

II. *An Extract of two Letters, from Dr. John Wallis, (Professor of Geometry in Oxford.) The One to his Grace the Lord Arch-Bishop of Canterbury. The Other to the Lord Bishop of Worcester.*

Concerning the Alteration (suggested) of the *Julian* account for the Gregorian.

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The most Reverend Father in God, Thomas Lord Arch-Bishop of Canterbury, his Grace at Lambeth.

Oxford June 13. 1699.

May it please your Grace,

AS to what your Grace mentions (in the close of your Letter which I had the honour to receive) about altering the Annual Stile. I am at a loss what to say. That there is, in our *Ecclesiastical Computation of the Paschal Tables*, somewhat of Disorder, is not to be deny'd. But I am very doubtful, that, if we go to alter that, it will be attended with greater Mischief, than the present Inconvenience. It is dangerous removing the Old Land-marks. *Κακὸν εἰ κείμενον ἔκινῆται.* A thing (of moment) when once settled

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(though with some Inconvenience) should not be rashly alter'd. Such changes may have a further prospect than Men at first sight are aware of, and may be attended with those Evils which are not presently apprehended.

In the business of *Geography*; upon removing the *First-Meridian* (upon some plausible pretence) from where *Ptolomy* had plac'd it (though a thing at first purely arbitrary) it is now come to pass, that we have (in a manner) no *First-Meridian*, at all; that is, none Fixed; but every New Map-maker placeth his First-Meridian where he pleaseth: which hath brought a great Confusion in *Geography*.

And, as to the point in question, the Disorder in the *Paschal Tables* was a thing noted, and complained of for three or four hundred years, before Pope *Gregory* did (unhappily) attempt the Correction of the Calendar. But it was, all that time, thought adviseable, rather to suffer that Inconvenience, than, by correcting it, to run the hazard of a greater Mischief.

And it had been much better, if it had so continued to this Day, rather than Pope *Gregory* (upon his own single Authority) should take upon him to impose a Law on all the Churches, Kingdoms and States of Christendom, to alter both their *Ecclesiastical* and *Civil* year, for a worse form, than what before we had.

Or if merely upon account of the *Paschal Tables* (for he made no other pretence) it were thought necessary to make a Change; he might have corrected the *Paschal Tables* (or given us New *Paschal Tables* instead of those of *Diomysius*;) without altering the *Civil year*. Which hath introduced the confusion (which we now complain of) of the Old and New *Stile*. And which now can never be remedied; unless all Nations should, at once, agree upon one; which is not to be supposed.

I say, *at once*; for if some sooner and some later do alter their Stile, the Confusion (in History) will yet be greater than now it is.

'Tis true, that upon pretence of the Popes (usurped) Supremacy in Spirituals (and in Temporals also in order to Spirituals) most Popish Countries (but I think, not all) have submitted their Civil year (as well as their Ecclesiastical) to the single Authority of the Pope's Bull.

But your Grace knows very well, that the Church of *England* had (long before this pretended Correction) Renounced the *Pope's Supremacy*; and (that being supposed) there is no pretence for the Pope of *Rome's* imposing a Law on the Church and Kingdom of *England*, to change our Ecclesiastical and Civil year; more than, in *Us*, for that in *Rome*.

And, upon this account, the Church and Kingdom of *England*, did at first not admit of that change, and have hitherto retained our Old Constitution of the *Julian* year; notwithstanding the Pope's (pretended) Supremacy; and I see not why we should now admit it, after having so long renounced it.

And really, though it may not yet appear and be owned above board; and, those who now press for an alteration, be not aware of it, and be far from any Popish design, I cannot but think there is, at bottom, a latent Popish interest, which (under other specious pretences) sets it on foot; in order to obtain (in practise) a kind of tacit submission to the Pope's Supremacy, or owning his Authority. And though they be so wise as to say nothing of it at present (for the Bait is designed to Hide the hook till the Fish be caught,) they will please themselves to have gain'd *de facto*, what in words we disclaim. For there is nothing but the Pop's Bull, which should induce the Change of the (*Civil*) *Julian* year (which is much better) for the

New Gregorian. For the Equinox going backward, (for 10 or 11 Minutes each year,) is very inconsiderable, and which in Celestial Computations, is easily rectified; as are many other inequalities of much greater concernment.

And I think it was never pretended that the *Civil* year must needs agree (exactly to a minute) with the *Celestial*. And, if never so much affected, is impossible to be had: For the *Solar* year, and the *sidereal* year, differ more from each other, than the *Julian* from either, which is a middle betwixt them.

And the Seat of *Easter* (which only concerns the Ecclesiastical not the Civil year) may easily be rectified, if need be, without affecting the Civil year at all.

Or, if not rectified; the Celebration of *Easter* a Week or Month sooner or later, doth not influence at all our solemn Commemoration of *Christ's Resurrection*.

And 'tis agreed by most (if not all) Chronologers, that as to the Year of our Lord, the *Annus Vulgaris* is not the *Annus verus* (though it be not agreed how much it differs:) But it would be a horrible Confusion in History, if we should now go about to alter the *Vulgar Account*.

All the pretence that I can understand for altering our *Stile*, is only, that in so doing we should agree with some of our Neighbours with whom we now differ: But it will then be as true, that we shall differ from others with whom we do now agree. We should agree with *France*, but differ from *Scotland* (which, as to us, is more considerable) and with all others who yet follow the old *Stile*.

If it be said, that they, in time, may come so to do by our Example. This would but make the Confusion yet the greater. For then we must be obliged, not only

only to know what places do use the new Stile; but, from what time they began so to do, if we would understand their Dates.

And, if we should, by a new Law alter our Stile in *England*; this would not comprife *Scotland*: And we cannot promise our selves that they would presently comply also. For (according to the present Constitution of that Church) they are not so pliable to comply with the *Modes* of *Rome* as some in *England* are.

And the business of *Easter* (which has the sole pretence of the first alteration) would, to them, signifie nothing: Who (according to their Constitution) observe no *Easter* at all, but do rather declare against it.

And when all is done, there will still be a necessity of keeping up the distinction of old Stile and new Stile (which Pope *Gregory's* pretended Correction hath made necessary;) and with that distinction things may be now as well adjusted, as if we should now change our Stile.

I forbear to discourse at large (that I be not too tedious) how much a better Constitution the *Julian* Year is, and more advisable, than the new *Gregorian*. Which is a thing so notorious, that no Astronomer, (who understands the Methods of Astronomical calculations) though a Papist, can be ignorant of; however they may please to dissemble it. Insomuch that (in their Astronomical Calculations) they are fain first to adjust their Calculations to the *Julian* Year, and thence transfer them to their New *Gregorian*.

And consequently how unreasonable it is for us to exchange our better *Julian* Year for one that is so much worse.

It would be much more reasonable (save that they will never be induced to part with ought, which may favour their Usurpation, how absurd soever,) that the
Papists

Papists should quit their new *Gregorian*, and return to their old *Julian Year*.

But I forbear to enlarge on this, (and many other things which might be alledg'd;) and humbly beg your Graces Pardon for having already given you the trouble of too long a Letter. And am,

My Lord,

*Your Graces very humble
and obedient Servants*

John Wallis.

A POST-SCRIPT

*To be added to a former Letter to the Lord Archbishop
of Canterbury.*

Post script, Aug. 31. 1699.

OF what Mr. *Lock* hath done in this matter, I know nothing but from your Graces Letter of *Aug. 27. 1699.* It seems he advises, that, for Eleven Leap-years, we should omit the Intercalation of *Febr. 29.* and thenceforth go on with the *Gregorian Account*: The last of which 11 Leap-years should be 1744. But, if we begin in the Change (as it is suggested) at the Year 1700. the last of those Eleven Leap-years must be 1740. not 1744. This

This Expedient is the same that was (during our Civil-wars) suggestedly those then at *Oxford* in the Year 1645. *viz.* That, from thence forward, we should omit ten such Intercalations.

Against which there seems to me this great Objection.

In the time of *Julius* and *Augustus Cæsar*, there was a Year which was called *Annus confusionis*: Upon the settling, unsettling, and resettling the *Julian* Year. (Of which *Kepler* gives an Account, with the Mischiefs of it, in his *Tabula Rædolphina*, with the Title *Typus Anni confusionis*.) And the like in the Year 1582. when Pope *Gregory* did at once strike out Ten Days of that Year.

But, if this Advice should take place; we should now, instead of one *Annus confusionis*, have a *Confusion* for *Four and Forty* Years together, wherein we should agree neither with the *Old* nor with the *New* Account. But be sometimes 10 Days, sometimes 9 Days, sometimes 8 Days, (and so forth) later than the One, and sooner than the other account. And a Forreigner would not be able to judge of an English Date, without knowing in which of these Years, we vary 10, 9, or 8 Days (and so forth) from either of these Accounts. And this, for 44 Years together. Which seems to me a much greater Confusion, then if (as in 1582) we should (once for all) cast out 11 Days. But I cannot think it advisable to do either.

F O R

*The Right Reverend Father in God William
Lord Bishop of Worcester at Whitehall.*

Oxford June 30. 1699.

May it please your Lordship,

IN a late Letter which I had the honour to receive from my Lotd Archbishop's Grace of *Canterbury*, His Grace was pleas'd to intimate, as a thing now under Consideration, about changing the Stile of our Civil Year.

It may perhaps be presumption in me to interpose my thoughts with your Lordship in a Business of that Nature. But I must needs think it a tender point to touch upon: and which, if we attempt it, may be attended with greater Mischiefs, than we may at first be aware of. I adventured to say somewhat to that purpose in a Letter to his Grace: But more may be said.

That the difference of Stiles doth create some Confusion in History is not to be denyed. (And 'tis very unhappy that Pope *Gregory XIII.* did in the last Century attempt it.) But it is now unavoidable and cannot be remedied.

For 'tis not *England* only, that useth the *Julian Year*. But all the Three Kingdoms of *England*, *Scotland*, and *Ireland*; and all our *Foreign Plantations*, which are not a few; and the two Kingdoms of *Denmark* and *Sweden*; the *Protestant Cantons* of *Switzerland*; and Four of the Seven united Provinces; and how many more of the Protestants in *Germany* I cannot presently say. And if we should now change our Stile in compliance with some of our Popish Neighbours from whom we differ;

differ; we should then vary from the Protestants with whom we now agree.

And particularly from *Scotland*, (with whom we are more concerned to agree than with *France*.) For we are not to presume that they will presently change at the same time with us. 'Tis happy that they did comply with us in the late Revolution; (to be under the same *King* with us:) We cannot presume they will be so fond of Compliance in all the *Modes of Rome*: † As is very evident in their not admitting *Episcopacy*, nor the Observation of *Easter*; (which latter was the only pretence of first introducing the *Gregorian Year*.)

So that there will still be as great necessity of SV. and SN. (Old Stile and New Stile) as now there is, (*without which we shall be at a loss, in History to judge distinctly of Dates; and, with it, we are now as easy as if we change.*)

If it be said, that other Protestants may, in time, be induced to follow our Example: Perhaps some may (not all:) But this would but make the confusion yet greater: For thenceforth, we must be obliged (if we would be at a certainty in History) not only to know *what Countries* do use this or that Stile; but, from *what time* they began so to do.

It would be much more advisable (if the Papists would be as compliant as they would have us to be) for the Papists to *return to their Old Julian Year*, than for us to *embrace their New Gregorian*. And, it might much easier be effected; For, if the Pope could be persuaded to grant a Bull to that purpose; all the Papists would, at once, be as much obliged so to do, as by *Pope Gregory's Bull* to vary from it. If it be said; there is no hopes of that; Then the Argument stands: If the Pope will not leave his pretended Supremacy, then we must admit it.

That the *Julian* Year is, in it self, a better form, and more advisable, than the New *Gregorian*, is undeniable; and, all Astronomers, even Papists themselves (if not otherwise Bigoted in favour of the Pope's *Supremacy*, and the *Infallibility* of the *Roman* Church) cannot but know it: Insomuch, that in many cases they are fain (or find it advisable) first to Adjust their Calculations to the *Julian* Year, and thence transfer them to the *Gregorian*.

And there is no Inducement for our changing our Better Year, for a Worse, but only in compliance with the Pope's pretended *Supremacy*, not only over all Churches and Kingdoms, but even the Celestial Motions, (as Pope *Gregory*, in his Bull, doth wisely pretend.)

Now 'tis well known, that, long before Pope *Gregory's* Bull, *England* had renounced the *Pope's* *Supremacy* (and are therefore unconcerned in that Bull;) and I see no reason why (after so long a Disclaimer) we should be now fond to readmit it. But what greater Evidence (of owning that Authority) can (in practice) be expected, than obeying their Commands, in things (otherwise) unadvisable? *Hoc Itacus velit, & magno mercentur Atrida*. And no doubt but the hand of *Joab* is in the matter, though perhaps we do not see it.

As to our selves; this cannot be done, without altering the *Act of Uniformity*, and altering the *Common-Prayer Book*; (For, at least, all the Calendar must be new fram'd:) And your Lordship knows how warm some were a while since, against touching that in the least, (or so much as considering (on the King's Commission for that purpose,) whether ought in it might be changed for the better.

If yet your Lordship think it necessary, that the *seat of Easter* should be rectify'd; that may easily be done, without altering the *Civil* Year: For if, in the *Rule for Easter*,

Easter, instead of saying *next after the One and Twentieth of March*, you say, *next after the Vernal Equinox*; the work is done. (And we might be excused the trouble of *Paschal Tables*; and the intricate Perplexities of the *Gregorian Epacts*.) For then every Almanack will tell you, *when it is Equinox, and when it is Full Moon*, for the present year, (without disturbing the Civil Account.) And this *Pope Gregory* might as well have done, without troubling the Account of Christendom.

But, if he would needs disturb the *Civil Year*; He should have rectified it (not to the time of the *Nicene Council*, but) to the time of our *Saviour's Birth*. For our *Epocha* is not from the *Nicene Council*, but from the *Birth of Christ*. We do not say, *Anno Niceni Concilii*; but *Anno Domini*. And most certain it is, that, at our *Saviour's Birth*, the *Vernal Equinox*, was not on the *One and Twentieth of March*, (as this *New Account* would suppose,) but *nearer to the Five and Twentieth*.

It is alledged as an Argument, why *Now* to change, because the difference, which this Year is but Ten Days, will next Year be Eleven Days.

But, My Lord, we must be very weak Disputants, to be caught by such a Fallacy, (which is barely begging the Question.) The Point in Question, is not *why Now*; but *why at all*. It is not We that have departed from them; but They from Us. The *Julian Year* was their Year, as well as Ours, till the year 1582. when a Fancy took *Pope Gregory* to Exchange a Better year for a Worse, and disturb the Christian World. And then the Argument (if it signifie any thing) stands thus: *The farther they be gone astray, the more reason there is that we should follow them*. I should rather argue, *The more Reason there is why They should return* (to that from whence they went astray.) *we are as we were*, (and as They were till that time.) And the

reason why we did not *then* change, remains still good why we should not make *that* change, *as all*.

If this Point had been started in our late King *James's* time; I desire your Lordship to consider, with what Face it would have looked. And, if the Mask be taken off, the Face is still the same.

I find, it was started in the time of our Civil Wars (about the year 1644) by those about the King, when *Oxford* was the King's Head-Quarters; but the project did not then succeed, by reason that the King's Party (in that contest) were not revalent. And your Lordship knows very well; how much it was to the prejudice of the King's Cause, that those on the other side would suppose him to be too much influenced by Popish Councils; of which this was a great Instance.

And no doubt they will be as ready to push it forward, (upon any the least pretence) whenever they find us soft enough to receive the impressiion. Not perhaps under the names of *Julian* and *Gregorian*, (for the word *Gregorian* speaks too plain,) but (under the softer terms) of *Old and New Stile*.

Otherwise, so much weight would not be laid upon so slight a pretence. For the Addition of *Old Stile* or *New Stile* will certainly determine the difference of *Eleven Days* in the next Century, as of *Ten* in this, if nothing else were in the wind. We have been too often caught in such Snares.

I forbear to say more (though more might be said) that I may not too much presume on your Lordship's Leisure. But am,

My Lord,

Your Lordship's very humble
Servant,

John Wallis.
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