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## An Analytical School on the Continent: The Heritage of Brentano (Revised)

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The aim of our paper is to present briefly the Austrian and Polish origins of analytic philosophy. Michael Dummett<sup>1</sup> (see also Joseph Maria Bochenski<sup>2</sup> and Roger Pouivet<sup>3</sup>) stressed the influence on the development of analytic philosophy of Franz Brentano and his disciples (including Edmund Husserl, Alexius Meinong, Anton Marty and Sigmund Freud), among whom Kazimierz Twardowski deserves special emphasis. Both Brentano and

Twardowski created independent philosophical schools and influenced the progress of the analytic movement in the 20th century<sup>4</sup>. Twardowski founded the Lvov-Warsaw School.

According to Jan Woleński the success of the Lvov-Warsaw School was the result of four main factors: (1) genetic: the activity of Twardowski and his disciples, (2) geographic: the two main centers of Lvov and Warsaw, (3) temporal: the end of 19th century until the Second World War and (4) substantial: common ideas. Among the most important characteristics, he does not mention any particular philosophical doctrine but rather a certain intellectual attitude<sup>5</sup>. Most philosophers of the Lvov-Warsaw School, followed Twardowski, in understanding philosophy as a collection of disciplines, including logic, ethics, aesthetics, metaphysics, and epistemology. So, philosophy was considered as a science. Moreover they shared the same metaphilosophical opinion concerning clarity, justification, the separation of philosophy from world-views and rejection of irrationalism. The Lvov-Warsaw School included various generations of philosophers and many other schools emerged from it, such as the famous Warsaw School of Logic<sup>6</sup> and the Cracow Circle<sup>7</sup>. The latter was a small research group formed by Józef Maria Bocheński, Jan Franciszek Drewnowski, Jan Salamucha and Bolesław Sobociński that worked together only seven years until the outbreak of the Second World War.

Among so many remarkable disciples of Twardowski, Kazimierz Ajdukiewicz (1890-1963)<sup>8</sup> was the one who achieved to create or inspire next generations of Polish philosophers, logicians, linguists and many others. We will try to present shortly his impressive legacy below.

He belonged to the so-called first generation of Lvov-Warsaw School, which means he was a direct disciple of Twardowski and Jan Łukasiewicz. He attended lectures given by, among others, Wacław Sierpiński, Marian Smoluchowski, and later, took part in seminars led by

Edmund Husserl and David Hilbert in Göttingen<sup>9</sup>. From 1945 to 1953 he held the position of professor in Poznań, firstly as Head of the Department of Logic and Methodology of Science and finally as a President of Adam Mickiewicz University (1948-1952). During the difficult post-war period, he created a genuine logical empire comprising over a 100 researchers (mostly logicians, but also philosophers of science, methodologists, linguists, theorists of culture etc.). Among his renowned disciples were: Roman Suszko, Maria Kokoszyńska-Lutmanowa, Henryk Mehlberg, Seweryna Romahnowa-Łuszczewska, Stefan Swieżawski and Ludwik Borkowski.

Ajdukiewicz was also was the first Editor-in-Chief of *Studia Logica* and an outstanding organizer of scientific life in Poland. He held the view that properly organized education in logic would guarantee social progress. He was the author of many popular textbooks in the field of logic and methodology intended not only for students and professional researchers, but also for public administration employees. He even wanted to introduce an obligatory course in logic for all workers in public administration, and considered logic to be a foundation of social reform. (He was one of the authors of a wide-ranging reform of the system of administration by means of education in logic, and always emphasized the role of an education in logic in the proper functioning of a society.)

Ajdukiewicz was the author of many philosophical conceptions, such as semantic epistemology, radical conventionalism, <sup>10</sup> and the original theory of meaning. He also should be considered precursor of categorical grammar, <sup>11</sup> and logic of questions <sup>12</sup>. However, his philosophical program influenced and inspired elaborations of various conception within logic, methodology of science, formal linguistics, and general theory of culture.

Ajdukiewicz's program of semantic epistemology is a perfect example of "the Polish style" of philosophy and his projects seem most original in the context of the opposition between the

analytical and continental traditions. The main idea of semantic epistemology consists in the application of formal methods to solving philosophical problems. As the title of the definitive collection of his works implies, "Language and Cognition" was the centre of his philosophical interests. Semantic epistemology constitutes the philosophical background for much contemporary research including Roman Suszko's Diachronic Logic – the first model-theoretic study of the dynamics of scientific knowledge. Ajdukiewicz is the godfather of the Poznań Methodological School<sup>13</sup> comprising most of all: Jerzy Giedymin, Jerzy Kmita, Leszek Nowak, Jerzy Topolski.

In the context of the "Polish style" in logic and philosophy, it is hard not to mention Alfred Tarski – the most famous Polish logician – who considered himself the beneficiary of Lvov-Warsaw School<sup>14</sup>. The only doctoral student of Stanisław Leśniewski, he always emphasized that his genius could have flourished only in the climate of this great Polish tradition. The first English edition of his logical papers in 1956 was dedicated to Tadeusz Kotarbiński – one of the finest representatives of the School<sup>15</sup>. Most of all, Tarski thought highly of philosophical minimalism, which was the main "rule" of Twardowski's metaphilosophical conception. Tarski appreciated the cooperation that existed between scientists, mathematicians and philosophers in the 1930's in Poland. He also enjoyed and was influenced by direct connections with artists<sup>16</sup>.

As we mentioned above, Ajdukiewicz was the godfather of the Poznań Methodological School and his program of semantic epistemology was developed there with great success. One of the most important members of the Poznań Methodological School – Leszek Nowak (1943-2009) <sup>17</sup> – introduced and developed three main concepts with his collaborators: an idealizational theory of science, non-Marxian historical materialism, and the so-called negativistic unitarian metaphysics <sup>18</sup>. He was always explicit about the "Polish style" in

philosophy and its independent position in relation to the Anglo-Saxon and continental tradition due to the heritage of Twardowski's disciples<sup>19</sup>. According to Nowak, a genuine philosopher – in opposition to historians of philosophy and logicians – plays for the Totality (the Whole), i.e. elaborates idealizational models of the Totality. The philosophical optimum is a radical idea combined with analytical reasoning. There is an inevitable opposition between radical and conciliatory philosophy. In philosophy – following Nowak – we should seek synthetic thoughts laid out in an analytic way<sup>20</sup>. He wrote:

"To have a consistent and clear vision of the Whole, but different than the others – this is the most important aim in philosophy. [...] The theoretical optimum is a balance between metaphysical boldness and empirical caution."

He also claimed that a genuine philosopher should devoted himself to 'the art of speculative thinking'<sup>22</sup>.

Another important representative of the Poznań Methodological School, Jerzy Kmita introduced the project of historical epistemology that can be also considered as an extension of Ajdukiewicz's program of semantic epistemology<sup>23</sup>. The hard core of this project consists of a conception of humanist interpretation. It is a variant of the Carnapian concept of the rational reconstruction of knowledge. The explanandum comprises the fact of the undertaking of a given action; the explanans, together with the assumption of rationality contains:

(1) Firstly, a description of some actions relevant in a given concrete instance, as they present themselves from the point of view of the subject's knowledge,

- (2) Secondly, a description of the association of given actions with corresponding results, as the association appears from the viewpoint of the subject's knowledge, and,
- (3) Finally, a description of the preference relation as it is designated by the norms of the subject and which in particular singles out the preferred result. (This is the goal of the undertaken action) <sup>24</sup>.

Even though Kmita admired Ajdukiewicz's style, he finally postulated a reduction of philosophical issues to ones that should be elaborated within a general theory of culture. The subtitle of his last book, i.e. *A Necessary Seriousness of an Ironist*, indicates the antiphilosophical turn – the subtitle is: *Transformation of the Philosophical Problems into the Ouestions to the Cultural Studies*.

When considering the importance, or even a precursory character of the Lvov-Warsaw school, we should briefly observe recent tendencies in the development of logic in general. After the mathematical turn and in the era of the practical turn<sup>25</sup>, in our opinion, the following *recommendation* should be taken seriously in the case of present-day logic: "Back to philosophy". In the context of the next (perhaps a practical one) turn in logic, one should refer to Franz Brentano's theory of the four phases of philosophy. Let us recall that investigations during the second phase (i.e. the first phase of decline, "das erste Stadium der Verfalles". Are determined by practical motives. So, if Benthem calls for such a philosophical return, the Brentano's tradition, continued by Twardowski and developed by Ajdukiewicz and the Poznań Methodological School, could provide a glimpse into how such a coming back might look like.

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<sup>1 &</sup>quot;A grave historical distortion arises from a prevalent modern habit of speaking of analytical philosophy as "Anglo-American". Apart from its implicit dismissal of the work of modern Scandinavian philosophers, and of the more recent interest in analytical philosophy that has arisen in a great many other European countries, including Italy, Germany and Spain, this terminology utterly distorts the historical context in which analytical philosophy came to birth, in the light of which it would better be called "Anglo-Austrian" than "Anglo-American". In central Europe, that is it to say, in the great cultural region defined by the use of the German language for purposes of publication, there were throughout the nineteenth century a great many diverse currents in philosophy, which did not, however, flow along isolated channels, but collided with each other because of the communication between representatives of the different trends in the universities. More than one of these currents contributed, in the twentieth century, to the formation of analytical philosophy, which before Hitler came to power, was to be viewed as more a central European than a British phenomenon." Michael Dummett, *The Origins of Analytical Philosophy*, (Cambridge, MA: Harvard University Press, 1993), 1-2.

<sup>&</sup>lt;sup>2</sup> See for example inaugural lecture at the Wittgenstein Symposium in 1985 Über die Analytische Philosophie. Józef Maria Bocheński, Logika i filozofia. Wybór pism (Logic and Philosophy. Selected Papers Warszawa: PWN, 1993), 35-49.

<sup>&</sup>lt;sup>3</sup> "S'agissant de la philosophie contemporaine, il est malaisé de fixer sa date de naissance. Elle dépend des orientations philosophiques adoptées. (...) Pour ma part, la leçon inaugurale de Kazimierz Twardowski à l'Université de Lvov, en 1895, est le moment décisif." Roger Pouivet, *Philosophie contemporaine*, (Paris: Presses universitaire de France, 2008), 11.

<sup>4</sup> For the Twardowski's indirect influence on the origin of British analytic philosophy see Maria van der Schaar, "From Analytic Psychology to Analytic Philosophy. The Reception of Twardowski's Ideas in Cambridge", *Axiomathes*, No. 3, (1996): 295-324.

<sup>&</sup>lt;sup>5</sup> See for example: Jan Woleński *Lvov-Warsaw School* at Stanford Encyclopedia of Philosophy <a href="http://plato.stanford.edu/entries/lvov-warsaw/">http://plato.stanford.edu/entries/lvov-warsaw/</a>, and Jacek Juliusz Jadacki "The Conceptual System of the Lvov-Warsaw School", *Axiomathes*, No. 3, (1996): 325-333. See also Jan Woleński, *Logic and Philosophy in the Lvov-Warsaw School*, (Dordrecht: Kluwer, 1989) and *The Lvov-Warsaw School and Contemporary Philosophy*, Katarzyna Kijania-Placek & Jan Woleński (Eds.), (Dordrecht: Kluwer, 1998).

<sup>&</sup>lt;sup>6</sup> The Warsaw School of Logic was formed by disciples of renowned Polish logicians (Jan Łukasiewicz and Stanisław Leśniewski) and Polish mathematicians (Wacław Sierpiński and Stefan Mazurkiewicz). The international acclaim of its members is indisputable including such outstanding researchers as Alfred Tarski, Stanisław Jaśkowski, Czesław Lejewski, Adolf Lindenbaum, Andrzej Mostowski, Mojżesz Presburger, Jerzy Słupecki, Bolesław Sobociński and Mordechaj Wajsberg.

<sup>&</sup>lt;sup>7</sup> For the Cracow Circle see Jan Woleński, "Polish Attempts to Modernize Thomism by Logic (Bocheński and Salamucha)", *Studies in East European Thought*, No. 55, (2003): 299-313. See also Roger Pouivet, "Jan Salamucha's Analytical Thomism", (in:) S. Lapointe, J. Woleński, M. Marion, W. Miśkiewicz (Eds.), *The Golden Age of Polish Philosophy*. *Kazimierz Twardowski's Philosophical Legacy*, (Dordrecht-Heidelberg-London-New York: Springer, 2009): 235-245.

<sup>&</sup>lt;sup>8</sup> In 1934, Quine stayed in Warsaw a few weeks. He was following the advice of Carnap, who had indicated Warsaw without a second thought as a place where one could learn logic. There

he met Łukasiewicz, Leśniewski and Tarski, who gave their lecturers in German especially for him. Quine was delighted by the Polish hospitality, in particular with the fact that Jan Łukasiewicz, a famous professor and two-time president of Warsaw University, spent half a day looking for a decent and cheap hotel for him. He also formed a close friendship with Alfred Tarski, whom he helped in the first years of his stay in the United States. He highly valued Kazimierz Ajdukiewicz and shared many of his ideas. When Woleński was editing a book about Ajdukiewicz, he asked Quine for an article. Quine answered that he had not much to say after all these years and that he regretted this because Ajdukiewicz was "one of the best". See Jan Woleński, "Śmierć Quine'a", ["The Death of Quine"], *Principia – Ekspres Filozoficzny*, No. 26, (2001): 3-4, [Polish].

<sup>&</sup>lt;sup>9</sup> Czesław Głombik, "Die Polen und die Göttinger phänomenologische Bewegung", *Husserl Studies*, No. 21, (2005): 1-15.

language based on meaning directives. The reconstruction of language competence requires the formulation of three kinds of rules: axiomatic, deductive and empirical. See also Anna Jedynak, "French and Polish Conventionalism", (in:) S. Lapointe, J. Woleński, M. Marion, W. Miśkiewicz (Eds.), *The Golden Age of Polish Philosophy. Kazimierz Twardowski's*\*\*Philosophical Legacy\*\*, (Dordrecht-Heidelberg-London-New York: Springer, 2009): 61-77.

11 The first structural grammar drawn up in a precise and complete way was Ajdukiewicz's grammar presented in "Die syntaktische Konnexität", Studia Philosophica 1 (1936): 1-27.

12 For the practical turn in logic see Dov M. Gabbay & John Woods "The Practical Turn in Logic", (in:) *Handbook of Philosophical Logic*, Dov M. Gabbay & Franz Guenthner, (Eds.), (Springer/Dordrecht, vol. 13), 15-122.

<sup>13</sup> Main Ajdukiewicz's works in English: *Pragmatic Logic*, (Edited by Klemens Szaniawski & Halina Mortimer, Dordrecht: Reidel, 1974), *The Scientific World-Perspective and Other Essays.* 1931-1963. (Edited and with an introduction by Jerzy Giedymin, Dordrecht: Reidel, 1977), *Problems and Theories of Philosophy*, (Cambridge: Cambridge University Press, 1973, translation by Henryk Skolimowski & Anthony Quinton).

<sup>&</sup>lt;sup>14</sup> See the excellent biography Anita Burdman Feferman and Solomon Feferman, *Alfred Tarski: Life and Logic*, (Cambridge: Cambridge University Press, 2007), 53-68.

<sup>&</sup>lt;sup>15</sup> In this context we would like to point out that both Twardowski and Ajdukiewicz supported the candidature of Tarski at a professorial position at the Warsaw University in late 1920.

Ajdukiewicz was also one of the first philosophers who fully appreciated the importance of Tarski's works.

<sup>&</sup>lt;sup>16</sup> See Burman Feferman & Feferman, *Alfred Tarski*, 53-68.

<sup>&</sup>lt;sup>17</sup> It is worth emphasizing that on 13 December 1981 martial law was imposed in Poland. All year long Professor Nowak was a prisoner in an internment camp (December 1981 – December 1982). Moreover, in 1985 he was dismissed from the university for underground publishing. After the so-called fall of Communism in Poland in 1989, the Professor was reinstated at the Adam Mickiewicz University.

<sup>&</sup>lt;sup>18</sup> See for example: Leszek Nowak, "On the concept of Nothingness", *Axiomathes*, Nos 1-3, (1997): 381-394.

<sup>&</sup>lt;sup>19</sup> Leszek Nowak, *U podstaw teorii socjalizmu*, [On the Foundations of the Theory of Socialism], (Poznań: Wydawnictwo Nakom, 1991, vol. III), 236-237, [Polish].

<sup>&</sup>lt;sup>20</sup> Leszek Nowak, Byt i myśl. U podstaw negatywistycznej metafizyki unitarnej. Nicość i istnienie, [Being and Thought. On Foundations of Negativistic Unitarian Metaphysics.

Nothingness and Existence], (Poznań: Zysk i S-ka Wydawnictwo, 1998, vol. I): 95, [Polish].

<sup>21</sup> Leszek Nowak, *Byt i myśl. U podstaw negatywistycznej metafizyki unitarnej. Wieczność i zmiana*, [*Being and Thought. On Foundations of Negativistic Unitarian Metaphysics. Eternity and Change*], (Poznań: Zysk i S-ka Wydawnictwo, 2004, vol. II): 261, [Polish].

<sup>22</sup> Ibid.

<sup>&</sup>lt;sup>23</sup> The concept and program of historical epistemology is also used by Anastasios Brenner. Moreover, he claims that historical epistemology is an answer to the crises in contemporary philosophy of science that last from 1962. We would like to emphasize that what he calls "historical epistemology" can be also considered as an example of realization of the postulates of semantic epistemology in Ajdukiewicz's sense. Brenner analyses the French analytical tradition – i.e. work of Jules Vuillemin, Gilles Gaston Granger and Jacques Bouveresse, among others – that saw the crisis in the philosophy of science in a new light, and questioned the originality of Kuhn's work. Most importantly, he proved that the crisis is due to many misunderstandings and misinterpretations. In our opinion, independent French and Polish analytic traditions have striking similarities, especially those between Ajdukewicz's and Vuillemin's philosophical pluralism. See, for example: Anastasios Brenner, "Quelle épistémologie historique", Revue de métaphysique et de morale 49 (2006): 113-125; Anastasios Brenner & Gayon Jean (ed.), French Studies in the Philosophy of Science, (Springer: Vienna, 2009). See also: Katarzyna Gan-Krzywoszyńska "Vuillemin on Natural Language: from Myth to Free Philosophy" in (ed.) Dariusz Łukasiewicz & Roger Pouivet, "Scientific Knowledge and Common Knowledge", (Bydgoszcz: Epigram, 2009), 147-154; Piotr Leśniewski & Katarzyna Gan-Krzywoszyńska, "On Existence and some Ontologies", Ruch Filozoficzny 1 (2009): 71-79.

<sup>&</sup>lt;sup>24</sup> For the concept of rationality in the Poznań Methodological School, see, for example: Jerzy Kmita, *Problems in Historical Epistemology*. (Warsaw: PWN-Polish Scientific Publishers &

Boston – Lancaster – Tokyo: Reidel, 1988). For analyses of idealization, see, for example: Ilkka Niiniluoto, "Theories, approximations, and idealizations" in *Idealization I: General Problems*, Jerzy Brzeziński, Francesco Cognilione, Theo A. F. Kuipers & Leszek Nowak (Eds.), (Amsterdam/Atlanta: Rodopi, 1990, Poznań Studies in the Philosophy of Science and Humanities, vol. 16): 9-57.

<sup>&</sup>lt;sup>25</sup> For the practical turn in logic see Dov M. Gabbay & John Woods, "The Practical Turn in Logic", (in:) D. M. Gabbay & F. Guenthner (Eds.), *Handbook of Philosophical Logic*, Vol. 13, (Dordrecht: Springer, 2005): 15-122.

<sup>&</sup>lt;sup>26</sup> Johan van Benthem, "Where is logic going, and should it?", *Topoi*, vol. 25 (2006): 117-122. By the way let us emphasize the following phrase (from the page 121): "Discussions of 'normative' versus 'descriptive' views of logic have become dogmatic, predictable, and boring." This is a delightful conviction in our opinion.

<sup>&</sup>lt;sup>27</sup> Franz Brentano, *Die vier Phasen der Philosophie und ihr augenblicklicher Stand*, (Stuttgart: Cotta, 1895): 10, [German].

<sup>&</sup>lt;sup>28</sup> See also Balázs M. Mezei & Barry Smith, *The Four Phases of Philosophy*, (Amsterdam-Atlanta, GA: Rodopi, 1998).