminaque natus erat
7. et Albae duo soles visos ferebant
8. et nocte Fregellis lucem obortam
9. et bos in agro Romano locutus
10. et ara Neptuni multo manasse sudore in circo Flaminio dicebatur
11. et aedes Cereris, Salutis, Quirini de caelo tactae

prodigia consules hostiis maioribus procurare iussi et supplicationem unum diem habere; ea ex senatus consulto facta. plus omnibus aut nuntiatis peregre aut visis domi prodigiis terruit animos hominum ignis in aede Vestae exstinctus caesaque flagro est Vestalis cuius custodia eius noctis fuerat iussu P. Licini pontificis. id quamquam nihil portendentibus dis, ceterum negligentia humana acciderat, tamen et hostiis maioribus procurari et supplicationem ad Vestae haberi placuit.

Translation:

In the State worried by such a crisis-point in the war, when they were attributing the causes of all that went right and wrong to the gods, prodigies were being announced:

1. at Tarracina the temple of Jupiter

2. at Satricum the temple of Mater Matuta had been hit from the sky
3. two serpents sliding in the temple of Jupiter by way of the very doors alarmed the people of Satricum no less
4. from Antium it was announced that bloody ears of corn had been observed by harvesters
5. at Caere a pig had been born with two heads
6. and a lamb at the same time male and female had been born
7. at Alba people were putting it about that two suns had been seen
8. at Fregellae light had arisen in the night
9. an ox spoke in the ager Romanus
10. the altar of Neptune in the Flaminian Circus was said to have streamed with copious sweat
11. the temples of Ceres, Salus, and Quirinus were hit from the sky

The consuls were bidden to expiate the prodigies with full-grown victims and to have a one-day *supplicatio* observed. Both orders were carried out in accordance with the decree of the Senate. More than all the prodigies either announced from outside or seen at home, the fire in the temple of Vesta having gone out terrified the minds of people. The Vestal whose duty it had been to take care of it on the night concerned was beaten by a whip by the order of the *pontifex* P. Licinius. Although that had occurred not by way of the gods' signifying anything but by a human's negligence, nevertheless it was decided that the occurrence be expiated by full-grown victims and that a *supplicatio* should be held to Vesta.

Comments:

A. Context

Again the prodigy list appears directly after the inauguration of the new magistrates (28,10.8) and the distribution of the provinces. They were processed prior to the consuls' leaving the city (28,11.11). Despite *nuntiabantur* rather than *nuntiata erant*,

at least some of the phenomena concerned were noted months before the commencement of C206; see below on 3, 4, 5, and 6.

B. Prodigies

1, 2 and 11. See on C218, 4.

3. This was a frightening sight as snakes could be considered a symbol of death, occasioning fear amongst witnesses.

The snake was a creature of the earth, emerging from the earth, and as such had an especial relationship with the Underworld. Snakes found in places where they were not accustomed to be found, such as a temple or other building, could not portend good. Cicero (*Div.* 1,36), tells of Ti. Sempronius Gracchus who caught two snakes in his house. He was told by the *haruspices* that his wife would die if he released the male snake but he would die if he released the female snake. A few days after releasing the female snake, he died.

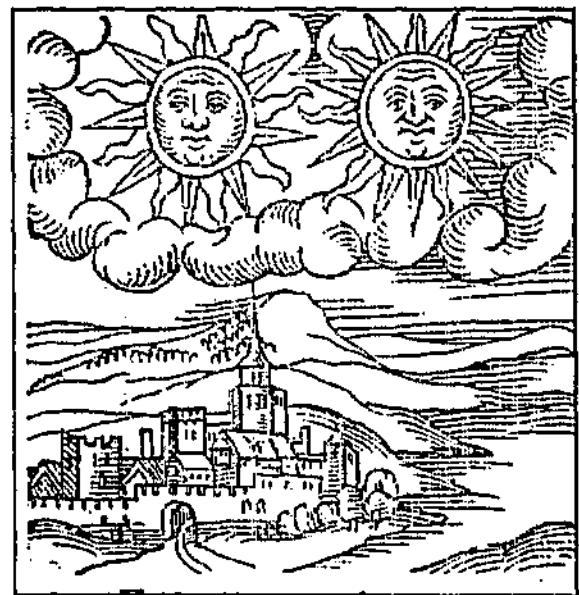
Tributsch (1983), pp. 30, 34-5, 39, points out that snakes are very sensitive to earth movements and prior to earthquakes they vacate their holes, even leaving hibernation early. It is unlikely, however, that the prodigy was reported in early C206 rather than in the warm months of C207.

4. See on C217, 13. The summer solstice, after which the harvest commenced (VARRO, *Rust.* 1,32.1; COLUMELLA 2,30.1), took place on Junius 15, C207.

5. See on C210, 6. Normally pigs were mated close to the vernal equinox; the gestation period was four months (VARRO, *Rust.* 2,4.7). The two-headed piglet, then, should have been born in C207.

6. See again on C210, 6. The preferred time for lambing was autumn (VARRO, *Rust.* 2,2.13-14). The hermaphroditic lamb, then, should have been born in C207. The place of observation will be Caere again.

7. Mock suns, also known as parhelia or sun dogs, are not uncommon sights in connexion with solar halo. Halos are formed by hexagonal ice crystals whose flat tops and bottoms reflect or refract light [SCHAAF (1989), p. 255]. The commonest is the 22° diameter halo. Somewhat rarer is a 46° counterpart. Parhelia are bright patches of light on either halo at the same elevation as the sun itself. There can be one or two parhelia for each halo. On occasion parhelia may be visible while the halo is not. The present case probably involves a single parhelion 11° from the sun.



8. See on C217, 14. One of the few *prodigia* where the time of occurrence (day or night) is actually stated. Despite the unaccustomed 'precision', diagnosis is all but impossible.

9. See on C214, 12.

10. See on C217, 16.

11. See on C218, 4.

C. Expiation

While a source of great alarm, the extinction of Vesta's fire was not a prodigy. Human carelessness did not signify a breach of the *pax deorum*, even if its consequence, like *prodigia*, might be deemed to require expiation.

C205 = 6/3/205-23/2/204 BCEJ

Consuls: P. Cornelius Scipio (Africanus), P. Licinius Crassus Dives.

LIVY, 29,10.4-5:

civitatem eo tempore repens religio invaserat invento carmine in libris Sibyllinis propter

1. crebrius eo anno de caelo lapidatum

inspectis, quandoque hostis alienigena terrae Italiae bellum intulisset, eum pelli Italia vincique posse, si mater Idaea a Pessinunte Romam advecta esset. id carmen ab decemviris inventum eo magis patres movit quod et legati qui donum Delphos portaverant referebant et sacrificantibus ipsis Pythio Apollini omnia laeta fuisse et responsum oraculo editum maiorem multo victoriam quam cuius ex spoliis dona portarent adesse populo Romano.

Translation:

At that time religious scruples suddenly pervaded the citizen body because in the Sibylline books, which had been consulted on account of

1. frequently repeated falls of stones within the year

[the verses were to the effect that] at whatever time an enemy born in another country had brought war to the land of Italy, he could be driven out of Italy and conquered if the Idaean Mother should have been conveyed from Pessinus to Rome. That group of verses discovered by the Xviri struck the senators all the more because at the same time the diplomatic mission which had carried a gift to Delphi were reporting both that when they sacrificed to Pythian Apollo the outcome had been favourable and that the reply had been given by the oracle to the effect that a victory much greater than the one from the spoils of which they were bearing gifts was at hand for the Roman people.

Comments:

A. Context

No processing and expiation of *prodigia* is recorded for the period between the entry of the consuls into office (LIVY, 28,28.12) and their departure for their provinces (28.46). Evidently the authorities had been propelled, for whatever reason, towards total culling of reports of unusual phenomena submitted between the processing of *prodigia* early in C206 and the Ides of March C205.

Towards the end of the year, when the time for electing the new consuls was approaching (LIVY, 29,10.1), a prolonged sequence of showers of stones, whose location is not specified, eventually dictated an extraordinary flurry of emergency expiatory activity.

B. Prodigy

1. See on C218, 8.

C. Expiation

The normal approach to a shower of stones was, to repeat, a *novendiale*, a nine-day expiatory period involving cessation of public business. Strictly, each and every shower of stones required such a *nostrum*. A prolonged series of showers, therefore, confronted the State, consequently, with a potentially massive administrative problem. One reason for resort to the Sibylline books, deep into C205, may have been concern

to avoid such inconvenience. A possible contributory factor towards a novel approach to a familiar phenomenon was a feeling that over-zealous culling of prodigial reports for the greater part of C206 had offended the gods and so was to some degree responsible for the manifestations that now confronted the State.

The recommended importation of the cult and cult image of the Idaean Mother, Cybele, from Pessinus, near the border of Galatia and 128 km from Ancyra, precursor of Ankara, the capital of modern Turkey, fitted in with a contemporary *Zeitgeist* conducive to increasing religious pluralism and hence the incorporation of compatible foreign cults into Roman life.

C204 = 24/2/204-13/2/203 BCEJ

Consuls: M. Cornelius Cethegus, P. Sempronius Tuditanus.

LIVY, 29,14.1-4:

quamquam nondum aperte Africa provincia decreta erat - occultantibus id, credo, patribus ne praesciscerent Carthaginienses - tamen in eam spem erecta civitas erat, in Africa eo anno bellatum iri finemque bello Punico adesse. impleverat ea res superstitionum animos, pronique et ad nuntianda et ad credenda prodigia erant. eo plura volgabantur:

1. duos soles visos
2. et nocte interluxisse
3. et facem Setiae ab ortu solis ad occidentum porrigi visam
4. Tarracinae portam
5. Anagninae et portam et multis locis murum de caelo tactum
6. in aede Iunonis Sospitae Lanuvi cum horrendo fragore strepitum editum

eorum procurandorum causa diem unum supplicatio fuit, et novendiale sacrum, quod

7. de caelo lapidatum esset

factum.

Translation:

Although the province of Africa had not been openly decreed, kept secret by the senators, I think, so that the Carthaginians might not know beforehand, nevertheless citizens were lifted in the hope that the war would be waged that year in Africa, and that the end of the Punic war was imminent. This situation had filled minds with superstitious expectations and they were conditioned both to report and to believe prodigies. Accordingly, rather a lot were publicly circulated:

1. two suns were observed
2. and a light had shone at night
3. at Setia a torch was observed extended from east to west

4. at Tarracina a city-gate had been hit from the sky
5. at Anagnia both a gate and the wall in many places had been hit from the sky
6. in the temple of Juno Sospita at Lanuvium a noise was emitted with a dreadful crashing

For the purpose of expiating the above, there was a *supplicatio* for one day, and because

7. there had been a falling of stones from the sky

a sacred *novendiale* was performed.

Comment:

A. Context

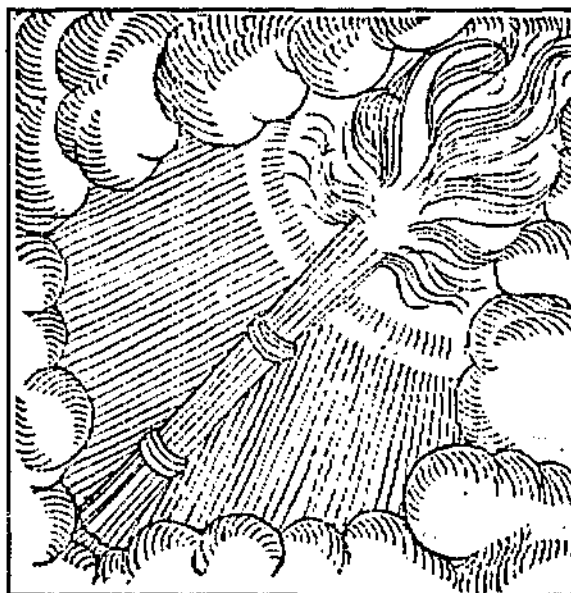
The seven prodigies were processed shortly after the consuls took office (29,13.1). A further shower of stones at the end of the year, after the extraordinary emergency expiation of a prolonged series, must have been daunting. It is likely, but not necessarily the case, that all the items in the group were reported late in C205, after the stone showers that prompted recourse to the Sibylline books. It is not out of the question that some of the prodigies concerned were observed earlier but that their processing was held over to the normal time. If so, unlike the chain of showers of stone, they were not considered to merit extraordinary prioritization. Given the climate created by the showers, one might expect reports of prodigies in general to have escalated. It may be that a fair amount of judicious culling was employed to achieve reduction to seven.

B. Prodigies

1. See on C206, 7.

2. See on C217, 14.

3. Most of the MSS read *stellae* after *facem*. A place name has to be restored and *Setiae* is the obvious correction. At *Quaestiones Naturales*, 1,1.11-12, Seneca spells out that *faces*, torches, are transitory phenomena. They race across (*transcurrunt*) the sky and on occasion are bright enough to be visible in daylight. *Fax*, then, connotes a bright meteoric fireball or bolide. At *de Natura Deorum*, 2.14, Cicero carefully distinguishes *faces* from *cometae*, comets.



Large fireballs leave a luminous trail in their wake which on occasion lingers and persists long after the body itself has disintegrated. The tense of the infinitive *porrigi* suggests that such may have been the case with the fireball observed from Setia.

4 and 5. See on C214, 10.

6. See on C213, 4.

C. Expiation

The expiations this year appear to have been fairly formulaic, following those prescriptions that had been made earlier for similar occurrences.

Consuls: Cn. Servilius Caepio, C. Servilius Geminus.

LIVY, 30,2.9-13:

praetores in provincias ire iussi: consulibus imperatum ut priusquam ab urbe proficiscerentur ludos magnos facerent quos T. Manlius Torquatus dictator in quintum annum vovisset si eodem statu res publica staret. et novas religiones excitabant in animis hominum prodigia ex pluribus locis nuntiata.

1. aurum in Capitolio corvi non lacerasse tantum rostris crediti sed etiam edisse
2. mures Antii coronam auream adrosere
3. circa Capuam omnem agrum locustarum vis ingens, ita ut unde advenissent parum constaret, complevit
4. eculeus Reate cum quinque pedibus natus
5. Anagninae sparsi primum ignes in caelo, dein fax ingens arsit
6. Frusinone arcus solem tenui linea amplexus est, circulum deinde ipsum maior solis orbis extrinsecus inclusit
7. Arpini terra campestri agro in ingentem sinum consedit
8. consulum alteri primam hostiam immolanti caput iocineris defuit

ea prodigia maioribus hostiis procurata; editi a collegio pontificum dei quibus sacrificaretur.

Translation:

The consuls were ordered before they should leave from the city to conduct the Great Games that T. Manlius Torquatus had vowed as dictator for the fifth year in the case that the republic should remain in the same state. Prodigies reported from many places excited new religious fears in the minds of men.

1. Ravens were believed not only to have torn away gold in the Capitoline temple but even to have eaten it
2. at Antium mice gnawed a golden wreath
3. around Capua an enormous number of locusts covered the whole countryside; because of the quantity there was little agreement whence they had come

4. at Reate a colt with five feet was foaled
5. at Anagnia at first fires were scattered in the sky and then a huge torch blazed out
6. at Frusino a halo encircled the sun with a thin line, and then a greater circle outside enclosed the circle itself
7. at Arpinum the earth sank into a huge cavity in a flat part of the countryside
8. in the case of one of the consuls sacrificing the first victim the head of the liver was missing

These prodigies were expiated by full-grown victims; the gods to whom sacrifice should be made were declared by the college of the pontiffs.

Comments:

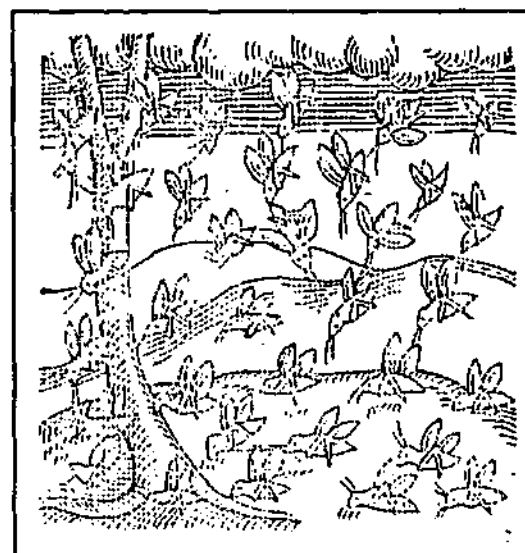
A. Context

Before being released to their provinces, the consuls were instructed by the Senate to expiate the prodigies that had been gathered between early C204 and their entry into office.

B. Prodigies

1. See on C218, 5 and C208, 2. The gold concerned was presumably gilding.
2. See on C208, 2.

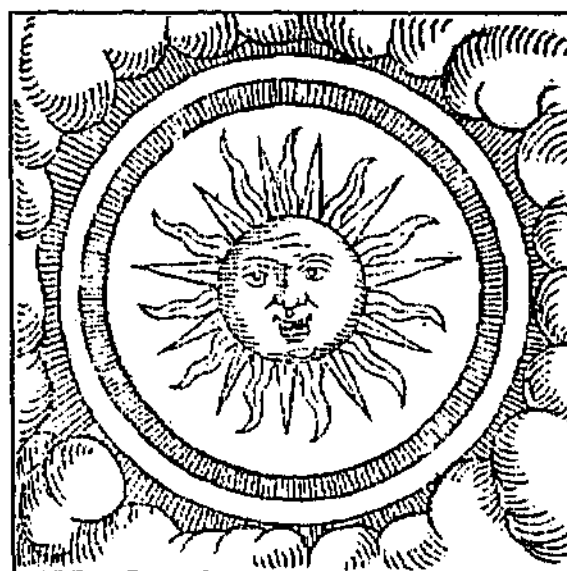
3. Pliny (*N.H.* 11,104) observes that locust plagues are interpreted as a sign of the gods' wrath (*deorum irae*). Such a concept is further supported by the inability of people to say from where the swarm had come, accentuating its almost otherworldliness.



4. See on C210, 6. One of the MSS has *Romae* here instead of *Reate*. The balance of probability favours the latter.

5. A meteor shower which eventually featured a large bright bolide. The seismically obsessed Tributsch (1983) p. 199, diagnoses earthquake lights! If the shower concerned were the conspicuous Lyrids, the observation would have been made on the 13th of April (= March 25, 204 BCE proleptic julian) of the Republican calendar. There are, of course, other possible identifications.

6. *Solis* is incomprehensible in a way that is compatible with both grammar and any possible arrangement in the sky. Clearly it is an intrusion by a scribe. The phenomenon is clearly an example of both the 22° and 46° halos visible at the same time.



7. The identification of this phenomenon is a difficult one, especially for the non-specialist. There is a number of possible explanations, but the one that stands out as the more likely is that a solution or collapse doline developed in an area of karst.

As Selby (1985), p. 303, informs us, "karst landforms are characterized primarily by underground drainage in areas of massive limestone, and the formation at the ground surface of hollows and pits where water enters the rock and enlarges joints and fissures by solution." Although solution is not a dominant process in karst, its most critical effect is in the enlargement of voids. The more water that passes through the rock, the greater the voids become to form caves, the predominant feature of karstland.

Limestone is defined as rock consisting of at least 50% carbonate materials. Calcite (CaCO_3) is the most common form, others being aragonite, dolomite and magnesium carbonate. Calcite and dolomite ($\text{CaMg}(\text{CO}_3)_2$) are both soluble in water containing dilute carbonic acid (H_2CO_3) which is derived by solution of CO_2 from the air and its reaction to water [SELBY (1985) p. 304].

Dolines, again as Selby notes (1985), p. 309, are "closed hollows which are well-, cone-, or bowl-shaped, with rocky or vegetated sides, circular or elliptical platforms and dimensions of 2-100m depth and 10-1000m diameter." In the case of *solution dolines*, pronounced solution occurs at favourable spots, such as major joints. The solutes move along the solution-widened fissures, ever increasing the size of the doline, though this process appears to be a slower one than could be expected to have occurred to judge by the prodigy report. The other option which will be mentioned here, though several other possibilities exist (space does not allow for an examination of each), is the *collapse doline*. These occur as the result of a sudden collapse of a cave roof. It leaves an almost vertically walled shaft, often of significant depth and width.

Italy has a wide distribution of carbonate rocks and therefore development to some degree or other of karst phenomena is present in all regions. Arpinum, the location of the sudden depression, is on the edge of a karst area, not so far from one of the main Italian caves, Pastena Cave. It is then extremely likely that this prodigy was a result of a solution of carbonic acid eating through limestone and creating some form of doline.

8. The most commonly practised form of divination by the Etruscan *haruspices* was the inspection of the organs of sacrificial victims, in particular hepatoscopy, examination of the liver. There were demarcated bronze livers which assisted in the interpretation of those of the victims, which were closely scrutinized with respect to colour, markings, and shape. If there were any irregularities apparent in these real livers, the corresponding part of the bronze liver would show which deity was in control of that section of the sky linked to that faulty section [SCULLARD (1981), p. 29].



Consuls: M. Servilius Geminus, Ti. Claudius Nero.

LIVY, 30,38.6-10:

Romae ad nuntium primum rebellionis Carthaginiensium trepidatum fuerat, iussusque erat Ti. Claudius mature classem in Siciliam ducere atque inde in Africam traicere, et alter consul M. Servilius ad urbem morari, donec quo statu res in Africa essent sciretur... prodigia quoque nuntiata sub ipsam famam rebellionis terrorem attulerant:

1. Cumis solis orbis minui visus
2. et pluit lapideo imbri
3. et in Veliterno agro terra ingentibus cavernis consedit, arboresque in profundum haustae
4. Ariciae forum et circa tabernae,
5. Frusinone murus aliquot locis et porta de caelo tacta
6. et in Palatio lapidibus pluit

id prodigium more patrio novendiali sacro, cetera hostiis maioribus expiata.

inter quae etiam aquarum insolita magnitudo in religionem versa nam ita abundavit Tiberis ut ludi Apollinares, circo inundato, extra portam Collinam ad aedem Erycinae Veneris parati sint. ceterum ludorum ipso die subita serenitate orta pompa duci coepta ad portam Collinam revocata deductaque in circum est cum decessisse inde aquam nuntiatum esset; laetitiamque populo et ludis celebritatem addidit sedes sua sollemni spectaculo reddita.

Translation:

At Rome upon the first news of the Carthaginians' renewed hostilities there had been alarm, and Tiberius Claudius had been ordered to take his fleet promptly to Sicily and then to cross to Africa, and the other consul, Marcus Servilius, to remain near the city until it should be known what was the state of affairs in Africa... At the very time of the rumours of rebellion, the reported prodigies too brought terror.

1. at Cumae the orb of the sun was seen to be diminished
2. and it rained with a shower of stones

3. in the countryside of Velitrae the ground sank creating huge depressions, and trees were swallowed into the depths
4. at Aricia the forum and shops around it
5. at Frusino the city wall at a number of places and a gate were hit from the sky
6. on the Palatine it rained with stones

That last portent was atoned for by a sacred *novendiale* according to ancestral custom, the rest by full-grown victims.

While expiation was proceeding, an unusual volume of water also became a matter of religious concern. The Tiber overflowed to such an extent that the Ludi Apollinares were organized outside the Colline gate in the area of the temple of Venus of Eryx, the circus having flooded. On the very day of the games with a sudden emergence of fine weather, the procession began to be led to the Colline gate was called back and conducted to the circus when it had been announced that the water had retreated from there: and its proper location restored to the solemn procession contributed popular joy and a large audience for the games.

Comments:

A. Context

Hannibal had finally removed himself and his men from Italy after a presence of some sixteen years. This left the Roman people in a state both of hope and anxiety. Scipio and Hannibal were to meet each other in Africa for what turned out to be the final battle. Livy chooses to relate the account of the battle of Zama and then flash back to earlier events at Rome, including the processing of aggregated prodigies by the incoming consuls.

B. Prodigies

1. Marchetti (1973), pp. 484f, is of the opinion that the partial solar eclipse referred to is that of 19th October, 202 BCE proleptic julian, which on my reconstruction of the calendar coincided with 3rd December of the Roman republican calendar. The fact that the magnitude of the eclipse at Cumae was never greater than 5-6% completely rules out an identification which also makes no calendrical sense. Since the prodigy was processed early in the consular year at a meeting of the Senate chaired by the new consuls, the eclipse occurred in C203. The obvious, and only, candidate is that of 6th May, 203 BCE proleptic julian, which coincided with 5th Junius of the Roman republican calendar. Viewed from Cumae, the 6th May, 203 BCE eclipse reached a magnitude of 35-38%. Given conducive weather conditions, for example, non-excessive cloudiness, this could well have been observable, even though culmination took place in the early afternoon with the sun still relatively high in the sky.

2 and 6. See on C218, 8. At 2, Livy has modified the language of the pontifical chronicle in order to avoid repetition.

3. This prodigy could be the result of a similar phenomenon already described at C203,7. The only possible objection is that Velitrae is situated in an area not of carbonate rocks but rather of volcanic tuffs. Yet, as Jennings (1987), p. 3, observes, "There is pseudokarst in young volcanic regions. Very long and even



comparatively complex tunnel caves develop where the lavas are very fluid; to form them several mechanisms operate. There are other smaller caves in young volcanic provinces of quite different origin (e.g. gas bubbles, vent shafts). Collapse depressions and natural bridges develop from these caves. This complex has been called *volcanokarst*."

4. See on C214, 7.

5. See on C214, 10.

Despite the religious fears it evoked, the flood of the Tiber was not treated as a prodigy, even given its great extent. Floods were not unusual phenomena. Indeed, in the case of the Tiber, they were routine. A major later example is referred to by Horace at *Odes* 1,2.13-20:

*vidimus flavum Tiberim, retortis
litore Etrusco violenter undis,
ire deiectum monumenta regis
 templaque Vestae,*

*Iliae dum se nimium querenti
iactat ultorem, vagus et sinistra
labiture ripa, Iove non probante, ux-
 orius amnis.*

(We saw the yellow Tiber, its waves hurled back in fury from the Tuscan shore, advance to overthrow the King's Memorial [Regia] and Vesta's shrines, showing himself too ardent an avenger of complaining Ilia, and spreading far and wide over the left bank without Jove's sanction - fond river-god).

According to Pliny, *N.H.* 3,55, the floods were warningly prophetic, a call to religion rather than a threat of disaster (*quin immo vates intellegitur potius ac monitor, auctu semper religiosus verius quam saevus*).

The temple of Venus of Eryx was built in 181 BCE. Livy's reference to it, then, is by way of topographic assistance to his contemporary readers.

The Apolline Games were celebrated in July.

C. Expiation

It is odd that only the shower of stones on the Palatine is expiated in the usual fashion. Possibly the impression given by Livy is false and a single *novendiale* was deemed to expiate both showers. The loss of 18 days on which public business could be transacted was considered unacceptable.

C201 = 25/1/201-13/1/203 BCEJ

Consuls: Cn. Cornelius Lentulus, P. Aelius Paetus.

Livy includes no processing of *prodigia* in his account of the events of this year, which begins at 30,40 and ends at 31,4.

C201 was the year as Livy heavily emphasizes (30,1.1) which marked completion of the Second Punic War. Might one speculate that euphoric conviction that the gods were now comprehensively on their side led the authorities at Rome to dismiss as spurious or irrelevant reports of phenomena that at other times might be construed as negatively portentous?

C200 = 14/1/200-3/1/199 BCEJ

Consuls: P. Sulpicius Galba, C. Aurelius Cotta.

LIVY, 31,1-2; 12.5-10:

Litterae... in senatu recitatae sunt ... pecuniam Locris ex Proserpinae thesauris nocte item sublatam... (2) indique passus senatus non cessari ab sacrilegiis...

curam expiandae violationis eius templi prodigia etiam sub idem tempus pluribus locis nuntiata accenderunt.

1. in Lucanis caelum arsisse adferebant
2. Priverni sereno per diem totum rubrum solem fuisse
3. Lanuvi in templo Sospitae Iunonis nocte strepitum ingentem exortum

iam animalium obsceni fetus pluribus locis nuntiabantur:

4. in Sabinis incertus infans natus, masculus an femina esset
5. alter sedecim iam annorum item ambiguo sexu inventus
6. Frusinone agnus cum suillo capite
7. Sinuessae porcus cum capite humano natus
8. in Lucanis in agro publico eculeus cum quinque pedibus

foeda omnia et deformia errantisque in alienos fetus naturae visa; ante omnia abominati semimares, iussique in mare extemplo deportari, sicut proxime C. Claudio M. Livio consulibus deportatus similis prodigii fetus erat. nihilo minus decemviros adire libros de portento eo iusserunt. decemviri ex libris res divinas easdem quae proxime secundum id prodigium factae essent imperarunt. carmen praeterea ab ter novenis virginibus cani per urbem iusserunt donumque Iunoni reginae ferri. ea uti fierent, C. Aurelius consul ex decemvirorum responso curavit. carmen, sicut patrum memoria Livius, ita tum condidit P. Licinius Tegula.

Translation:

Letters were read in the Senate, stating that money had been secretly removed at night from the temple of Proserpine at Locri... The Senate was indignant that such sacrileges should continue to be committed...

The prodigies that had been announced from many places in the same general period of time kindled the concern for expiating the violation of the temple.

1. people were bringing news that the sky had been on fire amongst the Lucani
2. at Privernum the sun was red throughout a whole day in clear weather
3. at Lanuvium, in the temple of Juno Sospita, at night a mighty noise arose

In due course, loathsome offspring of animals were reported from many places:

4. among the Sabines, a child of uncertain sex, whether male or female, was born
5. another was discovered, already sixteen years old, where sex was likewise ambiguous
6. at Frusino a lamb with a swine's head
7. at Sinuessa a pig with a human head was born
8. among the Lucani, in ager publicus, a foal was born with five feet

All these things were viewed as foul and deformed and as manifestations of nature's wandering into unnatural forms of parturition. Above all the semi-males were regarded as abominations, and it was ordered that they be removed to the sea immediately, as had been done only a very short while ago with Gaius Claudius and Marcus Livius consuls, when a similar monstrosity was carried away. Nevertheless, they ordered the *Xviri* to approach the books about this portent. The *Xviri* on the basis of the books, ordered the same religious rites which had been carried out a very short while ago with respect to the same prodigy. In addition, they ordered a hymn be sung throughout the city by three times nine virgins, and they ordered that a gift be presented to Queen Juno. Gaius Aurelius the consul ensured that these things should be done on the basis of the response of the *Xviri*. As for the hymn, just like Livius in the memory of the senators, so on this occasion Publius Licinius Tegulus composed it.

Comment:

A. Context

The prodigies were processed by the incoming consuls (31,5) prior to their departure for their provinces (31,14). The reports concerned had been accumulated between the entry into office of the consuls of C201 and those of the present year. At

least three of the phenomena (6, 7, and 8) are likely to have been noted some months before the commencement of C200.

B. Prodigies

1. *In Lucanis*: slipshod Latin from a purist perception. Cf. 8.

Lack of information regarding the time of the its occurrence hampers accurate diagnosis of the phenomenon, Tributsch (1983), pp. 145ff, naturally asserts that this, and the following two prodigies, involve precursors of earthquakes.



Whilst this could be conceivable, it is more

likely that the Lucanians witnessed an aurora, rare in minauroral latitudes and therefore likely to excite alarm. See on C217, 14.

2. See on C212, 8.

3. See on C213, 4.

4 and 5. See on C214, 14. That these were regarded as semi-males (*semimares*) implies that their maleness was slightly more obvious than in previous cases.

6. See on C210, 1. The preferential time for the birth of lambs, to reiterate, was autumn (VARRO, *Rust.* 2,2.13-14).

7. See on C210, 6. Pigs were mated, to repeat, between February and the vernal equinox (VARRO, *Rust.* 2,4.7; COLUMELLA, 7,9.3). Furrowing was four months later.

8. See on C203, 4.

C. Expiation

Although the hermaphrodite was dealt with in the same manner that the haruspices had prescribed some seven years earlier, the *pontifices* consulted the Sibylline books and prescribed again the measures that they had prescribed earlier. In C207, whilst in the process of expiating the dire prodigy of an hermaphrodite, lightning had struck the temple of Juno. The remembrance of the occurrence may very well have prompted the offering in C200 to Juno. Juno Lucina, whose temple was on the Esquiline, was especially the goddess of women and childbirth and so it may be thought that she, rather than Juno in her guise as Regina, would be the one to receive offerings to induce her to ensure only normal children be born, yet Juno Regina, who is generally depicted as wearing a goat's-skin with the head and horns forming a helmet, and carrying a shield and spear, as Scullard observes (1981), p. 71, "may originally have been a fertility goddess, who later assumed warrior attributes as protectress of the city." This prodigy was interpreted as a great evil, something that had to be expunged from

Italian land. Naturally, then, appeal would be made to the deity who was associated both with fertility and the protection of Rome.

C199 = 4/1/199-24/12/199 BCEJ

Consuls: L. Cornelius Lentulus, P. Villius Tappulus.

LIVY, 32,1.1 and 9-14 and 3.1:

consules praetoresque, cum idibus Martiis magistratum inissent, provincias sortiti sunt... feriae Latinae pontificum decreto instauratae sunt quod legati ab Ardea questi in senatu erant sibi in monte Albano Latines carnem, ut adsolet, datam non esse.

1. ab Suessa nuntiatum est duas portas quodque inter eas muri erat de caelo tactum
2. et Formiani legati aedem Iovis
3. item Ostienses aedem Iovis
4. et Veliterni Apollinis et Sancus aedes
5. et in Herculis aede capillum enatum
6. et ex Brutiis ab Q. Minucio propraetore scriptum eculeum cum quinque pedibus
7. pullos gallinaceos tres cum ternis pedibus natos esse
8. a P. Sulpicio proconsole ex Macedonia litterae adlatae, in quibus inter cetera scriptum erat lauream in puppi navis longae enatam

priorum prodigiorum causa senatus censuerat, ut consules maioribus hostiis, quibus diis videretur, sacrificarent; ob hoc unum prodigium haruspices in senatum vocati, atque ex responso eorum supplicatio populo in diem unum indicta et ad omnia pulvinaria res divinae factae.

rebus, quae Romae agendaerant, perfectis consules in provincias profecti.

Translation:

The consuls and praetors, having entered upon their offices on the Ides of March, drew lots for provinces... The Latin festival was repeated by decree of the *pontifices* because representatives from Ardea had complained in the Senate that the flesh of the animals sacrificed on the Alban mount had not been supplied to them in accordance with custom.

1. news came from Suessa that two gates and part of the wall that was between them had been hit from the sky
2. a mission from Formiae reported likewise with respect to their temple of Jupiter

3. so, too, Ostians reported with respect to their temple of Jupiter
4. so, too, yet again the men of Velitrae, with respect to their temples of Apollo and Sanguis
5. the Veliterni also reported that filaments had grown in the temple of Hercules
6. from Bruttium it was written by Quintus Minucius the propraetor that a five-legged colt had been born
7. and also three chicks of hens each with three legs
8. letters were conveyed from Macedonia, from the proconsul Publius Sulpicius, in which, among other things, it was written that a laurel had sprouted from the stern of a war-ship

On account of the first group of prodigies, the senate had decreed that the consuls should sacrifice full-grown victims to whatever gods it should seem appropriate. In respect of the single final prodigy *haruspices* were summoned to the senate. On the basis of their response, a *supplicatio* was proclaimed to the people for one day and at all *pulvinaria* sacrificial rites were performed.

When they had completed the duties that had to be performed at Rome, the consuls set out for their provinces.

Comments:

A. Context

Anxious to leave for their provinces as soon as possible the consuls ensured that the Latin Festival, one of the moveable *feriae conceptivae*, was held almost immediately after they took office. Unfortunately, their intended speed of departure was frustrated by the complaint of the representatives from Ardea. At the festival, jointly celebrated by the states of the one time Latin League and Rome, white steers were sacrificed to Jupiter Latiaris. The flesh of the animals was subsequently distributed among all the participating states. Somehow in C199 the Ardeates were left out.

Although the prodigies and their expiations are dealt with by Livy after his account of the duplication of the Latin Festival, it does not follow that the consuls did not turn their attention to the accumulated prodigial reports until after the festival's repetition. Livy reports matters of religious interest in order of importance rather than in strict chronological sequence. Having noted the remarkable circumstances in connexion with the Latin Festival, he backtracks to the *prodigia*.

B. Prodigies

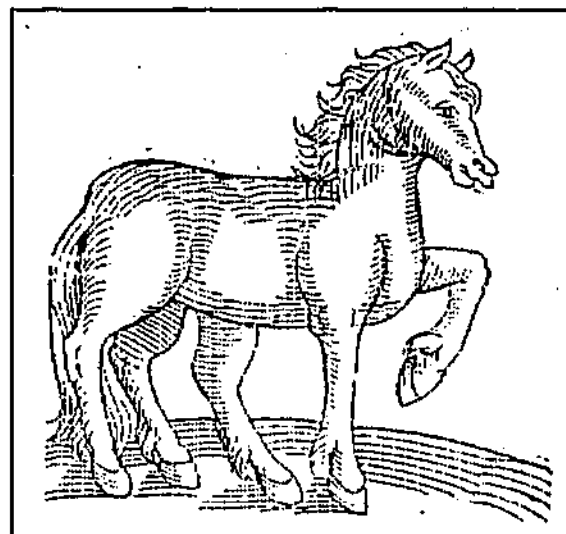
1. See on C214, 10.

2, 3, and 4. See on C218, 4.

5. Krauss (1930), p. 176, translates *capillum* as *hair*, and in a footnote suggests that this had appeared on the head of the cult statue. In the text he says, "the wind probably deposited on the statue's head several layers of dust containing fungi, which upon sprouting formed a mould that somewhat resembled a covering of hair. The persons who imagined that these events had actually occurred would naturally conclude that the power of the gods was at work in their representations to make their wishes known." It really would have been a prodigy if fungi-laden dust had landed solely on Hercules' head and not on his shoulders or any other parallel plane! I have chosen to translate *capillum* as *filaments*, as in the fibres of plants (see COLUMELLA, 10,167). There is no indication in the Livian text as to the location of the growth. The altar and its surrounds are obvious candidates and the statue too may have been affected. Seeds

dropped by birds, spores blown in by the wind; or grains fallen from offerings: any of these could have sprouted and created the appearance of unwonted threads.

6. See on C211, 6. Since C199 commenced on January 4th, 199 BCE proleptic julian, the horse should have been born the previous consular year, most likely close to the spring equinox (see VARRO, *Rust.* 2,7.7).



8. Similar to 5; seeds must have been dropped, probably by birds, and set root in the wood and, no doubt, dirt of the stern.

C. Expiation

The *haruspices* were called in to deal with the final prodigy, presumably because the Sibylline books and past pontifical records contained no precedent for this phenomenon so that the appropriate expiatory rites were unavailable.

C198 = 25/12/199-14/12/198 BCEJ

Consuls: Sex. Aelius Paetus, T. Quinctius Flaminius.

LIVY, 32,9.1-4:

consulem T. Quinctium ita habito dilectu, ut eos fere legeret, qui in Hispania aut Africa meruissent, spectatae virtutis milites, properantem in provinciam prodigia nuntiata atque eorum procuratio Romae tenuerunt.

1. de caelo tacta erant via publica Veis
2. forum et aedes Iovis Lanuvi
3. Herculis aedes Ardeae
4. Capuae murus et turres et aedes quae Alba dicitur
5. caelum ardere visum erat Arreti
6. terra Velitris trium iugerum spatio caverna ingenti desederat
7. Suessa Auruncae nuntiabant agnum cum duobus capitibus natum
8. et Sinuessae porcum cum humano capite

eorum prodigiorum causa supplicatio unum diem habita, et consules rebus divinis operam dederunt placatisque dis in provincias profecti sunt.

Translation:

When the consul Titus Quinctius had conducted his levy in such a way to choose soldiers of proven excellence who had served in Spain and Africa and was in a hurry to leave for his province, the prodigies which had been reported and their expiation held him back.

Hit from the sky were

1. a public highway at Veii
2. the forum and the temple of Jupiter at Lanuvium
3. the temple of Hercules at Ardea
4. the wall and towers and the so-called "White" temple at Capua

5. at Arretium the sky had seemed to be ablaze
6. the earth subsided in a great cavern three *iugera* in extent at Velitrae
7. at Suessa Aurunca men said that a two-headed lamb was born
8. and at Sinuessa a pig with a man's head

By reason of these prodigies a one-day *supplicatio* was proclaimed, and the consuls attended to the sacrifices and, having appeased the gods, departed to their provinces.

Comments:

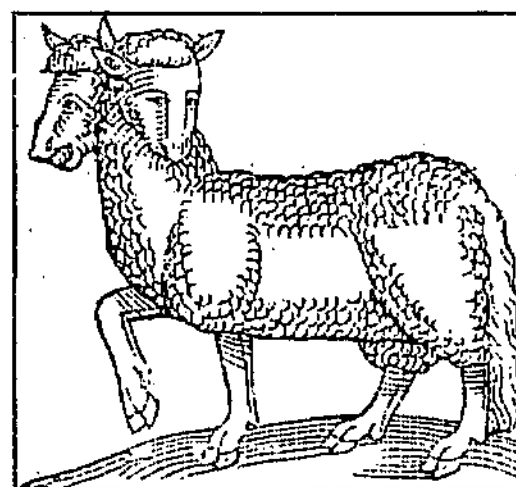
A. Context

The entry of the two consuls upon office is noted at 32,8.1. Flamininus was especially eager to leave Rome for his province and found the processing and expiation of accumulated prodigies and irksome impediment to departure.

B. Prodigies

1. See on C214, 9.
- 2, 3, and 4. See on C218, 4.
5. See on C200, 1.
6. See on C202, 3. A *iugerum* is a square measure roughly equivalent to a hectare.

7. See on C210, 1. In normal circumstances the birth would have occurred in autumnal period of C199.



8. See on C210, 6. The birth of the animal should have taken place in May, 199 BCE proleptic julian. The equivalent month in the now seriously deranged republican calendar was Quintilis.

C. Expiation

None of the prodigies this year was unusual in that it had not occurred before. Consequently there was no need for new rites to be decreed, nor for either the *haruspices* or the Sibylline books to be consulted.

C197 = 15/12/198-3/12/197 BCEJ

Consuls: C. Cornelius Cethegus, Q. Minucius Rufus.

LIVY, 32,29.1-2:

priusquam consules praetoresque in provincias proficiscerentur, prodigia procurari placuit, quod

- 1 aedes Vulcani Summanique Romae
2. et quod Fregenis murus et porta de caelo tacta erant
3. et Frusinone inter noctem lux orta
4. et Aefulae agnus biceps cum quinque pedibus natus
5. et Formiis duo lupi oppidum ingressi obvios aliquot laniaverant
6. Romae non in urbem solum sed in Capitolium penetraverat lupus

Translation:

Before the consuls and praetors could set out for their provinces, provision was made for expiation of the prodigies:

1. at Rome the temples of Vulcan and Summanus had been hit from the sky
2. and at Fregenae the wall and a gate
3. at Frusino a light had appeared during the night
4. at Aefula a two-headed lamb with five feet had been born
5. at Formiae two wolves, entering the town, savaged several people that they encountered
6. at Rome a wolf had not only entered into the city but even got as far as the Capitoline

Comments:

A. Context

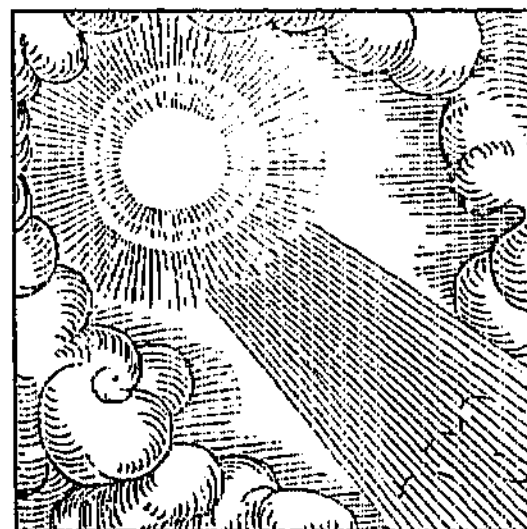
These six prodigies were processed by the consuls of 197 between their entry upon office and their departure to their respective provinces. They are an aggregate of those reported and accepted for expiation between early C198 and early C197.

B. Prodigies

1. See on C218, 4.

2. Some of the MSS offer *Fregellis* instead of *Fregenis*. The latter is preferable given its relative obscurity. See on C214, 10.

3. One of the very small number of prodigies specifically recorded as having occurred at night. See on C217, 14.



4. The position of Aefula is unknown though speculated to be south of the Tiber. Kreyssig proposed replacement with *Aesulae*. See on C210, 1. The lamb will have been born in the spring months of C198.

5 and 6. See on C218, 10. The wolves' unusual behaviour would have been dictated by extreme hunger due to inavailability of normal food source. The most likely time is winter which may have been especially severe across 198 and 197 proleptic julian.

C. Expiation

Livy provides no mention of the means of expiation. One may safely conclude that no unconventional procedures were involved.

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C196 = 4/12/197-23/11/196 BCEJ

Consuls: L. Furius Purpurio, M. Claudius Marcellus

LIVY, 33,26.6-9

priusquam aut hi praetores ad bellum prope novum, quia tum primum suo nomine sine ullo Punico exercitu aut duce ad arma ierant, proficiscerentur, aut ipsi consules ab urbe moverent, procurare ut adsolet prodigia quae nuntiabantur iussi.

1. P. Villius eques Romanus in Sabinos proficiscens fulmine ipse equusque exanimati fuerant
2. aedes Feroniae in Capenati de caelo tacta erat
3. ad Monetae duarum hastarum spicula arserant
4. lupus Esquilina porta ingressus, frequentissima parte urbis cum in forum decurrisset, Tusco vico atque inde Cermalo per portam Capenam prope intactus evaserat

haec prodigia maioribus hostiis sunt procurata.

Translation:

Before either these praetors departed for a war nearly new, because for the first time the Spaniards, without any Punic army or leader had taken to arms on their own account, or the consuls themselves moved from the city, they were ordered to expiate, as usual, the prodigies that had been announced.

1. P. Villius, a Roman *eques*, travelling in the Sabine territory had been deprived of his life by lightning, together with his horse
2. the temple of Feronia in Capena was hit from the sky
3. at the temple of Moneta the points of two spears had burned
4. a wolf entered by the Esquiline Gate; when it had run through the most crowded part of the city to the Forum, it proceeded by way of the Tuscan quarter and then the Cermalus and finally left the city unharmed through the Capenan Gate

These prodigies were expiated with full-grown victims.

Comments:

A. Context

The consuls of 196, whose entry upon office is noted at 33,25.4, were ordered to expiate these prodigies prior to their setting out for their various theatres of war. The prodigies were an aggregate of those reported between early C197 and the entry into office of the consuls of C196.

B. Prodigies

1. See on C217, 5. This may have been interpreted as divine disapproval of the conduct of the *equites* as a class, rather than a judgement sent down on one man.
2. See on C218, 4.
3. See on C217, 1.
4. See on C218, 10 and C197, 5 and 6. Given a further victim of starvation, the incident is most likely to have occurred during the winter of 197/196 proleptic julian.

C. Expiation

A routine expiation is intimated by Livy's brief notice.

C195 = 24/11/196-13/11/195 BCEJ

Consuls: L. Valerius Flaccus, M. Porcius Cato.

No processing and expiation of prodigies is featured in Livy's account of the consular year events. It is possible that massive preoccupation of the secular authorities and the *pontifices* with implementation of the Sacred Spring ceremony vowed in C217 (LIVY 22,9.10-10.6; 33,34.2; 34,44.1) led to the eclipse of more routine religious activities. Part of such a syndrome could have been disregard or dismissal of all prodigial reports accumulated since early C196.

The Sacred Spring ceremony involved the sacrifice of all domestic animals born between the first days of March and May by the republican calendar. Conveniently, due to the dislocation of the calendar, the technical spring months of March and April coincided with winter.

C194 = 14/11/195-3/11/194 BCEJ

Consuls: P. Cornelius Scipio (Africanus), Ti. Sempronius Longus.

LIVY, 34.43.1; 44.1-3; 44.6; 45.6-8:

principio anni quo P. Scipio Africanus iterum et Ti. Sempronius Longus consules fuerunt... ver sacrum factum erat priore anno... cum P. Licinius non esse recte factum... patribus renuntiasset, de integro faciendum arbitrato pontificum censuerunt... ver sacrum videri pecus quod natum esset inter Kal. Martias et pridie Kal. Maias P. Cornelius et Ti. Sempronio consulibus... ver sacrum ludique Romani votivi... facti... prodigia quoque alia visa eo anno Romae sunt, alia nuntiata.

1. in foro et comitio et Capitolio sanguinis guttae visae sunt
2. et terra aliquotiens pluit
3. et caput Vulcani arsit
4. nuntiatum est Nare amni lac fluxisse
5. pueros ingenuos Arimini sine oculis ac naso
6. et in Piceno agro non pedes, non manus habentem natum

ea prodigia ex pontificum decreto procurata. et sacrificium novendiale factum est, quod

7. Hadriani nuntiaverant in agro suo lapidibus pluvisse

Translation:

At the beginning of the year in which P. Scipio Africanus and Ti. Sempronius Longus were consuls... The Sacred Spring had been celebrated in the previous year... Since Publius Licinius the *pontifex maximus* had announced to the Senate that it had not been correctly performed, the fathers voted that it should be celebrated again under pontifical supervision... The 'Sacred Spring' was defined as all domestic animals born between the Kalends of March and the Kalends of May within the consulship of P. Scipio and Ti. Sempronius... The Sacred Spring and votive Roman Games were celebrated...

That year prodigies were both witnessed at Rome and reported from other places.

1. in the Forum and the comitium and on the Capitoline drops of blood were seen
2. it rained several times with earth

3. the head of Vulcan burned
4. it was announced that milk had flowed in the river Nar
5. at Ariminum a free-born boy without eyes or nose was born
6. and in the ager Picenus another without feet or hands

These prodigies were expiated by order of the *pontifices*, and a *novendiale* was performed because

7. the Hadriani had announced that in their territory it had rained with stones

Comments:

A. Context

No processing and expiation of prodigies at the beginning of the consular year is recorded. The necessity of repeating the onerous and complex Sacred Spring ceremony may have largely been responsible for disregard or dismissal of all prodigial reports aggregated between early C195 and the Ides of March C194. Advance effects on former of the Sacred Spring's renewal would again be palliated by coincidence of the technical spring months of March and April with winter.

Sometimes after the repetition of the Sacred Spring ceremony a batch of prodigial reports was accepted and expiated expeditiously rather than been allowed to accumulate until the following consular year. The reasons for such prompt processing may have included the gravity of the phenomena themselves and feelings of unease in connexion with the dismissal of sets of reports two years running.

B. Prodigies

1. See on C214, 5. The localization of this prodigy and the use of the word *guttae* (drops) makes this report slightly different from others featuring rains of blood. It is not outside the bounds of possibility that the drops were only considered *significant* in the areas pointed out.

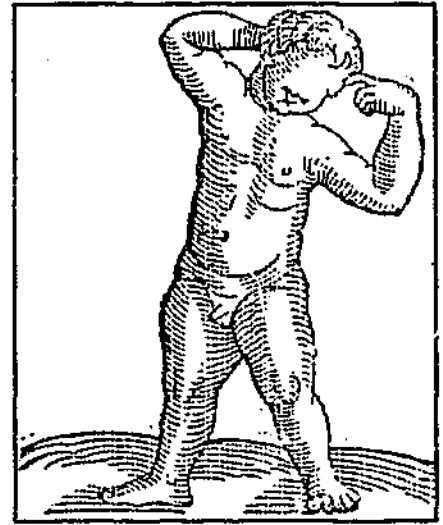
2. Given that the locale of the prodigy has to be Rome again, it is unlikely to reflect volcanic activity. Conceivably, airborne dust mingled with rain came down in clots of mud. For the ancient Romans, whatever its cause this was a far less alarming prodigy than rains of stone, since apparently it warranted no extravagant expiation such as a *novendiale*.



3. See on C217, 1. The locale will be Rome again.

4. Heavy rains can stir up clay materials of various colour from river beds or even bring it down from upland. Also violently agitated water can take on a whitish appearance.

5 and 6. See on C210, 6. Nature again straying grotesquely from her well-trodden path.



7. See on C218, 8.

C. Expiation

The requisite *novendiale* makes its appearance amongst otherwise unspecified expiatory rites.

C193 = 4/11/194-15/11/193 BCEJ

Consuls: L. Cornelius Merula, Q. Minucius Thermus.

I. *LIVY*, 34,55.1-4:

principio anni quo L. Cornelius Q. Minucius consules fuerunt

1. terrae motus ita crebri nuntiabantur

ut non rei tantum ipsius sed feriarum quoque ob id indictarum homines taederet; nam neque senatus haberi neque res publica administrari poterat sacrificando expiandoque occupatis consulibus. postremo decemviris adire libros iussis, ex responso eorum supplicatio per triduum fuit. coronati ad omnia pulvinaria supplicaverunt, edictumque est ut omnes qui ex una familia essent supplicarent pariter. item ex auctoritate senatus consules edixerunt ne quis, quo die terrae motu nuntiato feriae indictae essent, eo die alium terrae motum nuntiaret.

Translation:

In the beginning of this year, when Lucius Cornelius and Quintus Minucius were consuls,

1. so frequently were movements of the earth announced

that the people were wearied not only with the phenomenon itself, but also of the public holidays proclaimed on its account. With the consuls occupied in sacrifices and expiations, neither could the Senate be convened nor could the business of the republic be carried out. Eventually, the *Xviri* were instructed to approach the books, on the basis of their response there was a *supplicatio* for three days. Crowned with wreaths, people made supplication at all the *pulvinaria*, and it was decreed that all members of a family should make supplication together. Likewise, on the authority of the Senate, the consuls decreed that, on any day on which public holidays had been proclaimed because a movement of the earth had been announced, nobody should announce on that same day another movement of the earth.

Comments:

A. Context

The report of this prodigy opens the account of the events of C193, preceding even the allotment of provinces to the magistrates. One may then conclude that the many earthquake reports had been begun to be received prior to the consuls' entry into office. The absence of accumulated reports of other phenomena will be due in particular to the fast track processing and expiation of a group of prodigies well into C194.

B. Prodigy

1. At Cicero, *Div.* 1,35, Quintus claims *cum terrae saepe fremitus, saepe mugitus, saepe motus multa nostrae rei publicae, multa ceteris civitatibus gravia et vera praedixerint* (many a time the rumblings and roarings and quakings of the earth have given to our republic and to other states certain forewarnings of subsequent disaster). Pliny observes at *N.H.* 2,200: *nec vero simplex malum aut in ipso tantum motu periculum est, sed par aut maius ostento: numquam urbs Roma tremuit ut non futuri eventus alicuius id praenuntium esset* (nor yet is the disaster a simple one, nor does the danger consist only in the earthquake itself, but equally or more in the fact that it is a portent; the city of Rome was never shaken without this being a premonition of something about to happen). Both of these passages, not unique within the corpus of classical literature, clearly show the popular interpretation of this phenomenon - danger to come.

C. Expiation

Although the rites necessary to expiate the phenomenon of an earthquake are not specifically listed, Livy says (32,55.2) that neither the Senate could be convened, nor public business transacted because the consuls were occupied with this religious duty (*nam neque senatus haberi neque res publica administrari poterat sacrificando expiandoque occupatis consulibus*). Finally, with the authorities no doubt fed-up with constant interruptions to official business, the Sibylline books were consulted and specific rites ordained.

II. LIVY, 35,9.1-5:

censores erant priore anno creati Sex. Aelius Paetus et C. Cornelius Cethegus. Cornelius lustrum condidit. censa sunt civium capita <du>centa quadraginta tria milia septingenta quattuor. aquae ingentes eo anno fuerunt et Tiberis loca plana urbis inundavit; circa portam Flumentanam etiam collapsa quaedam ruinis sunt

2. et porta Caelimontana fulmine icta est, murusque circa multis locis de caelo tactus
3. et Ariciae
4. et Lanuvii
5. et in Aventino lapidibus pluit
6. et a Capua nuntiatum est examen vesparum ingens in forum advolasse et in Martis aede consedissee: eas conlectas cum cura et igni crematas esse.

horum prodigiorum causa decemviri libros adire iussi, et novendiale sacrum factum, et supplicatio indicta est atque urbs lustrata.

Translation:

Censors had been appointed the previous year, namely Sex. Aelius Paetus and C. Cornelius Cethegus. Cornelius performed the *lustrum*. The number of citizens recorded was 243 074. In that year there were huge floods and the Tiber inundated the low-lying areas of the City; around the Flumentanian gate certain buildings even collapsed into ruin.

2. the Caelimontanian gate was struck by lightning and in many places the wall nearby was hit from the sky
3. at Aricia
4. and at Lanuvium
5. and on the Aventine it rained with stones
6. it was also announced from Capua that a huge swarm of wasps had flown into the forum and settled in the temple of Mars: these were carefully collected and burned with fire

On account of these prodigies the *Xviri* were ordered to approach the books. A sacred *novendiale* was held, a *supplicatio* proclaimed, and the city was purified.

Comments:

A. Context

Towards the end of his account of the events of C193, Livy presents a summary list of sundry activities and occurrences excluded in the interest of continuity and coherence from his mainstream narrative. This appended material includes prodigial reports received later than the Ides of March that like counterparts the previous year were processed and expiated with relative urgency rather than being aggregated for attention at the beginning of the following consular year. Once again the seriousness of the phenomena, in particular the repeated rains of stones, will have contributed towards fast tracking.

B. Prodigies

Despite the magnitude of the Tiber's flood and the juxtaposition of Livy's account of it with a list of phenomena that are indubitably prodigial, it is unlikely that the inundation itself was accorded the status of a *prodigium*. At 35,21.5, Livy reports that in the following year the Tiber burst its banks with even greater devastation: *Tiberis infestiore quam priore anno impetu illatus urbi duos pontes, aedificia multa, maxime circa Flumentanam portam, evertit* (the Tiber, attacking the city was a more violent rush than the year before, swept away the two bridges and many buildings, especially around the Porta Flumentana). It is absolutely clear from his narrative that this disaster was not treated as a prodigy.

2. See on C214, 10.

3, 4, and 5. See on C218, 8.

6. If the wasps were interpretatively anthropomorphized into enemies of Rome, then, by settling in the temple of the war-god, they were threatening to invade by force of arms. In this case, the burning of the wasps was a kind of apotropaic magic, suggesting that the attack of the enemy would be successfully defeated.

C. Expiation

A single *novendiale* was considered sufficient to expiate showers of stones in their different locales. Once again expediency won out against strict adherence to *mos maiorum*.

C192 = 16/11/193-5/11/192 BCEJ

Consuls: L. Quinctius Flamininus, Cn. Domitius Ahenobarbus.

LIVY, 35,21.2-5:

priusquam consul praetoresque in provincias proficiscerentur, supplicatio fuit prodigiorum causa.

1. capram sex haedos uno fetu edidisse ex Piceno nuntiatum est
2. et Arreti puerum natum unimanum
3. Amiterni terram pluvisse
4. Formiis portam murumque de caelo tacta
5. et, quod maxime terrebat, consulis Cn. Domiti bovem locutum "Roma, cave tibi."

ceterorum prodigiorum causa supplicatum est; bovem cum cura servari alique haruspices iusserunt.

Translation:

Before the consuls and praetors set out for their provinces, there was a *supplicatio* on account of the prodigies.

1. it was announced from Picenum that a she-goat had produced six kids at a single birth
2. at Arretium a boy with one hand had been born
3. at Amiternum it rained with earth
4. from Formiae that the gate and a wall had been hit from the sky
5. and, what was an especial cause of terror, an ox belonging to the consul Gnaeus Domitius had spoken the words, "Rome, look out for yourself."

A *supplicatio* was held on account of the other prodigies; the *haruspices* instructed that the ox was to be carefully looked after and supplied with food.

Comments:

A. Context

Amid or after the allotment of provinces and distribution of troops and prior to the consuls' departure for their provinces, prodigies accumulated between fast track processing of a group of prodigies within C193 and the entry into office of the consuls for C192 were dealt with.

B. Prodigies

1. According to Columella (7,6.7), a goat of good stock would frequently produce twins and even on occasion triplets (*pessima est fetura cum matres binae ternos haedos efficiunt*). Six kids at one birth was regarded as a prodigy and indicative of Nature going awry.

Pliny (*N.H.* 8,200), Columella (7,6.6), and Varro (*Rust.* 2,3.8), all observe that kids were normally born at the beginning of spring. Since the Ides of March of C192 fell on the 16th November 193 proleptic julian, the report from Picenum reached Rome sometime in or after the months of C193 concurrent with the spring season.

2. See on C210, 6.

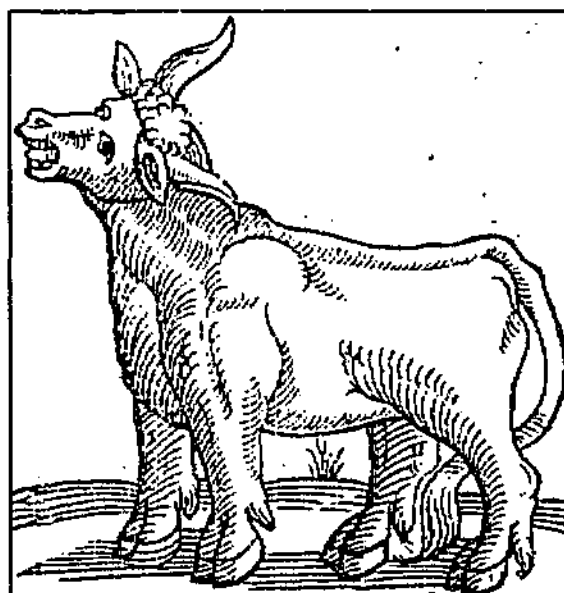
3. See on C194, 2.

4. See on C214, 10.

5. See on C214, 12.

C. Expiation

Once again the *haruspices* were consulted with regard to a prodigy, the talking cow (5). Yet in C209 when a cow had spoken they were not consulted at all, and in C214 when such had also occurred, they were apparently consulted in respect of the prodigies *in toto* for which they prescribed sacrifice of fully-grown animals. If the prescription in respect of the present speaking cow resembled that applied in similar circumstances in C174, then the cow was kept at public expense.



C191 = 6/11/192-17/11/191 BCEJ

Consuls: P. Cornelius Scipio Nasica, M'. Acilius Glabrio.

LIVY, 36,37.1-6:

principio eius anni... profecto ad bellum M'. Acilio, manente adhuc Romae P. Cornelio... boves duos domitos in Carinis per scalas pervenisse in tegulas aedificii proditum memoriae est. eos vivos comburi cineremque eorum deici in Tiberim haruspices iusserunt.

1. Tarracinae
2. et Amiterni nuntiatum est aliquotiens lapidibus pluvisse
3. Minturnis aedem Iovis et tabernas circa forum de caelo tactas esse
4. Volturni in ostio fluminis duas naves fulmine ictas conflagrasse

eorum prodigiorum causa libros Sibyllinos ex senatus consulto decemviri cum adissent, renuntiaverunt ieiunium instituendum Cereri esse, et id quinto quoque anno servandum; et ut novendiale sacrum fieret et unum diem supplicatio esset; coronati supplicarent; et consul P. Cornelius quibus dis quibusque hostiis edidissent decemviri sacrificaret. placatis diis ... in provinciam proficiscitur consul.

Translation:

In the beginning of the year with Manius Acilius off to the war and Publius Cornelius continuing to remain at Rome, it is recorded that two domestic oxen in the Carinae reached the roof of a building by a stairway. The *haruspices* instructed that they be burned alive and their ashes be thrown into the Tiber.

1. it was reported that at Tarracina
2. and at Amiternum that there had been several showers of stones
3. at Minturnae the temple of Jupiter and shops around the forum had been hit from the sky
4. at Volturnum two ships in the mouth of the river were struck by lightning and consumed by fire

On account of these prodigies the *Xviri* were directed by a resolution of the Senate to consult the Sibylline books. They reported back that a fast should be held in honour of Ceres and that this should be repeated every fifth year. They also enjoined that a *novendiale* be celebrated and that there should be a one-day *supplicatio* during which the participants should wear garlands;

the consul Publius Cornelius, furthermore, should make sacrifice with whatever victims the *Xviri* should prescribe.

With the gods placated... the consul departed for his province.

Comments:

A. Context

One of the consuls, M'. Acilius departed for his province extraordinarily early in the year, before the discharge of urgent religious business. His colleague, P. Cornelius, was compelled single-handedly to initiate assessment of prodigial reports accumulated since early C192. Right at the year's beginning, two oxen climbed stairs to the roof of a house. By direction of the *haruspices* they were burned alive. Livy seems to distinguish the occurrence, however remarkable, from the *prodigia* whose processing and expiation follow. The pontifical chronicles presumably did likewise. For different treatment of a similar incident at the beginning of the Second Punic War, see on C218,2.

B. Prodigies

1 and 2. See on C218, 8. Once again volcanism can be ruled out as a realistic explanation.

3. See on C218, 4.

4. Such a phenomenon must necessarily have been interpreted as Jupiter's being angry in some way with his people. If the ships concerned were war-ships then defeat was probably indicated; if trading-ships perhaps economic hardship.

C. Expiation

The *haruspices* were not consulted with respect to the *prodigia* proper. Despite the elaborateness of the expiatory procedures as a whole, once more a single *novendiale* was pragmatically considered adequate to cover multiple showers of stone.

C190 = 18/11/191-7/11/190 BCEJ

Consuls: L. Cornelius Scipio, C. Laelius.

1. LIVY, 37,3.1-6 and 4.4:

priusquam consules in provincias proficiscerentur, prodigia per pontifices procurari placuit.

1. Romae Iunonis Lucinae templum de caelo tactum erat ita ut fastigium valvaeque deformarentur
2. Puteolis pluribus locis murus et porta fulmine icta et duo homines exanimati
3. Nursiae sereno satis constabat nimbum ortum ibi quoque duos liberos homines exanimatos
4. terra apud se pluvisse Tusculani nuntiabant
5. et Reatini mulam in agro suo peperisse

ea procurata, Latinaeque instauratae quod Laurentibus pars carnis quae dari debet data non fuerat. supplicatio quoque earum religionum causa fuit quibus diis decemviri ex libris ut fieret ediderunt. decem ingenui, decem virgines, patrimi omnes matrimique, ad id sacrificium adhibiti, et decemviri nocte lactentibus rem divinam fecerunt...

per eosdem dies quibus est profectus ad bellum consul, Ludis Apollinaribus, ante diem quintum idus Quinctiles caelo sereno interdiu obscurata lux est, cum luna sub orbem solis subisset.

Translation:

Before the consuls set out to their provinces determined that the prodigies should be expiated by direction of the pontiffs.

1. at Rome the temple of Juno Lucina was hit from the sky in such a way that the gable and the doors were disfigured
2. at Puteoli the wall in many places and a gate were struck by lightning and two men were killed
3. at Nursia there was considerable consensus that a storm-cloud had appeared in a clear sky; there too two free men were killed
4. the people of Tusculum were reporting that it had rained with earth on them
5. the Reatini that in their territory a mule had given birth

After these had been expiated, the Latin Festival was renewed because the share of sacrificial meat due to the Laurentes had not been given to them. Because of all the religious fears there was also a *supplicatio* to those gods which the *Xviri* specified on the basis of the books. Ten free-born boys, ten girls, all having living fathers and mothers, were employed for this sacrifice, and at night the *Xviri* sacrificed suckling animals...

Around the time the consul [L. Scipio] departed to the war, during the Apollinarian Games, on the fifth day before the Ides of Quinctilis, with the sky clear during the day, the light was dimmed when the moon slid below the orbit of the sun.

Comments:

A. Context

The five prodigies listed are the total, or represent the end product of culling, of those reported between early C191 and the beginning of C190.

The consul, L. Scipio, departed for his province in Quinctilis, remarkably late in the year. As noted in part 2, the eclipse of the 14th of March 190 BCE proleptic julian, observed at Rome on the fifth day before the Ides of that month, plays a pivotal rôle in calibration of the Roman republican calendar with its proleptic julian counterpart. Around 90% of the sun's disc was obscured. The fact that the eclipse took place quite early in the day, around 7:15am local civil time at Rome, when the sun was still relatively close to the horizon, would have contributed further to ensuring that the occurrence did not escape wide observation.

B. Prodigies

1. See on C218,4.

2. See on C214,10. Obviously the men killed here and at Nursia were struck by lightning.

3. See on C217,5. It is highly unlikely, even if it does not follow inexorably, that the two deaths were associated with the sudden storm that developed when the sky was clear.

4. See on C194,2.

6. See on C211,6. Since the mating of the mule would not have been in accordance with any regular breeding practice, there is no guide as to the time of year at which it is most likely to have given birth.

Evidently the July solar eclipse was not regarded as a prodigy. Livy gives no indication to such affect and no expiation is recorded either within C190 or at the beginning of the following consular year. The march of ancient science had resulted in the graduation of eclipses from acts of the gods to predictable consequences of the regular orbital motion of sun and moon.

C. Expiation

The expiatory measures include nothing untoward.

II. OBSEQUENS, prodigiorum liber 1:

1. Iunonis Lucinae templum fulmine ictum ita ut fastigium valvaeque deformarentur
2. in finitimis pleraque de caelo icta
3. Nursiae sereno nimbi orti et homines duo exanimati
4. Tusculi terra pluit
5. mula Reate peperit

supplicatio per decem pueros patrimos matrimos totidem virgines habita.

Translation:

1. the temple of Juno Lucina was struck by lightning, in such a way that the gable and the doors were disfigured
2. in neighbouring towns many things were hit from the sky
3. at Nursia storm-clouds gathered from a clear sky and two men were killed
4. at Tusculum it rained with earth
5. a mule at Reate had given birth

A supplicatio was observed by ten boys with living fathers and mothers, and as many girls.

Comments:

O2 truncates the equivalent L2 and leaves out the place of observation. At O3 the *nimbus* of L3 multiplies.

C189 = 8/11/190-19/11/189 BCEJ

Consuls: M. Fulvius Nobilior, Cn. Manlius Vulso

Livy records no processing and expiation of prodigies either at the consular year's beginning or at any time within it. Any reports of unusual phenomena sent to Rome between early C190 and the Ides of March C189 were either rejected or disregarded. It is difficult to escape the impression that during part of the 180s BCE there was an element in the pontifical college which, motivated by rationalization or considerations of military or political pragmatism, sought to downgrade the state of prodigies and minimize the number processed and expiated.

During the year there was frequent and extensive flooding of the Tiber (LIVY, 38,28.4). As usual, despite the resultant damage, the inundation was not regarded as a *prodigium*.

C188 = 20/11/189-9/11/188 BCEJ

Consuls: M. Valerius Messala, C. Livius Salinator.

I. LIVY, 38,35.7; 36.4:

M. Valerius Messala inde et C. Livius Salinator consulatum idibus Martiis cum inissent, de re publica deque provinciis et exercitibus senatum consuluerunt... priusquam in provincias novi magistratus proficiscerentur, supplicatio triduum pro collegio decemvirorum imperata fuit in omnibus compitis, quod

1. luce inter horam tertiam ferme et quartam tenebrae obortae fuerant

et novendiale sacrificium indictum est, quod

2. in Aventino lapidibus pluvisset

Translation:

Then, when Marcus Valerius Messala and Caius Livius Salinator had been inaugurated as consuls on the Ides of March, they consulted the Senate regarding the general policy and the provinces and armies...

Before the new magistrates set out for their provinces, a three-day *supplicatio* was ordered in the name of the college of *Xviri* at all cross-road shrines because

1. in day light, roughly between the third and fourth hours, darkness had descended

and a *novendiale* was decreed because according to report

2. it had rained with stones on the Aventine

Comments:

A. Context

Only two prodigies were processed and expiated at the year's beginning. They should be the survivors of heavy culling of prodigial reports that reached Rome between early C189 and the initial days of C188.

B. Prodigies

1. Brind'Amour (1983), p. 148, and others have insisted that the phenomenon recorded is to be connected with the solar eclipse of 17th July, 188 BCE proleptic julian. This was close to total as observed at Rome with culmination taking place around 6:15am local civil time. The equation is unacceptable for four main reasons. The first two of these are chronological. Livy is explicit that the *prodigium* concerned was processed early in the consular year. The 17th of July, 188 BCE proleptic julian equates with the fourteenth day of *November* of the malaised republican calendar! Again, according to the prodigial reports, the darkness fell between the third and fourth hours. On the day of the eclipse the length of the Roman hour was 1 hour 14 minutes. The sun rose at 4:35am local civil time. Three hours only from dawn take us to around 7:40am which is considerably later than 6:15am. The third objection, non-chronological this time, is that there is no reference to the 'mechanics', now familiar to the Romans, of a solar eclipse; neither the moon nor the sun itself are mentioned. The fourth, and strongest, objection is that, like the solar eclipse of 190 BCE, that of 188 BCE would not have been regarded as a prodigy. By the end of the second century

BCE, eclipses had come to be regarded as natural rather than paranormal phenomena. It was precisely because the *tenebrae* of the report concerned were clearly not due to a solar eclipse that they qualified for recognition by the authorities at Rome as a *prodigium*. There is more than one possible explanation other than a solar eclipse for a sudden onset of darkness or gloom. Dust storms and airborne volcanic ash are two of the possible explanatory candidates. In the absence of sufficient descriptive and other information diagnosis is impossible. Not all sudden darkness has a routine astronomical or meteorological explanation. There can be more exotic and tangible causes. See also on a sudden darkness in C179.

2. See on C218,8. *Pluvisset* does not necessarily imply Livian doubt about the report's veracity. The subjunctive may be used by way of an effective *oratio obliqua*. The *tenebrae* were universally witnessed. An individual or group reported the shower of stones.



C. Expiation

Rather than presenting first the prodigies and then the expiatory procedures employed, for this year Livy has chosen to invert the formula, stating first the expiation and then the cause of it.

II. OBSEQUENS, P.L. 2:

1. luce inter horam tertiam et quartam tenebrae ortae
2. in Aventino lapidum pluviae novendiali expiatae

Translation:

1. in daylight between the third and fourth hours of the day, it became dark
2. showers of stones on the Aventine were atoned for by a *novendiale*.

Comment:

Obsequens multiples the stone shower just as he multiplied a *nimbus* the previous year.

C187 = 10/11/188-22/11/187 BCEJ

Consuls: M. Aemilius Lepidus, C. Flaminius.

C187 is yet another consular year in which no prodigies were processed and expiated, either shortly after the new consuls took office or at some later juncture.

At 39,7.8-9, Livy reproduces a record to the effect that during the Roman Games, which took place in the first part of September of the Roman calendar, a rickety pole in the circus fell onto the statue of Pollentia and knocked it over (*ludis Romanis eo anno, quo P. Cornelius Cethegus A. Postumius Albinus faciebant, malus in circo instabilis in signum Pollentiae procidit atque id deiecit*). Disturbed by the religious implication (*eo religione moti*), the senators decided that a day should be added to the games, that two statues should replace the one demolished and that one of them should be gilded. While religiously disturbing and warranting a form of expiation, the incident, which does not feature in Obsequens, was clearly not regarded as a *prodigium*. Such classification would have been difficult given that the pole was *instabilis*.

C186 = 23/11/187-12/11/186 BCEJ

Consuls: Sp. Postumius Albinus, Q. Marcius Philippus.

1. *LIVY*, 39,22.1-5:

per eos dies, quibus haec ex Hispania nuntiata sunt, ludi Taurii per biduum facti religionis causa. decem deinde dies apparatus ludos M. Fulvius, quos voverat Aetolico bello, fecit... novendiale deinde sacrum tenuit, quod

1. in Piceno per triduum lapidibus pluerat
2. ignesque caelestes multifariam orti adussisse complurium levi adflatu vestimenta maxime dicebantur

addita et unum diem supplicatio est ex decreto pontificum, quod

3. aedis Opis in Capitolio de caelo tacta erat

hostiis maioribus consules procurarunt urbemque lustraverunt

4. sub idem tempus et ex Umbria nuntiatum est semimarem duodecim ferme annos natum inventum

id prodigium abominantes arceri Romano agro nequeque quam primum iusserunt.

Translation:

During the days in which these things were reported from Spain, the Taurian Games were held over a two day period for religious reasons. Then M. Fulvius held the games which he had vowed during the Aetolian war...

Then he held a sacred *novendiale* because

1. it had rained with stones in Picenum for three days
2. celestial fires that appeared in several places were said to have set fire to (or scorched) the clothes of several people with a gentle afflation

A one-day *supplicatio* was added by decree of the *pontifices* because

3. the temple of Ops on the Capitoline had been hit from the sky

The consuls made expiation with full-grown victims and purified the city

4. about the same time it was reported from Umbria that a half-male some twelve years old had been found

Abhorring this prodigy, they ordered it to be kept away from Roman soil and to be killed as soon as possible.

Comments:

A. Context

No prodigies were processed and expiated at the commencement of the consular year. Shortly after celebration of the Taurian games and of a ten-day votive games vowed by M. Fulvius, four prodigies were processed and expiated almost immediately rather than being aggregated for the attention of the consuls of C185. The prolonged shower of stones, the phenomenon reflected by the second prodigial report and the discovery of the semi-male were all serious occurrences. In combination they were considered by the authorities of C185 to merit almost instantaneous action.

The Taurian games, allegedly established during the reign of Tarquinius Superbus, were celebrated on the 25th and 26th June by the Roman republican calendar. For C186 the proleptic julian equivalents are the 4th and 5th of March (!)

decem deinde dies apparatus is Madvig's minimalist conjectural replacement for the corrupt *decem apparatus deinde* of the MSS. Probably a further word such as *magnifice* or *splendide* needs to be inserted between *dies* and *apparatus*, which unsupported is rather flat.

B. Prodigies

1. See on C218,8. A meteoric explanation is ruled out by the duration, and volcanism by the locale.

2. If the text is right, Livy's expression is somewhat slipshod. Since a *novendiale* was a specific nostrum for showers of stone, the causal *quod* cannot, as appears at first sight, also embrace the second Picentine *prodigium*.

It is difficult to translate in such a way as not to pre-empt diagnosis. I have sought to be completely literal and used the obsolete noun *afflation* to render *afflatus*. Presumably the fire was aerial, off the ground, rather than high in the sky. If it were not for the claimed damage to clothing one would tend to think in terms of St Elmo's fire. As so often, it is unclear whether the phenomenon happened during the day or at night. Expert analysis is called for.

3. The most 'mundane' of the four prodigies. See on C218,4.

4. See on C209,9.

C. Expiation

To expiate the prodigy of the hermaphrodite, it was not necessary to consult the *haruspices* as they had previously furnished a precedent.

II. OBSEQUENS, P.L. 3:

sacrum novendiale factum quod

1. in Piceno lapidibus pluit
2. ignesque caelestes multifariam orti levi afflatu complurium vestimenta adusserunt
3. aedes Iovis in Capitolio fulmine icta
4. in Umbria semimas duodecim ferme annorum inventus

aruspicumque iussu necatus.

Translation:

A sacred *novendiale* was held because

1. in Picenum it had rained with stones
2. and celestial fires that appeared in many places had burnt (*or* scorched) the clothes of many people with a gentle afflation
3. the temple of Jupiter on the Capitol had been struck by lightning
4. in Umbria, a half-male about twelve years old was found

By order of the haruspices it was put to death.

Comment:

Obsequens gratuitously assumes that the *haruspices* were consulted about and gave the directions for the destruction of the semi-male.

C185 = 13/11/186-24/11/185 BCEJ

Consuls: Ap. Claudius Pulcher, M. Sempronius Tuditanus.

Livy records no processing or expiation of prodigies at any time during the consular year.

ASH
MIND

C184 = 25/11/185-14/11/184 BCEJ

Consuls: P. Claudius Pulcher, L. Porcius Licinus

For the second year running Livy records no processing and expiation of prodigies at any time during the consular year. It seems clear that a majority among Rome's current secular and religious authorities had either decided that *prodigia* were démodés in the light of scientific progress and/or that often complex rituals of expiation were an encumbrance incompatible with administrative efficiency at home and smooth transition of commanders in theatres of war.

C183 = 15/11/184-27/11/183 BCEJ

Consuls: M. Claudius Marcellus, Q. Fabius Labeo.

I. LIVY, 39,46.2-6:

P. Licini funeris causa visceratio data, et gladiatores centum viginti pugnaverunt, et ludi funebres per triduum facti, post ludos epulum. in quo cum toto foro triclinia strat essent, tempestas cum magnis procellis coorta coegit plerosque tabernacula statuere in foro; eadem paulo post, cum undique disserenasset, sublata; defunctosque volgo ferebant quod inter fatalia vates cecinissent, necesse esse tabernacula in foro statui. hac religione levatis altera iniecta, quod

1. sanguine per biduum pluvisset in area Vulcani

et per decemviros supplicatio indicta + erat + eius prodigii expiandi causa. consules, priusquam in provincias proficiscerentur...

Translation:

On account of the funeral of P. Licinius, sacrificial communal meal was provided, and 120 gladiators fought, and funeral games were given over a three-day period, after the games there was a public banquet. During this, after banquetting-couches had been arranged all over the forum, a storm came up with extremely violent winds and compelled most people to set up tents in the forum; these were removed shortly after when it had cleared up everywhere; general talk had it that they had fulfilled an omen which the soothsayers had declared to be among the decrees of fate: namely that tents had to be set up in the forum. After people had been released from this religious fear, another one was imposed on them on the grounds that

1. it had rained with blood for two days in the precinct of Vulcan

A *supplicatio* was proclaimed by the *Xviri* for the purpose of expiating the prodigy. Before the consuls set out for their provinces...

Comments:

A. Context

This single prodigy was processed and expiated right at the beginning of the consular year, shortly after the consuls had assumed office. The occurrence, in the wake of a spectacular storm whose consequences stimulated religious introspection, was sufficiently dramatic or dramatized to prompt recognition as a *prodigium*.

B. Prodigy

1. See on C214,5.

C. Expiation

The expiatory *supplicatio* is a relatively minimalist response.

indicta erat is added; Rupert advocated emendation to *est*.

II. LIVY, 39,56.6:

supplicatio extremo anno fuit prodigiorum causa, quod

2. *sanguine per biduum pluvisse in area Concordiae satis credebant*
3. *nuntiatumque erat haud procul Sicilia insulam, quae non ante fuerat, novam editam e mari esse*

Hannibalem hoc anno Antias Valerius decessisse est.

Translation:

At the end of the year there was a *supplicatio* on account of the prodigies, in the first place because they had sufficient belief

2. that it had rained with blood for two days in the precinct of Concord
3. also it had been announced that not far from Sicily, a new island which had not existed before emerged from the sea.

Valerius Antias informs us that Hannibal died in this year.

Comment:

A. Context

The two prodigies were recognized and expiated right at the end of the consular year. Such a sense of urgency was apparently inspired that the authorities were not prepared to leave processing to the administration of the next consular year.

Overall one detects a renewed 'positive' attitude towards *prodigia*. Abandonment of extreme rationalism and/or pragmatism could be connected with the death of the *pontifex maximus*, Publius Licinius Crassus, early in the year. He was replaced at the head of the religious establishment by Caius Servilius Geminus. His place in the pontifical college was filled by co-optation of Marcus Sempronius Tuditanus.

It is conceivable that a contributor to augmented religious sensitivity and zeal was satisfaction at news of the death of the arch-enemy Hannibal.

B. Prodigies

2. A second two-day rain of blood in an area adjacent to the Vulcan precinct is remarkable. While there is no good reason to suppose double reportage of the same event (Livy is emphatic about the different times of year concerned), it is legitimate to consider hysteria or fraud as possible explanations.

3. A submarine seismic disturbance or submarine volcanism are the obvious candidates as catalyst for this new island. Pliny, *N.H.* 2,202, saw the appearance of new land masses as a way of Nature's balancing subsidence: *nascuntur et alio modo terrae ac repente in alio mari emergent velut paria secum faciente natura quaeque hauserit hiatus alio loco reddente* (New lands are also formed in another way, and suddenly emerge in a different sea, nature as it were, balancing accounts with herself and restoring in another place what an earthquake has engulfed.)

C. Expiation

A further *supplicatio* is again somewhat minimalist.

III. OBSEQUENS, P.L. 4:

1. in area Vulcani per biduum
2. in area Concordiae totidem diebus sanguinem pluit
3. in Sicilia insula nova maritima

Translation:

1. for two days in the precinct of Vulcan
2. and in the precinct of Concord for the same length of time it rained with blood
3. off Sicily a new island arose in the sea

Comment:

Obsequens' terse summary obscures the fact that 1 and 2 together with 3 are processed at different ends of the consular year.

IV. *OROSIUS*, 4,20.30:

1. in Sicilia tunc Vulcani insula, quae ante non fuerat, repente mari edita cum miraculo omnium usque ad nunc manet.

Translation:

1. At that time, near Sicily, the island of Vulcan, which had not existed before, suddenly to the amazement of all, came forth from the sea and remains there to this day.

Comment:

Orosius adds the new island's name.

C182 = 28/11/183-17/11/182 BCEJ

Consuls: Cn. Baebius Tamphilus, L. Aemilius Paullus.

1. *LIVY*, 40,2.1-4:

1. ver procellosum eo anno fuit. pridie Parilia, medio ferme die, atrox cum vento tempestas coorta multis sacris profanisque locis stragem fecit, signa aenea in Capitolio deiecit, forem ex aede Lunae, quae in Aventino est, raptam tulit et in posticis parietibus Cereris templi adfixit, signa alia in circo maximo cum columnis quibus superstabant evertit, fastigia aliquot templorum a culminibus abrupta foede dissipavit

itaque in prodigium versa ea tempestas, procurarique haruspices iusserunt. simul procuratum est quod

2. tripedem mulum Reate natum nuntiatum erat
3. et a Formiis aedem Apollinis Caietae de caelo tactam

ob ea prodigia viginti hostiis maioribus sacrificatum est et diem unum supplicatio fuit.

Translation:

1. That year the spring was tempestuous. On the day before the Parilia, about midday, a terrible storm accompanied by wind sprang up; this caused damage in many places, both sacred and profane, it threw down bronze statues on the Capitol, tore a door-post from the temple of Luna which is on the Aventine, and having carried it along, fixed it in the rear walls of the temple of Ceres; it overturned other statues in the Circus Maximus, together with the columns on which they were standing, and, a further ill-omen, it broke off the pediments from the roofs of several temples and scattered them around.

Consequently, the storm was turned into a prodigy and the *haruspices* ordered expiation. At the same time expiation was made because

2. it had been announced that a three-footed mule had been born at Reate
3. and from Formiae that the temple of Apollo in Caieta had been hit from the sky

On account of these prodigies, twenty full-grown victims were sacrificed and there was a one-day *supplicatio*.

Comments:

A. Context

A long-standing agricultural festival, the *Parilia*, was celebrated on the 21st of April by the Roman republican calendar. In C182 this was equivalent to January 4th, 183 BCE proleptic julian. Since the day concerned is in the depth of winter, *ver* is used in a technical rather than a seasonal sense. The technical first day of spring was the 7th of February by the republican calendar. The first day of summer in the technical sense was the 9th of May (see VARRO, *Rust.* 1,28). All this serves to bring out the chaos that operated after protracted abandonment of intercalation.

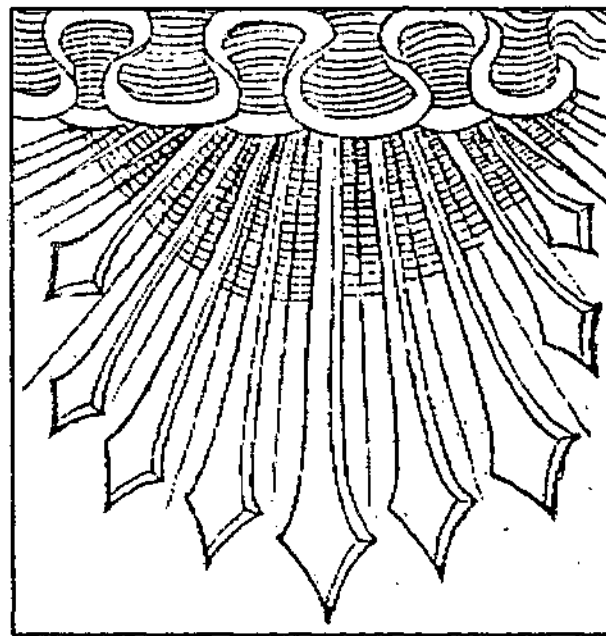
Since prodigies had been processed and expiated at the end of C183, the three-footed mule prodigy was not carried over from the previous year. *Simul* does not preclude the animal's having been born as early as late March. It was the processing of the three prodigies that was simultaneous. Whatever, the parents of the mule must have mated outside the normal breeding season.

B. Prodigies

1. As noted *à propos* an earlier year (C212), storms, however destructive, were not normally treated as prodigies. Given Livy's emphatic *in prodigium versa*, this exception is one that proves the rule. As well as being an agricultural festival, the *Parilia* was significant because the 21st of April was supposed to be the calendrical day of Rome's foundation. The proximity of the tempest to Rome's birthday could have influenced its prodigial grading.

2. See on C211,6.

3. See on C218,4. Although Formiae and Caieta are close to each other, it is strange that a lightning strike at the latter is furnished by the former. Since *Caieta* was read by Obsequens, it is unlikely to be corrupt. Conceivably, the content of a *prodigium* witnessed at Formiae has fallen out of the text. Alternatively, *Formiis* requires emendation.



C. Expiation

The Etruscan *haruspices* were consulted about the storm prodigy probably because the Romans were unaccustomed to treating storms as events requiring expiation and so have no precedents from which to work.

II. OBSEQUENS, P.L. 5:

1. procellosa tempestate strages in urbe facta signa aenea in Capitolio deiecit, signa in circo maximo cum columnis evertit, fastigia templorum aliquot a culmine abrupta dissipavit
2. mulus tripes Reate natus
3. aedes Apollinis Caietae fulmine icta

Translation:

1. Wreckage caused in the city by a storm accompanied by high winds involved the overthrowing of bronze statues on the Capitol, the storm overturned statues together with their columns in the Circus Maximus; it scattered the pediments of several temples which had been broken off from the roof
2. a three-footed mule was born at Reate
3. the temple of Apollo at Caieta was struck by lightning

Comment:

There is no reflection of *Formiis*. If the prodigy there is missing from Livy's text, it must have fallen out very early.

C181 = 18/11/182-29/11/181 BCEJ

Consuls: P. Cornelius Cethegus, M. Baebius Tamphilus.

1. *LIVY*, 40,19.2-5:

prodigia multa foeda et Romae eo anno visa et nuntiata peregre.

1. in area Vulcani et Concordiae sanguine pluit
2. et pontifices hastas motas nuntiavere
3. et Lanuvini simulacrum Iunonis Sospitae lacrimasse
4. pestilentia in agris forisque et conciliabulis et in urbe tanta erat ut Libitina funeribus vix sufficeret

his prodigiis cladibusque anxii patres decreverunt ut et consules quibus dis videretur hostiis maioribus sacrificarent, et decemviri libros adirent. eorum decreto supplicatio circa omnia pulvinaria Romae in diem unum indicta est. iisdem auctoribus et senatus censuit et consules edixerunt ut per totam Italiam triduum supplicatio et feriae essent.

Translation:

Many dreadful prodigies were observed at Rome that year and announced from outside the city.

1. in the precinct of Vulcan and Concord it rained with blood
2. and the priests announced that the spears had moved
3. the people of Lanuvium announced that the statue of Juno Sospita had wept
4. pestilence was so severe in the country-side, in rural towns, in district administrative centres, and in the city that Libitina could scarcely cope with the funerals

Disturbed by these prodigies and disasters, the senators determined both that the consuls should make a sacrifice with full-grown victims to whatever gods it should seem appropriate, and that the *Xviri* should approach the books. By determination of the latter, a *supplicatio* was decreed for one day at Rome around all the *pulvinaria*. Also on the *Xviri*'s authority the Senate decided and the consuls proclaimed that throughout the whole of Italy for three days there should be a *supplicatio* and religious holiday.

Comments:

A. Context

Livy notes the beginning of the consular year concerned at 40,18.3. The processing and expiation of prodigies is recorded immediately after he has dealt with the assignment of provinces and various military arrangements. Although one receives the impression that all the *prodigia* listed occurred after the new consuls took office, it is possible that they represent an aggregation of all reports accepted since processing of a group of prodigies in late April and May of the previous consular year.

B. Prodigies

1. See on C214,5 and C183,1 and 2. Yet another blood rain in the Vulcan and Concordia precincts whose contiguity is made clear. One cannot help thinking again in terms of hysteria or fraud.

2. *Martis* can safely be restored on the basis of Obsequens. *nuntiavere* is generally used for prodigy reports received from outside Rome. Nevertheless, the locale is likely to be the temple of Mars in the city. Deterrent to restoring Praeneste in the text is the version of Obsequens. See also on C218,5.

3. See on C217,16.

4. It is likely, but not absolutely certain, that the plague was regarded as a *prodigium*, though just as possibly it was one of the disasters mentioned.

C. Expiation

Duplication of *supplicationes* suggests again a resurgence of religiosity in the religious establishment.

II. OBSEQUENS, P.L. 6:

1. in area Vulcani et Concordiae sanguinem pluit
2. hastae Martis motae
3. Lanuvii simulacrum Iunonis Sospitae lacrimavit
4. pestilentiae Libitina non suffecit.

ex Sibyllinis supplicatum cum sex mensibus non pluisset.

Translation:

1. it rained blood in the precinct of Vulcan and Concord
2. the spears of Mars moved
3. at Lanuvium the statue of Juno Sospita wept
4. Libitina did not suffice for the plague

On the basis of the Sibylline books, there was a *supplicatio* when it had not rained for six months.

Comment:

The lack of rain for six months is recorded by Livy at 40,25.2. He makes no mention of a special *supplicatio* in its connexion. The *supplicatio* is that of Livy 40,19.5. Either Obsequens has manufactured a false connexion or his text is at fault at this point.

C180 = 30/11/181-19/11/180 BCEJ

Consuls: A. Postumius Albinus Luscus, C. Calpurnius Piso.

LIVY, 40,36.14; 37.1-3:

et is ipse exercitus aegre explebatur propter pestilentiam, quae tertium iam annum urbem Romanam atque Italiam vastabat...

1. praetor Ti. Minucius et haud ita multo post consul C. Calpurnius moritur, multique alii omnium ordinum illustres viri

postremo prodigii loco ea clades haberi coepta est. C. Servilius pontifex maximus piacula irae deum conquirere iussus decemviri libros inscipere, consul Apollini Aesculapio Saluti dona vovere et dare signa inaurata; quae vovit deditque. decemviri supplicationem in biduum valetudinis causa in urbe et per omnia fora conciliabulaque edixerunt; maiores duodecim annis omnes coronati et lauream in manu tenentes supplicaverunt.

Translation:

Even this army was raised with difficulty on account of the pestilence which was devastating the city of Rome and Italy for the third year running...

1. The praetor Tiberius Minucius died and not much after him the consul Gaius Calpurnius, many other distinguished men of all orders died too.

Ultimately this catastrophe came to be regarded as a prodigy. The *pontifex maximus* C. Servilius was directed to inquire into appropriate rites of atonement with respect to the anger of the gods. The *Xviri* were directed to inspect the Books; the consul was directed to view gifts to Apollo, Aesculapius, and Salus, and to provide gilded statues for them. He vowed the former and provided the latter. The *Xviri* proclaimed a *supplicatio* to vow for two days for the purpose of restoring health, both in the city and throughout all the rural towns and administrative centres. All people more than twelve years old made *supplicatio* wearing garlands and holding laurel in their hands.

Comments:

A. Context

Livy notes the beginning of the new consular year at 40,35.3. The expiations recorded at 37.2-3 were probably commenced during its first months. No prodigial reports were carried over from the previous year.

B. Prodigy

1. Under normal circumstances the deaths of magistrates through illness would not cause much stir, but in this case, during a major plague which had already run for a considerable time, it may have seemed that the leaders of Rome had become the targets of divine anger.

C. Expiation

Three gods were isolated for especial honours in this trying time : Apollo, Aesculapius and Salus. In C212, *Ludi Apollinares* were held and in C208, a plague induced the officials to vow them in perpetuity. Here the Romans were clearly expecting Apollo to come to their aid as a god of healing. Aesculapius was the Greek god of healing to whose cult centre in Epidaurus people went to find cures for their ailments. He was brought to Rome in 293-1 BCE. Salus was the Latin name given to his daughter Hygeia (Health).

Laurel branches were traditionally used as a means of purification. It was seen as a kind of prophylactic, as was the purple-bordered toga. Laurel protected people and their cities against the malevolent workings of evil spirits, and even soldiers heading into battle were on occasion crowned with laurel (cf. 45,38.12), perhaps to ward off the avenging *manes* of the men killed on the battle field. Pestilence was held to be caused by evil spirits and laurel would therefore repel them [See OGLE (1910)].

C179 = 20/11/180-2/12/179 BCEJ

Consuls: Q. Fulvius Flaccus, L. Manlius Fulvianus.

1. *LIVY*, 40,45.1-6:

hiems eo anno nive saeva et omni tempestatum genere fuit: arbore quae obnoxiae frigoribus sunt, deusserat cunctas; et ea tum aliquanto quam alias longior fuit. itaque Latinas nox subito coorta et intolerabilis tempestas in monte turbavit instaurataeque sunt ex decreto pontificum.

1. eadem tempestas et in Capitolio aliquot signa prostravit

fulminibusque complura loca deformavit

2. eadem Iovis Tarracinae

3. eadem Albam Capuae portamque Romanam, muri pinnae aliquot loci decussae erant

haec inter prodigia

4. nuntiatum et ab Reate tripedem natum mulum

ob ea decemviri iussi adire libros edidere, quibus diis et quot hostiis sacrificaretur, et ut supplicatio diem unum esset.

...

censuram inde comitia habita.

Translation:

Winter in that year was severe on account of snow and every kind of storm. It had withered up all trees which are vulnerable to cold; and on top of this lasted somewhat longer than in other years. Amid these conditions, blackness like that of night which suddenly came down and a storm that swept all before it broke up the Latin festival on the Alban mount. Consequently the games were renewed by proclamation of the *pontifices*.

1. the same storm overthrew several statues on the Capitoline

and wrecked with lightning strikes many places, namely

2. the temple of Jupiter at Tarracina

3. and the "white" temple and the Porta Romana at Capua, where the parapets of the wall were dislodged in several places

amidst these prodigies

4. it was announced from Reate that a mule with three feet had been born

On account of these occurrences, the *Xviri* were ordered to consult the books, they directed to what gods and with how many victims there should be sacrifice, and that there should be a one-day *supplicatio*.

...
Elections of censors were then held.

Comments:

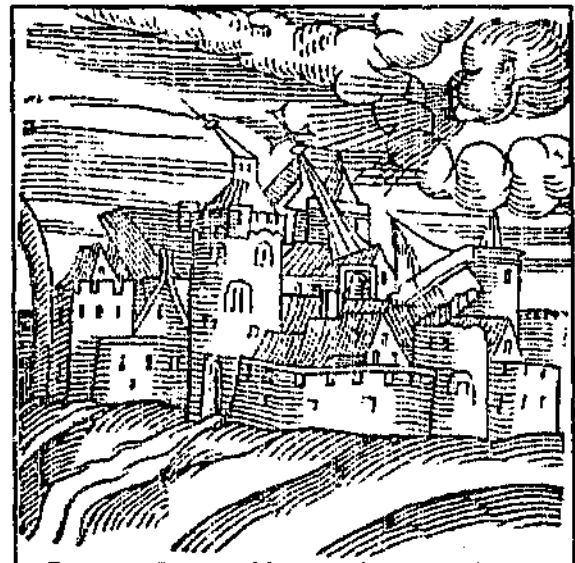
A. Context

Livy's account of the events of C179 begins at 40,44.3. The widespread storm responsible for three prodigies took place close to the consular year's commencement. It is possible that the mule teratology from Reate was carried over from the previous year.

B. Prodigies

1, 2, and 3. As usual, the storm itself was not a prodigy. Its direct toppling of statues, certainly of gods, on the Capitol and the effects of associated lightning at Tarracina and Capua were a different matter.

The single, damaged, manuscript (Codex Vindobonensis Lat. 15) on which we are dependent at this stage for Livy's text has *mox*



between *Latinas* and *subito*. *nox* is the obvious emendation. If it is correct, one might compare the sudden onset of night-like conditions with the *tenebrae* of C188,1.

4. See on C211,6.

C. Expiation

The conventional measures taken are comparatively low key.

II. LIVY, 40,59.6-8:

Ludi Romani instaurati ab aedilibus curulibus Cn. Servilio Caepione Ap. Claudio Centone propter prodigia, quae evenerant.

5. terra movit

6. in fanis publicis, ubi lectisternium erat, deorum capita quae in lectis erant averterunt se lanxque cum integumentis quae Iovi apposita fuit, decidit de mensa

7. oleas quoque praegustasse mures in prodigium versum est

ad ea expianda nihil ultra quam ut ludi instaurati essent actum est.

Translation:

The *Ludi Romani* were repeated by the curule aediles, Gnaeus Servilius Caepio and Appius Claudius Cento, on account of the prodigies which had occurred

5. the earth moved

6. in the public shrines, when a *lectisternium* was being held, the heads of the gods which were on the couches, turned themselves away and the dish which had been set before Jupiter together with its coverings fell down from the table

7. it was turned into a further prodigy that mice had tasted the olives

For the purpose of expiating these occurrences, nothing further was done beyond repetition of the Games.

Comments:

A. Context

The primary *Ludi Romani* would have concluded on the 19th day of September by the republican calendar. The equivalent in proleptic julian terms in the 23rd of May, 179 BCE. Presumably the three prodigial reports concerned were received during or immediately after their celebration. Processing and expiation were evidently considered a matter of urgency.

B. Prodigies

5. See on C193,1.

6. The prodigy may reflect effects of the tremor.

8. Cicero wryly notes at *Div.* 2,59 that the whole purpose of a mouse was to gnaw; one would expect them to consume unprotected food.

C. Expiation

Repetition of the games was expensive and time-consuming. Further dislocation stemming from other expiatory measures was unacceptable.

III. OBSEQUENS, P.L. 7:

1. *nimbus* continuis in Capitolio signa aliquot deiecta
2. fulmine Romae et circa plurima decussa
3. in lectisternio Iovis terrae motu deorum capita se converterunt; lanx cum integumentis quae Iovi erant apposita decidit
4. de mensa oleas mures praeroserunt

Translation:

1. As a result of unremitting dark clouds several statues on the Capitol were thrown down
2. very many places both at Rome and round about were struck by lightning
3. at the *lectisternium* for Jupiter, due to the movement of the earth, the heads of the gods turned themselves backwards; the dish with its coverings, which had been placed before Jupiter, fell down
4. mice gnawed at the olives on the table

Comment:

Once again Obsequens runs together two separate groups of prodigies. *nimbus continuis* involves considerable interpretative abbreviation of the Livian original. The locales of the lightning strikes are omitted.

C178 = 3/12/179-22/11/178 BCEJ

Consuls: M. Iunius Brutus, A. Manlius Vulso.

I. OBSEQUENS, P.L. 8:

1. incendio circa forum cum plurima essent deusta, aedes Veneris sine ullo vestigio cremata
2. Vestae penetralis ignis extinctus

Virgo iussu M. Aemilii pontificis maximi flagro caesa negavit ulterius interiturum. supplicationibus habitis in Hispani et Histria bella prospere administrata

Translation:

1. when most of the area around the forum had been burnt down by fire, the temple of Venus was incinerated without a single trace remaining
2. the home fire of Vesta went out

At the command of Marcus Aemilius, the *pontifex maximus*, the Vestal virgin responsible was beaten and said that it would never go out again. There were supplications after which the wars in Spain and Histria were carried on successfully.

Comment:

A large portion of Livy's account of the events of C178 is no longer available due to the loss of two quaternions from the only extant manuscript.

If the conflagration in the city achieved the status of a *prodigiurn*, then this will have been due to the total obliteration of the Venus temple.

It is highly unlikely that the temporary extinction of Vesta's fire, which is also mention in the *Periocha* (epitome) of Livy's 41st book, was regarded as a prodigy. Clearly there was a dearth of *prodigia* processed and expiated in C178 and Obsequens was driven, so to speak, to scrape the bottom of the barrel.

There is no way of telling at what time of year fire raged around the forum and one of the Vestal virgins was guilty of neglect.

C177 = 23/11/178-4/12/177 BCEJ

Consuls: C. Claudius Pulcher, Ti. Sempronius Gracchus.

1. LIVY, 41,9.5-7:

priusquam consules provincias sortirentur, prodigia nuntiata sunt

1. lapidem in agro Crustumino in lucum Martis de caelo cecidisse
2. puerum trunci corporis in agro Romano natum
3. et quadrupedem anguem visum
4. et Capuae multa in foro aedificia de caelo tacta
5. et Puteolis duas naves fulminis ictu concrematas esse

inter haec quae nuntiabantur

6. lupus etiam Romae interdiu agitatus, cum Collina porta intrasset, per Esquilinam magno consecrantium tumultu evasit

eorum prodigiorum causa consules maiores hostias immolarunt, et diem unum circa omnia pulvinaria supplicatio fuit.

Translation:

Before the consuls were to set out for their provinces, the prodigies were announced:

1. a stone had fallen from the sky into the grove of Mars in the territory of Crustumerium
2. in the countryside close to Rome a limbless boy had been born
3. and a four-footed snake had been seen
4. at Capua many buildings in the forum had been hit from the sky
5. at Puteoli two ships were consumed by fire simultaneously due to a lightning strike

while these occurrences were being announced

6. chase was given to a wolf in the daytime. It had entered by the Colline Gate and it had escaped by the Esquiline Gate to the accompaniment of great uproar on the part of the pursuers

On account of these prodigies the consuls immolated full-grown victims, and there was a one-day *supplicatio* about all the *pulvinaria*.

Comments:

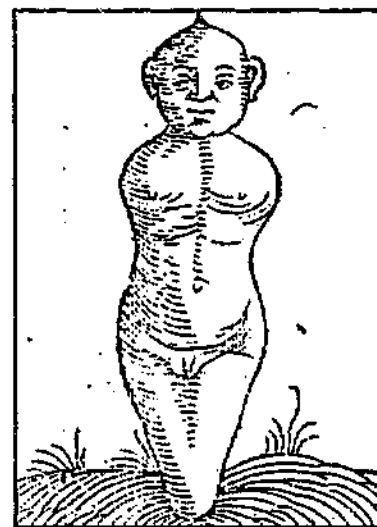
A. Context

The six prodigies listed were processed between the entry of the consuls upon office and their departure for the provinces. Despite the impression conveyed by *nuntiata sunt* and *nuntiabantur*, it is clear that the first five items represent an aggregation of reports over a period that extends from early C177 well back into the previous consular year. Reptiles (3) are not observed in winter. Only the sixth prodigy was definitely reported in C177.

B. Prodigies

1. While the absence of a *novendiale* from the expiatory measures is not probative, it is unlikely that this singleton *lapis* qualified for definition as a shower. If the report was not fictive, a meteorites is the obvious explanation; however, the religiously sensitive area of deposit raises at least the suspicions of doubt about authenticity. Prodigies involving Mars in any way would have been regarded as especially significant at this time, given the current extent of Roman military activity.

2. See on C209, 11.



3. This four-legged snake was presumably a lizard. Perhaps its legs were unusually stunted. As noted above, the creature would not have been observed during winter months.

4. See on C214,7.

5. See on C191,5.

6. Once again the wolf will have been in search of food. A severe winter can be inferred. See on C218,10.

C. Expiation

The expiations are routine. To repeat, there was no *novendiale*.

II. LIVY, 41,12.10; 13.1-3, 6:

Claudius duarum gentium uno anno victor... Romam revertit.

prodigia eo anno nuntiata:

7. in Crustumino avem sanqualem quam vocant sacrum lapidem rostro cecidisse

8. bovem in Campania locutam

9. vaccam aeneam Syracusis ab agresti tauro qui a pecore aberrasset, initam ac semine adpersam

in Crustumino diem unum in ipso loco supplicatio fuit, et in Campania bos alenda publice data, Syracusanumque prodigium expiatum editis ab haruspibus dis, quibus supplicaretur.

...

C. Claudius consul ad urbem venit.

Translation:

Claudius, victor over two people in one year... returned to Rome.

Prodigies were announced that year:

7. in the territory of Crustumerium a bird of the kind they call *sanqualis* cut a sacred stone with its beak

8. a cow spoke in Campania

9. at Syracuse a cow made of bronze was mounted and splashed with semen by an unmated bull which had strayed from its herd

There was a one-day *supplicatio* at Crustumerium on the actual spot, and in Campania the cow was presented for maintenance at public expense. The prodigy at Syracuse was expiated, after the *haruspices* had proclaimed the gods to which supplication should be made.

...

C. Claudius the consul reached the city.

Comments:

A. Context

Having gone through the details of various military campaigns, Livy concludes his narrative of the events of C177 with a brief account of overlapping happenings in Italy and at Rome. These include the establishment of a colony at Luna, the death of a *pontifex*, and processing and expiation of three prodigies. The phenomena reported were evidently considered to require more or less immediate attention.

B. Prodigies

7. Pliny is a little confused about this bird, generally identified as an osprey. He says (*N.H.* 10.20), that some claim it is the chick of the bearded vulture while others think it is the adult bearded vulture. Whichever it was, Pliny continues that none has been seen in Rome since 87 BCE, though he attributes such a belief to general slackness in observation and recognition. The object allegedly cut could have been a boundary, sepulchral or oath stone. From Cicero, *Fam.* 7.12 and elsewhere it emerges that oaths could be sworn on Jupiter and the stone. As Williams, the Loeb translator, explains (*ad loc.*), the swearer took up a stone saying 'If wittingly I break my oath, then may Diespiter cast me out of my possessions as I cast away this stone'." Whatever the type of stone concerned, the damage had religious implications and was a bad omen.

8. See on C214,12.

9. Acceptance of a report from Syracuse is remarkable. The incident must have made a major impression.

C. Expiation

The consternation engendered by 7 is evident in the fact that this prodigy was expiated with a *supplicatio* at its source, Crustumerium, rather than being dealt with at Rome. Given an unprecedented locale as well as occurrence, the *haruspices* were called upon to prescribe with respect to 9.

III. OBSEQUENS

There is no reflexion of either group of prodigies in Obsequens. This is more likely due to the state of the text than repeated carelessness on Obsequens' part.

C176 = 5/12/177-24/11/176 BCEJ

Consuls: Cn. Cornelius Scipio, Q. Petilius Spurius.

1. LIVY, 41,16.1-6:

Latinae feriae fuere ante diem tertium nonas Maias, in quibus quia in una hostia magistratus Lanuvinus precatus non erat populo Romano Quiritium, religioni fuit. ... accesserat ad religionem, quod Cn. Cornelius consul ex monte Albano rediens concidit et, parte membrorum captus ad Aquas Cumanae profectus ingravescente morbo Cumis decessit. ... consul Q. Petilius cum primum per auspicia posset, collegae subrogando comitia habere iussus et Latinas edicere, comitia in ante diem tertium nonas Sextiles, Latinas in ante diem tertium idus Sextiles edixit. plenis religionum animis prodigia insuper nuntiata:

1. Tusculi facem in caelo visam
2. Gabiis aedem Apollinis et privata aedificia complura
3. Graviscais murum portamque de caelo tacta

ea patres procurari uti pontifices censuissent iusserunt.

Translation:

The Latin festival took place on the third day before the Nones of May, religious apprehension arose because during the sacrifice of one of the victims, the official from Lanuvium had not prayed for the Roman population of the Quirites. ... Religious apprehension was increased because Gnaeus Cornelius the consul had fallen while returning from the Alban Mount, and was paralyzed in some of his limbs. He set out for Aquae Cumanae and died at Cumae after his illness grew more severe. ... As soon as the auspices permitted, the consul Quintus Petilius was instructed to hold an election for the choosing of a colleague and to proclaim the Latin Festival; the elections were scheduled for the third day before the Nones of Sextiles, the festival for the third day before the Ides of Sextiles. On top of all this, with people's minds full of religious fears, prodigies were announced:

1. at Tusculum, a torch had been seen in the sky
2. at Gabii the temple of Apollo and several private buildings
3. and at Graviscae the wall and gate had been hit from the sky

The senators ordered that these be expiated in accordance with the recommendations of the *pontifices*.

Comments:

A. Context

At least in part due to the fast-track treatment of a group of prodigies deep with in C177, no prodigial reports awaited the attention of the consuls of C176 when they took office. In or just before Sextilis of the republican calendar (equivalent to late April and early May, 176 BCE), in the wake of a vitiated Latin Festival and the death of one of the consuls, the civil and religious authorities deemed it appropriate to endorse, process and expiate without delay three prodigies that had been recently announced.

B. Prodigies

1. See on C217,7.
2. See on C218,4.
3. See on C214,10.

C. Expiation

Livy fails to spell out the expiatory measures that the *pontifices* recommended.

II. OBSEQUENS, P.L. 9:

1. cum immolassent victimas consules, iecur extabuit

Cornelius ex monte Albano rediens membris captus ad aquas Cumanas mortuus, Petillius contra Ligures dimicans occisus est.

Translation:

1. after the consuls had offered sacrifice, the liver melted away

Cornelius suffered a stroke on his way back from the Alban Mount and died at the spa of Cumae, while Petillius was killed in battle against the Ligurians.

Comment:

Failing to list the three prodigies at Livy, 41,16, Obsequens records an occurrence of which the historian gives a fuller account at 41,15. Early in the consular year it was reported to the Senate that the liver of a sacrificed ox had melted away during the boiling of its entrails prior to extispicy. Livy describes the occurrence as a *prodigium* using the word non-technically. Obsequens was misled by the term into regarding the incident as a prodigy in the official sense.

C175 = 25/11/176-6/12/175 BCEJ

Consuls: P. Mucius Scaevola, M. Aemilius Lepidus

Due to significant losses of sheets from the single MS in which book 41 of Livy's history is preserved, the historian's account of events towards the beginning and end of C175 is lost. Given the hopeless state of his text, the absence of C175 *prodigia* from Obsequens does next to nothing to counterindicate the possibility of either or both lacunae having contained prodigial material. The processing and expiation of prodigies later than Junius C175 would be ruled out by the suggested identification of C174,6.

C174 = 7/12/175-26/11/174 BCEJ

Consuls: Sp. Postumius Albinus, Q. Mucius Scaevola.

I. LIVY, 41,21.5-13; 22.1:

dilectus consulibus eo difficilior erat quod

1. pestilentia quae priore anno in boves ingruerat eo verterat in hominum morbos. qui inciderant, haud facile septimum diem superabant; qui superaverant, longinquo, maxime quartanae, implicabantur morbo. servitia maxime moriebantur; eorum strages per omnes vias insepultorum erat. ne liberorum quidem funeribus Libitina sufficebat. cadavera intacta a canibus ac volturibus tabes absumebat; satisque constabat nec illo nec priore anno in tanta strage boum hominumque volturium usquam visum.

... cum pestilentiae finis non fieret, senatus decrevit uti decemviri libros Sibyllinos adirent. ex decreto eorum diem unum supplicatio fuit, et Q. Marcio Philippo verba praeunte populus in foro votum concepit, si morbus pestilentiaeque ex agro Romano emota esset, biduum ferias ac supplicationem se habiturum.

2. in Veienti agro biceps natus puer
3. et Sinuessae unimanus
4. et Auximi puella cum dentibus
5. et arcus interdiu sereno caelo super aedem Saturni in foro Romano intentus et tres simul soles effulserunt
6. et faces eadem nocte plures per caelum lapsae sunt
7. et Lanuvini
8. Caeritesque anguem in oppido suo iubatum, flavis maculis sparsum, apparuisse affirmabant
9. et in agro Campano bovem locutum esse satis constabat

legati nonis Iuniis ex Africa redierunt.

Translation:

The consuls had particular difficulty with the levy because

1. the plague which had descended upon the cattle the previous year had this year turned to diseases that afflicted human beings. Its victims did not easily survive the seventh day; those who had survived that long contracted a lingering disease, for the most part quartan fever. Slaves especially were dying; there were piles of their unburied bodies along all roads. Libitina did not suffice even for the funerals of free people. Decay consumed the corpses, untouched by dogs and vultures. There was broad consensus that neither in the present nor in the previous year, was a vulture seen anywhere amid so great a destruction of cattle and men.

When no end came to the pestilence, the Senate decreed that the *Xviri* approach the Sibylline books. By their decree there was a *supplicatio* for one day, and while Quintus Marcus Philippus was dictating the ritual words, the people undertook a vow in the forum that they would hold religious holidays and a *supplicatio* for two days, if the disease and plague should be removed from the territory of Rome.

2. in the territory of Veii a boy was born with two heads
3. and at Sinuessa another with one hand
4. and at Auximum a girl with teeth
5. during the day-time with the sky clear an arc was extended above the temple of Saturn in the Roman Forum and three suns shone at the same time
6. and the same night several torches plunged through the sky
7. the people of Lanuvium
8. and of Caere were insisting that in each of their towns a crested snake flecked with golden spots had appeared
9. there was broad consensus that in rural Campania an ox had spoken

On the Nones of June, the ambassadors returned from Africa.

Comments:

A. Context

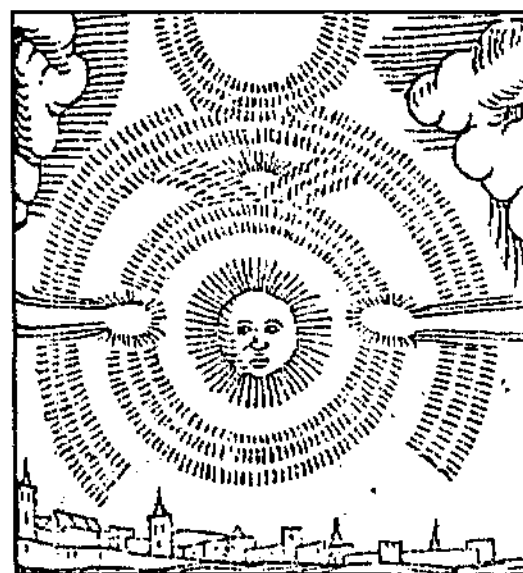
Eight further prodigies are introduced extremely abruptly after Livy's account of a spreading plague which apparently graduated to prodigial status. All of the *prodigia* were processed at the beginning of the consular year. 7 and 8 certainly and 6 probably were aggregated from C175.

B. Prodigies

1. Resorting to the Sibylline books all but guarantees that the plague had been upgraded to a *prodigium* once it had spread from animals to human beings and there was no sign of its abating.

2, 3, and 4. See on C209,11.

5. Given a clear sky, the *arcus* has to be a solar optical phenomenon. For an indubitable instance of the word applied to a component, in this case circular, of a halo display, see Velleius, 2,59.6. The ring concerned, pretty certainly the 22° halo, was coloured. Solar haloes are arcs frequently display some or all of the colours of the spectrum. Associated, for example, with a brilliant 22° halo



observed from Belfast on July 17, 1883 were brick red, yellow, green, and blue [ROLLO RUSSELL (1888), p. 267]. The *arcus* of C174,5 is also likely to be the 22° halo. Two parhelia were part of the same display.

6. The bolides are likely to have been components of a meteor shower. The most obvious candidate is the Lyrids. In that case the report has to relate to 25th March, 175 BCEJ = Quintilis 15 C175. The Lyrid shower of 25th March 174 BCEJ = Quintilis 3 C174 has to have occurred well after the processing of prodigies by the incoming consuls.



7 and 8. The two prodigies must have been aggregated from actual spring, summer or early autumn months of C175. If the matter of the crest were disregarded, then the leopard snake, rare in Italy, is an obvious candidate. The inclusion in the reports of a crest may be attributed to hysteria associated with the observation of an unusual snake. It is impossible to say whether Lanuvium or Caere furnished the first of the two reports.

9. See on C214,12.

C. Expiation

Forthcoming about attempts to expiate the *pestilentia*, Livy is silent about expiatory measures in connexion with the eight following prodigies.

II. OBSEQUENS, P.L. 10:

1. gravi pestilentia hominum bovumque cadavera non sufficiente Libitina cum iacerent, vulturius non apparuit.

Translation:

1. when in the course of a severe plague that afflicted men and cattle, corpses were lying ~~exposed~~ because Libitina did not suffice. No vulture appeared.

Comment:

The extant text of Obsequens includes no prodigy lists for any of the years from C174 to C168 inclusive. The absence is obviously due to damage to the MS upon which the Aldine edition was based, rather than repeated carelessness on the epitomator's part.

C173 = 27/11/174-8/12/173 BCEJ

Consuls: L. Postumius Albinus, M. Popillius Laenas.

1. *LIVY*, 42,2.1-7:

principio huius anni legati qui in Aetoliam et Macedoniam missi erant renuntiarunt. ... cum bellum Macedonicum in expectatione esset, priusquam id susciperetur, prodigia expiari pacemque deum peti precationibus, qui editi ex fatalibus libris essent, placuit.

1. Lanuvi classis magnae species in caelo visa dicebatur
2. et Priverni lana pulla terra enata
3. et in Veienti apud Rementem lapidatum
4. Pomptinum omne velut nubibus locustarum coopertum esse
5. in Gallico agro, qua induceretur aratrum, sub existentibus glaebis pisces emersisse

ob haec prodigia libri fatales inspecti, editumque ab decemviris est et quibus dis quibusque hostiis sacrificaretur, et ut supplicatio prodigiis expiandis fieret, alteraque quae priore anno valetudinis populi causa vota esset, ea uti fieret feriaeque essent. itaque sacrificatum est ut decemviri scriptum ediderant.

Translation:

At the beginning of this year, the ambassadors who had been sent to Aetolia and Macedonia reported back. ... There was expectation of war in Macedonia. Before its undertaking it was decided that the prodigies should be expiated and the peace of the gods, who had been specified on the basis of the books of destiny, should be ritually sought.

1. it was being said that at Lanuvium the semblance of a great fleet had been seen in the sky
2. that at Privernum dark-coloured wool had sprouted from the earth
3. that in the territory of Veii at Remens there had been a fall of stones
4. that the whole of the Pomptine territory had been covered by what might be described as clouds of locusts
5. and that in the ager Gallicus, wherever the plough was driven into the ground, fish had emerged beneath the existing soil

On account of these prodigies, the books of destiny were consulted, and it was proclaimed by the *Xviri* to what gods and with what victims there should be sacrifice, and that a *supplicatio* should take place for the purpose of expiating the prodigies, and that a second *supplicatio* which had been vowed the previous year for the sake of the health of the people should take place together with religious holidays. Accordingly sacrifice was offered as the *Xviri* had proclaimed in writing.

Comment:

A. Context

The five prodigies were processed at the beginning of the year. Given that ploughing was complete well before winter, 5 at least must have been aggregated from the previous consular year. The same is likely to be the case with 2 and 4.

B. Prodigies

1. See on C214,15. Yet again: it is not specified whether the phenomenon was observed during the day or at night. If the latter, then one could think in terms of an auroral display. If the former, either a peculiar cloud formation or some kind of mirage could have provided the basis for the report.
2. This is likely to have been some kind of mould. Many moulds are capable of extremely rapid growth, and not a few have a furry appearance.
3. See on C177,1.

4. Despite the intrusion of *velut*, the insects concerned have to be locusts. For an earlier prodigial locust swarm, see on C203,3.



5. The source and nature of the fish are enigmatic. One possibility is that they fell from the sky. There have been many reports, modern and ancient, of fish falling from the sky during rain storms. Athenaeus, in his *Deipnosophistae* 8,333, comments as follows on the phenomenon:

Φαινίας γοῦν ἐν δευτέρῳ πρυτάνεων Ἑρεσίων ἐν Χερρονήσῳ φησὶν ἐπὶ τρεῖς ἡμέρας ὑσαι τὸν θεὸν ἰχθύς. καὶ Φύλαρχος δ' ἐν τετάρτῃ ἑωρακέναι τινὰς πολλαχοῦ τὸν θεὸν ὑσαντα ἰχθύσι, πολλάκις δὲ καὶ γυρίνοις τοῦ αὐτοῦ συμβαίνοντος (Phaenias says in the second book of *The Rulers of Eresus* that in Chersonesus it rained fishes for three whole days. And Phylarchus in his fourth book says that certain persons have in many places seen it rain fishes and the same thing often happens with tadpoles.)

Water spouts are generally deemed responsible for such occurrences, sucking up fish from the sea or streams and then depositing them in entirely different locations. In his celebrated article, "Rains of Fishes" [*Natural History* 21 (1921), pp. 607-19], E.W. Gudger presents many cases of fish falls from all around the world.



Alternately, aestivating fish, awakened by heavy rain, may have begun burrowing to

the surface and have been turned up by the plough, depending on how far from a water-source this field was.

C. Expiation

Routine expiatory measures include no *novendiale* for the showers of stones. Evidently the authorities were unwilling to lose nine days of public business. Despite the renewed scrupulosity with respect to *prodigia* of the last few year, convenience dictated that at least some traditional rituals were no longer *de rigueur*.

After *expiandis fieret* the single MS has *alteraque priore anno*. Insertion of *quae* is due to Madvig. *qualis* would make a better supplement.

II. OBSEQUENS

The part of Obsequens' text that would have contained a prodigy list for C173 is lost. See above on C174.

C172 = 9/12/173-28/11/172 BCEJ

Consuls: C. Popillius Laenas, P. Aelius Ligus.

1. *LIVY*, 42,20.1-6; 21.1:

in suspensa civitate ad expectationem novi belli,

1. nocturna tempestate columna rostrata in Capitolio bello Punico priore posita ob victoriam M. Aemilii consulis, cui collega Ser. Fulvius fuit, tota ad imum fulmine discussa est

ea res prodigii loco habita ad senatum relata est; patres et ad haruspices referri et decemviros adire libros iusserunt. decemviri lustrandum oppidum, supplicationem obsecrationemque habendam, victimis maioribus sacrificandum et in Capitolio Romae et in Campania ad Minervae promunturium renuntiarunt; ludos per decem dies Iovi optimi maximo primo quoque die faciendos. ea omnia cum cura facta. haruspices in bonum versurum id prodigium, prolationemque finium et interitum perduellium portendi responderunt, quod ex hostibus spolia fuissent ea rostra, quae tempestas disiecisset. accesserunt quae cumularent religiones animis:

2. Saturniae nuntiatum erat sanguine per triduum in oppido pluvisse
3. Calatiae asinum tripedum natum
4. et taurum cum quinque vaccis uno ictu fulminis exanimatos
5. Auximi terra pluvisse

horum quoque prodigiorum causa res divinae factae et supplicatio unum diem feriaeque habitae.

consules ad id tempus in provinciam non exierant.

Translation:

The state was on tenter-hooks due to anticipation of the new war.

1. during a storm in the night the *columna rostrata* that had been placed on the Capitol during the first Punic war on account of the victory of the consul Marcus Aemilius, whose colleague was Servius Fulvius, was shattered completely from top to bottom by lightning

Regarded as a prodigy, the occurrence was referred to the Senate; the senators ordered that it be referred to the *haruspices* and that the *Xviri* approach the books. The *Xviri* reported back that the city should be purified, that a *supplicatio* and *obsecratio* should be held, and that there should be a sacrifice with full-grown victims both on the Capitoline at Rome and in Campania at the promontory of Minerva; in addition, beginning on the first possible day, games should be celebrated for ten days in honour of Jupiter Optimus Maximus. All these prescriptions were

carefully carried out. The *haruspices* responded that the prodigy concerned would have a good outcome; extension of frontiers and the destruction of enemies were portended, because the rostra which the storm had overthrown had been spoils taken from the enemy. There were other occurrences which built up religious concerns in their minds:

2. at Saturnia it had been announced that it had rained with blood for three days within the town
3. at Calatia that a donkey with three feet had been born
4. and also a bull together with five cows had been killed by a single strike of lightning
5. at Auximum that it had rained with earth

On account of these prodigies, too, religious rites were carried out; there was a one-day *supplicatio* and a religious festival.

So far the consuls had not departed for their province.

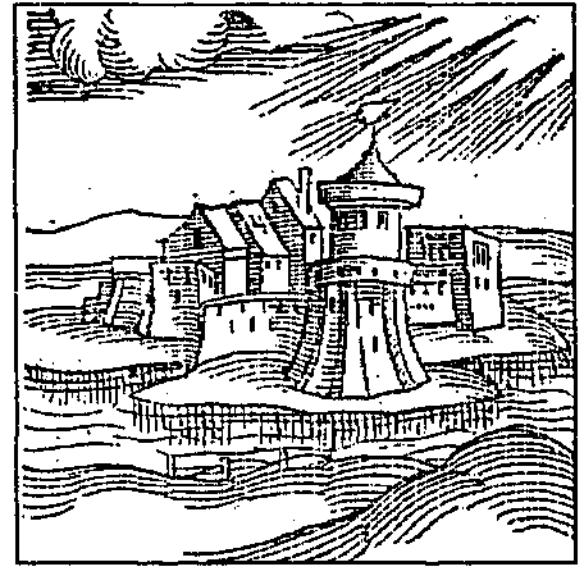
Comments:

A. Context

Livy's narrative makes it clear that all five prodigies were processed early in the consular year. Given normal breeding practice, the donkey would have been born in spring. 3, consequently, is likely to have been aggregated from C173. The same could be the case with any or all of 2, 4, and 5.

B. Prodigies

1. With war in Macedonia imminent, damage to a symbol of Rome's triumph in another confrontation would have caused major consternation. The *pax deorum* was clearly compromised, with Jupiter hinting subtly, or perhaps not so subtly, at the possibility of defeat. It is little wonder that the storm and its effects were elevated to the status of a *prodigium*.



2. See on C214,5. One wonders if it also rained blood outside the city walls! True or false, the occurrence would have struck the Romans as all the more menacing given the approach of war.
3. A deformed donkey not from Reate! The location of the prodigy may have contributed to the seriousness with which it was treated.
4. Jupiter expressing his disapproval again.
5. See on C194,2. One wonders whether a shower of stones was redefined with a view to avoiding a *novendiale*.

C. Expiation

This first prodigy was of such importance that its expiation was handled separately from the others, with both the *haruspices* and the *Xviri* being consulted by the Senate. The other four prodigies appear to have received standard expiation.

II. OBSEQUENS

The part of Obsequens' text that would have contained a prodigy list for C172 is missing. See above on C174.

C171 = 29/11/172-10/12/171 BCEJ

Consuls: P. Licinius Crassus, C. Cassius Longinus.

Part of Livy's account of the events at Rome during C171 is missing due to the loss of four quaternions from the only extant MS. It is possible that the lost portion of the text included a list of prodigies processed in that year. Unfortunately, the part of Obsequens' text that would have contained a prodigy list for C171 is also missing (see above on C174).

C170 = 11.12.171-23/12/170 BCEJ

Consuls: A. Hostilius Mancinus, A. Atilius Serranus.

The four lost quaternions of the only extant MS of Livy's 42nd and 43rd books which contained part of his account of events at Rome during C171 also included the historian's record of developments and activities in the city during the early months of C170. The lost portion of the text may have featured a list of prodigies processed close to the year's beginning. The part of Obsequens' text that would have contained a prodigy list for C170 is also missing (see above on C174).

C169 = 24/12/170-3/1/169 BCEJ

Consuls: Q. Marcius Philippus, Cn. Servilius Caepio.

1. LIVY, 43,13.1-8; 14.1:

non sum nescius ab eadem neglegentia qua nihil deos portendere vulgo nunc credant, neque nuntiari admodum ulla prodigia in publicum neque in annales referri. ceterum et mihi vetustas res scribenti nescio quo pacto antiquus fit animus et quaedam religio tenet, quae illi prudentissimi viri publice suscipienda censuerint, ea pro indignis habere, quae in meos annales referam.

Anagnia duo prodigia eo anno sunt nuntiata

1. facem in caelo conspectam

2. et bovem feminam locutam

eam publice ali

3. Minturnis quoque per eos dies caeli ardentis species affulserat

4. Reate imbri lapidavit

5. Cumis in arce Apollo triduum ac tris noctes lacrimavit

in urbe Romana duo aeditui nuntiarunt

6. alter in aede Fortunae anguem iubatum a compluribus visum esse

alter in aede Primigeniae Fortunae quae in colle est duo diversa prodigia

7. palmam in area enatam

8. et sanguine interdiu pluvisse

duo non suscepta prodigia sunt, alterum quod in privato loco factum esset

9. palmam enatam in impluvio suo T. Marcius Figulus nuntiabat

alterum quod in loco peregrino

10. Fregellis in domo L. Atrei hasta, quam filio militi emerat, interdiu plus duas horas arsisse ita ut nihil eius ambureret ignis, dicebatur

publicorum prodigiorum causa libri a decemviris aditi: quadraginta maioribus hostiis quibus diis consules sacrificarent ediderunt, et uti supplicatio fieret cunctique magistratus circa omnia

pulvinaria victimis maioribus sacrificarent populusque coronatus esset. omnia uti decemviri praeierunt facta.

...

censoribus deinde creandis comitia edicta sunt.

Translation:

I am not oblivious to the fact that as a consequence of the same negligence that leads people by and large in these times to believe that the gods foreshadow nothing, no *prodigia* are now brought to public notice and that none is recorded in contemporary annals. However, as I write of what happened in the old time past, in some strange manner my mind takes on an ancient mould and simultaneously a kind of religious awe holds me back from considering what those most experienced men of earlier times deemed a matter of public concern unworthy to be included in my own annals.

At Anagnia, two portents were announced that year

1. a torch was observed in the sky
2. and a cow spoke

this was being fed at public expense

3. at Minturnae during the same period the sky appeared to be on fire
4. at Reate stones fell in a shower
5. at Cumae on the citadel Apollo wept for three days and three nights

in the city of Rome two temple functionaries announced *prodigia*, one

6. that a crested snake had been seen by many people in the temple of Fortune
- the other, two different prodigies in the temple of Fortuna Primigenia which is on the hill
7. the first was that a palm-tree had sprouted in the courtyard
8. the second that it had rained with blood in the day-time

Two prodigies were not taken up

- (9.) Titus Marcius Figulus was announcing that a palm-tree had sprouted in his *impluvium*
- this was rejected because it happened in a private place

- (10.) at Fregellae, in the house of Lucius Atreus, a spear which he had bought for his son's military service was said to have blazed for more than two hours during the day-time in such a way that the fire consumed none of it

this was rejected because it had occurred in a non-Roman location.

On account of the official prodigies the books were approached by the *Xviri*; they proclaimed to what gods the consuls should sacrifice with forty full-grown victims. They proclaimed too that a *supplicatio* should take place; that all the magistrates should make a sacrifice with full-grown victims around all the *pulvinaria* and that the people should wear wreaths. Everything was done as the *Xviri* prescribed.

...

An assembly was then proclaimed for the election of the censors.

Comments:

A. Context

Livy's account of the events of C169 commences at 43,12.1. The prodigies are processed very early in the year, directly after the assignment of provinces and the allotment of troops. Given correspondence of the Ides of March C169 with the winter solstice, 6 must have been aggregated from the previous consular year. The same may be the case with some or all of the other prodigies.

The list of phenomena is prefaced by the key passage in which Livy dilates on his reasons for including prodigies in his annals.

B. Prodigies

1. Once again the *fax* should be a bright bolide.
2. See on C214,12.

3. If the phenomenon was observed during the night, an auroral display or a meteor shower is once again the most likely candidate.

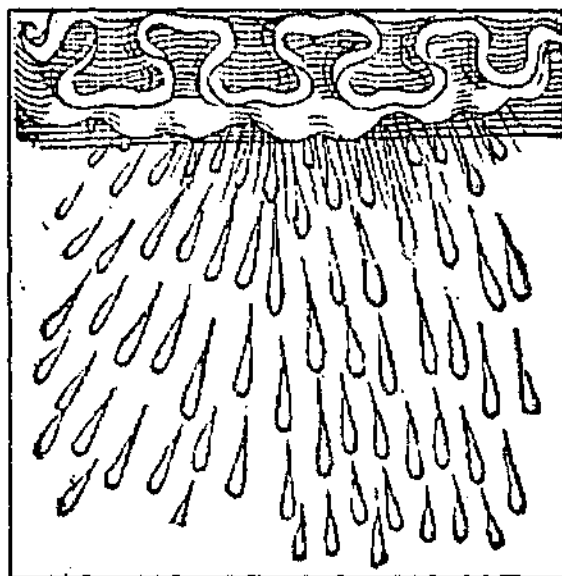
4. See on C218,8.

5. See on C217,16.

6. Unlike the snakes of C174,6 and 7, the reptile concerned was apparently not spotted.

7. Palm-trees were associated with victory, either athletic or military. For further, see TARBELL (1908).

8. It is unusual that occurrence during the day is specified. Were many alleged blood rains nocturnal? If so, was the only evidence for them a deposit observed on the ground in the early morning? Such questions lead one to consider the possibility of frequent fraud. See on C214,5.



(9.) Unusual phenomena observed on the private property of citizens were not considered to have an impact on the public welfare and so were not officially processed and expiated. Individuals were free to expiate such personal prodigies as they saw fit.

(10.) Unusual phenomena witnessed at places not closely connected with Rome were also not felt to be her concern. Fregellae was felt to be so connected when prodigies from there were accepted in C211 and C206 but by C169 it had become alienated; see further MACBAIN (1982), pp. 28-30. The occurrence itself was presumably a case of St Elmo's fire for which compare C214,2. It would help to know where the spear was placed.

C. Expiation

The expiatory rites are routine once again. No *novendiale* was prescribed for expiation of the rain of stones.

//. LIVY, 44,18.6:

bis in exitu anni eius lapidatum esse nuntiatum est

11. in Romano agro

12. simul in Veientibus

novendiale sacrum factum est

Translation:

At the end of the year it was announced that stones had fallen

11. in the territory of Rome

12. and simultaneously among the Veientines

A sacred *novendiale* was held.

Comment:

A. Context

Normally prodigies that occurred towards the end of a consular year were held over for attention at the beginning of the next. The immediate processing and expiation of late showers of stones at two separate locations is indicative of extreme concern. Perhaps the authorities perceived the occurrences as indicative of divine displeasure at their failure to schedule a *novendiale* for the shower of stones at Reate. One, only one though, was hastily put in place.

B. Prodigies

11 and 12. The expression is clumsy but beyond correction of *esse* after *nuntiatum* to *est*, and *Beientibus* to *Veientibus*, no further alterations are called for. Madvig's extensive emendations (he reads *bis in exitu anni eius lapidatum esse nuntiatum est, semel in Romano agro, semel in Veienti. bis novendiale sacrum factum est*) are ingenious but gratuitous.

C. Expiation

See A above.

III. OBSEQUENS

The part of Obsequens' text that would have contained prodigies for C169 is missing.

C168 = 4/1/168-16/1/167 BCEJ

Consuls: L. Aemilius Paullus, C. Licinius Crassus.

Although the single MS has many lacunae of differing lengths throughout this year, to judge from their position and context one may say with a fair degree of certainty that it is highly unlikely that a prodigy list was also lost.

C168 was the penultimate year of the Third Macedonian War, the year in which Perseus finally met with defeat and was betrayed to the Romans. Livy devotes practically all of his narrative, which begins at 44,19 and concludes at 45,25, to events pertaining solely to the war, which was occurring outside of Italy. Conceivably, this so engrossed the officials at Rome that they were more concerned to receive bulletins from the front than to assess and process prodigy reports from Italy.

Given the lacuna in Obsequens' text that commences after C175, the absence of *prodigia* for C168 cannot be adduced in confirmation of a Livian void.

C167 = 17/1/167-28/1/166 BCEJ

Consuls: Q. Aelius Paetus, M. Iunius Pennus.

1. *LIVY*, 45,16.5-6:

de prodigiis deinde nuntiatis senatus est consultus.

1. aedes deum Penatium in Velia de caelo tacta erat
2. et in oppido Minervio duae portae et muri aliquantum
3. Anagniae terra pluerat
4. et Lanuvi fax in caelo visa erat
5. et Calatiae in publico agro M. Valerius civis Romanus nuntiabat e foco suo sanguinem per triduum et duas noctes manasse

ob id maxime decemviri libros adire iussi supplicationem in diem unum populo edixerunt et quinquaginta capris in foro sacrificaverunt. et aliorum prodigiorum causa diem alterum supplicatio circa omnia pulvinaria fuit et hostiis maioribus sacrificatum est et urbs lustrata.

Translation:

Next the Senate was consulted concerning the prodigies which had been reported.

1. on the Velia the temple of the divine Penates had been hit from the sky
2. and in the town of Minervium, two gates and some of the wall
3. at Anagnia it had rained with earth
4. at Lanuvium a torch had been seen in the sky
5. at Calatia Marcus Valerius, a Roman citizen, was announcing that blood had run from his hearth situated in ager publicus for three days and two nights

Particularly on account of the last stated occurrence, the *Xviri* were ordered to approach the books; they proclaimed a *supplicatio* of one day for the people and made a sacrifice with fifty goats in the forum. On account of the other prodigies, there was a *supplicatio* on a different day around all the *pulvinaria*, sacrifice was made with full-grown victims and the city purified.

Comments:

A. Context

Five prodigies were processed at the beginning of the consular year immediately after assignment of provinces to incoming consuls and other magistrates. The first four are likely to have been aggregated from the previous consular year. One gets the impression from *nuntiabat* that the fifth was extremely recent.

B. Prodigies

1. See on C218,4.
2. See on C214,10.
3. See on C194,2.
4. See on C217,7. The bolide was probably witnessed at night but a daylight observation is not out of the question.
5. It is clearly stated that this prodigy occurred *in publico agro*, on state land, so that what may at first sight appear to be a private prodigy relating to the individual, Marcus Valerius, could be accepted as a public prodigy impinging on the whole republic. As has been said before, the appearance of blood, particularly in an unusual place, was a particularly negative omen. This prodigy was probably the result of heavy rains, swelling

to overflow an underground stream, which seeped under Valerius' house and came out from what must have been the weakest point, the hearth.

C. Expiation

The final prodigy was held to require special attention, with the *Xviri* consulting the Sibylline books and sacrifices being made specifically for it. For the other prodigies, none of them unique, routine expiatory measures were sufficient.

II. *OBSEQUENS*, P.L. 11:

1. Romae aliquot loca sacra profanaque de caelo tacta
2. Anagniae terra pluit
3. Lanuvi fax ardens in caelo visa
4. Calatiae in agro publico per triduum et duas noctes sanguis manavit

Translation:

1. at Rome several places both sacred and profane were hit from the sky
2. at Anagnia it rained with earth
3. at Lanuvium a blazing torch was seen in the sky
4. At Calatia in ager publicus blood ran for three days and two nights

Comments:

Obsequens collapses Livy's 1 and 2 and makes Rome the location of occurrences reported from Velia and Minervium respectively. Did he suppose that the two places were suburbs of the city? *Lanuvi* is Perizonius' emendation of *Lavini* of the Aldine edition. It is possible that Obsequens was careless and that the original reading should stand. At 4 (= Livy 5) Obsequens loses sight of Valerius' home and hearth. The omission dictates caution in assuming that any prodigial report in post-consular 167 notices in Obsequens is anything approaching a precise reflexion of the lost Livian original.

Section Two

Other Sources

Chapter Seven

Valerius Maximus, Pliny, Plutarch,
and Cassius Dio

A. Preface

In addition to Livy, four other ancient writers include in one or more of their works accounts of *prodigia* reported during the period 218-167 BCE. In chronological order, the authors involved are the miscellanist Valerius Maximus, the encyclopædist Pliny, the biographer and essayist Plutarch and the late imperial narrative historian Cassius Dio. Each is dealt with in a separate section divided into two parts. The first part consists of a functional biography of and other essential background information relating to the author concerned; the second deals with all relevant prodigial material included in his extant writings. In all four cases, the contents of the second part include the original texts of passages relating to *prodigia*, English translations of the same, and comments. Much of the comment revolves around contact points between prodigial material in Valerius, Pliny, Plutarch and Cassius Dio and counterpart representations in Livy. A final section is concerned with the bearing of the non-Livian prodigial material as a whole on the completeness or otherwise of the prodigy lists in Livy.

B. Valerius Maximus

1. Valerius Maximus and his writings

Valerius Maximus, praenomen either Marcus or Publius, flourished during the reigns of the early Julio-Claudian emperors. Certain passages in his work strongly suggest that he dedicated it to Tiberius, with cutting invective concerning a parricide and therefore referring to the notorious Sejanus. Neither the date of Valerius' birth nor of his death is anywhere recorded. In fact, personal details about the man are sadly lacking and those that exist have been gleaned from inferences in his writing, a miscellany of rhetorical and historical anecdotes. A single dateable circumstance pertaining to himself is recorded: he accompanied, in an unknown capacity, a certain Sextus Pompeius to Asia. This Sextus Pompeius can be identified with the consul of 14 CE who later became proconsul of Asia.

Was Valerius Maximus a man of wealth and position, or of poverty and subservience? The language used in relevant sections, though in some sense smacking of servility, does not point either way, but there is a reference in the preface to the chapter pertaining to fraternal devotion (5,5) to ancestral busts: *parem ex maiorum imaginibus gloriam traxi* - I inherited equal glory from the busts of our ancestors. As only those whose forefathers had held curule aedileships were permitted to display these *imagines maiorum*, this points to Valerius Maximus as being a descendent of a

family of senatorial rank.¹ Other information concerning his family and career are lacking.

The work by which Valerius Maximus is remembered is his *de Factis Dictisque Memorabilibus Libri IX*, a collection of miscellaneous anecdotes, with the words and deeds of notable Romans being kept distinct from those of foreigners and outnumbering them two to one. It is organized, if that is the right word, into nine books, some of which comprise closely allied topics while others contain diffuse subject matter. The first book, for example, deals more or less exclusively with religious matters while the seventh ranges across, among other things, good fortune, strategems, electoral defeats and wills that were broken. Most of the stories serve to illustrate some moral principle, and simplicity and probability are often sacrificed on the altar of sensationalism.

Valerius himself says in the preface that:

Urbis Romae exterarumque gentium facta simul ac dicta memoratu digna, quae apud alios latius diffusa sunt, quam ut breviter cognosci possint, ab inlustribus electa auctoribus digerere constitui, ut documenta sumere volentibus longae inquisitionis labor absit (The Memorable Words and Deeds of the men of Rome are scattered throughout various authors and cannot easily be found, so I have decided to undertake a compilation from distinguished authors to spare those requiring proofs the labour of long research.)

As he does not say from which particular author he extracted each story, it is very difficult to identify which *inlustres auctores* were used by him. It is beyond reasonable doubt that Livy was one of them.

Valerius' work was referred to by such as Pliny the Elder and Plutarch, and continued its popularity into the mediæval and Renaissance period. Some epitomes

¹ SKIDMORE (1996), p. 115.

were created, one by Julius Paris in the third century CE, another by Januarius Nepotianus, dated a little later and covering only the first two and part of the third books. The lacuna in all surviving manuscripts of the unabridged Valerius Maximus (1.1 *ext.* 4 to 1.4 *ext.* 1) is usually filled with one of these epitomes.

2. Prodigial Material

Text:

VALERIUS MAXIMUS, de Factis Dictisque Memorabilibus, 5,6.5:

...monstra alio tumultu credita sunt.

1. puerum infantem semenstrem in foro boario triumphum <clamasse>
2. alium cum elephantino capite natum
3. in Piceno lapidibus pluisse
4. in Gallia lupum vigili e vagina gladium abstulisse
5. in Sardinia scuta duo sanguinem sudasse
6. Antii metentibus cruentas spicas in corbem decidisse
7. Caerites aquas sanguine mixtas fluxisse
8. bello etiam Punico secundo constitit Cn. Domiti bovem dixisse "cave tibi, Roma."

Translation:

Portents attracted belief during another upheaval.

1. an infant of six months had cried "triumph!" in the cattle market
2. another was born with the head of an elephant
3. in the Picentian country it rained with stones
4. in Gaul a wolf carried away the sword from the sheath of a sentry
5. in Sardinia two shields sweated blood
6. at Antium bloody ears of corn fell into the baskets of harvesters
7. the waters at Caere had flowed mixed with blood
8. also during the Second Punic war it was established that an ox of Cn. Domitius had said, "Rome, look out for yourself."

Comment:

In the section of his work entitled *de prodigiis*, Valerius notes portents associated with the Veientine (5,6.3) and Social wars (5,6.4), and then, after an aside dealing with a strange occurrence in the consular year of P. Volumnius and Ser. Sulpicius (C461), lists *prodigia* reported in connexion with another upheaval (*alio tumultu*). The disturbance concerned, it emerges *à propos* the eighth item, actually a cuckoo in the nest, is the Second Punic war.

Comparison with the consular year by consular year prodigial record in Livy reveals that each member of Valerius' octet has a precise counterpart couched in exactly or almost exactly the same words. Equivalences are tabulated in the following concordance.

Valerius Maximus	Livy
1	C218,1
2	C209,11
3	C218,8
4	C218,10
5	C217,4
6	C217,13
7	C217,11
8	C192,5

The obvious conclusion from the consequences overall is that the eight prodigies in the left-hand column are a cluster drawn by Valerius from Livian lists relating to four different consular years, all of which he believed to fall within the period of Rome's second war with Carthage. In respect of one of the years, C192, Valerius was mistaken. By C192, the Second Punic war was well and truly over.

C. Pliny

1. Pliny and his writings

Born in 23 CE into an equestrian family in northern Italy, Caius Plinius Secundus came to Rome while still young and received an education from the best teachers available in the city. At the age of 23 he served as a soldier in Germany, during which time he wrote a monograph of throwing javelins from horseback (*de Jaculatione equestri*) and began a history of the Germanic wars. Returning to Rome in 52 CE, he embarked on the practice of jurisprudence though gained no particular distinction in this field. Pliny spent most of Nero's reign in retirement, probably outside of Rome. In contrast to those remarks in the *Naturalis Historia* (*N.H.*) pertaining to other emperors, those relating to Nero generally possess an unfavourable flavour,¹ and Beagon suggests that this could be due to "feelings of guilt and self-justification" stemming from Pliny's possible official activity in the early years of Nero's reign.² In the last years of the principate of Nero, Pliny produced two more works, a six-volume piece on the training of a young orator called *Studiosus*, and an eight-volume grammatical treatise, *Dubius Sermo*, which, his nephew comments, *scripsit sub Nerone novissimis annis, cum omne studiorum genus paulo liberius et erectius periculosum servitus fecisset* (this he wrote during Nero's last years when the slavery of the times made it dangerous to write anything at all independent or

¹ See, for example, *N.H.* 35,51 and 37,50.

² BEAGON (1992), p. 3.

inspired).³ Around this time too he became Procurator in Spain, returning to Rome in the early 70s when Vespasian had attained the principate. He adopted his sister's son, whose father had died in 71 CE, and entered into the new *princeps*' intimate circle, having served with the future emperor, Titus, in Lower Germany many years earlier. During this period he wrote a 31-book continuation of the history of Aufidius Bassus down to his own time.⁴

Throughout his life, Pliny had always fostered an intense interest in study and devoted much time to its pursuit. He slept little, studying by candle-light at night, and before dawn he would see the emperor Vespasian and discharge the duties required of him, devoting the rest of the day to study. Even while relaxing in the sunshine he would have something read to him and take notes from it. During meals he would be read to, and even during his bath he would dictate. When travelling about Rome, he would be carried in a chair so that he could give every minute to work. Pliny the Younger wrote a letter detailing his uncle's work habits, including a little tale about himself which well encapsulated his uncle's views: *Repeto me correptum ab eo, cur ambularem: "poteras" inquit "has horas non perdere"; nam perire omne tempus arbitrabatur, quod studiis non impenderetur* (I can remember how he scolded me for walking; according to him I need not have wasted those hours, for he thought any time wasted which was not devoted to research).⁵ As a result of his incessant note-taking, on his death Pliny left his nephew 160 notebooks, written in a minute hand on both sides of the page. It is a lamentable fact that of all of his writing, the 37-book encyclopædia, *Naturalis Historia*, wherein he purports to discuss natural phenomena in which mankind had no apparent hand, is the only one to

³ PLINY THE YOUNGER, *Ep.* 3,5.5.

⁴ *N.H.*, *Praef.* 19.

⁵ *Ep.* 3,5.16.

survive. What a mass of fragments from both extant and lost books would be preserved! From the titles given to Titus in the preface of the *Naturalis Historia*, it must have been published in about 77 CE, just two years before Pliny's remarkable death.

In late August, 79 CE, on noticing the eruption of Vesuvius, the scholar in Pliny compelled him to study the phenomenon more closely. Having received from Vespasian the command of the fleet stationed at Misenum, he was in the position to order a ship to sail him to Stabiae. Unfortunately he lingered too long there and the sea became too tempestuous to allow him to set sail and escape. He apparently suffocated, the gases and vapours from the volcano overwhelming his naturally weak lungs.

Despite his passion for study, Pliny's habits did not allow for him to be either original or discriminating in his composition. Although he amassed vast quantities of material, it was for the most part second-hand, augmented on occasion by his own knowledge and experiences. He lacked judgement in the selection of his material and incorporated much false information among the true. Being deficient in knowledge of scientific matters, he found himself rather at the mercy of those authors whose literature he plundered. Pliny also allowed his fascination with the unusual, his contempt of human nature, his belief in the wickedness of man and his distrust of the arrangement of Providence to dictate the shape of his work. As well as using the published writing of all those whose work he deemed it important both to preserve and transmit, he also pressed into service myths and folktales, presenting traditional beliefs as truths⁶ and thereby allowing questionable episodes to reflect negatively on the overall production. On occasion he relays criticisms of authors about certain points they presented but he does so in an erratic and haphazard fashion. Those authors whom Pliny consults are enumerated

⁶ LLOYD (1983), p. 135.

in book 1 of the *N.H.* The subjects treated in each book are succeeded by what appears to be a comprehensive list of authorities. He mentions the reason for this in his preface:⁷

Argumentum huius stomachi mei habebis quod his voluminibus auctorum nomina praetexui. est enim benignum - ut arbitror - et plenum ingenii pudoris fateri per quod profeceris, non ut plerique ex his quod attigi fecerunt. scito enim conferentem auctores me deprehendisse a iuratissimis et proximis veteres transcriptos ad verbum neque nominatos... (You will deem it a proof of this pride of mine that I have prefaced these volumes with the names of my authorities. I have done so because it is, in my opinion, a pleasant thing and one that shows an honourable modesty, to own up to those who were the means of one's achievements, not to do as most of the authors to whom I have referred did. For you must know that when collating authorities I have found that the most professedly reliable and modern writers have copied the old authors word for word, without acknowledgment.)

It is unfortunate that in his attempt to include every ancient author and cover every area of natural history he was unable to separate the chaff from the grain. Obscure and confused passages are not uncommon and, as will emerge, there are clear errors in respect of prodigies claimed to have occurred during the period with which this thesis is concerned.

⁷ Praef. 21-22.

2. Prodigious Material

1. C201

Text:

PLINY, *N. H.* 18,166:

1. Ex frugibus ostentum semel, quod equidem invenerim, accidit P. Aelio Cn. Cornelio cos., quo anno superatus est Hannibal: in arboribus enim tum nata produntur frumenta.

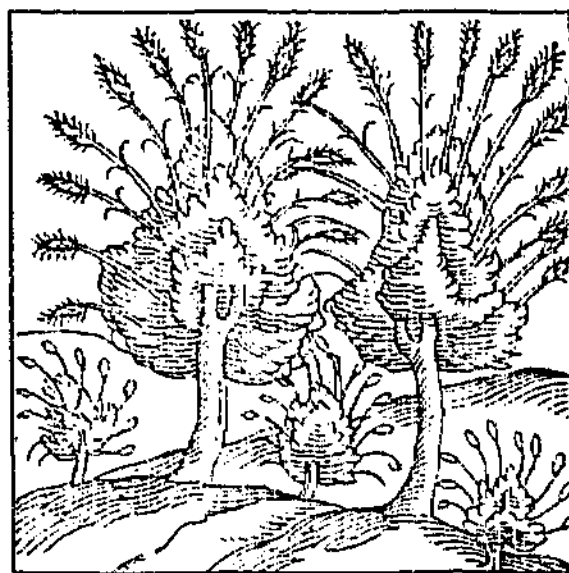
Translation:

1. The only portent arising from crops that I for my part have come across occurred in the consulship of Publius Aelius and Gnaeus Cornelius, the year in which Hannibal was overcome: it is handed down that on that occasion grain started growing on trees.

Comment:

Livy lists no *prodigia* for the consular year concerned and the question consequently arises as to whether he has failed to incorporate at least one prodigy recorded in the pontifical chronicles.

According to Obsequens, *P.L.* 27 (drawing on the lost 56th book of Livy's history) and *P.L.* 30 (drawing on Livy's lost 59th and 60th books) respectively, grain grew on trees during the consular year of Servius Flaccus and Quintus Calpurnius (C135) and that of Marcus Aemilius and Lucius Aurelius (C125).



Since Pliny certainly combed the whole of Livy in search of data, his recollection that the phenomenon was recorded only once is false. Given one memory lapse on Pliny's part in connexion with the grain on trees prodigy, another becomes not improbable. If he is also wrong about the names of the attached consuls, then it becomes unnecessary to countenance Livian omission of a prodigy that occurred in C201.

2. C174

Text:

PLINY, N. H. 2.99:

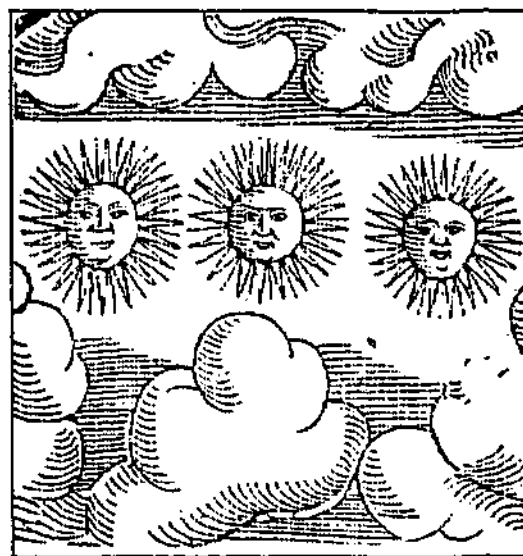
1. *trinos soles antiqui saepius videre, sicut Sp. Postumio Q. Mucio... consulibus*

Translation:

1. in early times three suns were quite often observed; for example, when Sp. Postumius and Q. Mucius were consuls.

Comment:

The same prodigy is recorded by Livy for the same year; see Livy C174,6.



3. C171

Text:

PLINY, N. H. 7.36:

1. invenimus in annalibus P. Licinio Crasso C. Cassio Longino coss. Casini puerum factum ex virgine sub parentibus iussuque haruspicum deportatum in insulam desertam

Translation:

1. We find it recorded in the Annals that when Publius Licinius Crassus and Caius Cassius Longinus were consuls, at Casinum, an unmarried girl still under her parents' care became a boy; by order of the *haruspices* he was removed to a desert island.

Comment:

The annals to which Pliny refers will be the *Annales Maximi*.

No prodigies are in evidence in the extant portion of Livy's account, which straddles books 42 and 43, of the events of the consular year concerned. Given the loss of four quaternions of book 43 which certainly, *inter alia*, with activities of C171 at Rome, it by no means follows that no *prodigia* were recorded. If a group did feature in the lost leaves it could well have included the sex change at Casinum. In view of the incomplete state of the text the absence of C171 prodigies from Obsequens' *P.L.* is not significant.

The expiation is noteworthy. One would expect prescription of drowning rather than exposure.

Addendum:

C217

Text:

PLINY, N.H. 2,200:

maximus terrae memoria mortaliū motus... Tiberii Caesaris principatu... creberrimus Punico bello intra eundem annum septies ac quinquagies nuntiatus Romam quo quidem anno ad Trasimenum lacum dimicantes maximum motum nec Poeni sentire nec Romani.

Translation:

The greatest earthquake in human memory occurred in the principate of Tiberius Caesar... the most numerous tremors during the Second Punic war when 57 were reported at Rome in a single year, the year when a considerable shock was noticed by neither Carthaginians nor Romans fighting at Lake Trasimene.

Comment:

No earthquakes feature in Livy's lists of prodigies accepted in either C217 or C216. If some of the 57 reports of shocks were prodigial reports rather than mere announcements of occurrence, then they were rejected by the civil and religious authorities. Given the elaborateness and protracted period of expiation of prodigies processed early in C217, such a reaction is not entirely surprising.

D. Plutarch

1. Plutarch and his writings

Details pertaining to Plutarch's life have to be gleaned from oblique references found in his own writings. It is a shame that the biographer of so many should leave no biography of himself.

Plutarch was born at Chaeroneia, a small town in northern Boeotia in Greece around the first century CE, near the end of the reign of Claudius. His was a family of considerable means and he was well-educated, studying at the great university town of Athens under the tutelage of Ammonius of Lamptrae, a Peripatetic philosopher well versed in religious lore. As a young man he was called upon to represent his native town to the Roman proconsul. At around 95 CE he became a priest of Delphi and apparently held that office until his death. Having travelled extensively around Greece, he visited Egypt and Asia Minor, as well as Italy where he resided at Rome between, approximately, 75 and 90 CE. He never mastered Latin but lectured in Rome in his own tongue. During his sojourn at Rome he made the acquaintance of the prominent Romans of the day, such as Iunius Arulenus Rusticus (praetor 69 CE), C. Minucius Fundanus (consul 107 CE and proconsul of Asia), and Q. Sosius Senecio (consul 99 CE and 107 CE). At some time he married a woman by name of Timoxena with whom he had at least four sons (Autobulus, Plutarch, Soclarus, Chaeron) and one daughter, also named Timoxena, whose death in early childhood induced him to write a touching letter of consolation to his much loved

wife (παραμυθητικὸς πρὸς τὴν γυναῖκα). There is no record of any other children, nor is there indication as to whether those attested lived to adulthood.

Fond of his native town, Plutarch spent the latter half of his life there, where he wrote, lectured, and performed various religious or civil duties. His writings have come down to us through the centuries in two groups, one a collection of lectures, letters and essays traditionally entitled the *Moralia*, and the other, for which he is chiefly known, *The Parallel Lives of Greeks and Romans*. The *Moralia*, largely composed prior to the *Lives*, have much in common with the latter, as Plutarch illustrates certain ethical points with concrete stories which appear in the later work, *Lives*. There are mini-monographs touching on many subjects, especially philosophy and ethics, but also music, archaeology, education, philology, physics, and mathematics, together with personal letters and anecdotes. The *Lives* were written to show the greatness of the ancient Greeks and Romans. They are arranged in pairs. Each pair consists of the life of a Greek and the life of a Roman and concludes with a comparison of the two men. As well as these pairs, four single lives are extant: Artaxerxes Mnemon, Aratus, Galba and Otho. At least one pair of Lives, Scipio Africanus the Elder and Epaminondas, is unfortunately lost, as well as probably non-paired Lives of the Roman emperors from Augustus to Nero, and of Vitellius, Hesiod, Pindar, Crates the Cynic, Daiphantus, Aristomenes and the poet Aratus.

The authorities consulted by Plutarch for the composition of his *Lives* number about two hundred and fifty (including Livy and Polybius). Eighty of these are writers whose work is partially or entirely lost. If, as is commonly supposed, he had written the *Lives* during his retirement in Chaeroneia, then Plutarch must have had access to a good library, but it is possible that he had already begun collecting data long before he set about the actual composition of the work. As an educated man, he would have been quite familiar

with the sources for his Greek *Lives* and although he confessed in his introduction to the *Life of Demosthenes* that he knew Latin imperfectly, he handled the Roman sources competently, if slightly less critically than their Greek counterparts, though he was aware in both cases of the difficulties inherent in using sources:

οὕτως ἔοικε πάντα χαλεπὸν εἶναι καὶ δυσθῆρατον ἱστορίᾳ τὰληθές, ὅταν οἱ μὲν ὕστερον γεγονότες τὸν χρόνον ἔχωσιν ἐπιπροσθούντα τῇ γνώσει τῶν πραγμάτων, ἢ δὲ τῶν πράξεων καὶ τῶν βίων ἡλικιώτις ἱστορία τὰ μὲν φθόνοις καὶ δυσμενείαις, τὰ δὲ χαριζομένη καὶ κολακεύουσα λυμαίνηται καὶ διαστρέφῃ τὴν ἀλήθειαν (to such degree, it seems, is truth hedged about with difficulty and hard to capture by research, since those who come after the events in question find that lapse of time is an obstacle to their proper perception of them; while the research of their contemporaries into men's deeds and lives, partly through envious hatred and partly through fawning flattery, defiles and distorts the truth.) (*Pericles* 13,12).

Despite having a relatively superficial acquaintance with the early history of Rome, Plutarch appears to make few errors about Roman institutions and those mistakes that are present do not detract from the general impression.

In his introduction to the *Life of Alexander*, 1,1-3, Plutarch explains that he did not intend to write history but rather to paint the portraits of men by delineating their characters rather than their deeds:

οὔτε γὰρ ἱστορίας γράφομεν, ἀλλὰ βίους, οὔτε ταῖς ἐπιφανεστάταις πράξεσι πάντως ἔνεστι δῆλωσις ἀρετῆς ἢ κακίας, ἀλλὰ πρᾶγμα βραχὺ πολλάκις καὶ ῥῆμα καὶ παιδιὰ τις ἔμφασιν ἤθους ἐποίησε μᾶλλον ἢ μάχαι μυριόνεκροι καὶ παρατάξεις αἱ μέγισται καὶ πολιορκίαι πόλεων. ὥσπερ οὖν οἱ ζωγράφοι τὰς ὁμοιότητας ἀπὸ τοῦ προσώπου καὶ τῶν περὶ τὴν ὄψιν εἰδῶν, οἷς ἐμφαίνεται τὸ ἦθος, ἀναλκίμβάνουσιν, ἐλάχιστα τῶν λοιπῶν μερῶν φροντίζοντες, οὕτως ἡμῖν δοτέον εἰς τὰ τῆς ψυχῆς σημεῖα μᾶλλον ἐνδύεσθαι καὶ διὰ τούτων εἰδοποιεῖν τὸν ἐκάστου βίον, ἐάσαντας ἑτέροις τὰ μεγέθη καὶ τοὺς ἀγῶνας (For it is not Histories that I am writing, but Lives; and in the most illustrious deeds there is not always a manifestation of virtue or vice, no, a slight thing like a phrase or jest often makes a greater revelation of character than battles where thousands fall, or the greatest armaments, or sieges of cities. Accordingly, just as painters get the likenesses in their portraits from the face and the expression of the eyes, wherein the character

shows itself, but make very little account of the other parts of the body, so I must be permitted to devote myself rather to the signs of the soul in men, and by means of these to portray the life of each, leaving to others the description of their great contests).

Due to this programme, important historical events are frequently noticed *en passant*, if at all. On occasion chronology becomes a little disordered, but the overall result, the portraits of the great Greek and Roman men selected, is a work that is interesting, intelligent and entertaining, revealing a deep humanity and commendable honesty of purpose.

2. Prodigious Material

1. C217

Text:

PLUTARCH, Fabius Maximus, 2.3:

Ἐπεὶ δ' Ἀννίβας ἐμβαλὼν εἰς Ἰταλίαν καὶ μάχῃ πρῶτον περὶ τὸν Τρεβίαν ποταμὸν ἐπικρατήσας, αὐτὸς μὲν ἤλαυνε διὰ Τυρρηνίας πορθῶν τὴν χώραν, ἑκπληξιν δὲ δεινὴν καὶ φόβον εἰς τὴν Ῥώμην ἐνέβαλε, σημεῖα δὲ τὰ μὲν συνήθη Ῥωμαίοις ἀπὸ

1. κεραυνῶν

τὰ δ' ὅλως ἐξηλλαγμένα καὶ πολλὴν ἀτοπίαν ἔχοντα προσέπιπτε -

2. θυρεοὺς ... ἀφ' αὐτῶν αἷματι γενέσθαι διαβρόχους ἐλέχθη

3. καὶ θέρη σταχύων περὶ Ἄντιον ἔναιμα κείρεσθαι
4. καὶ λίθους μὲν ἐκ τοῦ ἀέρος διαπύρους καὶ φλεγομένους φέρεσθαι
5. τοῦ δ' ὑπὲρ Φαλερίους οὐρανοῦ ῥαγῆναι δόξαντος
6. ἐκπίπτειν καὶ διασπείρεσθαι πολλὰ γραμματεῖα, καὶ τούτων ἐν ἐνὶ γεγραμμένον φανῆναι κατὰ λέξιν. "Ἄρης τὰ ἑαυτοῦ ὄπλα σαλεύει."

Translation:

When Hannibal invaded Italy, won his first battle at the Trebia, and marched through Etruria, laying everything waste as he went, the Romans were filled with consternation and fear. Prodigies occurred, some of the type familiar to the Romans, involving

1. lightning strikes

some completely out of the ordinary and with considerable strangeness

2. shields were said to have become moist with blood of their own accord
3. and at Antium ripe ears of corn were harvested covered in blood
4. and fiery and blazing stones were deposited from the air
5. the sky above Falerii appeared to gape open
6. many inscribed tablets fell out of their container and were scattered around, and on one of these appeared to be written the words, "Mars is shaking his weapons."

Comment:

Items 2-6 in the passage from Plutarch's *Life of Q. Fabius Maximus* have direct counterparts in Livy's list of prodigies processed and expiated in C217. P2 corresponds to Livy C217,4 with the locale, Sardinia, omitted from the former. P3 corresponds to Livy C217,13. P4 corresponds to Livy C217,7 with the Plutarchean version including two equivalents, *διαπύρους* and *φλεγομένους* for Livy's *ardentes*. P5 corresponds to Livy

C217,14. P6 corresponds to Livy C217,15 with Plutarch's version omitting reference to the lots shrinking and stating that they were scattered around after emerging from their container. Given the C217 context of P2-6, it is natural to see P1 as an abbreviated reflexion of Livy C217,5 for the same year. There is nothing to counterindicate parsimonious inference that Livy was Plutarch's source. In respect of item 6, the latter either ignored or failed to understand Livy's *adtenuatas* and added *διασπείπεσθαι* by way of explaining better what he took to be the scenario. Plutarch also thematically rearranged his six selected prodigies. The two items involving blood were juxtaposed and so also the two celestial phenomena.

2. C216

Text:

PLUTARCH, Fabius Maximus, 18:

1. καὶ τῶν Ἑστιάδων παρθένων δύο διεφθαρμένας εὐρόντες, τὴν μὲν, ὥσπερ ἐστὶν ἔθος, ζῶσαν κατώρυξαν, ἡ δ' ὑφ' ἑαυτῆς ἀπέθανε.

Translation:

1. Having found that two of the vestal virgins had sexual intercourse, they buried one alive, as is the custom, the other one died by her own hand.

Comment:

Without spelling out that the Vestals' behaviour was treated as a prodigy, Plutarch reflects Livy C216,6.

3. C208

Text:

PLUTARCH, Marcellus, 28,2:

πολλὰ σημεῖα διετάραττεν αὐτόν

1. ἱερῶν τινῶν κεραυνώσεις
2. καὶ μύες τὸν ἐν Διὸς χρυσὸν διαφαγόντες
3. ἐλέχθη δὲ καὶ βοῦν ἀνθρώπου φωνὴν ἀφείναι
4. καὶ παιδίον ἔχον κεφαλὴν ἐλέφαντος γενέσθαι

καὶ περιγενέσθαι περὶ τὰς ἐκθύσεις καὶ ἀποτροπὰς δυσιεροῦντες οἱ μάντις κατεῖχον αὐτὸν ἐν Ῥώμῃ σπαργόντα καὶ φλεγόμενον.

Translation:

Many other portents disturbed him

1. lightning strikes at certain temples
2. mice having eaten the gold in the temple of Jupiter

3. It was reported also that an ox had uttered human speech
4. And that a boy had been born with an elephant's head

When the priests got bad results with respect to their sacrifices and expiations, they kept him [Marcellus] in Rome, bursting and eager to set out.

Comment:

All four items in the passage from Plutarch's *Life of Marcellus* have direct counterparts in Livy's lists of prodigies processed and expiated in C209 and C208. P3 corresponds to Livy C209,7 with the locale, Privernum, omitted. P4 corresponds to Livy C209,11 with the locale, Sinuessa, omitted. P2 corresponds to Livy C208,2 with the locale, this time Cumae, again omitted. P1 is an abbreviated reflexion of Livy C208,1.

Once again there is no reason to doubt that Livy was Plutarch's source. It is unclear why, dealing with events of C208, Plutarch counterfactually juxtaposed two of its prodigies with two that had been processed and expiated in the previous year. Possibly dramatic considerations supplied all or some of the motivation. The C208 prodigies were not a particularly shining bunch and so Plutarch added to two chosen examples a couple of more sensational items from the previous year.

E. Cassius Dio

1. Cassius Dio and his writings

The details pertaining to the life of Cassius Dio Cocceianus are extracted from his history, with his own casual remarks providing us with all we know about this historian.

He was born in Bithynia in about 155 CE, son of Cassius Apronianus, a Roman senator and governor of Cilicia and of Dalmatia. Dio received a good education, and then apparently accompanied his father to Cilicia. After the death of his father, he went to Rome in about 180 CE. He had to have attained the age of 25 by this time and gained entry to the Senate as, when writing from a senatorial perspective about Commodus, he says, λέγω δὲ ταῦτά τε καὶ τὰ λοιπὰ οὐκ ἐξ ἀλλοτρίας ἔτι παραδόσεως ἀλλ' ἐξ οἰκείας ἤδη τηρήσεως (I state these and subsequent facts, not, as hitherto, on the authority of others' reports, but from my own observation).¹ From Pertinax (193 CE) he received the praetorship, assuming office the following year under Septimius Severus (193-211 CE). Shortly after Severus' accession, Dio produced a little book on dreams and prodigies, all of which foretold the emperor's greatness, and this naturally enough was received with great favour, with Severus writing a long epistle of thanks to Dio. The night following the receipt of this letter, Dio dreamt that he was now called upon to write the history of his own time. Having already collected

¹ Dio 73,4.2.

much contemporary material during Commodus' reign, Dio commenced with his principate. Once again his efforts met with approbation by Severus. Such approval encouraged Dio to write a history of Rome from foundation to the present. Dio's hopes for political advancement from an emperor who initially seemed so favourably disposed to him were not to be realized. Deterioration of the relationship may be attributed to Severus' change of attitude regarding Commodus. At the beginning of his reign, Severus had hated Commodus, but in the latter part he began to admire the tyrant. Consequently the work on Commodus that Dio had produced could no longer be tolerated. Dio circumspectly withdrew from public life for the last years of Severus' reign and lived in semi-retirement on his estate in Capua, gathering and collating the material for his history, a task which reportedly occupied twelve years. A further ten were required for the actual composition of the work.

In 216, during the reign of Caracalla (211-217 CE), Dio, as a senator, was called upon to accompany the emperor to Nicomedeia, but was not an eye-witness of other events in Asia or Egypt. In about 216 CE, Macrinus (217-218 CE), the only Roman emperor who was not a senator, gave him the position of *curator ad corrigendum statum civitatum* over Pergamum and Smyrna, a post which he retained for about three years, receiving continuance of it under Elagabalus (218-222 CE). In his history, he mentions having been a consul. He probably received this office shortly after the expiration of the curatorship. Following his year as consul, he received the proconsulship of Africa. On returning to Italy, he was sent out in 266 CE as governor first to Dalmatia, then, the following year, to Upper Pannonia. While in Pannonia, Dio enforced strict discipline amongst his troops and on his return to Rome, fearing that he would turn his attention to them, the Praetorians petitioned the emperor, now

Alexander Severus (222-235 CE), for Dio's death. Not only did Severus reject their demands, but in 229 he conferred a second consulship on Dio, with himself as his colleague. Given the constant enmity of the Praetorians, Dio was unable to feel comfortable in Rome and so spent much of his consulship outside of the city. Although he returned to the city after the expiration of his term of office, the precariousness of his life there did not suit him and shortly, on the pretext of a foot ailment, he obtained from the emperor permission to retire to his native city of Nicaea. He must have been, by this time, well advanced in years. He completed his history and died at some unknown date. As far as his family is concerned, we can conjecture from his work that he had a large number of children.

Dio's first work, the book of portents and prodigies relating to Severus is unfortunately lost. Part of the Roman History ('Ρωμαϊκὴ ἱστορία or 'Ρωμαϊκά) has survived. This originally consisted of eighty books, beginning with the landing in Italy of the refugee from Troy, Aeneas, and ending with 229 CE, the year of Dio's second consulship. Covering, then, nearly one thousand years of Italian history, the work was divided into three main parts. The first part concerned the republic. Documentation of the period was readily available, though Dio acknowledges that the truth about events and participants in them may be coloured by individual motivations of different writers. The second part begins with the establishment of the empire and ends with the death of M. Aurelius. This was a time when actions were kept secret and concealed. Reports made public were to be treated with suspicion and distrust because those in power let known only what they wanted. The third section, which opens with Commodus, deals with events and personalities about which he can write as an eye-witness. Dio is less than complimentary about what is to follow: ἀπὸ χρυσῆς τε βασιλείας ἐς σιδηρᾶν

καὶ κατιωμένην τῶν τε πραγμάτων τοῖς τότε Ῥωμαίοις καὶ ἡμῖν νῦν
καταπεσούσης τῆς ἱστορίας (our history now descends from a kingdom of gold to
one of iron and rust, as affairs did for the Romans of that day).²

Dio opens his history with the claim of having read almost everything on every
period of Roman history written by anybody. For this declaration to bear any weight
at all, he ought to have been acquainted with the *Annales Maximi* as well as, for
example, the work of Livy. Despite the loss of a large portion of Dio's work, what
remains is certainly sufficient to ascertain his worth as an historian. He took pains to
present as accurate a picture as possible, including even minutiae on the grounds of
their frequent importance. At one point, after recalling a relatively trivial incident
involving Commodus, he writes, καὶ μή μὲ κηλιδοῦν τὸν τῆς ἱστορίας ὄγκον, ὅτι
καὶ τὰ τοιαῦτα συγγράφω, νομίση (let no one feel that I am sullyng the dignity of
history by recording such occurrences).³ Even so, as Cary⁴ notes in his introduction
to the Loeb edition, "unfortunately the value of his history is greatly diminished for us
as the result of his blind devotion to ... theories governing historical writing in his day
...[one being that] the historian was never to forget that he was at the same time a
rhetorician; if the bare facts were lacking in effectiveness, they could be adorned,
modified, or variously combined in the interest of a more dramatic presentation."

Even with such flaws, the history of Dio was found to be a suitable work for
Zonaras to deploy when writing the portion of his *Annals* relating to Roman history.
Joannes Zonaras was a twelfth century Byzantine historian and theologian who

² Dio 72,36.4.

³ Dio, 73,18.3.

⁴ CARY (1970), p. xv.

undertook the writing of a history from the Creation to the death of the emperor Alexis I in 1118 CE. He frequently used the exact words of the authors whom he consulted and the first twenty books of Djo exist only in Zonaras' epitome.

2. Prodigious Material

1. C218 and C217

Text:

ZONARAS (epitomizing CASSIUS DIO), 8.22:

Οὕτω μὲν οὖν καὶ διὰ ταῦτα οἱ τε Ῥωμαῖοι καὶ οἱ Καρχηδόνιοι τὸ δεύτερον ἐπολέμησαν. καὶ τὸ δαιμόνιον τὰ γενησόμενα προεσήμηνεν.

1. ἐν γὰρ τῇ Ῥώμῃ ἀνθρωπίνως ἐλάλησε βοῦς
2. καὶ ἕτερος βοῦς ἐν τῇ τῶν Ῥωμαίων πανηγύρει ἐξ οἰκίας εἰς τὸ Τίβεριν ἑαυτὸν ἔρριψε καὶ ἐφθάρη
3. κεραυνοὶ πολλοὶ ἐφέροντο
4. καὶ αἶμα ἐξ ἀγαλμάτων ὥφθη
5. τὸ δὲ αἶμα ἐξ ἀσπίδος στρατιώτου ἐρρύη
6. ἑτέρου τε ξίφος ἐξ αὐτοῦ τοῦ στρατοπέδου λύκος ἤρπασε

τῷ δ' Ἀννίβᾳ θηρία πολλὰ καὶ ἄγνωστα τὸν Ἰβηρα διαβαίνοντι προκαθηγήσατο, καὶ ὄψις ὀνείρου ἐφάνη.

Translation:

In these circumstances and for these reasons, the Romans and the Carthaginians were to war for the second time, and the divine power indicated what was going to occur.

1. at Rome an ox had spoken with a human voice
2. another at the *Ludi Romani* hurled itself from a house into the Tiber and perished
3. many thunderbolts fell
4. in one case, blood was seen to flow from statues
5. in another, from the shield of a soldier
6. a wolf snatched the sword of another soldier from the camp itself

In the case of Hannibal, many unknown animals went in front of him, leading the way as he was crossing the Ebro and a vision appeared to him in a dream.

Comments:

It is impossible to tell whether or not Zonaras has selected from a larger group of prodigies in Cassius Dio, whether or not he has combined separate clusters in Dio into a single set, and to what extent he may have modified and/or garbled Dio's wording.

Z/CD2 is the counterpart of Livy C218,2 with the Zonaras/Dio version adding the detail that the ox plunged to its fate during the *Ludi Romani*. Preceding Livy C218,2 is a prodigy involving the precocious speech of a six-month old child. It is difficult to resist suspicion that Z/CD1 is the counterpart of Livy C218,1 and that, influenced by the item that follows, Zonaras or, conceivably, Dio himself was seduced into converting the talking baby into a talking ox. Z/CD6 is the counterpart of Livy

C218,10 with ἐξ αὐτοῦ τοῦ στρατοπέδου (the sword of another soldier) not precisely in correspondence with *vigili... ex vagina*. Possibly Zonaras has modified Dio's original words. Z/CD5 is the counterpart of Livy C217,4 with one shield instead of two. Z/CD4 will be the counterpart of Livy C217,16 if, as seems likely, Zonaras, or possibly Cassius Dio, has been influenced by the juxtaposed Z/CD5 to convert a conventional sweat into a bloody one. The remaining Z/CD3 could be the counterpart of either Livy C218,4 or C217,5, or both.

Although each Zonaras/Cassius Dio item has a Livian counterpart, ἐν τῇ τῶν Ῥωμαίων πανηγύρει at Z/CD2, which cannot but be authentic, rules out Livy's having been Cassius Dio's source. My inclination is to attribute to Cassius Dio direct, independent use of the *Annales Maximi* in assembling his prodigial material which for the years C218 and C217 has suffered considerable pruning and garbling at the hands of Zonaras. It follows that Livy who also made direct use of the *Annales Maximi* has failed to reproduce an important detail in respect of C218,2.

2. C215

Text:

ZONARAS (*epitomizing CASSIUS DIO*), 9.3:

ὑπατοι δὲ ὁ τε Γράκχος ὁ ἱππαρχος καὶ Ποστούμιος Ἀλβῖνος ἠρέθησαν. καὶ ὁ μὲν Ἀλβῖνος μετὰ παντὸς τοῦ στρατοῦ ὑπὸ τῶν Βουρίων ἐφθάρη, δι' ὅρους

ὕλῳδους πορευόμενος καὶ ἐνεδρευθεὶς. οὐ τὴν κεφαλὴν ἀποτεμόντες οἱ βάρβαροι καὶ ἐκκαθάραντες καὶ περιχρυσώσαντες πρὸς τὰ ἱερὰ αὐτῶν ἀντὶ φιάλης ἐκέχρηντο. γέγονασι δὲ τότε τέρατα.

1. βοῦς ... ἵππον ἔτεκε
2. καὶ ἐν θαλάσῃ ἐξέλαμψε πῦρ

Translation:

The consuls chosen were Gracchus, previously master of the horse, and Postumius Albinus. Albinus was destroyed with his entire army by the Boii after being ambushed as he was crossing a wooded mountain. The barbarians cut off his head, cleaned out the contents, gilded it and then used it for a bowl in their sacred rites. Portents occurred at that time.

1. a cow gave birth to a horse
2. fire shone out at sea

Comment:

Again Zonaras may have abridged Cassius Dio's list. Livy reports four prodigies for the year concerned. Z/CD1 is the counterpart of Livy C215.2; Z/CD2 that of Livy C215.1.

3. C206

Text:

CASSIUS DIO, 17.59-60 (P. 1 (p. 458sq.):

Οὐ μέντοι καὶ ἐπράχθη τι μνήμης ἄξιον οὐθ' ὑπ' ἐκείνων οὔτε ὑπ' ἄλλων τινῶν, οὔτε τότε οὔτε ἐν τῷ ὑστέρω ἔτει ἐν ᾧ Λούκιός τε Οὐετούριος καὶ Καϊκίλιος Μέτελλος ὑπάτευσαν, καίπερ σημείων πολλῶν καὶ δυσχερῶν τοῖς Ῥωμαίοις γενομένων.

1. ἀρνίον τε γὰρ ἀρρενόθηλυ ἐγεννήθη
2. καὶ σμήνος ὃ ... ον ὤφθη
3. κατὰ τε τῶν θυρῶν τοῦ ναοῦ τοῦ Διὸς τοῦ Καπιτωλίου ὄφεις δύο κατώλισθον
4. καὶ ἰδρῶτι πολλῷ αἱ τε θύραι τοῦ Ποσειδωνίου καὶ ὁ βωμὸς ἐρρύη
5. ἐν τε Ἀντίῳ στάχυνες αἱματώδεις θερίζουσί τισιν ὤφθησαν
6. καὶ ἐτέρωθι γυνὴ κέρατα ἔχουσα ἀνεφάνη
7. κεραυνοὶ τε ἐς ναοὺς πολλοί, ...

Translation:

Nothing worth recording was achieved by them or by any others, either then or in the following year, when Lucius Veturius and Caecilius Metellus became consuls; despite the fact that many portents of ill omen for the Romans had occurred.

1. a hermaphrodite lamb was born
2. a swarm of ... was seen
3. two snakes slid under the doors of the temple of Capitoline Jupiter
4. the doors and the altar of the temple of Neptune ran with much sweat
5. at Antium bloody ears of corn were observed by some harvesters

6. elsewhere a woman with horns appeared
7. many lightning strikes on temples

Comment:

A small part of the 17th book of Cassius Dio's history survives on five parchment leaves used in effecting repair on an MS (Parisinus 1397A) of the geographer Strabo. The MS of Dio to which the leaves belonged was probably produced in the eleventh century CE. The patching of the Strabo MS took place a few centuries later. All five of the leaves are damaged and consequently the text which they preserve is punctuated with minor and major lacunae. The text's content is part of Dio's account of events of C207-C200.

Included in the part of Dio's narrative, partly preserved in the so-called Paris fragment, is a list of prodigies processed and expiated in C206. Unfortunately there is a major break in the portion of text concerned that commences within the list's seventh item. It is consequently impossible to be sure whether further *prodigia* followed. In addition, there is a minor break in the text within the second item.

Dio's list of prodigies dealt with in C206 contained at least seven items. Its Livian counterpart whose text is complete contains eleven. Three of the Livian items, C206,1,2 and 11, all of which involve lightning strikes on religious sanctuaries could collectively correspond with CD7 where Dio may or may not have gone on to spell out details of location and cult affiliation. CD4 corresponds precisely with Livy C206,4 and CD1 with Livy C206,6 with Dio omitting the place, Caere, in which the sexually anomalous lamb was born.

Two further items in Dio have Livian counterparts but correspondence is not complete. At Livy C206,3 two serpents slide under the doors of the temple of Jupiter at Satricum. At CD3 serpents slide under the doors of the temple of Jupiter on the Capitoline at Rome. The explanation for the difference may be that having separated two Satricum *prodigia* that were juxtaposed in the *Annales Maximi* and taken over as such at Livy C206,2 and 3, Dio lost sight of the true location and went on to link the prodigy with the most significant of Jupiter's temples and the one with which he was most familiar.

At Livy C206,10 an altar of Neptune in the circus of Flaminius streams with copious sweat. At CD6 the doors and altar of a temple of Neptune stream with copious sweat. The temple's location is not spelled out but the natural inference is that it was at Rome. The discrepancy between Livy's and Dio's versions is disconcerting. It is unlikely that Livy's representation with its precise and non-sanctuarial location of the altar is wrong and it is consequently incumbent to account for Dio's heterodoxy. Possibly Dio had no clear conception of the nature of the *circus Flaminius* which no longer existed in his own day. Taking it for a district associated with a structure he inferred that it contained a Neptune temple, the obvious location for an altar connected with the god. The addition of *θύραι*, doors, to the altar still remains to be explained. For better or worse, Dio's creativity seems to be the only recourse.

Livy C206,5.7.8 and 9 have no apparent counterparts in what remains to Dio's list. It is possible, however, that an item or items corresponding to one, some or all of them were recorded in Dio's text after the interruption of CD7.

CD6 has no equivalent in Livy. It follows that Livy either carelessly or deliberately left out an item from the archetypal list of C206 prodigies in the *Annales*

Maximi. If the omission was calculated, Livy's excision could have been influenced by the apparition's perceived subjectivity and triviality. The prodigy lacked not only credibility but also *dignitas*.

CD2 raises a plethora of problems. As the defective text stands, a swarm of something likely to have begun with the letter *hypsilon* was observed somewhere. *σμήνος* is a rather exclusive word which connotes either a beehive or a swarm of bees (*μέλισσαι/μέλιτται*), wasps (*σφήκες*) or hornets (*άνθρηναι*). None of these commences with *hypsilon*. Given the difficulty it becomes tempting to consider the possibility that *σμήνος* is corrupt. If so, it becomes conceivable that CD2 corresponds with one of the Livian C206 items without an apparent CD correlate. If, on the other hand, *σμήνος* is correct, then Livy left out at least two C206 prodigies from the original list in the *Annales Maximi*. In the absence of clear indication as to the phenomenon involved, speculation on the motivation of Livy's omission is precluded.

F. The bearing of non-Livian prodigial material on the completeness of the prodigy lists in Livy

It was suggested earlier that the almost reverential seriousness with which Livy took prodigies that struck him as genuine indicators of a breach in the *pax deorum* should have motivated him to record all but the most palpably banal, implausible and non-authentic items from the ultimate annual prodigial lists recorded in the *Annales Maximi*. The fact that on occasion (C218 and C217 are two cases in point), Livy includes prodigies which he personally regarded as trivial or reflective of credulity tends to lend support to diagnosis of predisposition to something at least approximate to completeness.

If extensive lists of prodigies for several years in sources other than Livy were available, a near conclusive abjective assessment of Livian comprehensiveness or the lack thereof would become possible. The fewer the prodigies in other sources without Livian counterparts, the more certain Livian non-exclusivity would become. Unfortunately, the non-Livian prodigial material at our disposal is somewhat jejune. Despite the dearth it is very probably not without significance that there is only a single conclusive example (CD C206,6) of Livy's having omitted from one of his prodigy lists an item that featured in the master record of the pontifical chronicles. The item concerned is quite likely one that Livy would have regarded as absurd and incompatible with objective status.

In the eighth book of his *Punica*, the first century CE poet, Silius Italicus, begins to set the stage for his account of the battle of Cannae. Rome's catastrophic defeat is foreshadowed by a long list of sensational prodigies (20 in all) that occupies lines 622-645. Suffice it to say that there is no reason whatsoever to believe that Silius draws upon authentic prodigial material ultimately derived from the *Annales Maximi* and ignored by Livy. Like a similarly lurid catalogue of portents, associated with Julius Caesar's invasion of Italy in 49 BCE, at Lucan, *Pharsalia* 1.525-582, Silius' collection of phenomena is simply a dramatic device and transparently fictive. Included, for example, is an eruption of Vesuvius which, prior to the paroxysm of 79 CE, had been dormant for many centuries.

Data Assemblages

A. Preface

The data banks that follow are intended to facilitate exploitation for scientific and other purposes of the prodigial records, assembled in Part 3 of the main body of the thesis, for the consular years C218-C167 inclusive.

The first item (B) consists of a gazetteer accompanied by a map, indicating the general whereabouts of regions of ancient Roman Italy and the precise latitudinal and longitudinal co-ordinates of all discrete population centres, large and small, in the peninsula from which accepted and processed prodigies were reported.

The second item (C) shows the correlation of places which reported prodigies accepted and processed with frequency of reportage. It emerges that some locales, such as Lanuvium, were, so to speak, habitual furnishers of prodigial reports while others, even if no less populous and significant, were by and large silent.

The third item (D) comprises a cluster of concordances that display correlation of varieties of phenomena, astronomical, geophysical and so forth, with consular years and places of purported occurrence.

The fourth item (E) reveals the number of prodigies *processed* within each consular year and contributes towards correlation of these consular annual frequencies with the years of office of successive *pontifices maximi* and with attested changes of personnel in the pontifical college as a whole, in the college of the augurs, and in the decemvirate *sacris faciundis*.

B. Gazetteer

Aefula (Monte Sant'Angelo)	41°56'N 12°49'E
Alba (Castel Gandolfo)	41°45'N 12°38'E
Alban Mount (Monte Cavo)	41°45'N 12°43'E
Amiternum	42°20'N 13°24'E
Anagnia	41°44'N 13°10'E
Antium (Anzio)	41°27'N 12°38'E
Ardea	41°36'N 12°33'E
Aricia (Ariccia)	41°43'N 12°41'E
Ariminum (Rimini)	44°03'N 12°34'E
Arpi	41°34'N 15°32'E
Arpinum (Arpino)	41°38'N 13°37'E
Arretium (Arezzo)	43°28'N 11°53'E
Atella	40°56'N 14°13'E
Auximum (Osimo)	43°28'N 13°29'E
Caere (Cerveteri)	41°59'N 12°06'E
Caieta	41°16'N 13°32'E
Calatia	41°03'N 14°22'E
Cales	41°12'N 14°08'E
Capena	42°19'N 12°24'E
Capua	41°06'N 14°13'E
Casinum (Cassino)	41°29'N 13°50'E
Compsa	40°49'N 15°44'E
Crustumerium	42°00'N 12°31'E
Cumae	40°47'N 14°05'E
Eretum	42°08'N 12°37'E
Falerii (Civita Castellana)	42°17'N 12°25'E
Formiae (Formia)	41°16'N 13°37'E
Fregellae (Ceprano)	41°33'N 13°32'E
Fregenae	41°52'N 12°12'E
Frusino (Frosinone)	41°38'N 13°22'E
Gabii (Osteria dell Osa)	41°52'N 12°45'E
Graviscae	42°13'N 11°42'E
Hadria (Atri)	42°35'N 13°59'E
Lanuvium (Lanuvio)	41°40'N 12°42'E
Mantua	45°10'N 10°47'E
Minervium (Squillace)	38°46'N 16°31'E
Minturnae (Minturno)	41°16'N 13°45'E
Nursia (Norcia)	42°47'N 13°05'E
Ostia	41°46'N 12°18'E
Praeneste (Palestrina)	41°50'N 12°54'E
Privernum	41°29'N 13°12'E
Puteoli (Pozzuoli)	40°49'N 14°07'E

Reate (Rieti)	42°24'N 12°51'E
Remens	Exact location unknown but near Veii
Rome	41°53'N 12°30'E
Satricum (Conca)	41°28'N 12°45'E
Saturnia	42°37'N 11°32'E
Setia (Sezze)	41°29'N 13°04'E
Sinuessa	41°07'N 13°53'E
Spoletum (Spoleto)	42°44'N 12°44'E
Suessa Aurunca	41°14'N 13°56'E
Suessula (Cancello)	41°00'N 14°26'E
Syracuse	37°04'N 15°18'E
Tarquinius (Tarquinia)	42°23'N 11°45'E
Tarracina (Terracina)	41°17'N 13°15'E
Tusculum (Frascati)	41°48'N 12°41'E
Veii (Veio)	42°02'N 12°24'E
Velitrae (Velletri)	41°41'N 12°47'E
Volsinii (Bolsena)	42°38'N 11°59'E
Volturnum	41°02'N 13°57'E

ITALY

English Miles
0 10 25 50 75 100

- ◻ Ostia.....Roman colony
- ◻ Paestum.....Latin colony
- Locri.....other towns
- Approximate limits of Roman citizen territory in 241 B.C.



C. Prodigy Place and Number

Location	Number of Prodigies
Aefula	1
ager Pomptinus	1
ager Romanus	3
Alba	2
Alban mount	3
Amiternum	4
Anagnia	8
Antium	4
Apulia	1
Ardea	1
Aricia	5
Ariminum	1
Arpi	2
Arpinum	1
Arretium	2
Atella	1
Auximum	2
Bruttii	2
Caere	8
Caieta	2
Calatia	3
Cales	1
Campania	2
Capena	5
Capua	10
Casinum	1
Compsa	1
Crustumerium	2
Cumae	5
Eretum	1
Falerii	2
Formiae	3
Fregellae	3
Fregenae	1
Frusino	5
Gabii	2
Gaul	2
Graviscae	1
Hadria	2
Lanuvium	14

Lucania	2
Macedonia	1
Mantua	1
Maricia	1
Marrucini	1
Minervium	1
Minturnae	5
Nar	1
Nursia	2
Ostia	3
Picenum	4
Praeneste	2
Privernum	4
Puteoli	3
Reate	7
Remens	1
Rome	56
Sabini	4
Sardinia	5
Satricum	2
Saturnia	1
Setia	1
Sicily	3
Sinuessa	8
Spoletum	1
Subertanus	1
Suessa	1
Suessa Aurunca	1
Suessula	1
Syracuse	1
Tarquinius	1
Tarracina	6
Tusculum	3
Umbria	1
Veii	4
Veliternum	2
Velitrae	2
Volsinii	1
Volturnum	1
Unspecified Location	15
Widespread	2

D. Phenomena, Consular Years and Places

ARTEFACTS

Category	Year/Prodigy No.	Location
altars	C206,10	Rome
edifaces	C199,5	Velitrae
	C193,3	Rome
fire of Vesta	C206,12	Rome
	C178,1	Rome
lots	C218,9	Caere
	C217,15	Falerii
shields	C217,4	Sardinia
spears	C218,5	Lanuvium
	C217,1	Sicily
	C217,2	Sardinia
	C214,11	Praeneste
	C196,3	Capena
	C181,2	Rome
	(C169,10	Fregellae)
statues	C217,16	Rome
	C216,3	Sabini
	C215,3	Lanuvium
	C211,1	Rome
	C210,7	Capena
	C209,6	Rome
	C194,3	Rome
	C181,3	Lanuvium
	C179,8	UL
	C169,5	Cumae

BIOSPHERE

Category	Year/Prodigy No.	Location
Apparitions:		
aural	C213,4 C204,6 C200,3	Compsa Lanuvium Lanuvium
visual	C218,7 C214,17 C213,3	Amiternum Rome Tarracina
birds	C218,6 C214,1 C210,4 C209,8 C208,5 C203,1 C177,7	Lanuvium Lanuvium Anagnia Privernum Caere Rome Crustumerium
domestic animals:		
cattle	C218,2 C215,2 C177,9	Rome Sinuessa Syracuse
talking cattle	C214,12 C209,7 C206,9 C192,5 C177,8 C174,9 C169,2	Sicily Privernum ager Romanus UL Campania Campania Anagnia
donkeys	C172,3	Calatia
fowl	C217,20 C199,7	UL Bruttii
goats	C217,19 C192,1	UL Picenum
horses	C203,4 C200,8 C199,6	Reate Lucania Bruttii
lambs	C210,1 C206,6 C200,6 C198,7 C197,4	Tusculum Caere Frusino Suessa Aurunca Aefula
mules	C211,6 C190,5	Reate Reate

	C182,2	Reate
	C179,4	Reate
pigs	C210,6	Tarquinius
	C206,5	Caere
	C200,7	Sinuessa
	C198,8	Sinuessa
fish	C173,5	Gaul
humans:		
deaths	C180,1	UL
deformities	C209,11	Sinuessa
	C194,5	Ariminum
	C194,6	Picenum
	C192,2	Arretium
	C177,2	ager Romanus
	C174,2	Veii
	C174,3	Sinuessa
	C174,4	Auximum
hermaphrodites	C214,14	Spoletum
	C209,9	Sinuessa
	C207,8	Frusino
	C200,4	Sabini
	C200,5	Sabini
	C186,4	Umbria
infans	C218,1	Rome
	C214,13	Marrucini
insects:		
bees	C214,16	Rome
	C208,3	Casinum
locusts	C203,3	Capua
	C173,4	ager Pomptinus
wasps	C193,6	Capua
pestilence	C181,4	widespread
	C174,1	widespread
plants:		
cultivated	C217,13	Antium
	C206,4	Antium
wild	C214,2	Apulia
	C199,8	Macedonia
	C169,7	Rome
	C169,9	Rome
reptiles	C210,5	Tarracina
	C206,3	Satricum
	C177,3	ager Romanus
	C174,7	Lanuvium
	C174,8	Caere
	C169,6	Rome
sacrifices	C203,8	Rome

	C176,1	Rome
Vestals	C216,6	Rome
wild animals:		
mice	C208,2 C203,2 C179,7	Cumae Antium UL
wolves	C218,10 C207,6 C197,5 C197,6 C196,4 C177,6	Gaul Capua Formiae Rome Rome Rome
wool	C217,18 C173,2	Capua Privernum

PHENOMENA OF THE EARTH

Category	Year/Prodigy No.	Location
earthquakes	C212,5	Reate
	C193,1	UL
	C179,5	UL
fire	C217,3	Sardinia
	C215,1	UL
	C210,3	Anagnia
islands	C183,3	Sicily
subsidence	C203,7	Arpinum
	C202,3	Velitrae
	C198,6	Velitrae
water:		
blood	C217,11	Caere
	G217,12	Caere
	C216,4	Caere
	C214,3	Mantua
	C213,5	Amiternum
	C211,4	Subertanus
	C209,5	Alba
	C208,6	Volsinii
	C207,5	Minturnae
	C167,5	Calatia
flood	C214,6	Rome
milk	C194,4	Nar

PHENOMENA OF THE SKY

Category	Year/Prodigy No.	Location
aerial phenomena	C214,15 C173,1	Hadria Lanuvium
eclipses	C217,6 C217,9 C202,1 C188,1	Sardinia Arpi Cumae UL
lightning:		
temple complexes	C218,4 C214,8 C213,2 C212,2 C211,1 C210,2 C209,1 C209,3 C208,1 C207,2 C207,9 C206,1 C206,2 C206,11 C199,2 C199,3 C199,4 C198,2 C198,3 C198,4 C197,1 C196,2 C191,3 C190,1 C186,3 C182,3 C179,2 C179,3 C176,2 C167,1	Rome (Hope) Rome (Vulcan) Aricia (Jupiter) Rome (not specified) Rome (Concord) Rome (Jupiter) Alban Mount (Jupiter) Capua (Fortune) Capua (Fortune, Mars) Minturnae (Jupiter) Rome (Juno) Tarracina (Jupiter) Satricum (Mater Matuta) Rome (Ceres, Salus, Quirinus) Formiae (Jupiter) Ostia (Jupiter) Velitrae (Apollo, Sangus) Lanuvium (Jupiter) Ardea (Hercules) Capua ("White") Rome (Vulcan, Summanus) Capena (Feronia) Minturnae (Juno) Rome (Jupiter) Rome (Ops) Caieta (Apollo) Tarracina (Jupiter) Capua ("White") Gabii (Apollo) Rome (Penates)

walls and gates	C214,10	Gabii
	C213,1	Caieta
	C212,3	Suessula
	C212,4	Cumae
	C211,2	Anagnia
	C211,3	Fregellae
	C209,3	Capua
	C209,4	Sinuessa
	C208,4	Ostia
	C207,4	Atella
	C204,4	Tarracina
	C204,5	Anagnia
	C202,5	Frusino
	C199,1	Suessa
	C198,4	Capua
	C197,2	Fregenae
	C193,2	Rome
	C192,4	Formiae
	C190,2	Puteoli
	C179,3	Capua
	C176,3	Gravisciae
	C167,2	Minervium
individuals	C217,5	Sardinia
	C216,5	Rome
	C212,3	Suessula
	C196,1	Sabini
	C190,3	Nursia
	C190,2	Puteoli
other	C214,7	Rome
	C214,9	Sabini
	C209,2	Ostia
	C207,3	Maricia
	C202,4	Aricia
	C198,1	Veii
	C198,2	Lanuvium
	C191,3	Minturnae
	C191,4	Volturnum
	C177,4	Capua
	C177,5	Puteoli
	C176,2	Gabii
	C172,1	Rome
	C172,4	Calatia
<hr/>		
luminescence:		
nocturnal	C217,14	Falerii
	C217,17	Capua
	C206,8	Fregellae
	C204,2	UL
	C197,3	Frusino

diurnal	C174,5	Rome
unknown	C218,3	Rome
	C200,1	Lucania
	C198,5	Arretium
	C169,3	Minturnae
meteors/meteorites	C217,7	Praeneste
	C217,8	Arpi
	C204,3	Setia
	C203,5	Anagnia
	C176,1	Tusculum
	C174,6	UL
	C169,1	Anagnia
	C167,4	Lanuvium
moon	C217,10	Capena
strange precipitations:		
blood	C214,5	Rome
	C194,1	Rome (<i>guttae</i>)
	C183,1	Rome
	C183,2	Rome
	C181,1	Rome
	C172,2	Saturnia
	C169,8	Rome
chalk	C214,4	Cales
earth	C194,2	Rome
	C192,3	Amiternum
	C190,4	Tusculum
	C172,5	Auximum
	C167,3	Anagnia
milk	C209,10	Sinuessa
stones	C218,8	Picenum
	C216,1	Rome
	C216,2	Aricia
	C215,4	Lanuvium
	C212,1	Alban mount
	C211,5	Eretum
	C207,1	Veii
	C207,7	Rome
	C205,1	UL
	C204,7	UL
	C202,2	Cumae
	C202,6	Rome
	C194,7	Hadria
	C193,3	Aricia
	C193,4	Lanuvium
	C193,5	Rome
	C191,1	Tarracina
	C191,2	Amiternum

	C188,2 C186,1 C177,1 C173,3 C169,4 C169,11 C169,12	Rome Picenum Crustumerium Remens Reate Rome Veii
storms	C182,1 C179,1	Rome Alban Mount
sun	C212,6 C206,7 C204,1 C203,6 C200,2 C174,5	UL Alba UL Frusino Privernum Rome
inexplicable phenomena	C190,3	Nursia

E. Prodigy Numbers, Consular Years and Religious Authorities from 218-167 BCE

† indicates either death of office holder or re-assignment or retirement of office holder.
Superscript numbers refer to the entries found in *RE*.

C. Years	Consuls	No. of Prodigies	Pontifex Maximus	Priests	Augurs	Xviri Sacris Faciundis
Priests whose year of incumbency is prior to 218, or unknown or uncertain but presumably or possibly prior to 218.			L. Cornelius Lentulus ²¹¹	Q. Aelius Paetus ¹⁰³ P. Scantinius L. Aemilius Paullus ¹¹⁸ L. Cantilius T. Manlius Torquatus ⁸² P. Licinius Crassus Dives ⁶⁹ M. Aemilius Papus M. Aemilius Regillus M. Marcius C. Claudius C. Sempronius Tuditanus C. Papirius Maso ⁵⁷ T. Otacilius Crassus M. Pomponius Matho ¹⁰	M. Claudius Marcellus ²²⁰ Sp. Postumius Albinus ²⁵ C. Atilius Serranus ⁶² P. Furius Philus ⁸⁰ M. Pomponius Matho ⁶ Cn. Cornelius Lentulus ¹⁷⁶ Q. Fabius Maximus ¹¹⁶ M. Aemilius Lepidus ⁶⁶ Sp. Carvilius Maximus T. Otacilius Crassus	M'. Aemilius Numida ¹⁰³ C. Servilius Geminus ⁶⁰ C. Papirius Maso ⁵⁸ M. Livius Salinator ³² Ti. Sempronius Longus ⁶⁶ Q. Mucius Scaevola ¹⁹
218	P. Cornelius Scipio ³³⁰ Ti. Sempronius Longus ⁶⁶	10	L. Cornelius Lentulus ²¹¹			
217	Cn. Servius Geminus ⁶¹ C. Flaminius ²	20				

C. Years	Consuls	No. of Prodigies	Pontifex Maximus	Priests	Augurs	Xviri Sacris Faciundis
216	L. Aemilius Paullus ¹¹⁸ C. Terentius Varro ⁸³	6		P. Scantinius † L. Aemilius Paullus ¹¹⁸ † Q. Aelius Paetus ¹⁰³ † Q. Caecilius Metellus ⁸¹ Q. Fabius Maximus ¹¹⁶ Q. Fulvius Flaccus ⁵⁹ [Livy 23.21.7] L. Cantilius ¹ † [Livy 22.57.3]	M. Aemilius Lepidus ⁶⁶ † [Livy 23.30.15]	
215	Ti. Sempronius Gracchus ⁵¹ Q. Fabius Maximus ¹¹⁶	4				
214	Q. Fabius Maximus ¹¹⁶ M. Claudius Marcellus ²²⁰	17				
213	Q. Fabius Maximus ¹⁰³ Ti. Sempronius Gracchus ⁵¹	5	L. Cornelius Lentulus ²¹¹ †	C. Papirius Maso ⁵⁷ † M. Cornelius Cethegus ⁹² Cn. Servilius Caepio ⁴⁴ [Livy 25.2.2]	P. Furius Philus † L. Quinctius Flaminius ⁴ [Livy 25.2.2]	C. Papirius Maso ⁵⁸ † L. Cornelius Lentulus [Livy 25.2.2]
212	Ap. Claudius Pulcher Q. Fulvius Flaccus ⁵⁹	6	P. Licinus Crassus Dives ⁶⁹ [Livy 25.5.2-4]			
211	P. Sulpicius Galba Cn. Fulvius Centumalus	6		M. Pomponius Matho ¹⁰ † C. Claudius † T. Otacilius Crassus ¹² † C. Livius Salinator ²⁹ [Livy 26.23.7-8]	Sp. Carvilius Maximus † T. Otacilius Crassus ¹² † M. Servilius Pulex Geminus ⁷⁸ [Livy 26.23.7-8]	M. Aemilius Numida † M. Aemilius Lepidus [Livy 26.23.7]
210	M. Valerius Laevinus M. Claudius Marcellus	7		M. Marcius † C. Servilius Geminus ⁶⁰ [Livy 27.6.15]	Ti. Sempronius Longus ⁶⁷ [Livy 27.6.15]	Ti. Sempronius Longus ⁶⁶ † Ti. Sempronius Longus [Livy 27.6.15]
209	Q. Fabius Maximus ¹¹⁶ Q. Fulvius Flaccus ⁵⁹	11		M. Aemilius Papus † C. Mamilius Atellus [Livy 27.8.1-3] C. Valerius Flaccus [Livy 27.8.4-10]		Q. Mucius Scaevola ¹⁹ † C. Laetorius [Livy 27.8.4]

C. Years	Consuls	No. of Prodigies	Pontifex Maximus	Priests	Augurs	Xviri Sacris Faciundis
208	M. Claudius Marcellus ²²⁰ T. Quinctius Crispinus	6		Cn. Cornelius Dolabella ¹³¹ [Livy 27.36.5]	M. Claudius Marcellus ²²⁰ † P. Aelius Paetus ¹⁰¹ [Livy 27.36.5]	
207	C. Claudius Nero M. Livius Salinator	9				
206	Q. Caecilius Metellus ⁸¹ L. Veturius Philo	11				
205	P. Cornelius Scipio ³³⁶ P. Licinius Crassus Dives ⁶⁹	1		M. Aemilius Regillus † [Livy 29.38.6]		
204	M. Cornelius Cethegus ⁹² P. Sempronius Tuditanus	7		Ti. Veturius Philo [Livy 29.38.6]	M. Pomponius Matho ⁵ † Ti. Sempronius Gracchus ⁵² [Livy 29.38.7]	M. Pomponius Matho ⁵ † M. Aurelius Cotta [Livy 29.38.7]
203	Cn. Servilius Caepio ⁴⁴ C. Servilius Geminus ⁶⁰	8		Q. Fabius Maximus ¹¹⁶ † Ser. Sulpicius Galba ⁵⁶ [Livy 30.26.10]	Q. Fabius Maximus ¹¹⁶ † Q. Fabius Maximus ¹⁰⁴ [Livy 30.26.7-10]	
202	Ti. Claudius Nero M. Servilius Pulex Geminus ⁷⁸	6		T. Manlius Torquatus ⁸² † C. Sulpicius Galba ⁴⁹ [Livy 30.39.6]		
201	Cn. Cornelius Lentulus P. Aelius Paetus	0				
200	P. Sulpicius Galba C. Aurelius Cotta	8				M. Aurelius Cotta † M. Acilius Glabrio ³⁵ [Livy 31.50.5]
199	L. Cornelius Lentulus P. Villius Tappulus	8		C. Sulpicius Galba † Ser. Sulpicius Galba ⁵⁶ † M. Aemilius Lepidus ⁶⁸ [Livy 32.7.15]		
198	T. Quinctius Flamininus Sex. Aelius Paetus	8		Cn. Cornelius Scipio Hispallus ³⁴⁶ [Livy 32.7.15]		

C. Years	Consuls	No. of Prodigies	Pontifex Maximus	Triests	Augurs	Xviri Sacris Faciundis
197	C. Cornelius Cethegus Q. Minucius Rufus	6				
196	L. Furius Purpureo M. Claudius Marcellus ²²²	4		C. Sempronius Tuditanus † M. Cornelius Cethegus ⁹² † M. Claudius Marcellus ²²² L. Valerius Flaccus ³⁵ [Livy 33.42.5]	Q. Fabius Maximus ¹⁰⁹ † [Livy 33.42.6]	
195	M. Porcius Cato L. Valerius Flaccus ³⁵	0			C. Claudius Pulcher ³⁰⁰ [Livy 33.44.3]	
194	P. Cornelius Scipio ³³⁶ Ti. Sempronius Longus ⁶⁷	7				
193	L. Cornelius Merula A. Minucius Thermus	6				
192	L. Quinctius Flamininus ⁴ Cn. Domitius Ahenobarbus ¹⁸	5			L. Aemilius Paullus ¹¹⁴ [CIL 1 ² .1]	
191	M. Acilius Glabrio ³⁵ P. Cornelius Scipio Nasica	4				
190	L. Cornelius Scipio C. Laelius	5		Q. Fabius Pictor ¹²⁷ [Livy 37.47.8]		
189	Cn. Manlius Vulso M. Fulvius Nobilior	0				
188	C. Livius Salinator ²⁹ M. Valerius Messalla ⁴⁰	2				
187	M. Aemilius Lepidus ⁶⁸ C. Flaminius	0				
186	Sp. Postumius Albinus ²⁵ Q. Marcius Philippus ⁷⁹	4				

C. Years	Consuls	No. of Prodigies	Pontifex Maximus	Priests	Augurs	Xviri Sacris Faciundis
185	Ap. Claudius Pulcher M. Sempronius Tuditanus ⁹⁵	0				
184	P. Claudius Pulcher L. Porcius Licinus	0			Cn. Cornelius Lentulus ¹⁷⁶ † Sp. Postumius Albinus ²⁵ [Livy 39.45.8]	
183	Q. Fabius Labeo ⁹¹ M. Claudius Marcellus ^{223/4}	3	P. Licinius Crassus Dives ⁶⁹ † C. Servilius Geminus ⁶⁰ [Livy 39.46.1]	M. Sempronius Tuditanus ⁹⁵ P. Licinius Crassus Dives ⁶⁹ † [Livy 39.46.1]		
182	L. Aemilius Paullus ¹¹⁴ Cn. Baebius Tamphilus	3				
181	P. Cornelius Cethegus M. Baebius Tamphilus	4				
180	A. Postumius Albinus C. Calpurnius Piso	1	M. Aemilius Lepidus ⁶⁸ [Livy 40.42.12]	C. Cornelius Dolabella ¹³¹ † C. Servilius Geminus ⁶⁰ † L. Valerius Flaccus ³⁵ † Q. Fabius Labeo ⁹¹ P. Cloelius Siculus Q. Fulvius Flaccus ⁶¹ [Livy 40.42.6, 11]	Sp. Postumius Albinus ²⁵ † P. Cornelius Scipio ³³¹ [Livy 40.41.13]	*C. Servilius Geminus † Q. Marcius Philippus [Livy 40.42.11-12]
179	L. Manlius Acidinus Fulvianus Q. Fulvius Flaccus ⁶¹	7				
178	M. Iunius Brutus A. Manlius Vulso	0				
177	C. Claudius Pulcher ³⁰⁰ Ti. Sempronius Gracchus ⁵³	9		M. Claudius Marcellus ²²² † M. Claudius Marcellus ²²⁵ [Livy 41.13.4]		

C. Years	Consuls	No. of Prodigies	Pontifex Maximus	Priests	Augurs	Xviri Sacris Faciundis
176	Cn. Cornelius Scipio Hispallus ³⁴⁶ Q. Petillius Spurius	3		Cn. Cornelius Scipio Hispallus ³⁴⁶ † L. Furius Philus ⁷⁷ [Livy 41.16.4]		
175	P. Mucius Scaevola M. Aemilius Lepidus ⁶⁸	0				
174	Sp. Postumius Albinus Q. Mucius Scaevola	9		Cn. Servilius Caepio ⁴⁴ † M. Sempronius Tuditanus ⁹⁵ † C. Sulpicius Galba ⁵⁰ Cn. Cornelius [Livy 41.21.8-9]	P. Aelius Paetus ¹⁰¹ † Ti. Sempronius Gracchus ⁵² † Ti. Sempronius Longus ⁶⁷ † T. Veturius Sempronianus ¹⁷ Q. Aelius Paetus ¹⁰⁴ [Livy 41.21.8-9]	Ti. Sempronius Longus ⁶⁷ † C. Sempronius Longus ⁶³ [Livy 41.21.8-9]
173	L. Postumius Albinus M. Popillius Laenas	5				L. Cornelius Lentulus † A. Postumius Albinus [Livy 42.10.6]
172	C. Popillius Laenas P. Aelius Ligus	5		Q. Fulvius Flaccus ⁶¹ † Cn. Domitius Ahenobarbus ¹⁹ [Livy 42.28.10-13]		L. Aemilius Papus † M. Valerius Messalla ⁴⁰ [Livy 42.28.10-13]
171	P. Licinius Crassus C. Cassius Longinus	0				
170	A. Hostilius Mancinus A. Atilius Serranus	0		L. Furius Philus ⁷⁷ † C. Livius Salinator ²⁹ † T. Manlius Torquatus ⁸³ M. Servilius [Livy 43.11.13]	L. Quinctius Flaminius ⁴ † [Livy 43.11.13]	
169	Q. Marcius Philippus ⁷⁹ Cn. Servilius Caepio	10		P. Quinctilius Varus † [Livy 44.18.7]		M. Claudius Marcellus ²²³ † Cn. Octavius ¹⁷ [Livy 44.18.7]
168	L. Aemilius Paullus ¹¹⁴ C. Licinius Crassus	0		L. Postumius Albinus [Livy 45.15.10]		
167	Q. Aelius Paetus M. Iunius Pennus	5		Q. Fabius Pictor ¹²⁷ † [Livy 45.44.3]	C. Claudius Pulcher ³⁰⁰ † T. Quinctius Flaminius ⁶ [Livy 45.44.3]	

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