

11-21-2019

Oedipus and the Stars

Kurt Fosso
Lewis & Clark College

Follow this and additional works at: <https://crossworks.holycross.edu/necj>

Recommended Citation

Fosso, Kurt (2019) "Oedipus and the Stars," *New England Classical Journal*: Vol. 46 : Iss. 2 , 4-18.
Available at: <https://crossworks.holycross.edu/necj/vol46/iss2/1>

This Article is brought to you for free and open access by CrossWorks. It has been accepted for inclusion in New England Classical Journal by an authorized editor of CrossWorks.

Oedipus and the Stars

Kurt Fosso

Lewis & Clark College

Μέτρῳι χρῶ.

—Thales of Miletus

Abstract: At *OT* 795 Oedipus’ recollection of measuring his fugitive course *by the stars* presents a double crux, concerning both the textual tradition’s dueling terms for that measurement and scholars’ related, opposed renderings of the phrase as literal or figurative. I argue Oedipus’ words can be taken literally to signify the *techne* of ancient celestial navigation, a metric of human knowhow versus the forces of fate and the divine.

Midway through Sophocles’ *Oedipus Tyrannus* one comes upon a textual crossroads — or, more precisely, upon the horns of a puzzling dilemma. At issue is Oedipus’ passing mention of the stars in recounting his anxious flight many years before from Delphi and its oracle’s prophecy of incest and parricide, driving him far from his homeland:

κἀγὼ ‘πακούσας ταῦτα τὴν Κορινθίαν
 ἄστροις τὸ λοιπὸν ἐκμετρούμενος [corr. τεκμαρούμενος] χθόνα 795
 ἔφευγον, ἔνθα μήποτ’ ὀψοίμην κακῶν
 χρησμῶν ὀνειδίη τῶν ἐμῶν τελούμενα. (*OT* 794-97)¹

And from then on I attended to the whereabouts of Corinth,
 By the stars thereafter measuring [judging] my course; 795
 I fled to a place where I never would behold those evils
 The reproachful oracle foretold.

As intimated by the above brackets, the initial predicament is to choose between alternative terms for Oedipus’ recollected use of the stars: between the codices’ extant but possibly corrupt ἐκμετρούμενος, “to measure distance [ἄστροις, by the stars],” and

¹ Text from Lloyd-Jones and Wilson (LJ-W) 1990, *Sophocles Fabulae*, supplemented by Jebb 1897 and Dawe 2006. Unless stated otherwise, translations are my own.

August Nauck's anagram-like late emendation (ca. 1866), τεκμαρούμενος, "to judge [by the stars]" (*LSJ*). The latter verb, τεκμαίρω, denotes acts of judging and specifically those of conjecture, estimation, and calculation by signs or tokens (*LSJ*; cf. τέκμαρ, a "fixed mark" or "sure sign"). By contrast, ἐκμετρέω more narrowly designates a specific *form* of calculation: that of measuring spaces, contents, or distances; hence Hugh Lloyd-Jones and Nigel G. Wilson's charge that the codices' ἐκμετρούμενος is merely the "intrusive gloss" of its less restrictive twin.² Yet Nauck's conjecture invites an obvious enough question: why is the extant term, and its specifying of (celestial) measurement, so problematic and potentially misbegotten?

On the side of Nauck's correction certainly are parallel usages in ancient sources³ as well as in the play (*OT* 916, καινὰ τοῖς πάλαι τεκμαίρεται, "judge [conjecture] new things by the old"),⁴ and, many centuries later, a proverbial iteration in Libanius (4th c. CE) *Declam.* 4.184, ἄστροις . . . τεκμαιρόμενος, that is largely the basis for Nauck.⁵ On the side of ἐκμετρούμενος are other if fewer sources⁶ plus a plethora of mathematical, legal, philosophical, and other ancient uses of the root word, μέτρον ("measure," "rule") and its related forms, including several instances in Sophocles (e.g., *OT* 561, μετρηθεῖεν, "to measure"; *Aj.* 5, μετρούμενον).⁷ In addition, despite Lloyd-Jones and Wilson's deriding of the extant term as mis-transmitted "nonsense,"⁸ ἐκμετρούμενος holds its unwavering

² LJ-W 1997, 57. Given the words' almost anagrammatic similarity, one wonders why LJ-W do not list scribal error rather than glossing alone as a suspected cause. It may go without saying.

³ Cf. Lucian *Icaromen.* 1, ἄστροις τεκμαίρεσθαι ὁδόν, "judge the way by the stars"; *Arr. An.* 2.2.4. In *LSJ* τεκμαίρομαι has numerous other usages for calculation and judgment, including especially conjecturing from the unknown to the known, as at *Isoc.* 4.141, γεγενημένοις τεκμαίρεσθαι, "conjecture the future"; *Pind. O.* 8, ἐμπόροις τεκμαίρεσθαι, "judging by burnt-offerings," and *N.* 6, τεκμαίρει . . . ἰδεῖν, "give signs to see"; *Hp. Prog.* 24, τοὺς . . . περιεσομένους . . . τεκμαίρεσθαι τοῖσι ζῦμπασι σημείουσιν, "judge by all the symptoms"; and even *Eur. Phoen.* 180-1, προσβάσεις τεκμαίρεται πύργων, "calculating how he might scale the towers." In *Hom. Od.* 11.112 the word importantly signifies foretelling and at 10.563 ordaining.

⁴ Cf. τεκμήριον, *Soph. El.* 774, 904, 1109, *OC* 1510.

⁵ In support, LJ-W 1990, *Sophoclea* 98 judge the Libanius parallel "decisive." But Bremer and van Erp Taalman Kip 1994, 23 object: "it is hardly relevant that ἄστροις τεκμαίρεσθαι was a proverbial expression some seven or eight centuries after Sophocles wrote his play." LJ-W 1997, 56 counter, unconvincingly, "Libanius knew the ancient classics well, and in this matter carries more weight than many writers nearer in time to Sophocles." Cf. Kopff 1993, 159, and Finglass 2018, 414-15. Dawe 2006, 140 points to parallel but late figurative usages in Boissonade *Anec.* 2.238 and Eustathius, despite the fact that both employ not τεκμαίρεσθαι but σημαίνεσθαι, to "interpret" or "conclude from signs" (*LSJ*). Lucian *Icaromen.* 1 is more persuasive.

⁶ Besides the one usage in *OT*, *LSJ* cites no other sources for ἐκμετρέω that specifically concern celestial or astronomical measurement. But related uses in navigational-geographical measures appear in *Strab.* 4.2 *passim*, παραλίαν ἐκμετροῦντι, "measure the seacoast"; cf. *Philo Mut.* 190, ἐκμετρούμενος διάστημα, "measure space"; *De.* 21:1, ἐκμετρήσουσιν ἐπὶ τὰς πόλεις, "measure the distance to the surrounding cities." Cf. also *Eur. Frag.* 382, τόρνοισιν ἐκμετρούμενος, "[a circle] measured with compasses," *IA* 815-16, πόσον χρόνον ἔτ' ἐκμετρήσαι, "measure out the days"; and *PAmh.* 2.79.16, ἐκμετρητής, "measurer" or "surveyor." LJ *Soph. Frag.* 324 enlists ἐκμετρέω's antonym, ἐκμετρον, "beyond measure"; cf. *Xen. Anab.* 3.2.16, ἄμετρος, "without measure." Dawe 2006, 140 also notes the less common meaning "of 'traversing' as at *Hom. Od.* 3.179 . . . or Xenophon of Ephesus 1.12.3."

⁷ See also μέτρον, *Soph. El.* 236, *Ich.* 110; μετριος, "due measure," *El.* 140, *Phil.* 179, *OC* 1212 (cf. Ellendt 1841).

⁸ LJ-W 1990, *Sophoclea*, 98. Against this scholarly "high-handedness," Bremer and van Erp Taalman Kip 1994, 23 inquire, if Sophocles "wrote τεκμαρούμενος and if ἄστροις τεκμαρούμενος had become a proverbial expression in Libanius' time, why and how would τεκμαρούμενος have been ousted from the text by a [presumably] nonsensical ἐκμετρούμενος?" Finglass 2018, 414 conjectures, "the reference to stars may have

place in the codices and commentaries, and for over two millennia has made sense enough to the play's countless readers, actors, and scholars. Since Nauck, translators and other specialists have therefore been fairly divided between those who accept his emendation, largely given the word's later proverbial usage, and those who adhere to the letter of the surviving text; the difference between “judging” and “measuring,” as between signs and measures, affording a narrow but not insignificant distinction—a point to which I'll return.

This question of measurement versus judgment leads to a second and more obviously interpretive dilemma, which has long produced its own critical divide: whether Oedipus' eying of the stars should be taken literally as a kind of *techne* (that of “measuring” distance and/or location) or as figurative and even proverbial, signifying not knowledge but ignorance, and so perhaps in accord with Nauck's conjecture. If actual measurement, Oedipus would be recalling his use of naked-eye celestial observation to steer his fugitive course—eastward, southward, even northward—clear of those predicted evils to the southwest in Corinth. If figurative, his words would contrarily signify that in his flight into exile he simply avoided by all means his familial seaport city, all the while journeying with *nothing but the (indecipherable) stars* as a guide and hence with little or no guidance at all. Which path or horn, then, to choose? Which way lies textual sense and which way nonsense? Are we to envision the young Prince Oedipus navigating his direction via specific stars and constellations, “orienting himself solely by his power to interpret his environment and move within it accordingly,”⁹ or instead see him fleeing in the darkling manner of the proverb, without much sense even of which way he could be heading? And what difference might this starry distinction make for a play in which “to know where” may well prove to be “the fundamental riddle of life,”¹⁰ and where, too, human knowledge and knowhow are of such conspicuous significance?

Since at least the Scholia and tenth-century *Suda* lexicon, the few lines have elicited commentary, frequently affirming their figurative and proverbial character.¹¹ It is all the more a testament to the complicated nature of this interpretive and philological dilemma, then, that the first English translator of the play, Lewis Theobald,¹² so ambivalently navigated his way between the looming horns, on the one hand rendering Sophocles' ἄστροις . . . ἐκμετρούμενος literally as *techne* but on the other hand uneasily noting, almost as an apology or self-correction, that the authoritative “old Scholiast” deemed the phrase “a Metaphor, borrowed from those that traverse the Seas, who by the Stars are taught the

irrationally encouraged the change” to the corrupt ἐκμετρούμενος—which would seem to acknowledge precisely the ancient association of the stars and measurement.

⁹ Kicey 2014, 43.

¹⁰ Goldhill 2012, 27. Cf. the wordplay of ὅπου, “where,” at *OT* 1256 (see Goldhill 27-29), first noted in Knox 1957, 184. One might also usefully consider the ample ironies concerning ἐνθα, “where” or “whence,” especially at *OT* 414, 796.

¹¹ Suidas, *Suda*, from the section *Ἀστρονομία*, alpha, 4257.

¹² Dryden and Lee 1678 excluded the astronomical reference from their very free, first English adaptation, *Oedipus: A Tragedy*.

Course of their Navigation” (1715, l. 309).¹³ Not surprisingly, subsequent translators and editors have felt more obliged to choose a literal *or* a figurative meaning for the phrase and its implications concerning Oedipus’ fateful journey.

Those treating the lines as figurative include George Adams (ca. 1729), Gottfried Hermann (1823), Peter Elmsley (1825), Sir George Young (1887), and Sir Richard Jebb (1897), the latter citing comparable albeit much later phrases in Claudius Aelianus (*Hist. Anim.* 7.48, τὸ λεγόμενον ἄστροις αὐτὰς ἐσημαίνετο, “knew their places by the stars”), Lucian (*Icaromen.* 1), and Hesychius of Alexandria, and concluding that such locutions were navigational metaphors “borrowed from voyages in which the sailor has no guides but the stars” (l. 794). Likewise, Gilbert Murray deciphered the passage in much the same privative sense, with “No landmark but the stars to light my [Oedipus’] way” (1911, p. 46), as has Philip Vellacott, whose Oedipus “resolved / Thenceforth to know that country only by the stars” (1971, ll. 831-32).¹⁴ James Hogan’s (1991) commentary follows suit, relating the phrase to navigational usage and thereby situating it as a rhetorical figure in Oedipus’ diegesis. R. D. Dawe’s revised edition (2006), now privileging Nauck’s emendation, understands the lines, after Jean François Boissonade, as ““infer[ring] the location . . . by the stars’ (like a mariner).” Similarly, P. J. Finglass (2018, p. 414) reads the phrase as a metaphor from navigation “to express his [Oedipus’] alienation from what he believes to be his native city, using the stars to shun his homeland.” The most emphatic and hyperbolic of all such renderings must be that offered by Peter Meineck and Paul Woodruff (2000, l. 795), whose terrified Oedipus “[t]ried to flee a universe away from Corinth.”

But the literalist side has its champions, too. Early in the history of the play’s translation, Thomas Francklin rendered the Greek as “by the stars / Guiding my hapless journey” (1758, p. 233), as similarly did Thomas Maurice (1779) and George Somers Clarke (1790). John Brasse’s early nineteenth-century version portrays Oedipus “Ever after measuring out [or ascertaining the position of] the Corinthian land by [observing] the stars” (1829, 54; original brackets), and in his extensive commentary Thomas Mitchell, noting that the several lines have long “furnished difficulty,” tacitly sides with those commentators who acknowledge the possibility that Oedipus used the stars to navigate his way. Mitchell ventures so far as to wonder if the exile “necessarily travel[ed] by night,” with the attendant enigma of his having encountered the Phocal crossroads and King Laius and company in the dark (1840, 113).¹⁵ David Grene’s widely read translation (1942) has Oedipus seeking to “measure from the stars / the whereabouts of Corinth,” as similarly does Bernard Knox’s version (1959, 45), while Stephen Berg and Diskin Clay interpret the

¹³ Nor does Theobald’s citation of a similar phrase by Virgil’s helmsman-navigator, Palinurus (*A.* 5.25), clarify matters literal and figurative, since Virgil’s usage is if anything more plainly literal.

¹⁴ See also the figuratively oriented translations by Banks 1956, Berkowitz and Brunner 1970, and Bagg 2004.

¹⁵ On the crossroads or rather “triple roads” in *OT* and their location, geography, culture, and symbolism, see Rustin 1996, 112: “The crossroads is the portal through which, among other things, prophecy becomes history, heir becomes king, son becomes father, father becomes corpse, and Sophocles becomes a classic.”

text as “measuring my progress by the stars” (1978, l. 1036). Lloyd-Jones’ Loeb edition, although accepting Nauck’s correction, still has the Prince (as did Theobald) “making out its [Corinth’s] position by the stars” (1994, p. 407), as, most recently, does Oliver Taplin (2015), whose Oedipus “used the stars / to steer well clear of that direction.”¹⁶

This history pinpoints the dilemma’s age-old horns but, excepting these literalist translations’ implicit claims, to judge by their literal terms, the critical tradition has yet to offer an explicit argument for any kind of *technical* reading of the hero’s recollected use of the night sky: to gauge whether Oedipus could in fact be credibly recalling his celestial measuring of his travels’ direction and/or of Corinth’s position, and many centuries before the invention of the astrolabe, not to mention of magnetic compasses. In short, would an overland traveler—some real-life referent for Sophocles’ savvy young prince—have used naked-eye star navigation both to guide his course and, in Grene’s wording, to “measure . . . the whereabouts of Corinth”? Granted, Libanius’ proverbial late usage of ἄστροις . . . τεκμαιρόμενος itself implies that sailors utilized the night sky to guide them, but what can we determine with any certainty about such maritime as well as terrestrial capabilities, given especially the unwelcome fact that, as James Beresford opines, “studies of ancient navigation suffer from a paucity of evidence”¹⁷

For its part, rudimentary celestial navigation, and the identification of stars and constellations it requires to gauge direction, was at least as old as Homer’s *Odyssey*. There the goddess Calypso advises Odysseus to sail by night with the Great Bear, known also as the Wain, always on his left (5.270), and he notably also locates the Pleiades, Hyades, and Orion.¹⁸ More significantly, in the sixth century, Thales of Miletus had, if we trust Callimachus’ account, identified Arcas, the Little Bear (*Iamb.* 1.55, τῆς ἀμάξης . . . τοῦς ἀστερίσκους, viz. “the little stars of the Wain”), as the constellation nearest the North Pole.¹⁹ Thales had likely acquired this knowledge from the seafaring Phoenicians, renowned for

¹⁶ Similarly, Wertenbaker 1992, 24 has Oedipus “fi[x]” his “route by the stars,” Mulroy 2011 depicts him “us[ing] the stars to measure distances,” and in Ahrens Dorf and Pangle 2014 Oedipus “measur[ed] the / Location of the land of Corinth by the stars.”

¹⁷ Beresford 2013, 173: “The literate elites of the ancient world generally paid scant attention to the arts being practiced by their contemporaries in the seafaring community.” As one noteworthy, arguable exception, Xen. *Mem.* 4.7.4 has Socrates bid his students to learn from ship pilots (as well as from nighttime hunters) those practical skills of astronomy that aid in time-keeping and the calendar, to “distinguish sure signs,” τεκμηρίους χρῆσθαι, of the hours, months, and years—albeit not signs or marks of direction and navigation.

¹⁸ Like Arcas, the Great Bear or Wain is a northern circumpolar constellation, never dipping below the horizon into the sea, although in antiquity not as accurate a marker of true north. Cf. Graham 2013, 57; Theodossiou et al. 2011, 25-26; Rogers 1998, 79-82; and Dicks 1970, 30-33. Mark 2005, 143 notes that “Telemachus’ voyages to and from Pylos are also night trips” navigated via the stars.

¹⁹ Owing to celestial precession, our sky’s North Star, Polaris, at the Dipper handle’s end, would not have been the ancient Greeks’ nearest visible pole star. In the fifth century that would have been the brightest star in the Little Dipper’s (Ursa Minor’s) bowl (Graham 2013, 57; cf. Couprie 2011, 22-23). As for viewing that ancient night sky, modern computer star maps can adjust accurately for precession to form accurate mapping of different times of the year and over millennia.

their advanced skill in navigation, although, like Odysseus, most maritime Greeks of the time probably still relied, as Aratus states, on the Great Bear as a less true but conveniently brighter northern constellation.²⁰ As a nobleman of Corinth, a twin-seaport society and indeed a city state recognized in the drama's wartime era for its prowess in naval warfare (Thuc. 1.13.2-5), Oedipus might reasonably be expected by Sophocles' audience to be familiar not just with sailor parlance, including its proverbs, but also with such rudiments of sailing. Maritime *techne* would include lore of winds and currents as well as the uses of the sun, moon, and stars for navigation: ναυβάταισιν ἄστρον ὄς, "as a star to sailors" (Eur. *Phoen.* 835). An informed Greek would understand as well the significant seasonal positions for such stars as Sirius and Arcturus and for the Pleiades, Hyades, and Orion, whose motions informed the agricultural calendar of plowing, sowing, and harvesting, and which, along with other stars, provided important indices for sea navigation.²¹

Such constellations were dazzlingly visible to any Greek traveler or seaman on a clear evening, including in the wartime year of 429, when *Oedipus Tyrannus* probably debuted, close to the post-winter opening of the oracle at Delphi. Seated in the theatre at the Festival of Dionysus, some at least of the spectators (and not just attending sailors or farmers) would note the protagonist's reference to the stars and envision him or perhaps themselves walking in the twilight or dark. Along the zigzagging roads, the journeyer would, like Odysseus far at sea, look up at the bright constellation of Calisto the Great Bear to determine north or possibly (but again, less likely) trace a line to the truer but fainter stars in Arcas (Ursa Minor). Meanwhile, he would find Orion to the southwest, and still farther south the Dog Star (Sirius) would glimmer above the hills. Completing this compass-like cross, on the eastern horizon would shine the Hydra and Nemean Lion. Thus determining north, and marking as well these or other constellations' seasonal positions to the west, south, and east, the roaming Oedipus could steer clear of Corinth's whereabouts to the west while at the same time more securely tracking his changing course, ἄστροις τὸ λοιπὸν ἐκμετρούμενος.

By this scenario, then, Oedipus could "measure" his direction, compass-like, "by the stars." But in all probability what such a traveler could *not* do was measure either his location or Corinth's position and distance. For the Greeks of the era, and navigators well into modern times, had no way to accurately determine longitude—not by the stars or other means—and mariners could only estimate their position by the approximations of dead reckoning. As for ascertaining latitude, although a simple-enough technique appears to have been known at least to some fifth-century navigators,²² it was years in the future for most.

²⁰ See Beresford 2013, 205-7.

²¹ Cf. Hesiod, *WD* 597-98, 609-20; Aesch. *PB* 459, Soph. *Antig.* 332-37, Xen. *Mem.* 4.7.4. Rutherford-Dyer 1983, 127-28 makes the intriguing claim that Homer's nautical phrase, "wine-dark sea," may itself draw upon "the sunset departure of ships bound on night-time navigations by the stars"; cf. *Od.* 2.388.

²² Evans 1998, 33, 100; cf. Beresford 2013, 208. One could measure latitude via the altitude of the pole star above the horizon, with as basic an instrument as a ship's mast or one's fanned-out hand.

Consequently, a journeyer probably could not accurately measure his or a given landmark's position; not even in terms of basic latitude. Nor, for that matter, would that *techne* have been of much use to Oedipus anyway given Corinth's and Thebes' similar lines of latitude, unless his wanderings took him far to the north or south. Given that geographical fact, could not the exile then simply have guided himself *away* from the west by tracking the rising and setting sun, without recourse to measuring the stars above at all? Perhaps. But then of course the sun does not always set directly in the west, and locating the stars at twilight or in the dark would free a journeyer from restricting travel to clear days, relatively open ground (with a horizon line), and daylight hours, amid twisting and forking terrain, much as was the case for those Greek sailors far out at sea.

A traveler would look to the sun and stars, but would not a north star or northern constellation then be enough to ascertain his simple direction? Yet by creating a celestial compass of sorts, Oedipus could better situate himself *within* those stellar points and therefore better gauge his relative direction, including Corinth's own alignment. Knowing how to find the fixed mark for north and build around it a kind of map—ἄστροις τὸ λοιπὸν ἐκμετρούμενος—would enable a traveler more assuredly to “measure” rather than merely guess at his direction away from one place and towards another, ἔνθα μήποτ' ὀψοίμην κακῶν / χρησιμῶν ὀνειδίη τῶν ἐμῶν τελούμενα. In this respect, travel on a clear night arguably afforded *more* direction and guidance than by day. And Oedipus therefore can quite literally mean what he recollects about using the stars: that he measured both his direction and Corinth's relative directional whereabouts (but neither its distance nor precise location) via the night sky's indices. Sophocles' words for this Corinthian, renowned as much for his riddle-solving knowhow as Corinth was for seafaring, thus can be interpreted as many translations rightly have since Theobald's own: in the technical sense understood especially by ancient navigators, who measured their seafaring course's direction “by the stars.” It was, moreover, an activity not without its scientific and broader cultural significance in the Periclean Age.

For in doing so, such journeyers were participating in a quest to better understand the cosmos, including not just the movements but also the material natures of its stars, sun, and moon—a scientific pursuit then nearing its early zenith. Most notably, Anaximander sought to theorize the natural workings of celestial bodies, introduced the gnomon,²³ and developed a map of the earth. Anaxagoras in turn speculated about the solidity of celestial objects, partially confirmed around the year 466 by a meteorite recovered near Aegospotami.²⁴ Much if not all of this new science and its empirical measures would have been talked about in the free-thinking intellectual circles in Athens, whose numbers included Aeschylus, although the city's eventual and very potent conservative backlash

²³ Bassu 2013, 358: “Le développement de l'usage du gnomon par Anaximandre montre . . . la mesure est au centre de la recherche philosophique” (“Anaximander's development of the use of the gnomon shows . . . measure to be at the center of philosophical enquiry”).

²⁴ See Graham 2013, 174-75, 229-31.

obliged Anaxagoras, charged with blasphemy, to flee in or around the year 450, aided by Pericles, and of course led fifty years later to the capital punishment of Socrates for impiety. Indeed, some leading men of Athens had come to see “what an enormous revolution this new world picture really meant. When all natural phenomena can be explained by natural causes, there is no longer a place for the gods.”²⁵

In this light, Thales’ dictum Μέτρωι χρῶ, “observe the measure,” was a guiding principle and *modus operandi* for emergent Greek scientific and philosophical thought,²⁶ including for Pythagoreans like Philolaus, who held that all that could be known had number (DK 4).²⁷ Sophocles’ Oedipus can likewise be affiliated with the growing and not uncontroversial company of capable measurers, as more clearly still was the clever hero Palamedes in the dramatist’s timely *Nauplius*: ἐφηῦρε δ’ ἄστρον μέτρα καὶ περιστροφάς . . . σημαντήρια νεῶν τε ποιμαντήρισιν ἐνθαλασσίοις, “He discovered the measures and revolutions of the stars . . . sure signs for those at sea” (Lloyd-Jones 2003, Fragment 432). As Thomas E. Jenkins relates, this mythical measurer-astronomer configures “the *semanteria* of the stars into a system that now he (and others) can understand: constellations. Moreover, this celestial grouping allows him in turn to impart *additional*, layered, meaning to the stars; they are now guides—indices—both to weather and to distance.”²⁸ Like Sophocles’ ἐκμετρητής Palamedes, and like the skillful real-life Corinthian, Athenian, and other sailors of the age, by pinpointing certain stars and gauging their “measures” (μέτρα) and rotations (περιστροφάς), journeyers could determine their direction within a kind of Vitruvian Man’s encompassing cosmos.

Still, one might nonetheless ask what difference it really makes, beyond quibbling, were readers to stick to the Scholiast’s rhetorical reading of Oedipus’ starry phrase. Yet I would argue there really is a difference and a significant one: between the characterization of a young Oedipus who, having journeyed the distance to Delphi for oracular answers, flees in blank ignorance or, contrarily, who uses his practical and rational skill to direct his travels away from foretold homeland “evils” and ultimately, and ironically, to Thebes. There his reasoning abilities will resolve the Sphinx’s numerical riddle of a four, two-, and three-legged (footed) creature into an encompassing measure of Man,²⁹ slaying the chimera and saving himself and the city. By a literal reading, rather than relegating the stars to figures of mystery, divine will, or mere ignorance, they signify (again, with no little irony) the rational means for Sophocles’ human to govern his life, in keeping with the

²⁵ Couprie 2011, 180.

²⁶ Bassu 2013, 101: “Le *métron* devient une valeur à observer et à respecter en toute occasion” (“The *métron* becomes a value to observe and respect on every occasion”).

²⁷ Cf. Aristotle, *Metaph.* 986a3 and a21, 987b28.

²⁸ Jenkins 2005, 40; original emphasis.

²⁹ Granted, this temporal-developmental notion of “Man” is, like all concepts, in some sense figurative (not least in a drama). But it is also justifiably a deductive product—and measurement. Then again, Ferguson 1972, 182 wryly observes that, with but an altered accent, Oedipus’ name can be read as “*Oi-dipous* ‘Ah! two-foot,’ the answer to the Sphinx’s riddle.”

intellectual “School of Hellas” then at Athens. Indeed, for Daniel Graham, philosophers like Anaxagoras, convinced “that the world was a series of natural events occurring in the natural world governed by natural laws” rather than by the pleasure and “displeasure of the gods” to be deciphered as divine signs (cf. τεκμαίρω), sought “to explain heavenly events on the basis of natural processes.”³⁰ For these new thinkers, the stars above provided important (quasi-) fixed points to navigate an increasingly knowable, mappable, predictable, and measurable world.

In Sophocles’ double-edged tragedy of discerning where and who one is, Oedipus’ very name (Οιδίππος, chiefly “swollen foot”) of course plays upon the verb οἶδα, “I know,”³¹ and, as the drama emphasizes, upon old versus new ways of knowing and judgment, most prominently prophecy and fate versus human deduction and forms of *techne*. Measurement becomes a further metric for Oedipus’ humanist if at times wavering resistance to the forces of the divine, including to its seer Teiresias, over whom the King lords his famous victory over the Sphinx as having been achieved solely by practical knowledge alone, γνώμη κυρήσας (γνώμη, “means of knowing”), not mantic augury, ἀπ’οίωνων μαθῶν (“untaught by birds,” *OT* 398)—and, by extension, all such signs from the gods.

One sees how the phrase ἄστροις . . . ἐκμετρούμενος, with its feet in mathematical measure (μέτρον) and its head in the night sky (τοῖς ἄστροις, *Stob.* 1.21.9), might especially serve, more than its twin, τεκμαρούμενος, as a modernist shibboleth: a telltale sign for human knowledge and its *knowing-where* in the wide cosmos, echoing the sophist Protagoras’ ambiguous (and, Plato deemed, relativistic) proclamation, πάντων χρημάτων μέτρον ἐστὶν ἄνθρωπος, “Man is the measure of all things” (*DK* 80b1). It is along these lines that J. C. Kamerbeek so adamantly argues against Nauck’s emendation of ἄστροις τεκμαρούμενος, a phrase for incertitude tantamount to “‘at a venture’ . . . [, when] it is precisely in order to avoid ‘chance’ that he [Oedipus] does not return to Corinth.”³² In fact, the meaning of the phrase ἄστροις . . . ἐκμετρούμενος, and arguably our acceptance or rejection of Nauck, depends a great deal upon how we perceive the role of reason itself within Sophocles’ tragedy, including the place and legitimacy of technical and scientific knowledge vis-à-vis traditional, pious belief. For the Greeks, the μέτρον, as both a unit of measure and the capacity for measurement, underlay the very notion of an intelligible empirical world; the terminology of μέτρον and ἐκμετρέω pointing toward and indeed eventually undergirding the mathematics of Euclid and his successors. By contrast, the term τέκμαρ augurs toward μέτρον’s opposed figuration as the indeterminate and ἔκμετρον, “beyond measure,” and so back toward prophecy and its search for signs of divine favor and disfavor in oracles and omens (as at *Hom. Od.* 11.112). In this context, the conjectural

³⁰ Graham 2013, 228.

³¹ Oedipus indeed sarcastically plays upon his name, “know-nothing Oedipus,” to Teiresias, *OT* 397. Note also the Corinthian Messenger’s odd Oedipus puns on “know-where,” μάθοιμ’ ὅπου . . . κάτισθ’ ὅπου, *OT* 924-26.

³² Kamerbeek 1967, 163-64.

τεκμαιρόμενος, the very sign of conjecture, leads as in Libanius toward a wider, figurative sense of calculation as guesswork and intuition, with the stars both broadened and reduced to signs without measure.³³

Nauck's emendation may thereby be read as itself an interpretive gloss, one favoring the figurative (proverbial) over the literal and arguably misjudging the place of measurement, as of its golden ratio and mean, in Sophocles' drama and world. Μέτρῳ χρῶ. Yet to Thales' axiom, Creon's closing admonition, πάντα μὴ βούλου κρατεῖν, "Do not seek to be master over all things" (*OT* 1522), obtrudes as a dialogical rejoinder. For technical knowledge, even about the stars above, may steer us, then as now, toward a wrong or fateful path and end. Moreover, as Simon Goldhill observes, "Where so much of the fifth-century enlightenment . . . [was] concerned with producing answers, Sophocles reminds his audience again and again that in the human world secure solutions are harder to find,"³⁴ whether measured in the stars or at one's feet. In fact, the very πούς in Οἰδίπυος can signify a linear unit of measurement³⁵ and hence, too, our human capacity (and anatomy) to measure the world. Sophocles' ἔκμετρητής, *know-foot* protagonist aptly and pointedly measures the stars of the night sky to direct his terrestrial, pedestrian course. But he does so within a tragedy that also highlights the antipodal limits of human reason and control (*OT* 397, ὁ μηδὲν εἰδὼς Οἰδίπυος, "I, the know-nothing Know-foot/Swell-foot"; cf. 1334-35, 1484-85), setting those capabilities against older ways of knowing and the uncertain forces of fate, oracles, and the divine.

Indeed, a darkling, unsettling sense of indeterminacy,³⁶ ἔκμετρος, looms over Oedipus' knowhow and its reasoned calculations, including his savvy measuring by the stars and its tragic ends. In this sense, the tradition's alternative, alternating terms ἔκμετρούμενος and τεκμαρούμενος might be said to inform and even to permeate each other, outside and inside Sophocles' text. The conspicuous phrase ἄστροις . . . ἔκμετρούμενος, situated within the rhetorical confines of τεκμαίρεσθαι and the longstanding conjectures of scholarship and translation, serves all the more as an important piece in Sophocles' uncanny puzzle of the determinate and indeterminate, the measurable and immeasurable, the known and unknown. It is a puzzle ever in need of piecing together.³⁷

³³ Cf. τεκμαίρομαι as a sign for uncertainty, *AP* 12.177 (Strat.); and τέκμαρσις even the interpreting of dreams, *D.C.* 47.46. Aristotle will utilize the related term τεκμήριον precisely to signify *demonstrative proof* in logic versus σημεῖον as uncertain sign or argument (and also arguably vs. empirical measure, μέτρον), as in *APr.* 70b2, *Rh.* 1357b4, 1402b19 (*LSJ*).

³⁴ Goldhill 2014, 37; cf. *Soph. OT* 130. Segal 2001, 10 similarly contends that Sophocles' *Oedipus Tyrannus* shares with Parmenides and other of the era's philosophers the typifying concern "with finding truth in a world of appearances." See also Fosso 2012, esp. 45-50.

³⁵ Cf. Plato *Men.* 82C ff.

³⁶ Cf. Goldhill 2014, 36; and Sheehan 2012, 50.

³⁷ My thanks to Mark Anspach, David Galaty, and Stephen Tufte for their stellar guidance, and to this essay's numerous other, very generous readers.

Works Cited

- Adams, George, ed. and trans. 1729. *The Tragedies of Sophocles, Translated from the Greek with Notes Historical, Moral and Critical*. London. Vol. 1.
- Ahrensdoerf, Peter J. and Thomas L. Pangle, trans. 2014. *Agora Editions: Theban Plays: Oedipus the Tyrant, Oedipus at Colonus, Antigone*, by Sophocles. Ithaca.
- Bagg, Robert, ed. and trans., with Mary Bagg, ed. 2004. *Oedipus the King, by Sophocles*. Boston.
- Banks, Theodore Howard, trans. 1956. *Three Theban Plays: Antigone, Oedipus the King, Oedipus at Colonus*. New York.
- Basu, Sébastien. 2013. “*Métron*,” entre “*Logos*” et “*Praxis*” dans la *Philosophie Grecque, d’Homère à Aristote*. Dissertation, Université d’Aix-Marseille.
- Beresford, James. 2013. *The Ancient Sailing Season*. Leiden and Boston.
- Berg, Stephen and Diskin Clay, eds. and trans. 1978. *Sophocles: Oedipus the King*. New York.
- Berkowitz, Luci and Theodore F. Brunner, trans. 1970. *Sophocles: Oedipus Tyrannus. A New Translation, Passages from Ancient Authors, Religion and Psychology*. New York.
- Brasse, John, ed. 1829. *The Oedipus Rex of Sophocles, Chiefly according to the Text of Brunck; with Critical, Philological, and Explanatory Notes, Illustrations of Peculiar Idioms, and Examination Questions*. London.
- Bremer, Jan Maarten and A. Maria van Erp Taalman Kip. 1994. “*Sophoclis Fabulae* by H. Lloyd-Jones and N. Wilson.” *Mnemosyne* 47.2: 236-44.
- Callimachus. 1958, 1978. *Aetia, Iambi, Lyrics Poems, Hecale, Minor Epic and Elegiac Poems, and Other Fragments*. Musaeus. *Hero and Leander*. Thomas Gelzer, ed. Cedric Whitman, trans. Cambridge MA.

- Clarke, George Somers, trans. 1790. *Oedipus, King of Thebes, A Tragedy, from the Greek of Sophocles: Translated into Prose, with Notes, Critical and Explanatory*. Oxford.
- Couprie, Dirk L. 2011. *Heaven and Earth in Ancient Greek Cosmology: From Thales to Heraclides Ponticus*. New York.
- Dawe, R. D., ed. 2006. *Sophocles: Oedipus Rex*. Rev. ed. Cambridge.
- Dicks, D. R. 1970. *Early Greek Astronomy to Aristotle*. Ithaca.
- Dryden, John and Nathaniel Lee. 1678. *Oedipus: A Tragedy*. London.
- Ellendt, Friederich Theodor. 1841. *Lexicon to Sophocles*. Abridged and trans. from Ellendt. Oxford.
- Elmsley, Peter, ed. 1825. *Sophocleous Oidipous Tyrannos*. London.
- Euripides. 2002. *Helen, Phoenician Women, Orestes*. David Kovacs, ed. and trans. Cambridge MA.
- Evans, James. 1998. *The History and Practice of Ancient Astronomy*. New York.
- Ferguson, John. 1972. *A Companion to Greek Tragedy*. Austin TX.
- Finglass, P. J., ed. 2018. *Sophocles: Oedipus the King*. Cambridge.
- Fosso, Kurt. 2012. "Oedipus Crux: Reasonable Doubt in *Oedipus the King*." *College Literature* 39.3: 26-60.
- Francklin, Thomas, trans. 1758. *The Tragedies of Sophocles*. London. Vol. 2.
- Goldhill, Simon. 2012. *Sophocles and the Language of Tragedy*. Oxford.
- Graham, Daniel W. 2013. *Science Before Socrates: Parmenides, Anaxagoras, and the New Astronomy*. New York.

- Greene, David, trans. 1942. *Oedipus the King*. In David Greene and Richmond Lattimore, eds. 1991. *Sophocles I: Oedipus the King, Oedipus at Colonus, Antigone*. 2nd ed. Chicago. 9-76.
- Hermann, (Johann) Gottfried Jakob, ed. 1823. *Sophoclis Oedipus Rex. Optimorum Librorum Fidem Iterum Recensuit et Brevibus Notis Instruxit Car. Gottlob Avg. Erfurdt*. 2nd ed. Leipzig.
- Hesiod. 2007. *Hesiod: Volume I: Theogony, Works and Days, Testimonia*. Glenn W. Most, ed. and trans. Cambridge MA.
- Hogan, James C., ed. 1991. *A Commentary on the Plays of Sophocles*. Carbondale.
- Homer. 1995. *The Odyssey, Books 1-12*. George E. Dimock, ed. Cambridge MA.
- Jebb, Sir Richard C., ed. 1897. *The Oedipus Tyrannus, by Sophocles, with notes and Commentary*. 2nd ed. Cambridge.
- Jenkins, Thomas E. 2005. "Palamedes' 'Writing Lesson': On Narrative, Writing, and Erasure." *Classical and Modern Literature* 25: 29-53.
- Kamerbeek, J. C. 1967. *The Plays of Sophocles: The Oedipus Tyrannus*. Leiden. Vol. 4.
- Kicey, Michael Andrew. 2014. "Road to Nowhere: The Mobility of Oedipus and the Task of Interpretation." *AJP* 135.1: 29-55.
- Knox, Bernard. 1957. *Oedipus at Thebes*. New Haven.
 ---, trans. 1959, 1987. *Oedipus the King*. By Sophocles. New York.
- Kopff, E. Christian. 1993. "*Sophoclis fabulae; Sophoclea: Studies on the Text of Sophocles* by Hugh Lloyd-Jones, N. G. Wilson; *Sophocles: Trachiniae* by Malcolm Davies." *AJP* 114.1: 155-63.
- Lloyd-Jones, Hugh, ed. and trans. 1994. *Sophocles: Ajax, Electra, Oedipus Tyrannus*. Cambridge MA.
 ---, ed. and trans. 1994. *Sophocles: Antigone, The Women of Trachis, Philoctetes, Oedipus at Colonus*. Cambridge MA.
 ---, ed. and trans. 2003. *Sophocles: Fragments*. Cambridge MA.

- , and Nigel G. Wilson, eds. 1990. *Sophoclea*. Oxford.
 ---, eds. 1997. *Sophocles: Second Thoughts*. Göttingen.
 ---, eds. 1990. *Sophoclis Fabulae*. Oxford.

Lucian. 1915. *The Downward Journey or The Tyrant, Zeus Catechized, Zeus Rants, The Dream or The Cock, Prometheus, Icaromenippus or The Sky-man, Timon or The Misanthrope, Charon or The Inspectors, Philosophies for Sale*. A. M. Harmon, ed. Cambridge MA.

Mark, Samuel. 2005. *Homeric Seafaring*. College Station TX.

Maurice, Thomas, trans. 1779. *Poems and Miscellaneous Pieces, with a Free Translation of The Oedipus Tyrannus of Sophocles*. London.

Meineck, Peter and Paul Woodruff, trans. 2000. *Oedipus Tyrannus*. Indianapolis.

Mitchell, Thomas, ed. 1840. *Oedipus Tyrannus of Sophocles, with Notes Critical and Explanatory*. Oxford.

Mulroy, David, trans. 2011. *Oedipus Rex*, by Sophocles. Madison.

Murray, Gilbert, trans. 1976. *Sophocles: Oedipus King of Thebes* (1911). London.

Nauck, August, and F. W. Schneidewin, eds. 1866. *Oedipus Tyrannos*. 5th ed. Berlin.

Philolaus. 2016. *Early Greek Philosophers*. André Laks and Glenn W. Most, eds. and trans. Cambridge MA. Vol. 4.

Plato. 1924. *Laches, Protagoras, Meno, Euthydemus*. W. R. M. Lamb, trans. Cambridge MA.

Rogers, J. H. 1998. "Origins of the Ancient Constellations: II. The Mediterranean traditions." *Journal of the British Astronomical Association* 108.2: 79-89.

Rustin, Jeffrey. 1996. "Oedipus and Triviality." *CP* 91.2: 97-112.

Rutherford-Dyer, R. 1983. "Homer's Wine-Dark Sea." *G&R* 30.2: 125-28.

- Segal, Charles. 2001. *Oedipus Tyrannus: Tragic Heroism and the Limits of Knowledge*. New York.
- Sheehan, Sean. 2012. *Sophocles' Oedipus the King: A Reader's Guide*. New York.
- Suidas (traditional attribution). 2014. *Astronomia* (alpha, 4257). Catherine Roth, trans. *Suda Online: Byzantine Lexicography*.
- Taplin, Oliver, trans. 2015. *Sophocles: Four Tragedies: Oedipus the King, Aias, Philoctetes, Oedipus at Colonus*. Oxford.
- Theobald, Lewis, ed. and trans. 1715. *Oedipus, King of Thebes: A Tragedy. Translated from Sophocles, with Notes*. London.
- Theodossiou, E., V. N. Manimanis, et al. 2011. "Astronomy and Constellations in the *Iliad* and *Odyssey*." *Journal of Astronomical History and Heritage* 14.1: 22-30.
- Thucydides. 1919. *History of the Peloponnesian War*. C. F. Smith, trans. Cambridge MA. Vol. 1.
- Vellacott, Philip, trans. 1971. *Sophocles and Oedipus: A Study of 'Oedipus Tyrannus' with a New Translation*. Ann Arbor.
- Virgil. 1999. *Eclogues, Georgics, Aeneid: Books 1-6*. H. Rushton Fairclough, trans. Rev. G. P. Goold. Cambridge MA.
- Wertenbaker, Timberlake, trans. 1992, rpt. and corr. 1994. *The Thebans: Oedipus Tyrannos, Oedipus at Colonus and Antigone*, by Sophocles. London.
- Xenophon. 2013. *Memorabilia, Oeconomicus, Symposium, Apology*. E. C. Marchant and O. J. Todd, trans. Rev. Jeffrey Henderson. Cambridge MA.
- Young, Sir George. 1887, 1906. *The Dramas of Sophocles Rendered in English Verse Dramatic and Lyric*. Ernest Rhys, ed. Everyman's Library. New York.