

An Extract

Of a Letter written by Signor Cassini Professor of Astronomy in Bononia; to Monsieur Petit at Paris, and Englished out of the Journal Des Scavans; concerning several Spots lately discover'd there in the Planet Venus.

TO give you some account of my present Studies, I shall acquaint you, that having been a good while very assiduous and careful in making Observations of *Venus*, to see, whether that Planet did not turn about its Axis, by a motion like to that of *Jupiter* and *Mars*; I met at first with many difficulties, but at last considering, that I should succeed better in my Observations at a time when *Venus* is at a good distance from the *Earth*, than when she is near thereto, I attentively observ'd, when she was risen somewhat high above the *Horizon*, and shin'd brighter, whether I could not discern in her some part remarkable either by its brightness or obscurity, among the rest, especially about the middle of her Disk. And this I did not in vain; for I discover'd at last towards the middle of her Body a part clearer than the rest, by which one might judge of the Motion or the Rest of this Planet.

The first time I saw it, was *October 14. 1666. h. 5. 45'. p. m.* and then this bright part was very near the Center, on the *North* side. And at the same time I observed *Westward* two obscure spots, somewhat oblong; but I could not then see that resplendent part long enough to conclude any thing from thence, nor was I able to see any thing well of those parts till *April 28. 1667.* on which day, a quarter of an hour before Sun-rising, I saw again a bright part, situated near the *Section*, and distant from the *Southern Horn* a little more than $\frac{1}{4}$ of its Diameter. And near the *Eastern Ring* I saw a dark and somewhat oblong spot, which was nearer to the *Northern* than the *Southern Horn*. At the rising of the Sun I perceived, that this bright part was then no more so near the *Southern Horn*, but distant from it $\frac{1}{3}$ of its Diameter. This gave me great satisfaction. But

I was surpris'd at the same time to find, that the same Motion, which was made from *South* to *North* in the inferiour part of the Disk, was on the contrary made from *North* to *South* in the superiour part; whence the determination of the Motion may be better taken: For we have no Example of the like motion, except it be in that of the *Libration* of the Moon.

The next day, at the rising of the Sun, the said *bright* part was not far from the *Section*, and distant from the *Southern Horn* $\frac{1}{4}$ of the Diameter. When the Sun was 4 degrees high, the same was scituated near the *Section*, and remote from the *Southern Horn* $\frac{2}{5}$ of the Diameter. The Sun being high 6 deg. 10 min. it seem'd to have been pass'd the Center, and that the Section of the Disk did cut the same. The Sun being 7 deg. high, it appear'd yet more advanced Northward, together with two *obscure* Spots seated between the *Section* and the *Circumference*, and equally distant from one another, and from each Horn on both sides. And the Sky being very clear, I observ'd the motion of the *bright* part for $1\frac{1}{2}$ hour, which then seem'd to be exactly made from *South* to *North*, without any sensible inclination *Eastward* or *Westward*. Mean-time I perceiv'd in the motion of the *dark* Spots so great a Variation, that it cannot be adscribed to any reason in *Opticks*.

May 10. and 13. before Sun-rising, I saw still the *bright* part near the Center Northward.

Lastly, June 5. and 6. before the rising of the Sun, I saw the same between the Northern *Horn* and the Center of this Planet, and I noted the same irregular Variation in the *obscure* Spots. But when *Venus* began to be further removed from the Earth, it was more difficult to observe these *Phænomena*.

I shall not presume to declare my sentiment touching these Apparences so boldly, as I did concerning the Spots formerly discover'd in *Jupiter* and *Mars*. For those Spots I could very well observe for a whole night together, during the opposition of those Planets to the Sun: I could consider their Motion for the space of several hours; and at last, seeing them return regularly to the same place, I could judge whether they were the same spots or not, and in how much time they

they absolv'd their Relation. But it was not so here with the Apparences in *Venus*; for one sees them but for so small a time, that it is far more difficult, *certainly* to know, when they return to the same place.

Yet this I can say, (supposing that this *bright* part of *Venus*, which I have observ'd, especially this year 1667, hath always been the same) that in less than one day it absolveth its motion, whether of *Revolution* or *Libration*, so as in near 23 hours it returns about the same hour to the same scituation in this Planet; which yet happens not without some irregularity. Now to affirm, (supposing it to be always the *same* bright part) whether this Motion is made by an entire *Revolution*, or by a *Libration*, I dare not yet do, in regard I could not see the Continuity of the Motion through a *great* part of the Arch, as I did in the other Planets: And for this very reason, *that* will always be difficult to determine.

An Extract

Of a Letter, written by J. DENIS, Doctor of Physick, and Professor of Philosophy and the Mathematicks at Paris, touching a late Cure of an Inveterate Phrensy by the Transfusion of Blood.

This Letter was lately sent by the Author himself to the Publisher, as it was printed at Paris in French; the substance whereof is in English, as follows.

IT is now almost a twelve-month that I declared my self publicly in this matter of *Transfusion*, and after I had grounded my Conjectures upon divers reasons, and a number of Experiments which I made joyntly with M. *Emmerez*, I resolv'd to expect in the sequel a further confirmation, by carefully observing all that should happen in the several Trials I intended to practice.

In this resolution, we have since let slip no occasion to improve this Operation, which hath been follow'd with good success, and I could here alledge some particular Relations, the circumstances of which would appear curious enough, if I did