

## Table of Contents

|  | Page: |
|--|-------|
| Competence Held Hostage #2: The Princeton Institute vs Aubrey Diller     | 55    |
| ‡6 Ptolemy's Backwardness: by HUGH THURSTON                              | 58    |
| ‡7 Unpublished Letters: Dicks-JHA, DR-Isis, & Oddly-Large                | 61    |
| ‡8 The JFK Assassination Conspiracy Conspiracy (& Hotdog→Hamburg)        | 72    |
| ‡9 Scrawlings  | 77    |
| ‡10 The "Theft" of the Neptune Papers: Amnesty for the Astronomer Royal? | 92    |

### News Notes:

**A.** We are grateful for an appreciative review of *DIO* (done with deft British understatement, as also exemplified below at ‡10 §D9), which appeared in the 1993 Spring number (p.19) of the *Newsletter* of the British Society for the History of Mathematics<sup>1</sup> (founded 1971; first President G.J.Whitrow, current President John Fauvel): "A lively historical journal from the USA has come our way — indeed, two journals in one: *DIO* & *The Journal for Hysterical Astronomy* reassesses various historical views and reputations, largely in the field of history of astronomy, from a fearless perspective well aware of the operation of structures of power and influence in the groves of academe. . . . much recommended to any BSHM member bored with the blandness of the more prominent public journals, or open to the possibility of scholars being motivated by other considerations than the pursuit of objective truth."

**B.** *DIO* 2.1 (‡1 §E) posed our Puzzle for the Ages: "Greg tells me that his twin brother Chris was born 2 minutes after him. But, on Greg's 8<sup>th</sup> birthday, Chris had yet to celebrate a birthday. Question: what is Greg's age?" Answer: according to our Gregorian calendar (invented by Chris Clavius, S.J.), the only 8-year span in living memory containing no leap year was 1896-1904. Thus, Greg was born 1896/2/28 23:59, while Chris was born 1896/2/29 00:01. So, in 1992 April (*DIO* 2.1), Greg was 96 years old. The problem was immediately and correctly solved by Keith Pickering and AAS-HAD bibliographer Ruth Freitag, who are rewarded by being afflicted with permanent free *DIO* subscriptions.

**C.** [Note added 2002-2003&2013. I am sorry but not greatly surprised to report the continuation of odds-innocent History-of-Astronomy unappreciation of Aubrey Diller's magnificent sph-trig-based theory's glovelly-fit to the famous Hipparchos-Strabo klimata data; though, at least the competing, once-dominant Neugebauer theory is now dead (as creditably acknowledged by C.Wilson & A.Jones, happily rendering out-of-date at least some criticism within). Continuing **decade-after-decade** failure to honor Diller is particularly perverse, since all 3 post-Diller new evidences (2 unexpected extra klimata, plus DR's bringing-in standard 05' latitude-rounding) are in his favor, as noted in the following 3 pp analysis (slightly revised & augmented in 2003&2013). See especially *DIO*'s shocking Table 1 at p.56 here (uncited by *JHA* 2002), now even stronger than in 1994, from reinforcement (anachronistically added atop Table 1 here) by *yet another new perfectly-fitting klima*, Cinnamon — as well as the discovery (*DIO* 16 ‡3 eq.3) that the sole seemingly non-fit klima, Meroë, *actually fits after all: on-the-nose*. (Meroë not updated here but at *DIO* 16 [2009] ‡3 Tables 1&2.) Diller's grand discovery proved positively for the 1<sup>st</sup> time the true antiquity of sph trig (*and* the accuracy of real ancient scientists' adopted obliquity). *JHA* 33:15-20 [2002] has now (politely but irrationally) promoted a shaky alternate theory based on *one* (non-fitting!) datum related to *one* latitude, while discarding the *dozen*-latitude-fit Diller solution by suddenly attacking the very Strabo data all parties (incl. Neugebauer) had formerly agreed to.<sup>2</sup> We hope that the progressive spirit that has finally led to rejection of the Neugebauer theory will continue and so finally elevate Diller's brilliant & important discovery to its proper exalted place in the scientific history of antiquity.]

<sup>1</sup> Applications for membership (£12/year): J. Helen Gardner, 25 Hollow Croft Road, Willenhall, West Midlands, WV12 5YS, England. Copies of *Historia mathematica* vol.15 (1988): £25.

<sup>2</sup> An entirely needless denigration of Diller's discovery, since his & the *JHA*'s competing theories aren't mutually exclusive, given Hipparchos' variability. The *JHA* paper alleges conflicting non-klima Hipparchos data, ignoring: [a] his known penchant for improving numbers from time to time [*Almajest* 4.11, *DIO* 1.3 §§K-P], combined with [b] the fact that the klimata are from a *single coherent source*.

## COMPETENCE HELD HOSTAGE

### The History-of-Astronomy Journal Watch: #2 of a Series

#### [ 8 Yr-Old OutBrains Muffia. Nazi Germany OutFreespeeches It ]

#### A. Diller's Discovery of Spherical Trig's Use in 2nd Century BC:

#### SIXTY YEARS of History-of-Astronomy Denial of Credit.

#### Archons Promote, Fund, & Honor the Suppressors.

#### How Long Will a Muffia Reign-of-Error Disgrace Academe?

The 1991/5 *Journal for the History of Astronomy* and 1991/9 *Isis* (Hist.sci Soc) carried promotion of the O.Neugebauer-Muffia's lovably preposterous theory (central to the Muffia cult) that high pre-Ptolemy Greek astronomy secretly depended<sup>1</sup> upon simple-minded Babylonian arithmetic schemes. Both articles (in their notes 38 and 7 [ & n.22 ], resp)<sup>2</sup> recommend G.Toomer's 1988 collection of alleged evidences for the theory. (See our not entirely respectful comments, at *J.Hysterical Astron* 1.2 §E4, on this and the 2 other gossamer pseudo-proofs of Hipparchan use of Babylonian astronomical techniques. See also *ibid* §E3.) The funniest of all these alleged "evidences" (repeatedly flogged by longtime BrownU Neugebauer-lapdog G.Toomer)<sup>3</sup> is the claim by O.Neugebauer (Princeton Institute for Advanced Study) at p.305 of his 1975 *History of Ancient Mathematical Astronomy*, that Hipparchos' klimata (Strabo 2.5.34f: neatly illustrated at Neugebauer 1975 p.1313) were computed in arithmetical-Babylonian style, by a 3<sup>rd</sup>-order arithmetic scheme. (Which the Toomer 1978H p.210 rendition, in the *Dictionary of Scientific Biography* [!], misreported as 2<sup>nd</sup>-order — until DR's 1978/3/18 letter to the *DSB* corrected this at the proof stage.)

But the Muffia (Babylonian) arithmetic scheme<sup>4</sup> explains only 6 of the 13 klimata, while the lovely spherical trig (Greek math) explanation, by classicist Aubrey Diller<sup>5</sup> fits 12 of the 13 klimata, after improvement by DR's introduction of standard ancient rounding<sup>6</sup> into the reconstruction. DR has also included the 19<sup>th</sup> klima; the fit to the Hipparchos-Strabo latitude is again perfect, a fine fruitfulness test: Diller didn't even know of that klima, so he couldn't have adjusted his theory to it. [Same for 12<sup>h</sup>3/4 klima, which hugely clashes with Neugebauer.] Table 1 provides a Princetitute-Muffia vs Diller-DR comparison.

(My late friend Diller [Indiana University] was internationally respected as probably the most knowledgeable scholar ever, regarding ancient Greek geographical mss. He overmodestly protested that his klimata discovery was a fluke, since — as a philologist — he pleaded little knowledge of math. Which only shows just how brilliant he was. I used to tell Diller — emphasizing the high irony — how it's possible that, centuries hence, it is this atypical discovery that he may be more remembered for, than any other part of his lengthy lifetime of the most refined scholarship.)

A typically nasty & intolerant 1934 Neugebauer letter to Diller attacked Diller's paper as trash. [Which may explain why Diller had to publish his discovery outside the US Hist.sci

<sup>1</sup> Greek astronomy's only major suppressed source was the ever-politically-dangerous heliocentrist heresy: see *DIO* 1.1 ‡7, *DIO* 1.3 §§O4-O6, *DIO* 2.1 ‡3 fn 14.

<sup>2</sup> For even more recent promotion of these alleged evidences of Babylonian inspiration of great Hellenistic math astronomy, see John North's 100% politically-correct *Fontana History of Astronomy and Cosmology* 1994 (p.94). The Muffia is right about absolutely everything. And DR & *DIO* do not exist. Same as North at *JHA* 25:243; 1994.

<sup>3</sup> See p.210 [nn.12&13] of *DictSciBiogr* 15:207 (1978) and p.356 of G.Toomer (p.353 in E.Leichty, M.Ellis, P.Gerardi 1988, Eds. *A Scientific Humanist: Studies in Memory of Abraham Sachs*, Philadelphia).

<sup>4</sup> The Muffia arithmetic scheme is equivalent to the equation  $\phi = 50[M^3 - 62M^2 + 1307M - 8454]$ , where geographical latitude  $\phi$  is in stades (rounded in Table 1 to 100 stade precision), at scale (fn 10) 700 stades/1°.

<sup>5</sup> See Diller *Klio* 27.3:258 (1934) [pp.266f. Published in Leipzig, Germany.]

<sup>6</sup> Without accounting for conventional ancient rounding (fn 10), the Diller scheme will fail at the [Phoenicia and] S.Little Britain klimata. But, even if one ignores rounding, the Diller theory still works for 10/13 of the data (vs. the Muffia theory's 6/13). [Its rms fit is 8 times better than the Muffia-Princetitute's; Diller-DR's is 10 times better.]

| Klima            | Longest Day<br><i>M</i> | Hipparchos-Strabo $\phi$<br>[Data] | PrincetonInst-Muffia $\phi$<br>[Babylonian] | A.Diller-DR $\phi$<br>[Greek] |
|------------------|-------------------------|------------------------------------|---|-------------------------------|
| Cinnamon         | 12 <sup>h</sup> 3/4     | 8800                               | 10200                                       | 8800                          |
| Meroë            | 13 <sup>h</sup>         | 11800                              | 12800                                       | 11600                         |
| Syene            | 13 <sup>h</sup> 1/2     | 16800                              | 17600                                       | 16800                         |
| Lower Egypt      | 14 <sup>h</sup>         | 21400                              | 21800                                       | 21400                         |
| Phoenicia        | 14 <sup>h</sup> 1/4     | 23400                              | 23700                                       | 23400                         |
| Rhodos           | 14 <sup>h</sup> 1/2     | 25400                              | 25500                                       | 25400                         |
| Hellespont       | 15 <sup>h</sup>         | 28800                              | 28800                                       | 28800                         |
| Massalia         | 15 <sup>h</sup> 1/4     | 30300                              | 30300                                       | 30300                         |
| Pontus           | 15 <sup>h</sup> 1/2     | 31700                              | 31600                                       | 31700                         |
| Borysthenes      | 16 <sup>h</sup>         | 34100                              | 34100                                       | 34100                         |
| Tanais           | 17 <sup>h</sup>         | 38000                              | 38000                                       | 38000                         |
| S.Little Britain | 18 <sup>h</sup>         | 40800                              | 40800                                       | 40800                         |
| N.Little Britain | 19 <sup>h</sup>         | 42800                              | 42800                                       | 42800                         |

Table 1: Comparison of Theories Explaining Hipparchos' Klimata  $\phi$ 

dictatorship, in the relative academic freedom of Nazi Germany! (See fn 5.)] Decades later, Neugebauer 1975 p.734 n.14 sneeringly branded Diller's result "absurd". Soon after, Rawlins 1982C fortuitously rediscovered<sup>7</sup> Diller's solution — adding improvements (fn 6&10) & independent confirmation (fn 9) — after over 4 decades of neglect & gross Muffia abuse. Neugebauer's wrath was incited by the very import of Diller's find, which overthrew one of the most critical of the Muffia sales-manual's alleged proofs of Babylonian influence on high Greek mathematical astronomy, as did DR-H.Thurston's undoing of 2 parallel 1991 papers. (See DIO 1.2 fn 73.) Add to these DR's DIO 1.1 ¶6 demonstration that the tropical year, on one of the most famous Babylonian astronomical cuneiform texts, is based on two wellknown Greek observations. All three discoveries gut the Muffia's above-cited — now crumbling<sup>8</sup> — holiest-of-holy tenets (on which have been founded decades of Muffia cult articles, books, grants, conferences, promotions; and arrogance): the Princetitude-Muffia unnegotiable demand that pre-Ptolemy Greek astronomy (e.g., Hipparchos) depended upon simpleminded Babylonian astronomy.

Diller's proposed Hipparchos obliquity (the accurate value, 23° 2/3), central to Diller's 1934 theory, has since been independently verified by Rawlins 1982C and Nadal & Brunet 1984.<sup>9</sup> (On Hipparchos' adopted obliquities, see DIO 4.1 ¶3 fn 18.)

Despite the striking preferability of Diller's solution<sup>10</sup> (see Table 1 here), the Muffia

<sup>7</sup> When a search of the literature turned up Diller's priority (& the Neugebauer 1975 condemnation), I swiftly contacted Diller (whom I did not then know), by phone (San Diego to Bloomington: 1979/11/26), to inform him of his vindication. One of my most cherished memories is Diller's expression of gratitude for, as he later put it (1980/1/24), having a long-suppressed theory "rescued [45 years later] by a phonecall from a stranger in San Diego."

<sup>8</sup> See DR at DIO 1.2 fn 73, Dicks at DIO 4.1 ¶1, & H.Thurston *Early Astronomy* 1994 pp.123, 128.

<sup>9</sup> *Publ. Astron. Soc. Pacific* 94:359 & *Archive Hist. Exact Sci.* 29:211 [p.212 n.17], respectively.

<sup>10</sup> For the Diller-DR sph trig solution, we use the equation of *Almajest* 2.3:  $\tan\phi = -\cos(M/2)/\tan\epsilon$ , where  $\phi$  = geographical latitude of computed klima,  $M$  = longest day (Summer Solstice), and  $\epsilon$  = obliquity. In this case  $\epsilon = 23^\circ 40'$ . According to standard ancient math-geographical practice (Neugebauer 1975 p.935 n.1), we round each thus-computed  $\phi$  to the nearest 5'. After converting  $\phi$  to stades via the wellknown Hipparchos-Strabo ratio (700 stades/1° of latitude: Neugebauer 1975 p.305 n.27), we then round to customary (Neugebauer 1975 pp.334 & 1313) ancient precision for klimata, 100 stades. (By the way: where is it known that the Babylonians ever used Greek stades?) In the case of Phoenicia, the pre-rounded  $\phi$  in stades is 23450, which could round to either 23500 stades or (the Hipparchos-Strabo value) 23400 stades. Naturally, the latter is listed in the Diller-DR column of Table 1.

cult persists in refusing to believe it. Indeed, since Neugebauer's haughty 1975 discard of Diller's find, the Muffia has not even cited it.<sup>11</sup> Typical. (See Dicks' DIO 4.1 ¶1 accounts of similar Muffia behavior; see also DIO 2.1 ¶3 §§C5<sup>12</sup> & "Black Affidavit" at DIO 1.3 ¶10.) And why shouldn't the Muffia ignore Diller's compelling solution? — since History-of-science [Hist.sci] & indeed *all of academe's handsome journals* themselves utterly ignore (and thus assent to) the Muffia's outrages. I.e., no History-of-Astronomy archon will say a word in public about the level of integrity displayed by such systematic noncitation.

The issues here are merely [a] the origin-epoch of spherical trig, and [b] the truth of the inter-relation of Greek astronomy [unexpectedly empirical: accurate obliquity] & Babylonian, among the most critical contended issues of scientific history. So why should Hist.sci archons care about open & equitable discussion of such trivia? Why should Hist.sci archons not keep right on punishing the suppressors with lucrative Ivy League professorships, gov't grants, and prestigious publication? Why should Hist.sci archons not continue controlling acceptable-to-them discourse through (what B.Rawlins calls)<sup>13</sup> a bloody Reign of Error? — slandering & ostracizing heretics (DIO 1.1 ¶1 §§A8&C7 & ¶3 §§D2-D3) and hushing other potential dissenters by the perceived starvation-threat of grant-severance and denial of publication and conference-invitations (DIO 1.1 ¶1 fn 20 & DIO 1.2 fn 57).

The best part is that even while Ivy League kooks suppress at will the most patently-true cult-offending discoveries (such as Diller's) *for over half a century — and still counting*, academe<sup>14</sup> (and its institutions & journals) blithely continues to advertise itself to the tax-paying public as the epitome of a rational and openminded free-marketplace of ideas. . . .

**News Notes added 1997:** [1] The above-cited DIO 1.1 ¶6 discovery (1991), that the yearlength on crucial Babylonian cuneiform tablet BM 55555 (c.100 BC) was based on Greek observations, is (see DIO 6 ¶1 fn 137) now so widely accepted outside the Muffia asylum, that BM 55555 has even been specially displayed at the British Museum explicitly due to DIO's finding. [2] Muffia peddlers of funny there's-a-Babylonian-in-the-woodpile explanations for pre-Ptolemy Greek astronomy keep non-citing (i.e., faking the nonexistence of) our stark Table 1 (opposite page): actual testing finds that an 8 year-old's brain takes under 15 timesecods to see that the Diller-DR theory (Greek) fits Hipparchos' klimata (c.130 BC) better than the PrincetonInst-Muffia theory (Babylonian). But, after 63 years of mental struggle, the Princetitude-Muffia klan still<sup>15</sup> sees the reverse, while *privately slandering & exiling the non-blind as fools*. And the insecure History-of-science community (Princetituding its integrity, to maintain a vital longstanding umbilical cord to the Institute) stays paralytically silent on this insular cult's own public silence. Adapting an old joke to a modern one: What do you call a History-of-Astr archon with 2 brain cells? Pregnant.

<sup>11</sup> Praiseworthy exception: O.Pedersen was the party communicating Nadal & Brunet 1984 to *AHES*, for which Pedersen deserves explicit credit here. It should be added that Pedersen has wisely kept himself clear of the Muffia Babylon—Greece monomania — and is also as skeptical as DR regarding the field of archaeoastronomy. (R.Newton used to suggest that the main accomplishment of archaeoastronomy was the establishment of a word containing 4 consecutive vowels.)

<sup>12</sup> On 1994/5/8, at the Dibner Inst (MIT) Muffia conference, DR bluntly asked aloud if anyone else present wished to claim (as his own) the discoveries here cited, namely: the [period-relation] sources for the *Almajest* planet mean motions. [DR solved three planets. A.Jones later solved Mars&Jupiter.] When G.Toomer & O.Gingerich (both present) said nothing, DR then requested a swift end to Muffiosi's 14<sup>th</sup> suppression of the fact [1980/4/13 DR letter to OG: DIO 2.1 ¶3 §§C5-C6] that DR was discoverer. (Toomer 1984 App.C uses the 3 correct DR solutions & the revolutionary find that period-relations solve the motions, but won't say who 1st revealed all this.) Silence since.

<sup>13</sup> In light of the lengthy Muffia Muff-Catalog at §A of "Casting Pearls Before Pyglets" (DIO 4.1 ¶4), Keith Pickering suggests alternatively: Rain-of-Error.

<sup>14</sup> This is not for a moment to forget academe's invaluable productivity and credits (¶9 §K10). But these do not excuse decades of neglect & abuse of vital & compelling scholarship. E.g., Diller is deceased. General recognition of his discovery's import is inevitable — but it is now too late for him to reap the recognition he deserved for his klimata-obliquity discovery. (Diller's fiscal situation was needlessly uncertain for him in his last years.) See DIO 1.2 fn 90. But the other side of the coin is brighter: though archons may threaten and censor while they live, the future is infinite. So, to the end of history, Diller's brilliance will live on; and certain parties' haughty vileness, recorded in detail in DIO, is equally sure to achieve eventual eternal memory (¶9 fn 27). In contrast to knowledge (DIO 3 p.3), suppression — like the wealth & power that feed it — is not forever.

<sup>15</sup> See News Notes (p.54) Note C.