

*De Respirationis Usu Primario Diatriba, Auth. Malachia Thruston M. D. Cui accedunt Animadversiones à Cl. Viro in eandem conscripta, una cum Responſionibus Authoris. Londini, apud Joh. Martyn, Reg. Societ. Typographum ad insigne Campanæ, 1670.*

**T**His Learned Author, a worthy Member of the *R. Society*, in discoursing upon this no less difficult than important subject, observes this Method;

*First*, he lays for a ground, that there is and needs must be Motion in the Blood. *Secondly*, he declares, what kind of Motion and how various that is, shewing also, that all those motions are to be adscribed to the *Vital Blood*, and to be preserved therein. *Thirdly*, he maketh it his business to prove (which is his main design, that those Motions are both continually produced, and maintained by the means of *Respiration*, premising something of the Nature and Properties of the *Air*, and the *Fabrick* and Motion of the *Pneumatick* parts.

This done, he sheweth the probability of his *Hypothesis*, as being intelligible, and able to solve innumerable questions, and among them such, as have been esteemed almost insoluble. And *first*, he teaches, how *Respiration* maintains that *Progressive* Motion, which he also calls the Motion of *Rivers*; and then, how it preserveth the Motions of *Fluidity*, and *Warmth*, by the *Airs* subduing, comminuting, and dilating the Blood. Where he digresseth to give an Answer to those, that will not allow the *Air* to have any ingress into the Blood; as also to explain the cause of *Sanguification*, adscribing it neither to the Heart nor the Liver, but principally to the *Lungs* in those that are borne; but in *Fetus's*, to the maternal Blood, and the *Vmbilical* vessels.

*Next*, he proceeds to explicate the many *Problems* of *Respiration* by the delivered *Hypothesis*: And chiefly why *Respiration* is so absolutely necessary to Life, viz. because Life principally consists in the motion of the Blood; which soon ceaseth, when *Respiration* is stopp'd. Upon which Question thus resolv'd, depends also the solution of divers others, to be found in this Book.

To all which he adds the reason of the Difference, there is, as to *Respiration*, between the Borne and Un-borne; solving that knotty *Heruvian Problem*, viz. Why a *Fetus*, being divested of the *Secundine*, and having once breathed in the open *Air*, cannot live afterwards without it, but dyes presently? Which he imputes to the hindred Motion of the Blood, entertained by *Respiration*.

But why, after that *Respiration* hath once begun, the Blood will not, when there is need, return to its former passage through the *Foramen Ovale*; we refer to the Author himself for an Answer: as we also do for other considerable Solutions of many other difficulties occurring in this Learned Treatise.

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