1.
Wallis to Henry Oldenburg
Oxford, 7/[17] April 1674

Transmission:

W Letter sent: London *Royal Society* Early Letters W2, No. 22, 2 pp. Some loss of text through breaking of seal, supplemented from Letter Book. At top of p. 1 in Oldenburg's hand: 'Ent⟨ere⟩d. L.B. 7. 61.' On p. 2 beneath address, again in Oldenburg's hand: 'Acc. d. 14. Apr. 74.' and: 'Dr Wallis to Mr Oldenburg (*1*) concerning (*2*) about Mr Jessops Letters and the (*a*) hyp *breaks off* (*b*) Doctors Hypothesis of Tydes; as also Mr Hooks Observation (*aa*) of the Parallax (*bb*) ⟨–⟩ (*cc*) concerning the Parallax of the Earths orbe.'— printed: Oldenburg, *Correspondence* X, 564–6.
w^1Copy of letter sent: London *Royal Society* Letter Book Original 7, pp. 61–3.
w^2Copy of w^2: London *Royal Society* Letter Book Copy 7, pp. 93–5.

Reply to: Oldenburg–Wallis 31.III/[10.IV].1673.

This letter was read at the meeting of the Royal Society on 16 April 1674 (old style). See Kaye, *Unrecorded early meetings*, 151. Hooke reports being shown the letter by Oldenburg at a coffee house earlier the same day. See Hooke, *Diary*, 97: 'With Oldenburg at the coffee house. He shewd Dr. Wallis his Letter about another way of finding the motion and parallax of the earth. Said to have been found by him 26 years since but by discourse with him 3 or 4 years since when I told him of my way, he talkd of other ways whose imperfections and insufficiencys I shewd him, but he seemd not then to have had any thoughts of this.' The letter was evidently conveyed to London by Peter Rosenstand (Rosenstein), as mentioned, and was received by Oldenburg on 14 April 1674 (old style).

Oxford Apr. 7. 1674.

Sir,

I hope you have received (though yours[1] of March. ult. mention it not) the papers[2] which I lately had[3] from you, & did return[4] to you by the next post save one after I received them; having first transcribed them to keep a copy of them.

The papers that have passed between me & Mr Jessop, I question

5 having (*1*) onely (*2*) first
7 Mr *add.*

[1]yours: i.e. Oldenburg–Wallis 31.III/[10.IV].1674.
[2]papers: i.e. the original of Jessop–Lister 25.VI/[5.VII].1673 and its enclosure, Jessop's reflections on Wallis's hypothesis of tides.
[3]had: i.e with Oldenburg–Wallis 24.III/[3.IV].1673/4.
[4]return: i.e. with Wallis–Oldenburg 31.III/[10.IV].1674.

whether it will be proper to print[5]. If my Lo. Brouncker, upon perusal, should be of the opinion; an abstract may be made, for the things as they are be too large to trouble the publike with, though it be proper inough for you to preserve them. The objection I hinted myself against my own Hypothesis, is what I have been long aware of; & have taken care of it, as far as the thing would well bear, in my first delivery of the Hypothesis: which is, that the Diurnal doth immediately offset the Menstrual not the annual motion; & doth there most favour it where it is most parallel to it and (be it greater or lesse) doth there give a concussion, which, without it, would not be. If that satisfy not, I scarce know what further to adde; unless, that the the common Center of Gravity, of the Earth & moon, may, for ought we know, be further off than we suppose: for my making it to be about $\frac{4}{3}$ of the Earths Radius, from the Center of the Earth; is onely upon presumption that the moons Body is (specifically) as heavy, as that of the Earth, & no more. But if It should prove to be (specifically) heavier then the Earth; the Common Center will be farther off, & the menstruall motion swifter than wee suppose. But of this, we can determine nothing.

As for M. Hugens, he might have forborn running me down (though without naming me) amongst his Alii[6], when as what he delivers is, in effect, but just the same with what I published before[7]. But, though I thought it fit inough, for me to take notice of, yet it will not be worth while (I think) to make a publike quarel of it.

My former Letter[8] out to Paris, may if there be occasion, be printed by parts, not all at once.

Mr Hooks ⟨Observation⟩[9] of the Annual Parallax compared with the

2 of (*1*) that (*2*) the
8-10 parallel (*1*) : If that (*2*) to it and ... would not be. If that
15 Earth (*1*) . But (*2*) , & no more. But
15 to be (*1*) otherwise heavier (*2*) (specifically) heavier

[5]print: The letters exchanged between Wallis and Jessop were never printed, nor was the exchange mentioned in the *Philosophical Transactions*.

[6]Alii: i.e. Huygens, *Horologium oscillatorium*, 91; *Œuvres complètes* XVIII, 242/243: 'Qui vero rem sese confecisse sperabant viri insignes, Cartesius, Honoratus Fabrius, aliique, nequaquam scopum attigerunt, nisi in paucis quibusdam facilioribus, sed quorum tamen demonstrationem nullam idoneam, ut mihi videtur, attulerunt.'

[7]same ... before: cf. Wallis–Oldenburg 20/[30].III.1673/4.

[8]Letter: i.e. Wallis–Brouncker VIII?.1668; Wallis, *Correspondence* II, 573–92.

[9]Obervation: i.e. Hooke, *An attempt to prove the motion of the Earth from observations*, London 1674, based on one of Hooke's Cutlerian lectures. This work was reviewed in *Philosophical Transactions* No. 101 (25 March 1674), 12–13.

Lucida Draconis; I am ⟨very well plea⟩sed with. Onely I am sorry it hath been no further prosecuted. For depen⟨ding as it⟩ were upon little more than one observation, and that a nice one: they who like ⟨not the⟩ thing, will rather content them selves to attribute it to some errour, from some unheeded accident, than take the pains to repeat it. It is a disadvantage allso, that it is so smal a star, for had it been one of the first magnitude, it would probably have been nearer, & the Parallax more considerable. The most favourable for his observation is (that which he mentions) the utmost in the Tail of the Greater Bear. For though the Lucida Lyrae be as near the Pole of the Zodiack, yet it comes not so near our Zenith. I had heretofore (about 26 years since, as I remember) projected a way of discovering a Parallax by that of Lyra, by observing at several times of the year, not, his greatest or lest altitude, but (to avoyd the inconvenience of refraction) his g[r]eatest East or West Azimuth, (the Azimuth being accounted free from being influenced by the Refraction, though the Altitude be not;) by the Perpendicular edge of some high Tower or Steeple, (well settled,) or the like; making marks on some steady place below, from whence I might see at several times its greatest Easting or Westing. Which, without a Telescope, would do more than Instruments larger than will be manageable. But I never had opportunity of putting in practise.

This Letter, I suppose, will be brought you by M. Rosenstein[10], a Dane, who goes hence to morrow morning. He & his brother[11], two very civil persons, studious & good Scholars, came hither (as I remember) about a year & half since: And have here continued their studies; with a very commendable & ingenuous conversation, & acquaintance with persons of the best quality. But (which I tell you for the strangeness of it)

2 depending (*1*) at most (*2*) as it were upon little more than one (*a*) single observation, (*b*) observation, and that a nice one:
8 which *add.*
14 his geatest *corr. ed.*
16 Perpendicular *add.*
19 than (*1*) larger Instruments (*2*) Instruments larger

[10]Rosenstein: i.e. Peter Rosenstand (17th century), Danish scholar from the Cimbrian peninsular (Jutland), who with his elder brother sojourned in Oxford 1672–4. The brothers were admitted to read in the Bodleian Library on 17 October 1672. See *Bodleian Library* MS Wood E5.

[11]brother: i.e. Martin Rosenstand (d. 1674), brother of Peter Rosenstand, who evidently committed suicide on 2 February 1673/4 (old style). See Wood, *Life and Times* II, 280–1.

on Candlemas day last in the morning, by a very astonishing accident, the Elder Brother was found in the House of office[12], some distance from the house[13], he lay in, dead; & had, as by many circumstances attending it seemed highly probable, in his sleep, or dream, hanged himself. Which though it may seem very strange, yet, all things considered, it is not accountable how it should be otherwise. The story is too large to tell you in all the circumstances: And his brother, who was much| afflicted at it, [2] & allmost beside himself, will not be willing (I suppose) to be put upon the discourse: So that unless he give occasion himself, doe not take notice of it. It hath occasioned many discourses pro et con; & many stories of strange things done in sleep. But I find generally, people very sorry at the accident; & very favourable in their thoughts of it. But inough of this. He had thoughts of leaving Oxford presently upon it; but upon further considerations, thought better to stay here a while. And now desires me to give him a letter or two to London, that he might have the opportunity of some acquaintance there. Whence, after a month or six weekes, he intends for home.

I am

Yours to serve you,
John Wallis.

These
For Mr Henry Oldenburg,
Secretary to the Royal Society,
at his house about the middle
of the Pelmel, near St James's,
Westminster.

3 he lay in, *add.*
9 himself; (*1*) you need not (*2*) doe not

[12]House of office: i.e. privy.

[13]house: at the time, the Rosenstand brothers were staying in the house of Mrs Mary Mumford near the Sheldonian Theatre. See Wood, *Life and Times* II, 280.