Journal for the History of Analytical Philosophy

Volume 10, Number 5

Editor in Chief

Audrey Yap, University of Victoria

Editorial Board

Annalisa Coliva, UC Irvine
Vera Flocke, Indiana University, Bloomington
Henry Jackman, York University
Kevin C. Klement, University of Massachusetts
Consuelo Preti, The College of New Jersey
Marcus Rossberg, University of Connecticut
Anthony Skelton, Western University
Mark Textor, King's College London

Editor for Special Issues

Frederique Janssen-Lauret, University of Manchester

Review Editors

Sean Morris, Metropolitan State University of Denver Sanford Shieh, Wesleyan University

Design and Layout

Daniel Harris, Hunter College Kevin C. Klement, University of Massachusetts

ISSN: 2159-0303

jhaponline.org

© 2022 Adam Trybus and Bernard Linsky

Two Poles Worlds Apart: Chwistek, Ingarden and the Split Between Phenomenology and Analytic Philosophy

Adam Trybus and Bernard Linsky

This article describes the background to Roman Ingarden's 1922 review of Leon Chwistek's book Wielość rzeczywistości (The Plurality of Realities), and the back-and-forth that followed. Despite the differences, the two shared some interesting similarities. Both authors had important ties to the intellectual happenings outside Poland and were not considerd mainstream at home. In the end, however, it is these connections that allowed them to gain recognition. Ingarden, who had been a student of Husserl, became the leading phenomenologist in the postwar Poland. For Chwistek, a painter, philosopher, and logician interested in Russell's work, such connections meant that he won the competition for a professorship at the university in Lwów over Alfred Tarski. Until recently, Chwistek's place in Polish logic remains unclear and Ingarden's interactions with Polish logic and the Vienna Circle have not been investigated extensively. A deeper look at this intellectual fracas between Ingarden and Chwistek helps one in the study of the complicated mesh of alliances within the Lwów-Warsaw School. The article also identifies the origins of the split between phenomenology and the analytic philosophical tradition in Poland.

Two Poles Worlds Apart: Chwistek, Ingarden and the Split Between Phenomenology and Analytic Philosophy

Adam Trybus and Bernard Linsky

1. Introduction

Leon Chwistek is an obscure and puzzling figure in the history of Polish logic and analytic philosophy. This avant-garde artist and an all-round intellectual did not put all his eggs into one basket. He dabbled in experimental psychology, art theory and mathematics. While he was not claimed by the dominant school of logical thought in Poland of that era, Chwistek was nevertheless close to some of the members of the Lvov-Warsaw School¹ and was referred to as a "Polish logician" by some representatives of the Vienna Circle.² He is perhaps best-known among English-

speaking historians of logic for the mention of his paper "The Theory of Constructive Types" in the Introduction to the (1925) second edition of *Principia Mathematica* (*PM*) and, notoriously, for his competition with Alfred Tarski over an appointment as professor at the Polish university in Lwów. Chwistek's success was in part due to a brief letter of reference from Russell that is seen by some as a scandalous error of judgment on Russell's part.³ Aside from that, Chwistek's only influence on philosophical work in English is the posthumously published *The Limits of Science* (Chwistek 1948).⁴ He died in 1944 having sought refuge in the Soviet Union from the German invasion of Lwów in 1941. Figure 1 summarises Chwistek's intellectual path (not all the events or publications are mentioned by us in the article).

Out of the two, Roman Ingarden is perhaps better known to English-speaking analytic philosophers as Poland's most prominent phenomenologist. Ingarden was a student of Edmund Husserl but parted ways with his teacher in the 1920s over the "idealistic turn" in phenomenology, and so was not a member of the mainstream German tradition of Husserl and Heidegger. Ingarden's 1931 book *Das Literarische Kunstwerk* has become well known among analytic philosophers in English as *The Literary Work of Art*, for his notion abstract objects are created has entered the mainstream of analytic metaphysics. Ingarden remained in Lwów as a professor of German literature until the end of World War II. After the war, Ingarden resumed his teaching first at the Nicolaus Copernicus University in Toruń and then at the Jagiel-

¹Woleński mentions Chwistek's involvement in relation to the concepts developed by the members of the school, most notably the Łukasiewicz (or Polish) notation (Woleński 1989, 93) and the theory of semantic categories by Leśniewski (Woleński 1989, 140).

²A lot of what we describe is connected to the city of L'viv in Ukraine. This is a place of rich and complex history: it was "Lemberg" as capital of Galicia in the Austro-Hungarian empire, then "Lwów" as part of Poland between the wars. In the Soviet Union the city was called "Lvov" and since Ukrainian independence it is officially known as "L'viv". We use "Lwów" to refer the the period of Ingarden and Chwistek's involvement with the university there, as do the sources that we quote. The English name of the school of logic that originated there in the interwar period is established to be "The Lvov-Warsaw School", which is perhaps unfortunate as it reflects neither the Polish, nor the Ukrainian names, and instead uses a version alien to both cultures, creating a false illusion of deeper Russian ties with the city and what happened there. As we write our article, the people of L'viv are undergoing bombardment while offering heroic assistance to a stream of refugees from the eastern regions of Ukraine. In recent years academics in L'viv have been reviving the spirit of

international cooperation embodied by the school of Kazimierz Twardowski and in which also Roman Ingarden and Leon Chwistek flourished. We urge fellow philosophers to support the brave people of Ukraine as they struggle to maintain their freedom and bring peace to their nation.

³The letter is quoted in several sources, including Feferman and Feferman (2004, 67). Another account of the letter and of Chwistek's work on Russell's logic can be found in Linsky (2011, 54).

⁴For the argument against the Axiom of Reducibility see Copi (1951) and Church (1976).

⁵See, for example, Thomasson (1999).

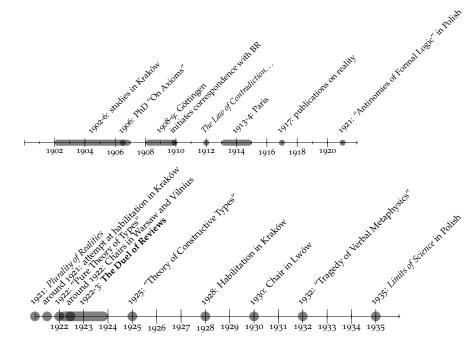


Figure 1: A chronology of Chwistek's career.

lonian University in Kraków and became the leading exponent of Phenomenology in Poland.

The two dramatis personae, Chwistek and Ingarden, crosssed paths in relation to a book authored by Chwistek, which he considered particularly dear to his heart, entitled *Wielość rzeczywistości* (*The Plurality of Realities*) that appeared in Polish in 1921. It remained virtually unknown to the Anglophone readership until 2018 when it has been translated into English by Karol Chrobak.⁶ Ingarden wrote a scathing review of that book and

this unlocked a series of events, which are the focal point of this article.

The ensuing dispute over the reviews has a legendary status for Polish academics and even wider cultural circles, while being simply unknown to English-speaking philosophers. Three recent Polish studies and a reprint of the original exchange have revived interest in Poland. We refer to them in what follows, as an indication of the reverberations of the exchange in Poland to this day. Note that the suprisingly polemical style of the reviews was in fact rather typical of the cultural scene. Indeed, contemporary scholars of the history of Polish logic and philosophy assert that Ingarden's review was held as a model for new scholars in Kazimierz Twardowski's emerging school of philosophy.

Our interest below is to sort through the polemics to find early signs of the split between the "continental philosophy" then represented by Henri Bergson and Edmund Husserl, and the new analytic philosophy, then represented by Bertrand Russell. Moritz Schlick had just assumed his chair at the University of Vienna in 1922, and so even the meetings of the "first Vienna Circle" of Frank, Hahn and Schlick did not start until the year of this dispute, 1923. The year 1922 also marks the publication of the English translation of Wittgenstein's Tractatus Logico-Philosophicus which was to become of such interest in both British analytic philosophy and in the Vienna Circle. It will not come as a suprise, then, that Chwistek represents what he takes to be the views of Bertrand Russell in this dispute. Issues important to the debate can be resolved through attention to familiar ideas from Bertrand Russell's theory of types and *The Problems of Philosophy*, as well as the less familiar notions about definitions and axioms of the Polish logician Stanisław Leśniewski, together with

⁶See Chwistek (2018, 163–238). The original is reprinted in the widely available collected logical and Philosophical works of Chwistek (1961), and figures in the authoritative biography by Karol Estreicher (1971). Quotations from the original are taken from the English translation (Chwistek 2018) with any divergences indicated with citations of the original Polish.

⁷That the dispute was well known at the time can be seen in a reference to Chwistek's four levels of reality in Witkewicz's (1992, 182) absurdist play, *Janulka, Daughter of Fizdejko*, written in 1923, but not well known outside of Poland.

⁸Namely, Mróz (2015), Chrobak (2003), and Kuliniak (2020).

Chwistek's own experience as a theoretician of the "Formist" movement. Ingarden's objections, while in many ways ignorant of the complexities of Chwistek's admitedly idiosyncratic views on these issues, also present the views of phenomenology in objection to the newly emerging analytic philosophy. Our article tells the story, focusing on Chwistek. Thus, the fracas with Roman Ingarden — an important figure in the history of Polish philosophy—is nevertheless viewed as an episode in Chwistek's tumultous career and, consequently, the article mentions facts about Ingarden only inasmuch as they aid in describing Chwistek's predicaments.

2. The Background to the Debate

Leon Chwistek was born in Kraków in 1884 and studied mathematics and philosophy at the Jagiellonian University from 1902. Receiving a doctorate in Kraków with a thesis "On Axioms" in 1906, Chwistek struggled to find a permanent placement in academia. In 1908–9 Chwistek spent a year in Göttingen where he heard Henri Poincaré lecture on "constructivist" notions in logic. He had even lived in Paris from 1913–14 encountering the greats of that era, including Picasso (Estreicher 1971, 76, 91). At some point, he proposed *Wielość rzeczywistości* for his *Habilitationschrift* and is reported to have said that he sent the manuscript to his former teacher Władysław Heinrich. Heinrich, he says, did not like it at all, and soon after discussing the topic they stopped talking to each other. At this point it is worth noting that Chwistek also engaged in a correspondence with

Russell, beginning with letters in 1909 when he was studying at Göttingen, attending courses with Husserl and studying logic, his primary interest, in Hilbert's department of mathematics. More importantly for our story, a letter from Chwistek to Russell, dated 21 September, 1923, indicates that Chwistek had sent a copy of *Wielość rzeczywistości* to him, likely to solicit support in the campaign to have it accepted for his habilitation at Kraków:

... I have published some other papers... and I shall send them to you with the 1st part of my "Theory of Constructive Types". In the same time I would send to you my philosophical book published in 1921, i.e. "Wielość rzeczywistości" (The plurality of realities), where I try to show that there are at least 3 self-consistent and practically equivalent systems of reality (psychologism, physical realism, natural realism). In two last chapters I take up some applications of this theory to ethics and to the theory of painting. I would be very glad, if you could have a good translation of this book, because I am sure that the subject would be interesting to you, my theory being, as a matter of fact, an application of the Theory of Types to philosophical problems (Jadacki 1986, 254).¹¹

Subsequent letters by Russell to Chwistek (10 October 1923) and a response from Chwistek (29 October 1923) indicate that Russell intended to find someone to translate the book from Polish. However, in the end Russell was unable to get *Wielość rzeczywistości* translated.¹²

Lutosławski had already published some works in English. It is not known how he replied to Chwistek but the book was obviously never published by this route.

⁹Estreicher (1971, 200) says that until 1909 Chwistek did not know where to specialize. His thesis was not valued enough at the university for them to encourage Chwistek to think about habilitation.

¹⁰The next step in the newly constituted Polish system would be to publish a "habilitation" thesis to be judged by a commission of professors that would enable the successful candidate to teach at a university, inititially as an unsalaried *docent/dozent*, but, aspiring to a position of Professor.

¹¹The entire correspondence is published in Jadacki (1986).

¹²Chwistek also thanks Russell for a copy of the English translation of Wittgenstein's *Tractatus* with Russell's Introduction. Mróz (2015, 8) quotes a letter written by Chwistek to Wincenty Lutosławski in 1923 revealing that Chwistek was looking for help in that respect in many places:

I take the liberty of sending two of my works to you, Professor. I would have the following request in that regard. I would really want my *Plurality of Realities* to be published in English. If you, after reading it, decide that it is of sufficient quality, I would be immensely grateful if you recommend the book to your publisher.

Chwistek also says that neither Stanisław Zaremba nor Jan Sleszyński (important professors in Kraków) were enthusiastic about this work. Consequently, despite all the efforts, Chwistek was unable to obtain habilitation. After this failure, Chwistek worked for a while as a school teacher in Kraków, in the meantime painting and publishing on philosophy and logic. In fact, to the educated public, Chwistek was mostly known as a painter of the "Formist" school of abstract art, and as a controversial figure with many *avant-garde* artists as friends and acquaintances.

Although not deemed habilitation-worthy material, *Wielość rzeczywistości*—a book dear to Chwistek's heart—was nevertheless published in 1921 and provoked a minor controversy in cultural circles, eventually becoming the subject of the review by another aspiring philosopher, Roman Ingarden.

Roman Ingarden was born in the same city but was eleven years Chwistek's junior. He first studied mathematics and then philosophy, not in Kraków, however, but in Austrian Lemberg under Kazimierz Twardowski (Łukasiewicz and Leśniewski were already among Twardowski's students). 13 Ingarden's intellectual path was to lead him in a slightly different direction though. He relocated again, and from 1912 to 1915 studied under Edmund Husserl in Göttingen, eventually following his mentor to Freiburg. Ingarden received his Doctoral degree for the dissertation "Intuition und Intellekt bei Henri Bergson" in 1918. He then returned to what had become Lwów, working as a teacher in secondary schools (in parallel with Chwistek's predicament) and worked on his habilitation document, which was eventually published as Essentiale Fragen (1925).14 Ingarden was appointed as a dozent in Lwów in 1925 and advanced to Professor in Philosophy in 1933.

It is plausible that Ingarden had become interested in Chwistek's book because of its opposition to phenomenology. He may

also had had some familiarity with Chwistek from his time in Göttingen and later on from Ingarden's frequent visits to Kraków. Whatever the backstory, Kazimierz Twardowski—who was critical of Chwistek's work—wanted Ingarden to review this publication, and this was what Ingarded duly did. This initial review, however, turned out to be only the first lunge in a duel of responses. The exchange was carried out mostly on the pages of *Przegląd Filozoficzny (Philosophical Review)*, a prominent journal of philosophy in Poland to this day. In parallel, Ingarden also wrote another, brief, review published in 1923 in the other leading philosophical journal in Poland *Ruch Filozoficzny (Philosophical Movement*, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected with Twardowski.) **In parallel** [Philosophical Movement, a periodical connected w

Chwistek responded to Ingarden's main review and, as Kuliniak (2020) claims, Ingarden was blind-sided by Chwistek's reply although to the reader predisposed to Chwistek's philosophy and so sensitive to Ingarden's insults, it seems perhaps only a bit over the top but returning tit for tat. Apparently Ingarden had considered not continuing the debate but changed his mind after an exchange of letters with Władysław Witwicki that are quoted by Kuliniak. Witwicki, a student of Twardowski, was a psychologist and philosopher known for his involvement in discussions of the principle of contradiction. In a letter to Ingarden from 23 April, 1922, one finds:

I am indeed very happy that you have dealt with Chwistek and what you wrote about him was truly long overdue... And here we have Chwistek... applying for a chair in Warsaw and finds an ardent supporter in Leśniewski. I personally consider [Chwistek's ideas] philosophical Bolshevism and agree completely that philosopical

¹³Chwistek's fiancée Olga Steinhaus, sister of the prominent Lwów mathematician Hugo Steinhaus, was a student of Twardowski as well.

¹⁴Gilbert Ryle reviewed *Essentiale Fragen* favorably in 1927, introducing phenomenology to Anglophone philosophy.

¹⁵See Estreicher (1971, 206–10).

¹⁶By this phrasing we refer to the fact that Chwistek was involved in a sabre duel in Paris in 1913 over an insult to his fiancée Olga Steinhaus. No one died, although the case was widely known and even reported, with a photograph, in French newspapers.

¹⁷That review is not mentioned in the exchange in *Przegląd Filozoficzny*. It had been submitted for publication in September of 1922, and so was still in press during the main exchange.

and algebraic cultures have nothing to do with each other (Ingarden to Witwicki, quoted by Kuliniak (2020, 98), our translation).

So we see that at this point Chwistek was already looking for a position in Warsaw. Witwicki's account also suggests that Chwistek had strong supporters within the Lvov-Warsaw School.¹⁸ However, the following fragment of a letter from Witwicki to Ingarden reveals varying attitudes towards Chwistek among those close to Twardowski:

[Chwistek] applied for habitiation in algebraic logic and Leśniewski supports him a lot. He says that he cannot blame the man for his philosophising, since even Kotarbiński wrote some balderdash and still etc. (sic!) For Leśniewski, all philosophy is Chwistekology anyway, and philosophising in one's free time he considers acceptable. It can be forgiven anyone who also writes about such highly sophisticated things as mathematical logic without the reducibility principle and Vol. I of Russell without one thing or the other (sic!). I am looking forward to your review. As for me, I am against letting ambitious but unconscientious types to influence our youth, and Chwistek seems to be that kind of a person. Unfortunately, it is hard to publicly justify such an impression formed on the basis of personal contacts and conversations—in front of the members of the faculty that support such an individual. Łukasiewicz hesitates and I do not know what Kotarbiński thinks. (Witwicki to Ingarden, 3 May 1922, quoted by Kuliniak (2020, 99), Our translation).

Moreover, Kuliniak (2020) claims that not only Leśniewski, but also Łukasiewicz and even Kotarbiński supported Chwistek in this application for Habilitation.¹⁹ Whatever truly transpired,

Chwistek did not end up a professor in Warsaw.²⁰ Witwicki writes the following to Ingarden (on 17 May, 1922):

And so Chwistek is gone after a bitter discussion, the reason being his lack of personal qualifications for the post of a docent (sic!) in Warsaw...I am ready to tell everybody that Nuż w bżuhu²¹ is enough to disqualify anyone as a teacher in any school. His public activity seems to me not an art movement but an action against the European, and thus Polish, culture... Curiously, Łukasiewicz and Leśniewski seem to be indifferent to this... Łukasiewicz... thinks that Chwistek's artistic and philosophical activity are indeed revolutionary but that this should not scare anyone: often the works of genius look revolutionary, e.g. the three-valued logic or Einstein's theory...He says that we are from the older generation²² and have no understanding for young revolutionaries... Chwistek represents the highest philosophical culture of Russellism (sic!) and if he makes a fool of himself in his free time—that's nothing. This formist programme, however, brings the most concerns: "We want to piss in every colour". If not for the danger that the candidate had pissed from the lectern in red and green, I assure you that he would have passed muster... In my mind, it all started with the

Łukasiewicz's and Kotarbiński's. Kotarbiński wrote, "Let me mention finally the name of Dr. Leon Chwistek (now in his forties), a researcher from Kraków, whose work... according to some specialists in logistic, make him the best Polish expert on the system of Bertrand Russell, the master of modern formal logic" (Mróz 2015). The chair was eventually given to Tadeusz Czeżowski in 1923.

²⁰Perhaps Chwistek suspected that even Leśniewski had some reservations at some point. Estreicher finds the following note in Chwistek's papers:

Leśniewski has been repeating for some time now that my system is inconsistent since he found some inaccuracies in the directions concerning the use of definitions, which allowed him to construct a paradox (Estreicher 1971, 204).

²¹Nuż w bżuhu: literally "A knife in the belly" but using experimental orthography that some found offensive. This was a daily published by the artists identified with the futurist movement. Chwistek had published selections from his book there already. Witwicki's letters show that the attitudes in Warsaw were in many respects no different to those in Kraków.

¹⁸The account in Estreicher's biography also confirms e.g., the close relations between Chwistek and Leśniewski (Estreicher 1971, 204).

¹⁹Chwistek must have been considering options other than Kraków and Warsaw around that time. He is mentioned as a candidate for a chair in Wilno (now Vilnius, Lithuania, but then belonging to Poland). Mróz (2015) describes the correspondence with Lutosławski, head of the selection committee responsible for assessing the candidates. Opinions were solicited, including

²²Witwicki was only 6 years older than Chwistek.

alleged undermining of the principle of contradiction. Today, the Aristotelian logic is considered only one out of many systems, and it all seems to depend on tastes. No suprise that various Chwisteks can gallivant about. What happened to the boundaries and absolute coordinates? (Kuliniak 2020, 99–100)

Learning about the support for Chwistek in Warsaw, Ingarden realised that he needed to be more careful when dealing with him than he initially had thought. Reading about Chwistek's defeat in Warsaw, however, meant that he could now strike with full force not fearing potential defence of Chwistek's by his powerful supporters. Ingarden publishes his remarks to Chwistek's reply in *Przegląd Filozoficzny* in 1923. This was finally met by silence on Chwistek's side and thus ended the exchange, which was for some time the talk of the town. After a while, things calmed down and both focused on what was pressing for them at the time: obtaining habilitation.

With his options drastically reduced, Chwistek took another chance on habilitation in his *alma mater*. He still did not have many friends at the faculty in Kraków, in part owing to his associations with the avant-garde movement and "a playful artistic life", and so he had troubles even in his second attempt at obtaining the habilitation degree there.²³ It was not until 1928 (three years after Ingarden) that he finally habilitated, presenting "The Theory of Constructive Types" this time. Chwistek was one of the first to criticize *PM* for including principles that could not be derived from logical notions alone. He deals with this problem in a series of papers from the early 1920s—some of which no doubt formed the basis for his earlier habilitation attempts—culminating in "The Theory of Constructive Types". The problematic character of these principles, referred to as "axioms"—the *Axiom of Infinity*, the *Axiom of Reducibility*, and the *Axiom of Axiom of Reducibility*, and the *Axiom of Axiom of Infinity*, the *Axiom of Reducibility*, and the *Axiom of Infinity*, the *Axiom of Reducibility*, and the *Axiom of Infinity*.

Choice—were identified by critics early on, most prominently in Wittgenstein's Tractatus Logico-Philosophicus where it is claimed that they are not logical truths. This has come down to this day as justifying the claim that the logicist project of reducing mathematics to logic was a failure. This was not Chwistek's interpretation of these principles, however. Chwistek soon abandoned the charge that the Axiom of Reducibility leads to a contradiction, and in the "The Theory of Constructive Types" presents it as only one of several axioms that might be added to logic in his system.²⁴ This was also Chwistek's first article originally published in English. The habilitation committee could not simply dismiss this result but, at the same time, the oppossition against Chwistek did not wane. Thus, awarding the habilitation degree came with an important, if unorthodox, condition: Chwistek was not to apply for a permanent position at the university in Kraków (Estreicher 1971, 202). Embattled, Chwistek is reported by Estreicher as describing his efforts in the following way:

Studying history makes me more understanding of today's Poland. There is no defence against barbarism. It takes centuries to polish such instincts. Still, the current state of affairs is quite dreadful and therefore interesting. I feel like some Georges de La Tour or Boethius drowning in the waves of barbarism. Yet, the more difficult the fight, the greater the victory. All important intellectual outposts are full of barbarians, eager to take their anger out and with no real interest in science. There is only a handful of honest people, who are often powerless and inept. A man, who obtains his position owing to deceit, fights with all his might to stay there. That is why true creativity is being stifled (Estreicher 1971, 202).

Hence, at this point, for various reasons, all major academic centres were ruled out for Chwistek as potential job placements. Almost by elimination, Jan Kazimierz University in Lwów be-

²³As Karol Estreicher—his student, companion and biographer—puts it in the preface to Chwistek (1960, 10). Others thought that Chwistek was suspected of Communist sympathies and was anti-Catholic. See Estreicher (1971, 203).

²⁴Chwistek originally had said that the system is inconsistent in his "The Law of Contradiction", but drew back from this to the now standard charge that Reducibility runs contrary to the motivation for the ramified theory of types in the 1921 paper "Antinomies of Formal Logic".

came Chwistek's last chance. This is the part of his biography that is perhaps best known among historians of logic, although we here offer some more information about the affair. Chwistek won his position at Lwów in 1929 in a competition to which Alfred Tarski also applied. Chwistek was supported by Banach²⁵ and Steinhaus, whereas Tarski was supported by Twardowski. The resulting stalemate was broken by asking some of the leading logicians at the time for opinions about the candidates. David Hilbert did not want to get involved, and Alfred N. Whitehead did not respond at all (Estreicher 1971, 207). Out of the three, only Bertrand Russell replied, stating briefly:

... I know the work of Dr Chwistek and think very highly of it. The work of Mr. Tarski I do not remember at the moment, nor have I access to it at present. In these circumstances I can only say that in choosing Dr Chwistek you will be choosing a man who will do you credit, but I am not in a position to compare his merits with those of Mr. Tarski. (Russell to Żyliński, 23 December 1929)

This had to suffice. Chwistek was made a professor of Logic in the Faculty of Mathematics and Physics in Lwów in 1930. Hence, in the end, Ingarden and Chwistek found themselves working at the same university (although in different faculties housed in different buildings a few blocks apart) for almost twelve years.

3. Chwistek's Project

Chwistek introduces his book with:

The purpose of this study is to establish the meaning of the word "reality" (Chwistek 2018, 165).²⁶

There follow four philosophical problems concerning realism from different domains. The first question is realism about other minds, in particular the reality of pain and other sensations in other people and in animals. Next, realism about the entities and concepts of physics, such as the ether, atoms, electrons, etc., and, with Einstein's then recent theory of relativity, the concept of simultaneity. The third is the seemingly narrow problem raised by the duty of "sacrificing myself for my homeland". This problem involves realism about nations, for, Chwistek suggests, it seems to require that "what I am supposed to sacrifice my real life for is a kind of fiction". This issue of realism about social entities extends well beyond nations. Finally, the notion of representing "reality" in art is "perhaps less fundamental, but not less interesting." As an painter and theoretician of the abstract "Formist" movement, he is concerned with understanding the way in which non-representational art can none the less express some sort of "reality" in a portrait, or whether he is merely representing the appearances of certain patches of colour and shapes.

Chwistek presents his account in terms of an ambiguity of the meaning of the term "reality", and more strongly, as a problem of identifying the plurality of realities of his title. This will be jarring to contemporary philosophers who may allow that there are different views about the *realism* in different domains, such as mathematics, the past, or theoretical physics, but that the notion of "realism" invoked is the same in each domain. Chwistek's proposal was a thesis of pluralism in ontology.²⁷

²⁵A. Dawidowiczówna, Chwistek's daughter, wrote in her memoirs: "Stefan Banach, who was one of the leading mathematicians of the time, was able to split the Philosophical Faculty... Banach... used to say:—I shall split the faculty and bring you here" (Dawidowiczówna 1989, 101).

²⁶Quotations from the original are taken from the English translation (Chwistek 2018, 163–238) with any divergences indicated with citations of the original Polish.

²⁷Rudolf Carnap (1967) chooses between equally valid alternative "physical" or "psychological" bases for his constructions of the world. Carnap says that a first version of his ideas was written in 1922–1925, and does not refer to Chwistek. Such ideas were, however, clearly in the air. The notion of distinct ontologies for science and ordinary life returns with the "scientific and manifest images" from Bas van Fraassen *The Scientific Image* (1980) and Michael Dummett's (2004) proposal in *Truth and the Past* that there might be different forms of realism about different facts, whether mathematics or the past. These discussions all seem to argue that there is one notion of *reality* but that it applies differently to the objects of different theories. Jason Turner (2010) gives

Chwistek begins his second chapter by defending his own "constructive" method in Philosophy in contrast to three prominent alternatives, with different views about the role of logic. He dismisses the deductive, logical, method of Leibniz, Spinoza, and Russell, as that of "dogmatic realists" (Chwistek 2018, 170).

The technical basis of Chwistek's charge of "dogmatic realism" against Russell is the ontological committment of the Axioms of Infinity, Choice and Reducibility in *Principia Mathematica* on the grounds that they assert, respectively, the existence of an infinity of individuals, a "choice function" that selects an element of each of a set of disjoint sets, and of a "predicative" propositional function that shares the extension of any given higher-order predicate. Although Chwistek rejects Russell's mathematical realism, we will see below that he is right to call himself a "Russellian".

4. The attack on Bergson and Husserl

Chwistek's real target in his discussions of philosophical method is

The view that "reality is incomparably more complicated than what we can describe with symbols (Hegel, Nietzsche, Bergson), and that it can be cognized (Chwistek 2018, 171)

It is the polemical attack on these philosophers that draws the most attention from Ingarden in his large review, as should be expected from his having just writing a thesis on Bergson, although to the reader of Russell's criticisms of Bergson from this period this will sound familiar from our own experience with the long history of the dispute over the divide between analytic and continental philosophy. Chwistek increases the invective:

Bergson easily falls into unparalled frippery, which in the [earlier] quoted passages borders on the ridiculous (Chwistek 2018, 173).

the name "Ontological Pluralism" to a position with distinct notions of existence. Amie Thomasson (2007) argues that the "reality of ordinary objects" and "the reality of physics" are not incompatible.

Ingarden responds to this in kind:

This statement is, at best, an impertinence towards someone who is after all one of the greatest contemporary French intellectuals, an impertinence that is the more flagrant, the less the author understands Bergson's standpoint (First Review).

Ingarden reacts to the criticisms of Bergson and Husserl by accusing Chwistek of not having read their works sympathetically. Ingarden had just published a discussion of Bergson as his habilitation thesis, so perhaps Ingarden's impatience is understandable. When Ingarden then attacks Chwistek's criticism of Husserl, the attack is even more open:

... The reader not familiar with the works of Husserl and his disciples as to, first of all, come to the conclusion that the level of contemporary German philosophy is very low, if this Husserl... utters such trivialities and nonsense... This demonstrates that: 1) the author is completely unfamiliar with the works of Husserl... and 2) he is not well-versed in the problems of philosophical logic and epistemology. ... he is even unaware that there are no "disciples of Husserl and Meinong" (as if there existed a group of this kind), not to mention his lack of knowledge of all the antagonisms between the two philosophers and their students (First Review).

Ingarden would have known that Chwistek had some knowledge of phenomenology, having attended lectures of Husserl at Göttingen in 1909, and, would have been familiar with Meinong as well.²⁸ The "parting of the ways" between analytic philosophy and the schools inspired by Husserl had already begun.²⁹

When Chwistek takes the example of non-Euclidean geometry as a problem for the Husserlian search for "eidetic essences"

²⁸To outsiders the assimilation of Meinong and Husserl was not absurd. Arthur Pap groups Husserl's Phenomenology and Meinong describing "the school of 'phenomenology', or 'Gegenstandstheorie', as founded by *Husserl* and *Meinong*" (Pap 1944, 465). Gilbert Ryle (1927) also presents the two as part of a common "school" of philosophy.

²⁹Friedman (2000) describes the split between Carnap and Heidegger at Davos in 1929.

of the notion of "point" and "line", Ingarden contemptuously dismisses the difficulty:

He also insinuates that phenomenologists take a specific standpoint on non-Euclidean geometries (which are not as simple as the author believes them to be!), a standpoint *nowhere to be found in any* phenomenological work known to me (and I know *all* the works by phenomenologists, bar some post-war publications, which have appeared after *Wielość rzeczywistości* was published... (First Review).

Chwistek goes on to argue that the method of "intuition of essences" that Husserl proposes will run counter to the scientific method. The notion of "line", Chwistek claims, is not defined after claiming that there is a unique "essence" to be discovered. Instead there is are varying concepts to be found in the plurality of non-Euclidean geometries needed by physics.

5. The Constructive Method

The bulk of Ingarden's review is devoted to a criticism of Chwistek's "constructivism", by which relies on the piecemeal addition of axioms in a system of symbolic logic. This he contrasts with separation of the portions of a theory into analytic and synthetic in the Kantian tradition. It is his views about how the successive addition of purely formal axioms will lead to a proper understanding of given notions which raises the strongest of objections from Ingarden, and also differs from the division of formal theories into defintions and axioms, followed by Russell.

Ingarden rejects the notion that meaningless symbols can be given a meaning by including them in a formal system. Chwistek describes the goal of making ordinary, vague, notions more precise by including them in precise formal systems. Ingarden, as a phenomenologist, thinks that this shows a misunderstanding of the nature of meaning. Words are not symbols, abstracted from strings of written or spoken sounds, and then given meaning from their relations to other strings in formalized theories.

A symbol is a physical object, or to be precise, a typical shape of a physical object (e.g. a drawing, a blot, a musical tone, etc.) that, owing to an agreement has been endowed with a function of "expressing" some ideal content (meaning, sense)... A symbol devoid of meaning is not a symbol; similarly an insect's leg that got stuck accidentally on a papyrus ... is also not a symbol... (First Review).

Ingarden's view that meaning arises from a convention of ascribing an formulated meaning to specific marks by convention is characteristic of the phenomenological account of meaning arising fom Husserl's Logical investigations.30 Ingarden developed this view of meaning in his criticism of the verification principle of meaning at the 1935 World Congress of Philosophy in Prague, to which Carnap and Neurath responded. Ingarden criticised the verification theory of meaning, that a sentence of a scientific theory was to get its meaning from its method of verification, by arguing that a sentence must first be attributed a meaning before one could possibly know how to verify it. Ingarden, as a phenomenologist, saw meaning as attributed to signs by scientists, rather than as having that meaning emerge directly from the physical patterns of "piles of ink" on the page, or sound waves emitted by speakers. Ingarden charged that one can only determine what would verify a proposition if one already knows its meaning, not the other way around. 31 So, already in 1922 Ingarden was firmly in grasp of this criticism of materialist or naturalist accounts of meaning, which he there directed towards the physicalist formalism of Chwistek.

In fact Chwistek's "constructive method" involves both deductions from first principles in a formal language, in his case that of the new logic of *Principia Mathematica* (1910). Axioms, he

³⁰Ingarden cites "Husserl, Logische Untersuchungen II, P.I, Chapter 1, §1-4". ³¹This argument was picked up by Isiah Berlin who charged the logical positivists with a "hysteron proteron". See Pelletier and Linsky (2018) for a discussion of the "hysteron proteron" argument in Ingarden's address to the World Congress, and the brief replies by Carnap and Neurath in Ingarden (2018).

holds, are a way of giving an precise form to an intuitive notion that is made precise by the construction of formal systems. Thus the Axioms of Infinity, Reducibility and Choice, although objectionally existential claims, make more precise the notions of "individual", "propositional function" and "class".

Whitehead and Russell's system contains two categories of concepts, namely fundamental concepts accepted without definitions, and defined concepts. The latter category of concepts is of secondary importance, since, at least in theory, they can be ousted from the system. The consistent realization of this task would surely be difficult—nonetheless, it is sure that in every single case we can present a statement by means of fundamental concepts alone; on the condition, however that this statement refers not to symbols, but to what is represented by the symbols (Chwistek 2018, 179).

It is in the use of logic to formalize theories about non-logical concepts that those pre-theoretic notions are given a precise meaning:

In the field of research that anticipates the system of formal logic or disciplines based on it, we have to use analytic propositions that allow us to roughly delineate the set of primitive concepts, as well as the *synthetic a priori* propositions referring to the part of the set of concepts that is not completely determined. This research constitutes the characteristic field of philosophy. In the first place, it leads to the discovery of the fundamental statements of scientific systems, which we consider true, but only due to the fact that they express relations between symbols that on their own are devoid of sense and acquire it actually only as a result of figuring in these statements. Since the number of the fundamental statements of scientific systems is small, the right results of philosophical investigations can be expressed by definitions that can by no means be considered true or false, as they simply bring sense to some hitherto unused symbols (Chwistek 2018, 181).

Here it may be helpful to point out the resistance we feel to his objections to the distinction between definitions and axioms. It is a fundamental prescription of contemporary logic that definitions

not be "creative". In any formal system there will be primitive, undefined, vocabulary, however additional expressions will be added by definitions, whether those are explicit biconditional as "a triangle is a three sided plane figure" or the famous Russellian *contextual* definition. A "creative" definition would facilitate the proofs of new sentences in the old vocabulary without the defined expression. An examination of Chwistek's definitions and axioms below will show that he shared with Stanisław Leśniewski a non-standard view allowing for creative definitions through a method of that develops formal theories piecemeal. Indeed Leśniewski credits Chwistek both with awakening his own interests in formal logic and inspiring these views on definition.³²

6. The Four Realities

Chapter IV bears the same title as the book, "The Plurality of Realities". Chwistek's ontological pluralism distinguishes four levels of reality; the reality of impressions, the reality of imagination, the reality of things, and the reality of physics. The first step in the construction of a formal theory of these "realities" is to come up with an axiom/definition that will be extensionally correct by providing a necessary and sufficient condition for an entity to belong to each reality. Primitive concepts, expressed as propositional functions, which will be combined to distinguish the four categories. Chwistek immediately admits that the notions used to specify meanings of "real" are themselves "ambiguous", though keeping in mind the plan to further specify their meanings by adding axioms as the theory develops.

The three primitive predicates are "ix" (x is real). "bx" (x is immediately given), and "wx" (x is visible).³³ "Impressions" (sense-data) are certainly "immediately given". It might seem

³²See Simons (2020) for the an account of Leśniewski's use of definitions.

 $^{^{33}}$ From the Polish *x jest rzeczywiste*, *x jest bezprośrednio dane*, and *x jest widzialne*.

that a tree seen through a window is not immediately given in perception because we only see one part of it. If we say that the parts are *given* as a whole in perception, the tree is, afterall, immediately given. Chwistek points out similar issues with "visibility". While clearly an ink stain before me is visible, the atoms of which it is made are not, and what of a mountain seen in the distance?

No, because I cannot designate a point from which it would be visible "better" than from another one. Yes, because I can designate such points from where I can see it as "to some extent" good (Chwistek 2018, 188).

Chwistek holds that only a formal development of these definitions by the addition of axioms force us to resolve these ambiguities in one way or the other.³⁴

Chwistek then follows this with a series of axioms that are to be conjoined as providing the initial definitions of the four levels of reality. These axioms are simply conjoined in different ways to finally "define" the four levels of reality: the reality of impressions, the reality of imagination, the reality of ordinary things, and the reality of physics. Axioms 1 and 2 are common to all four realties. Their conjunction asserts that what is immediately given and what is visible is real. The realities of impressions and imagination limit "reality" to just those possibilities (with 3a). Both the reality of ordinary things and the reality of physics assert the reality of some things that are not immediately given, such as the hidden parts of objects or atomic particles. All but the reality of imagination agree on 4a, by limiting perception to a waking state and not a reverie, hallucination, or dream. Finally, the reality of ordinary things is distinguished by being limited to what is observed in "normal conditions", the world of mid-sized physical objects observable in daylight, etc.

These "definitions" of the four realities are thus limited to two distinctions, sharing features 1 and 2 but differing on the other

three features. This is admittedly unexpected, perhaps a gratuitous display of cleverness, but it is not the baffling confusion that Ingarden suggests in his first review. Ingarden expects instead four axiomatic theories that state fundamental features of each sort of reality. This does not at all look like Chwistek's own example, of non-Euclidean geometry, where against a shared number of axioms describing the relations of points and lines, one particular axiom, the "parallel postulate", presents a single feature that distinguishes distinct theories. Ingarden's response, in the second review Ingarden in *Ruch Filozoficzny* is simply to mock the proposal with a deadpan characterization of Ingarden's complaint as rather his only contact with the substance of the book.

Clearly Ingarden misunderstands the nature of the axioms, by objecting that, for example, because axioms 1 and 2 characterize all four realities, that the realities are not disjoint, but instead have some objects in common. Ingarden suggests that these supposed realities are composed of the very same entities, but just considered from a different perspectives, that they are different "moments" of the same objects. This seems to be a simple misunderstanding of the logic of the conjunction of predicates. No single object will satisfy all of the conjoined predicates more than one reality, while the shared properties of being real if directly given or visible will characterize all of the realities. Ingarden charges that Chwistek has confused the different cognitive relations we have to objects with a difference of kind of those objects. While Chwistek uses epistemological notions including Russell's notion of "being directly given", different modes of access are in fact definitive of different categories of objects. Here, again, we have a direct confrontation with Ingarden's phenomenological philosophy in conflict with Chwistek's Russellianism.

Attention to the next axioms, 5a and 5b, however, provides an explanation of several of these puzzling technical features of Chwistek's "constuctivist method". Using the notion of *part of* from Leśniewski, Chwistek indicates the next steps of the con-

³⁴Difficulties for defining the notion of *object of perception* and *immediate perception* will be familar from J. L. Austin (1961).

struction of the theory of multiple realities. Using Leśniewski's symbol \subset for *part of*, Chwistek presents two further axioms: 5a) A part of a real object is real and 5b. An object whose part is real is real.

These axioms express theses that are fundamental to Leśniewski's later theory of *mereology*, the theory of part and whole, which presumably, would express the metaphysical uniformity of each level of a given reality, such as the world of physical objects, in that any sum or part of physical entities is also physical. The application of this principle to the other levels of reality is less obvious.³⁵

Interestingly, there are indications that Chwistek and Leśniewski were in close contact at this time. In the series of papers "Foundations of Mathematics", published in 1927, Leśniewski makes an approving reference to Chwistek's 1924 and later, referring back to earlier days, suggests that it was Chwistek's influence that led him to take formal logic seriously:

Under the influence of conversations which I had in 1920 in Warsaw with Dr. Leon Chwistek, now Professor of Logic in the University of Lwów, I decided on the introduction into my scientific practice of some 'symbolic' language using formulas constructed by 'mathematical logicians' in place of the colloquial language, and in its 'logical' aspect, and to bend it to theoretical purposes for which it was not originally created (Leśniewski 1992, 364–65).³⁶

Leśniewski had a complicated, and perhaps indiosyncratic approach to defnitions. According to Simons (2020, §4.2) this is apparent in the method of adding definitions in a piecemeal process, by which definitions were not simply abbreviations of previous notation, but could themselves constitute the introduction of new expressions in a way that seemingly violates the ban

on "creative" definitions.³⁷ This is precisely what happens in *The Plurality of Realities*. Using a minimum of undefined primitive symbols, axioms are be added step by step, resulting in a formal system that gives a more precise meaning to the original primitives.³⁸

7. Russell's Influence on Chwistek

A more easily established influence on Chwistek's idea of multiple realities is that of Bertrand Russell. Chwistek's English tutor, Henryk Dziewicki, carried on a long correspondence with Russell and gathered a number of his important philosophical works for the mathematicians in Kraków.³⁹

In his very interesting book entitled *The Problems of Philosophy*, Bertrand Russell attempts to construct the concept of reality in the spirit of rational realism (the reality of physics). According to his theory, reality consists of elements given immediately and of objects that cannot be cognized by the senses, but are considered to be causes of the sense phenomena that we encounter. The only way to recognize certain features of real objects is by reasoning (Chwistek 2018, 192).

Chwistek's "Three Lectures Relating to the Concept of Existence" from 1917, shows the similarity between Chwistek's levels of reality and Russell's formulation of the "problem of matter" in 1912.⁴⁰ The notion of levels of reality persisted throughout Chwistek's writings, to the concluding chapter of *The Limits of*

 $^{^{35}}$ See Simons (2020, 179) for a temporal version of this thesis is a fundamental axiom of the *mereology* of the temporal part-whole relation.

³⁶The first fruit of this study is Leśniewski's well known criticism of Whitehead and Russell for making use mention confusions, a charge repeated by other Lwów-Warsaw logicians.

³⁷According to his student, Czeław Lejewski, Leśniewski presented his seminars with long and intricate additions of definitions to develop theories along alternative paths (Simons 2020, §4.3).

³⁸Chwistek (1923) includes both axioms of "intensionality" and an axiom of "extensionality" to be adopted or not, leading to distinct theories of types.

³⁹The correspondence between Dziewicki and Russell, which includes a description of a tea with Ludwig Wittgenstein in 1915, is held in the Bertrand Russell Archives. See Wittgenstein (2012, 81).

 $^{^{40}\}mbox{See}$ "Three Lectures Relating to the Concept of Existence" (Chwistek 2018, 115–41).

Science. In the "The Plurality of Realities", and more explicitly in his "Three Lectures Relating to the Concept of Existence", Chwistek explicitly identifies Russell as aiming discover "the reality of physics" based on our sense-data, Chwistek's reality of impressions. Russell's famous discussion of his table that begins The Problems of Philosophy is in fact an acknowledgement of the reality of ordinary objects. Chwistek's reality of imagination is familiar to readers of Russell's Our Knowledge of the External World. Russell discusses the reality of dreams and hallucinations, which are just as real as the sense data derived from matter, and only to be distinguished by the regularities and patterns that they obey. All Russell's influence on Chwistek extends to other features of style and method. Even Chwistek's criticisms of Henri Bergson can be seen as inspired by the similar criticisms of that philosopher that occupied much of Russell's attention in this period.

The very notion of distinct realities and the accompanying relativism suggested by talk of "levels" of reality can also be understood by keeping Chwistek's study of the theory of types in mind. How is it possible to talk about "equally legitimate" realities except by adopting the viewpoint of one of them as *genuinely* real? The answer is in the theory of types.

The question arises: in which reality are we while talking about many realities? The question comes within the scope of the theory of logical types, and can easily explained by it. Let us call the reality of impression elements and the reality of things, which we talked about above, "first-type realities", and the theories that describe them "first-type theories". It is obvious that, while aware of the existence of the two first-type realities, we can still believe,

depending on the general disposition of our mind, that they have been created either within the reality of impression elements or within the reality of things. When it comes, for example, to a discussion in a cáfe, what is to be expected is the superiority of the reality of things. When it comes to a lonely contemplation deep in a wood, what takes the lead is the reality of impressions. The two realities will not be identical to the repsective first-type realities and, therefore, we will call them "second-type" realities, whereas the theory within which we distinguish both realities will be a "third type theory" (Chwistek 2018, 194).

The shift of language from "realities" to "theories" does abandon the traditional notion of Metaphysics as the study of some one "ultimate reality". The invocation of Russell's theory of types at this point hints at a solution. Just as the theory of types denies that there are any totalities of objects or propositions, as new classes and propositions can be constructed by reference to a given totality, Chwistek holds that theorizing about realities, and a judgment that they are equally legitimate in some sense or that one is more important for a given purpose than another, is made from another standpoint, that does not belong to that given totality.

Chwistek makes another application of the notion of logical types in a response to a "paradox of justification" made by the neo-Kantian mathematician Leonard Nelson (1908, 444–45).⁴³ Nelson argues against the conventional notion of justification that any fundamental criterion of knowledge would rely on a "cognition", but to determine whether we have that justification will require another cognition. But that is impossible. Chwistek replies by invoking higher order cognitions:

The strength of this reasoning collapses immediately after we notice that the act of cognition consisting of setting some cognitive criterion belongs to another reality than that to which the criterion

⁴¹See Russell (1914, 95). Many of Chwistek's other non-logical works also contain references to Russell: for example, in the lecture given at the Jagiellonian University in 1924 entitled *Wielość rzeczywistości w sztuce*, Chwistek mentions Russell's treatment of Kant's antinomies and Zeno of Elea's paradoxes. He does so however, without pointing to a specific source (Chwistek 1960, 55).

 $^{^{42}\}mbox{See}$ Chapter II of Russell (1914) which contains an extended criticism of Bergson.

⁴³Nelson and Kurt Grelling (1907) had earlier presented the paradox of the predicate "heterological". The theory of types provides a solution to that paradox as well.

should apply. The criterion can in turn be subjected to a higher-order scrutiny. The apparent *regressus ad infinitum* is harmless since higher-order cognition does not require that the analysis be started from the beginning, but is automatically drawn from cognition of a lower order thanks to the systematic equivocality of pertinent concepts, as is also the case in formal logic (Chwistek 2018, 196).

The notion of "systematic equivocality" that Chwistek invokes is the "typical ambiguity" of the expressions of *Principia Mathematica* by which any given principle of logic can be interpreted anew for an assignment of higher types to the basic expressions. Chwistek invokes this "equivocality" to explain how we can come to assess our principles of justification in terms of (suitably adjusted) principles that apply to all our reasoning. This seems to be exactly how someone thinking in terms of the theory of types would avoid the notion of "self justifiying beliefs". Contemporary foundationalists in epistemology may thus hold that for perceptual beliefs the mere existence of the belief (when it occurs in standard conditions, etc.) provides a justification for the belief. Chwistek asserts that only a distinct, second order, justification of our judgment that something is a basic or first order justification can provide that justification.

8. Applications of the Theory of Realities in Life

Other applications of the theory provide a brisk resolution of other traditional philosophical puzzles. The debate between psychological parallelism and mutual interaction of soul and body. The body has a derivative status in the organization of the reality of sense, whereas the mind is not relevant to physical explanations in the reality of material things. Free will has no place in the reality of physical explanations, whereas from our experience of deliberating about actions in the world of "impression elements" we know that we can act freely (Chwistek 2018, 196–97).

Chwistek's solutions to the problems with which he began the essay are similarly brief and sketchy.

It is obvious that in the reality of impression elements there is no such thing as psychological states of other living beings, as has been ultimately established by the psychologistic school. The opposite is true about the reality of things which the assumption about the real existence of psychological states of other people (and, in a sense, of animals as well-at least highly developed ones) is a completely natural hypothesis (Chwistek 2018, 198).

The notions of sacrificing for one's country and of reality in art fall under the remaining two realities, each the subject of their own chapters.

Chwistek's "natural realism" is the "reality of ordinary things". Chwistek gives a varied series of characterizations of this realism, citing an extraordinary number of antecedents. All are developed in explicit rejection of the reality of impressions or ideas, and the reality of physics. The realism, however, will be familiar from contemporary discussions of the "common sense" metaphysics of medium sized physical objects. It would include the very table that Russell rejects in the opening chapter of *The* Problems of Philosophy, where he contrasts the sense data from perception of a table with its colour and perceived smooth surface with the colorless, atomic composition in the scientific image. Chwistek elucidates the defining notion of "visibility under normal conditions" with another ordinary example, namely a "bent" pencil in a glass of water. It does not require scientific instruments or theory to realize that the lower half of a pencil dipped into a glass of water is not being seen under the normal conditions that hold for seeing the top half. In fact, it is just such a situation that leads us to consider reality of sense impressions, more easily perhaps than by following Russell's reflections on the desk.

Among characterizations Chwistek uses are Thomas Reid's "common sense" philosophy, Sir William Hamilton, who coined the term, and Pragmatism. It is not impossible to have a science of ordinary "things", although the phenomenology of Husserl, and the realism of Meinong are a first step. (Ingarden expresses puz-

zlement at this seemingly positive assessment of their philosophies after the severe criticisms of the earlier chapter.) The association with Pragmatism and the world of practical action suggests to Chwistek the mathematical theory of probability as a result of the "constructive" method of making a science precise with formalization. The puzzle of the survival of a statue through the loss of parts is presented as another problem of this realism, as are the difficulties in the notion of causation, which Chwistek takes to have been eliminated from the worlds of physics and of impressions in favor of regularities. At the same time, however, both free-will and indeterminism are congenial with this reality. While clearly admittedly inchoate in Chwistek's presentation, this reality will be more familiar to a contemporary philosopher than it was in Chwistek's day.

Different occasions will allow different people to "inhabit" one reality rather than others with varying ease. Chwistek cites Ernst Mach:

... Mach gives the example of a university professor who theoretically believes himself to be a solipsist, is certainly not in practice, when he has to thank a Minister of State for a decoration... These examples prove only that while living in a reality of people and things once can be aware of the possibility of the reality of impression elements, and even perform a precise analysis of it. The superstition that talking about a certain reality is the same as being in it has so far made it impossible to many people to understand this simple fact that there is no one reality (Chwistek 2018, 211).

Merely changing from contemplating one reality to another

... does not yet prove that there are two realities. I remind you here we are encountering a fallacy coming under the theory of logical types. In talking about one man's moving from one reality into another one we are dealing with the second-order reality, while the first-order reality exists only as the contents of thoughts of the person in question (Chwistek 2018, 213).

Chwistek ventures claims about moral psychology based on differences in focus on different realities: The reason why people of action more frequently choose the reality of things is that psychic states do not exist. The man of action acts, but does not experience (Chwistek 2018, 213).

As a result of this attention to outward behavior over an attention to the intensity of inner thought, from the point of view of this reality, "all people are essentially equal" (Chwistek 2018, 214). At the same time dreamers, (and likely artists) who dwell in the reality of their inner life, are not likely to wrong others, even they will not be likely to perform "good deeds" due to their "apathy and inertia", and even excused their failure to fulfil their promises (Chwistek 2018, 215).

The phenomenon of the radical egotist who sees himself as released from moral codes is due to a failure to leave the reality of the inner life of experience to deal with the natural reality which includes others. Returning to the opening paragraphs of the essay Chwistek recognizes that "fear of death causes someone to move into the reality of impression elements", excusably, it seems, and that "making sacrifices can be understood only on the grounds of the reality of things and people. It is only "preventing individuals from immersing themselves in their own lives, and imposing on them the reality of things and people ..." (Chwistek 2018, 217) is the only way to lead them to fight for their country.⁴⁴

9. The Plurality of Realities in Art

Chwistek ends "The Plurality of Realities" with an issue of realism in art, based on his own experience as an artist. When confronted, for example, with painting a portrait:

On the one hand, I can imagine I am dealing with a play of visual impressions that — for the sake of orientation — I group together in objects. In that case, the best I could do is to follow impressionist

⁴⁴Chwistek served as an officer in the Polish Legion of Austria-Hungary in the First World War.

artists and to try to paint the composition of colours which I consider the most interesting. On the other hand, I could believe that a real object exists — independent of my impressions — that I am attempting to paint. But then, I have to look for much more complicated methods of reproducing it on canvas. The way we solve this dilemma depends, of course, on which concept of reality we use (Chwistek 2018, 166).

Chwistek's own painting ranged from impressionism in the pre war era to an expressionist and abstract style which he identified as "Formism". The concluding chapter identifies each of the four realities with different schools or eras in art; (1) the reality of sensation and impressionism, (2) primitivism and natural reality (3) naturalism and scientific reality (4) and abstract art with the reality of imagination. Despite Ingarden's shock at such broad generalizations this application of Chwistek's theory will seem to us as almost commonplace one hundred years later. It is quite familiar from art history to present the rise of realist art with the rise of scientific knowledge of perspective and anatomy from the renaissance through the nineteenth century. The identification of impressionism with the world of impressions is most striking in pointillism, which was explicitly based on then recent theories of colour perception.

A primitive does not imitate reality, because his knowledge of things is given to him immediately at the moment of creation, so he creates "from memory" relying only on himself. A primitive does not counterfeit reality, he passes over only the domain of visual phenomena, which he does not recognize as belonging to reality. A primitive is not retarded, as he can depict with the highest accuracy those features of objects that are interesting to him (Chwistek 2018, 224).

The "primitive" painting in Egyptian tombs or portraits that is full of tokens of the identity of the subject of a portrait or conventional, and anatomically "inaccurate" representations of the human body. Chwistek presents the "post-impressionist" non-representational art of imagination, as following a decline

in interest in subjective psychology, presumably in the aftermath of the great war:

Diversification of concepts and interests resulted in contemporary artists *intentionally searching for a new style in art based on overcoming the content.* I will call this kind of artists "formists". In principle, it is possible to solve this problem on the basis of every reality, and as we know, it has actually been solved by representatives of all the mentioned types of art. However, while primitives, realists, and impressionists accomplished this task by treating the content in a banal way, meaning by pushing it into the background as an element of little importance, formists thanks to the reality of imaginations, have at their disposal a totally different means that exploits the instability of contours of objects that make up this reality (Chwistek 2018, 229).

10. Conclusions

The debate that has been described by us, lingered in obscurity in Poland until a recent revival of interest. In 2020, also in *Ruch Filozoficzny*, Radosław Kuliniak, republished the exchange with a discussion and some material from the Roman Ingarden Archives in Kraków.

Looking back on Leon Chwistek's *The Plurality of Realities* we can see it as an early defense of "ontological pluralism", presented as an application of Russell's theory of types to wider philosophical issues. It sparked a controversy in Poland, not least because Chwistek's idiosyncratic approach to philosophy did not have many admirers among professional philosophers. While long familiar to Polish philosophers, this dispute is, however, unknown to the English-speaking world. In the process of untangling the arguments, we hope to have shed light on these historical happenings as the Lvov-Warsaw School was being formed, as well as an instance of the "split" between the continental and analytic philosophical traditions.

Chwistek was not a member of the Lvów-Warsaw School or of the Vienna Circle, but was clearly well-known by both.⁴⁵

Karl Menger, the founder of the Mathematical Colloquium at the side of the Vienna Circle recalls his own first visit to Warsaw in 1929, during which he invited Tarski to speak in Vienna. Menger did not distinguish Chwistek as a logician or as a philosopher as a Pole allied with the Vienna Circle from his other colleagues in Lwów. He saw nothing unusual with Chwistek for having views about phenomenology in his capacity as a logician:

The first Polish logician I met, near Cracow, on my way to Warsaw was Chwistek and we soon found points of agreement about obscurities in Husserl's phenomenology and Weyl's utterances in support of it (Menger 1994, 146).

In addition to speaking at the First Congress for Unified Science in Paris in 1935 and the second in Copenhagen in 1936. Chwistek also spoke in March 1936 to Schlick's circle and to Hahn's mathematical colloquium in Vienna. Chwistek also addressed the 9th International Congress of Philosophy in Paris in 1937, appearing in the report in *Erkenntnis* as a "supporter" of the Vienna Circle (Stadler 2015, 75, 175, 185, 191). He was also on the program for the ill-fated 5th Congress of Unified Science at Harvard University that coincided with the attack on Poland in September, 1939. From the viewpoint of the Vienna Circle, it seems, Chwistek counted both as a logician and as one of their Polish sympathizers.

Despite making a break with Husserl over his so-called "idealistic turn", Ingarden continued to considered the leader of a main stream of phenomenology. Ingarden's dispute had not reached the level of incomprehension of Carnap's earlier attack on Heidegger, however. Ingarden's variety of Phenomenology still engaged with Logical Positivism.

We think that this study of *The Plurality of Realities* makes more understandable Leon Chwistek's marginal position in the history of Polish analytical philosophy between the wars.⁴⁶ It may be granted that Chwistek was a "Russellian" from Kraków and not a student of Twardowski. Perhaps if his book had been translated into English a century ago, and if he had survived the war and returned to Poland, the story of this Polish controversy might have been told differently.

That this tug of war between Chwistek and Ingarden was something more than merely an intellectual exchange can also be confirmed by reading between the lines of some of the sources describing the reception of Chwistek's book. When talking later about it, Chwistek only says that it provoked passionate reactions but does not mention Ingarden by name. 48 Instead, he mentions the article by Kazimierz Błeszyński praising it for its depth. Błeszyński's (1922), "Philosophy and the new trends in art" is a general treatment of contemporary developments in science and culture. His theme is the ongoing mathematisation of various fields (e.g., physics) and an increasing abstract character of others ("And making geometry more abstract is not enough — the great Bertrand Russell is completely logicising (sic!) arithmetic, the other fundamental branch of mathematics, as we speak"). Błeszyński's tone is sympathetic and he praises Chwistek, "the best Russell scholar in Poland", for his bold attempt even though it cannot be said that he agrees with all of Chwistek's conclusions (Błeszyński 1922, 309–47). Moreover, Estreicher, when discussing the reviews of Chwistek's book says that for the most part "it was met with a silent opposition" and

⁴⁵See Woleński (1989, 310). On page 23 one reads that Chwistek's ideas were too esoteric for both mathematicians and philosophers from that school, and so he "can by no means be considered a member of the Lvov-Warsaw school". As mentioned, Woleński discusses Chwistek's involvement with concepts developed by the members of the school, most notably the Łukasiewicz (or Polish) notation (Woleński 1989, 93) and the theory of semantic categories by Leśniewski (Woleński 1989, 140).

⁴⁶Grattan-Guinness (2000, 495) wittily describes him as "A Pole Apart".

⁴⁷Sebastién Gandon refers to Chwistek as one of the exotic Russellians. [ref?]

 $^{^{48}\}mbox{As}$ recorded in an account of his talk given at the university in Kraków in 1924, see Chwistek (2018, 51–73).

mentions a handful of responses including those by Irzykowski, Kotarbiński, Błeszyński and Witkiewicz, however, Ingarden's contribution is left out (Estreicher 1971, 146–48). The fact that Kulinak(2020) asserts that Ingarden was taken aback by Chwistek's attack and that Ingarden's own review is considered to serve as a model suggests that the intellectual split between various philosophical factions in the interwar Poland reverberates to this day.

In 1932, Chwistek attacked Ingarden, now his university colleague, one more time. Ten years after their duel, Chwistek reviewed Ingarden's well known habilitation thesis, *The Literary Work of Art* (1931) in the final exchange involving the two. Chwistek gave his review the memorable title "The Tragedy of Verbal Metaphysics". ⁴⁹ This time, Ingarden did not respond.

Acknowledgements

The first author's research was financially supported by the Polish National Science Centre (Narodowe Centrum Nauki) under grant No. 2017/26/D/HS1/00200.

Adam Trybus

University of Zielona Góra adam.trybus@gmail.com

Bernard Linsky

University of Alberta blinsky@ualberta.ca

References

- Austin, J. L., 1961. Sense and Sensibilia. Oxford: Clarendon Press.
- Błeszyński, Kazimierz, 1922. "Filozofja a nowinki w sztuce." *Przegląd Warszawski* 2(4): 309–47.
- Carnap, Rudolf, 1931. "Überwindung der Metaphysik durch logische Analyse der Sprache." *Erkenntnis* 2: 219–41.
- ——, 1959. "The Elimination of Metaphysics Through Logical Analysis of Language." In *Logical Positivism*, edited by A. J. Ayer, pp. 60–81. New York: MacMillan.
- ——, 1967. *The Logical Structure of the World*, edited by Rolf A. George. Berkeley: University of California Press.
- Church, Alonzo, 1976. "Comparison of Russell's Resolution of the Semantical Antinomies with that of Tarski." *Journal of Symbolic Logic* 41: 747–60.
- Copi, Irving, 1951. "The Inconsistency or Redundancy of *Principia Mathematica." Philosophy and Phenomenological Research* XI: 190–99.
- Chrobak, Karol, 2003. "'Leon Chwistek, Roman Ingarden. Historia pewnej polemiki." In *Od teorii literatury do ontologii świata*, edited by Jerzy Perzanowski and Andrzej Pietruszczak, pp. 273–80. Toruń: Uniwersystet Mikołaja Kopernika.
- Chwistek, Leon, 1912. "Zasada sprzeczności w świetle nowszych badań Bertranda Russella." *Rozprawy Akademii Umiejętności* 30: 270–334.
- ——, 1921a. "Antynonomje logiki formalnej." *Przegląd Filo- zoficzny* 24: 164–71.
- —, 1921b. Wielość rzeczywistości. Kraków: Jasło.

⁴⁹Ingarden 1931 has been translated as Ingarden (1973). Chwistek's review appeared as "The Tragedy of Verbal Metaphysics" in 1932 (Chwistek 2017a). Estreicher (1971, 242) says that at this time it was unusual for Chwistek to attack someone in writing openly and that Ingarden was one of his few exceptions. The characterization of Chwistek in Kuliniak (2020), however, is that of an irritable dilletante.

- —, 1922a. "Über die Antinomen der Prinzipien der Mathematik." *Mathematische Zeitschrift* 14: 236–43.
- ——, 1922b. "Zasady czystej teorii typów." *Przegląd Filozoficzny* 25(3): 359–91.
- ——, 1922c. "Krótka rozprawa z panem Romanem Ingardenem, doktorem uniwersytetu fryburskiego." *Przegląd Filozoficzny* 25(4): 541–44.
- —, 1923. "The Theory of Constructive Types (Principles of Logic and Mathematics), Part I." *Annales de la Société polonaise de mathématique* 2: 92–141.
- —, 1932. "Tragedia werbalnej metafizyki Z powodu ksiażki Dra Ingardena: Das literarische Kunstwerk." *Kwartalnik Filozoficzny* 10: 46–76.
- ——, 1935. *Granice Nauki*. Lwów and Warsaw: Książnica-Atlas.
- ——, 1948. *The Limits of Science*, edited by E. Brodie. London: Kegan Paul.
- —, 1960. *Wielość rzeczywistości w sztuce i inne szkice literackie*, edited by Karol Estreicher. Warsaw: Czytelnik.
- —, 1961. *Pisma Filozoficzne i Logiczne*, edited by Kazimierz Pasenkiewicz. Warsaw: Państowowe Wydawnictwo Naukowe.
- —, 1967. "Antinomies of Formal Logic," translated by Z. Jordan. In *Polish Logic:* 1920-1939, edited by Storrs McCall, pp. 338–45. Oxford: Clarendon Press.
- ——, 2012. "The Principles of the Pure Type Theory," translated by Adam Trybus. *History and Philosophy of Logic* 33: 329–52.
- ——, 2017a. "The Tragedy of Verbal Metaphysics," translated by Adam Trybus and Bernard Linsky. *Journal for the History of Analytical Philosophy* 5(1): 1–20.

- ——, 2017b. "The Law of Contradiction in the Light of Recent Investigations of Bertrand Russell." In *The Significance of the Lvov-Warsaw School in the European Culture*, edited by A. Brożek, F. Stadler and J. Wolenski, pp. 227–90. Cham: Springer Verlag.
- ——, 2018. *The Plurality of Realities: Collected Essays*, edited by Karol Chrobak. Krakow: Jagiellonian University Press.
- ——, 2022. "A Short Polemic with Mr Roman Ingarden, doctor of the Freiburg University," translated by by Adam Trybus. *Journal for the History of Analytical Philosophy* 10(5).
- Dawidowiczówna, Alina, 1989. . . . Zeschniţe liście i kwiat. . . . Warsaw: Wydawnictwo Literackie.
- Dummett, Michael, 2004. *Truth and the Past*. New York: Columbia University Press.
- Estreicher, Karol, 1971. *Leon Chwistek: Biografia Artysty* (1884-1944). Krakow: Państwowe Wydawnictwo Naukowe.
- Feferman, Anita Burdman and Solomon Feferman, 2004. *Alfred Tarski: Life and Logic*. Cambridge: Cambridge University Press.
- Friedman, Michael, 2000. *A Parting of the Ways*. La Salle: Open Court.
- Grattan-Guinness, Ivor, 2000. *The Search for Mathematical Roots* 1970-1940. Princeton: Princeton University Press.
- Grelling, Kurt and Leonard Nelson, 1907. "Bemerkungen zu den Paradoxien von Russell und Burali-Forti." *Abhandlungen der Fries'schen Schule* 2: 301–24.
- Ingarden, Roman, 1922. "Recenzja z *Wielość rzeczywistości* Leona Chwistka." *Przegląd Filozoficzny* 25(3): 451–68.
- —, 1923a. "Wieloś ć rzeczywistości Leona Chwistka." *Ruch Filozoficzny* 7: 99–101.

- ——, 1923b. "Uwagi do ≪Krótkiej rozprawy»." *Przegląd Filo- zoficzny* 26(1-2): 100–04.
- —, 1925. Essentiale Fragen. Halle: Publisher Needed.
- —, 1931. Das Literarische Kunstwerk: Eine Untersuchung aus dem Grenzgebiet der Ontologie, Logik und Literaturwissenschaft. Halle: Salle.
- ——, 1973. *The Literary Work of Art*, translated by George G. Grabowicz. Evanston, IL: Northwestern University Press.
- ——, 2018. "The Logical Attempt at a New Formulation of Philosophy: A Critical Remark," translated by Bernard Linsky. *Journal for the History of Analytical Philosophy* 6(6): 1–6.
- ——, 2022a. "Review of: Leon Chwistek *The Plurality of Realities*, 1922'." *Journal for the History of Analytical Philosophy* 10(5).
- ——, 2022b. "Review of Leon Chwistek's The Plurality of Realities, 1922/1923 from Ruch Filozoficzny." Journal for the History of Analytical Philosophy 10(5).
- ——, 2022c. "Remarks on "A Short Polemic." *Journal for the History of Analytical Philosophy* 10(5).
- Jadacki, Jacek Juliusz, 1986. "Leon Chwistek—Bertrand Russell's Scientific Correspondence." *Dialectics and Humanism* 13(1): 239–63.
- Kuliniak, Radosław, 2020. "Wprowadzenie do polemiki Romana Witolda Ingardena z Leonem Chwistkiem." *Ruch Filozoficzny* 76(1): 91–103.
- Leśniewski, Stanisław, 1992. *Collected Works*, edited by S. J. Surma, J. T. J. Srzednicki, J. D. Barnett and V. F. Rickey. Dordrecht: Kluwer.

- Linsky, Bernard, 2011. *The Evolution of Principia Mathematica*. Cambridge: Cambridge University Press.
- McCall, Storrs, 1967. *Polish Logic* 1920–1939. Oxford: Clarendon Press.
- Menger, Karl, 1994. *Reminiscences of the Vienna Circle and the Mathematical Colloquium*, edited by L. Golland, B. McGuinness and A. Sklar. Dordrecht: Kluwer.
- Mróz, Tomasz, 2015. "Dwa listy Leona Chwistka o jego inspiracjach i stanie filozofii w Polsce." *Rocznik Historii Filozofii Polskiej* 8: 5–23.
- Nelson, Leonard, 1908. Über das sogenannte Erkentnisproblem. Gottingen: Vandenhoek & Ruprecht.
- Pap, Arthur, 1944. "The Different Kinds of a Priori." *The Philosophical Review* 53(5): 465–84.
- Pelletier, Francis Jeffry and Bernard Linsky, 2018. "Verification: The *Hysteron Proteron* Argument." *Journal for the History of Analytical Philosophy* 6(6): 7–35.
- Russell, Bertrand, 1912. *The Problems of Philosophy*. London: Williams and Norgate.
- ——, 1914. *Our Knowledge of the External World*. Chicago: Open Court.
- Ryle, Gilbert, 1927. "Review of Essentiale Fragen: Ein Beitrag zum Problem des Wesens by Roman Ingarden." Mind 36: 366–70.
- Simons, Peter, 2020. Stanisław Leśniewski. Stanford Encyclopedia of Philosophy (Fall 2020 Edition), https://plato.stanford.edu/archives/fall2020/entries/lesniewski/.
- Stadler, Friedrich, 2015. The Vienna Circle. Vienna: Springer.

- Thomasson, Amie L., 1999. *Fiction and Metaphysics*. Cambridge: Cambridge University Press.
- —, 2007. Ordinary Objects. New York: Oxford University Press.
- Turner, Jason, 2010. "Ontological Pluralism." *The Journal of Philosophy* 107(1): 5–34.
- van Fraassen, Bas C., *The Scientific Image*. Oxford: Clarendon Press.
- Whitehead, A. N. and Bertrand A. Russell, 1910. *Principia Mathematica*. Cambridge: Cambridge University Press.
- Witkiewicz, Stanisław, 1992. *The Witkiewicz Reader*, edited and translated by Daniel Gerould. London: Quartet Books.
- Wittgenstein, Ludwig, 1922. *Tractatus Logico-Philosophicus*, edited by C. K. Ogden. London: Routledge and Kegan Paul.
- ——, 2012. Wittgenstein in Cambridge: Letters and Documents 1911-1951, edited by Brian McGuinness. Chichester: John Wiley and Sons.
- Woleński, Jan, 1985. Filozoficzna szkoła lwowsko-warszawska. Warsaw: Państowe Wydawnictwo Naukowe.
- ——, 1989. *Logic and Philosophy in the Lvov–Warsaw School*. Dordrecht: Kluwer.

A review of Leon Chwistek's *Wielość* rzeczywistości, Kraków 1921

Roman Ingarden

Translated by Adam Trybus with the assistance of Bernard Linsky

The treatise aims to determine the meaning of the term 'reality'. This is to be done by *working out the range*¹ of the notion of reality obtained using the "constructive method" that is intended to replace the original concept¹¹ of reality, not only in the scientific system but also in practice. The latter, with the author not providing us with its meaning even in vague terms, is supposed to be — given the fluidity of its range — unfit for scientific purposes. Moreover, it is even "not sufficient in terms of finding one's way among a number of fundamental phenomena." The two other methods of dealing with what the author calls "the problem of reality" — the first supposedly used by Hegel, Nietzsche, Bergson and the second by "Husserl, Meinong etc." — are rejected by the author as inadequate. The end result of making use of the "constructive method" is the construction of not just one but four different notions of reality.

When introducing these, the author starts with the notion of existence as one that is "incomparably (sic!)ⁱⁱⁱ more general". The author views this notion in the manner of Whitehead and Russell, the approach he finds sufficient. However, it turns out that its definition is not unambiguous, and this ambiguity carries

over to the notion of reality contained within it. In order to get rid of this ambiguity, we have to — according to the author — focus on the relations between this and other notions. In the case these notions are independent, one should choose the statements that are true "independently of the ways in which one can determine the range of such notions". The chosen statements are then grouped by the author into four systems of axioms, determining the four notions of reality.

These systems are as follows: I. The reality of impressions: (1) If x is directly given, then x is real; (2) If x is visible, then x is real; (3a) If x is real, then x is visible or is directly given; (4a) the statement "x is visible" is equivalent to the statement "x is visible in reality"; (4d) for some x, the statement "x is visible" is not equivalent to the statement "x is visible under normal circumstances".50 II. The reality of imaginations: This system differs from the previous one only in that (4a) is replaced with (4b): "For some x, it is not true that the statement "x is visible" is equivalent to the statement "x is visible in reality". ⁵¹ III. The reality of objects: This systems upholds (1), (2), and (4a) from system I and replaces (3a) with (3b): "Certain real objects are not directly given". Also, (4d) is replaced with (4c) "that identifies the range of the notion of visibility with that of the notion of visibility under normal circumstances" ($wx \equiv w_n x$). Moreover, two new postulates are added: (5a) "A part of a real object is real" and (5b) "An object having a real part is real". IV. A physical reality: this system differs from the previous one only in that (4c) is replaced with (4d). The systems I, III, IV are, according to the author, consistent; whereas the problem of consistency of system II is sidestepped by him.

Yet, as the author has it, there are not only four *notions* of reality but also *four* different *realities* corresponding to these notions.

¹[Arabic numerals are used for footnotes in the original. Roman numerals indicate remarks by the translators.] Ingarden uses the term "zakres." This should be read as "intension" rather than "extension".

[&]quot;Ingarden uses "pierwotne pojecie". We follow this translation as "original concept" uniformly in what follows. "pierwotne" can can also mean "primitive" and "primary".

 $^{^{\}mbox{\tiny iii}}$ All such interjections are Ingarden's own editorial commentaries, unless marked otherwise.

⁵⁰This postulate is not formulated by the author in plain words, instead he uses a symbolic description: $(\exists x)$. – $(wx \equiv w_n x)$

⁵¹In a symbolic form: $(\exists x)$. – $(w \equiv w_j x)$

This statement, in his view, lies at the core of the treatise and is the reason for its groundbreaking character. We shall see in due time how the author justifies this statement. All these four "realities" are to be "equally valid". The meaning of this phrase, however, is not explained by him. He is also not concerned with how these relate to each other. The number of realities is further multiplied as a result of the author differentiating between the reality in which we exist when speaking about the plurality of realities from these realities themselves, and so on. In addition, we can move from one reality to the other but this is often independent of our own will. Finally, not all of the four mentioned realities have existed for the same length of time. The reality of impressions was apparently only created when impressionism in art had began to emerge, whereas the reality of imaginations is apparently only being created in our times — in relation to futurism (sic!). The character of reality agrees, according to the author, in some strange way with the character of the hypotheticality that, "in one way or another", is to be applied to the physical reality.

So much for the theory of the plurality of realities itself. The rest of the treatise is filled with additions and various consequences which cannot be described here. Let us only note that the author is particularly involved in implementation in the area of the theory of arts. Although — as the author claims — the so-called "true" art is alien to "copying" any reality, each of the four types of painting, resp. sculpture, is nevertheless closely related to one of the four realities: primitivism with the reality of objects, realism with the physical reality (sic!), impressionism with the reality of impressions, and futurism with the reality of imagination. None of these types — the author concludes — is better or worse but, in principle, these are all equally valid; one senses however, that the author particularly emphasises the equal status of futurism when compared with the other types of art.

The treatise creates so many doubts related to so many various areas that we will limit ourselves here to describing only a selected few, focusing mostly on methodological issues.

Every author has the right to choose the method he sees fit, without having to justify anything to the reader. However, when an author starts with a description of a number of methods and eventually settles in on one of them, heiv is obliged to: a) have a thorough knowledge of the described methods, b) show that the rejected methods are unfit for the particular problem at hand and that his chosen method is suitable and indeed superior to the remaining ones. In our opinion, the author failed to address criterion (b) in a satisfactory way and his attempt at doing so raises serious doubts whether his way of addressing (a) is satisfactory. I shall only concern myself here with his approach to Bergson and Husserl's phenomenology.

According to the author, Bergson claims what follows: Reality is infinitely more complex than what can be described in words. Every attempt at describing it is a distortion and *hence* leads to contradiction.⁵² The task is therefore to "feel the essence of becoming, and not to understand what cannot be understood". "To that end, one can make use of a system of fluid notions, each of which can only be felt, and not understood" (p. 12). The method of Bergson is supposed to rely on making use of liminal notions, and if it so happens (as in the case of pure observations) that such notions are empty, then it is apparently no obstacle for Bergson, as "the meanings he attaches to the notions he uses are completely different than those resulting from the usual way of doing so".

These are supposed to be the symbols of mental acts of a special kind, which we admittedly cannot perform but the possibility of

⁵²A few lines before this statement, Dr. Chwistek claims that "Bergson starts with claiming contradiction in what is real" (p. 13). One notes that the contradiction between these two statements is due to Chwistek, not Bergson.

^{iv}We repeat Ingarden's use the masculine form when discussing generalities about persons. Polish has obligatory markings for gender.

which is intuitively felt by Bergson. In order to give the reader the idea of this intuitive feeling, Dr. Chwistek quotes a number of, more or less randomly selected, passages from "Matière et mémoire".

Regarding this recapitulation of Bergson's standpoint, it should be noted that it is so vague and, more importantly, so superficial, that one can indeed make use of Chwistek's own statement (p. 14) and say that it truly is one of those "often very naïve interpretations that eventually led to a distortion of the aim of the author". It is better not to recapitulate someone's standpoint at all than to do it in a way that shows that the author has merely familiarised himself with the words used in the works of Bergson, and remained alien to their true meanings. In any case, Chwistek's description does not reveal the reason why Bergson rejects the possibility of gaining knowledge about reality by means of the intellect. And this reason should not only be mentioned but also critically analysed, given that the author himself makes use of a certain, one could say, extremely intellectual method. And if Chwistek considers the reason to be given in the sentence "reality is infinitely more complex than what can be described in words", then this would testify to his complete ignorance of Bergson's theory of mind, not to mention that Bergson never explicitly says this. The manner in which the author cites Bergson also seems strange and pointless: after four or five sentences of Bergson's one finds the following reference: "Matière et mémoire, p. 203-263". Is this a way to encourage the reader to ensure the fidelity of the quotations?

A more important remark concerns the arguments given by the author against both the standpoint and method of Bergson. These are almost non-existent. For one cannot truly accept as an argument the statement that: "Bergson easily falls into unparalleled frippery, which in the quoted passages borders on the ridiculous" (p. 13). This assertion is, at best, an impertinence towards someone who is after all one of the greatest contemporary French intellectuals, an impertinence that is the more flagrant

given how little the author understands Bergson's standpoint.⁵³ The remark made by the author that Bergson's notions of pure observation and memory are empty also cannot be conceivably considered an objection, since Dr. Chwistek himself approaches these notions as mere examples, and so any particular opinion about them has no impact on the validity of Bergson's method. The charge that Bergson, despite his opposition to "the specified symbols" has to eventually make use of them, nevertheless is—notwithstanding its imprecise formulation—justifiable but not new at all. Finally, the remark that Bergson used such symbols in a "vague and imprecise manner" (p. 14) is not supported by any justification. Even if true, however, it would not be enough to reject Bergson's method.

We can only conjecture that the author rejects Bergson's method because the latter is considered a representative of "the metaphysics of fluid notions", whereas the author, as a matter of principle, only regards a theory worthwhile if it uses precisely defined notions with stable ranges and if it resembles a mathematical theory. Let us then examine the problem of these "fluid notions" in Bergson. The way Chwistek presents his objection creates the false impression that Bergson does not meet fundamental theoretical conditions regarding the use of notions. If Bergson rejects the use of any notational apparatus in acquiring knowledge of the real world it is not because of his dislike of notions with a "stable range". In fact, Bergson is not concerned with the range of notions at all but he certainly does assume that the notions should have stable ranges, i.e. unchanging in the case where the same notion is used within a single reasoning (deduction). He rejects, however, the apparatus of "set" notions that are available at the outset of a philosophical inquiry into reality, as he believes that: 1) their meaning is best suited for the re-

⁵³For the sake of precision, I should emphasise that I do not agree with Bergson and have severely criticized him.

vIngarden uses "określone symbole", which can also mean "fixed".

quirements of practical life, 2) notions, as intellectual creations, bring into consideration an entire system of formal structures (action schemata), which when applied to reality contribute to the creation of a false picture of that reality in terms of its formal construction, 3) as "notions" relate to reality in an indirect, non-straightforward, way these can at most be a result, a way of conserving the direct way of gaining knowledge, and not an instrument used to extend our knowledge of objects. Since, as it has been mentioned, such notions were not meant to be used for gaining disinterested knowledge, one should reject them and attempt to create anew notions of real objects that would not necessitate the use of action schemata and would not immobilise fluid reality. And it is here, while working on establishing new, philosophical, notions representing real objects that one has to rely on "intuition" and, in order to aid in that process make use of "flexible" notions, the definitions of which can always be adapted to the characterization of the objects they are to describe. Now, whether Bergson in the right and whether he is always consistent in his approach is quite another matter. One notices, however, how distant the description provided by the author is from Bergson's actual standpoint. In order to investigate the applicability of Bergson's method to the "question of reality" it would be necessary to: 1) clearly, unambiguously and exhaustively describe the problem that the author is dealing with (the remarks contained in the "introduction" of the book reviewed by us do not provide this, and even after the discussion on Bergson's approach, the problem is not defined in a clear way), 2) prove that the intuitive method of Bergson is not fit to solve precisely this problem at hand, or alternatively that 3) it cannot yield any valid results at all, given certain fundamental flaws — This, as it is clear from the above, has not been achieved by the author.

What, then, is the phenomenological method as described by the author? — It is to rely on a naïve (sic!) analysis of the meaning of the words" (p. 14), it is to focus on "the search for

the meaning of the words common to all human beings" (!).54 The author believes that "the task of searching for this meaning by means of analysis is not a priori unattainable" (p. 14). Yet, it is the scarcity of results obtained by using this method that indicates that one would not get very far using it.55 This is caused by the fact that the original notions (the understanding of which — and this is our guess — is the one that is common to all human beings) were developed under the conditions of practical life and are ill-suited for the purposes of scientific inquiry. Their meaning can be determined using some trivial inferences and one cannot move beyond that level. In addition, even this trivial part of the task can ensnare us in partisan attitudes, an example of this is the supposed approach of phenomenologists towards non-Euclidean geometries. Apparently, they consider them "word-plays that can be used as brain-teasers". "The disciples of Husserl and Meinong" (!) are supposedly completely in the dark with regard to the things that are well-known to every diligent student of geometry. If, therefore, phenomenology cannot "explain this relatively simple and, in some way, trivial fact of the existence of many geometries" (p. 15), then how can it be used in the explanation of reality, which is "far more complex"? (p. 15).

⁵⁴Emphasis is mine, p. 14.

⁵⁵It should be noted that this negative evaluation of phenomenological work can be found only at the beginning of the treatise within the discussion aimed at rejecting the method. However, already on p. 47 we find remarks showing some recognition of the work by phenomenologists "that" — allegedly — "provided notions required for constructing the system of natural realism". The remarks on p. 95 go even further, as we read there that: "a richness of notions that can be used in the analysis of such systems is found in the works of Husserl and his school". Such a duality of opinions — which is, however, never supported by any argument — serves to disorient the reader not familiar with the works of phenomenologists, and shows that the author was unable to settle on a firm opinion in this matter. Using this occasion, let me note that it is a gross misunderstanding, if the author believes that "the material-a priori knowledge" has anything to do with "the reality of imagination". Such a close proximity to the reality of futurists would be a little disturbing to the phenomenologists, to say the least.

The reader not familiar with the works of Husserl and his disciples has to, first of all, come to the conclusion that the level of contemporary German philosophy is very low, if this Husserl, who over the last two decades has made such a name for himself in Germany, utters such trivialities and nonsense. We, on the other hand, are not surprised in the slightest that the author rejects the phenomenological method as he understands it. For the task of trying to find the "meaning common to all human beings" is so grotesque that we would not have trusted the researchers who had sought such a thing. We are only surprised that the author does not consider this task to be "a priori unacceptable". This demonstrates that: 1) the author is completely unfamiliar with the works of Husserl or knows very little of them, in any case does not understand them at all, and 2) he is not well-versed in the problems of philosophical logic and epistemology. His bold remarks, accusing phenomenologists of not even having the knowledge available to a diligent student are therefore the more surprising. The disorientation of the author is so vast that he is even unaware that there are no "disciples of Husserl and Meinong", not to mention his lack of knowledge of all the antagonisms between the two philosophers and their students. He also insinuates that phenomenologists take a specific standpoint on non-Euclidean geometries (which are not as simple as the author believes them to be!), a standpoint nowhere to be found in any phenomenological work known to me (and I know all the works by phenomenologists, bar some post-war publications, which have appeared after 'Wielość rzeczywistości' was published, and v. 1 of "Philosophie der Arithmetic" by Husserl, a treatise written in a psychologistic spirit that cannot be considered phenomenological). Admittedly, when saying that, the author does also quote Meinong, but this only testifies to the level of his confusion. And even if phenomenologists approached matters in the way the author wants them to, he does not provide any substantial argument against that point of view; and finally, even if the author were right that the described approach is wrong, this would have

no bearing on whether the phenomenological method is suitable for the analysis of reality. The author is also apparently unaware of the fact that the problem of the essence of reality has been a focal point for phenomenologists for a number of years and that the following publications contain a number of preliminary research results: 1) "Ideen zu einer reinen Phaenomenologie" (1913) by E. Husserl, 2) "Ueber den Empfindungsbegriff" (1912) by H. Hoffman and 3) "Zur Ontologie u. Erscheinungslehre der realen Aussenwelt" by H. Conrad-Mauritius (1916). The research conducted there shows how difficult and complicated the problem of reality is. The author in his work did not even get as far as to familiarise himself with a primer on these difficulties.

Given all this, we are forced to conclude that the author's manner of critiquing the works or methods of others has no place in a scientific publication. The level of discussion of the views of other philosophers (Nietzsche, Poincaré) is not much higher and the discussions themselves do not bring anything of fundamental importance in terms of the choice of a method.

Having rejected other methods in such an unsatisfactory way, the author simply states that "there only remains 'the constructive method', which finds its firmest basis in formal logic" (p. 17). Given, however, that "simply providing a theory of reality is not enough, since one has to devise a theory of reality that would take into account all the practical needs related to this problem" (p. 17), "we cannot merely content ourselves with the use of a system of formal logic but we are forced first to reconsider the design of this system from its foundations [...] and only then to base our construction on the results of this investigation" (p. 17). We are completely at loss in understanding why "a theory of reality is not enough", what "all those practical needs related to this problem" are, and why any practical considerations would have to play any role in answering the purely theoretical question "what is reality?". We do not know why the author decides on this particular method, founded on a system of formal logic, when four pages before he presents "an uncontested fact" — (a claim, which is yet again left unsupported by any argumentation by the author!) — "that one cannot think of creating a unified system based on the principles of formal logic" 9p. 13) — but let us ignore all this in anticipation of the announced "redesigning of the foundations" and the explanation of the method used by the author.

Unfortunately, the reader is left disappointed. The author first describes the properties of "a formal system" and its relation to notions as initially conceived, but he does not clearly indicate what in that description comes from Russell and what is the result of his own redesign efforts. Yet, on top of an extremely formalistic approach to the problem of *truth*, which "is to be valid only within a given system"; on top of the view that the fundamental statements are considered true merely because these "express the relations between symbols that in themselves are meaningless and are really furnished with meaning (!) only as a result of their presence in these statements" (p. 21) — the reader discovers a claim unconnected and in fact inconsistent with the above, most likely being a result of this fundamental revision yet again unsupported by any argument, namely, that "introducing those specific definitions cannot be an accident but has to be determined by taking into account the original ways of defining these notions, which form the basis for the ones to be defined" (p. 24–25). The task of philosophy is therefore to "provide a definition of such a notion that would in practice (?!) replace the notion as originally defined" (p. 25). Why? What do we care about the notions as used originally? After all, according to Dr. Chwistek, these are reliable neither in life nor in science. What makes us believe that a formal (or otherwise) theory should involve notions with meanings similar to the notions as used initially, if it is only within the limits a given system that a notion of truth can operate? The argument in support of this is not given by the author and it cannot be otherwise for when the notion of truth is defined in the above manner, it follows that one is at complete liberty when it comes to constructing the fundamental notions in

question. And the author's pragmatic approach to this problem does not serve him well: it falls into a petitio principii fallacy inconsistent with statements that are also accepted by the author. A procedure is "practical" when it leads to the realisation of the assumed goal. One of the requirements for achieving the goal, if it is to be consciously accomplished and is not as a result of fortuitous coincidence, is to identify the conditions of the given situation that determine necessary conditions for achieving the goal. This assumes that one needs to gain knowledge about the situation and these conditions; and thus presupposes a different notion of truth than that accepted by the author. Therefore, whoever — such as the author — claims that it is for practical reasons that the fundamental statements (or notions) are constructed within a given theory, is in effect forced to accept the existence of a certain objective way of acquiring knowledge, and so the existence of objective truth. This, notwithstanding the fact that one is often making false claims regarding certain specific matters. Making such false claims is not in the least related to the impossibility of acquiring the truth but it results from the introduction of certain states of affairs into the chain of reasoning that can objectively be said to not to belong to the given theoretical problem area. We do understand that the author willing to investigate the problem of reality cannot openly opt for the construction of notions based on a simple "sic iubeo" [I order this], and thus having gotten rid of the possibility of objective knowledge and truth, seeks help in pragmatism. Would it not be better in such a case, however, to abandon the essentially sceptical formalist approach to truth? Would it not be better to give up on the "constructive method" completely?

Not that the method itself is described in any great detail by the author. In order to find out more, therefore, it would be more beneficial for us to have a closer look simply at what he does.

The notion of reality is, according to the author, an ambiguous one. Yet, many other notions used in "determining the range" of the notion of reality are also ambiguous. Not to worry! — seems

to be the author's answer — let us choose such statements that are "true" independently of the way in which the range of the supporting notions might be determined, and use them to create "an axiomatics" of the notion of reality. First of all, what is the meaning of "true" in this context? Can it be this truth that "is only operational within the system"? If we understand correctly, however, this truth is reduced to a mere 'consistency'. How one is to apply this to an axiom? The author senses this problem and has at his disposal a second notion of truth that, as it has been described above, can only be a property of a sentence if it describes "the relations between symbols that are in themselves devoid of meaning and are really furnished with meaning only as a virtue of them being in such statements". We confess that we do not fully understand what the author has in mind. What are those relations between symbols that are devoid of meaning? A symbol is a physical object or, to be precise, a typical shape of a physical object (e.g. a drawing, a blot, a musical tone etc.) that, owing to an agreement has been endowed with a function of "expressing" some ideal content (meaning, sense). To perform this function, the symbol does not have to exist in reality (contrary to the case, when sign is a signal, cf. E. Husserl, Logische Untersuchungen, II, p. I, Chapter 1, §1–4), since even the represented symbols are symbols indeed; one of the requirements is, however, the existence of an association between its shape and the ideal content that it "expresses" and obviously the content itself. "A symbol devoid of meaning" is not a symbol, even if it is of a shape similar to the ones that are usually chosen by us for symbols. Therefore, "abracadabra" is not a symbol; similarly, an insect's leg that got stuck accidentally on a papyrus with some Ancient Greek inscriptions in a place where it looks like a diacritic mark unknown to antiquity is also not a symbol. There might be cases where we do not know the meaning of a drawing and yet, owing to its similarity to the symbols we use, we consider it as one of these. However, at the moment when we realise that not only do we not know the meaning of the drawing but that there is not a

meaning attached to it at all, the drawing stays merely a drawing, and does not become a symbol without "attaching" a meaning to it. The author could say to this that there are symbols "devoid of meaning" that yet do not stop being symbols after all. However, what would that mean? Only that their content consists in the meaning of the word "anything", the range therefore covers all the possible objects, perhaps bar the symbol itself. Therefore, there is a meaning here after all. Finally, one can talk about the form of a symbol as such, e.g. of a function of expressing "some" content by "some" drawing or an acoustic motif. This form of a symbol cannot be, however, realised. This is because at the very moment we would like to do this we move from the form of a symbol to the symbol itself, since we are forced to choose a certain specific drawing shape (an acoustic motif) and to pin down the meaning (even in the most general terms, stating that this symbol denotes "anything"). Mere forms of symbols cannot be used to build statements. If, therefore, the author talks of "symbols devoid of meaning", then he is either not talking about symbols at all, or what he says is a contradiction in terms. If we take a collection of such "symbols" that are truly devoid of meaning, that is a collection of drawings, and place them next to each other, then there will be no relations among them apart from those of geometric nature, about which we can obviously say a lot but in some other statement written using symbols that are full of meaning. The resulting sequence of drawings, however, cannot be said to be any kind of a statement or a theorem; it is a drawing that, naturally, cannot be said to be either true or false and at the same time is not fit for use in any sort of a theory.⁵⁶

Trying to figure out what the author has in mind, we conjecture that according to him the meaning of such symbols can be described as "anything" accompanied with a certain *reservatum*

⁵⁶The reason why we focus on this problem is that the author's approach is similar to the approach of a number of Polish philosophers that call themselves logisticians. We this it is important to analyse this problem in detail hoping that this will contribute to resolving at least some of the misunderstandings.

that a choice of certain specific meaning having a smaller range depends on some subsequent phases of the interchange. The possibility of such symbols, or rather of such a phase in the creation of symbols, is accepted by us without reservation. What we focus on is the way in which such subsequent phases are said to be realised. Dr. Chwistek, together with other logisticians, believes that the initial meaning of such symbols ("anything") will become narrower if a number of such symbols having various physical shapes are put in a number of ways next to each other. (This is referred to as constructing a set of axioms). I think that if only the logisticians, and Dr. Chwistek in particular, did exactly as they describe, e.g. if they tried to establish the meanings of such symbols by concatenating them and refrained from attaching meanings taken either from positive sciences or from the content of the "original notions", then it would have instantly become clear that such actions can never lead to establishing, for example, a system of axioms of reality, arithmetic, or logic. For what could possibly be the result of creating various concatenations of such symbols? It can only result in combining or separating certain signs, in creating certain rules allowing or prohibiting certain signs to be grouped together. As a result of applying such rules, the meaning of a given symbol does not change from the initial "anything", since the effect of grouping the symbols in a particular way can only lead to a proviso that e.g. a given symbol *x* can only be placed next to some other symbol, say, y. Such a rule applies to the symbol itself and not to the meaning it represents. It is quite apt, when Kazimierz Ajdukiewicz⁵⁷ compares such symbols to chess figures: they merely represent a system of allowed or prohibited moves and — an element that is absent in the case of the chess figures! — the meaning that can be described as "anything". The meaning of such symbols can only be made more precise than the initial "anything" when

one, in concatenating the symbols, makes use of meaningful and unambiguous categorical and logical expressions, such as "is", "and", and "or". Then e.g. a meaning of the symbol connected to another using the expression "is" can be made more precise in the sense that it can no longer be the broadest understanding of "anything" but it has to be this "anything" that can, or has to, be a *property* of some other "anything". Meaning can only come from meaning with the meanings modifying each other when used together, whereas a combination of drawings can only be a drawing itself. Yet, even after the introduction of those categorical and logical expressions that, given their meanings, make the meaning of the symbols they connect more precise, we are still in the realm of the most general relations between different kinds of "anything". What a far cry from a system of axioms for a given domain — but can we, in fact, when trying to construct such a system use the method as thus described?

Before we deal with this question, let us briefly discuss the above-mentioned "truth" of the axioms containing the symbols that mean "anything" bounded together only by means of expressions of a categorical and logical character. Such axioms are to be true because they "express the relations among the symbols, etc.". First of all, no statement expresses relations among symbols that are its own constituent elements. It is surprising that the author, who accepts Russell's type theory, should be prone to making such a mistake. Statements express relations between objects that are related to the meanings of the symbols used. Secondly, can it be really the case that a statement becomes "true" solely by the virtue of expressing certain relations among objects? And what if a statement attributes to the objects associated with the symbols relations that do not really hold among them? Finally, what does "being true" precisely mean here? Surely, this is not the kind of truth limited to a given system. Therefore, is it that by "being true" the author presumably means only a property of a statement, namely that the statement expresses certain relationships among objects denoted by the symbols used, as

 $^{^{57}\}mbox{Cf.}\,$ K. Ajdukiewicz, "Z metodologii nauk" [On the methodology of sciences], Lwów 1921.

postulated by the meaning of the statement, no matter whether such relations "truly" hold? The author does not expand on this, yet given the novelty of his approach to the problem of truth, he ought to have done so. Is it possible, however, that the author, when designing an axiom system that is to capture the notion of reality, makes use of such a notion of "being true"? In other words, is his theory regarding his own actions consistent with what he is doing? Surely, in whichever way we decide to combine the term "reality" with the terms "directly given", "visible" (cf. Axiom 1: "If x is directly given, then x is real")⁵⁸, then such statements alway express a relation among objects associated with the terms, therefore, given the above explication of the notion of "being true", they are always "true". And why talk about the "ambiguity" of terms beforehand, when these should rather all still be "devoid of meaning" according to the author?! Therefore this "being true" must mean yet something else and in the place of symbols "devoid of meaning" we immediately obtain symbols that are laden with meaning, and a complex meaning at that. Hence, the author's theory regarding his own actions is completely divorced from the actions themselves.

Let us assume, however, that the author (being inconsistent) uses the notion of truth in a way that is most often employed both in everyday life and in the sciences (i. e. a statement is "true" if there exists such a state of affairs that is associated to this statement), furthermore, let us assume that the symbols are not "devoid of meaning" at all but, instead, these are everyday words, the meaning of which is neither clear nor unambiguous in our minds. In such a case, however, can searching for true

statements independently of the way in which the range of the terms is determined help us realise our goal? The goal, as the author has it, is to construct a notion that would replace the respective notion as originally conceived in practice. What is meant here by "practice"? — everyday life? Science does not care what kinds of notions are used in everyday life. Perhaps it is science then? — as when dealing with various theoretical problems appearing e.g. in theory of knowledge, metaphysics, ethics? But in such situations we do not care the slightest about notions "replacing" the originally used ones: we are interested in such notions as can express the essential features of objects, independently of what "the originally used notions" turn out to be. It is not even necessarily about constructing notions corresponding to the same objects, as about the originally used notions, for it may often emerge that there no objects correspond to the originally used notions. Therefore, we can only really be interested in objects and their essential properties and try to construct notions that faithfully represent these essential properties. It would seem that, in order to realise this task, we have to focus, on the objects in question and, first and foremost, our task is to gain a detailed knowledge of such objects. Instead, Dr. Chwistek, after presenting the three notions by means of "propositional functions": 1) x is real, 2) x is directly given, 3) x is visible suggests suggests that we choose those statements that are true independently of the way in which their range is determined. Can we find such statements at all? Can this be done given that, as the author himself admits, each of these notions, and therefore the statements themselves, are ambiguous? How can we find out whether a given statement is true,⁵⁹ if we do not know what it really says? In addition, we are not allowed to remove this ambiguity, to perform any analysis, in order to refer to the objects! For, in this case the statements do not provid us with a uniform state of affairs. How can we then try to figure out

 $^{^{58}}$ Let us note here that all the terms: 1) "x", 2) "directly given", 3) "real" are to be devoid of meaning according to the described approach. On the other hand, if, in line with our corrections, the meaning of all these is "anything", and, if owing to the specific combination presented in the above axiom this is supplemented by certain operational rules, that meaning is made more precise as a result of the terms being combined with the following categorical expressions: "if-then" and "is".

⁵⁹In the sense described above.

whether such statements correspond to some state of affairs in reality? When the task is described as above, our attempts can lead to one of the two possible outcomes: either 1) we assume one of the every-day meanings assigned to the symbols that belong to the statement, or 2) we assume that each of the symbols (apart from the categorical and logical expressions) means "anything", with the proviso that the "anything" related to one symbol is different than those related to other symbols. The second case has been already discussed; while in the first case one is faced with complete arbitrariness and the inability to establish whether a statement, so interpreted, is true, since we lack the required tool: a direct knowledge of the objects in question. In addition, we will not be able to realise the goal of the entire endeavour. This goal has not been, admittedly, stated by the author, but we can tease it out. The point is to construct the fundamental notions in such a way that we obtain a perfect apparatus of unambiguous and precise notions to use with unfailing certainty in all our mental operations. In this case, instead of one, we are provided with as many as four axiom systems. We, however, would be content with a single one that was fit for the task at hand. Whereas each of the systems is ambiguous or unclear as the secondary notions which determine the main ones are perfectly ambiguous and every reader is free to pick those meanings towards which he feels a particular inclination. Instead of certainty, order, and clarity, we are presented with complete chaos and forced to begin ab 000.60

Therefore, the "constructive method" fails. And we cannot, really, demand that the author support it with arguments for a closer look reveals its complete emptiness.

How does the author now prove the existence of four realities corresponding to the proposed sets of axioms? This, after all,

lies at the core of his treatise. Let us see what the author has to say in that matter: "From our point of view, the extra-sensory reality of Russell is one of the possible realities and the point is not how to reach this extra-sensory reality but that there are more than one reality accessible to us through our senses, since we have either impressions and complexes of impressions, that cannot exist outside our cognitive experience or objects existing outside of our cognitive experiences, parts of which are completely undetectable. This duality is a feature of each individual object, e.g. the lamp I am presently looking at. By saying that it is a single real object that can be understood in two ways, I would have settled the question of the relation of reality and sense knowledge by means of an hypothesis. If we wish to avoid it, we have to agree that there are at least 2 realities capable of being known using senses (at least partially) "61 (p. 35). And continues — on p. 36 — "We do not have, however, any a priori criterion that would allow us to decide whether the constituents of our sensations, into which in certain situations our cognition can be decomposed are real or whether such elements are simply the products of our minds...".

We cannot, and do not want to, enter into a discussion of "constituents of our sensations", "objects", their relations, etc., and whether it is truly impossible to show which of these "really" exists. In order for such a discussion to be on a scientifically acceptable level one would have to first and foremost abandon this sphere of generalities and simplifying remarks that the author seems to inhabit, and undertake a far-reaching analysis of all the elements at play — and this is an endeavour that, despite all the work that has already been done on that topic by some other philosophers, will most likely not be in a conclusive state for many years to come. We only wish to direct attention to the way the author proceeds with his own analysis. Since we cannot — so the author believes — decide which of the cognitive approaches can provide us with objective knowledge of the

⁶⁰We, for example, could never agree on such an interpretation of the expression "directly given" that seems to emerge from a number of author's remarks. We cannot even consider it a serious proposal. Given the method used by the author — who is to judge which one of us is in the right — it could equally be both of us.

⁶¹Emphasis mine.

world, we can assume that *each* of these approaches provides us with such a knowledge and hence all that "appears to us" we accept as "real"! Reasoning that stems out of an extreme fear of introducing some kind of "arbitrary hypothesis" — a fear, we emphasise, which is quite surprising in an author who bases his constructs on an arbitrary "*sic iubeo*" — leads to an introduction of an equally arbitrary hypothesis, the introduction of which is in addition not justified by anything more than this overblown fear of arbitrariness of other hypotheses. For, the mere fact that my cognition is filled with different types of data in different situations, has, emphatically, no bearing on the "realness" of such data at all.

We hope that discussing certain methodological issues related to the treatise gives the reader an idea about what to expect from it, and that what has been said is enough to conclude that by following such a protocol, it would have been very hard for the author to reach any valuable conclusions at all.

Finally, one small remark spurred by a statement from the review by T. Kotarbiński: the statement we, by the way, also believe to be true. Prof. Kotarbiński states that an important and interesting part of the treatise is related to the application of the main hypothesis expressed in the "Wielość rzeczywistości" to the theory of art. No doubt, the problem of distinguishing fundamental types (styles) of works of art and considerations of whether each of these corresponds to a specific domain of reality or a specific picture of the world connected with a specific cognitive approach of the subject — is very interesting and important for both history and theory of art. Yet again, however, the methodological apparatus the author employs in hope of addressing this problem is highly unsatisfactory. Not to mention that one should, when doing so, have the basic question of the "theory of reality" solved and Dr. Chwistek's book unfortunately fails us in that respect. But first and foremost one should make the effort of collecting rich material on the history of art in order to perform a comparative analysis of this experiential material which should

be then presented to the readers in the form of reproductions, to *show* that certain styles have their own characteristic features corresponding to a given reality. The author's reasoning, devoid of all that, is therefore lacking in power and cannot be considered sound. I have been convinced that this problem is not as easy as the author would have it after reading Prof. Wölflin's "Kunstgeschichtliche Grundbegriffe", to which I allow myself to point the author's attention. This book is several hundred pages long and is rich in reproductions, yet it is only concerned with a number of differences between two styles. I have the impression that, had the author followed this path of historical and comparative studies, he would not have claimed, perhaps, that realistic works of art recreate a"physical reality".

A Short Polemic with Mr Roman Ingarden, doctor of the Freiburg University

Leon Chwistek

Translated by Adam Trybus with the assistance of Bernard Linsky

In the last issue of *Przegląd Filozoficzny*, Dr. Roman Ingarden presented a "review" of my book entitled *Wielość rzeczywistości*. This "review", written in a style reminiscent of scholastic pathos, complete with the use of *pluralis maiestaticus*vi is apparently intended as a just rebuke of an ignorant savage by a scientist of world-wide proportions that knows all the details of the philosophical movements in Germany and elsewhere. Acting in accordance with this tenet, the author, not willing to go deeply enough in his analysis, simply states that I do not understand or know the authors I described (Bergson, Husserl, Nietzsche, Poincaré), that I am unaware of important (?)vii results obtained by the Husserlians regarding the theory of reality, that I am not conversant with the problems of philosophical logic (?) and epistemology, and that my arguments are primitive and do not deserve consideration anyway.

I am convinced that a non-biased reader will approach the "review" of Dr. Roman Ingarden with considerable reservation and will not form any opinion about my book on its basis. The reader, aware that Dr. Roman Ingarden is an ardent student of Prof. Husserl and as such has taken upon himself the task of promoting the obscure ideas of his master in Poland, will not marvel at his righteous indignation (*Entrüstung!*) at the book containing serious reservations against the dogmatic claims made by

Husserlianism. This is not, therefore, about an opinion regarding my book but about the basis for discussion, which I consider to be the most important.

But what is there to be discussed with Mr. Ingarden? Perhaps that in Bergson's theory terms do not have fluid ranges but flexible (!) definitions instead?

Am I to explain to him the ways in which the original notions of a fraction or a real number as based on geometric images are replaced in theoretical arithmetic with constructs that initially seem artificial or even inconsistent with the original notions, but which nonetheless in practice replace those notions entirely?

Should I ask Mr. Ingarden to let me in on a secret and finally reveal what those extraordinary discoveries of the Husserlians truly are? Dr. Ingarden's study, entitled *Dążenia fenomenologów* [*The Aims of the Phenomenologists*], which seemed to me a perfect source of information, does not provide an answer to this question. The remaining literature on the topic is equally unrevealing.

What is there to be done therefore? Perhaps it is best to limit the discussion to a specific example.

Let us focus on the definition (!) of direct experience, repeated in the above-mentioned survey article by Mr. Ingarden. It turns out that Husserlians "understand direct experience as a cognitive act where the object is present in the flesh, or — as Husserl puts it — is corporeally self-present (*leibhafte Selbstgegebenheit*)". It is clear that we deal here with a sentimental literary language and quite ineptly at that. It is not even certain whether such a thought can be expressed in Polish. In any case, we are dealing here with a description that in practice must lead to an absolute arbitrariness of interpretation. Let us assume that, taking a planar sheaf of lines intersecting at a given point and a line in the same plane that does not contain such a point, I conclude that such a construction "occurred in the flesh". Assume further that the sheaf contains lines not intersecting with the line. Should I conclude therefore that Lobachevskian geometry is true? Should

 $^{^{}m vi}[$ Roman numeral footnotes are introduced by the translators.] *pluralis maiestaticus* is "the royal 'we' ".

 $^{^{\}mathrm{vii}}$ All material in parentheses, question marks (?), and exclamations (!) are Chwistek's.

we, therefore, consider Beltrami's ideas useless? I should like to know how Dr. Roman Ingarden answers this. So far I have been unable to find any answer to this question either in the books by the Husserlians or in my discussions with them.

Let me mention a remark made by Prof. Wilkosz who, when talking with me on this topic, expressed his amazement that the Husserlians, working in the era of such rapid developments in logic and mathematics as we are witnessing today, have not even for a moment considered joining forces in making progress in this direction, and yet are constantly touching upon the same problem area. Surely, however, every step of such a work would provide examples that make the task of finding the common grounds more feasible. Until that moment arises, the chances are not equal. On the one hand, logicians perfect the constructive method believing in its power on the basis of specific results in mathematics, whereas on the other hand, Husserlians talk about (philosophical?) logic using sentimental literary language, and thus avoid having to tackle concrete problems. To make matters worse, the "Polish Husserlian" announces the uselessness of the constructive method, thus in one stroke putting not only me but all the logicians in a pickle. This, however, seems too good to be true. It is interesting that our philosopher arrived at this conclusion without referring to the fetishes of Husserlianism such as the corporeal self-presence of objects but simply by following common sense and stringing together a couple of remarks. This is not a place to try to explain to Mr. Ingarden e.g. that Husserl talks about symbols denoting symbols he confuses logic and semantics (similar remarks apply to many other things as well). Let me just note that our Husserlian would be hard pressed to find a logician that claims to thoroughly understand the "notion of entailment", or a geometer willing to use his notion of a "straight line" independently of the axioms of Euclid or any others. It is evident that such notions are clear to us to a degree, as we are able to come up with a list of axioms involving these, but not clear enough so that we could move with certainty outside the system of axioms. Outside of such a system one encounters freedom of interpretation, never-ending discussions, calling each other names: simply put, all the least interesting aspects of science. Further on a call to authority appears (the world-renown philosophy!), fruitless inquiries into what such-and-such official philosopher had in mind writing such-and-such cliché, culminating in the abandonment of any meaningful scientific activity.

As Mr. Ingarden is so kind to provide me with bibliographical suggestions, let me return the favour and give him a suggestion of my own. I advise Mr. Ingarden to focus on any well-defined problem, for example the one described by me above, and to think it through.

In closing remarks, I must point out a certain abominable fact that touches upon the question of manners in writing.

Reading the Mr. Ingarden's review, one finds out that "the author (i.e. me) decides on this particular method, founded on a system of formal logic, when four pages before he presents an undeniable fact — (a claim, which is yet again left unsupported by any argumentation from the author!) — that one cannot think about constructing a uniform system based on the principles of formal logic that satisfies all postulates of life" (p. 13, /en 174) (emphasis mine, p. 459). Reading this fragment myself, I was amazed how I could write such an absurdity. After all, the main task of formal logic is precisely to build uniform systems. Viii Surely, the system I have outlined in the previous issue of *Przegląd Filozoficzny* is precisely of this kind, moreover that is one of the features of the system of natural realism presented in Chapter V of *Wielość rzeczywistości*.

I search for the mentioned page with trepidation and ...I find the following sentence written in italics "one cannot think about constructing a uniform system of reality based on the principles of formal logic *that satisfies all the postulates of life*" (the words omitted by Mr. Ingarden are emphasised). This is

viiiChwistek likely means "consistent" by "uniform".

similar to the situation when someone when referring to the sentence "There is no English philosopher who misquotes" used merely the part "there is no English philosopher" in the review. It goes without saying that I have not justified — either with my own or anyone else's argument — the sentence provided by Mr. Ingarden, since I did not write it. The statement provided by me on p. 13 relates to the opinions of those in support of irrationalism, and I happen to agree with that statement. In the subsequent parts of the book I provide my own justification for this statement by showing the possibility of constructing various systems of reality, each of which is obviously uniform and is able to deal with the problem of reality for as long as we remain in a specific state of mind, which is characterised by me as a result of staying in a given reality. When this state changes, one needs to use another system. When it comes to the reality talked about by the irrationalists, it is obvious that there is no uniform system that would represent it, as such a reality simply does not exist provided we agree that the sets "given" by the ambiguous notions are fictions. All this I attempted to dutifully present in my book with the hope that perhaps further studies of this topic will allow the final explanation of certain really interesting but complicated issues connected with it.

Mr. Ingarden refrained from getting deeper into such issues as he preferred to use a much simpler method. I am far from assuming ill will on this philosopher's side, it is hard for me, however, not to conclude that his urge to defeat the opponent forced him to use methods unacceptable in a scholarly discussion.

Remarks on "A Short Polemic"

Roman Ingarden

Translated by Adam Trybus with the assistance of Bernard Linsky

I allow myself to clarify, or respectively to state, the following facts:

- 1. Whether I am "an ardent student of Husserl" or for that matter any other personal attack against me made by Mr. Chwistek — is irrelevant to either the contents of Mr. Ch.'s treatise or the contents of my article.⁶² Attacking a person when one lacks a well-argued response to a critique is a method taken from the low-brow journalism that assumes a lack of criticism by its readers. In a scholarly publication this approach is out of place, to say the least. Therefore, in the future, I will only deal with those "Polemics" that focus on my statements and not on me personally and that present a well-supported critique. For now, let me turn a blind eye to the tone of this "Short Polemic", viewing it as a manifestation of the author's agitation — caused perhaps by the fact that my article laid the situation bare. Perhaps, it would have been better if I had "beaten about the bush" and not disclosed fully my opinion about the "plurality of realities". It might be that in such a case, Dr. Chwistek would have been more open to my argumentation.
- 2. I do not "simply state" that Dr. Ch. "does not understand or know" etc. but I deduce this as a consequence of the facts I quote. Dr. Ch. does not cite any facts that would refute my statements. By referring to his conversation with Prof. Wilkosz stating that "phenomenologists have not even for a moment considered joining forces in order to make progress

in that direction" (in mathematics and logic, most likely the algebraic one), Dr. Ch. indirectly admits to have been in the wrong, when groundlessly assigning phenomenologists a certain approach to non-Euclidean geometries. If phenomenologists had not dealt with these matters, it would be hard for them to hold any views in that regard.⁶³

- 3. Mr. Ch.'s booklet does not contain any "serious reservations (!)ix against the dogmatic claims made by Husserlianism" as 1) it does not present a consistent view on phenomenology at all (as it oscillates between a condemnation and a praise) 2) condemning it, the treatise points out without any justification "the scarcity of results", the danger of falling for "one-sided speculations", an inability to explain "this very simple and in a sense even a trivial (!) fact of the existence of many geometries". Clearly, Mr. Ch. does not even remember well what he himself wrote in his booklet.
- 4. I did not claim at all that "in Bergson's theory, the terms do not have fluid ranges but flexible definitions instead". I merely claimed that Mr. Ch's objection against Bergson is stated without any justification, moreover I opposed the phase when terms are already being created through obtaining direct knowledge about objects. In the latter case, according to Bergson, the terms have to have a flexible definition, able to be adapted to the results of the analysis.
- 5. The notions of a fraction and a real number in theoretical arithmetic and their relation to the original notions are not

⁶²Cf. Przegląd Filozoficzny 25, 3: 451-468.

⁶³It was only in December of 1922 that the following works on philosophy of mathematics appeared in Volume VI of *Jahrbuch f. Philosophie*: F. Landau, "Ueber die Bedingungen der Möglichkeit einer deduktiven theorie"; O. Becker, "Beiträge zur phaenomenologischen Begründung der Geometrie"; H. Lipps, "Paradoxien der Mangenlehre".

^{ix}Chwistek uses the word "uroszczenia" [literally: claims] which may have struck Ingarden as non-standard, hence the exclamation.

analogous to the notions of reality as constructed by Dr. Ch. and their relation to the respective original notions. Dr. Ch. does not take into account that there are objects that can be captured using precisely delimited notions (of the type of mathematical notions) and there are those that cannot. He also does not take into account that there are branches of knowledge the value of which is not lessened by the fact that they are not a reflection of the state of affairs in the realm of objects existing autonomously of the cognitive agent, and that there are fields of knowledge which would be rendered worthless by such a fact. The former include e.g. some mathematical theories, the latter e.g. a theory of reality.

- 6. Regarding the question directed at me about the sheaf of lines and a line, I can only say the following:64 the difference between two sets of axioms expresses the fact that the objects these systems relate to are different. Therefore, the fact that in one geometry we accept only one, and in the others, more than one straight line containing a point not on a given line, yet parallel to it, remains unproblematic as long as the same words (space, straight line etc.) being used in two different geometries and having different meanings according to different axiom systems does not incline one to think that they might denote the same objects that can be characterised in the same way. Whether there is a *genus* proximum for the Euclidean and non-Euclidean spaces, genus that would allow us to consider both the former and latter as spaces — requires separate and extended analysis. I have not made any statement in that respect and do not intend to do so now.
- 7. The way Dr. Ch. represents my arguments seems to suggest that I wish to replace the constructive method with the

- phenomenological one. I did not aim at this in the article that Mr. Ch. argues against. I only pointed to some serious flaws in the constructive method as used by Mr. Ch. in the context of the problem of reality. If I were to present my opinion in that respect, I can only state (justifying it would require some other venue) that in any case it is the phenomenological method, rather than the one used by Dr. Ch., that can yield interesting results when applied to the problem of the essence of reality.
- 8. I have not written in my article about symbols that denote symbols; and the entire topic of Husserl's views on logic discussed by Dr. Ch. has nothing to do either with the problem of reality or with my article. Having said that, and knowing a little about Husserl's views, I dare to doubt that "Husserl when talking about symbols denoting symbols confuses logic and semantics" or that "similar remarks apply to many other things as well" (!).
- 9. I have stated nowhere that the "notion of a straight line" is clear enough to allow one to "move with certainty outside the system of axioms". I also do not intend to search for a geometer willing to work "independently of the axioms of Euclid or any others". I only claimed that in order to formulate axioms and compose them in a system one has to first explain the relevant notions, so that these become completely, and not only "to a degree", clear. I claimed that one cannot explain the fundamental notions without a reference to direct knowledge of the objects of these notions. Without that, the ultimate understanding of what kinds of objects are the focus of a given deductive theory will always be at risk of subjective interpretations. Let me emphasise, moreover, that deciding on the axioms is not the mathematician's job and cannot be done using the mathematical method. The mathematician draws conclusions from the existing axioms and must remain within their realm.

⁶⁴This problem, however, cannot be easily dealt with in a couple of sentences and whoever demands that is probably unaware of the multitude of issues that need to be tackled here.

- 10. Dr. Chwistek is in the right when complaining about the incompleteness of the quotation. It has been distorted by omitting the word "reality". This has been caused by a regretful mistake in copying the text, one I discovered only when examining the already-printed issue of Przegląd Filozoficzny. If the honourable editors of Przegląd Filozoficzny had taken into account my request, written in August 1922, to send me the proofs (and the letter made it clear that I wanted to change certain things!), I would have most likely noticed and corrected this omission. Alas, no proofs were sent to me. Dr. Chwistek could not have known about these peculiar circumstances and I fully understand that he is vexed by this, however the mentioning of lack of "manners in writing" etc. is unnecessary to say the least.65 The remainder of the quote ("that satisfies all the postulates of life") I purposefully omitted as already included immediately above (in the same sentence) and in some other place as well, I speak about this notion of taking into account all the postulates of life; and so I thought it was clear that this is the only type of system taken into account here. Unfortunately, it is evident that I have misjudged this and it only served to weaken the argument I wanted to make. Since, if a system of formal logic is unfit for creating a uniform system of reality because it would not take into account "all the postulates of life", and these are the postulates that Mr. Ch. wants to take into account, it is puzzling why (and that was my only claim!) Mr. Ch. follows this extremely intellectualistic
- ⁶⁵At the end of October 1922 I spent a couple of hours in Warsaw, on my way to Lwów and to my surprise found out that my article had been already printed. I submitted a request to Dr. Borkowski, asking for the editors to send the text for corrections for couple of days. I was told this was not possible. I only received a confirmation from the printing press that Mr. I. "wishes to view his article". Obviously, I could "view" the article but had no time for making any serious effort at correcting the text. Therefore, I decided to give up on the task altogether.

- method that makes use of a system of formal logic. Does Dr. Ch. claim, therefore, that his own "theory of reality" does not present a "uniform system of reality"? I would consider this a serious argument against such a theory.
- 11. Finally, I must state that for twenty six main arguments I made against *Wielość rzeczywistości*, Mr. Ch. deals with only those described by me in points 2,4,5, 7–10. Mr. Ch. remains silent in the case of the remaining arguments and the reasoning behind them. In order to avoid any further misunderstandings, I provide the following list of corrections to my original text:

viens to my engine texts		
	Instead	Should be
p. 451	Independence	Ambiguity
p. 453	What	Since
p. 456	Creation	Creating
p. 459	uniform system	uniform system of reality
p. 460	Such	Cheap
p. 461	Which (f. plur.)	Which (f. sing.)
p. 463	sentences express relations among objects	sentences
		express relations
		among notions
		and
		describe relations
		among objects

Editor's comment: the above "Remarks" were submitted to the journal before the fourth issue of the XXV volume of *Przegląd Filozoficzny* appeared but could not be present in that issue for reasons independent of the editorial office.

Review of Leon Chwistek's Wielość rzeczywistości

Roman Ingarden

Translated by Adam Trybus with the assistance of Bernard Linsky

The book aims to determine the axiomatics of the notion of reality using the so-called constructive method and culminates in composing four different systems of axioms, as well as in the statement that there are four different — as the author has it — "equally valid" realities relating to these systems.

- I. The reality of impressions:
- (1) If x is directly given, then x is real;
- (2) If x is visible, then x is real;
- (3a) If x is real, then x is visible or is directly given;
- (4a) the statement "*x* is visible" is equivalent to the statement "*x* is visible in wakefulness";
- (4d) for some *x*, the statement "*x* is visible" is not equivalent to the statement "*x* is visible under normal circumstances".
 - II. The reality of imagination: This system differs from the previous one only in that (4a) is replaced with
- (4b) For some x, it is not true that the statement "x is visible" is equivalent to the statement "x is visible in wakefulness".
- III. The reality of objects: This systems upholds (1), (2), and (4a) from system I and replaces (3a) with
- (3b) "Certain real objects are not directly given". Also, (4d) is replaced with

- (4c) that "identifies the range of the notion of visibility with that of the notion of visibility under normal circumstances".

 Moreover, two new postulates are added:
- (5a) "A part of a real object is real" and
- (5b) "An object having a real part is real".
- IV. The physical reality: this system differs from the previous one only in that (4c) is replaced with (4d) (from System I).

Systems I, III and IV are, according to the author, consistent and regarding the consistency of System II, the author refrains from judgement. The treatise presents various consequences of this setup, including considerations on ethics and theory of art. The Author tries to show that each of the four realities is related to a specific type of art or an artistic movement: 1) impressionism, 2) futurism, 3) primitivism, and 4) realism, respectively. And since all the realities are "equally valid", the same applies to the mentioned art movements, especially futurism.

The treatise contains a number of deficiencies both methodological and factual. The former are described by us in detail in another place,⁶⁶ here we shall limit ourselves to the analysis of the above-mentioned systems of axioms.

These determine four notions of reality that are to replace the original notion of reality, which is unfit for both scientific and practical purposes owing to its vagueness. Unfortunately, the notions put forward by the Author also suffer from this flaw, as the terms used in determining them are vague. The Author himself admits that the latter are vague but does not try to fix this, believing that the above axioms, which are to be true no matter what the range of the terms turn out to be, allow him to avoid this problem altogether. That this task is doomed, we show in another publication. Here, we wish to investigate whether the Author's suggestions do not suffer from the instability of

⁶⁶Przegląd Filozoficzny

the notions he proposes. Since the Author is mostly concerned with the ranges of notions, this will be our focus as well. Let us introduce the following numerical abbreviations:

- 1. The range of the notion "directly given".
- 2. The range of the notion "visible" that can be split into:
 - **2a** the range of the notion "visible in wakefulness under normal circumstances";
 - **2b** the range of the notion "visible in wakefulness not under normal circumstances";
 - **2c** the range of the notion "visible not in wakefulness".
- 3. The range of the notion "not directly given".
- 4. The range of the notion of the objects, (at least) the parts of which satisfy the conditions described in axioms 1,2, 3b, 4a, 4c.
- 5. The range of the notion of the objects, (at least) the parts of which satisfy the conditions described in axioms 1,2, 3b, 4a, 4d.

Then, the ranges of the proposed notions of reality are as follows:

- 1. Reality of Impressions = 1 + 2a + 2b.
- 2. Reality of Imagination = 1 + 2a + 2b + 2c.
- 3. Reality of Objects = 1+2a + at least part of the range of 3 + 4a.
- 4. Physical Reality = 1 + 2a + 2b + at least part of the range of 3 + 4b.

As we see, the ranges of the proposed notions agree to an extent; in particular all that is directly given and all that is visible

in wakefulness under normal circumstances belongs to all four realities; and the objects visible not under normal circumstances belong to all but one reality (of objects); finally, the objects not directly given belong both to the Reality of Objects and to Physical Reality. Obviously, owing to the parts that have different ranges, the notions become different as well. However, the same objects assigned to different ranges remain so, unless in each case we point to a different moment in these objects, which becomes by virtue of them being assigned to different groups — a constitutive moment. Such a constitutive moment relating to the entire range of the defined notion is lacking in the Author's treatment of the topic. For we cannot consider a mere introduction of a uniform name for the entire range of the defined notion to be such a constitutive moment. As a result, we are presented with four groupings with no clear reason why these are put in the same box, groupings that have nothing but the name in common and consisting, for the most part, of the same elements. And things could not have been any other way for, after all, the author believes that to construct a notion is to simply create a list of objects. What criteria of choice should we then adopt? It is hard to figure this out from the proposed axiom systems. It might be that the author has some tacit criteria in mind. After all, when talking about his four realities, he phrases it in a way as to suggest these are four separate, mutually exclusive, domains with the proviso that one is able to move from one to the other. This is especially evident when the reality of impressions and the reality of objects are opposed and in the claim that the reality of impressions came to be only in the period when impressionism emerged as an art movement (!!). Only in assuming these four separate realities can the treatise be viewed as groundbreaking, as is emphasised a number of times by the author himself. But this merely means that the author uses his notions in a different sense than that allowed by the axioms he provides. Since, on the basis of the axioms, one can — as we pointed out — conclude that the four realities do not exclude each other. On the contrary, there exists

^{*}Their intersection is not empty. [the translators]

one common domain (consisting of the ranges 1 + 2a) that can be used to travel, as it were, one way or the other, obtaining the objects with ranges that differ from the ranges of objects in this common domain. This indicates another way of differentiating between these "realities" distinct the one proposed by the author — provided, of course, that the features chosen by him in fact allow one to differentiate one reality from the other. In order to carry out the differentiation proposed by the author one would have to point either to a) certain qualitative characteristics of all the objects assigned to one notion of reality that do not characterise the objects assigned to the remaining notions of reality (assuming that the qualitative differences can indeed constitute separate realities!), or b) certain categorical differences, or finally, to c) investigate whether the nature of the reality of the objects of the four realities is not different but that they merely differ in certain characteristics. Only then could we obtain a uniformity of the proposed notions and investigate whether there truly are four kinds of different realities. For only showing that there are four specific natures (something that decides about the "reality" of the real objects) of realities that are different from each other would allow one to truly talk about the "plurality of realities". In order to identify such a particular nature of reality (realities), however, the "constructive method" and determining the range of notions are of no use. This nature is something that needs to be identified, discovered — but not constructed — by us, provided that our efforts are to culminate in obtaining knowledge. On the other hand, the ranges of notions can be set completely at will, without taking into account important affinities among the objects from the same range. Starting from the range can merely be some sort of artificial preparatory trick when embarking on a cognitive process — a trick that is completely unnecessary and often inappropriate. Moreover, when doing so one should always emphasise the tentativeness of the determined range, until — using other methods — one is able to show that they are truly uniform. In order to discover the specific nature of reality, one has to begin with highlighting direct knowledge to understand the "meaning" of reality, and only this "meaning" can in turn be the range of the notion, or the objects that are in it. If we fail to achieve that, we are at risk of never reaching our goal, as was the fate of Dr. Chwistek.

No wonder that no term used by Dr. Chwistek to determine the range of the notions of reality indicates the ontic moment of the real objects. Both "directly given and visible" indicate (in one way or the other) certain relative features of the object that are associated with it only on the basis of the existence of a certain cognitive relation between an agent and the object of cognition. Such features could, at most, serve to determine certain criteria allowing one to check whether the assumed object is, in one sense or the other, "real", provided we were able to show the existence of such relations between the "reality" of the object and the above mentioned relative features. Insofar as we are aware of some difficulties related to such an endeavour, the features introduced by the author are not sufficient to define completely certain criteria, especially given a complete lack of clarity and ambiguity in what he writes about the meaning of the terms "directly given" and "visible". Being able to determine such criteria is predicated, however, on us having an independently obtained knowledge about what the reality of the object is; and it is impossible to use such relative features to enunciate the meaning of reality.

Therefore, Dr. Chwistek's attempt fails and the reason for that — as we show elsewhere — is, for the most part, the wrong choice of a method relies on a scarcity of factual findings both in terms of ontology and epistemology. The treatise is insufficiently thought out by the author and written in a way that often raises serious doubts regarding precision, clarity and consistency of reasoning.⁶⁷

⁶⁷Given that the author and the reviewer are involved in a discussion printed in *Przegląd Filozoficzny*, the editors wish to state that the manuscript of this report was submitted on 16 September 1922.