Franciszek Bargieł SJ: Adalbertus (Wojciech) Tylkowski SJ (1624–1695) and His *Philosophia curiosa*

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Abstract This issue features a translation of another paper by Franciszek Bargieł SJ, this time dedicated to the profile of another Jesuit philosopher, Adalbertus (Wojciech) Tylkowski. The article was originally published in Latin in Forum Philosophicum 7, (2002): 239–51. It has since been translated into English.

About the Translation

Translation is never merely replacing words in one language with those of another. My guiding maxim is St. Jerome's statement, in his letter to Pammachius, that a translator renders not words but meanings. A translator therefore conveys an intelligible message, not a mere string of semantically equivalent words. In every translation the source words are signs pointing to a larger end: to reproduce, in another language, the argument, style, and thought of the original. Because languages map the world differently, the translator must at times alter form to preserve function. Faithfulness to meaning may therefore require departures from the original word order, syntax, or idiom.

This principle has guided my work. Franciszek Bargieł's Latin text has been translated here into English with attention not only to literal accuracy but, above all, to the author's intended sense. Bargieł writes in the scholastic and Jesuit tradition, in which precision of definition and rigour of argument matter as much as manner of expression. My translation aims to highlight both. Latin and English differ in their preferred sentence structures. Bargieł frequently uses complex periodic sentences, suspending key predicates until the final clause. English does not tolerate such structures well. Where length and complexity would hinder understanding, I have split them into several

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sentences. This is an interpretative choice that preserves the argumentative structure while removing a barrier arising from syntactic differences alone. Orthography and Latin proper names follow standard contemporary conventions. Philosophical terms are rendered with established English equivalents; where no adequate equivalent exists, the Latin is retained, and Greek terms are given in transliteration. This posed no major difficulties, since most English philosophical vocabulary is calqued from Latin or, in part, from Ancient Greek.

My decisions rest on two complementary principles. First, functional equivalence: the English should give readers an understanding comparable to that intended for the author's educated Latin audience, given the resources of English and changed conditions of reception. Second, preservation of style: Bargieł writes a highly scholasticised Latin shaped by scholastic method and, above all, Jesuit pedagogy. The tension between accessibility and historical texture is real. I resolve it case by case, asking what each passage does (definition, inference, admonition) and then choosing the degree of modernization that preserves its effect without concealing its origin.

A few words about Bargieł's style. He writes with the calm confidence of a trained Jesuit debater. He presents Tylkowski and his views matter-of-factly, without delving into detail. The aim is to present the largely unknown Jesuit philosopher and theologian Wojciech Tylkowski in a concise outline. In English, I have sought to preserve this rhythm. The division into numbered sections and paragraphs remains that of the original. Bargieł prepared this article as an abridgement of his longer Polish study of Tylkowski, which also shapes its style.

Finally, I reiterate St. Jerome's rule, which has guided me: "I do not translate word for word, but sense for sense." (*Non verbum e verbo, sed sensum de sensu.*) Adopting this maxim, I have striven to remain faithful to the meaning and argument of the original while allowing them to live in English. If the wording or structure occasionally deviates from the Latin, it is to maintain a deeper correspondence of meaning and intent. That correspondence, not mechanical sameness, is the true measure of accuracy. By that measure, I hope this translation preserves the clarity, logic, and precision of Bargieł's text.

A Very Short History of the Jesuit Order in the Sixteenth and Seventeenth Centuries

The Society of Jesus, founded in 1540 by Ignatius of Loyola, rapidly became one of the most influential orders in the Catholic Church, combining intense pastoral and missionary work with a rigorously standardized educational

programme (O'Malley 1993, 6). The early Constitutions and the Exercises shaped a disciplined corporate identity oriented to service "for the greater glory of God," but by the turn of the century the order's distinctive public face was the school. *The Ratio Studiorum* (finalized in 1599) codified curricula, teaching methods (*lectures*, *praelectiones*, *disputations*), classroom management, and a hierarchical sequence of studies from grammar through humanities and rhetoric to philosophy and theology. (Farrell 1970, xiii–xiv) Prefects of studies coordinated cohorts; rectors and provincials enforced uniform standards; weekly disputations and public "acts" trained students to argue with precision and decorum. The Ratio also specified reading lists, hours, and the roles of tutors, ensuring that a pupil moving from Cologne to Naples or from Vilnius to Lisbon would encounter recognizably the same programme (O'Malley 1993, 8–20; Farrell 1970, xv–xviii).

By the seventeenth century, this administrative machinery sustained a global system of higher education. Colleges and residential academies multiplied across Catholic Europe and far beyond, forming a network that moved teachers, textbooks, and methods with unusual speed. Print reinforced this circulation: compendia, commentaries, and disputation theses produced in one province were adopted and adapted in another, so that a textbook written for a Roman classroom could be taught in Prague, Antwerp, or Puebla (Friedrich 2022, 201–32). The schools were not isolated institutions. They sat at the intersection of pastoral care and civic culture: they trained clergy and laity, furnished preachers and confessors to courts and cities, staged Latin drama for urban audiences, and maintained sodalities that linked adolescent piety with adult patronage.

This mattered for philosophy and science. In philosophy, the Society preserved and reshaped Thomistic-Suárezian scholasticism, consolidating a common syllabus while allowing controlled debate on contested points. Logic, natural philosophy, metaphysics, and moral theology were taught in a sequence that privileged clarity of definition and argumentative order. The leading manuals and commentaries—Thomas Aquinas as the norm, Francesco Suárez as interpreter and foil—supplied the conceptual grammar of causality, substance and accident, act and potency, habitus and virtue (Casalini, Pavur 2016, 239–44). Yet the schools did not function as museums of inherited doctrine. Faculty read new books, staged *quaestiones* on fresh problems, and revised notes as controversies evolved. Where necessary, they integrated novel observations into older frameworks.

The Society's engagement with the new sciences was continuous and ambivalent, at once receptive and cautious. At the Collegio Romano, Christoph Clavius, the long-serving professor of mathematics, was a principal

architect of the Gregorian calendar reform that culminated in 1582 and continued to be explained, defended, and taught into the early seventeenth century (Baldini 1994, 121–27). Clavius expanded the mathematical curriculum, promoted Euclidean rigour, and trained students who would make astronomy and instrumentation central to Jesuit pedagogy. (Baldini 1994, 128) In the mid-seventeenth century, Giovanni Battista Riccioli and Francesco Maria Grimaldi combined observation, experiment, and careful argument in their *Almagestum Novum* and related works. (Heilbron 1999, 53–54) They measured pendulums, mapped the Moon, proposed lunar nomenclature still in use, and explored the behaviour of light and shadow; Grimaldi coined "diffraction" to mark phenomena not captured by simple rectilinear propagation. Their astronomy defended a sophisticated geocentric or Tychonic framework even as it assimilated telescopic data and improved methods of measurement (Heilbron 1999, 55–78).

Athanasius Kircher, a Roman polymath and indefatigable correspondent, exemplified another Jesuit mode of learned activity: the encyclopaedic synthesis of marvels, reports, and instruments into compendia that sought to order the world's knowledge. His museum at the Roman College displayed fossils, automata, scientific devices, and ethnographic curiosities; his printed works ranged from magnetism to hieroglyphs, volcanoes to music. However heterogeneous, this oeuvre reveals the Baroque appetite for totality and the Jesuit instinct to organize novelty within an intelligible frame. The taste for "curious" phenomena that animated Kircher also percolated through classrooms and popular lectures, where demonstrations of optics, pneumatics, and mechanics accompanied formal teaching (Findlen 2004, 33–39).

The seventeenth century was also the age of global missions. Jesuit education provided the linguistic, logical, and rhetorical skills that missionaries applied abroad; reports from Asia and the Americas, in turn, fed European curiosity and reshaped curricula (Friedrich 2022, 221). In China, Matteo Ricci's strategy of accommodation and mathematical expertise opened elite doors at the end of the sixteenth century and set patterns that continued with his successors in the seventeenth. Calendrical science and cartography travelled with catechesis; translations moved both ways. In New Spain, Peru, and Paraguay, reductions organized communal life and schooling; observations of flora, fauna, and languages entered European collections (Friedrich 2022, 244–51). The missions were intellectual enterprises as well as pastoral ones. They tested the elasticity of scholastic categories when confronted with unfamiliar cosmologies and practices, and they supplied data for natural history and geography that teachers at the Roman College or in Antwerp could integrate into lessons (Friedrich 2022, 251–54).

In the confessional conflicts of the period, the Jesuits were visible actors. They preached in contested cities, advised Catholic princes, staffed seminaries that formed clergy for re-Catholicized territories, and debated Protestant theologians in print and at court. Their schools helped consolidate post-Tridentine Catholic culture by shaping elite literacy and argument. Latin drama, emblematic processions, and public disputations linked the classroom to the street, presenting ordered knowledge as civic spectacle (O'Malley 1993, 7–11). The Thirty Years' War and its aftermath affected colleges unevenly, but the order's administrative resilience, provincial congregations, visitations, and regular correspondence with Rome sustained continuity of practice through political instability (Friedrich 2022, 233).

The internal mechanics of Jesuit pedagogy deserve emphasis, because they explain both the endurance of the schools and their intellectual profile. The *praelectio*, a structured explication of a text that combined paraphrase with analysis, taught students to move from words to things and back again. Daily repetition and weekly disputation drilled retrieval and application. The curriculum required cycles of composition: Latin verse and prose in the lower schools; set-piece orations and forensic exercises in rhetoric; theses defended in philosophy and theology. (Farrell 1970, xx–xxii) The method cultivated a habitus of conceptual discrimination and a public style of reason-giving that could be transposed from the pulpit to the laboratory and the law court. Even when Jesuit philosophers resisted elements of the new mechanical philosophy, their students possessed the tools to read Descartes, to reconstruct an argument, and to press objections in the idiom of the schools (Casalini and Pavur 2016, 254).

In the Polish-Lithuanian Commonwealth, the network of colleges anchored by institutions such as Vilnius (raised to an academy in 1579) and Braniewo trained generations for service in church and commonwealth. The Polish-Lithuanian colleges followed the Ratio closely while responding to local needs: instruction in rhetoric supported the Commonwealth's political culture of public speech; philosophical courses prepared clergy and magistrates to reason in a shared scholastic idiom; drama and festival articulated Catholic identity in a multi-confessional society. Within this milieu, Wojciech Adalbert Tylkowski (1624–1695) emerged as a representative figure. His *Philosophia curiosa* reflects both scholastic rigor clear divisions, articulated theses, careful resolution of objections and Baroque curiosity, a readiness to catalogue phenomena and to indulge wonder as a prelude to explanation (Darowski 1994, 15–17). The work's curiosity is not an abandonment of method, but its expansion to include the newly notable,

in the spirit of Kircher's compendia and the experimental demonstrations circulating in Jesuit schools (Findlen 2004, 111–14).

The picture that results is one of institutional coherence amid intellectual diversity. The Society of Jesus, in the seventeenth century, preserved a core curriculum that stabilized philosophical vocabulary and argumentative form, while its teachers and writers engaged new instruments, data, and geographies (O'Malley 1993: 12–23; Friedrich 2022: 244–48). The order's global communications, disciplined pedagogy, and culture of disputation enabled a rapid diffusion of practices, from calendar reform to telescope use and mathematical instruction, across provinces. The same mechanisms that formed preachers and confessors also produced astronomers, linguists, and encyclopaedists. The Jesuit school was thus not a marginal appendage to pastoral life, but a central engine of Catholic intellectual culture, shaping the terms in which philosophy and science could be discussed and the audiences to whom they could be addressed. In the Polish-Lithuanian Commonwealth, as elsewhere, that engine powered the education of writers like Tylkowski, whose pages exhibit the Society's characteristic blend of system and surprise: a disciplined scholasticism open to the widened horizon of the seventeenth-century world.

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Adalbertus (Wojciech) Tylkowski SJ (1624–1695) and his *Philosophia curiosa* (1669)[1]

Franciszek Bargieł SJ (translation)

Abstract A monographic study on this subject by Franciszek Bargieł was published in 1986 in Polish as *Wojciech Tylkowski SJ i jego "Philosophia curiosa" z 1669 r.* (Krakow 1986, 197 pp.); we shall present a synthesis of the key elements of this here, for readers of *Forum Philosophicum*.

I. Introduction: Justification of the Dissertation

The man of whom we speak appears worthy of mention even in our time, as an outstanding witness of his age, a writer of very many works on the most diverse topics (theology, philosophy, the physico-mathematical sciences, asceticism, devotion, education, homiletics, and canon law), published in many places not only within the borders of Poland but also in foreign lands (Augsburg, Braunsberg/Braniewo, Frankfurt, Gdańsk-Oliwa, Graz, Heiligenstadt, Kalisz, Krakow, Konstanz, Košice, Lublin, Lviv, Nysa, Przemyśl, Regensburg, Trnava/Tyrnava, Ulm, Warsaw, Vienna, Vilnius, Wrocław, and Würzburg). He was therefore a very studious and most learned man, skilled in many languages, and a polyhistor, composing his texts in Latin and in vernacular Polish, whose name is inscribed permanently in the history of (Polish and European) intellectual culture and ought not to be erased from it.

He was called, by contemporaries and posterity, "a most learned scholastic of the seventeenth century." His learning is attested to by the many names of authorities cited in *Philosophia curiosa*, which number as many as there are pages in the three hundred pages of the Krakow compendium. These belong to various spheres and types of human culture and, indeed, to nations and times ranging from Hebrew, Greek, and Latin antiquity, through the medieval, patristic, and scholastic ages, down to modern times with their own sciences. It cites not only nearly all of the philosophers, but also other figures mentioned in the Bible, mythology, church history, and both Christian and Arab-Muslim literature.

1. The article was originally published in Latin in Forum Philosophicum 7 (2002), 239–51.

His writings were translated into other languages (German), and he received commendations in official letters sent to him by the Superior General of the Society of Jesus. He knew several languages. Besides Polish and Latin, he knew Hebrew, Greek, Italian, Spanish, French, and German.

Here, then, are reasons commending the person and work of Tylkowski as worthy of being remembered and discussed scientifically in these days as well.

II. Objective Bibliography: i.e. Publications on Tylkowski

Much has been written about him and his Philosophia curiosa in encyclopaedias, lexica, and historiographies, and indeed not uniformly. More often he was reviewed positively, though only with moderate criticism. Yet wholly negative opinions have not been lacking—notably that expressed by H. Struve in his book on logic *The History of Logic as a Theory of Cognition in Poland*. (Warsaw 1911, 183–84) However, this view does not have a solid foundation, as more careful studies have shown.

In the hitherto most extensive dissertation on him—which is what is under consideration here—twenty-six bibliographical titles devoted to him are cited; the most important of these are noted below.

1. Gabryl, Franciszek. 1913. "Philosophical Concepts of Our Seventeenth-Century Scholastics." *Ateneum Kapłańskie* 10: 97–114, 217–27.
2. Bednarski, Stanisław. 1933. *The Decline and Revival of Jesuit Schools in Poland*, Krakow: 87, 295–97, 333.
3. Estreicher, Karol Józef Teofil. 1936. *Bibliografia polska*, Vol. 31: 452–73.
4. Plečkaitis, Romanas. 1975. *Philosophy in Lithuania in the Feudal Period*, Vilnius: 185–86, 481.
5. Tazbir, Janusz. 1978. "W. Tylkowski, a Ridiculed Polymath." *Kwartalnik Historii Nauki i Techniki* 32 (1): 77–78, 83–100.
6. Darowski, Roman. 1978/1980. "Genesis of Wojciech Tylkowski SJ's Philosophia curiosa." *Archiwum Historii Filozofii i Myśli Społecznej*, 26: 22–43.
7. Ogonowski, Zbigniew. 1979. *Philosophy and Social Thought of the Seventeenth Century*, Part 2: 296–303.
8. Ogonowski, Zbigniew. 1985. *School Philosophy in Seventeenth--Century Poland*, Warsaw: 101–07.

III. Curriculum Vitae

He lived nearly seventy years, between about 1624 and 1695, fifty of which he spent in the Society of Jesus, in its Lithuanian province. He was born in Mazovia between the years 1622 and 1629. Various dates of birth are noted in documents. He entered the Society at Vilnius on 1st February 1645. After the novitiate he completed studies in the humanities and the liberal arts. He studied a three-year course of philosophy (1648–1651) in two colleges (Orsha and Polotsk). After completing this, for four years (1651–1655) he taught rhetoric and mathematics in middle schools, carrying out the usual teaching practicum in the Society (Polotsk, Nieśwież). In his theological studies he suffered serious impediments due to war with the Cossacks and the Swedes that was raging then. He began these at Poznań in 1655, and continued in Prague in Bohemia until 1659, where he was also ordained a priest, and was engaged for two years in the care of souls in Wrocław in Silesia, which belonged to the Bohemian province of the Society.

Having returned to his homeland, he chiefly devoted himself to teaching various disciplines (moral theology, Hebrew, philosophy, mathematics) in various places and for various periods. During the years 1662–1666 he taught these sciences at Braunsberg. From 1666 to 1670, in Warsaw, he was a professor of moral theology, philosophy, and mathematics. From 1670 to 1673 he stayed in the Vatican in Rome as a confessor in the basilica of St. Peter. From 1673 to 1675 he was Rector of the Pontifical Seminary and a professor of mathematics. From 1677 to 1683 he fulfilled the office of court missionary (theologian, confessor, preacher, chaplain) with two bishops, first of Płock and then of Poznań. Having left the episcopal court, he returned to teaching moral theology and mathematics, first at Płock (1683–1685), then in Warsaw (1685–1692). He died on 14th January 1695, in either Warsaw or Vilnius, both of these versions having been recorded.

IV. Subjective Bibliography: Chiefly, Philosophical Writings and Lines of Development

Tylkowski combined teaching duties and other priestly offices with constantly writing and publishing texts—on, indeed, very many areas of human knowledge and activity, as was noted above. The writings handed down to posterity number 60 items in all. They were published and republished not only in Poland but also beyond its borders—namely, in Germany—and were even translated into that language from the Latin in which they were usually composed.

Many of his publications do not belong to the genus of philosophy or of science, but serve the needs of religious life and Christian piety. His

philosophical writing, however, gradually evolved: from collections of theses for students' disputations published at Braunsberg in 1664–1666, through the compendium *Philosophia curiosa* made public in Krakow in 1669, to a multi-volume edition of *Philosophia curiosa*, in which the *Physica curiosa* alone contains 10 tomes, to which not only *Logica* and *Metaphysica curiosae* are to be added, but also *Matheseos curiosae pars I et II* and, moreover, "Pars quarta Philosophiae curiosae continens compendium Philosophiae moralis (de bono et malo) et de re agrarian"—in sum, 15 volumes printed partly at Oliva near Gdańsk and partly at Poznań in the years 1680–1694.

Two books composed in Polish also belong to this third stage of Tylkowski's philosophical activity there: *Uczone rozmowy* [*Learned Conversations*] from 1692, and *Stół mądrości ku zbawiennemu i politycznemu przy stołowych rozmowach pożytkowi* [*The Table of Wisdom for Saving and Civic Benefit at Table-Talk*] from 1674.

The first stage of *Philosophia curiosa* consists of six collections of theses, published at Braunsberg for scholastic use when he was their teacher in philosophy there (1664–1666). This was ascertained and established by Roman Darowski SJ. They are as follows:

1. *Select Conclusions from the Whole of Aristotle's Logic*;
2. *Select Conclusions from Aristotle's Books On Physics*;
3. *Select Conclusions from Aristotle's Books On Coming-to-Be and Passing-Away and the Elements*;
4. *Select Conclusions from Aristotle's Books On the World, the Heavens, and Meteorology*;
5. *Select Philosophical Conclusions from Aristotle's Books On the Soul*;
6. *Select Philosophical Conclusions from Aristotle's Metaphysics.*

The full title of the book under discussion is as follows: *Philosophia curiosa seu quaestiones et conclusiones curiosae de universa Aristotelis philosophia ad genium et ingenium huius saeculi formatae et propositae per A. Tylkowski e Soc. Jesu, theologum et philosophiae professorem in Varsaviensi Collegio eiusdem Societatis.* (Warsaw 1669)[*Curious Philosophy, or Curious Questions and Conclusions on the Whole of Aristotle's Philosophy, Shaped and Proposed to the Spirit and Wit of this Century by A. Tylkowski of the Society of Jesus, Theologian and Professor of Philosophy at the Warsaw College of the Same Society.*]

V. The Doctrine Contained in the Compendium of *Philosophia Curiosa* From 1669, Viewed in General Terms as a Middle Stage of His Development

That text is divided into five parts, namely: logic, physics in two parts (general and particular), psychology, and metaphysics, all designated by the adjective "curiosa." The doctrine is set forth in a similar way in the individual parts: that is, through theses (assertions) and questions (interrogations) which, however, are not coextensive with the theses and their content, but display a certain portion of them in a somewhat unusual form that spontaneously arouses the reader's attention and curiosity.

The several parts are not of the same extent, and they also differ in the number of theses and questions: Logic numbers 40 pages with 30 theses--questions; Physics I, 81 pages with 36 problems; Physics II, 60 pages and 24 problems; Psychology, 76 pages and 53 problems; Metaphysics, 38 pages and 20 problems. From this overview it seems to be clear that the greatest space is given to Physics and Psychology, the least to Metaphysics, and not much more to Logic.

The doctrine of *Philosophia curiosa* does not depart much from the traditional scholasticism of that time as contained, for example, in two contemporary works by A.Q. Krasnodębski SJ and T. Młodzianowski SJ, entitled *Philosophia Aristotelis explicata and Praelectiones philosophicae*. At least, this is so in the philosophical compendium of Tylkowski from 1669—i.e. in the middle stage of the development of *Philosophia curiosa*. Whatever difference there is between Tylkowski's philosophy and that of his two confreres is mainly formal in nature, consisting in a specific form and method—that is, in the "curiosity" of philosophizing announced already in the book's very title: hence, a popular mode of writing without scientific apparatus, a symbolic way of speaking full of images, examples, and comparisons, which appeals to experience and common sense and aims to be useful and fruitful in everyday life. For this reason *Philosophia curiosa* cannot be a manual text for students like the works compared with it (Krasnodębski and Młodzianowski), which employ a scientific language with syllogistic argumentation.

VI. *Logica Curiosa* (30 Questions, Over 40 Pages)

Its general subject is made up of the three operations of the mind, from which arise concepts/ideas, judgments, and reasonings/discourses. It therefore does not differ in essentials from the logical tradition of scholastic philosophy. The individual operations are explained as to their laws, with introductory questions on the nature of science and logic and on their

relation to other sources of knowledge—and, in the manner commonly embraced at that time, some metaphysical topics are also added.

Cognitive certitude, even scientific certitude, does not in Tylkowski's view always require demonstration, for it can be immediately evident in and of itself. Ahead of his account of the development of science, he calls Aristotle's philosophy a preliminary science. Analogously to his contemporary T. Młodzianowski SJ, he conceives of logic as a kind of art which is more practical than theoretical: that is, a practical-speculative science, whose object is not the cognition of truth but the rectitude of cognition and its acts. It is not a real science, criteriology, but a formal one: dialectic. Its function is to direct the operations of the mind and the sciences so that they are correct. Therefore, knowledge of logic is useful to everyone; it facilitates and prolongs life. All the laws, principles, and axioms of logic, like the norms of ethics, have universal validity for every time and place without exception.

Speaking of the object of science and logic, Tylkowski distinguishes a threefold species: the material object, the formal object, and the object of attribution as constitutive of the principal formal object, and therefore of the greatest importance in the process of cognition. This last species of object is specific to him. In the development of cognition he assigns great roles to abstraction and distinction: the former serves the formation of universal concepts, the latter serves the clarity of cognition through knowledge of the parts of the object.

In the chapter on the first operation of the mind he underlines the importance of universal ideas in their twofold kind, firstly, insofar as there are direct and reflex universals, secondly: the *praedicamenta*, the categories of being (substance and nine accidents), and the *praedicabilia*, the modes of predicating (genus, species, specific difference, property, logical accident)—that is, metaphysical and logical universals, general modes of being and of predication. A metaphysical insertion of this sort was usual in logic texts of that time, and to it are added other metaphysical topics: namely, on the notion of being and, above all, on the category of relation.

Tylkowski does not acknowledge the analogy of the concept of being, but holds it to be the highest genus predicable univocally of God and creatures, of substance and accidents. He explicates the question of relation in the mind of Francisco Suárez, and of ontological modalism. Relations he places between complete entities, not between their internal constituents. They are not really distinct from their subjects and foundations. They can be transcendental, essential, holding between causes and their effects and predicamental relations, accidental, depending on their term—as, for

example, likeness. Some are unilateral (between the world and God its Creator), others mutual, bilateral (between creatures).

The question of words—that is, of terms in speech and writing—is raised within the problem of truth in cognition. Cognitive truth resides primarily in judgment and enunciation, and only secondarily is predicated of objects. Statements about future contingents, both absolute and conditional (counterfactuals), also have their own truth.

Reasoning is defined as "an enunciation inferring one proposition from another." Its perfect form is the syllogism, consisting of two premises and one conclusion, introducing various figures and modes. For its validity and rectitude a consequence is necessary: that is, the outflow of the conclusion or consequent from the premises or antecedent. The author warns against sophisms—that is, fallacious modes of reasoning. He compares science with faith, considering them to be diverse sources of cognition that are not repugnant to each other and can cooperate peacefully. Faith in God and knowledge about God are both possible.

The "curiosities" usually objected to in Tylkowski are hardly present in his logic: at least, not real ones. In a few simulated and purely verbal instances, real problems worthy of investigation are concealed.

VII. *Physica Curiosa*. Part I: General

Its subject is "Selected Conclusions from Aristotle's Books *On Physics*," presented in 36 questions and over 81 pages. Generally speaking, the matter here is the natural body and its structure, conceived modally in the mind of Suárez; the relative categories of being, likewise conceived modally; the dynamism of the body—i.e. its fourfold causality (material, formal, efficient, final), with divine causality not excepted; the substantial and accidental changeability of bodies; the so-called elements or simple constituents of bodies and their various combinations in living and non-living things; and, finally, local motion (spontaneous and mechanical), its causes, and its connections with place and time.

Doctrinally, *Physica curiosa* does not differ much from the Aristotelian-scholastic physics set forth in other writings. Its specific features are: ontological modalism—i.e. the introduction of modes into the constitution of bodies among their constitutive elements (matter and form, essence and existence, substance and accidents), meaning the Suárezian conception of scholasticism; and, further, the treatment, in the chapter on corporeal causality, of divine activity with respect to the world created by God, in terms of its continual conservation in being and cooperation with its actions.

In particular, for Tylkowski, only Aristotelian hylomorphism (the union of matter and form) seemed appropriate to explain the structure of bodies. The conceptions of ancient philosophers, and of the defenders of atomism, did not appeal to him. In his conception, matter is pure potency, which does not exist in reality except in union with form, even if it is not without its own existence. The form is prior, and is lost in change so that another may be received. Some bodies are natural, one per se; others are artefacts, joined accidentally as aggregations of bodies. In the area of causality, action at a distance is rejected as contradictory in and of itself—as is the physical dynamism of numbers (*contra* Pythagoras) and words (*contra* Paracelsus), and reciprocal causality.

Tylkowski strongly attacks magic, and the various superstitions then rampant. He acknowledges a distinction between terrestrial and celestial powers and activities (of the heavenly bodies). He emphasizes the finality of the actions of brute animals as moderated by their instinct. He holds possible the compenetration of bodies (two bodies in one place) and multilocation (one body in several places), but only by the power of God—and, also, a vacuum in space, though not an infinite material magnitude. Concerning divine concurrence with the actions of creatures he insists that, in relation to human beings, it should not be by way of physical predetermination, since this would be incompatible with freedom.

Continuous quantity, in his opinion, is not composed of indivisible elements, but of extended parts which are further divisible to infinity. There is no contradiction in the eternity of the world (creation from eternity), although many things argue against it. Local motion, as a flowing reality passing through different places, cannot be instantaneous, complete in a single moment and a single place: such are substantial changes and the actions of God (creation). From local motion there results an impetus, an impulse, as a quality enabling further movement. However, a "perpetual motion" machine is neither real nor possible.

VIII. *Physica Curiosa*. Part II: Particular

This part, with 24 questions and over 60 pages, comments on Aristotle's text *On Coming-to-Be and Passing-Away and the Elements*. The questions considered in this second part of the treatment of physics are not altogether other or different from those raised in that of general physics, but very close and similar, repeating what has already been said so that it may be explained more accurately. Such a manner of writing is to be observed in other texts by Tylkowski as well.

In respect of the general arrangement of the problems, we may point to the following: the mutability of bodies (substantial and accidental),

their activity, properties, constitutive elements, and the motion and rest of bodies.

In particular:

1) Substantial change assumes three species—namely, generation, corruption (birth and death), and the transformation of one thing into another—in which there shines through an alchemical persuasion about the possibility of acquiring gold in the process of transformations. In the case of corruption and putrefaction, autogenesis or spontaneous generation is admitted given the autonomous generation of worms, from which plagues were believed to arise at that time, also in philosophy.

2) Accidental change is effected in the category of quantity and quality, insofar as quantity increases or diminishes, becomes greater or lesser (augmentation, growth; and detriment, diminution), while quality (heat, color, light) changes in its intensity, assuming various degrees. Qualitative change can be perfective or corruptive, intensifying or weakening a quality.

3) The activity of a body can proceed in three ways: either with respect to similarity, or according to contrariety, or via the reaction of resistance.

4) Among the properties of a body one can point to rarity and density (rarefaction and condensation), and also heaviness and lightness. Along with heaviness, the phenomenon of gravitation is also explained, which assumes various forms in air and water.

5) More attention is paid to the so-called elements or internal principles of bodies by which they are constituted. These are conceived as simple corpuscles, not dissoluble into other smaller ones. In Aristotle's mind, there are four elements composing material things, and they are ordered hierarchically according to the degree of heaviness: fire, air, water, earth—but also distinguished by their own properties (hot, humid, cold, dry). Each element has its own elemental sphere or surrounding space. Earth is distinguished as a constitutive element and as the terrestrial globe. In this latter sense it is said to be mobile, but without any explanation being given as to how this happens. Another version of bodily constitution devised by the chemists is also given, which is effected by salt, sulfur, and mercury as so-called principles of movements. Moreover, the mixtures of elements are diversified in living and non-living things, as well as on the Earth's surface and under the Earth, where metals and other minerals arise (gold, silver, copper, lead). In this chapter, human temperaments are also mentioned: that is, the various natural types of human disposition (choleric, sanguine, phlegmatic, melancholic).

6) Finally, bodies are considered in a state of motion or of rest. One kind of motion is natural and spontaneous, another artificial and mechanical,

evoked by external force. In its production, various machines or devices produced thanks to human technical skill take part, in order to augment bodily powers and activities.

The particular physics therefore completes the general one, but also often repeats its questions. It is less philosophical than the other. It frequently appeals to experience, from which it draws its arguments, as well as to common sense. It also uses biblical-theological arguments, especially in its digressions about imaginary spaces and about the motions of the heavens.

Among the real "curiosities" noted above is the live birth of worms (spontaneous generation) from putrefaction.

IX. *Psychologia Curiosa* (Anthropology): Treated in 53 Questions and Over 76 Pages

As far as its extent is concerned, this comes second after the treatment of physics; it is more extensive than those of logic and metaphysics. In the traditional division of scholastic philosophy, it is not encountered as a separate segment. Its doctrine partly belongs to physics, partly to metaphysics.

It deals both with the soul in general and with the specifically human rational soul. The soul, understood generically, is the principle of life and immanent motion in all living things (plants, brute animals, human beings), assuming in them various species of soul: vegetative, sensitive, and rational. Further, there is discussion of its powers/faculties and of its vegetative and sensitive functions (of the external and internal senses), and indeed of very many questions which now pertain to other non-philosophical sciences such as biology, anatomy, physiology, medicine, and others.

The vegetative soul presides over three functions: nourishment, growth, and generation—that is, the origin of a living being from a living being in the likeness of the species. The sensitive soul operates through the five external senses (sight, hearing, smell, taste, touch) and the four internal senses (common sense, imagination, the estimative power/instinct, and memory). There is one soul in the body. It operates through itself, even if it has faculties. In a human being it is indivisible; in other living things it is divisible. It does not vivify all the elements of the body. Lacking life are blood, milk, fat/grease, bones, and teeth. Blood is in the body, but is not mixed with it. From blood arise the so-called "vital or animal spirits," which take part in animals' operations and sometimes cause abnormal affections.

The rational soul is unitary in a human being, whole in the entirety of the body and in every part of it. Virtually it contains within itself the lower souls, vegetative and sensitive. It is spiritual (immaterial) and immortal. It has three faculties: memory, intellect, and will—although memory does

not really differ from intellect. The human will enjoys freedom (of exercise and of specification), to which natural actions are not subject, since they are performed of necessity. The fruits of exercised freedom (of free actions) are good or bad habits, operative dispositions, virtues or vices, which incite to further works and make them easier.

Tylkowski's psychology does not essentially differ from scholastic psychology, at least in the rational part, but it is enriched with arguments drawn from experience.

X. *Metaphysica Curiosa* (Ontology and Natural Theology)

This expounds the third part of scholastic philosophy, and in comparison to the other parts of *Philosophia curiosa* is the briefest, consisting of twenty questions discussed over 38 pages. In its subject matter it is nevertheless rather complex and diversified, in that it is partly ontological, partly angelological, and partly theological; of these, the last contains four questions, the first five, and the middle one eleven.

In its ontological part, the discussion is about being as such, together with its properties—the one, the true, and the good; about the essence and existence of being, which are not really distinct; about subsistence, supposit, or person; about their incommunicability *ad extra*; and about the being of reason existing only in the mind—that is, in cognition.

The most extensive part of Metaphysica curiosa is about the so-called "intelligences"—that is, incorporeal spirits, good and evil angels, their existence, nature, faculties, activity, and their influence on human beings and on material events. Their existence is argued for, especially, from the heavens with their orderly and regular motions, which must be directed by intelligent beings. For the fulfillment of this office, the intelligences were devised by Aristotle and received by scholasticism. Other arguments likewise persuade one of their reality.

In Tylkowski's opinion, the angels were created by God before the creation of the world. They are endowed with intellect, will, and power to act, but of limited strength. As men have their guardian angels, so do the stars; each of them has a guardian and mover who takes care of its orbital motions. They can also influence human beings and their actions, whom they outnumber. They are diversified into species. In their decisions, good or evil, they are mutable, in which regard there seems to lie a hopeful conjecture about the possibility of the reconciliation of demons with God—that is, their possible conversion to God through the revocation of their former rebellion. As they can change their will, so they can change their dwelling by migrating from place to place. They cannot be simultaneously in many

places, but several can be in one place. One devil cannot at the same time occupy and possess several human beings.

Moreover, angels, both good and evil, can move bodies, stir up earthquakes, storms, and tempests, and also engender rain in a finite region, though not over the whole world. Likewise, they can induce diseases and weaknesses, produce deceptions in the senses, and change a person's outward appearance into that of a brute animal. They do not know free operations with certainty, but only probably. They cannot compel human beings, but only give inspirations, good or bad.

The theological metaphysics presents not only natural theology, but also certain elements of dogmatic theology founded on divine revelation. It treats first of the existence, nature, and attributes of God, insofar as these are knowable by the light of reason alone; then of the God of faith insofar as He is the Trinity of Persons, which even the pagan philosophers Plato and Aristotle acknowledged, or at least had a presentiment of. Arguments persuading one of the existence of God do not stand in the way of the possibility and fact of atheism. Our knowledge of God is better grounded than that of the existence of angels. The divine nature, however, is almost inaccessible to human cognition; it is therefore safer to speak of God negatively than positively, to say what He is not rather than what He is—i.e. to use expressions involving negations: immutable, immense, infinite, immortal, incomprehensible…

God most certainly is not a material being, but spiritual, most simple, most perfect, omnipotent, omnipresent, eternal, living and free, beneficent, the source of all things outside Himself, without temporal succession. He simply is. The infinity of God contains in itself all God's properties, which can be reduced to it, the Trinity of Persons not excepted. Tylkowski confirms his assertions by geometric conclusions drawn from the infinity of a line.

XI. Curiosities, Absurdities, Witticisms, Cases of Insolence, "Instances of the Ridiculous," Singularities, and Marvels Found in *Philosophia Curiosa*

Some of these are purely verbal, others to some extent real, but they are common to other philosophers of that time and are due to the state of development of the sciences. Such was their conviction regarding animal or vital spirits present in the blood and wandering through the body, arising from a piece of flesh as instruments of various vital phenomena. Likewise, their view about the diversity of matter and forces in terrestrial and celestial bodies, and about the moving of the heavens by the so-called intelligences

or angels as guardians and movers. There was also their alchemical conviction about the transmutation of metals, their generation deep in the Earth through formative power, and their growth from particles sown in the Earth. Likewise, their stance regarding the autogenesis, the spontaneous birth, of worms from putrefaction.

Certain "instances of the ridiculous" seem proper to him: the rejuvenation of an old man; the reception of new teeth in old age; cooling through heat and fire; the possibility of being satisfied by smell alone; the killing of sheep and their beneficial consumption for him (by the light of faith); the justification of burning witches, insofar as they are instruments of demons.

In proportion to the entirety of the text and the problems discussed, these are not many; they do not exceed a tenth of it. Attention should also be paid above all to their purpose, which is not the creation of witticisms as such, or purely humorous, but methodological: the arousing of readers' curiosity and the stimulation of the human mind for reading and study of the book *Philosophia curiosa*. In view of this, Tylkowski's work, by reason of its curiosities, cannot be declared altogether inept, nor can its scientific value be called into question. Notwithstanding all those things which, in the light of today's state of development of the sciences, can rightly be objected to about it, even if it certainly does not everywhere measure up to the scientific norms and methodological demands of the present time it should, for its own time, be deemed genuinely useful for those of a modest intellectual culture, apt for informing minds on many questions not otherwise known about, and effective in fostering a moderate form of intellectual criticism vis a vis more than a few superstitions then rampant, as well as various scientific prejudices unworthy of a Christian person and a sober mind—indeed, ones quite harmful both in private life and in social intercourse. Even today, reading this book does not seem like time spent idly and uselessly for a person skilled in Latin, to whom philosophical problems are not alien.

Recapitulation of the Dissertation

The curiosities present in our author's philosophy do not prevent it from being acknowledged as a typical instance of scholastic philosophy in its Thomistic-Suárezian version as taught in the schools of the Society of Jesus in Poland in the seventeenth century. Here are its principal distinctive characteristics: first, its close connection with the texts of Aristotle, with many references to them, even if it cannot be called a commentary on them; then, the not very precise separation between philosophical and

theological topics, with the result that in explaining or proving purely natural problems, arguments or examples taken from divine revelation are used more than just occasionally; finally, a popular and symbolic mode of narrating and expounding the problem under consideration, often appealing to imagination, common sense, and human customs—hence, a kind of empiricism joined with a priori argumentation which, however, never assumes a syllogistic form; and lastly, a very frequent resorting to authorities of all times and nations, where these are not only strictly philosophical but drawn from all areas and types of human culture and activity—something that foreshadows the eclectic mode of philosophizing which prevailed in later generations of philosophers. Most often, Tylkowski appeals to three authors along with their works: Aristotle, St. Thomas Aquinas, and St. Augustine, the bishop of Tagaste. He does not openly refer to Suárez, although he professes his ontological modalism. His Latin terminology is very abundant; doctrinal statements are not infrequently repeated, which may be considered a defect, even though in the author's own mind this was meant to aid the reader's memory.

In brief: the philosophy contained in the book *Philosophia curiosa* is scholastic as to doctrine, but not in the manner of its exposition—given that syllogistic argumentation is lacking. Moreover, it does not have the customary form encountered in the disciplines of philosophy; accordingly, it should rather be called an omni-science, an encyclopedia of all the sciences.

Considering all of the above, the attention paid to Tylkowski and his philosophy, whether in the book made publicly available in 1986 or in this synthesis of its key elements, appears entirely justified; indeed, it is to be hoped that the author himself, and his work, will henceforth be shown in a clearer light and held in better estimation.