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The premodern rise of analytic language to demonstrate the quantitative variation of the qualities —physical and metaphysical— is revealed in boundless detail in this volume. The complexity of its manifestations and its European impact through broad textual circulation persisted into modernity. Scholars who write in this book display diverse outlooks on the quantitative analysis of physical changes, which extend from medieval formulations of logical paradoxes to the dilemma between dynamic/kinetic description of motion and qualitative alterations in terms of mathematical proportional variations, also involving modifications in "essential forms", interpreted as causal forces enduring beyond the physical nature. The editors are aware of the ambiguous term *calculatores*, proposed by Roger Swineshead, which is slightly biased, given the widespread adoption of analytical methods for explaining physical change. Ranging from the redefinition of the categories that describe motion to the mathematical vocabulary that locates the specific "instant" at which an intense or gradual alteration of motion occurs, as well as the relationships between the impressed force, the increase in speed, and the passivity of the medium regarding local motion. Additionally, the multiple commentaries on Aristotelian physics, the editing of *Sophismata* by Kilvington, Bradwardine, Heytesbury, and Swineshead, introduce the vocabulary of analysis to describe the physical conditions of motion, attesting how quantitative variations are expressed through variable proportional measures.

That is the case addressed by Trifogli regarding Thomas Wylton's definition of the "instant of change". "Instant" does not compose the variation of motions, nor is it a part of physical change. Therefore, instant is defined by the changing subject to continuously measure the temporal extension of motion, bounded by the "instants" of the beginning and end. Those limits of measure and the precise definition of the instant at which change occurs avoid the infinity of time associated with local motions. The reinterpretation of change and its descriptive composition, according to the extreme limits, is a precedent for the questions proposed by Kilvington and Bradwardine, as introduced by Jung. Indeed, they introduce a new perspective on motion based on the proportional relationship between the power of the mover driving the movement and the increase in the velocity of the moving object. However, Kilvington focuses on the logical paradox of whether there is a power that exceeds the velocity impressed by the moving object, increasing velocity or the force decreasing due to medium resistance. Unlike Aristotle and Averroes, who advocate an equivalence between potential force and velocity, Kilvington points out the paradox of an increase in force without any proportional effect on velocity. The Mertonians, Bradwardine, and Pippewell introduced a mathematical perspective for researching the potential ratio of the moving object's force and its velocity increase. This ratio represents the doubleness of the impressed force and the overcoming of the medium resistance, which is a geometric proof based on the observation of the elementary spheres and the proportion between their motions. The proportional ratio applied to local motion, dissolving, in Bradwardine's terms, "the clouds of ignorance" in favour of the "demonstrative winds" provided by the mathematical proportions feasible in the physical description of motion (*ignorantiae nebulis demonstrationum flatibus effungatis, superest ut lumen scientiae resplendeat veritatis*).

The "demonstrative winds" summoned by Bradwardine stand out among the manuscripts of *De proportionibus* studied by Podkonski, since mentions of Swineshead are detected in the manuscript tradition, possibly connecting *De motu locali* with Bradwardine's ideas and Heytesbury's *Sophismata* on difform motions. Thus, the local displacement has a velocity that increases or decreases uniformly from the midpoint of the velocity maximum pick. Swineshead quotes the rule of uniform difform local motion from Heytesbury but adds a further assumption about the proportionality of difform motion, since at the middle point of motion, there is a continuous increase or decrease, doubling its velocity. Podkonski presents two versions of the proportional analysis found in Heytesbury, emphasising the importance of the midpoint at which motion accelerates or decelerates proportionally. Regarding the mathematical interpretation of local motion and the increasing or decreasing according to a proportional relationship between geometric quantities, Lukács offers Bradwardine's approach on this language through the description of divine causality. In *De causa dei*, the portrayal of the proportional increase of the divine infinite power, which can only increase and increase, is related to the miraculous healings of the Gospel. The experience of the biblical account reveals healing, but without introducing us to the language of the continuous increase of divine power, whose virtues unfold in a proportional order according to the latitude of divine power, which represents its infinite expansion. In this case, mathematical language provides imaginative support for conceiving this infinite increase, diverting the possibility of nature's persistence in time, depriving it of embodying infinity. This recalls the problem of justification, since in creation an infinite increase of divine grace cannot occur concerning a limited number of individuals. However, we can imagine this infinite grace without limiting its constant increase to the series of individuals who receive it. The theologians and the *falsigrapho*, possibly Kilvington, assume an uncertain number of individuals or the possibility of infinity that challenges the latitudinal increase of divine power.

Read confronts, one more time, Kilvington and Bradwardine in the liar paradox. Among the sentences considered *insolubilia*, this statement does have multiple meanings or can be interpreted as a meaningless proposition. Verifying the meaning of *Sortes dicit falsum* leads us to ask whether it indicates falsehood or is true in a restricted way. Heytesbury advises employing the terms in their most familiar meaning, so we can determine whether the statement is true or false. Read translates "insoluble scenario" as *casus de insolubili*, which makes it easier to point out the meaning degree concerning a specific or restricted language use, and its probability. Swineshead introduces another variable, the sufficiency or insufficiency of this type of proposition, which implicitly generates diffuse degrees of probability regarding its meaning. In contrast, Dumbleton develops a classification of "scenarios" of meaning connected to Bradwardine's position and his implicit meaning multiplicity. Both "scenarios" and the context of the *obligationis* suggest a further analysis of the terms without leaving the initial assumption of the ambivalent or multivalent meanings. Returning to the dynamics of local motion, Rommevaux-Tani describes, based on the *Tractatus de sex inconvenientibus* by an anonymous author, but in the context of the *schola oxoniensis*, the problems introduced by the proportional analysis of changes in velocity about the movements of generation, alteration, and local displacement. The treatment of each of these "inconveniences" involves the exposition of the most accepted analysis versus the solution suggested by the *Tractatus* itself. For each issue, she describes the "inconvenience" and the pursuit for a solution acquired from the study of each question. Rommevaux-Tani is the author of the critical edition of *Tractatus de sex inconvenientibus*. Besides, her article introduces an additional issue: the Prague manuscript (Národní Knihovna, VIII. G. 19), in which the *Tractatus* remains surrounded by other Oxonienses pamphlets by Kilvington or Bradwardine, along with other anonymous opuscula. Remarkably, the optical treatises and their references on the analysis of local motion and the proportional measures applicable to variations in light incidences on spherical "scenarios".

Thakkar opens a fundamental section of this book by including Wycliff among the continental successors of the Oxonienses, or *calculatores*. His generation, which included Giovanni da Casale, Oresme, and Holland, is an interesting example of the historiographical discussion about who was part of the "Bradwardine Circle" or "Schule", as Maier labelled it. While Weisheipl pointed out that Mertonians had no direct contact, they did adopt Bradwardine's methods. Thus, among *calculatores,* not everyone who is an Oxonian is a Mertonian, nor are all Mertonians or all Oxonians; therefore, not all *calculatores* are Oxonians or Mertonians. A curious *insolubilia* that Sylla condensed into a pragmatic assumption: the use of "new measure languages" which describe Bradwardine's followers and the authors who constructed a method to elucidate the analytical problem of motion and indicate the proportional measure of its variations. Thakkar's answer with a question: what exactly did the *calculatores* calculate? A question about the new descriptive language of motion, focusing on increase and decrease, and how these variations take place. Language employed by Wycliff, who uses analytical expressions about motion (*gradus, motus uniformis, motus difformis*) to explore physical questions like "mathematicians treat [them] like empiricist philosophers (*sensibiles philosophi*)".

Berger stresses the *calculatores* posterity through the figure of Helmoldus de Zoltwedel, who developed his career in Prague around 1390. His studies on *insolubilia* place him in the wake of the calculators, especially for his exposition of the liar paradox and other issues. His criticism of Heytesbury, who he claimed often used evasive words (*verba evasiva*), is striking. Helmold emphasises the elusiveness of the multiple meanings associated with these propositions. He seeks to establish distinctions, whether the statement is false, has a reference, or is nonsensical, allowing the "moderns" to assume this contradiction and resolve the meaning issues. The article presents the critical edition of the *Questions on Insolubilia* (*Questiones parvorum logicalium*), which mentions Helmold's teacher, Conradus Soltow, and his more nuanced interpretation of the liar paradox. Biard studies Blasius of Parma's outlook on physical variations of accidental qualities, based on the gradual concept of quality intensity and its remission. The problem of attributing accidental quality is related to exploring its relationship to the subject, for example, the degree of increase in heat and the consequent cooling. Those qualities are mixed with the parts of the subject, or are there inherent qualities that suddenly emerge? Accidental qualities are studied by comparing them with the subjects that display them and the proportional variations of their changes. Once the proportions of variations are known, it remains to find the quality's nature, which does not depend merely on subjects, since qualities are forms that, similar to causal principles, gradually acquire or lose intensity. Blasius adheres to the gradual acquisition or loss of intensity as an explanation of the forms' physical operations, which are not material parts of substances. It seems a succession of qualitative unfolding, but not all cases of qualitative increase or decrease support formal continuity. The increase in speed, for example, is attributed to a moving object, but occurs in a medium that itself possesses other qualities.

Szapiro deals with the problem of uniformly difform qualities of the medium regarding light refraction and the distortions of stargazing. This issue is addressed by Nicole de Oresme, whose origins date back to *Meteorologica*, the *Almagest*, and Ptolemy's Optics. The question is whether an observer has a proportional deviation of the sun's altitude caused by the light refraction, which modifies the observation of stars or not. The observer, who is not located at the centre of the sphere, implies that the rays' incidence may have a degree of inclination produced by the density of the medium, the Earth's atmosphere. Oresme's hypothesis about the density of the uniform difform medium is reproduced in three mental experiments showing the deviation of the sun's position regarding the observer's spot. The density change demonstrates the introduction of the analytical vocabulary of motion applied to the resistance of the medium in which light refraction occurs. Szapiro maintains that proportional change is a particular application of the Merton Rule, in which the degree of inclination varies from 1/2 to 1/4, up to 1/8, demonstrating the refraction degrees that connect with the Merton Rule regarding the proportional increase or decrease of motion velocity. The two and three-dimensional diagrams, offered by Szapiro, clearly represent the application of proportional language to different phenomena, such as light refraction and the density of the medium. That is a remarkable example of *calculatores* tradition and its applications.

Di Liscia, editor of the volume, addresses the performance of analytical language concerning qualitative variations of perfections or "essential forms". *De perfectione specierum* is an issue easily found in the *Sententiae* commentaries, for instance, John of Naples or Augustine Nifo. Although the Neoplatonic echoes regarding the influence of the first causes on the second natural causes and the physical explanation of their "influence" on substantial change, Di Liscia tackles the signification framework that eventually leads to carelessness perfections to study the analytical measure of physical alterations. The comparison between the geometric language of Oresme and John of Naples exemplifies the setting of early analytical processes applied to substantial species, which seek their perfection by nature, configured in proportional alterations. Remarkably, it is the ascription to Jean Legrand of a manuscript, which Murdoch took as an anonymous treatise, allowing Di Liscia to locate in France the spreading of *De perfectione specierum* all around Europe. Legrand's *Compendium utriusque philosophia* displayed the analytical vocabulary that links it with the study of the species perfectible process from the minimum degree until it reaches its maximum intensity of perfection. Although described progressively as a numerical series, Legrand draws a diagram illustrating the tendency of species toward perfection, based on a circle whose centre represents the divinity, using the radius to draw a sequence of triangle sides, which gradually represent the species' perfection degrees. The "triangle of zero degree" represents divine perfection, as seen in Nicholas of Amsterdam's treatise, which demonstrates the application of geometric language proportions to describe species alterations and their ultimate perfection. The case of Paul of Venice recalls the issue of the "triangle of zero degree", as well as its reference to the problem of latitudes, species, and their variations leaning toward essential perfection. Blasius of Parma condensed geometric analysis into imaginative tools to analyse species alterations. However, assimilating the analytical geometric model to leave behind perfections opens the way to another language, which later becomes the analytical framework for the new physics. Di Liscia's chapter addresses the dissemination of dynamic-metaphysical issues, revealing the pathways of premodern science language, whose core was the causal influence of perfections that "flowed" freely in nature.

Oosterhoff introduces the gradual contraction of the approval of analytical tools. Lefevre d'Etaples' critical statements resonated among the editors of Aristotelian works, a group obsessed with a set of tools that are nothing more than geometric representations. Early print culture argued with late scholasticism about a teaching program more closely tied to philological and historical interpretation of texts than to an approach to proportional language that expresses the physical nature of change and motion. Lorenzo Valla, a philological spirit of the first half of the 16th century, addressed the emergence of Platonic mathematics, dismissing the merging between physical explanation and the analytical language of geometry.

Seller introduces an Italian commentator of Heytesbury, Angelo Fossambruno. The *Expositio de tribus praedicamentis* focused on the kinetic variations of velocity and uniform-difform local motion, representing the Italian reception of Heytesbury, whose *De regule* was the logic teaching text in Padua in 1496 and circulated in the University of Bologna. Seller recalls the crossroads between the Aristotelian definition of velocity, which increases in a passive medium due to the activity of the moving body and the quantification of increasing through a geometric language to spot the degrees of intensity and the velocity increases. Regarding motion in a vacuum, Fossambruno contemplates a solution *ad imaginationem* that envisions the conceptual conditions of local motion. Imagining void space whose passivity is like a medium that lacks resistance, Fossambruno sketched a mental experiment to speculate on the variation of motion qualities according to its causal conditions, which are favourable in a vacuum. The *ad imaginationem* method is replicated in the treatment of the infinite intensity of motion. This possibility may arise if a motion resistance decreases or increases its latitude indefinitely (*latitudinem motus esse infinitam versus extremum intensius*).

Sylla closes this volume by outlining the historiographical steps of the *calculatores* tradition in the 20th century, mentioning Maier, Duhem, Murdoch, and Clagett. Not without first recalling Leibniz's affinity for Richard Swineshead, who pointed out the need to reprint the *Liber calculationum*. While Leibniz often "looked back" to recognise the relevance of *calculatores* for historiography, it represented a challenge against the singularity of the 17th-century scientific revolution. Sylla illustrates the phases of a personal unfinished project that highlights the intellectual affinity between Leibniz and the science of his time, which employed mathematical methods to transform Aristotelian physics into a new language suitable for studying nature. Leibniz wrote on dynamics around 1690 with a conscious use of the *calculatores* vocabulary. Sylla highlights the intensive and the gradual increase of motion of those *scholastici quidam maxime Angli moliti sunt singulares quosdam calculos admodum subtiles circa intensiones et remissiones qualitatum et formarum [...]*. Sylla raises an even more complex issue concerning the dismissed transmission of the *calculatores* during the 17th century and how Leibniz found himself in an intellectual context in which everyone studied those *scholastici*, as shown in the appendix of the Leibnizian texts that explicitly quote them. It is feasible for Sylla that Leibniz, based on his reading of Alvaro Thomas and Swineshead, could have carried out the project of the *calculatores* by following *le chemin par l'infini et l'infiniti de l'infini.*