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The Polish School of Praxiology: Historical Background, Essential Features, the Founder and Main Representatives

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Abstract: The text is dedicated to the Polish School of Praxiology, founded primarily by Tadeusz Kotarbiński. The aim of the article is to present an outline of the history of the School, to review the scientific contribution of its main representatives, and to indicate its essential features. The School connects praxiology *sensu scricto* (theory of action), ethics, together with felicitolology, within the framework of practical philosophy. Kotarbiński's concept of praxiology can be described as "small philosophy" in contradistinction to many 19th-century all-encompassing syntheses, which were often substitutes of worldviews; in the interpretation of Wojciech W. Gasparski this concept is also called "philosophy of practicality." In the article, the Polish School of Praxiology is compared in some aspects with the Lvov-Warsaw School and the Austrian School of Economics (more precisely, with the philosophical foundations of the latter school).

Key words: Polish School of Praxiology, praxiology, praxeology, *philosophia practica*, philosophy of practicality, Tadeusz Kotarbiński, Ludwig von Mises, Jan Zieleniewski, theory of organization

1. Introductory Remarks

Leopolis,¹ the city belonging to Poland for many centuries – and at present, since the end the World War II, belonging to Ukraine – is a place with which the found-

^{*} In the last year of his life, Professor Wojciech W. Gasparski did me the honour of inviting me to become the co-author of this paper on the Polish School of Praxiology. The article shows an outline of its history and its crucial features in a comparative perspective, but without aiming for a comprehensive analysis of the phenomenon of Polish praxiology. The Professor specifically requested we do not list his name first, albeit his contribution in this field of research is undeniably greater. The final version of the text was prepared for publication when prof. Gasparski was no longer with us. My sincere thanks are due to prof. Anna Lewicka-Strzałecka and prof. Alojzy Czech for reviewing the latest versions of the article and for their comments (Marcin W. Bukała's note).

¹ Lwów in Polish, and Львів in Ucrainian, Lvov in English.

ers of the two main schools of praxiological thinking were connected. Tadeusz Kotarbiński (1886–1981) obtained his doctorate there in 1912, and Ludwig von Mises (1881–1973) was born in this city in 1881.² Universitas Leopoliensis was also the cradle of one of the main schools of analytic philosophy, the Lvov-Warsaw School, to which Kotarbiński belonged in the early phases of his scientific path.³

The Polish School of Praxiology – a branch of the Lvov-Warsaw School – was founded by Kotarbiński in the middle of the 20th century. Independently, in accordance with the theses of von Mises, "praxeology" became the philosophical foundation of the Austrian School of Economics.

The aim of the article is to present a brief outline of the historical background of modern praxiology and the development of the Polish school. The text is also about the founder of the school:⁴ the paper's goal is to discuss those of Kotarbiński's concepts that form the basis for further praxiological thought (however, the concept of reism, although in a way related to praxiology, does not necessarily belong to its premises,⁵ and is not discussed here⁶). Therefore, the

² The figures of T. Kotarbiński and L. von Mises – the founders of two schools, called "praxiological" and "praxeological" – are juxtaposed in the work of W.W. Gasparski, *Between Logic and Ethics: The Origin of Praxiology*, "Axiomathes" 2006, Vol. 7, No. 3, pp. 385–394.

³ See U. Wybraniec-Skardowska, Introduction. The School: Its Genesis, Development and Significance, in: The Lvov-Warsaw School: Past and Present, eds. Á. Garrido, U. Wybraniec-Skardowska, Birkhäuser, Cham 2016, pp. 3–14; Cz. Porębski, Lectures on Polish Value Theory, Brill, Leiden–Boston, MA, 2019; cf. B. Smith, Why Polish Philosophy Does Not Exist, in: The Lvov-Warsaw School: The New Generation, eds. J.J. Jadacki, J. Paśniczek, Brill, Poznań 2006, pp. 19–39; Kotarbiński continued the analytic focus of the Lvov-Warsaw School, as a disciple of its outstanding representative Kazimierz Twardowski; see A. Betti, Kazimierz Twardowski, in: The Stanford Encyclopedia of Philosophy (Fall 2021 Edition), ed. E.N. Zalta, URL: https://plato.stanford.edu/archives/fall2021/entries/ twardowski/; on K. Twardowski, see also F. Coniglione, Nel segno della scienza: la filosofia polacca del Novecento, Franco Angeli, Milano 1996 (Epistemologia, Vol. 52), p. 79f.

⁴ In the praxiological and analytic perspective, the scientific contribution of T. Kotarbiński is presented in the encyclopedic entry written by W.W. Gasparski, *Kotarbiński, Tadeusz,* in: *Pow-szechna encyklopedia filozofii*, Vol. 5, Polskie Towarzystwo Tomasza z Akwinu, Lublin 2004, pp. 902–907; see also W.W. Gasparski, *Agency in a Praxiological Approach*, in: *The Lvov-War-saw School: Past and Present*, eds. Á. Garrido, U. Wybraniec-Skardowska, Birkhäuser, Cham 2016, pp. 175–187; Cz. Porębski, *Lectures on Polish Value Theory*, op. cit., pp. 30–40 ("Lecture 3: Kotarbiński. Knowing and Doing").

⁵ P.T. Makowski, Jak myśleć o praktyczności [How to Think about Practicality], "Prakseologia" 2022, Vol. 163–164, in press (on the book by W.W. Gasparski, Filozofia praktyczności. Traktat o filozofii Tadeusza Kotarbińskiego oraz similaria, Wydawnictwo IFiS PAN, Warszawa 2021).

⁶ For reism, see the entry by J. Woleński, *Reism*, in: *The Stanford Encyclopedia of Philosophy* (Spring 2022 Edition), ed. E.N. Zalta, URL: https://plato.stanford.edu/archives/spr2022/entries/reism/ (substantive revision on 10.04.2020); the papers by B. Smith, B. Wolniewicz and others in the

article focuses on the following problems: who were the chronologically first representatives of modern praxiological thought (in the late 19th century)? Where to look for their earlier precursors? What was the concept of "small philosophy" proposed by Kotarbiński, and why can it be called "the philosophy of practicality"? Who were the most important representatives of the Polish School of Praxiology? What were the main features of this school, especially in comparison to the "praxeological" concept developed within the Austrian School of Economics?

2. Latin *Praxilogia* – French *Praxilogie* – Polish *Prakseologia*, and Austrian-American Praxeology

The historical roots of praxiological thinking can be associated with a reflection on the virtue of *phronesis* (Aristotelian $\phi p \circ v \eta \sigma \iota \varsigma$, and scholastic *prudentia*).⁷ As Danilo Facca notes, *praxilogia* appeared at the beginning of the 17th century in the texts of the German philosopher Clemens Timpler (1563–1624). However, the idea was forgotten for more than two centuries.⁸

Praxiological concepts were introduced into the contemporary scientific circulation in the late 19th century by Spaniard Melitón Martín Arranz (1820–1886) and French Louis Bourdeau (1824–1900) and Alfred Espinas (1844–1922).⁹ In

following volume: J. Woleński, ed., *Kotarbiński: Logic, Semantics and Ontology*, Springer, Dordrecht 1990; F. Coniglione, *Nel segno della scienza…*, op. cit., p. 129f.

⁷ In the praxiological context, the role of virtue of *phronesis* is also underscored in recent research, e.g., in the works of Bent Flyvbjerg.

⁸ Cf. D. Facca, On the Early Modern Origin of the Term "Praxiology": Historical Reconstruction and General Considerations, "Prakseologia," Vol. 165, in press; see also J. Ostrowski, An Outline of the Prehistory of Praxiology, in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983, pp. 31–45.

⁹ L. Bourdeau, *Theorie des sciences. Plan de science integrale*, Germer Bailliere et C., Paris 1882; cf. V. Alexandre, ed., *The Roots of Praxiology: French Action Theory from Bourdeau and Espinas to Present Days*, in cooperation with W.W. Gasparski, Transaction Publishers, New Brunswick, NJ, 2002. The book is Volume 7 of the series "Praxiology: The International Annual of Practical Philosophy and Methodology" (later quoted briefly as: Praxiology). The series consists of twenty-five volumes edited or coedited by W.W. Gasparski. The essential issues of praxiological thought were discussed especially in the following volumes: 1 (praxiologies and philosophy of economics), 7 (historical French origins), 10 (pragmatism, including *The ABC of Practicality* – the translation of Kotarbiński's text), 12 (praxiological contributions of French and other nations), 22 (designology, particularly developed by W.W. Gasparski), 23 (Kotarbiński's role and legacy), 25 (praxiology in the different outlooks); see Bibliography. In the 20th century the knowledge of concept of praxi-

the 20th century, praxiological thought became the basis for the two mentioned schools, due to the crucial contributions of Tadeusz Kotarbiński and Ludwig von Mises. Thus, albeit in the late 19th century praxiology came to being in Spain and developed in France, in the 20th century it became the conceptual foundation of two scientific schools in other countries: the Polish School of Praxiology and the Austrian (actually Austrian-American) School of Economics. The English term **praxiology** is used in the Polish School whereas **praxeology** – in the Austrian one.

Praxiology is first of all an "action theory" which is focused on **effectiveness** and **efficiency**. In recent studies by Piotr T. Makowski, Kotarbiński's praxiological ideas are discussed as a philosophical action theory.¹⁰ Various approaches to the general study of human action have been developed: the ergologic and managerial (Melitón Martín, Jan Zieleniewski,¹¹ Roland Caude¹²), the functional (Louis Bourdeau), the technological (Alfred Espinas), the psychological (Charles A. Mercier), the methodological (Tadeusz Kotarbiński, Georges Hostelet), the economic (Ludwig von Mises), the ethical (Mario Bunge), the epistemological (Donald A. Schön) and the decisional (Eugeniusz Słucki,¹³ Arnold Kaufmann¹⁴) and

ology was disseminated thanks to Alfred Espinas and his article *Les origines de la technologies*, "Revue Philosophique de la France et de l'Etranger" 1890, Vol. 30, pp. 295–314. In the quoted book *The Roots of Praxiology: French Action Theory*, the *Theorie des sciences* is partly translated into English (L. Bourdeau, *Praxiology as the Science of Functions*, pp. 21–43); and the excerpts of *Les origines de la technologies* too (A. Espinas, *The Origins of Technology*, pp. 45–91); see Bibliography. Ludwig von Mises indicated Espinas as the first predecessor of his praxiological way of thinking, and he omitted the contribution of Melitón Martín and Bourdeau. For this reason, Espinas is mistakenly indicated in many works as the chronologically first representative of praxiological thought; cf. J. Zieleniewski, *Remarks of a Polish Praxiologist on the Subject of a Paper by C. Gutiérrez*, "Theory and Decision" 1971, Vol. 1, pp. 359–368, see pp. 362–363.

¹⁰ Cf. P.T. Makowski, M. Bonecki, K. Nowak-Posadzy, eds., *Praxiology and the Reasons for Action*, Routledge, New York 2015 (Praxiology, Vol. 23); P.T. Makowski, *Tadeusz Kotarbiński's Action Theory: Reinterpretive Studies*, Springer, Cham 2017.

¹¹ J. Zieleniewski, The Theory of Organization and Management, in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983, pp. 347–360.

¹² R. Caude, Scientific Organisation of Work and Management, in: The Roots of Praxiology: French Action Theory from Bourdeau and Espinas to Present Days, ed. V. Alexandre, Transaction Publishers, New Brunswick, NJ, 2000 (Praxiology, Vol. 7), pp. 163–182.

¹³ E. Słucki (Евгений Слуцкий) was a scholar of Polish origin, active in Russia and later in the Soviet Union; on his contribution, see F. Coniglione, *Nel segno della scienza*, op. cit., p. 142.

¹⁴ A. Kaufmann, The Science of Decision-Making, in: The Roots of Praxiology: French Action Theory from Bourdeau and Espinas to Present Days, ed. V. Alexandre, Transaction Publishers, New Brunswick, NJ, 2000, pp. 183–198.

of the systems (Wojciech W. Gasparski). Nevertheless, only Kotarbiński and von Mises were founders of the schools. The other mentioned authors of the 19th century and the first seven decades of the 20th century – such as Martín, Bourdeau, Espinas, Mercier and Hostelet – did not create them. As Zieleniewski observed:¹⁵

It seems amazing that in spite of the evident social usefulness of a general theory of efficient action, in spite of the thought-provoking contents of the majority of publications mentioned here, almost none of the authors found continuators of their ideas, almost none created a "school"; for the continuity of thought usually ended very soon.

The proposal of the Polish school is distinguished by the fact that in addition to effectiveness and efficiency of action, also **ethicality** (the third **E**) is required in the praxiological terms.¹⁶ Moreover, in Kotarbiński's approach praxiology received the status of a general methodology of sciences.

Von Mises's approach is quite different, as it assumes the complete axiological neutrality of praxiological rules and their grounding in the structure of the human mind.¹⁷ The crucial features of von Mises's theory of practical action were discussed and juxtaposed with the Polish School of Praxiology by W.W. Gasparski in Volume 17 of the series "Praxiology," dedicated to entrepreneurship.¹⁸ In Volume 162 of the journal "Prakseologia" (founded by Kotarbiński and Zieleniewski), von Mises's view was also compared to the philosophy of business en-

¹⁵ J. Zieleniewski, *Remarks of a Polish Praxiologist*, op. cit., pp. 360–361.

¹⁶ This point was not formulated explicitly by Kotarbiński. Nevertheless W.W. Gasparski demonstrated the correctness of this interpretation in many works, including: W.W. Gasparski, *Between Logic and Ethics*, op. cit.

¹⁷ On the *a priori* categories of the Austrian school, cf. L. von Mises, *Human Action: A Treatise on Economics*, Ludwig von Mises Institute Auburn, Auburn, AL, 1998, pp. 38–41 (Chapter II, subchapter 3: "The A Priori and Reality") and pp. 199–200 (Chapter X, subchapter 3: "Calculative Action"); see also p. 199: "All the praxeological categories are eternal and unchangeable as they are uniquely determined by the logical structure of the human mind and by the natural conditions of man's existence. Both in acting and in theorizing about acting, man can neither free himself from these categories nor go beyond them. A kind of acting categorially different from that determined by these categories is neither possible nor conceivable for man."

¹⁸ W.W. Gasparski, Entrepreneurship from the Praxiology Point of View, in: Entrepreneurship: Values and Responsibility, eds. W.W. Gasparski, L.V. Ryan, S. Kwiatkowski, Transaction Publishers, New Brunswick, NJ, 2010 (Praxiology, Vol. 17), pp. 23–36; on Ludwig von Mises, see also W.W. Gasparski, ed., Praxiologies and the Philosophy of Economics, Transaction Publishers, New Brunswick, NJ, 1992 (Praxiology, Vol. 1).

terprise of Józef Innocenty M. Bocheński, whose ideas are close to praxiological concepts.¹⁹

3. Kotarbiński's "Small Philosophy" or Philosophy of Practicality²⁰

On 25 April 1918, in a lecture hall of the University of Warsaw, a thirty-twoyear-old philosopher gave the famous lecture "On Philosophy Great and Small." Tadeusz Kotarbiński – for he was the author of the lecture in question – did not present any impressive prospects for his audience. As the students wrote about the lecture,²¹ the young professor rather outlined a minimalist programme.

His recommendation was to abandon the construction of great syntheses and to practice "small philosophy": the kind of philosophy that will serve as a plan for **reforming intellectual work**.²² The students looked at one another; the glances of those who had been drawn to philosophy by the need for a broad view of the world, the need for a great system, reflected their disappointment... How can you feel fascinated with the prospect of a bee's or ant's work when your imagination shows you an eagle's wings stretched out in flight? Those among the audience who remembered Icarus' downfall began – maybe not immediately, but certainly

¹⁹ J.I.M. Bocheński, Towards the Philosophy of the Industrial Enterprise, transl. M.W. Bukała, "Prakseologia" 2020, Vol. 162, pp. 19–41; J. Gniadek, The Philosophy of Industrial Enterprise from a Praxeological and Personalistic Perspective, "Prakseologia" 2020, Vol. 162, pp. 83–101; cf. W.W. Gasparski, Entrepreneurship from the Praxiology Point of View, op. cit., pp. 24–25. On Bocheński's model, see also in the quoted Vol. 162 of "Prakseologia": T. Airaksinen, The Development of Immanent Ends in Professor Bocheński's "Towards the Philosophy of the Industrial Enterprise", pp. 61–81; W.W. Gasparski, The Philosophy of the Business Enterprise by Józef Maria Bocheński, pp. 43–59; M.W. Bukała, The Main Topic of the Issue: Józef Maria Bocheński on the Business Enterprise, pp. 14–18; M.W. Bukała, Business Enterprise in the Logic and Ontological Analysis of Józef I. M. Bocheński, pp. 103–114.

²⁰ The content of this section relates largely to the remarks on "small philosophy" presented in a previously published text: W.W. Gasparski, *Tadeusz Kotarbiński and His Philosophical Transitions*, in: *Transition Redesigned: A Practical Philosophy Perspective*, eds. W.W. Gasparski, B. Rok, Routledge, New York 2013 (Praxiology, Vol. 20), pp. 3–13.

²¹ In the first series of *Fragmenty filozoficzne* [Philosophical Fragments], *Seria pierwsza: ku uczcze-niu piętnastolecia pracy nauczycielskiej prof. T. Kotarbińskiego w Uniwersytecie Warszawskim* [Series One: Celebrating Fifteen years of Prof. Tadeusz Kotarbiński's Work as a Teacher at the University of Warsaw], Warszawa 1934 (published by students).

²² Ibid.

with time – to realize something that Francis Bacon had written several centuries before: "Nec manus nuda, nec intellectus sibi permissus multum valet; Instrumentis & auxilliis res perficitur; quibus opus est, non minus ad intellectum, quam ad manum"²³ (Kotarbiński was the subsequent translator of *Novum organum*, the Baconist *par excellence*²⁴).

And thus, the practising of "small" (or "minor") philosophy started (as the students reminisced!): the hard labour of tackling conceptual subtleties, long hours of pondering the meanings of the terms they used, hours of tedious effort aimed at formulating their thoughts precisely and extracting important issues from among verbal misunderstandings. As the participants of this project added: one could feel the burden of this unspectacular analytical work. Even so, they admit – just like those who hammer the last piton into the rock wall and climb the last overhang to relish the view stretching from the conquered peak – that Professor Kotarbiński created an atmosphere of perhaps the greatest philosophical intensity, an atmosphere in which (despite the methodological emphasis on "small philosophy"), one feels the ozone of "great philosophy"!

Kotarbiński, referring to his praxiological works, asked his followers to read them all, and he underlined that they constituted a coherent system. Writing about this system, Kotarbiński addressed the readers: "Read my works better," – and he meant more carefully, more deeply, with greater understanding – "read them all." "This is a whole, not a conglomeration! It is a system [...]," "Call it preposterous, unnatural, badly built, what have you"; "[...] I can add more than one rude word myself"; "Just don't call me an eclectic, I beg of you."²⁵

Thus, Kotarbiński's works should be considered as a philosophical system, which is the foundation of the Polish School of Praxiology.

This system focuses first of all on the universe of actions of a subject actively changing the reality, where a subject is defined as a conscious human, aware of

²³ Francisci Baconis de Verulamio Novum Organum Scientiarum, Pars II. Novum Organum sive Iudicia de Interpretatione Naturae, Summa Digesta in Aphorismos, Aphorismus 2 (ed. Typis Gasparis Girardi, Venetiis 1762, p. 26).

²⁴ While naming Kotarbiński "The Baconist par excellence," W.W. Gasparski must have been based on a deeper knowledge of his Master's approach; cf. T. Kotarbiński, *The Development of the Main Problem in the Methodology of Francis Bacon*, offprint from: "Commentariorum Societatis philosophicae Polonorum – Studia philosophica" 1935.

²⁵ T. Kotarbiński, Odpowiedź [The Answer], in: Dzieła wszystkie [Opera omnia], Vol. 2: Ontologia, teoria poznania i metodologia nauk [Ontology, Theory of Cognition and Methodology of Sciences], Wrocław 1993, pp. 170–182 (citation transl. by Wojciech W. Gasparski).

their surroundings.²⁶ This universe is the world of practical human activity, the world of acting humans. Therefore, Kotarbiński's system is in fact a **philosophy of practicality**.²⁷ It was presented as such especially in his main work, *Traktat o dobrej robocie* (titled *Praxiology* in the English translation).²⁸ Practicality is not understood here in the everyday sense, that is, resourcefulness. It is a philosophy of practicality, when "practicality" means efficacy in a broader sense, that is, the basic technical value of human actions. Kotarbiński was interested in the issues of practicality from the very start of his philosophical path; in fact, they were his direct and primary interest also in the course of exploring other areas of philosophy. These issues affected: his concern over the teaching of philosophy as the foundation of teacher training;²⁹ his concern over the importance of logic; his concern over words properly describing reality; his concern over avoiding practical mistakes – hence his effort in the field of errors' typology.³⁰

All these concerns resulted in a kind of *organon* of practicality, that is, a set of cognitively well-founded instruments essential to any acting man, that is, doing something intentionally to achieve a chosen goal, whether the actions involve research practice (sciences and their methodology) and/or they involve functional practice (technologies and their methodological foundations).

According to Kotarbiński *philosophia practica* is understood as life wisdom. The main founder of the Polish Praxiological School underscored its essential importance: life wisdom is worth working for with no less commitment than physical safety, food and wages.³¹ Such an idea implied the rejection of both Marxist

²⁶ Ibid., pp. 175–176.

²⁷ Cf. W.W. Gasparski, A Philosophy of Practicality: A Treatise on the Philosophy of Tadeusz Kotarbiński, Philosophical Society of Finland, Helsinki 1993 (partly republished as On the Concept of Practicality and On the Methodology of Practical Disciplines (Sciences); see Bibliography).

²⁸ T. Kotarbiński, *Traktat o dobrej robocie*, Ossolineum, Wrocław 1955; published in English as: *Praxiology: An Introduction to the Science of Efficient Action*, transl. O. Wojtasiewicz, Pergamon Press, Oxford 1965.

²⁹ T. Kotarbiński, Odrębność i rodzaj użyteczności nauk humanistycznych [The Distinctiveness and the Particularity of Usefulness of the Humanities], in: Dzieła wszyskie [Opera omnia], Vol. 2: Ontologia, teoria poznania i metodologia ogólna, op. cit., p. 90; see A. Lewicka-Strzałecka, Tadeusza Kotarbińskiego wzorzec wychowania i cnót nauczycielskich [Tadeusz Kotarbiński's Model of Education and Teaching Virtues], in: Myśl Tadeusza Kotarbińskiego i jej współczesna recepcja [The Thought of Tadeusz Kotarbiński and Its Contemporary Reception], eds. B. Banajski, W.W. Gasparski, A. Lewicka-Strzałecka, Polska Akademia Nauk, Towarzystwo Naukowe Prakseologii, Warszawa 2006, pp. 85–91.

³⁰ T. Kotarbinski, *Practical Error*, "Danish Yearbook of Philosophy" 1964, Vol. 1, pp. 65–71.

³¹ T. Kotarbiński, *Myśli o ludziach i ludzkich sprawach* [Thoughts on Humans and Human Problems], Ossolineum, Wrocław 1986, p. 23.

economicism³² and or ethical skepticism. In the described system, *philosophia practica* is divided into:

- felicitology (hedonistics, eudaimonology), or the study of a happy life,
- praxiology (general methodology, general theory of action), or the study of the practicality of actions,
- ethics *sensu stricto* (ethics proper, moral deontology), or the study of "how one should live to deserve to be called a decent person."

4. Representatives of the Schools

The Polish School of Praxiology came to being first of all thanks to Tadeusz Kotarbiński. In his praxiological concepts, he was followed by his younger collaborators – Jan Zieleniewski (1901–1973), Marian Mazur (1909–1983) and Tadeusz Pszczołowski (1922–1999) – and later by his disciples mentioned below. Zieleniewski made a very significant contribution to praxiological research, especially in the ergologic and managerial aspects. His scientific path was initially independent from Kotarbiński.³³ In the application of praxiology in the field of management and work organization, two figures – of fundamental importance for the school – complemented each other: the great philosopher and theorist Kotarbiński,³⁴ and Zieleniewski. The latter initially – before World War II – com-

³² Karol Wojtyła noted the fact of Kotarbiński's criticism of Marxism: "Certain eminent thinkers who maintained a critical attitude towards dialectical materialism were also regarded with suspicion. Of these I particularly remember Tadeusz Kotarbiński, Maria Ossowska and Tadeusz Czeżowski" (John Paul II, *Memory and Identity: Personal Reflections*, Weidenfeld & Nicolson, London 2005, p. 10). On "economicism," see J.I.M. Bocheński, *Sto zabobonów. Krótki filozoficzny słownik zabobonów* [One Hundred Superstitions: A Brief Philosophical Dictionary of Superstitions], Philed, Kraków 1994, entry "Ekonomizm"; cf. A. Brożek, *Logical Analysis against Superstitions: Józef M. Bocheński on the Social Role of Philosophy*, "Edukacja Filozoficzna" 2020, Vol. 70, pp. 39–57. The term **economicism** is used here in a broad philosophical sense (described by Bocheński). It must not be confused with its narrower meaning describing a type of political strategy of workers' movements, used in the Soviet thought (especially by Vladimir Lenin in his criticism of trade unions).

³³ Zieleniewski wrote his PhD on the philosophy of fiction in Hans Vaihinger and David Hume, under the supervision of Cracovian historian of philosophy Witold Rubczyński (who was first of all an outstanding medievalist and the scientific editor of the works of Matthew of Cracow).

³⁴ In this point, Kotarbiński reffered also to the achievements of the most oustanding Polish theorist and practician of management – Karol Adamiecki; cf. T. Kotarbiński, *Główne myśli Karola*

bined scientific research with management practice, and, moreover, he came from a well-known family of entrepreneurs.³⁵

In the 1980s and early 1990s, the scientific and organization development of Polish praxiology was coordinated mostly by Pszczołowski, and for more than two last decades by Wojciech W. Gasparski (1936–2022), one of Kotarbiński's students.

Apart from the mentioned researchers, the following ones had or have an especially significant role in the development of the school: Jarosław Rudniański (1921–2008), Maria Nowakowska (†1989), Witold Kieżun (1922–2021), Henryk Stonert (1923–1992); and (still active): Anna Lewicka-Strzałecka (born 1949), Piotr T. Makowski (born 1982).

The Polish School of Praxiology has also attracted some foreign researchers. In particular, Finnish philosopher Timo Airaksinen (born 1947),³⁶ and other scholars, like Victor Alexandre (born 1939) from France.³⁷

In the framework of the school, works and concepts representing various aspects of praxiological reflection have been developed. Their list would mainly include:³⁸

- fundamental terms of praxiology and the formal (or quasi-formal³⁹) status of this discipline (T. Pszczołowski, H. Stonert, Edward Leniewicz, Mirosław Sułek),
- formal theory of action (M. Nowakowska, P.T. Makowski),
- praxiosemiontics (Tadeusz Wójcik),
- issues of motivation, theory of work (J. Zieleniewski, Xymena Gliszczyńska, T. Pszczołowski),
- theory of creativity (Andrzej Strzałecki),
- praxiology and theory of decision (Tadeusz Tyszka),

Adamieckiego (18 III 1866 – 16 V 1933) [The Main Thoughts of Karol Adamiecki], "Prakseologia" 1971, Vol. 39–40, pp. 7–15.

³⁵ A. Czech, Jan Zieleniewski (1901–1973) – Cracow Period, Early Works, in: Reflections about Contemporary Management, eds. B. Kożuch, Ł. Sułkowski, Peter Lang, Berlin 2017, passim; see also other texts in the volume dedicated to his contribution: "Prakseologia" 1971, Vol. 39–40 and the paper: J. Zieleniewski, The Theory of Organization and Management, op. cit.

³⁶ T. Airaksinen, ed., *Praxiology and the Philosophy of Technology*, Transaction Publishers, New Brunswick, NJ, 2007 (Praxiology, Vol. 15).

³⁷ See V. Alexandre, ed., *The Roots of Praxiology*, op. cit.

³⁸ For selected works of the mentioned scholars, see Bibliography.

³⁹ The concept of praxiology as a quasi-formal discipline was developed by Henryk Stonert.

- praxiology of discussion (T. Pszczołowski),
- linking praxiology with technology and cybernetics (M. Mazur, T. Airaksinen),
- praxiological theory of management (J. Zieleniewski, W. Kieżun, P.T. Makowski, Mateusz Lewandowski),
- praxiology of fighting and negative cooperation concepts (J. Rudniański)
- praxiology of religion (J. Rudniański),
- praxiological concepts of creation and studying (J. Rudniański),
- applying praxiology in the theory of law (Adam Podgórecki),
- theory of social engineering (A. Podgórecki),
- praxiology and the methodology of designing (Danuta Miller, W.W. Gasparski, A. Strzałecki),
- praxometries (W.W. Gasparski),
- praxiological system theory (W.W. Gasparski, A. Lewicka-Strzałecka),
- applying praxiology in business ethics (D. Miller, W.W. Gasparski, A. Lewicka-Strzałecka).

The school brings together scholars with different worldviews, including both Christians and atheists. Kotarbiński himself presented an atheistic worldview (at least in the period of his scholarly activity), although he admitted that he drew inspiration from evangelical values and a chivalrous ethos. Many of his students identified themselves with Christianity, for example Rudniański, Stonert, Podgórecki, Kieżun and Gasparski.⁴⁰

5. Essential Features of the School

The **philosophy of practicality** shaped the essential features of the Polish School of Praxiology. They can be described in the following points:

1. Praxiological concepts clearly diverge from the traditional Aristotelian idea of *philosophia practica* (considered as moral philosophy). Nevertheless, the concept of practical action – as it is viewed in the Polish School – takes also into account the ethicality of action as one of its essential features

⁴⁰ Moreover, the organizational concepts of Karol Adamiecki, which for Kotarbiński were an important point of reference in the thought concerning organizational practice (see above, in n. 34), were inspired by Catholic solidarism.

required in praxiological terms (apart from effectiveness and efficiency). In this aspect, the concepts of the school differ from von Mises's approach, in which "praxeology" is axiologically neutral, and the ethicality of action depends on the choice of goals (in the Austrian perspective, such choice is considered as extrinsic to the praxiological problem).

- 2. The Polish School of Praxiology does not assume the existence of praxiological categories inscribed in the structure of the human mind.⁴¹ As Jan Zieleniewski notes, in this aspect the Polish praxiologists are close to other representatives of this discipline, such as Alfred Espinas, Eugeniusz Słucki⁴² or Georges Hostelet. A decisively different position was presented by von Mises. However, in Murray Rothbard's concept (who was a continuator of von Mises's thought), the emphasis on the *a priori* character of "praxeological categories" was partially limited.⁴³
- 3. Due to its historical origin, the Polish School of Praxiology is linked to the Lvov-Warsaw School, and, in consequence, one of the goals of praxiology is to create the analytic philosophy of action.⁴⁴ It is also worth noting that praxiological thought (in its Polish or Austrian version) was developed in countries where analytic philosophy flourished (that is, in the USA and Poland). At the same time, praxiology is essentially distant from "continental philosophy" (whose particularly characteristic representatives were, among others, Martin Heidegger or Jacques Derrida).⁴⁵
- 4. The Polish school brings together scholars with different worldviews another common point with the Lvov-Warsaw School.
- 5. The conceptual foundation of the Polish School of Praxiology is the philosophical system created by T. Kotarbiński (which could be called "philosophy of practicality"!). This focus on creating a system differentiates the Polish School of Praxiology from the Lvov-Warsaw School.
- 6. Praxiology is considered by Kotarbiński as the general methodology, because praxiology includes the theory of intellectual actions through which

⁴¹ See above, in n. 17.

⁴² See above, n. 13.

⁴³ J. Zieleniewski, *Remarks of a Polish Praxiologist*, op. cit., pp. 364–365.

⁴⁴ This aspect is underscored in the recent studies by P.T. Makowski.

⁴⁵ Cf. the remarks on the Polish analytic philosophy in the article by B. Smith, Why Polish Philosophy Does Not Exist, op. cit.

other scientific disciplines/arts⁴⁶ are developed.⁴⁷ Analogically, in von Mises's view "praxeology" is the philosophical foundation of economics.

- 7. The term "small philosophy" indicates that, within the framework of the Polish **philosophy of practicality**, praxiological concepts can give humans essential support (tools) in their action. This term also indicates the auxiliary role of practical tools: in no way does "small philosophy" propose the idea of the primacy of practice over ethics or over the pursuit of truth.⁴⁸
- 8. Ontological **reism** does not belong to the essential element of the Polish School of Praxiology, though it was proposed and presented by Kotarbiński himself (in his later works in a more moderate version of **concretism**). At present, this concept of Kotarbiński is mainly developed outside the praxiological school, mostly by the philosophers linked to the School of Brentano.⁴⁹
- 9. The Polish praxiological concepts are applied to different detailed disciplines and different areas of human activity (see above in the list of school representatives), but theory of organization and business ethics have a special significance here. The first path was initiated by Polish praxiologists already in the 1960s, especially by Jan Zieleniewski.⁵⁰ Later, after the collapse of so-called real socialism, applying praxiology in the area of business ethics became a crucial accomplishment of the Polish School of Praxiology. In the praxiological perspective, business ethics acquires its proper philosophical dimension and is not reduced to the position of an auxiliary discipline of management theory.⁵¹

⁵¹ Cf. W.W. Gasparski et al., eds., *Entrepreneurship: Values and Responsibility*, op. cit. In this volume, in addition to the strictly praxiological perspective, the interconnection between entrepre-

⁴⁶ The term "scientific" is understood broadly (not limited to the French term *la science*), whereas Kotarbiński's understanding of the term "arts" is close to the word "skills" (in the Polish original: *umiejętności*, which could be associated with the word *umiejętnia*, proposed in the 19th century by Bronisław Trentowski to replace the word "university").

⁴⁷ The concept of praxiology as the general methodology can be compared to the concept of L. Bourdeau, who considered praxiology as the "Science of Functions" (cf. L. Bourdeau, *Praxiol*ogy as the Science of Functions, op. cit.)

⁴⁸ For this reason, the interpretations ascribing to Kotarbiński a special kind of absolutization of the value of action in a neo-Marxist perspective (such as the interpretation of Brazilian theologian Hugo Assman) definitely seem wrong.

⁴⁹ See above, in n. 6; cf. F. Coniglione, Nel segno della scienza, op. cit., p. 129f (subchapter 2.2.5: Reismo e prasseologia in Tadeusz Kotarbiński).

⁵⁰ Moreover, praxiology is applied to economics as well; cf. T. Kotarbiński, *Praxiology and Economics*, offprint from: *On Political Economy and Econometrics: Essays in Honour of Oskar Lange*, Pergamon Press, Warszawa 1965, pp. 303–312.

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Scientific disciplines supporting practicality with theoretical tools are being developed in diverse directions. Tadeusz Kotarbiński did envisage some of them, but some others were not foreseen by him. The latter would never bother him but instead would make him happy, because (as he used to say): "Being outdistanced by one's own followers is the true reward for a brave master." The students were, are, and will be those for whom Kotarbiński fulfilled his mission as a teacher and **trustworthy guardian**.

Bibliography

- Airaksinen T., The Development of Immanent Ends in Professor Bocheński's "Towards the Philosophy of the Industrial Enterprise", "Prakseologia" 2020, Vol. 162, pp. 61–81.
- Airaksinen T., Praxiological Efficiency in Heteregeneous Professional Ethics, in: Praxiology and Pragmatism, eds. L.V. Rayan, F.B. Nasher, W.W. Gasparski, Transaction Publishers, New Brunswick, NJ, 2002 (Praxiology: The International Annual of Practical Philosophy and Methodology, Vol. 10 [hereafter cited as: Praxiology]), pp. 71–86.
- Airaksinen T., Professor Gasparski on Design and Entrepreneurship, "Zagadnienia Naukoznawstwa" 2017, Vol. 53, No. 2, pp. 135–147.
- Airaksinen T., ed., *Praxiology and the Philosophy of Technology*, Transaction Publishers, New Brunswick, NJ, 2007 (Praxiology, Vol. 15).
- Alexandre V., *The Structural Analysis of Actions and Its Social-Psychological Aspects*, in: *The Roots of Praxiology: French Action Theory from Bourdeau and Espinas to Present Days*, ed. V. Alexandre, in cooperation with W.W. Gasparski, Transaction Publishers, New Brunswick, NJ, 2000 (Praxiology, Vol. 7), pp. 21–43.
- Alexandre V., Gasparski W.W., eds., *French and Other Perspectives in Praxiology*, Transaction Publishers, New Brunswick, NJ, 2005 (Praxiology, Vol. 12).

neurship, ethics and cultural background is taken into consideration, especially in the papers by: Marcin W. Bukała, Robert Sirco, Laurent Montreuil, Anthony Percy, Moses L. Pava, David Pistrui and Josiane Fahed-Sreih (see Bibliography); cf. also T. Airaksinen, *Professor Gasparski on Design and Entrepreneurship*, "Zagadnienia Naukoznawstwa" 2017, Vol. 53, No. 2, pp. 135–147.

- [Bacon F. =] Francisci Baconis de Verulamio *Novum Organum Scientiarum*, Typis Gasparis Girardi, Venetiis 1762 (1st ed. 1620).
- Banajski R., *150 tomów "Prakseologii"* [150 Volumes of "Prakseologia"], "Prakseologia" 2010, Vol. 150, pp. 11–24.
- Betti A., *Kazimierz Twardowski*, in: *The Stanford Encyclopedia of Philosophy* (Fall 2021 Edition), ed. E.N. Zalta, URL: https://plato.stanford.edu/archives/ fall2021/entries/twardowski/ (substantive revision published on 17.05.2017).
- Bocheński J.I.M., *On the System*, in: *Studies on Mario Bunge's "Treatise"*, eds. P. Weingartner, G.J.W. Dorn, Brill, Amsterdam–Atlanta, GA, 1990 (Poznań Studies in the Philosophy of the Sciences and the Humanities, Vol. 18), pp. 99–104.
- Bocheński J.I.M., *Sto zabobonów. Krótki filozoficzny słownik zabobonów* [One Hundred Superstitions: A Brief Philosophical Dictionary of Superstitions], Philed, Kraków 1994.
- Bocheński J.I.M., *Towards the Philosophy of the Industrial Enterprise*, transl. M.W. Bukała, "Prakseologia" 2020, Vol. 162, pp. 19–41.
- Bourdeau L., Praxiology as the Science of Functions, transl. G. Chevallier, in: The Roots of Praxiology: French Action Theory from Bourdeau and Espinas to Present Days, ed. V. Alexandre, in cooperation with W.W. Gasparski, Transaction Publishers, New Brunswick, NJ, 2000 (Praxiology, Vol. 7), pp. 21–43 (transl. of the fragment of Theorie des sciences. Plan de science integrale).
- Bourdeau L., *Theorie des sciences. Plan de science integrale*, Germer Bailliere et C., Paris 1882.
- Brożek A., Logical Analysis against Superstitions: Józef M. Bocheński on the Social Role of Philosophy, "Edukacja Filozoficzna" 2020, Vol. 70, pp. 39–57.
- Brożek A., Jadacki J., *Minimalizm etyczny Tadeusza Kotarbińskiego* [Ethical Minimalism of Tadeusz Kotarbiński], "Etyka" 2006, Vol. 39, pp. 48–71.
- Bukała M.W., Business Enterprise in the Logic and Ontological Analysis of Józef I. M. Bocheński, "Prakseologia" 2020, Vol. 162, pp. 103–114.
- Bukała M.W., *The Main Topic of the Issue: Józef Maria Bocheński on the Business Enterprise*, "Prakseologia" 2020, Vol. 162, pp. 14–18.
- Bukała M.W., 'Periculum' and Business Responsibility: On the Scholastic Attitude toward Entrepreneurship, in: Entrepreneurship: Values and Responsibility, eds.
 W.W. Gasparski, L.V. Ryan, S. Kwiatkowski, Transaction Publishers, New Brunswick, NJ, 2010 (Praxiology, Vol. 17), pp. 139–149.
- Caude R., Scientific Organisation of Work and Management, in: The Roots of Praxiology: French Action Theory from Bourdeau and Espinas to Present Days,

Marcin W. Bukała, Wojciech W. Gasparski

ed. V. Alexandre, in cooperation with W.W. Gasparski, Transaction Publishers, New Brunswick, NJ, 2000 (Praxiology, Vol. 7), pp. 163–182.

- Coniglione F., *Nel segno della scienza: la filosofia polacca del Novecento*, Franco Angeli, Milano 1996 (Epistemologia, Vol. 52).
- Czech A., Jan Zieleniewski (1901–1973) Cracow Period, Early Works, in: Reflections about Contemporary Management, eds. B. Kożuch, Ł. Sułkowski, Peter Lang, Berlin 2017, pp. 23–32.
- Czech A., Józef M. Bocheński's Analysis of "System" and "Finality" Notions, "Journal of Economics & Management" 2005, Vol. 2, pp. 46–58.
- Espinas A., *Les origines de la technologies*, "Revue Philosophique de la France et de l'Etranger" 1890, Vol. 30, pp. 295–314
- Espinas A., The Origins of Technology, transl. C. Wintrebert, in: The Roots of Praxiology: French Action Theory from Bourdeau and Espinas to Present Days, ed. V. Alexandre, in cooperation with W.W. Gasparski, Transaction Publishers, New Brunswick, NJ, 2000 (Praxiology, Vol. 7), pp. 45–91 (transl. of excerpts from Les origines de la technologies).
- Facca D., On the Early Modern Origin of the Term "Praxiology": Historical Reconstruction and General Considerations, "Prakseologia," Vol. 165, in press.
- *Fragmenty filozoficzne* [Philosophical Fragments], in: *Seria pierwsza: ku uczczeniu piętnastolecia pracy nauczycielskiej prof. T. Kotarbińskiego w Uniwersytecie Warszawskim* [Series One: Celebrating Fifteen years of Prof. Tadeusz Kotarbiński's Work as a Teacher at the University of Warsaw], Warszawa 1934 [published by students].
- Gasparski W.W., *Agency in a Praxiological Approach*, in: *The Lvov-Warsaw School: Past and Present*, eds. Á. Garrido, U. Wybraniec-Skardowska, Birkhäuser, Cham 2016, pp. 175–187.
- Gasparski W.W., Between Logic and Ethics: The Origin of Praxiology, "Axiomathes" 2006, Vol. 7, No. 3, pp. 385–394.
- Gasparski W.W., Entrepreneurship from the Praxiology Point of View, in: Entrepreneurship: Values and Responsibility, eds. W.W. Gasparski, L.V. Ryan, S. Kwiatkowski, Transaction Publishers, New Brunswick, NJ, 2010 (Praxiology, Vol. 17), pp. 23–36.
- Gasparski W.W., Filozofia praktyczności. Traktat o filozofii Tadeusza Kotarbińskiego oraz similaria, Wydawnictwo IFiS PAN, Warszawa 2021 (transl. of A Philosophy of Practicality: A Treatise on the Philosophy of Tadeusz Kotarbiński).
- Gasparski W.W., *Kotarbiński, Tadeusz*, in: *Powszechna encyklopedia filozofii*, Vol. 5, Polskie Towarzystwo Tomasza z Akwinu, Lublin 2004, pp. 902–907.

- Gasparski W.W., *Kotarbiński, Tadeusz Marian*, in: *Encyklopedia filozofii polskiej*, ed. A. Maryniarczyk, Vol. I, Polskie Towarzystwo Tomasza z Akwinu, Lublin 2011, pp. 726–731 (accessible also online: http://www.ptta.pl/efp/pdf/k/kotarbinskit.pdf).
- Gasparski W.W., On the Concept of Practicality, in: Praxiology and Pragmatism, eds. L.V. Rayan, F.B. Nasher, W.W. Gasparski, Transaction Publishers, New Brunswick, NJ, 2002, pp. 61–70 (re-edition of Part One of A Philosophy of Practicality: A Treatise on the Philosophy of Tadeusz Kotarbiński).
- Gasparski W.W., On the Methodology of Practical Disciplines (Sciences), "Prakseologia" 2022, Vol. 163–164, in press (re-edition of Part Four of A Philosophy of Practicality: A Treatise on the Philosophy of Tadeusz Kotarbiński).
- Gasparski W.W., A Philosophy of Practicality: A Treatise on the Philosophy of Tadeusz Kotarbiński, Philosophical Society of Finland, Helsinki 1993 (Acta Philosophica Fennica, Vol. 53).⁵²
- Gasparski W.W., The Philosophy of the Business Enterprise by Józef Maria Bocheński, "Prakseologia" 2020, Vol. 162, pp. 43–59.
- Gasparski W.W., A Praxiological Theory of Design, in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983 (Theory and Decision Library, Vol. 34), pp. 281–312.
- Gasparski W.W., Praxiology, in: Systems & Control Encyclopedia: Theory, Technology, Applications, ed. M.G. Singh, Pergamon Press, Oxford 1987, pp. 3860-3865.
- Gasparski W.W., Tadeusz Kotarbiński and His Philosophical Transitions, in: Transition Redesigned: A Practical Philosophy Perspective, eds. W.W. Gasparski, B. Rok, Routledge, New York 2013 (Praxiology, Vol. 20), pp. 3–13.
- Gasparski W.W., ed., *Biznes, etyka, odpowiedzialność. Podręcznik akademicki* [Business, Ethics, Responsibility. Academic Handbook], [with editiorial cooperation of] A. Lewicka-Strzałecka, D. Bąk, B. Rok, J. Sokołowska, PWN, Warszawa 2012.
- Gasparski W.W., ed., *Designology: Studies on Planning for Action*, Routledge, New York 2014 (Praxiology, Vol. 22).
- Gasparski W.W., ed., *Praxiologies and the Philosophy of Economics*, Transaction Publishers, New Brunswick, NJ, 1992 (Praxiology, Vol. 1).

⁵² Transl. as Filozofia praktyczności. Traktat o filozofii Tadeusza Kotarbińskiego oraz similaria (2021); Part One re-edited as On the Concept of Practicality (2002); Part Four re-edited as On the Methodology of Practical Disciplines (Sciences) (2022).

- Gasparski W.W., Lewicka-Strzałecka A., Rok B., Bąk D., In Search for a New Balance: The Ethical Dimension of the Crisis, in: The Role of Large Enterprises in Democracy and Society, eds. B. Fryzel, P.H. Dembiński, Palgrave Macmillan, New York, pp. 189–206.
- Gasparski W.W., Szaniawski K., Praxiology and Decision Theory, in: Decision Making and Change in Human Affairs, eds. H. Jungermann, G. de Zeeuw, D. Reidel, Dordrecht-Boston 1977, pp. 491–506.
- Gniadek J., The Philosophy of Industrial Enterprise from a Praxeological and Personalistic Perspective, "Prakseologia" 2020, Vol. 162, pp. 83–101.
- Gutiérrez C., *The Extraordinary Claim of Praxeology*, "Theory and Decision" 1971, Vol. 1, pp. 327–336.
- John Paul II, *Memory and Identity: Personal Reflections*, Weidenfeld & Nicolson, London 2005.
- Kaufmann A., The Science of Decision-Making, in: The Roots of Praxiology: French Action Theory from Bourdeau and Espinas to Present Days, ed. V. Alexandre, in cooperation with W.W. Gasparski, Transaction Publishers, New Brunswick, NJ, 2000 (Praxiology, Vol. 7), pp. 183–197.
- Kolarzowski J., Supremacja prawdy: filozofia Tadeusza Kotarbińskiego w poszukiwaniu wspólnego fundamentu dla reizmu i etyki niezależnej [The Supremacy of Truth: Tadeusz Kotarbiński's Philosophy in Search for a Common Foundation of Reism and Independent Ethics], in: Myśl Tadeusza Kotarbińskiego i jej współczesna recepcja [The Thought of Tadeusz Kotarbiński and Its Contemporary Reception], eds. B. Banajski, W.W. Gasparski, A. Lewicka-Strzałecka, Polska Akademia Nauk, Towarzystwo Naukowe Prakseologii, Warszawa 2006, pp. 27–34.
- Kotarbiński T., The ABC of Practicality, transl. A. Szpaderski, in: Praxiology and Pragmatism, eds. L.V. Rayan, F.B. Nasher, W.W. Gasparski, Transaction Publishers, New Brunswick, NJ, 2002 (Praxiology, Vol. 10), pp. 25–59 (transl. of Abecadło praktyczności).
- Kotarbiński T., *The Development of the Main Problem in the Methodology of Francis Bacon*, offprint from: "Commentariorum Societatis philosophicae Polonorum – Studia philosophica" 1935.
- Kotarbiński T., *Elementy teorii poznania, logiki formalnej i metodologii nauk*, Warszawa 1929 (transl. as: *Gnosiology*...).
- Kotarbiński T., *Główne myśli Karola Adamieckiego (18 III 1866 16 V 1933)* [The Main Thoughts of Karol Adamiecki], "Prakseologia" 1971, Vol. 39–40, pp. 7–15.

- Kotarbiński T., Gnosiology: The Scientific Approach to the Theory of Knowledge, transl. O. Wojtasiewicz, Pergamon Press, Oxford 1966 (transl. of Elementy teorii poznania, logiki formalnej i metodologii nauk).
- Kotarbiński T., *L'image de mes idées*, offprint from: "Ricerche filosofiche" 1965, Vol. 33, No. 2.
- Kotarbiński T., *Leçons sur l'histoire de la logique*, transl. A. Pozner, PWN, Warszawa 1965 (transl. of *Wykłady z dziejów logiki*).
- Kotarbiński T., *Myśli o ludziach i ludzkich sprawach* [Thoughts on Humans and Human Problems], Ossolineum, Wrocław 1986.
- Kotarbiński T., *Odpowiedź* [The Answer], in: *Dzieła wszystkie* [Opera omnia], Vol. 2: *Ontologia, teoria poznania i metodologia nauk* [Ontology, Theory of Cognition and Methodology of Sciences], Ossolineum, Wrocław 1993, pp. 170–182.
- Kotarbiński T., Odrębność i rodzaj użyteczności nauk humanistycznych [The distinctiveness and the particularity of usefulness of the humanities], in: Dzieła wszystkie [Opera omnia], Vol. 2: Ontologia, teoria poznania i metodologia nauk [Ontology, Theory of Cognition and Methodology of Sciences], Ossolineum, Wrocław 1993, pp. 77–90.
- Kotarbiński T., On the Essence and Goals of General Methodology (Praxiology), in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983 (Theory and Decision Library, Vol. 34), pp. 21–30.
- Kotarbiński T., *Philosophical Self-Portrait*, in: *Kotarbiński: Logic, Semantics and Ontology*, ed. J. Woleński, Springer, Dordrecht 1990, pp. 1–6 (transl. of *L'image de mes idées*).
- Kotarbinski, T., *Practical Error*, "Danish Yearbook of Philosophy" 1964, Vol. 1, pp. 65–71.
- Kotarbiński T., *Praxiology: An Introduction to the Science of Efficient Action*, transl. O. Wojtasiewicz, Oxford 1965 (transl. of *Traktat o dobrej robocie*).
- Kotarbiński T., *Praxiology and Economics*, offprint from: *On Political Economy and Econometrics: Essays in Honour of Oskar Lange*, Pergamon Press, Warszawa 1965, pp. 303–312.
- Kotarbiński T., Traktat o dobrej robocie, Wrocław 1955 (transl. as: Praxiology...).
- Kotarbiński T., Wykłady z dziejów logiki, Ossolineum, Łódz-Wrocław 1957.
- Kowalik T., *La praxéologie économique d'Oskar Lange*, "Organon" 1966, Vol. 3, pp. 245–258.

- Leniewicz E., Practical Problems and Practical Directives, in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983 (Theory and Decision Library, Vol. 34), pp. 265–279.
- Lewicka-Strzałecka A., Tadeusza Kotarbińskiego wzorzec wychowania i cnót nauczycielskich [Tadeusz Kotarbiński's Model of Education and Teaching Virtues], in: Myśl Tadeusza Kotarbińskiego i jej współczesna recepcja [The Thought of Tadeusz Kotarbiński and Its Contemporary Reception], eds.
 B. Banajski, W.W. Gasparski, A. Lewicka-Strzałecka, Polska Akademia Nauk, Towarzystwo Naukowe Prakseologii, Warszawa 2006, pp. 85–91.
- Makowski P.T., *Jak myśleć o praktyczności* [How to Think about Practicality], "Prakseologia" 2022, Vol. 163–164, in press.⁵³
- Makowski P.T., Kotarbiński's Praxiology and the Analytic Action Theory, in: Praxiological Essays: Texts and Contexts, ed. W.W. Gasparski, Routledge, New York 2017 (Praxiology, Vol. 25), pp. 101–113.
- Makowski P.T., Praxiology Meets Planning Theory of Intention: Kotarbiński and Bratman on Plans, in: Praxiology and the Reasons for Action, eds. P.T. Makowski, M. Bonecki, K. Nowak-Posadzy, Transaction Publishers, Routledge, New York 2015 (Praxiology, Vol. 23), pp. 43–71.
- Makowski P.T., *Tadeusz Kotarbiński's Action Theory: Reinterpretive Studies*, Palgrave Macmillan, Cham 2017.
- Mises L. von, *Human Action: A Treatise on Economics*, Ludwig von Mises Institute, Auburn, AL, 1998.
- Mortreuil L., The Profit of Values: A Christian Vision of Corporate Social Responsibilities, in: Entrepreneurship: Values and Responsibility, eds. W.W. Gasparski, L.V. Ryan, S. Kwiatkowski, Transaction Publishers, New Brunswick, NJ, 2010 (Praxiology, Vol. 17), pp. 177–193.
- Nowakowska M., Cognitive Sciences: Basic Problems, New Perspectives, and Implications for Artificial Intelligence, Academic Press, Orlando, FL, 1986.
- Nowakowska M., *Language of Motivation and Language of Actions*, Mouton, The Hague–Paris, 1973.

Nowakowska M., Teoria działania [Theory of Action], PWN, Warszawa 1979.

⁵³ On the book by W.W. Gasparski, Filozofia praktyczności. Traktat o filozofii Tadeusza Kotarbińskiego oraz similaria (2021).

- Ostrowski J., An Outline of the Prehistory of Praxiology, in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983 (Theory and Decision Library, Vol. 34), pp. 31–45.
- Pawa M.L., The Spirit of Jewish Entrepreneurship, in: Entrepreneurship: Values and Responsibility, eds. W.W. Gasparski, L.V. Ryan, S. Kwiatkowski, Transaction Publishers, New Brunswick, NJ, 2010 (Praxiology, Vol. 17), pp. 211–220.
- Percy A., Entrepreneurship and Catholic Social Teaching, in: Entrepreneurship: Values and Responsibility, eds. W.W. Gasparski, L.V. Ryan, S. Kwiatkowski, Transaction Publishers, New Brunswick, NJ, 2010 (Praxiology, Vol. 17), pp. 195–209.
- Pistrui D., Fahed-Sreih J., Towards the Understanding of Islam and Muslim Entrepreneurship in the Middle East, in: Entrepreneurship: Values and Responsibility, eds. W.W. Gasparski, L.V. Ryan, S. Kwiatkowski, Transaction Publishers, New Brunswick, NJ, 2010 (Praxiology, Vol. 17), pp. 221–234.
- Podgórecki A., *A Sociological Theory of Law*, Presentation by V. Ferrari, Giuffrè, Milano 1991.
- Porębski Cz., *Lectures on Polish Value Theory*, Brill, Leiden–Boston, MA, 2019 (Studien zur Osterreichischen Philosophie, Vol. 47).
- Pszczołowski T., Philosophical and Methodological Foundations of Kotarbiński's Praxiology in: Kotarbiński: Logic, Semantics and Ontology, ed. J. Woleński, Springer, Dordrecht 1990, pp. 97–105.
- Rudniański J., Struggle in a Defense Social Environment, in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983 (Theory and Decision Library, Vol. 34), pp. 325–345.
- Sirco R., The Entrepreneurial Vocation, in: Entrepreneurship: Values and Responsibility, eds. W.W. Gasparski, L.V. Ryan, S. Kwiatkowski, Transaction Publishers, New Brunswick, NJ, 2010 (Praxiology, Vol. 17), pp. 153–175.
- Smith B., *On the Phases of Reism*, in: *Kotarbiński: Logic, Semantics and Ontology*, ed. J. Woleński, Springer, Dordrecht 1990, pp. 137–183.
- Smith B., Why Polish Philosophy Does Not Exist, in: The Lvov-Warsaw School: The New Generation, eds. J.J. Jadacki, J. Paśniczek, Brill, Poznań 2006 (Poznań Studies in the Philosophy of the Sciences and the Humanities, Vol. 89), pp. 19–39.

- Stonert H., Making Use of Science in Actions (A Study in Methodology and Praxiology), in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983 (Theory and Decision Library, Vol. 34), pp. 231–263.
- Sułek M., Praxiology: A New Approach, in: Praxiological Essays: Texts and Contexts, ed. W.W. Gasparski, Routledge, New York 2017 (Praxiology, Vol. 25), pp. 152–161.
- Szaniawski K., *Tadeusz Kotarbinski from Ontological Reism to Semantical Concretism*, in: *Theory and History of Ontology*, website ed. by R. Corazzon, URL: https://www.ontology.co/kotarbinskit.htm.
- Wójcik T., Praxiosemiotics: The Theory of Optimum Message in the Service of Other Disciplines and Practical Activities, in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983 (Theory and Decision Library, Vol. 34), pp. 125–141.
- Woleński J., Reism, in: The Stanford Encyclopedia of Philosophy (Spring 2022 Edition), ed. E.N. Zalta, URL: https://plato.stanford.edu/archives/spr2022/entries/reism/ (substantive revision on 10.04.2020).
- Wolniewicz B., Concerning Reism, in: Kotarbiński: Logic, Semantics and Ontology, ed. J. Woleński, Springer, Dordrecht 1990, pp. 199–204.
- Wybraniec-Skardowska U., Introduction. The School: Its Genesis, Development and Significance, in: The Lvov-Warsaw School: Past and Present, eds. Á. Garrido, U. Wybraniec-Skardowska, Birkhäuser, Cham 2016, pp. 3–14.
- Zieleniewski J., *Dlaczego tylko "cybernetyka i filozofia nauk technicznych"*, "Zagadnienia Naukoznawstwa" 1968, Vol. 1, No. 17, pp. 3–12.
- Zieleniewski J., *Remarks of a Polish Praxiologist on the Subject of a Paper by C. Gutiérrez*, "Theory and Decision" 1971, Vol. 1, pp. 359–368.
- Zieleniewski J., The Theory of Organization and Management, in: Praxiological Studies: Polish Contributions to the Science of Efficient Action, eds. W.W. Gasparski, T. Pszczołowski, Springer, Dordrecht 1983 (Theory and Decision Library, Vol. 34), pp. 347–360.
- Zieleniewski J., Why "Cybernetics and the Philosophy of Technical Sciences" Only, in: Akten des XIV Internationallen Kongresses fur Philosophie, Vol. 2, Wien 1968, pp. 601–608 (transl. of Dlaczego tylko "cybernetyka i filozofia nauk technicznych").
- Zieleniewski J., *Wirsamkeitsschwelle*, in: *Lexicon der Planung und Organisation*, eds. H. Niewerth, J. Schröder, Quickborner Team, Quickborn 1968, pp. 192–193.