## NEW NOTES AND DISCOVERIES ON THE INVENTION OF EARLY MODERN PRECISION INSTRUMENTS

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Since antiquity, the need to assess the intensity of diseases was taken seriously in medical practice. Insofar as the functions of the body depended on the dynamic imbalance of qualities such as hot and cold, the variations in their proportion gave rise to a series of natural phenomena that, while different in kind, could nonetheless be ordered in degrees. Depending on the prevalence of one quality over the other, with respect to

an ideal proportion fixed in advance (aequale ad pondus), functions were impaired to a lesser or greater degree, determining the intensity or severity of a disease. One of the first attempts at measuring the severity of a disease was provided by Galen of Pergamum (129-199/216 AD). Galen proposed to conceptualise the alterations affecting an organism in terms of segment lengths (latitudines), an approach that remained

vital in the Galenic tradition via the commentaries on his Ars medica, a work also known as Microtegni. In this paper I focus on one of the latest examples of such commentaries, that which Santorio Santori (1561-1636) wrote in 1612. I move on analysing how the question of intensity is taken over by Santorio, and how he developed it to transform it into the preoperational theory which sustained his invention of precision instruments. In the final part, along with a new discovery, I provide a new visual and documentary evidence how thermometers, pulsilogia and other such instruments were applied in everyday medical practice.