

## ΔΗΛΟΣ ἘΚΙΝῆΘΗ: AN ‘IMAGINARY EARTHQUAKE’ ON DELOS IN HERODOTUS AND THUCYDIDES

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**Abstract:** Thucydides’ and Herodotus’ comments on a portentous (and unique) Delian earthquake contain the same phrase, but date the event almost 60 years apart and mutually rule out each other’s datings. Two additional problems in these passages – geology demonstrates that Delos has never in fact had an earthquake of any significance and κινεῖν is not the word for an earthquake – point to an explanation for the historians’ treatment. They are based on the Delphic oracle quoted by Herodotus which promised to ‘move unmoved Delos’, a paradox based on the island’s mythical transition from floating to fixed (Pindar), but liable to confusion with its equally well-known aseismicity. Normally κινεῖν τὰ ἀκίνητα is used of interfering with religious sites; but the oracle’s prediction was interpreted as an earthquake, that was assumed to have occurred in due course (although it had not). Both historians accepted the interpretation, but followed different datings since they invested it with different symbolism, Herodotus of the evils of the Persian and subsequent Greek wars, Thucydides of excited anticipation on the eve of the Peloponnesian War, since for him κίνησις meant ‘mobilization’ (1.1).

**Keywords:** Delos, oracles, Thucydides, Herodotus, earthquakes, Peloponnesian War

Thucydides closes his survey of public opinion on the eve of the Peloponnesian War with this statement (2.8.3):

... ἔτι δὲ Δῆλος ἐκινήθη ὀλίγον πρὸ τούτων, πρότερον οὐπω σεισθεῖσα ἀφ’ οὔ Ἑλληνας μέμνηται

... and moreover, Delos was moved a little before these events, although it had never before been shaken in Greek memory.

As is well known, Δῆλος ἐκινήθη duplicates an expression of Herodotus (6.98.4) appended to the account of the Persian admiral Datis’ stop at Delos on his way to Marathon in 490:

μετὰ δὲ τοῦτον ἐνθεῦτεν ἔξαναχθέντα Δῆλος ἐκινήθη, ὡς ἔλεγον οἱ Δῆλιοι, καὶ πρῶτα καὶ ὕστατα μέχρι ἐμέο σεισθεῖσα

after his [Datis’] setting sail from there, Delos was moved, as the Delians said, shaken for the first time and, up to my own day, the last

This seems to be one of those occasions when Thucydides, without mentioning Herodotus by name, makes a ‘correcting’ reference to his text.<sup>1</sup> In the case of the Delian earthquake, the nature

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<sup>1</sup> Notably when he denies the existence of *Pitanates Lochos* or the extra votes of the kings at Sparta (1.20.3; cf. Hdt. 6.57.5, 9.53); or omits information that Herodotus thinks is significant, for example Thuc. 2.2.1 with Hdt. 7.233 on the role of the father of Eurymachus

at Thermopylae and the son’s murder at Plataea or Thuc. 2. 67.4 with Hdt. 7. 137 on the background of the killing of Aristeus by the Athenians. On a few occasions it appears not that Thucydides responds to Herodotus, but that each is responding to the other or even that Herodotus already knows and rejects a position that Thucydides will accept (notably Minos: Thuc. 1.4 versus Hdt. 3.122.1; see Irwin (2007); Hornblower (2011)). For others, see Hornblower (1996) 37, 123 and the extensive list 139–45; Stadter (2012).

of his disagreement – the earthquake's date – is for once spelled out very clearly, yet the extent of that disagreement (almost 60 years) has drawn scholars of the calibre of Arnaldo Momigliano (1930) and D.M. Lewis (1960), not to speak of every commentator on either of the two texts,<sup>2</sup> into attempts at an explanation. One approach postulates two different earthquakes at Delos (even though each historian insists on the quake's uniqueness), assuming, for example, that Herodotus was writing in 432 and did not yet know the Thucydidean quake (even though he mentions events of 431 and 430 in the next book; Hornblower (2011)) or that by Thucydides' time the earlier one was forgotten (even though Thucydides repeats vocabulary and phrasing from Herodotus' text); those who make them one and the same try to explain the difference in date (Momigliano (1930)) as due to Herodotean imprecision, How and Wells (1928) splitting the difference and dating the quake to *ca.* 460.

### I. The seismicity of Delos

One might expect the seismic history of Delos in the fifth century BC to be illuminated by archaeology and geology, and in a way it is, because there is no trace of any such history at all. The extensive excavations and study of Delos by the *École française d'Athènes* have produced no sign of any seismic disturbance in the archaeological record of the Archaic or Classical period (the *Guide de Délos* (Bruneau and Ducat (1983)) does not even mention Thuc. 2.8.3 or Hdt. 6.98.4). The geology of Delos too has been extensively studied in the context of the Aegean, and, in contrast to other islands (Santorini in particular) and in great contrast to the Greek mainland where serious earthquakes have clearly been frequent, the sea level of Delos has undergone virtually no change (Pavlopoulos et al. (2011)) and is, along with Mykonos, Rhenea and the Cyclades in general, free from signs of past earthquakes. As the most recent study puts it:<sup>3</sup>

The Cycladic region, with a lithospheric thickness of 28–30 km, is located behind the inner volcanic arc in the center of the Aegean lithospheric plate. This underwent clockwise block rotations as a result of extensional forces ... It is considered to be an 'aseismically deformed area', because seismic activity is limited to minor localized earthquakes of magnitude <2 on the Richter scale ... This peculiar behavior of the Cyclades is probably due to the existence of a very closely spaced geometric fracture framework within the metamorphic rocks, preventing strain accumulation. Thus, energy release manifests itself in continuous deformations creeping along the fracture planes ...

A recent comparative study of vertical displacement over millennia in the Aegean disagrees on the causes of the aseismicity of the Cyclades in general, but this is precisely because the lack of vertical displacement is limited to two areas, one of them Delos:

Saliagos (Antiparos) and part of the Mykonos-Rhenia-Delos district in the Cyclades insular complex do not reveal any vertical trends ... This 'stability' could be the result of an extremely low tectonic activity ... However, the rest of the data regarding Cyclades do not support that concept since uplifting ... and subsiding trends ... are quite evident ... Hence, identified 'stability' is probably the result of a dynamic equilibrium between uplift and subsidence in a tectonically active area.<sup>4</sup>

Since palaeoseismologists, evidently unaware of ancient assertions of Delian aseismicity, have independently discovered the aseismic nature of Delos even if they do not agree on its causes (see also Jusseret and Bateman (2011)), it is surprising that they do not adopt a more

<sup>2</sup> Gomme (1959); Hornblower (1991); Rusten (1989); Fantasia (2003) on Thucydides 2; How and Wells (1928); Scott (2005) on Herodotus 6; see also Munson (forthcoming).

<sup>3</sup> Mourtzas (2012) 5. In this and the following quotation I have omitted the copious citations of secondary literature.

<sup>4</sup> Pavlopoulos et al. (2011) 9.

sceptical attitude to the earthquakes they note were reported at Delos by Herodotus, Thucydides and others.<sup>5</sup> The other historically-attested Cycladic earthquakes, most of which include reports of tsunamis, were at Santorini (always accompanied by volcanic eruptions and lava flow), in AD 46, 1650, 1707 and 1866, and at Melos, in 1862.<sup>6</sup>

Even without geological evidence, Stadter downgrades the importance of the actual Delian earthquake for resolving the discrepancy between Herodotus and Thucydides.<sup>7</sup> It 'has been given a symbolic meaning in both authors, such that there is no need for an immediate chronological tie'. The 'symbolic earthquake' with a floating chronology resembles the category of the 'imaginary earthquake' which Angelos Chaniotis posits in Hellenistic historiography: it may have actually occurred, but has been so overlaid with symbolism or supernatural intention (like affecting only the guilty) that its historicity is of secondary importance. He notes the earliest example is in Herodotus 5.85.<sup>8</sup>

In what follows I will set forth additional textual reasons for putting the Delian earthquake into this category: (1) the telltale use of κινεῖν, which betrays its derivation from a chain of textual interpretations; (2) Delos' unique status as being not only aseismic (in ancient history and modern geology), but also ἀκίνητος (in legend); (3) the context of Δῆλος ἐκινήθη in Thucydides, which has less to do with natural disasters than with the pre-war human-induced κίνησις ('mobilization') noted in his preface at 1.1.

## II. κινεῖν and Delos in ancient texts

That Δῆλος ἐκινήθη is the formulation of both Thucydides and Herodotus is curious, since in neither historian (nor almost anywhere else in ancient Greek) is κινεῖν the proper designation for an earthquake, which is not a 'moving' but 'shaking' (σειεῖν, σεισμός).<sup>9</sup> In a forthcoming article on κίνησις in the preface to Thucydides I argue (developing neglected work by Hammond and Latacz)<sup>10</sup> that κινεῖν in Thucydides consistently refers to converting resources like money (1.143.1), men (1.105.4), ships (3.16.1) or even rubble (1.93.2) or water (4.98.5) to offensive use in wartime, i.e. 'mobilize', and that κίνησις μεγίστη in the preface means not 'the greatest upheaval' (a supposed reference forward to σεισμοί and other natural catastrophes of the war catalogued in 1.23), but 'the greatest mobilization' which alone suits the previous sentence (note preceding παρασκευή and ἀκμή) and the argument of the preface.

The undeniable application of ἐκινήθη in Thucydides 2.8.3 to an earthquake might be thought to cast doubt on that argument, but the reverse is the case: the customarily clear difference between κινεῖν and σειεῖν raises revealing questions about the interpretation of 2.8.3.

Thucydides was very interested in and knowledgeable about Delos, having perhaps visited it himself (1.8.1), interpreted its mention in a Homeric hymn (3.104.4–5) and noted the island's fortunes in the war (3.1.1, 5.32.1). But there is nothing in his wording here (except the unsourced correction on the date) that could not have been entirely derived from the passage in Herodotus. The word choice of Herodotus in turn is explained by the oracle he quotes:<sup>11</sup> 'I will move even Delos, though it is unmoved' (κινήσω καὶ Δῆλον ἀκίνητόν περ εὐόσαν). The verb does not originate with either Herodotus or Thucydides, but quotes the God. The fact that both Herodotus

<sup>5</sup> See also Guidoboni et al. (1994); Papazachos and Papazachou (1997).

<sup>6</sup> Mourtzas (2012) 8–9 (where for the 46 quake correct 'BC' to 'AD'); Papazachos (1990) 117, 205, 211, 240–41.

<sup>7</sup> Stadter (1992) 789.

<sup>8</sup> Chaniotis (1998) 407.

<sup>9</sup> For two possible exceptions, see n.13.

<sup>10</sup> Hammond (1952); Latacz (1994).

<sup>11</sup> Not included by Fontenrose (1978) among 'historical' Delphic oracles (or in fact at all), and some scholars have suggested the oracle text is an interpolation (rejected in the Teubner of Rosén), but Herodotus refers to it with ὁ θεός, as well as repeating κινεῖν so frequently and glossing it; the deduction with οὐκ ἀεικέες also seems to presuppose the oracle's text (on all these points, see below).

and Thucydides gloss κινήθηναι as σεισθῆναι shows that they are both working from the Delphic oracle as their chief source; their gloss also shows that they both know that κινεῖν is not the normal designation for an earthquake.

Finally, whereas Thucydides quotes Herodotus, and Herodotus quotes the oracle, the oracle itself is quoting Pindar (*Hymns fr.* 33c)<sup>12</sup> and disagreeing with him on a point of substance rather as Thucydides disagrees with Herodotus.

Χαῖρ', ὦ θεοδμάτα, λιπαροπλοκάμου  
παίδεσσι Λατοῦς ἡμεροέστατον ἔρνος,  
πόντου θύγατερ, χθονὸς εὐρεί-  
ας ἀκίνητον τέρας, ἄν τε βροτοὶ  
Δᾶλλον κικλήσκουσιν, μάκαρες δ' ἐν Ὀλύμπῳ  
τηλέφαντον κυανέας χθονὸς ἄστρον.

Hail, O heaven-built island, offshoot most desirable  
to the children of shining-haired Leto,  
daughter of the sea, immobile marvel (ἀκίνητον τέρας)  
of the broad earth, whom mortals  
call Delos, but the blessed gods on Olympos  
call the far-shining star of the dark-blue earth.  
(Loeb translation of William Race)

Pindar refers to Delos as ἀκίνητον τέρας, the adjective applied to Delos in the oracle and Herodotus and the noun applied to the oracle by Herodotus (καὶ τοῦτο μὲν κου τέρας ἀνθρώποισι τῶν μελλόντων ἔσσεσθαι κακῶν ἔφηνε ὁ θεός). But Pindar finds Delos portentous for precisely the opposite quality, its *not* having suffered movement.

Eventually we will retrace the links in this chain of intertexts back again from Pindar to Thucydides, but first we must try to clarify the meaning of ἀκίνητος and two distinctive legendary qualities of Delos.

### III. Delos ἀκίνητος

By this time it will be no surprise to learn that Pindar does not use ἀκίνητος here to refer to earthquakes,<sup>13</sup> but rather to the unique legend of Delos' origin, as he explains elsewhere in the same hymn (Pind. *fr.* 33d, translation Race):

ἦν γὰρ τὸ πάροιθε φορητὰ  
κυμάτεσσι παντοδαπῶν ἀνέμων  
ῥιπαῖσιν· ἀλλ' ἄ Κοιογενῆς ὅπῳτ' ὠδί-  
νεσσι θυίοισ' ἀγχιτόκοις ἐπέβα  
νιν, δὴ τότε τέσσαρες ὄρθαι  
πρέμων ἀπώρουσαν χθονίων,  
ἄν δ' ἐπικράνοις σχέθον  
πέτραν ἀδαμαντοπέδιλοι  
κίονες, ἐνθα τεκοῖ-  
σ' εὐδαίμον' ἐπόψατο γένναν.  
].ισ[

<sup>12</sup> Stadter (1992) 790 n.22 also notes the relevance of this fragment. Its date is of course unknown, but its priority to the oracle's 'correction' of ἀκίνητον seems the more reasonable assumption.

<sup>13</sup> Although he does provide one of only two examples I have been able to discover of a derivative of κινεῖν as possibly earthquake-related (κινήτηρ γαίης (γῆς), *H. Hom.* 22.2, Pind. *I* 4(3).19).

For previously it was carried  
 on the waves by the blasts of winds  
 of all sorts. But when Koios' daughter,  
 frantic with the pains of approaching birth,  
 set foot on it, then did four upright columns  
 with bases of adamant rise  
 from their foundations in the earth  
 and on their capitals support  
 the rock. There, after giving birth,  
 she beheld her blessed offspring.

Pindar is our oldest source for a tradition about Delos that became standard later: that it was originally a floating island and became fixed in the Aegean after the birth of Apollo. The legend that Delos was originally floating is developed at length in Callimachus' *Hymn to Delos* 30–54, where the newborn island playfully darts around the Aegean to the consternation of seafarers.<sup>14</sup>

#### IV. Aseismic Delos

But Delos does indeed turn out not only to have progressed from free-floating status to the immovability (fixed location) of a 'regular' island, but also to possess unshakability (freedom from earthquakes), which is not the same thing and apparently unique. So the elder Pliny (*HN* 4.66–67) in a list of the Cyclades islands:

ipsaque longe clarissima et Cycladum media ac templo Apollinis et mercatu celebrata Delos, quae diu fluctuata, ut proditur, sola motum terrae non sensit ad M. Varronis aetatem; Mucianus prodidit bis concussam. hanc Aristoteles ita appellatam tradit, quoniam repente apparuerit enata ...

Itself by far the most famous of the Cyclades and in the centre of them is Delos, known for its temple of Apollo and its market, which floated around for a long time, it is told, and was unique in not suffering an earthquake up to the time of Marcus Varro; Mucianus says it was shaken twice. Aristotle says it was named thus because it emerged as suddenly visible [= 'clear'] (translation mine).

Pliny has correctly distinguished Delian 'immovability' from 'unshakeability', even though he has a source that denies the latter.<sup>15</sup> Yet this aseismicity is in some sources confused with immovability (Seneca *Natural Questions* 6.26.2–41):

Sed mouetur et Aegyptus et Delos, quam Vergilius stare iussit: Immotamque coli dedit et contemnere uentos; hanc philosophi quoque, credula natio, dixerunt non moueri auctore Pindaro. Thucydides ait antea quidem immotam fuisse sed circa Peloponnesiacum bellum tremuisse. Callisthenes et alio tempore ait hoc accidisse: 'Inter multa, inquit, prodigia quibus denuntiata est duarum urbium, Helices et Buris, euersio, fuere maxime notabilia columna ignis immensi et Delos agitata.' Quam ideo stabilem uideri uult, quia mari imposita sit habeatque concauas rupes et saxa peruia, quae dent deprehensio aeri reditum; ob hoc et insulas esse certioris soli urbesque eo tutiores quo propius ad mare accesserint.

But Egypt is moved and so is Delos which Vergil [*Aeneid* 3.77] commanded to stand still: 'and he granted it to be inhabited without being moved, and to scorn the winds'. Philosophers too, a credulous race, have said it is not moved on the authority of Pindar [probably fr. 33 above]. Thucydides says that earlier it had been unmoved, but trembled around the time of the Peloponnesian War. Callisthenes

<sup>14</sup> For the reception of this tradition in Hellenistic epigram, see Ypsilanti (2010) 64–70; in Vergil's *Aeneid* 3.74–48, Barchiesi (1994) 440–41.

<sup>15</sup> For Mucianus' travels in the Cyclades and

elsewhere, see Williamson (2005). Possibly the two earthquakes Mucianus mentions were from Herodotus and Thucydides, or Thucydides and Callisthenes as in the next quotation from Seneca.

[*FGrHist* 124 F 20] says that this happened on another occasion too: ‘among many portents’, he says, ‘through which was announced the overturning of the two cities Helice and Bura, the most notable were a column of immense fire and the agitation of Delos’. He proposes that it is regarded as so stable because it was embedded in the sea and has hollowed-out cliffs and permeable rocks such as allow trapped air to get out again; for this reason, islands generally have firmer soil, and cities are safer the nearer they are to the sea (translation H. Hine, adapted to retain the literal meaning of key verbs).

As Walter Lapini (1995) has pointed out, there is here a confusion between Delos’ grant of immovability and its tradition of being ‘unshaken’, especially because the different verbs κινεῖν ‘move’ and σείειν ‘shake’ are both rendered with *movere/eri* in Latin;<sup>16</sup> but even in Greek the scholia to Callimachus’ Hymn 4 (to Delos) line 11 give the following gloss: <ἄτροπος>: ἤγουν ἀκίνητος καὶ ἄσειστος· ἢ γὰρ Δῆλος οὐδέποτε σειομένη τινάσσεται; ‘unturned’: i.e., unmoved and unshaken. For Delos never quakes from being shaken.

### V. Kinetic intertextuality from Pindar to Thucydides

All previous considerations of Thucydides’ Delian earthquake have been based on the seemingly reasonable assumption that his and Herodotus’ reports must be reconciled with an underlying physical event. In the absence of physical evidence for that shared event – indeed, a presumption to doubt that it was in itself memorable – and recalling once again that κινεῖν is not the proper word for an earthquake, it will be instructive to reread in reverse order, starting with Pindar, our four texts and trace to what a great extent the contents of each can be accounted for solely by dependence on and defiance of its immediate predecessor.

Every one of them includes a form of κινεῖν affecting Delos and an adjective describing the island’s state as the negative of that verb (twice ἀκίνητος, twice with a negative modifying phrase); three of them explicitly assert further significance (τέρας Pindar and Herodotus, σημήναι Thucydides) and the fourth, being an oracle, is *ipso facto* symbolic; and two of them specify this meaning more closely (τὰ μέλλοντα κακά for Greece in Herodotus, just τὰ μέλλοντα in Thucydides). Thus each of the texts appropriates an important element of its predecessors. But it also adds or alters something on its own.

#### V.1. The oracle reads Pindar

To Pindar’s account the oracle adds a paradox: without denying his assertion of Delian immovability in ἀκίνητόν περ ἐοῦσαν (or relegating it to the past as will Herodotus and Thucydides), it asserts that it will move the island nonetheless. Note also that, as in other Delphic oracles (to Croesus Hdt. 1.53, to Bacchiads 5.92, on Miletus 6.19, Salamis 7.141), it uses the future – it is a prediction and promise, not an interpretation of a specific event,<sup>17</sup> the sort of ‘hint’ for which the oracle is famous (Heraclitus *VS* 22 B55: ὁ ἄναξ, οὗ τὸ μαντεῖόν ἐστι τὸ ἐν Δελφοῖς, οὔτε λέγει οὔτε κρύπτει ἀλλὰ σημαίνει). What is the meaning of κινήσω? What is going to happen and what it is going to mean are matters of conjecture. One possibility is found in the proverbial expression κινεῖν τὰ ἀκίνητα used of desecrating religious sites by Plato;<sup>18</sup> but

<sup>16</sup> Barchiesi (1994) 441 suggests that the ‘powerful language of steadiness’ with which Delos’ anchors are described in Pindar, Callimachus and Vergil prompts a link between fixedness and aseismicity especially in Latin texts.

<sup>17</sup> Aristotle (*Rhetoric* 1407b), in a discussion of *ambibolia* (ambiguity), notes that *chresmologoi* take care to use the future tense and not specify when something will happen.

<sup>18</sup> τῶν τὰ ἀκίνητα κινούντων: Plato *Theaetetus*

181b (scholia ἀκίνητα κινεῖν παροιμία καθ’ ὑπερβολήν, ὅτι μὴ δεῖ ἔδη (sic) μηδὲ βωμοὺς κινεῖν ἢ τάφους ἢ ὄρους = Diogenianus 1.25.1; Zenobius 1.55.1; *Etymologicum Magnum* 48.38); ἐπιχειροῦντι δὴ νομοθέτη κινεῖν τῶν τοιούτων τι πᾶς ἀπαντᾷ λέγων μὴ κινεῖν τὰ ἀκίνητα: *Laws* 684e, Democritus *VS* 142. ἀκίνητα has this sense evidently in Hesiod *WD* 750 (where see West (1978)); cf. Pindar *Ol.* 9.33 (the sceptre of Hades) and it is applied to unchanged laws and traditions in Thucydides 1.71.3, 3.37.3 (Cleon).



Herodotus, who cites Delian informants for an earthquake, does not consider this interpretation, even though he himself uses the phrase in speculating on Miltiades' motive in entering a temple of Artemis (6.134: εἶτε κινήσοντά τι τῶν ἀκινήτων εἶτε ὅ τι δὴ κοτε πρήξοντα) and refers once (1.187) to a τάφος ἀκίνητος.<sup>19</sup>

### V.2. Herodotus reads the oracle

When Herodotus in turn takes up the oracle, he adds to his discussion several layers of interpretative detail.<sup>20</sup>

(a) κινήσω is converted to the past and passive, and glossed as an earthquake (Δῆλος ἐκινήθη ... σεισθεῖσα).

(b) The oracle's contradictory ἀκίνητος with present participle is reinterpreted to leave room for a unique exception in the past (καὶ πρῶτα καὶ ὕστατα μέχρι ἐμέο σεισθεῖσα).

(c) The portent's substance and timing are justified in detail (τοῦτο μὲν κου τέρας ἀνθρώποισι τῶν μελλόντων ἔσσεσθαι κακῶν ἔφηνε ὁ θεός· ἐπὶ γὰρ Δαρείου ... ἐγένετο πλέω κακὰ τῇ Ἑλλάδι ἢ ἐπὶ εἴκοσι ἄλλας γενεὰς ...).

(d) He closes with a paraphrase of the oracle that has now been plausibly explained on the basis of what happened subsequently (οὕτω οὐδὲν ἦν ἀεικὲς κινήθηναι Δῆλον τὸ πρὶν εἶδον ἀκίνητον).<sup>21</sup>

Along with shifting the future 'movement' of the oracle into the past, he adds a relative dating on the authority of the Delians (μετὰ δὲ τοῦτον ἐνθεῦτεν ἐξαναχθέντα Δῆλος ἐκινήθη, ὡς ἔλεγον οἱ Δῆλιοι), and this becomes the earthquake's most significant feature.

### V.3. Thucydides reads Herodotus

Thucydides retains from Herodotus the interpretation of κινήσω as an earthquake, the assumption that it is now an event in the past and repeats ἐκινήθη and σεισθεῖσα. He also states the earthquake's possible meaning. But he makes significant changes: first, he 'corrects' Herodotus by dating the earthquake to just<sup>22</sup> before the Peloponnesian War and ruling out the date of Herodotus, even though Herodotus had taken the trouble to rule out in advance the date assigned by Thucydides, for his phrase ὕστατα μέχρι ἐμέο excludes Thucydides' date just as decisively as Thucydides' προτερον οὐπω ... ἀφ' οὗ οἱ Ἕλληνας μέμνηται rejects Herodotus'. The fact that they mutually exclude each other's dates suggests that each seems to be aware of, and hostile to, the other's interpretation. Related to this difference is the second major change in Thucydides, or rather a group of changes.

(a) He ascribes the interpretation of its meaning to public opinion (ἐλέγετο καὶ ἐδόκει ... σημῆναι) rather than himself.

(b) He takes over Herodotus' μέλλοντα of its reference point but leaves off κακά.

(c) He groups the Delian earthquake together with other oracles and signs at the war's outset.

(d) He appends the report of the earthquake to a general account of pre-war activities in which Greeks are not suffering, but *excited* (μετέωρος).

The Thucydidean context of the earthquake's reception will be discussed further in part VII below.

<sup>19</sup> A later Greek oracle to Camarina in Sicily takes the form μὴ κίνει Καμάριναν· ἀκίνητος γὰρ ἀμείνων· Servius on *Aeneid* 3.701; Silius Italicus 14.198; Greek Anthology Appendix 9.685 Beckby; Lucian *Pseudologistae* 32; *Oracula Sibyllina* 3.736.

<sup>20</sup> Although Herodotus' discussion is narratologically generated by a report from the Delians (for this tactic, see Fehling (1989) *passim*, 91 n.6 on this

passage), his vocabulary shows that all of its substance is an interpretation of the oracle.

<sup>21</sup> ἀεικὲς (in Herodotus normally 'unseemly, shameful', but here 'improbable'; cf. 3.33.5; Aeschines in *Ctesiph.* 185; Lycurgus in *Leocr.* 103) suggests this is his own interpretation of the oracle's vocabulary.

<sup>22</sup> Herodotus' relative μετὰ is narrowed to ὀλίγον πρὸ.

## VI. 'Imaginary earthquakes' and their timing

Chaniotis (1998) identifies characteristics in the reports of earthquakes that hint at tendentiousness to the detriment of factual accuracy, for example epiphenomena like storms and hail<sup>23</sup> or the assumption of an intentionality behind the event, for example that it only harms the guilty. To his list of telltale extras may be added, in the case of Delos, *timing*, the implicit significance of its date, which for both Herodotus and Thucydides is the only reason for even mentioning the portent.<sup>24</sup> For them both, the earthquake at Delos was 'welcome' as a portent, as long as its timing was right: each accepts a date immediately preceding the start of the events that are the historian's chief concern, and that is why, as noted above, each takes care to exclude the other's date.

Chaniotis takes pains to add that he is not claiming that such earthquakes never occurred at all, nor in this case need we rule out a minor tremor; and there is no question at all of its being an invention of Herodotus or Thucydides, since the chain of intertexts proves otherwise: they are taking the statements of predecessors, to which were probably added the interpretations of χρησμολόγοι<sup>25</sup> and reports of others, and adapting these to their own projects.

I do, however, hope to have shown that modern attempts to follow Herodotus and Thucydides and postulate an actual earthquake from this prophecy, to reverse the normal process and make a sort of *eventus ex vaticinio*, run up against many obstacles, in increasing order of importance:

1. The persistent tradition of an earthquake-free Delos in Pliny;
2. The absence of any archaeological evidence for a Delian earthquake in the fifth century (or later, for that matter);
3. The geologically aseismic nature of the Cyclades, especially Delos (for which the reasons are disputed, but the fact is not);
4. The obvious dependence of the four intertexts on their predecessors rather than external sources;
5. The fact that Thucydides and Herodotus, though using the same oracle as a primary source, each deny that the other's earthquake happened at the time indicated and date their earthquakes almost 60 years apart;

6. κινεῖν is not the proper designation for an earthquake, but used by the oracle because of Pindar, by Herodotus because of the oracle and by Thucydides because of Herodotus.

Herodotus and Thucydides were inclined to view it as a popular portent of an upcoming war, but they needed a precise date, and so they postulated a three-stage process: first an oracle, then an earthquake, then a war, supported probably by Delians who vouched for an earthquake no matter how minuscule and possibly cooperative χρησμολόγοι as well. But distrust starts with the improper word ἐκινήθη, and then with the radical disagreement about the date the whole edifice of argument begins to crumble. As we know from 'urban legends' today, just because the war happened does not necessarily mean the right-sounding intermediate event happened as well. The Delian earthquake is less a seismic event, than a semiotic one.

Were there other possible interpretations of the oracle? In what other senses could it have promised that the god would 'move' Delos? Anything that happened to Delos in the Classical period was significant:<sup>26</sup> Polycrates invested it with political importance (Thuc. 1.13.6), for Pindar, as we have seen, it was a τέρας, Nicias staged an elaborate religious pageant there;<sup>27</sup> then

<sup>23</sup> Or the columns of fire in Callisthenes, unless this takes place elsewhere than Delos.

<sup>24</sup> Historians are neither geologists nor astronomers, they select what affects their subject, as we can see with eclipses: Herodotus accepts that an eclipse which actually took place on 17 February 478 was instead in 480, so that it would be part of Xerxes' passage into Greece rather than after the Battle of

Salamis (Reggi (2006) 2 n.9). Thucydides, on the other hand, does not mention most of the war's solar eclipses (despite 1.23.3, they were not more numerous), presumably because they had no influence on public opinion or military planning.

<sup>25</sup> See Zimm (2010).

<sup>26</sup> Smarczyk (1990) 504–25.

<sup>27</sup> Plutarch *Nicias* 3; Geske 2005: 77.



it underwent a triple 'movement', in the sense of κινεῖν τὰ ἀκίνητα discussed above: purified by the Athenians with its burials moved in 426 (Thuc. 1.8.1, 3.104), then its population entirely expelled in 422 (5.1), then re-established the next year (5.32.1). Thucydides tells us the first of these actions was undertaken κατὰ χρησμόν δὴ τινα, the last τοῦ ἐν Δελοῦ θεοῦ χρήσαντος. The oracle's promise of 'movement' might have been considered fulfilled aseismically, if not for the island itself, at least for its inhabitants.

## VII. The Delian κίνησις and the pre-war mobilization in Thucydides 2.8

Stadter describes well the intensity of Herodotus' digression on the Delian earthquake:

The historian doubles and redoubles the significance of the visit of Datis to Delos, privileging the passage with special markers: the earthquake, an authorial statement on evils, authorial explanation of this statement, the formal naming of the Persian kings, the reference to Persians and Greeks recalling the preface, the reference to wars between Greek powers, the quotation of the oracle, and the gloss on meanings of the kings' names.<sup>28</sup>

What primarily motivates Thucydides' appropriation of Δῆλος ἐκινήθη is less obvious. It quotes Herodotus, but the disagreement with him is not at all overt (as in 1.20.3) and detectable only by a comparative reader; the quake's factuality is clearly accepted, despite modern grounds for distrust and his self-distancing from its interpretation; it does not belong to those σεισμοί and ἐκλείψεις of 1.23.3 that were popularly exaggerated and numbered, along with the plague (*cf.* 3.87), among the war's *pathemata*. Nor does it inhibit planned action, as do earthquakes at 3.89.1, 5.50.5 and 6.95.1. Quite the opposite, the descriptive passage to which Δῆλος ἐκινήθη is the conclusion describes a state of enthusiastic anticipatory preparation, recognized by Latacz<sup>29</sup> as recalling the language of the preface:

Thucydides of Athens composed the war the Peloponnesians and Athenians fought against each other. He started to work as soon as it broke out, since he foresaw it would be important, and most noteworthy of all before it. This realization was based on the peak of every aspect of preparedness reached by both entrants (ἀκμάζοντές τε ἦσαν ἐς αὐτὸν ἀμφοτέροι παρασκευῆ τῆι πάσει), and the observation that the remaining Greek peoples were joining one side or the other (τὸ ἄλλο Ἑλληνικὸν ... ξυνιστάμενον πρὸς ἑκατέρους), either from its outbreak or planning it later. For this was in fact the largest *mobilization* (κίνησις) for Greeks as well as a component of non-Greeks (τοῖς Ἑλλήσι ... καὶ μέρει τινὶ τῶν βαρβάρων), extending over more or less the most people.<sup>30</sup>

In the text leading up to the Delian earthquake, a last-minute review of war-preparations on the eve of hostilities, the initial preparations are recalled and described in greater detail (Thuc. 2.7.1–8.3):

After what had happened at Plataea and the treaty had been dissolved for all to see, the Athenians made their preparations (παρασκευάζοντο) for going to war, and preparations were made also (παρασκευάζοντο δὲ καὶ)<sup>31</sup> by the Lacedaemonians and their allies, readying to send embassies to the Persian king and to barbarians elsewhere (παρὰ βασιλέα καὶ ἄλλοσε πρὸς τοὺς βαρβάρους)<sup>32</sup> if one side

<sup>28</sup> Stadter (1992) 788.

<sup>29</sup> Latacz (1994) 424–26.

<sup>30</sup> The datives are not agents in this sentence (the implied agents are the Athenians and Spartans), but rather datives of reference. The superlative ἐπι πλείστον references τῶν προγεγενημένων above, 'the most people of any previous conflict'.

<sup>31</sup> *Cf.* also the frame of the catalog in 9.1 and 9.6:

9.1 παρασκευῆ μὲν οὖν καὶ γνώμη τοιαύτη ὄρμηγτο, πόλεις δὲ ἑκάτεροι τάσδε ἔχοντες ξυμμάχους ἐς τὸν πόλεμον καθίσταντο; 9.6 ξυμμαχία μὲν αὐτῆ ἑκατέρων καὶ παρασκευῆ ἐς τὸν πόλεμον ἦν.

<sup>32</sup> Note that here we find the clarification of a problem of the sentence in 1.1.2, the effect of the *kinesis* for 'a large part of the barbarians ... most of mankind' (μέρει τινὶ τῶν βαρβάρων, ὡς δὲ εἶπεῖν καὶ ἐπι πλείστον

or the other (ἐκάτεροι) had hopes of acquiring any aid, and forging alliances with any cities that were outside their own power. The Lacedaemonians commanded their existing allies from Italy and Sicily and their sympathizers to build ships in proportion to each city's size, to an approximate total of 500 ships planned, and to prepare fixed sums of money, and beyond that to stay outside the fighting and receive delegations of Athenians, so long as they came in a single ship, until these preparations were finished. The Athenians reviewed their existing alliance and sent embassies to lands more or less surrounding the Peloponnese, Corcyra, Cephallenia, Acarnania and Zacynthus, looking to make secure friendships with these since they intended to wage offensive war around the Peloponnese. Both sides had in mind nothing small, but were invigorated for the war (ὀλίγον τε ἐπενόουν οὐδὲν ἀμφοτέροι, ἀλλ' ἔρρωντο ἐς τὸν πόλεμον), not without good reason. For all the subject cities were keen to join in resistance, and furthermore a populous young generation in the Peloponnese, and a populous one in Athens, were, in their inexperience, not unwilling to have a taste of warfare. And all the rest of Greece was on tenterhooks (μετέωρος) as the foremost cities were coming together. And many sayings were cited, and oracle-collectors chanted many verses for those about to go to war and in other cities. And moreover, Delos was moved, though it had never before been shaken by an earthquake in the memory of the Greeks. It was said, and believed by many, to be a sign of events about to take place. And if anything of that sort happened to occur, it was all investigated.

This vivid depiction of furious activity, even excitement, on the eve of war expands what Thucydides observed in 1.1 and what he chose to call κίνησις, 'mobilization'. And so 'ἐκινήθη', which Herodotus read in retrospect as symbolic of τὰ μέλλοντα κακά inflicted by both Persians and Greeks, seems to Thucydides to put the capstone on the mobilization (κίνησις), when he revisits the insight he credits in his preface with leading him to start writing his war.<sup>33</sup>

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ἀνθρώπων), namely the embassies sent far and wide to acquire aid and allies in 2.7.1.

<sup>33</sup> Similarly, in the analysis of the causes of stasis in

3.82.1 πᾶν τὸ Ἑλληνικὸν ἐκινήθη means 'all Greece was mobilized', discussed in Rusten (forthcoming).

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