Filozofia Nauki (The Philosophy of Science) ISSN 1230-6894 e-ISSN 2657-5868 2022, vol. 30(1) [117]: 5-22 DOI: 10.14394/filnau.2022.0001

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THE LVOV-WARSAW SCHOOL IN THE WORLD OF VALUES INTRODUCTION TO THE SPECIAL ISSUES OF FILOZOFIA NAUKI

1. AXIOLOGY IN THE LVOV-WARSAW SCHOOL

The next two issues of *Filozofia Nauki / The Philosophy of Science* adopt a unique point of view on the heritage of the Lvov-Warsaw School¹ (hereafter in brief: "LWS" or "School"). According to widespread opinion, the main object of interest of the members of the LWS was broadly understood logic as well as its applications in the philosophy of science, ontology, and epistemology. This opinion is mostly right. However, this does not mean that other fields of philosophy were ignored by the members of the LWS. Just the opposite. The members of the LWS explored many fields of broadly understood philosophy. In this regard, axiology, or the theory of values, also played an important role in the LWS's research and output. One of leading philosophers of the School, Izydora Dambska, wrote:

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¹ The history of the city which was the cradle of Twardowski's School was extremely turbulent in the last 120 years. In the 20th century, it first belonged to Galicia, the Polish province of Austria-Hungary, then between 1918 and 1939 to independent Poland. Dramatic, fratricidal battles for the city between Poles and Ukrainians took place in 1919. Between 1939 and 1945, it was occupied by Soviet Russians, Nazi Germany, and Russians again. In 1945, based on the Yalta agreements, it was included in the Soviet Union. Since 1991, it is a part of independent Ukraine. Representatives of various nations refer to this city variously. Poles call it "Lwów", Ukrainians — "Льыв" ("Lviv"), Austrians and Germans — "Lemberg." Since in all English monographs about the School, the term "Lvov-Warsaw School" is used, this term is also used in the majority of the papers included in this volume. However, some authors have chosen a different spelling, which we accept and respect.

A characteristic feature of metaphilosophical reflection in . . . the Lvov-Warsaw School was an emphasis put explicitly or implicitly on axiological moments: on moral values that are presupposed and produced by philosophizing; on a particular ethos that shapes the sense of a philosopher's life. (Dambska 1989: 29)

With these two volumes, we offer to address the question of how Kazimierz Twardowski and his students (and followers) developed axiology. Thus, the aim of these two volumes is to present some aspects of this often overlooked area (particularly in English literature on the subject). Thus, we aim to contribute to on-going studies on the heritage of the LWS.

To begin with, it should be instructive to define the scope of axiology.

Traditionally, axiology is regarded as the theory of values as such. Within axiology, one can ask such questions as, for instance, how values exist, how they are structured, or which laws govern the field of values. Axiology can be also held within particular fields, e.g., if one asks about values of particular kinds. With this in mind, ethics, or the theory of moral values, and aesthetics, or the theory of aesthetic values (including creation and perception of artworks) are of course counted in the domain of axiology. Let us call here these two disciplines together "axiology in the strict sense." However, in the scope of axiology, we may also include investigations of other kinds of values, such as cognitive and praxiological values. Let us call research into all these types of values (or the results of such research) "axiology in the broad sense."

Given the distinction just sketched, even if we limit ourselves to axiology in the strict sense, the majority of representatives of the LWS took up issues of this kind more or less often. For some of them, like Maria Ossowska, Władysław Tatarkiewicz, Mieczysław Wallis, or Leopold Blaustein, the ethical or aesthetic problems became the major object of research. For others, like Kazimierz Twardowski, Tadeusz Kotarbiński, Tadeusz Czeżowski, Kazimierz Ajdukiewicz, or Izydora Dąmbska, it was at least one of the domains of their investigation. If we take axiology in the broad sense, we may even risk saying that the majority of the LWS representatives contributed to it. Moreover, their contribution was certainly diverse and significant.

Let us introduce one more distinction. If we want to reconstruct the axiology of a certain group, we may look at what this group says or writes about values or at what values are realized by the members of this group. Let us reserve the terms "explicit" and "implicit" axiology, respectively, for these situations. The aim of these introductory remarks is to present some basic terminological and theoretical distinctions sketched by the members of the LWS.

2. TWARDOWSKI'S EXPLICIT AXIOLOGY

The LWS was founded in Lvov by Twardowski who was the main educator in the School and influenced, directly or indirectly, all its members, also within the field of axiology.

Twardowski considered philosophy to be a science that has to, first of all, fulfill methodological criteria of clarity and justification. Philosophy, according to Twardowski, is a group of disciplines such as psychology (which was not separated from philosophy at that time), logic, metaphysics or ontology, epistemology, ethics, aesthetics, and history of philosophy.

From his teacher Franz Brentano, Twardowski inherited psychologism, which he gradually abandoned but remained convinced that descriptive-psychological investigations may serve as an empirical basis for philosophical investigations. From the very beginning, he included also broadly understood logic into the philosophical organon. It is not surprising that both Warsaw School of Logic and Lvov School of Psychology took their origin in Twardowski's environment. Also, Twardowski's investigations into epistemology (first and foremost, his inquiries into the concept of truth and his defense of absolutism), as well as metaphysics (first of all his analyses of object, actions, and soul), became a significant inspiration for his students.

Twardowski's program for philosophy, including the emphasis on clarity and justification, the use of logic, the empirical ground of research, and respect for tradition, was summed up by Kazimierz Ajdukiewicz with the term "antiirrationalism." The cognitive values included in this program became a common ground for all members of the School.

In the sphere of ethics, Twardowski's influence was equally remarkable. According to him, ethics, just as epistemology or metaphysics, can be practiced scientifically. He proposed so-called independent ethics, not grounded on any religious or world-view assumptions, but instead based on empirical sources, and built from the bottom up. In Brentano's descriptive psychology, there are three basic classes of experiences: presentations, judgments, and acts of love and hate. Twardowski replaced the latter class with two separate classes of feelings and acts of will, and he considered the last group of acts as an empirical basis for scientific ethics.

Twardowski's ethical investigations can be classified mostly as metaethical. Just as in epistemology, he defended ethical absolutism by refuting axiological relativism and skepticism altogether. He explained differences in moral evaluations by the fallibility of our ethical cognition. Twardowski analyzed the sources of ethical norms, the concept of free will, and responsibility for

actions. In addition, he argued for the thesis that the real object of ethical evaluation is human character. A practical consequence of this claim was that a great role of educators is to shape the characters of the youth.

Twardowski was also interested in aesthetics, mostly in the aesthetics of music. He attempted to address the question of whether it is possible to indicate the criterion of "sonic" beauty, and whether music can fulfill an evocative function, namely bring about some feelings or emotions in the listeners.

3. TWARDOWSKI'S IMPLICIT AXIOLOGY

Certainly, the greatest and most noticeable influence was exerted by Twardowski on his students — and through them on the entire Polish culture — in the field of broadly understood axiology, that is the field of cognitive and praxiological values. This was so because, among others, his views concerning these values were manifested not only in his theoretical reflection but also in his teaching practice and public activity.

In Twardowski's teaching program, the emphasis was put on teaching skills that enable students to think independently and creatively. These cognitive skills are necessary for the cognitive values of the output of scientific work but they are also necessary for any educated human being. Independent and creative thinking are two important components of logical culture; for this reason, Twardowski was a great promoter of developing logical culture in society.

Twardowski was also aware that in order for his students to become outstanding scholars, they have to combine logical skills with some other values, like good work and moral virtues. He ended his course of logic, delivered at the University of Lvov in the year 1895/1896, with the following remark:

Logic has led us to know the truth. Whoever makes use of logic, has to, first of all, desire the truth. . . . In order to get to the truth, one has to love the truth, not to love oneself; for logic to lead us to the truth, it must be applied to what it is really meant to serve: to discover the truth, and not to please oneself. . . . In order to be a good thinker, one has to be a good, just man. (Twardowski 1895/1896)

Twardowski not only provided his students with some sort of knowledge and skills. By introducing hard discipline and rigor of thought among his students but being always just in his estimation of the value of their work, Twardowski shaped his students' characters.

He also served his students as a personal model, a person who took his duties seriously and fulfilled them with determination.

At the end of his life he wrote:

If we want to be real philosophers, we cannot limit ourselves to theoretical investigations and to words but should love wisdom in the ancient sense, in which it covers not only intellectual values but also some moral virtues, and makes a philosopher a man not only of truth but also of justice. (Twardowski 1929: 12-13)

4. THE LWS AND CONTINUATIONS OF TWARDOWSKI'S AXIOLOGICAL IDEAS

During his thirty-five-year career in Lvov, Twardowski found many talented students who developed his ideas in various directions. He promoted nearly 50 doctors of philosophy and his lectures were so popular that, in some academic years, they were attended by over 2000 students. Twardowski's seminar was a real forge of talents. He proposed to his students some issues for analysis, supported them, and provided them with a certain methodological toolkit, but he did not force any particular set of views on them. In any case, in the first decades of the 20th century, the LWS flourished and became the leading school in philosophy in Poland before the outbreak of World War II. Trained in independent thinking and constructive discussions, members of the LWS either followed Twardowski's paths, or modified them significantly, and quite often proposed conceptions opposite to those of Twardowski.

That is why the LWS was diversified despite some general common ground. Jan Łukasiewicz and Stanisław Leśniewski introduced mathematical logic into the School. The psychological branch developed accordingly thanks, first of all, to Władysław Witwicki, Stefan Błachowski, and Stefan Baley. Also in philosophical investigations, narrowly understood, either more formal or informal methods were applied. Many members of the LWS came to specialize in logic and philosophy of science — others explored different fields or were as comprehensive as Twardowski himself.

Twardowski's students who got chairs of philosophy, logic, or psychology in various Polish universities continued to some degree Twardowski's didactic missions. At least some of them, like Kotarbiński, Ajdukiewicz, Dąmbska, became devoted and beloved teachers.

Usually, students of Twardowski and students of his students are counted in the School. However, some other criteria for belonging to the School are also taken into consideration, such as the fulfillment of methodological postulates or self-identification. In the characteristics of axiology in the School sketched below and in the whole volume, we take broad criteria of being a school member. We include into the LWS, in particular, Władysław Tatarkiewicz and Józef M. Bocheński, who were not students of Twardowski but fulfilled sub-

stantial criteria of being representatives of the LWS and identified themselves with its tradition.

Below, we sketch very generally the main directions of axiological investigations in the LWS.

5. THOUGHT AND ACTION: PRAXEOLOGY

Values appear in our life together with actions. Let us repeat that already Twardowski was interested in the theoretical approach to values that stressed the connections between the theory of action, the relations between thought and action, and the tensions between theory and practice. The most general discipline which examines these connections was later called by Kotarbiński "praxeology."

In Kotarbiński's thought, praxeological investigations were developed into a whole discipline. Praxeology, designed by him, is the science of effective actions, which provides analyses of concepts connected with human actions, and formulates criteria for the evaluation of actions. The aim of praxeology is also to bridge the gap between theoretical knowledge and effective applications of this knowledge (namely, praxiological directives).

As this discipline developed, it turned out that various areas of axiology may be treated as specifications of praxeology in general. It should come as no surprise that later in Warsaw Kotarbiński inspired his students and other scholars to develop the project of praxiological investigations, also within specialized fields. One can even go a step further and claim that he founded a school of praxeology in Warsaw. In 1962, the first issue of the journal *Prakseologia* [Praxeology] came out which collected studies in this field, and the journal is being published even today. Curiously enough, nowadays praxeology exceeds the limits of philosophy, and is mainly developed in management theory.

6. COGNITIVE VALUES IN SCIENCE: METHODOLOGY

According to the members of the LWS, including Twardowski himself, philosophy can be regarded as a group of sciences which, however, plays an important role with respect to other sciences. Thus, a natural area of actions analyzed by philosophers from the point of view of its efficiency is the area of science-creating actions. Methodology is the theory of these actions.

Methodology of science became one of the subjects of interest at the LWS, and it would be difficult to overestimate the output of the LWS members in this domain. Let us recall once more that among the criteria of "good work" in philosophy, the fulfillment of the postulates of clarity and justification were listed. The postulate of clarity is aimed against vagueness and obscurities in the sciences. The main weapon in the fight against vagueness is language analysis, since language is a tool for thinking and cognition. The members of the LWS did not only propagate and realize these postulates but they also analyzed many analytic tools to make the philosophical language a better tool of communication. The second postulate of "good work," namely the postulate of justification, was also not only exercised but also theoretically elaborated by the LWS members. They devoted a great deal of attention to reflection on the methods of justifying claims, both indirect (concepts of reasoning) and direct (extrospection, intuition), in the natural sciences as well as the humanities and, par excellence, the philosophical sciences. These issues were explored not only by Twardowski, but also by Ajdukiewicz, Bocheński, Czeżowski, and Kotarbiński.

7. LOGIC AS THE MORALS OF THOUGHT

Logic in the LWS was understood broadly and included formal (mathematical) logic as well as logical semiotics and methodology. It was a common view among the members of the School that a knowledge of logic is necessary both in the sciences and in everyday life. Broadly understood logic enables one to think clearly and provide appropriate justification to one's judgements: it frees one from prejudices and makes one "resistant to intoxication" (to use Ossowska's term).

It has to be added that the role of mathematical logic in general education was the object of controversy in the school. Łukasiewicz, the first "logistician" (the term used at the beginning of the 20th century by Twardowski's students to indicate mathematical logicians) in the LWS, was convinced that mathematical logic may serve everyone as "the measure of precision." Others, like Ajdukiewicz or Kotarbiński, recommended using informal logical tools outside logical or mathematical research. For everyone, logic was connected to a kind of moral commitment to rigorous thinking. From this point of view, one is responsible for clarity of her or his thoughts and for precise linguistic formulation of one's thoughts. By contrast, someone who speaks unclearly

probably speaks unclearly as well; this, however, means, that one is "morally" responsible for imprecise and unclear ideas.

8. ETHICS AND METAETHICS

Many members of the LWS contributed to the realization of Twardowski's program of independent ethics.

From a metaethical point of view, a dominant position in the LWS was intuitionism of a certain kind. In this approach, ethical intuitions are basic experiences with which we react to valuable objects. These experiences are emotions that lead one to evaluate some actions as morally good or bad. Values, in this approach, are objectively present in objects, and not just products in one's mind. Unlike in emotivism, which was characteristic of other early analytic philosophers, for the LWS, emotions are only reactions to values. This kind of cognition of values is fallible just as sensual cognition but may serve as a point of departure for science.

Elements of this kind of intuitionism are present in the work of Ajdukiewicz, Czeżowski, and to some degree, in the writings of Twardowski and Kotarbiński; it was best developed by Marian Przełęcki, a representative of the third generation of the LWS. Tatarkiewicz was also an intuitionist but his approach was based on another assumption — namely, that good is a simple quality which, however, usually appears together with other qualities which make it difficult to see it clearly.

If we juxtapose the content of ethical conceptions of the LWS members, we see that most "ethicists" in the LWS comprehended ethics as based on protectiveness understood as a positive moral virtue. On this approach, our moral duty is to remove the suffering of others, mostly those who are closest to us. In content, this ethics is to some extent comparable to Christian ethics but, of course, it does not rely on external justification appealining to the divine. In the LWS, the most mature form of the system of normative ethics was proposed by Kotarbiński in his ethics of trustworthy protector.

A separate program of independent ethics was proposed by Ossowska, who was arguably the most significant ethicist of the LWS. Ossowska considered ethics as a group of sciences exploring moral phenomena and involving metaethical investigations as well as psychology, sociology, history, etc. of morals.

9. AESTHETICS

In general terms, aesthetics is a philosophical discipline that explores such topics as art, beauty, taste, and aesthetic judgments. Given this general account, it is hard to hold that the LWS members developed a unified concept of aesthetics. Instead, one can define diverse approaches explored by Twardowski, his students or followers. Undoubtedly, however, aesthetics, and thus the question of aesthetic values, was taken up by the LWS members. As already mentioned, the beginnings of aesthetic thought in the LWS can be found in Twardowski's writings devoted mainly to the topic of music. In this regard, Twardowski asked how one should understand beauty which is created by musicians or he examined an evocative function of music which evokes emotions in listeners. This shows that Twardowski adopted a clear psychological-descriptive framework in his analysis of music aesthetics. Arguably, this framework arose within the Brentanian heritage, but more importantly, influenced later aesthetic investigations undertaken by Twardowski's students.

A clear psychological context of aesthetics can be found in Witwicki's writings. Witwicki defended a doctoral dissertation on ambition written under Twardowski's supervision. From the very beginning, he widely used psychological-descriptive tools in analyzing different phenomena. In personal life, he was fascinated by art, and was actively involved in creating art — e.g., drawings, paintings, and sculptures. Within his philosophical psychology, he defined methodological tools that enabled him to analyze artworks understood as cultural artefacts or the products of related human actions. This method consists in describing the artist's experiences and dispositions which are the basis for created products. As such, Witwicki's method is rooted in Twardowski's distinction between actions and products. It can be added that Witwicki drew a parallel between art and science; in this regard, he held that creating art is comparable to the creation of scientific knowledge. Just as scientists create theories understood as organized wholes, artists create harmonious artifacts; whereas the former strive for truth, the latter aim at beauty.

A psychological framework was adopted also by other students of Twardowski, including Baley, Blaustein, and Wallis. Baley also used descriptive-psychological tools to analyze creativity. Curiously enough, just as Twardowski, Baley was focused on the phenomenon of music. In turn, Blaustein examined different experiences connected with the perception of art, including paintings, sculpture, and theater. He presented interesting theories of experiences of radio listeners and cinema goers. In general, he adopted a Brentanian-Twardowskian thesis that consciousness is intentional,

yet according to him, intentional experiences have different structures within experiences of different types of artworks. For Wallis, aesthetic experience was connected to everyday life as it enables one to take a rest from everyday duties. For him, then, aesthetics is not a mere theoretical discipline, but is strictly connected with human life.

Stanisław Ossowski and Tatarkiewicz adopted a different approach than that rooted in Twardowski's philosophical psychology. Ossowski formulated the most comprehensive and systematic account of aesthetics among the LWS members. For him, aesthetics is one of the disciplines of philosophy which explores the concept of aesthetic value. However, values are inaccessible directly, and for this reason, aesthetics has to start with a description of a variety of aesthetically valuable objects. Importantly, Ossowski accepts Twardowski's thesis that artworks have evocative functions, and precisely for this reason, one should determine different types of reactions of audience members to various classes of artworks. Thus, a viewer or a listener experiences values due to aesthetic experiences which are explored by an aesthetician. Aesthetics, thus defined, is not a purely theoretical discipline. Instead, one shall refer to a sociological framework of art in order to describe criteria of beauty. In brief, art is for Ossowski determined by society. In turn, Tatarkiewicz adopted a more historical approach toward aesthetics. He examined different historical conceptions of beauty, and as a result of his long-life studies, he published a three-volume contribution to the history of aesthetics in antiquity, the Middle Ages, and in modern times. Tatarkiewicz was also interested in specific issues in aesthetics — for instance he studied architecture, sculpture, and poetics.

11. VALUES IN LIFE

Let us risk a hypothesis that one of the reasons for the development of axiological investigations in the LWS was historical circumstances. First, the lack of Poland's independence, then the need to rebuild the state, two world wars, and political terror after World War II — all of those raised axiological questions and provoked axiological investigation.

As a result, some axiological works of the LWS members were written just because of those circumstances or events. Twardowski's "On Patriotism" (1919/2013) was a speech to soldiers in 1919. Ajdukiewicz's "On Justice" (1939) was dedicated to Twardowski after his death, but it also referred to the political situation. Tatarkiewicz's monumental monograph *On Happiness* was prepared during World War II. Czeżowski wrote his "On Deontology of Academics" and

Ajdukiewicz his works on freedom in science (1946, 1957) in response to the post-war ideological pressure at universities. Ossowska's "The Model of a Citizen in a Democratic System" (1946) was also prepared still during the war. Dambska analyzed silence as a means of expression and as a value in 1963 – that is, in a time when political censorship restricted freedom of public expression, while in 1981 she wrote "When I Think of the Word 'Freedom'," when the jaws of censorship began to relax. In 1939, Jan Salamucha worked on "The Problem of Force in Social Life" (1939), and his paper "Evil and Suffering" was prepared after he was imprisoned in the Sachsenhausen concentration camp. Twardowski presented his views on academic ethos in his famous speech "On the Dignity of the University" (1933), a copy of which was buried with him according to his will.

Let us add that many members of the LWS proved their social courage in these hardest times. During World War I, Twardowski and Czeżowski committed themselves to help the students of the University of Lvov to survive. Ajdukiewicz and Kreutz were soldiers during this war. In 1920, they were joined by almost all School members who decided to fight in the Polish-Bolshevik war.

The attack of the Nazis from the West and the Soviets from the East in 1939 did not weaken the spirit of the LWS's members. Although all Polish institutions were closed during World War II by the occupiers, secret teaching was organized. Some of Twardowski's students joined various military or social organizations. Dambska was a member of the Home Army, the biggest underground military organization in Europe. Salamucha and Sobociński belonged to the National Armed Forces. Czeżowski and the Ossowskis actively helped Poles of Jewish origin to survive the Holocaust (Czeżowski was awarded the "Righteous among the Nations" medal for that).

After the war, the School and its members became the object of ideological-political attacks, and some of them were temporarily deprived of academic positions. Thanks to their resistance, the spirit of anti-irrationalism was never completely destroyed and could resurrect in better political circumstances.

All of these examples prove that the world of values was not only the object of research for them but that they incorporated these values into the imperfect world they lived in.

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Still, this "axiological" trait of the LWS is not sufficiently discussed or analyzed. We find it especially important to present some aspects of axiology in the LWS. The present volume includes seven original axiological studies. In his paper "Kotarbiński on Intellectual Values and Intellectual Ethics," Pascal Engel explores Kotarbiński's idea of good or efficient work (in Polish: dobra robota) in the context of an intellectual ethics. This part of ethics asks about our duties, values, and norms in the epistemic domain. Engel discusses different approaches to the relationship between epistemology and ethics - i.e., inclusivist, exclusivist, and overlapping views. Engel argues that Kotarbiński formulated an original concept of intellectual ethics, which seems to have some connections with virtue epistemology. By claiming this, Engel holds that Kotarbiński's praxeology, understood as a theory of action, can be regarded as a form of ethics, and as a result, Engel classifies this ethics as an exclusivist one — or, more precisely, as a functional one. Kotarbiński held that there are practical values associated with good work — namely, the values of efficiency in action. In addition, according to Engel, Kotarbiński develops the idea of the reliable guardian - i.e., of an individual who has understood the ethical values and who is ready to transfer his understanding to others. These elements of Kotarbiński's work show, following Engel, that the author of *Praxeology* developed the basics of intellectual ethics.

Ryszard Kleszcz in his "Anti-irrationalism, Its Value and Philosophical Implications" analyzes the concept of anti-irrationalism rooted in Twardowski's writings, and developed later by Ajdukiewicz, and Dambska. The term "antiirrationalism" was coined by Ajdukiewicz, who claimed that the LWS is characterized by a clear emphasis on scientific cognition. In his contribution, Kleszcz holds that, for Twardowski, irrationalism was associated with irrational beliefs — i.e., beliefs that cannot be classified as scientifically justified. However, there are some beliefs — such as beliefs related to worldview which are not regarded as irrational although they are not scientifically justified. Twardowski finally separated the sphere of the worldview and the sphere of science (and scientific philosophy). A more nuanced view on irrationalism can be found in Dambska's writings. According to Kleszcz, Dambska held that anti-irrationalism should be understood first and foremost as the opposite of irrationalism, and as such, it should recognize that irrationalism has no right to exist in science. Against this background, Kleszcz holds that the program of anti-irrationalism is still valuable as it combats vagueness and the practice of promoting views without providing any justification for them.

Also Tadeusz Szubka in "Leading Metaphilosophical Values of the Lvov-Warsaw School" explores the concept of scientific philosophy as understood by the LWS members, including Twardowski, Ajdukiewicz, Zygmunt Zawirski, and Dąmbska. According to Szubka, this type of philosophy is regarded as a rigorous academic discipline, and as such, it cannot be comprehended as a speculative metaphysical system rooted in one's world-view. Moreover, scientific philosophy should be pursued in a critical and collaborative spirit. For Ajdukiewicz (from Szubka's point of view), scientific philosophy is not a unified movement, but rather a certain way of doing philosophy that adopts ideas and methods from the field of exact science. Ajdukiewicz's concept was later developed by other members of the LWS. In his study, Szubka focuses in this regard on Zawirski and his account of scientific philosophy, especially understood as a form of philosophy adopted by the LSW's members.

In "On Certain Values of the Lvov-Warsaw School and Logical Culture: Towards Challenges of Contemporaneousness," Urszula Wybraniec-Skardowska begins with a general idea that the LWS was possible thanks to the values formed in it. Wybraniec-Skardowska identifies diverse values, including creative and critical thinking or high logical culture, which determined the basics of the LWS. In her study, Wybraniec-Skardowska analyzes selected values as discussed and understood by the LWS members. In this regard, she discusses Lukasiewicz's view of creative thinking in the field of science, and asks about the relevance of Lukasiewicz's conception for today's scientists. In addition, the study concerns Czeżowski's examination of logical culture in the context of society. These reflections lead Wybraniec-Skardowska to ask what can be done to improve logical culture in society. While addressing this question, she refers to the LWS members, including Twardowski, Ajdukiewicz, Czeżowski, and Kotarbiński.

In his study "Polish Logicians in the Years 1918-1948 on Social Functions of Logic," Jan Woleński discusses the LWS in the broader context of Polish culture and other trends in philosophy in Poland. This study explores Twardowski's contribution to logical research conducted in Poland at the beginning of the twentieth century. Woleński also explores how the LSW reshaped the scope and level of the teaching of logic in Poland. In this regard, he argues that, unlike in Germany or England, research in logic was performed in close cooperation by mathematicians and philosophers. This was evidenced by the logical programs for high-schools in which logic was taught — e.g., by Ajdukiewicz or Łukasiewicz — in mathematical studies. Woleński also discusses the idea of contrasting politics with logic, especially in the context of World War II and the post-war period. Especially the confrontation of logic promoted by the LWS members with Marxism is explored.

In her "The Value of Reality to Logic and the Value of Logic to Reality: A Comparison of Łukasiewicz's and Leśniewski's Views," Zuzana Rybaříková juxtaposes the conceptions of two prominent logicians of the LWS, Leśniewski and Łukasiewicz. Rybaříková focuses on the two philosophers, and explores the relation between logic and reality in their writings. She argues that Leśniewski accepted the postulate that logic should serve reality by providing strict rules to it. In addition, he was opposed to Hilbert's idea that logic is just a mere formal game of symbols. As a result, according to Rybaříková, Leśniewski understood his systems of logic as expressing general laws of reality. Rybaříková argues next that also for Łukasiewicz logic and reality were closely connected, even though not so much as in Leśniewski's theories. And so, Łukasiewicz referred to reality in his analysis of many-valued logic. However, he was aware that any excessive connection between logic and reality can have a negative impact on logic. In his later works, however, Łukasiewicz radicalized his position by claiming that logic cannot build a certain firm structure of reality.

Marcin Będkowski in "On Good Mental Work: Techniques of Mental Work as a Subject of Pragmatic Logic in the Lvov-Warsaw School" explores the concept of good mental work. The author presents good work as a value, and argues that it determined the basics of the LWS. To show this, Będkowski puts emphasis on the existential, instead of methodological nature of good work. He refers to Twardowski, Kotarbiński, Ajdukiewicz, and Czeżowski to show that the postulates of good work were adopted in mental work — e.g., in the field of pragmatic logic. Będkowski claims that these ideas are rooted in the stoic thought. Against this background, Będkowski juxtaposes the LWS conceptions of good work with contemporary approaches to mental work: with Calvin Newport's idea of deep work, Niklas Luhmann's idea of *Zettel-kasten*, or Robert Boice's concept of productive writing.

This volume ends with the "Archives" section, which collects three translations (from Polish) of classical texts that show the contribution of the LWS members to axiology. Ajdukiewicz's "On Justice" was originally written in 1939 on the occasion of the first anniversary of Twardowski's death, and presented at a symposium devoted to him. Ossowska's "The Model of Citizen in a Democratic System" was written during World War II and published in 1946, whereas her "On the Concept of Dignity" was published in 1966.

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