An Annotated Leśniewski Bibliography

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At the urging of friends and colleagues, I prepared An Annotated Leśniewski Bibliography (pp. 1–39), which was distributed in July 1972. Four years later, in June of 1976, An Annotated Leśniewski Bibliography (Supplement I) (pp. 40–83) was distributed. All of this was further supplemented and revised in the spring of 1978 and eventually appeared in Stanisław Leśniewski: Collected Works, pp. 711–785 (= Rickey 1992).

Recently, my interest in the logical systems of Leśniewski has been rekindled and in December 2009, I began to gather more recent references pertaining to Leśniewski’s systems. The existence of the web has made this task infinitely easier than it was forty years ago.

I would encourage all who use this bibliography to send me corrections and, especially, additions. This document is being prepared in TtX and it would be most helpful if you sent additions in this format, but documents in Word or HTML are perfectly acceptable (however .pdf format makes my life difficult as I then need to retypе the information). You can most easily contact me via email: fred.rickey@me.com. I would be pleased if you would also send me copies of your papers, for I am again trying to digest what has been written about Leśniewski and his logical systems, especially the more technical papers.

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Abelson, Raziel


Aczel, Peter


Agazzi, Evandro, editor


Agapov, E. P.


Ajdukiewicz, Kazimierz (1890–1963)

For a complete list of Ajdukiewicz’s publications, see Studia Logica, 16, 39–43.

1923 “O intencji pytania ‘co to jest P’, (Referat z odczytu),” Ruch Filozoficzny, 7 (1923), 152b–153a.

1926 “Założenia logiki tradycyjnej” (Foundations of traditional logic), Przegląd Filozoficzny, 29 (1926), 200–229.

The directive for distributing quantifiers that is discussed on page 210 is credited to Leśniewski.


Using Leśniewski’s theory of semantic categories, Ajdukiewicz refutes Kotarbiński’s ‘proof’ of the non-existence of individuals. He introduces here, for the first time, a convenient notation for the designation of particular semantical categories.


Contains interesting historical remarks about the Polish school of logic.


The seminal paper on the application of the famous fractional notation for semantical categories to ordinary language.


Ajdukiewicz considers several kinds of existence and applies them to the question of fictitious objects and also to the metaphysical controversy over what is real. He uses Leśniewski’s ontology to discuss the notions of real and intentional existence. In the review, Quine interprets ontology in set theory and thus concludes that quantification commits Leśniewski to abstract entities.


Geach, who spoke accurate but slow Polish, translated this from the reprint in Ajdukiewicz 1960. He judged parts II and III of the paper, which dealt with quantifiers, to be “complicated and unsatisfactory,” and so omitted them. Ajdukiewicz attributes the term ‘semantical category’ to Husserel 1900, but remarks that he has adopted the ‘simple account’ of them developed by Leśniewski. He notes that the word ‘functor’ was coined by Kotarbiński.


A basic philosophy text. The problem of ideal objects is treated.


Giedymin’s introduction contains biographical information. A bibliography of the works of Ajdukiewicz is included, 22 of which are in this volume, including a reprint of his 1949.

Summary: The collection contains five short texts written by Ajdukiewicz in the years 1920–1924. The curriculum vitae from 1924 includes, inter alia, the author’s account of his soldier years during the First World War. The second text (a summary of a lecture for The Polish Philosophical Society) is concerned with the distinction between the absolute and relative time. Texts 3 and 4 are in praise of Łukasiewicz’s three-valued logic as a contribution to the theory of human freedom. The last text — written in a casual, ‘Cartesian’ style — presents epistemological problems one faces in trying to distinguish dreams from reality

Andrews, Peter

A simplification of Henkin 1963.

Angelelli, Ignacio

Leśniewski had “the only philosophical acceptable manner of planning a ‘way out’ of the antinomies.” (p. 218)


Anellis, Irving H.


Apostel, Leo

Apostel claims that for Leśniewski and Heinrich Scholz, logic was ontology (in the philosophical sense). Claims that Leśniewski 1930a states that “the science of logic has quite explicitly as its object the study of certain very general laws of being” (quoting Apostel, who does not quote Leśniewski). Cites Lejewski 1954b and 1958b as clear explanations of Leśniewski’s position. The discussion ends by saying that Leśniewski defines existence to exclude the null class and then goes on to make some incomprehensible remarks about methodology.


Arai, Yoshinari

Deals with the equivalent calculus.

Arai, Yoshinari and Tanaka, Shotaro
Provides several single axioms for the equivalential calculus.

The title refers to the system of Les’s protothetic in Meredith 1951. The authors derive several equivalences in that system.

Asenjo, Florencio G.


There are connections between mereology and the systems developed in these three papers.


Bacon, John


Baldwin, Thomas


Bar-Hillel, Yehoshua (1915–1975)


Stresses the importance of inscriptive semantics for Philosophy.


**Barnett, Dene** (1917–1997)

Obituary.


**Barwise, Jon** (1942–2000)


**Batóg, Tadeusz** (Born 1934).

Discussion of his work and bibliography


1961b “Critical remarks on Greenberg’s axiomatic phonology,” *Studia Logica*, 12 (1961), 195–205. This is a criticism of J. H. Greenberg’s “An axiomatization of the phonologic aspect of language,” which appears in *Symposium on Sociological Theory*, edited by L. Gross, Evanston/NewYork, 1959. Batóg closes his paper by remarking that “Greenberg’s system would gain much in simplicity and naturality if it were based on Lesniewski’s mereology.”


**Beklemishev, Lev D.**

This seems to be a reprint of Luschei’s book.

**Belnap, Nuel**


**Beltiukov, A. P.**


**Bergmann, Gustaw**

Deals with problems similar to those considered by Leśniewski.

**Berrendonner, Alain**


**Beth, Evert Willem (1908–1964)**


**Betti, Arianna**


1966a “Il rasoio de Leśniewski,” (Leśniewski’s rasor), *Revista de Filosofía* need details


Author’s abstract: Lesniewski — and not his pupil Tarski — was the first to show that natural language is incurably affected by contradictions, and only by sanitizing it do we get an acceptable means of scientific investigation.


Alongside a respect for philosophically informed formal work and an interest in all things Polish, Jan Woleński and I share a profound admiration for Leśniewski’s oeuvre. As Jan once told me, you can work on Leśniewski for your whole life. Indeed so. Eighteen years after I
first met him, on a morning in late March at a bus stop in Sucha Bezkidzka, Southern Poland, here’s a story about the axioms of Leśniewski’s mereology, and Tarski’s complicated role in it.


Betti, Arianna, de Jong, Willem R., and Martijn, Marije


Betti, Arianna, and Leob, Iris


Bigelow, John

2010 “Quine, mereology, and inference to the best explanation,” *Logique et Analyse*, 53, 212–?? Full text.

Billich, Jerzy K., and Jaśkowski, S.


Sinisi 1983, p. 55, reports that this has one of the early references to Leśniewski’s ontology.

Binkley, R.


Bird, Otto Allen (1914–2009)


Black, Robert


Blanché, Robert

**Blass, Andreas**


**Blecksmith, Richard and Null, Gilbert**


**Block, W. J. and Pigozzi, Don**


**Bocheński, Jósef Maria = Inocenty M. (1902–1995)**

1939 “La logique de Théophraste,” *Collectanea Logica*, 1 (1939), 195–304. As the publishing house was bombed, this was only known through a review by H. Scholz, *Z 22*, 290–291, until republished as 1949a.


1988 “The Cracow Circle,” pp. 9–18 in *The Vienna Circle and the Lvov-Warsaw School*. This is a group of logicians interested in Catholic thought.


**Bochman, Alexander**

**Borkowski, Ludwik Stefan** (1914–1993)

Biographical sketch by Piotr Kulicki.

1951 *On analytical and synthetic definitions*. This is his Ph.D. dissertation from Uniwersytet Wrocławski under the direction of Jerzy Słupecki.


Extends the translatability condition so that the non-creativity of definitions is guaranteed.

1970 *Logika formalna* (Formal Logic), Warszawa: PWN.

Contains a chapter on ontology and many remarks on Leśniewski’s methods in the propositional calculus.


**Borkowski, L., and Słupecki, Jerzy**


**Bornstein, Benedykt** (1880–1948)

1914 “Podstawy filozoficzne teorji mnogości” (Philosophical foundations of set theory), *Przegląd Filozoficzny*, 17 (1914), 183–193.

This promotes Leśniewski 1914b.


A reply to Leśniewski 1914b.

**Borowski, Lesław**


**Borowik, Piotr E.**
2003 “Jan Śleszyński o “Podstawach teorii mnogości” St. Leśniewskiego II,” presentation at the Wrocław University VIII Conference Applications of Logic in Philosophy and the Foundations of Mathematics, Karpacz, 6-10 May 2003

2004 “Jan Sleszyński i teoria mnogości Stanisława Leśniewskiego,” presentation at the Wrocław University IX Conference Applications of Logic in Philosophy and the Foundations of Mathematics, Karpacz, 26-30 April 2004

Bottani, Andrea


Bourdeaux, Jack C.


Provides a “set theoretical model of ontology and proves a soundness theorem (consistency).


Provides a “set-theoretic model for Leśniewski’s logical systems, which, I believe, is in keeping with their constructive, or ‘nomanalistic’ spirit.” A soundness theorem is proved.

Bourdeau, Michel


Bourquin, Daniel


Bryman, Jerachmiel (Born 1908 in Łódź)

1933 [The shortest axiom-system for Peano arithmetic], Master’s thesis, 1933.

This result is noted in Leśniewski 1988, p. 155. He also discovered a single axiom for the equivalential calculus (Łukasiewicz 1939; Le Blanc 1991, p. 22).

Burkhardt, Hans (–2013), Seibt, Johanna, Imaguirie, Guido, and Gerogiorgakis, Stamatiou, editors

2017 Handbook of Mereology, Philosophia Verlag, München, Germany.

Burge, Tyler (Born 1946)


**Bury, Jan**


**Cantor, Georg** (1845–1918)


**Canty, John Thomas**


1968 “On symbolizing singularity S5 functions,” *Notre Dame Journal of Formal Logic*, 9 (1968), 340–342. Full text. Leśniewski’s wheel and spoke notation is used to symbolize the 16 unary functors of $S5$. This is done in such a way that the symbolism indicates the intended interpretation and also the syntactical connections between the functors. This work is based on a normal form representation of G. J. Massey.

1969a “The numerical epsilon,” *Notre Dame Journal of Formal Logic*, 10 (1969), 47–63. Abstract, *Journal of Symbolic Logic*, 32, 432. Full text. Ontology, extended by an axiom of infinity, is used to derive Peano’s arithmetic. Section one gives the main theses of this derivation, which parallels the work of *Principia Mathematica*. In section two a numerical epsilon is defined and it is shown that an internal ontological model for this epsilon exists. Using the numerical epsilon, the paper concludes by providing a characteristically ontological model for Peano’s arithmetic.


**Carnap, Rudolf (1891–1970)**


**Carrara, Massimiliano and Martino, Enrico**


**Casari, E.**

1985 *I sistemi logici di Leśniewski* (The Logical Systems of Leśniewski), unpublished manuscript.

**Carewright, Helen M.**


**Celiščev, Vitalij V.**


In §3, pp. 24–34, several systems with substitutional and referential quantification are briefly discussed.


Chapter III, §7, pp. 82–93, discusses Leśniewski’s theory of existence based on Prior 1955a, 1962, and Lejewski 1954b. Chapter IV, §4, discusses Leśniewski’s theory of descriptions, pp. 111–118; the use of the copula in ontology; and, referring to Lejewski 1954b, Luschei 1962), Prior 19551 and 1962, the substitution of descriptions for variables.

Chapter V, §3, pp. 132–138, discusses interrelations between two methods of quantification and two conceptions of logic. A comparison of substitutional and referential quantification is given.

**Chénique, François**


**Chikawa, Kazuo**

Gives generalizations of Słupecki’s six laws that describe the properties of functions of one variable in elementary protothetic. Shows that each law of functions of one argument is equivalent to its corresponding law with two arguments.

Chisholm, Roderick  (1916–1999)

See Plantinga 1975.


Church, Alonzo  (1903–1995)

1951  “The need for abstract entities in semantic analysis,” Proceedings of the American Academy of Arts and Sciences, 80 (1951), 100–112.

There are numerous comments about Leśniewski and his views about definitions.


Chwistek, Leon  (1884–1944)

1912  Zasada sprzeczności w świetle nowszych badań Bertranda Russella (The Principle of Contradiction in the Light of New Investigations of Bertrand Russell), Kraków: Polska Adademia Umiejętności, 1912.

Leśniewski’s work is discussed on page 372.

There are several comments about Leśniewski.

English Translation: 1948.

Cites Leśniewski’s ontology, p. 103, and his views on the empty class, pp. 113–114.

Chrudzimski, Arkadiusz

Chrudzimski, Arkadiusz and Łukasiewicz Dariusz

2006 Actions, Products, and Things: Brentano and Polish Philosophy, Frankfurt: Ontos Verlag, 2006. This volume is on line at USMA.

This volume is devoted to Brentano’s influence on the Lvov-Warsaw School.

Cīrulis, Jānis P. (Born 1943)

1975 “Logika s Vkljuceniem” (Logic with inclusion), Zeitschrift für math. Logik und Grundlagen der Math., 21 (1975), 247–266.

Can be regarded as the realization of some ideas of Canty 1971.


Clark, Bowman L.


Clay, Robert E.

1961 Contributions to Mereology, Ph.D. Dissertation in Mathematics, University of Notre Dame, under the direction of Sobociński. xv + 180 pp.

It is shown that under the conditions of weakly discrete the collective and distributive classes become alike with respect to equinumerosity. Hence, we can prove the analogues of set-theoretic formulae. Also, for a certain type of statement, discrete and weakly discrete are equivalent.


If the usual mereological definition of class is replaced by the shorter definition:

\[ [Aa] : A \in KI(a) \equiv A \in A : [B] : a \subseteq el(B), \equiv .A \in el(B) \]

then the resulting system is not equivalent to mereology. Models are given to show that this system is weaker than mereology.


As the base for the model take the set of real numbers whose decimals contain only zeros and ones with the exception of 0. This guarantees that representations are unique. Then define ‘A is an element of B’ to mean that every place where A has a 1 in its decimal expansion, B does also. All axioms and rules are verified under this interpretation. The real number system is introduced axiomatically into ontology; thus the rules of ontology go over.

1969 “Sole axioms for partially ordered sets,” Logique et Analyse, 12, #48, 361–375.


In the standard axiom system based on element the axiom stating that every individual is an element of itself is dependent. This is not true in the standard axiom system based on part, even though Tarski 1929 claims otherwise.


Clay proves that if \( a \) is finite, then the set of \( a \) is finite. Sobociński had previously proved this under the hypothesis that \( a \) is discrete.


The short definition of class can be proved without the use of auxiliary definitions. This is significant as Leśniewski 1927 used the mereological notion of set in his proof. The results of Clay 1965 still hold in the weakened system using the short definition of class.

Disproves the claim of Tarski 1935 and Grzegorczyk 1955 that models of mereology and models of complete Boolean Algebras with zero deleted are identical.


The non-empty regular sets of any topological space form a Boolean Algebra with zero deleted. Thus, by Clay 1974a, we have a variety of models of mereology. For example, Euclidean space provides a model of atomless mereology.


Provides single axioms shorter than those of Lejewski 1973a.


1981 *La Mereologia de Lesniewski*, Universidad de Oriente, Cumana, Venezuela.

**Cocchiarella, Nino B.**


**Cohen, Laurence Jonathon (1923–2006)**


Basically a critique of Lejewski 1954b. Sympathetic but mistaken.


**Coniglione, Francesco; Poli, Roberto and Woleński, Jan, editors**


**Carazzon, Raul**

Have copy.

Corcoran, John; Frank, William and Maloney, Michael


A valuable paper dealing with the same subject as Rickey 1972.

Costdaa, Newton C. A. and Béziau, Jean-Yves


It is emphasized that the elimination of definitions is not necessarily straightforward, especially in the case of paraconsistent logic.

Correia, Fabrice


Cotnoir, Aaron J.


Author’s abstract: I examine the link between extensionality principles of classical mereology and the anti-symmetry of parthood. Varzi’s most recent defence of extensionality depends crucially on assuming anti-symmetry. I examine the notions of proper parthood, weak supplementation and non-well-foundedness. By rejecting anti-symmetry, the anti-extensionalist has a unified, independently grounded response to Varzi’s arguments. I give a formal construction of a non-extensional mereology in which anti-symmetry fails. If the notion of “mereological equivalence” is made explicit, this non-anti-symmetric mereology recaptures all of the structure of classical mereology.

Cotnoir, A. J.; Varzi, Achille C.


We present a new axiomatization of classical mereology in which the three components of the theory — ordering, composition, and decomposition principles — are neatly separated. The
The equivalence of our axiom system with other, more familiar systems is established by purely deductive methods, along with additional results on the relative strengths of the composition and decomposition axioms of each system.

Cotnoir, Aaron J., and Bacon, Andrew


Obojski 2013 comments on this paper.

Couturat, Louis (1868–1914)


1918 *Algebra logiki*, Warszawa: Wydawnictwo Kasy im. Mianowskiego. Polish translation of 1905 by Bronisław Knaster. Łukasiewicz initiated the translation of this work [Woleński 1995, p. 371]. It was most likely used as a textbook.

Cresswel, Max J. (Born 1939)


Crossley, John N., compiler (Born 1939)


Curry, Haskell Brooks (1900–1982)


Czernecka-Rej, Bożena

???? “Salamucha, Jan.” Biographical article in Polish from PEF — Copyright by Polskie Towarzystwo Tomasza z Akwinu

Czeżowski, Tadeusz (1889-1981)
Here is a link to an extended bibliography of Czeţowski’s works.


Contains a brief exposition of protothetic and the theory of semantical categories.


Dąmbska, Izydora (1904–1983)


Dapoigny, Richard and Barlatier, Patrick

2017 “Towards a qualitative representation for specifying natural language,”

Davis, Charles


Concerns the Axiom of Choice for many-link functors.

Dawson, John W., Jr. (Born 1944)

Woleński points out that Gödel’s incompleteness theorem was known in Poland via a talk by Tarski to the Warsaw Philosophical Society, April 15, 1931.

Dedekind, Richard (1831–1916)

1888 *Was sind und was sollen die Zahlen?*, Braunschweig: Vieweg, 1888.


Dembowski, Jan


De Pater, W. A.


Ditchen, Ryszard; Glibowski, Edmund and Kościk, Stanisław


Djankov, Bogdan


“The problem stated there is considered more as historical-logical than purely theoretical” (p. 439). Sections 3 and 4, pp. 442–452, contain a brief review of the development of the theory of semantical categories in the works of Husserl, Leśniewski, Ajdukiewicz, and Tarski.

Drewnowski, Jan Franciszek (1886–1978)


Drucker, Thomas


Duda, Roman (Born 1935)


Dudman, V. H.


Dumitriu, Anton (1905–1992)


Dummet, Michael (Born 1925)


Dunn, J. M., and Belnap, N. D.


Simons 1983, note 2, says that the Dunn-Belnap interpretation is “more careful” than that of Küng-Canty 1970 in that the later “presupposes the existence of sets as the extensions of terms.”

Dupraz, Marie-Louise and Rouault, Jacques


Calls attention to the value of Leśniewski’s logic for linguistics.

Eberle, Rolf A. (1931–2014)

1965 *Nominalistic Systems — the Logic and Semantics of Some Nominalistic Positions*, Ph.D. dissertation, University of California at Los Angeles, under the direction of Donald Kalish.


1968 “Yoes on non-atomic systems of individuals,” *Noûs*, 2 (1968), 399–403. JSTOR.

Tries to formulate a principle of individuation suitable for non-atomic systems. The problem was raised by Yoes 1967; this solution was criticized by Schuldenfrei 1969.

An improvement of his 1968.


Presents a first-order logic which permits empty universes in interpretations. This interesting and plausible semantic theory can account for partially defined operators.


**Edwards, Paul, Editor** (1923–2004)


“Łukasiewicz, Jan,” V, 104–107, by C. Lejewski.


“Syntactical and semantical categories,” VIII, 57–61, by Y. Bar-Hillel.


**Eschenbach, Carola and Heydrich, Wolfgang**


**Evans, Gareth**

Evenden, John


Evenden, John and Hubbeling, H. G.


Farber, Marvin (1901–1980)


Chapter X, pp. 283–3112, contains an analysis of wholes and parts as presented by Husserl.

Feferman, Anita Burdman and Feferman, Solomon


Feferman, Solomon (1928 –2016)


Feys, Robert (1889–961) and Fitch, Frederic B. (1908–1987)


Fillion, Nicolas


Fleming, Christopher J.


Floyd, W. F. and Harris, F. T. C. editors.

Amongst the philosophers with whom Woodger now came into contact was Professor K. R. Popper who introduced him to A. Tarski. In his analysis of the relation ‘part of’, a prerequisite for the study of theories involving statements about structure, Woodger had independently developed a system that was similar to Leśniewski’s Mereology. Tarski’s excitement at the first development of an application of such a system was a considerable stimulus to Woodger. In 1935 he went to Poland in order to meet with the Polish school of Logicians and to discuss mutual ideas, especially with Łukasiewicz and Tarski with whom he had been in correspondence." [p. 4]

“In 1949 he was invited to give the Tarsner Lectures at Trinity College Cambridge. In these he expanded more fully his view that a nominalistic attitude was the correct basis for the language of science.” [p. 5]

Forrest, Peter  (Born 1948)


Fraenkel, Abraham  (1891–1965)


Fraenkel, Abraham A. and Bar-Hillel, Yehoshua

1958 Foundations of Set Theory, Amsterdam: North Holland.

There is the barest outline of ontology on pp. 185–188. They comment: “We seem to stand at the verge of a real interest in the work of these two logicians [Leśniewski and Chwistek] that has already fertilized the thought of many a worker in the foundations of Mathematics.” [p. 186]. There is a discussion of Leśniewski’s semantical categories on pp. 168–171.

Fraenkel, Abraham A., Bar-Hillel, Yehoshua and Levy, Azriel


Franzke, Norbert and Rautenberg, Wolfgang


Fredj, Mounia


Frege, Gottlob  (1848–1925)
Leśniewski was aware of Frege’s work after the publication of Principia Mathematica. See especially §33 on definitions.
***** I got tired when I got to 1929b, p. 410, so need to come back to this. *****


This citation does not match 1992, p. 203.


1903 The Foundations of Arithmetic: A Logicomathematical Enquiry into the Concept of Number, New York: Philosophical Library. Translated by J. L. Austin.


Gallie, Roger D.


Garbacz, Paweł


Gardies, Jean-Louis (1925–2004)


1984 Rational Grammar, Philosophia.


GEACH, Peter T.

Garrido, Ángel and Wybraniec-Skardowska, Urszula (Editors)

2018 *The Lvov-Warsaw School. Past and Present*, Birkhäuser. There are 46 chapters:

Gasser, James


Gauthier, Yvon


Geach, Peter T. (1916–2013)


A generalized form of Leśniewski’s proof that Frege’s way out of the Russell antinomy only generates new contradictions.


Makes use of Ajdukiewicz’s notation.


Geach points out the similarity between the way that Okham and Leśniewski wrote definitions. Claims that Leśniewski failed to observe the Fregean cannons of definition. He cites an
example in Prior 1956 which leads to contradictions and suggests that definitions be treated in the style of Quine’s abbreviative definitions. The consistency proof of Kruszewski 1925 as well as remarks in Rickey 1976 show that Geach is not interpreting Prior correctly.

Gentzen, Gerhard (1909–1945)


Gessler, Nadine


2002 Défense d’une sémantique de la relation de partie à tout en logique. Résolution de l’argument de De Morgan, Thèse soutenue à l’Université de Neuchâtel sous la direction de D. Miéville.


https://core.ac.uk/download/pdf/20661044.pdf

“The author intends “to examine certain features that characterize the logicist construction that can be performed within the categorial and expansive framework provided by Leśniewski’s Ontology, by putting these features in relation with the question of procedures of abstraction and nominalization.” The paper contains an informal discussion of Ontology (singular propositions, ontological neutrality, definitions, introducing the concepts of equinumericity and cardinal number); no mathematical results are presented.” Jānis Cirulis (Riga)

Gessler, Nadine and Miéville, Denis


Giaretta, Pierdaniele

Giles-Peter, Andrew Robert

1972 *Nominalistic Philosophy of Logic: with Particular Reference to the Systems of Stanisław Leśniewski*, Master of Arts thesis, Philosophy Department, La Trobe University, Bundoora, Victoria, 1972.

Ginisti, Jean-Pierre


Ginisti, Jean-Pierre and Gregorowicz, Jan


Glibowski, Edmund


Glibowski, Edmund and Słupecki, Jerzy


Glibowski, Edmund and Słupecki, Jerzy


Based on mereology.

Gobber, Giovanni


Gochet, Paul (1932–2011)


Gochet, Paul; Gribomont, Pascal and Thayse, André


Godfrey-Smith, W.


Goldfarb, Warren D. (Born 1949)

**Gombocz, Wolfgang Leopold**


**Gómez-Torrente, Mario**

A list of his publications is online. Probably more of them should be included.


This paper examines from a historical perspective Tarski’s 1936 essay, "On the concept of logical consequence." I focus on two main aims. The primary aim is to show how Tarski’s definition of logical consequence satisfies two desiderata he himself sets forth for it: (1) it must declare logically correct certain formalizations of the $\omega$-rule and (2) it must allow for variation of the individual domain in the test for logical consequence. My arguments provide a refutation of some interpreters of Tarski, and notably John Etchemendy, who have claimed that his definition does not satisfy those desiderata. A secondary aim of the paper is to offer some basic elements for an understanding of Tarski’s definition in the historical logico-philosophical context in which it was proposed. Such historical understanding provides useful insights on Tarski’s informal ideas on logical consequence and their internal cohesion.

**Goodell, John D.**


Łeśniewski’s wheel-and-spoke notation is adopted here.


This paper, which deals with the calculus of propositions with quantifiers, uses an adoption of Łeśniewski’s wheel-and-spoke notation.


The wheel-and-spoke notation is used.


Bibliography of works by and about Goodman.

There is much of value here on the Calculus of Individuals and its applications, as well as simplicity of primitive terms. There are important changes in the second edition.

**Goodman, Nelson and Quine, Willard v. O.**


**Götzlind, Erik**


**Grattan-Guinness, Ivor (1941–2014)**


**Grégoire, F.**


**Grelling, Kurt (1886–1942) and Nelson, Leonard (1882–1927)**


Leśniewski has adopted Nelson’s definition of an antinomy, p. 314. Cited in Leśniewski 1927; page 178 of his *Collected Works*.

**Greniewski, Henryk (1903–1972)**


1953 “Logika formalna w Polsce w dobie Odrodzenia,” (The renaissance of formal logic in Poland), *Problemia*, 10 (1953), 658–664.

**Grize, Jean-Blaise** (Born 1922)


A clear brief introduction to ontology and mereology written especially for linguists.

1973 *Logique moderne*, Paris/ La Haye: Gauthier-Villars/Mouton, fasc. III.

**Gromska, Daniela** (1889–1972)


**Grossmann, Reinhardt Siegbert** (1931–2010)


1965 *The Structure of Mind*, Wisconsin: University of Wisconsin Press.

Deals with similar problems as Leśniewski. Sections on Twardowski, Meinong, etc., have more philosophical and historical relevance than might be apparent, but they cannot be taken uncritically as an accurate account.


Contains a section on definitions.

**Gruszczynski, Rafal and Pietruszczak, Andrzej**


2009 “Space, points and mereology. On foundations of point-free Euclidean geometry,” *Logic and Logical Philosophy*, vol. 18, no. 2 (1994),

**Gruszczynski, Rafal and Varzi, Achille C.**


**Grygianiec, Mariusz**


Grzegorczyk, Andrzej (1922–2014)


Ontology is mentioned several times. He says that we can frequently regard the sign of inclusion, ‘⊂’, as equivalent to the sign ‘∈’ of membership (pp. 316–317). Formally this is correct because of the thesis

\[ mb : m \in b. \equiv .m \subset b . m \in V \]

of ontology. Without the word ‘frequently’ he would be wrong. With it, the wrong impression is given.


This paper has been criticized by Clay 1974a, Luschei 1962, pp. 154–166, and by Rickey 1977.


Reism calls for a geometry of solids.


This theory is based on mereology.


Shows how to reduce the number of primitive types in Henkin 1963.

Grzegorczyk, Andrzej; Mostowski, Andrzej and Ryll-Nardzewski, C.


In this second order arithmetic they have a “Leśniewski Schemata”:

\[(\exists \alpha^k)(x_1, \ldots, x_n)[\alpha^k(x_1, \ldots, x_n) = \pi],\]
which “is a form of definability corresponding to Leśniewski’s rule of ontological definability.”

**Guarino, Nicola and Guizzardi, Giancarlo**


**Guarino, Nicola and Smith, Barry**


**Gumański, Leon**

1960 *Logika klasyczna a założenia egzystencjalne* (Classical logic and existential presuppositions), *Zeszyty Naukowe Uniwersytetu Mikołaja Kopernika w Toruniu, Filozofia, 1, Z. 4.*

This interesting and exhaustive study shows that the traditional logic cannot be treated as a part of Leśniewski’s elementary ontology, of the algebra of classes, of the theory of relations, or of the first-order functional calculus.


**Gurczyński, Jacek**


**Haack, Susan (Born 1945)**


Suggests that if propositional quantifiers are interpreted substitutionally and if quotations are treated as functions, then this “might provide some relief to the ontological difficulties which Quine [1934] finds in the interpretation of protothetic.” (p. 293)


**Halldén, Sören (1923–2010)**


**Halpern, Ignacy = Ignacy Izydor Myślicki (Myślicki-Halpern) (1874–1935)**
1910 (Metaphysics: the history of its name, concept and currents), lecture at the Polish Psychological Society in Warsaw, 28 October 1910.

Leśniewski participated in the discussion. This is the first printed evidence of his scientific activity.

**Hahmann, Torsten and Gruninger, Michael**


**Halpern, Ignacy = Ignacy Izydor Myślicki (Myślicki-Halpern) (1874–1935)**

1910 (Metaphysics: the history of its name, concept and currents), lecture at the Polish Psychological Society in Warsaw, 28 October 1910.

Leśniewski participated in the discussion. This is the first printed evidence of his scientific activity.

1911 “Metafizyka, dzieje jej nazwy, pojęć, prądów,” (Metaphysics, history, names, and currents), *Ruch Filozoficzny*, 1 (1911), 13–14.

In this report of a lecture, there are several comments by Leśniewski.

**Hamblin, Charles Leonard** (1922–1985)


There are some similarities with many-link functors here.

**Harman, Gilbert** (Born 1938)


**Hausman, Alan and Echelbarger, Charles**


They argue that no extension of Goodman’s nominalistic ontology is adequate.

**Hausdorff, Felix** (1868–1942)


Leśniewski refers to this as the second edition, but this is not a second edition of Hausdorff’s more famous *Grundzüge der Mengenlehre* (1914).


**Hellman, Geoffrey** (Born 1943)

**Helmer, Olaf (1910–2011)**


These two papers treat the same subject as Sobociński 1955.

**Hempel, Carl Gustav (1905–1997)**


**Hempoliński, H., editor**


**Henkin, Leon (1921–2006)**


After a historical sketch of nominalism (which mentions Leśniewski, p. 187), he considers the following points (which are also considered by Goodman and Quine 1947): 1. Provide a description of the conditions under which mathematical sentences may be affirmed, without reference to abstract entities, 2. Eschew any assumption on the finitude or infinitude of physical objects.


A system very closely related to protothetic.

**Henry, Desmond Paul (1921–2004)**

Henry was also a pioneer of computer art.

Ontology, and in particular many-link functors, is used in the discussion.


Uses ontology to refute the constantly occurring complaint that modern logic cannot analyze certain theses or forms of expression which occur in medieval logic. The crucial difficulty is usually presented as “Ockham quantifies over terms whereas modern logicians quantify over variables (individuals):” Ontology can handle this.


Contains an excellent introduction to ontology with examples of its applications for the elucidation of problems in medieval logic and metaphysics. Modifications of Henry 1964a and 1969 have become chapters in this book.


Ontology is used extensively to make arguments precise.


Ontology is used here.


Hilbert, David (1862–1943) and Bernays, Paul (1888–1977)

1939 *Grundlagen der Mathematik*, Berlin: Springer, 2 volumes.

Hitnikka, J.; Czarnecki, T., Kijania-Placek, K., Placek, T.; and Rojczak, A., editors.


Hintikka, Jaakko (1929–2015)

2003 *Philosophy and logic in search of the Polish tradition: essays in honour of Jan Wolenski on the occasion of his 60th birthday*, edited by Jaakko Hintikka ... [and others]. Dordrecht ; London : Springer, [2003].

Hintze, Henning


This paper is devoted to the analysis of some aspects of Leśniewski’s nominalism. First, two traditions of nominalism are distinguished: the Aristotelian one and the phenomenalistic one. Next, some merits of Leśniewski-type nominalism are discussed. The paper concludes with a discussion of some problems and their proposed solutions in the frameworks of Leśniewski-type nominalism and phenomenalistic nominalism.

For the sake of explaining the merits of a Leśniewskitype nominalism, it should be made clear what is meant by “nominalism” and what the characteristics of this special type of nominalism are. To the first question we can find quite a lot of mutually inconsistent answers. Therefore I will just explain the distinction between two different nominalistic traditions which I hold to be fundamental. I think we should not just focus on the question which so-called abstract entities are rejected but as well look for basic entities nominalists rely on.

Hiż, Henry Thadeus (1917–2006)

TO DO: See if his nachlass contains any notes he took of Leśniewski’s courses.
1948 *An Economic Foundation for Arithmetic.* Ph.D. Dissertation, Harvard University, 1948, under the direction of Quine.


Gives a definition of semantical categories based on substitutability in many (not ‘all’) sentences without loss of sentencehood.


Tarski and Leśniewski met every Thursday at Leśniewski’s house for a private discussion (Sobociński also related this to Rickey) [Feferman and Feferman 2004, pp. 395 (n. 44), 398 (n. 48)]. It would be interesting to obtain a copy of these notes and to transcribe and translate them.

1993 “Uwagi o Leśniewskim” (Some remarks on Lesniewski), *Ruch Filozoficzny*, 50(1), 1993, 60–64. [This is probably a published version of Hiz 1992.]


Need to check this out.

**Hodges, Wilfrid**


This chapter collects and examines Tarski’s remarks on definition. Influences on Tarski from Lesniewski, Kotarbinski and others are discussed, and Tarski’s remarks on Padoa’s method are examined at length. A timeline for the development of Tarski’s definition of truth is suggested, and various strands in the development of model-theoretic techniques in Tarski’s work are presented.

**Hodges, Wilfrid and Lewis, David**


There is no sentence in Goodman’s calculus of individuals which says there are finitely or infinitely many individuals.

**Horwich, Paul**
https://projecteuclid.org/download/pdf_1/euclid.ndjfl/1093891796
This is a discussion of Henry 1967. He objects that some of Henry’s statements in ontology “do not capture exactly Anselm’s statements.” After presenting reasons for this view, alternate formulations are suggested.


Hovda, Paul

2008 Presents the latest state of the art on the axiomatization of mereology.


Hughes, Christopher


Hugly, Philip


Hugly, Philip and Sayward, C.


Huntington, Edward Vermilye (1874-1952)

1905 “Note on the definitions of abstract groups and fields by sets of independent postulates,” Transactions of the American Mathematical Society, 6 (1905), 181–197. Errata TAMS, 7 (1906), 59. JSTOR. Have copy.

Cited by Leśniewski.

Husserl, Edmund (1859–1938)

1891 Philosophie der Arithmetik, Halle: C. E. M. Pfeffer (Robert Stricker).


Indrzejczak, Andrzej

The problem of describing formally how mathematicians informally state proofs, was posed by Łukasiewicz in his seminar in 1926. Jaśkowski presented his first results on natural deduction in 1927 at the First Polish Mathematical Congress in Lvov. However natural deduction procedures were “applied in the twenties by Leśniewski, Tarski [and], Salamucha, as is evident from their papers.”

Ingarden Roman  (1893–1970)


Iséki, Kiyoshi


Shows that the equivalential calculus can be based on $Epp$, $EEpqEqp$ and $EEpqEEqrEpr$. It is amazing that this very intuitive axiom system was not discovered earlier.


Chapter 4 contains a discussion of protothetic (244–274), ontology (275–290), and mereology (290–297).


“Some of his [Büchi, “Die Boole’sche Partialordnung und die Paarung vol Gefügen,” *Portugalia Mathematica*, 7, 119–180] results are true for both the set theories in the senses of G. Cantor and S. Leśniewski.” This paper deals with the Cantor type.


Iséki, Kiyoshi; Setp. Yasuo; and Tanaka, Shotaro


Ishimoto, Arata


Shows that a certain fragment of ontology is complete with respect to the interpretation proposed by Prior 1965.


???? “The completeness of a propositional fragment of Leśniewski’s ontology and its relevance to logical grammar.” Typescript. Full text.

???? “Logical Grammar — Logical and Ontological Observation”

**Ishimoto, Arata and Kobayashi, M.**


**Ishimoto, Arata and Sagal, P. T.**

???? “Interpreting Lesniewski’s Ontology — a Propositional Fragment of Lesniewski’s Ontology and Related Systems.”

**Iwanuś, Bogusław (Died in 1995, age 54)**


**Jacquette, Dale**

“An argument against multiply instantiable universals is considered in neglected essays by Stanislaw Leśniewski and I.M. Bochenski. Bochenski further applies Leśniewski’s refutation of universals by maintaining that identity principles for individuals must be different than property identity principles. Leśniewski’s argument is formalized for purposes of exact criticism, and shown to involve both a hidden vicious circularity in the form of impredicative definitions and explicit self-defeating consequences. Syntactical restrictions on Leibnizian indiscernibility of identicals are recommended to forestall Leśniewski’s paradox.”

Jadacki, Jacek J.


2015 Pisma zebrane (Collected Works). Two volumes.


Jadacki, Jacek J. and Paśniczek, J, editors


Janicki, Ryszard


A version of mereology with applications to model software structures.

Jardine, Charles J. and Jardine, Nicholas

Jaśkowski, Stanisław (1906–1965)


This famous paper which initiates work on natural deduction techniques, is obviously inspired by Leśniewski’s informal proof technique.


Sphere is the primitive term.

1949b “Quelques problèmes actuels concernant les fondements des mathématiques,” *Casopis pro Pestovani Matematiky a fysiki*, 74 (1949), 74–78. There is a Polish summary.


Joray, Pierre


Summary: “The paper presents a logicist construction of Peano’s arithmetic based on the framework of S. Leśniewski’s extensional calculus of names (ontology). The construction is shown to have three main advantages compared to Principia mathematica’s classical solution. First, cardinality is defined without the use of classes or sets (even as convenient symbols). Second, the dependence of Peano’s axioms vis-à-vis the only nonlogical assumption (axiom of infinity) is clarified. Finally, the use of Leśniewski’s definition rules shows that there is no
need for an ad hoc reduction process of impredicative functions to predicative ones (axiom of reducibility)."


2005 “Should definitions be internal?,” The Logica Yearbook 2004 (Prague, 2005), pp. 189–199. The entire volume is on line.


Author’s Abstract: Prothetetic is one of the most stimulating systems for propositional logic. Including quantifiers and an inference rule for definitions, it is a very interesting mean for the study of many questions of metalogic. Unfortunately, it only exists in an axiomatic version, far too complicated and unusual to be easily understood by nowadays students in logic. In this paper, we present a system which is a natural deduction (in Fitch-Jaśkowski’s style) version of prothetetic. According to us, this system is adequate for teaching Leśniewski’s logic to students accustomed to natural deduction.

Joray, P. and Godart-Wendling, B


The first six (of ten) sections and the relevant parts of the bibliography are reprinted in McCall 1967, 346–406.


1963b “O logicznym determinizmie,” Studia Logica, 14 (1963), 59–98. This is slightly different than 1963a


A comprehensive history of the Warsaw school. The influence of Twardowski is clearly seen here. Contains a good bibliography.


Jurcic, Joseph


Kalinowski, Georges = Jerzy Kalinowski (1916–2000)


1989 Sur les fondements de la mathématique: fragments (discussions préalables, méréologie, ontologie), Stanislaw Lesniewski; trad. du polonais par G. Kalinowski; préf. de D. Miéville, Paris: Hermès. I think this should be listed under Lesniewski with Kalinowski as translator.


Kalinowski, Georgs and Adoración Sánchez García


Kalman, J. A.

Łukasiewicz 1939 found 3 shortest single axioms for the equivalential calculus, and Meredith (Meredith and Prior 1963) found 7 more, with proofs for some of these being given by Peterson 1976. Kalman has found one more: $EpeEpEqErpErq$. The computer program which found the proof is discussed.

**Kaminski, Stanisław**


**Kaplan, David** (Born 1933) [Wikipedia](#)


**Kapulkin, Krzysztof**

2004 “Systemy logiczne a świat” (Logical Systems and the world).

[http://www.racjonalista.pl/kk.php/s,3561](#)

**Kearns, John T.**

A list of his publications is on the web.


“a brief, sympathetic, and relatively complete account of Leśniewski’s work.” (p. 61). The comments at the end about ‘structure’ are misdirected. He, and many others, tries to make cardinality a mereologial notion, while it is really an ontological one.


A system of predicate logic in the spirit of Leśniewski.


A reply to Lejewski 1954b.


Many-link functors are used in this criticism of an argument of G. Bergman which purports to show that a substance ontology is untenable.

Presents a formal system wherein quantified general terms can significantly be used in the same places as proper names. He claims this system is more like English than ontology is. There are reasons to believe that deep structure is closer to the surface than had previously been thought.


**Kelley, John L.** (1916–1999)


On page 251 of the appendix on Morse set theory there is the following footnote: “Actually, an axiom scheme for definitions is also assumed without explicit statement. That is, statements of a certain form, which in particular involve one new constant and are either an equivalence or an identity, are accepted as definitions and are treated in precisely the same way as theorems. The axiom scheme of definition is in the fortunate position of being justifiable in the sense that, if the definitions conform with the prescribed rules, then on new contradictions and no real enrichment of the theory results. These results are due to S. Lésniewski [sic].”

Kelley is, of course, wrong about the non-creativity of definitions. Unfortunately this belief persists in the literature.

**Kielkopf, Charles F.**


**Kijania-Placek, Katarzyna, and Woleński, Jan,** editors


**Kleene, Stephen Cole** (1909–1994)


**Kleinschmidt, Shieva,** editor

2014 *Mereology and Location*, Oxford University Press.

Table of Contents:
1. THE MANY PRIMITIVES OF MERELOGY, Josh Parsons
2. PARthood IS IDENTITY, Kris McDaniel
3. MERELOGY AND MODALITY, Gabriel Uzquiano
4. WHERE IT’S AT: MODES OF OCCUPATION AND KINDS OF OCCUPANT, Peter Simons
5. A SPATIAL APPROACH TO MERELOGY, Ned Markosian
6. BALLS AND ALL, Daniel Nolan
7. CONFLICTING INTUITIONS ABOUT SPACE, Peter Forrest
8. TRANSHYPERTIME IDENTITY, Hud Hudson
9. PARTS OF PROPOSITIONS, Cody Gilmore
10. MEREOLoGICAL SUMS AND SINGULAR TERMS, Kathrin Koslicki

Klibansky, Raymond, (editor) (1905–2005)


Kneale, William (1905–1990) and Kneale, Martha


Kobayashi, Mitsunori and Ishimoto, Arata


Kohl, Ryan


Kokoszyńska, Maria

Contains a portrait of Ajdukiewicz and a list of eleven articles about him, all but two of which appeared after his death in 1963.

Komorowski, Jan; Polkowski, Lech T.; and Skowron, Andrzej


Korcik, Antoni

This paper mentions Leśniewski’s views on existential propositions.

Kortlandt, Frederik Herman Henri


The fifth chapter is devoted to the exposition and critical analysis of Batóg’s axiomatic system of phonology. It gives an account of some mereological concepts.

Koslicki, Kathrin


Kotarbinska, Janina (1901–1997)


Kotarbiński, Tadeusz (1886–1981)

Ph.D. University of Lwów 1912, under the direction of Kazimierz Twardowski, with a dissertation entitled *Etyka Utylitaryzmu*.

1913 “Zagadnienie istnienia przyszłości,” (The problem of existence of the future), *Przegląd Filozoficzny*, 16 (1913), no. 1, pp. 74–92. Also in *Nowe Tory*, No. X.


This summary of a discussion contains some remarks by Leśniewski.


In the chapter “Nauczyciele sztuki nauczania” (Teachers of the art of teaching), Kotarbiński characterizes Leśniewski as a teacher.


Contains, among others, his 1921.


“Contains personal recollections of Leśniewski’s unpublished treatments of certain topics in semantics, together with brief informal accounts of his theories.” [Luschei 1962, p. 320]


Pp. 190–211 provide an introduction to ontology.


Kowalski, James G.

1975 Leśniewski’s Ontology Extended with the Axiom of Choice, Ph.D. dissertation under Sobociński at Notre Dame. Published as 1977.


Shows, in ontology, that the Axiom of Choice, Zorn’s Lemma, and the Well Ordering Principle are equivalent. In a type theory like ontology, the Axiom of Choice cannot be added as a single sentence, but it must be added for each type. A rule of procedure for doing this is provided.

Krajewski, Stanisław and Woleński, Jan


Kraszewski, Zdzisław and Suszko, Roman


1968 Klasy normalne i nienormalne a teorii mnogosciowe i mereologiczne pojecie klasy (Z badan nad pojeciem klasy II) (Classes normales et non normales par rapport aux concepts ensembliste et méréologique de classe n Recherches sur le concept de classe II), Studia Logica, 22, 85–97.

Kripke, Saul (Born 1940)


Krokiewicz, Adam (1890–1977)

1948 “O logice stoikow” (On Stoic logic), Kwartalnik Filozoficzny, 17 (1948), 173–197.

Kruszewski, Z.


Krzyszanowski, Juliusz


Kubiński, Tadeusz (1923–1991)


1960 “An attempt to bring logic nearer to colloquial language,” Studia Logica, 10 (1960), 61–75.


Kubinski, Tadeusz and Zabski, Eugeniusz


Kuhn, Steven T.

Kulicki, Piotr


A calculus of names is a logical theory describing relations between names. By a pure calculus of names we mean a quantifier-free formulation of such a theory, based on classical propositional calculus. An axiomatisation of a pure calculus of names is presented and its completeness is discussed. It is shown that the axiomatisation is complete in three different ways: with respect to a set theoretical model, with respect to Leśniewski’s Ontology and in a sense defined with the use of axiomatic rejection. The independence of axioms is proved. A decision procedure based on syntactic transformations and models defined in the domain of only two members is defined.


By pure calculus of names we mean a quantifier-free theory, based on the classical propositional calculus, which defines predicates known from Aristotle’s syllogistic and Leśniewski’s Ontology. For a large fragment of the theory decision procedures, defined by a combination of simple syntactic operations and models in two-membered domains, can be used. We compare the system which employs ‘ε’ as the only specific term with the system enriched with functors of Syllogistic. In the former, we do not need an empty name in the model, so we are able to construct a 3-valued matrix, while for the latter, for which an empty name is necessary, the respective matrices are 4-valued.


Küng, Guido (Born October 5, 1933)


Logic is about X’s if and only if its laws or propositions either name or quantify over X’s. Logic has been variously held to be about (1) mathematical objects, (2) objects in general, (3) linguistic expressions, or (4) meanings. It would then belong to (1) mathematics, (2) ontology, (3) linguistics, or (4) semantics. The author argues that the names in classical logic name at most things, and so support none of the above views. He distinguishes three interpretations of the quantifiers: (a) referential, (b) substitutional, and (c) Leśniewskiian.
If we allow higher-order quantification, then (a) commits us to (1) or (2), (b) to (3) and (c) to (4). The author accepts (c) and (4). Are extensional meanings (extensions) nevertheless mathematical objects (sets)? The author avoids this conclusion by subtly distinguishing sets from extensions considered as ways of signifying things. The passage from semantics to mathematics occurs when extensions are reified as sets. The limpid discussion concludes with a summary account of Leśniewski’s formal systems.


Küng, Guido and Canty, John Thomas


Kuratowski, Kazimierz (1896–1980)


Kuratowski, Kazimierz and Mostowski, Andrzej (1913–1975)

1968 *Set Theory*, Amsterdam: North Holland.

Kuzawa, Mary Grace (born 1918)


Laforge, Jean-Marc


de Laguna, Theodore


Clark 1981 notes that this presents a “suggestive alternative basis for Whitehead’s theory.”

Lambek, Joachim (Born 1922)


1999 “Les types en mathématique et en linguistique,” pp. 147–158 in D. Miéville (editor), *Rôle et enjeux de la notion de catégorie en logique*, Université de Neuchâtel: Travaux de logique 13, 147–158. His name is given here as “Jim Lambek,” the name that he uses colloquially.

**Lambert, Karel (born 1928)**


**Lambert, Karel and Scharle, Thomas**


**Landini, Gregory**


**Lando, Giorgio**


**Lapointe, Sandra; Marion, Mathieu; Miśkiewicz, Wioletta; and Woleński, Jan, editors.**


**Largeault, Jean**

**Lauener, H.**


**Lebesgue, Henri L. (1875–1941)**


**Lebiediewa, Swietlana**


**Le Blanc, Audoënus Owen Vincent**

1983 *A Study of the Axiomatic Foundations of Mereology*, thesis submitted to the University of Manchester for the degree of Master of Arts in the Faculty of Arts. [Cited by Lejewski 1996, p. 61]


Provides new axioms for mereology based on overlap and Klass, as well as several new axiom systems for mereology.


Presents deductions from axiom $A_n$ which are considerably shorter than those in Sobociński 1960 and derives the laws of implication without using the rule of extensionality.


1996 “Mutual influence of Leśniewski and Łukasiewicz,” presentation at the meeting “Łukasiewicz in Dublin” — an International Conference on the work of Jan Łukasiewicz,” July 7–10, 1996. [Program of the meeting.]

???? “Łukasiewicz, Aristotle, and contradiction,” available only online.

A very interesting discussion of Łukasiewicz 1919b.

Leblanc, Hugh (1924–1999)


Lecomte, Alain


Lednikov, E. E.


Lehrberger, John


Lejewski, Czesław (1913–2001)

Obituary by Peter Simons.

1953 O pojęciu istnienia w logice (Sur le concept d’existence en logique), Polskie Towarzystwo Naukowe Na Obczyznie 4, 15-17.


This paper includes Lejewski’s “ontological table” which is a fine way of explaining the basic functors of ontology.


1977b Systems of Lesniewski’s Ontology with the Functor of Weak Inclusion as the Only Primitive Term, Studia Logica 36.4, 323-349.


Presents the shortest known single axiom for the notion of mereological elementhood. It contains 11 ontological units.


A note on a problem

1983a “A note on Leśniewski’s axiom system for the mereological notion of ingredient or element,” *Topoi*, 2 (1), June 1983, 63–71. [Citation.]


An obituary of Sobociński.

1984 “Ś.P. Bolesław Sobociński,” *Znac*, No. 351-352, pp. 400-403. This is the same as his 1983b.

1989 “Formalization of functionally complete propositional calculus with the functor of implication as the only primitive term,” *Studia Logica*, 48 (4), 479–494. Abstract. JSTOR. Have copy.

Formulates Terminological Explanations for the rules of substitution, detachment and definition for the implicational calculus, a system which he discussed in Lejewski 1958. The real novelty here is that he presents examples showing the independence of the conjuncts in the TEs. It was Leśniewski’s policy to show by example that every clause of a definition was necessary, but lack of space prevented him from doing so in print; an exception is with the definition of class in Chapter IV of “O podstawach matematyki” [Leśniewski 1983, p. 25].

1989 *Ricordando Stanisław Lesniewski*, Trento: Centro Studi per la Filosofia Mitteleuropea.


Describes the life and work of Leśniewski and evaluates the impact his novel system has since exercised. The details are concerned with Leśniewski’s biography; characterization of his three theories; Leśniewski’s views on various particular subjects such as the meaning and role of formalization, definition and notational system in science formation; intended interpretation of quantifiers; and Leśniewski’s type of nominalism. The paper is intertwined with a number of reminiscences. MR1072109 by Surma.


1993b “Logika, ontologia i metafizyka”, *Filozofia Nauki*, 1/1, 15–35. Translated by Anna Lissowska. Lejewski has written reviews of Sobociński 1954.

Lenzen, Wolfgang


**Lepage, François**


This paper is composed of two independent parts. The first is concerned with Russell’s early philosophy of mathematics and his quarrel with Poincaré about the nature of their opposition. I argue that the main divergence between the two philosophers was about the nature of definitions. In the second part, I briefly present Leśniewski’s Ontology and suggest that Leśniewski’s original treatment of definitions in the foundations of mathematics is the natural solution to the problem that divided Russell and Poincaré.


**Leśniewski, Stanisław** (1886–1939)


Leśniewski cites Cornelius 1834, Mill 1872, Husserl 1901, Twardowski 1894, Petrażycki 1905, Brentano 1874, and mentions Spencer.


Leśniewski cites Łukasiewicz 1910b, Marty 1908, Mill 1884, as well as his 1911.

1912a [On the principles of the logical middle], a paper read to the Philosophical Society of Lwów in “last year’s summer term.” Cited in Leśniewski 1913c, p. 47 in Leśniewski 1992. Need original title and better reference.

1913a Logičeskia rassuždenia (in Russian), St. Petersburg, 87 pp.

These is no English translation of this in Leśniewski’s Collected Works (1992) or elsewhere.


This is a response to Kotarbiński 1913. An unpublished partial German translation, “Ist die Wahrheit nur ewig oder ist sie ewig und seit ewig?,” by Rose Rand is in Sobociński’s Nachlass.


This paper was finished in March 1913 when Leśniewski was in San Remo, in North-West Italy.

When citing this paper, Leśniewski always follow Leśniewski’s tradition and give the title as above, even though it contains a typographical error: It should be “środua”.


1913f [Review of Władysław Biegański’s Traktat o poznaniu i prawdzie (Treatise on Knowledge and Truth), Wychowanie w domu i w szkole, VI, vol. II, 1913, 139–142. Known from Betti 2001, p. 403.

1914a “Czy klasa klas, nie podporzadkowanych sobie, jest podporządkowana sobie?,” Przegląd Filozoficzny, 17 (1914), 63–75.


This work has never been re-published or translated.

This is Leśniewski’s first presentation of Mereology, which is done in ordinary language. It would be a good student project to formalize these proofs.

The paper was finished in April 1916 in Moscow, where Leśniewski spent WWI. He cites no literature, but he does quote Kotarbiński 1914 in an opening quotation, thanks Sierpiński and Kotarbiński for there help while he was preparing the paper, and notes that Lucyan Zarzecki suggested the term ‘ingredient.’ A noteworthy feature of this paper is that Leśniewski gives examples to show that the different conjuncts of his definitions are independent. He did not do this in later papers, e.g., when stating his Terminological Explanations, because of lack of space.

1921a “On the principles of Ontology,” on January 10, 1921, a talk to the Polish Association of Psychology.

1921b “O stopniach funkcyj gramatycznych” (On comparisons of the grammatical functions), a talk given March 10, 1921 to the Logic Section of the Warsaw Philosophical Institute, *Przegląd Filozoficzny*, 24 (1921), 248. This is only a listing of the title. Mentioned, Leśniewski, *Works*, p. 370.

Mentioned in Leśniewski, It is unclear why this lecture is reported in *Przegląd Filozoficzny* after that of 1921a.

Sinisi 1983a, p. 54, says that he “discussed questions of Ontology.”

1927 “[On the foundations of ontology], a talk given in September, 1927 to the Logic Section of the Second Polish Philosophical Congress (Księga Pamiątkowa Drugiego Polskiego Zjazdu Filozoficznego, Warszawa 1927), *Przegląd Filozoficzny*, 31 (1928), No. 1–2, p. 160.


Sinisi 1983a, p. 54, notes this presentation.


The University of Warsaw Library has digitalized an offprint of Sections VI–IX of this paper. Thus one can easily compare the original with the English translation.


Leśniewski cites Bocher 1905, Huntington 1905, Weber 1893, as well as Whitehead and Russell 1925.


This is the single most important paper dealing with protothetic.
One result in this paper is the axiomatization of the equivalential calculus. This has generated an immense amount of work, especially the search for single axioms. For up to date information, see Dolph Ulrich’s Sentential Calculi Pages.


Lesniewski cites Huntington 1905, Hurwitz 1913, Weber 1893, and his own 1929a.


1963 “Is truth only eternal or both eternal and sempiternal,” Polish Review 8 (1963), 23–43. English translation of 1913b.

1967a Stanisław Leśniewski: Collected Papers. Canty has collected Leśniewski’s papers, with the exception of 1913a, 1913b, 1916, which could not then be located, and the bound photostats have been deposited in the University of Notre Dame Library. BC 135 L637, vi + 297 pages.


1983a “Lesniewski sobra la concepcion de los “eventos”,” Theorema, 83–89.


This is Sinisi’s translation of "O podstawach matematyki," which is complete, but with some exceptions: (1) After the first ten Theorems in Chapter IV, the proofs are omitted, (2) A long footnote about Whitehead’s theory of events is omitted as it is translated in Sinisi 1966, and (3) all of Chapter XI on ontology has been omitted as it is summarized and discussed in Sinisi 1983a [this information is from footnote 1 of Sinisi 1983].


Contents:
Translator’s Foreword IX

PART ONE: FOUNDATIONS OF MATHEMATICS
1. From the foundations of Protothetic 3
2. Definitions and theses of Leśniewski’s Ontology 29
3. Class theory 59

PART TWO: PEANO ARITHMETIC AND WHITEHEAD’S THEORY OF EVENTS
4. Primitive terms of arithmetic 129
5. Inductive definitions 153
6. Whitehead’s theory of events 171

List of seminars and courses delivered by Leśniewski at Warsaw University between 1919 and 1939 179

Bibliography 181


Contents:
Introduction by The Editors VII-XVI
A contribution to the analysis of existential propositions (1911) 1
An attempt at a proof of the ontological principle of contradiction (1912) 20
The critique of the logical principle of the Excluded Middle (1913) 47
Is all truth only true eternally or is it also true without a beginning? (1913) 86
Is the class of classes not subordinated to themselves, subordinated to itself? (1914) 115
On the foundations of mathematics 1927-1931 (The series consists of the following papers): 174
I. Introduction (1927) 174
II. On Russell ‘antinomy’ concerning ‘The Class of Classes which are not elements of themselves’ (1927) 197
III. On various ways of understanding the words ’Class’ and ’Collection’ (1927) 207
V. Further theorems and definitions of the ‘General Theory of Sets’ from the period up to the
year 1920 inclusive (1929) 264
VI. The axiomatization of the 'General Theory of Sets' from the year 1918 (1930) 315
VII. The axiomatization of the 'General Theory of Sets' from the year 1920 (1930) 321
VIII. On certain conditions established by Kuratowski and Tarski which are sufficient and necessary for P to be the Class of objects a (1930) 327
IX. Further theorems of the 'General Theory of Sets' from the years 1921-1923 (1930) 332
X. On 'Singular' propositions of the type \(A \varepsilon b\) (1931) 364
On functions whose fields, with respect to these functions are groups (1929) 383
On functions whose fields, with respect to these functions are Abelian groups (1929) 399
Fundamentals of a new system of the foundations of mathematics (1929) 410
On the foundations of Ontology (1930) 606
On definitions in the so-called theory of deduction (1931) 629
Introductory remarks to the continuation of my article 'Grundzüge eines neuen Systems der Grundlagen der Mathematik' (1938) 649
An annotated Lesniewski Bibliography [up to 1978] by V. Frederick Rickey 711
Index 787–794.

See also Łukasiewicz et al., 1938.

1999 “Listy do Kazimierza Twardowskiego” (Letters [from Leśniewski] to Kazimierz Twardowski,), Filozofia Nauki, 7(1–2), 115–133.
Twenty letters from Leśniewski to Twardowski.
1994b “Próba dowodu ontologicznej zasady sprzecznosci ci,” Filozofia Nauki, 2 (1994), 2, 117-147 [Need to verify page numbers]. Critical edition of the paper of Leśniewski 1912 by Jacek J. Jadacki, taking into consideration also its Russian version (1913a) prepared by the author himself with some important modifications. Leśniewski’s Russian was as perfect as his Polish.


xxxx Stanisław Leśniewski: Pisma zebrane, edited by Jacek Jadacki, 2 volumes, 468 + 408 = 876pp. The cover has a picture of Leśniewski that I do not recognize. There may be things here that have not been translated.

**Leśniewski’s Courses and Seminars**

1919–1920 Exercises on the foundations of mathematics.

See McFarland, McFarland, and Smith (2014), p. 7. Tarski attended during his second year at the University of Warsaw (during the first year he studied biology).

1919–1920 Foundations of the theory of classes.

See Leśniewski’s Collected Works (1992), pp. 365. Influenced by Chwistek, Leśniewski began to use symbolic language, instead of natural language, in his lectures. This was his first year of lectures at the University of Warsaw.


See Leśniewski’s Collected Works (1992), pp. 367. Not listed in Leśniewski1988. It is not clear whether the summer semester was in 1919 or 1920. **** SEE MMS ***

Autumn 1920


See Leśniewski’s Collected Works (1992), pp. 628. Leśniewski 1930b is a summary of these lectures. If these dates are correct, he probably wrote this paper before giving the course.

1933-1934 Introduction to Mathematical Logic.


**Lewis, David (1941–2001)**


Libardi, Massimo


Lindenbaum, Adolf (1904–1941)


Lindenbaum, Adolf and Tarski, Alfred


Before Leśniewski coined the word “Protothetic” he used the word “logistic”. This paper is cited in Leśniewski 1927 and 1929, which are translated into English in Leśniewski 1992, pp. 176 and 415.

Sinisi 1983, p. 55, reports that this has one of the early references to Leśniewski’s ontology. Articles in this journal typically have both Polish and French titles.

Linsky, Leonard (1922–2012)


Linsky, Leonard and Schumm, George


Lippert, Bernhard Matthaus


Lode, Tenny


López-Escobar, E. G. K. and Miraglia, Francisco

2002 *Definitions: the Primitive Concept of Logics or The Leśniewski-Tarski Legacy*, Dissertationes Mathematicae (Rozprawy matematyczne), no. 401. Table of Contents.


Lorentz, Kuno


Łukasiewicz, Dariusz


Łukasiewicz, Jan (1878–1956)

1910a “Über den Satz des Widerspruchs bei Aristoteles,” *Bulletin International de l’Académie des Sciences de Cracovie, Classe de philologie, Classe d’histoire et de philosophie*, 15–38. 1971 is an English translation. There is a German reedition: *Über den Satz des Widerspruchs bei Aristoteles* (Zur modernen Deutung der aristotelischen Logik), and also a French translation: *Du principe de contradiction chez Aristote*, but no further details are available.


1925 “O pewnym sposobie pojmowania teorji dedukcji” (On a certain way of understanding the theory of deduction), *Przegląd Filozoficzny*, 28 (1924), 134–136. This is a report of a presentation given on 8 December 1924 at the Logic Section of the Warsaw Philosophical Institute. See Alfred Tarski. *Early Work in Poland — Geometry and Teaching* by Andrew McFarland, Joanna McFarland and James T. Smith, pp. 340–341 for a discussion of this talk.

This summary by Łukasiewicz of a lecture he gave to the Logic Section of the Polish Philosophical Society on February 18, 1928, contains the first (known) mention of creative definitions in the literature. Mention is made of several definitions which are creative in certain systems, but no details are given in this summary. At this lecture Leśniewski affirmed his belief in creative definitions and stated that creative definitions should be used as often as possible.


At his lecture of March 24, 1928, Łukasiewicz mentions creative definitions and refers to them as “hidden axioms.” [It is unclear why this lecture, which was given after 1928a, is reported earlier in the volume.]


Cited by Leśniewski in his 1930b.

Sinisi 1983, p. 55, reports that this has one of the early references to Leśniewski’s ontology.

1929a “O znaczeniu i potrzebach logiki matematycznej,” [The meaning and requirements of mathematical logic], *Nauka Polska*, 10 (1929), 604–620.

Cited by Leśniewski in his 1930b. Sinisi 1983, p. 55, reports that this has one of the early references to Leśniewski’s ontology.


An off-print of this paper was sent to Heinrich Scholz in Münster for review. It is the only copy of the paper known to have survived the war. It is now in Poland [where?]. Creative definitions are discussed at the end of the paper.


According to Betti 2002, p. 404, this contains “sharply critical remarks by Leśniewski.”


Works: Jan Łukasiewicz, Olgierd Wojtasiewicz, Elements of Mathematical Logic. ++++


• Collected Works of Jan Lukasiewicz (Western Philosophy Series) 1 edition By J Srzednicki Collected Works of Jan Lukasiewicz (Western Philosphy Series) J Srzednicki


A collection of French translations of 13 important papers by Łukasiewicz. MR3241576 by Roman Murawski.

Łukasiewicz, Jan; Smolka, Franciszek; and Leśniewski, Stanisław


Łukasiewicz, Jan and Tarski, Alfred

Cited by Leśniewski 1930b [= 1992, p. 630].

Łukasiewicz, Regina


The arguments in this letter are criticized by Anellis in his review of Feferman and Feferman 2004.

Luschei, Eugene C. (1928–2012)


Łyczak, Marcin; Porwolik, Marek; and Świątorzecka, Kordula


Lyons, John


Ma, Lei

Should it be “Lei Ma”?


The paper presents a method of truth-graph by truth-tables. On the one hand, the truth-graph constituted by truth value coordinate and circumference displays a more visual representation of the different combinations of truth-values for the simple or complex propositions. Truth-graphs make sure that you don’t miss any of these combinations. On the other hand, they provide a more convenient tool to discern the validity of a complex proposition made up by simple compositions. The algorithm involving in setting up all the truth conditions is proposed to distinguish easily among tautologous, contradictory and consistent expressions. Furthermore, the paper discusses a certain connection between the truth graphs and the symbols for propositional connectives proposed by Stanislaw Leśniewski.

Machover, Maurice  Born 1936

Mancosu, Paolo


Marciszewski, Witold


In the author’s view, the importance of Leśniewski’s work consists in providing an alternative to the now classical approach to logic and the foundations of mathematics: in logic Leśniewski concentrates on the structure of a sentence, and he revindicates the traditional idea of a sentence as consisting of a subject, an object and a copula; in set theory, where his concern is the nature of a set, Leśniewski puts the main emphasis on the distinction between sets in the distributive sense and sets in the collective sense. MR986061 by Stanisław J. Surma.


Marcus, Ruth Barcan (Born 1921)


Marshall, David, Jr.


Marsonet, Michele

list of his publications is on the web.


Dąmbska 1979 criticized Kotarbiński 1966 and his view of empty names. This interesting paper continues the discussion. Leśniewski is not mentioned, but this definitely relates to his system of ontology.

Martin, Norman M.


For an obituary and list of his publications, see Philip Meguire, “Richard Milton Martin: American Logician,”


Martin, Richard Milton and Woodger, Joseph Henry


Mazurkiewicz, Stefan (1888–1945)

1939 “Stanislaw Leśniewski (1886–1939),” Przegląd Filozoficzny, 42 (1939), 115.

McCall, Storrs


There is an excellent detailed review by Hiż, The Philosophical Review, 78 (1969), 539–543 which is available in JSTOR.

**Megill, Norman D.**

2004 *Metamath A Computer Language for Pure Mathematics*. [Full text](#).

**Menger, Karl (1902–1985)**


Look here for information about Leśniewski.

**Menne, Albert (editor)**


**Meredith, Carew Arthur (1904–1976)**


**Meredith, Carew Arthur and Prior, Arthur N.**


Proves that two formulas are shortest single axioms for the equivalential calculus, augmenting the three given in Łukasiewicz 1939. Claims that six more are shortest single axioms, but Peterson 1976 shows that one of them is not.

**Merleau Ponty, Maurice (1908–1961)**


**Meyers, Jeremy**

2011 “A pixelated geometry of solids,” 21 pp. manuscript.

The author completed a Ph.D. at Stanford under the direction of Solomon Fefferman. Have copy.


???? “Nominalistic Mereologic and Classical Space,”

**Michałowski, Witold**


This short note is a reply to Lejewski’s criticisms in his review of Michalowski 1955. The dispute is about the existential import of the particular quantifier. It is claimed that Kotarbiński and Słupecki, based on “notes of Leśniewski’s lectures held at the Warsaw University before 1939,” held that the particular quantifier has existential import.

Miéville, Denis (15 September 1946 — 27 October 2018)


“...This article provides an introduction to the deductive theories, which are so little known, of S. Leśniewski. The reasons that led this Polish logician to develop a theory of collective classes as well as the logical theories that underlie it are set forth here, and the main characteristics of Leśniewski’s three systems – mereology, protothetics and ontology – are presented. Some epistemological considerations are included in this study.”


The logical theories of Stanislaw Leśniewski differ profoundly from classical formal systems. Unlike the latter, they do not have an entirely predetermined vocabulary. Nor do they have a determined list of functors of syntactical-semantic categories. Due to formalized directives for definitions, the logics of Leśniewski are constructed progressively, making new theses and consequently functors of new syntactical-semantic categories accessible. In this article we present the genetic aspect associated with these theses-definitions. We also show that the property of creativity makes it possible to bridge some of the fundamental gaps in contemporary classical logics.


1992a S. Lesniewski, ou une manière d’aborder l’ontologie, Sémiotiques 2, 19-35.


1997b Microsystème, logique et lexique, Cahiers de lexicographie 71, 183-193.


Miéville, Denis and Vernant, Denis, editors


Mihailescu, Eugene Gh.


Chapter two deals with the equivalential calculus. It seems to include a translation of the completeness proof of Leśniewski 1929b.

Mikolajewicz, Boleslaw

19xx Zagadnienie odtwarzalności logiki tradycyjnej w pewnym elementarnym rachunku nazw, Acta Universitatis Wratislaviensis.

Milkov, Nikolay

“Synoptic Logic & Formal Ontology,” Full text.

Miskiewicz, Wioletta

**Miszczyński, Ryszard**

Here is a link to his papers. Several of them should be incorporated here.


Leśniewski belongs to a group of contemporary supporters of the thesis concerning the classical model of science. Axioms are real and understandable. The functor “∈”, which is used in his ontology, is of great significance. The article discusses how it is understood and perceived by the scholar.

20?? “Matematyka a nauki przyrodnicze (z rozważań Stanisław a Leśniewskiego),” (Mathematics And Natural Sciences (From Stanisław Leśniewski’s Deliberations)), 1–15.

I present the proposal of a Polish scientist to treat mathematics as a tool of natural sciences. Deductive theories are to describe the world. It will provide them with consistency. However, they themselves do not assume the existence of reality. The disadvantage is the lack of adequate characterization of intuition which provides mathematics with the knowledge of reality.


Leśniewski made research into the classical definition of truth for categorical sentences. He formulated the conditions indispensable for their truthfulness: having a denoting subject and co-denoting verb. Among others, the result was the rejection of the principle of the excluded middle as well as providing solutions to some known antinomies.


The text discusses Stanislaw Lesniewski’s first attempt to solve Russell’s antinomy. It is based on the intuitive understanding of the collective set.


The article discusses the project of a mereological solution of the antinomy which is more mature than the first one. It is a formalized and axiomatized theory in which Russell’s
structure cannot be reproduced. An important component of the solution is the analysis of the advantages of the concept of a mereological class over the concept of a distributive class.

2012 “O definicjach twórczych: między poglądami Jana Łukasiewicza i Stanisława Leśniewskiego,” 
*Prace naukowe akademii im. Jana długosza w częstochowie*, 9, 207–221.

The author discusses two different approaches to the problem of creative definitions: those of J. Łukasiewicz and S. Leśniewski.


This analysis of Russell’s antinomy was presented by Sobociński only after Leśniewski’s death. The logical system, called ontology, is the basis for carrying out the research. The definition of paradox provided by Leonard Nelson is used in deliberations. The result is the acknowledgment that Russell’s contradiction is not an antinomy because the assumptions adopted by Russell are unacceptable. R. Urbaniak’s critique results in the fact that a part of Sobociński’s cerebrations lose their significance.

2016 “Intuicyjny formalizm Stanisława Leśniewskiego” (Stanisław Leśniewski’s Intuitive Formalism), *Filozofia Nauki*, 25 (2(94)), 145–160.

The paper discusses the two volumes of Stanisław Leśniewski’s *Pisma zebrane* [Collected Works] edited by Jacek Jadacki and published in 2015. The focus here is on the works published in the second period of Leśniewski’s scholarly activity, when he created his system of foundations of mathematics. However, the publications were not presented systematically and comprehensively. The article also explains why Leśniewski’s view is called “intuitive formalism.”


Summary/Abstract: Husserl formulated the concept of semantic categories in his *Logische Untersuchungen* (1901), which were later used by Leśniewski to construct a formal language for the foundations of mathematics. The author focuses on the language Protothetic described in “Grundzüge eines neuen Systems der Grundlagen der Mathematik” (1929), presenting in clearly defined language, how Leśniewski used so-called. “Terminological clarification” (Terminological Explanation) characterised by semantic categories.

2017 “Stanisław Leśniewski’s radical formalism,”

Formalism used by Leśniewski is called a radical one. According to the author, it is the implementation of the postulates of the so-called formal arithmeticians. Mathematical theory is presented as a pure game of formulas devoid of content. It is governed by the precise rules described in the metalanguage. The author stresses the difference between Leśniewski’s and Hilbert’s mathematical approaches.

Discusses Jadacki’s, Stanisław Leśniewski’s genius of logic. The book presents the scholar and his work from the point of view of the people who knew him. They describe both his views and his personality. It is worth noting that not all the accounts are favorable. In the last chapter, Jadacki presents his own survey of Leśniewski’s achievements.

Moiseev, Vyacheslav

“Towards a Platonic epistemology of mathematics,” Abstract.

2012 “Projectively modal ontology: between worlds of St. Lesniewski and W. Soloviov” Text.

Projectively Modal Ontology:

Moravcsik, Julius M. E.


Morawiec, Adelina


Morgan, Charles G.


Comments on Nemesszeghy & Nemesszeghy 1971.

Morrison, Paul G.


Morscher, Edgar; Czermak, Johannes and Weingartner, Paul (editors)


Morse, Anthony P. (1911–1984)


Mostowski, Andrzej (1913–1974)

1948 Logika Matematyczna, Warszawa-Wroclaw: Monografie Matematyczne, T. XVIII.

Mulligan, Kevin

2014 “Arithmetic in Leśniewski’s ontology.” In Mulligan et al., 2014.

Mulligan, Kevin and Smith, Barry


**Mulligan, Kevin, Kijania-Placek, Katarzyna and Placek, Tomasz**


**Munitz, Milton K.** (–1995)


**Murawski, Roman** (Born 1949)


Contains a chapter on Leśniewski.

2014 *The Philosophy of Mathematics and Logic in the 1920s and 1930s in Poland*, Birkhauser.


**Myhill, John R.** (1923–1987)


Constructs a system of arithmetic with infinitely many creative definitions. He credits Leśniewski with the notion of a creative definition but incorrectly cites the “Über Definitionen” paper as the source.


**Nagel, Ernst** (1901–1985)


**Nef, Frédéric**


Nemesszeghy, E. Z. & Nemesszeghy, E. A.

1971 “Is $p \supset q =_{Df} p \lor q$ a proper definition in the system of the *Principia Mathematica*?,” *Mind*, 80 (1971), 282–283.

This paper has been criticized by Black 1973, Dudman 1973, Morgan 1973 and Rickey 1975.

1973 “On the creative role of the definition $(p \supset q) = (\sim p \lor q)$ Df in the system of *Principia*: Reply to V. H. Dudman (I) and R. Black (II), *Mind*, 82 (1973), 613–616.


Neumann, John von  (1903–1957)


After commenting that he knows of no adequate formalized system for mathematics whose rules are stated precisely enough to prevent contradictions, Leśniewski obtains a contradiction in this paper of von Neumann [1992, 488-490, 665]. He cites this as “separately published” [1992, 429], so perhaps he was working with an offprint.


Nicod, Jean George Pierre  (1893–1924)


Cited in Leśniewski 1988, p. 3 where he remarks that Nicod (and Sheffer 1913) use a “special definitional sign of identity” and so it is difficult to say that Nicod’s theory of deduction is really based upon the sole primitive sign ‘|’.

Nicolas, Georges


Nowik, Grzegorz


Discusses Leśniewski’s work on cryptography.

Obojska, Lidia

2013 “U źródeł zbiorów kolektywnych. O mereologii nieantysymetrycznej (At the foundations of collective sets: on non-antisymmetric mereology).” PL ISSN 2082-5684


Author’s abstract: In response to the paper by Cotnoir and Bacon published in RSL 2/2012, we would like to add some remarks regarding supplementation principles. It is known that in a classical mereology, the Strong Supplementation Principle (SSP) together with antisymmetry enforces the Weak Supplementation Principle (WSP). Instead, in the nonwellfounded mereology, the failure of extensionality causes the failure of antisymmetry (Cotnoir, 2010), hence the investigated model is also nonantisymmetric. Cotnoir supposes that the failure of antisymmetry implies the failure of (WSP) when (PP1) is applied, however gives no explicit argument, which we would like to supply in this paper. Additionally, when (PP2) is applied, (SSP) implies (WSP), hence the failure of antisymmetry does not necessarily imply the failure of (WSP).


Odegard, Douglas


Onicescu, Octav and Radu, Eugen


Oppy, Graham (Born 1960)


Ostasiewicz, Walenty

???? “Pioneers of fuzziness,” undated ms. Full text.

Ozawa, Masanao and Waragai, Toshiharu


Parsons, Charles (Born 1933)


Partee, Barbara Hall (Born 1940)

**Pasenkiewicz, Kazimierz**


**Patterson, Douglas**


2012 *Alfred Tarski: Philosophy of Language and Logic*, Palgrave Macmillan.

**Paul, Laurie Ann**


**Pavlov S.A.**

???? “Embedding of Leśniewski’s Elementary Ontology into Semantically Closed Theory of Denotation.”

2013 “Axiomatic theory of denotation and Lesniewski’s ontology,” [in Russian]

This paper conceders basic presuppositions of the theory of denotation and proposes the axiomatic theory of denotation. Lesniewski’s elementary ontology is embedding into the axiomatic theory of denotation.

**Peano, Giuseppe (1858–1932)**


**Pearce, David and Woleński, Jan**

1988 *Logischer Rationalismus. Philosophische Schriften as der Lemberg-Warschauer Schule*, Frankfurt am Main: Athenium, 1988. Reprints some work of Leśniewski (including parts of Leśniewski 1929), but I don’t know which ones. Are there translations into German?

**Peeters, Marc**


**Peirce, Charles Sanders (1839–1914)**


**Pelc, Jerzy (Born 1924)**


**Pelletier, Francis Jeffry**


**Perreiah, Alan R.**


**Perzanowski, Jerzy (1943–2009)**


There are some models in Perzanowski’s paper, so it deserves a careful look. Copy saved.

**Peterson, Jeremy George**

Meredith claims in Meredith and Prior 1963 that six equivalential formulas are each a single axiom of the equivalential calculus. Here Peterson shows that five of them are, but that $EpEEqErpEqr$ is not. Kalman 1978 shows that when the last two variables in this ‘axiom’ are reversed, that another shortest single axiom for the equivalential calculus is produced.


Describes the computer program used to obtain proofs that several formulas, given in his 1976, are in fact shortest single axioms for the equivalential calculus.


Pietruszczak, Andrzej


??? Logiczno-filozoficzne i formalne problemy w metodologii standardowego rachunku nazw. Systemy i ich metateoria, Ph.D. Dissertation dealing with the Calculus of Names at Nicolaus Copernicus University, supervised by Leon Gumański.


??? Metamereologia, Habilitation in Philosophy, Nicolaus Copernicus University. Referees: Jacek Paśniczek, Jerzy Perzanowski and Jerzy Pogonowski


Pietruszczak, Andrzej and Nasieniewski, Marek

Pietruszczak, Andrzej and Gruszczynski, R.


Pinzani, Roberto


“Sul concetto di categoria semantica in Husserl, Lesniewski e Ajdukiewicz.” Full text. Have copy.

**Plantinga, Alvin (Born 1932)**


**Pogonowski, Jerzy (Born 1951)**


**Pogorzelski, Witold A. (1895–1963)**


**Poli, Roberto**

A complete list of Poli’s publications.


**Poli, Roberto, and Libardi, Massimo**


Deals with Leon Petrażycki and his influence on Leśniewski.

“Due to the current availability of the English translation of almost all of Lesniewski’s works it is now possible to give a clear and detailed picture of his ideas. Lesniewski’s system of the foundation of mathematics is discussed. In a brief outline of his three systems Mereology, Ontology and Protothetics his positions concerning the problems of the forms of expression, proper names, synonymity, analytic and synthetic propositions, existential propositions, the
concept of logic, and his views of theory of science and metaphysics are sketched. The influence of Mill, Łukasiewicz, Austrian philosophy and especially Petrazycki on his thinking is evaluated and an interpretation is suggested setting him squarely in a tradition of classical Aristotelian logic."

Polkowski, Lech

A list of his publications is available at this link. Probably many more of them should be included here.


Polkowski, Lech and Skowron, Andrzej

“Rough mereology in information systems. A case study: Qualitative spacial reasoning,” Chapter 3 in ??? Contains a large bibliography. Full text.

Popper, Karl (1902–1994)


Porwolik, Marek


Pouivet, Roger and Rebuschi, Manuel


Pozsgay, Lawrence James


Prakel, Judith M.


**Prieto, Pablo Domínguez**

1997 Łukasiewicz (1878–1956) (Spanish) Paperback?

**Prior, Arthur N.** (1914–1969)


Prior has written reviews of Lejewski 1955, Sobociński 1955,

**Quine, Willard van Orman** (1908–2000)

1923 (639) Leśniewski, Stanisław, 1886-1939. Correspondence with WVOQ, 1923–1937. 1 folder. Some correspondence in German.
1932 (659) Łukasiewicz, Jan. Correspondence with WVOQ, 1932–1945.1 folder. Some correspondence in German.

1933 (3240) Logic notes, mostly 1934–38: autograph manuscript, 1933–1951.2 folders. Notes in a bound notebook; pages numbered from 1 through 300. Table of contents and Indexes of names and subjects at back of volume. First entry: “Warsaw, May 16, 1933.” Loose sheets found between pages 38-39 removed to separate folder.

The above three items are located in W. V. Quine Papers (MS Am 2587). Houghton Library, Harvard University. The numbers in parentheses refer to file numbers.


Leśniewski 1930b is cited in footnote 2 to support Quine’s claim “I agree with Leśniewski that “it is false that” is an admissible reading of “∼,” perhaps even preferable expositoarily to the etymologically more immediate reading “not” . . .”


**Rand, Rose** (1903–1980)

An Inventory to the Rose Rand Papers (55 pages), which are held at the University of Pittsburgh Library is on line. There is correspondence with Ajdukiewicz, Kalinowski, Kotarbinski, Lejewski, Prior, Sobociński, Tarski, Woodger, as well as translations of works by Łukasiewicz and Leśniewski. This archive deserves study.


**Rasiowa, Helena** (1917–1994)

Provides a complete axiomatization of the partial propositional calculus based on $E$, equivalence, and $E'$, non-equivalence using the axioms $EEpqEE rqEpr$, $EEpqEErqE'pr$. The first axiom is a complete axiomatization of the PPC based on $E$. It is attributed to Sobociński but no reference is given. In fact it is due to Łukasiewicz; discovered 1933, published 1939.

MR0032521 by B. Jónsson is a summary. Also reviewed by Turquette, Journal of Symbolic Logic, 15, 139 (1950).

Rescher, Nicholas  (Born 1928)

Leibniz had a formal treatment of the part relationship.


Resnik, Michael David  (born 1938)

1964 “Some observations related to Frege’s way out,” Logique et Analyse, 7, #27, 138–144.

Rezuş, Adrian


Richard, Sébastien  (Born 1981)

Need to record his translations and reviews.

2007 “Le problème de l’identité temporelle dans la méréologie de Peter Simons,” Diplôme d’études approfondies en philosophie, Université de Liége.

2006 “La conception sémantique de la vérité et ses perspectives dans la philosophie de Jaakko Hintikka,” Licence en philosophie, Université Libre de Bruxelles.


2012 De la forme à l’être. Sur la genèse philosophique du projet husserlien d’ontologie formelle, Ousia, Bruxelles. Ñ

2008 La conception sémantique de la vérité. DÔAlfred Tarski à Jaakko Hintikka, Academia Bruylant, Louvain-la-Neuve, 2008

2017 “Leśniewski on metalogic and definitions,” Synthese

Rickey, V. Frederick  (Born 1941)


1972 *An Annotated Leśniewski Bibliography*, (pp. 1–39), Bowling Green State University.


1976a *An Annotated Leśniewski Bibliography (Supplement I)* (pp. 40–83), Bowling Green State University.


“This article proposes to clarity the problem of interpreting Leśniewski’s ontology. A distinction is made between two kinds of interpretation: substitutional and “natural.” Substitutional interpretation is shown to involve difficulties and limitations. A “natural” ontology, the major principles of which are presented here, is shown to be of considerable interest.”

“For interpreting Ontology, the author suggests a structure consisting of a domain of individuals, a set of names for these individuals and a denotation relation which relates the names and the individuals. In this paper only the primitive epsilon is given an interpretation.” A crucial idea comes from Miéville’s 1984 book. [MR87j:03029]


Ridder, Lothar

Rieser, Max (= Samuel Maximilian Rieser (1893–1981)


Deals primarily with the period after WWII. There is little mention of Logic, so this is only of tangential interest.

Rogalski, Andrzej Krzysztof


Rojeck, P.


Rojszczak, Artur (1968–2001) and Woleński, Jan


Rose, Alan


Rouault, Jacques

1971 Approche formelle de problèmes liés à la sémantique des langues naturelles, Thése de Doctorat ès Sciences à l’Université Scientifique et Médicale de Grenoble; Institut de Recherches en Mathématiques Avancées.


Russell, Bertrand (1872–1970)
Leśniewski cites this as “Vol. 1,” for originally a second volume was announced. See Leśniewski 1992, p. 220

See Leśniewski 1992, p. 222


See Leśniewski 1992, p. 225, 609


Rvacev, Leonid A.


Rybaríková, Zuzana


Rzewuski, Paveł

2012 “Stanisław Leśniewski — logik radykalny.” (Stanislaw Leśniewski — radical philosopher).
There is some new, to me, information here: Leśniewski’s political views were radical left. For a time he belonged to the Socjaldemokracja Królestwa Polskiego i Litwy (Social Democracy of the Polish Kingdom and Lithuania). In 1913 he went to Kimborciszek, the family estate of his wife, in the Vilnius region. Serious problems arose with his habilitation, due to opposition from Mstislav Wartenberg

Sagal, Paul Thomas


Salamucha, Jan (1903–1944)
1930 Pojęcie dedukcji u Arystotelesa i Św. Tomasza z Akwinu. Studium historyczno-krytyczne (The concept of deduction in Aristotle and Saint Thomas Aquinas, a critical historical study), Warsaw.


Salustri, Filippo A. and Lockledge, Jeffrey C.


Sanders, John T.

1996 “Stanisław Leśniewski’s logical systems,” Axiomathes, 3 (1996), 407–415. Full Text. Stanisław Leśniewski’s interests were, for the most part, more philosophical than mathematical. Prior to taking his doctorate at Jan Kazimierz University in Lvov, Leśniewski had spent time at several continental universities, apparently becoming relatively attached to the philosophy of one of his teachers, Hans Comelius, to the chapters of John Stuart Mill’s System of Logic that dealt specifically with semantics, and, in general, to studies of general grammar and philosophy of language. In these several early interests are already to be found the roots of the work that was to occupy Leśniewski’s life: a search for a definitive doctrine of what sorts of things there are in the world, or better, of what language must be like if it is adequately and efficiently to represent the world.

Sant’Anna, Adonai S.


Sarlet, Henri


Schäfer, Burkhard


Schirn, Matthias
Critical discussion of Dale Jacquette’s English translation of Frege 2007, analyzing errors and shortcomings in this translation and in Austin’s translation of Frege

Scharle, Thomas W. (Born 1938)
This work is the substance of his M.A. thesis in Philosophy under the direction of Sobociński.

Scheffler, Israel (Born 1923)
His Ph.D. dissertation “On quotation” was earned at the University of Pennsylvania in 1952 under the direction of Nelson Goodman.

Schock, Rolf (1933–1986)
He endowed the Rolf Schock Prize in logic and philosophy, which has been won by Willard Van Orman Quine (1993), Dana Scott (1997), Michael Dummett, Saul Kripke and Sol Feferman (2003).

Scholz, Heinrich (1884–1956)
Scholz began a correspondence with Łukasiewicz in 1938 and helped him and his wife Regina to leave Poland and hide in Germany.

Schönfinkel, Moses (1889–1942)
This paper was brought to Sobociński’s attention by Leśniewski, who noted that Schöfinkel used functions similar to multi-link functors. See Sobociński 1934, n. 2. Schöfinkel was a founder of Combinatorial Logic together with Haskell Curry, whose notes on this paper are available here.

**Schuldenfrei, Richard**

1969 “Eberle on nominalism in non-atomic systems,” *Noûs*, 3, 427-430. JSTOR.

**Severens, Richard Hoxie**


**Shanker, Stuart**

*Philosophy in Britain Today*, Google books.

**Sheffer, Henry Maurice** (1882–1964)

Cited in Leśniewski 1988, p. 3 where he remarks that Sheffer (and Nicod 1916) use a "special definitional sign of identity" and so it is difficult to say that Nicod’s theory of deduction is really based upon the sole primitive sign ‘|’.

**Shepard, Philip T.**


**Sierpiński, Waclaw** (1882–1969)

In language which is, depending on the opinion of the reader, either coldly analytical or sarcastic, Leśniewski criticizes the ‘invention’ of the empty set by Sierpiński, Cantor, Fraenkel 1923 and Hausdorff 1927. Sierpiński took offense and this led to a disagreement that led to Leśniewski’s resignation from the editorial board of *Fundamenta Mathematicae*. Łukasiewicz resigned in sympathy. Leśniewski 1927 cites p. 4 of this book of Sierpiński. See Leśniewski 19183b, p. 18, or 1992, p. 211.


**Sikorski, Roman** (1920–1983)

**Simons, Peter M.**


Presents semantic tables for functors. As the author realizes the approach is limited to small finite domains [Canty, 87]:03030]


This book with an introduction by Witold Marciszewski, views the history of philosophy and logic from 1837 to 1939 from the perspective of the cradle of modern exact philosophy — Central Europe. In a series of case studies, it illuminates the developments in this region, most notably in Austria and Poland, examining thinkers such as Bolzano, Brentano, Meinong, Husserl, Twardowski, Lesniewski, and Tarski, as well as the logicians like Frege and Russell
with whom they bore a close resemblance. The book challenges established views about the history of philosophy and logic in Europe, and shows the vitality of the Central European tradition.


2007 “Stanisław Leśniewski,” The Stanford Encyclopedia of Philosophy, Full text


Sinisi, Vito F. (1924–2005)


Contains an English translation of a long footnote form “O podstawach matematyki” which deals with Whitehead’s theory of events. This footnote is thus not reproduced in Leśniewski 1983.


Discusses Leśniewski’s refutation of Frege’s claim that one can have a class of a single object. Cited by Betti 2008.


An analysis of Leśniewski 1914, which is Leśniewski’s first analysis of the Russell antinomy. His second, from about the same time was not published until Chapter II of Leśniewski 1927. The third and definitive analysis is in Sobociński 1949.


This is the introduction to his translation Leśniewski 1983.


This is a summary (not a translation) of Chapter XI of Leśniewski’s “O podstawach matematyki,” which deals with ontology. The only deduction here is that of the long (1920) axiom of ontology.


Sinisi, Vito, and Woleński, Jan


Skidmore, Arthur (Died 2004)


Skolomowski, Henryk (Born 1930)


Śleszyński, Jan (1854–1931)
1921 *O Logice Tradycyjnej* (On Traditional Logic), Wydawnictwo Towarzystwa Filozoficznego w Krakowie, no. 8, Krakow.
See Obojska

Słomska, A.


Słupecki, Jerzy (1904–1987)

Picture


Leśniewski is mentioned several times. I don’t believe he mentions definitions, but must check.


Based on notes of Leśniewski’s students


1956 “Geometria sześcianów” (The geometry of cubes), *Zeszyty Naukowe Wyższej Szkoły Pedagogicznej w Opolu, Matematyka*, 1 (1956), 38–47.


Discusses some aspects of the genesis and early years of the Warsaw School of Logic, emphasizing contributions of Łukasiewicz and Leśniewski.

**Smart, John J. C.**


**Smirnov, Vladimir Alexandrovich**

1965 Modelirovanije mira v struktury logiceskijh jazykov (La modélisation du monde dans la structure des langages logiques), Logic and Methodology of Science (Proc. 4th All-Union symp., Kiev, 1965), Moscow, 117-125.

Cites a paper of Iwanuś 1973.


1987a “Strict embedding of the elementary ontology into the monadic second-order calculus of predicates admitting the empty individual domain,” *Studia Logica*, 46 (1).


**Smith, Barry**


Chapter 6 deals with Twardowski.

“Topological foundations of cognitive science.” Full text.


**Smith, Barry and Mulligan, Kevin**

**Sobociński, Bolesław  (1906–1980)**

NOTE: Rickey has reprints of many papers by Sobociński and will send them on request.


Gives six new single axioms for the equivalent calculus, one discovered by Bryman, two by Łukasiewicz, and three by himself.


1949 “An investigation of protothetic,” *Cahiers de l’Institut d’Études Polonaises en Belgique*, no. 5. Polycopié. Brussels 1949, v + 44 pp. Reviewed by Alonzo Church, *Journal of Symbolic Logic*, 15 (1950), 64. Because only part of this paper has been reprinted, we make a copy of the original available here. The original was mimeographed so the quality is not good. Part 1, Part 2, Part 3. Sobociński 1967b is a new English translation. A quick glance at the original will show that the English in the first six pages of Sobociński 1988 has been cleaned up considerably.


He states, in note 13, that two definitions given in this paper are creative in mereology. These are functors of category $N/N N N (N/N N)$. The proof of this claim has never been published.

Cited by Betti 2008.

1956 “In memoriam, Jan Łukasiewicz (1878–1956),” *Philosophical Studies*, (Maynooth, Ireland) 6 (1956), 3–49. This English version of 1957a contains a “Curriculum vitae of Jan Łukasiewicz,” which is essentially the same as Łukasiewicz 1994. This also has a list of the publications of Łukasiewicz.


This paper was to appear in 1939 in the ill-fated volume Collecteana Logica under the title “Z badań nad prototetyka.” An earlier English publication of this paper is Sobociński 1949, but only pp. 29–39 of that work is included here. A footnote indicates that this is a new translation from the Polish by Z. Jordan; this means that an offprint must has survived.


Cited by Lepage 2009.

Courses taught by Sobociński at the University of Notre Dame:
Spring 1962: Symbolic Logic, Philosophy 112. An elementary course in ontology. This is the first course taught by Sobociński that Rickey attended. The notes that he took, 232pp, will be posted here in due course.


Solonin, J. N.

1969a Teorija jazyka v rannich rabotach St. Lesniewskogo (La théorie du langage dans les premières oeuvres de S. Lesniewski), Problems of Philosophy and Sociology, 1st out, Leningrad University pub., 103–107.


Mentions Leśniewski 1929 and Łukasiewicz 1950. No new results.

Srzednicki, Jan T. J.


Srzednicki, Jan T. J., Rickey, V. Frederick, and Czelakowski, J., editors.


Srzednicki, Jan T. J., and Stachniak, Zbigniew, editors.


There is an excellent review of this volume by Peter in History and Philosophy of Logic, 11(1990), 107–110.

Stachniak, Zbigniew


**Staszek, Walenty**


**Stelzner, Werner**


**Sternfiel, Robert**


**Stevenson, L.**


**Stone, Marshall H. (1903–1989)**


This is one of the earliest references to Leśniewski in English.

**Stonert, Henryk (1923–1992)**

1959 *Definicje w naukach dedukcyjnych* (Les définitions dans les sciences déductives), Łódź: Zakład Narodowy im. Ossolińskich we Wrocławiu.

**Stuchliński, Józef Andrzej**


Jan Łukasiewicz distinguished three various formulations of the law of contradiction in Aristotle’s considerations concerning axiomatic foundations of *philosophia prima* in the book Π
of *Methaphysics*. Łukasiewicz referred to these formulations as “ontological,” “logical,” and “psychological,” respectively. The author focuses his attention on the last of them, namely to the so called psychological approach. He finds this approach to be an inadequate interpretation of Aristotle’s views and tries to show that the most appropriate interpretation is pragmatic-logical.

1999 “Mereologia Leśniewskiego a zagadnienia przyrodnioznawstwa” (Leśniewski’s mereology and natural science topics), *Przegląd Filozoficzny*, Nowa Seria, 31 (3), 109–120.


2002 *Definicja zdania prawdziwego w języku logiki i językach opartych na logice* (The definition of a true sentence in the language of logic and languages based on logic), Warsaw: Faculty of Philosophy and Sociology, University of Warsaw 2002. 264 pp., 24 cm.


**Sullivan, Theodore F.**


**Sundholm, Göran**


Although mainly devoted to Wittgenstein, the “prickliness” between Leśniewski and Tarski is discussed.
Deals with relations between Leśniewski and Tarski as well as the Leśniewski-Sierpiński conflict. Cited by Feferman 2002, note 26, and Betti 2008, p. 70.

Suppes, Patrick (Born 1922)


Surma, Piotr

2011 Poglądy filozoficzne Jana Łukasiewicza a logiki wielowartość ciowe, Publisher: Semper.

Surma, Stanisław J.


1971b Przegląd wyników i metod badań nad równoważnościowym rachunkiem zdań (Compte rendu des résultats et des méthodes du calcul équivalenciel des propositions), Ruch Filozoficzny 29, 284-290.


MR0497904 (58 #16119) quotes from the author’s introduction: “This paper deals with the most important results and methods of investigations of the equivalential propositional calculus and some of its extensions. It contains, among other results, the description of the well-known criteria discovered by S. Leśniewski, M. H. Stone and E. Gh. Mihailescu as well as the achievements of Lukasiewicz’s seminar in mathematical logic in the thirties. The last section contains a brief treatment of the author’s deduction theorems valid in the equivalential propositional calculus."


1976a XXIInd Conference on the History of Logic, 5-9 July, 1976, Jagiellonian University and Polish Academy of Sciences, Kraków, 1976. This volume of abstracts was distributed at the meeting. Included are Gardies 1976, Scharle 1976 [add all items].


Description of the contents of his 1976a.

Susko, Roman  (1919–1979)


Introduces “quasi-definitions,” which “denote new axioms which contain new terms and which moreover, ‘determine unambiguously’ the extension of these terms. The last condition plays a similar role to that played by the condition of non-creativity and of translatability in the old theory of definitions.”


Szaniawski, Klemens, editor  (1925–1990)


Święczkowska, Halina


This article is an attempt to recreate the intuitions which accompanied Leśniewski when he was creating his calculus of names called Ontology. Although every reconstruction is to some extent an interpretation, and as such may be defective, still, there are reasons justifying such reconstruction. The most important justification is the fact that both Leśniewski and his commentators stressed that ontology originated from reflections about ordinary language, in which sentences such as A is B appear in one of the meanings associated with them in Ontology, and that the users of the Polish language use such sentences accordingly and properly identify them. Assumed it is so, let us try, based on Leśniewski’s guidelines as well as comments and
elaborations on Ontology (Leśniewski 1992: 364-382, 608-609; Kotarbiński 1929: 227-229; Rickey 1977: 414-229; Simons 1992: 244; Lejewski 1960: 14-29), to evaluate the accuracy of this approach, referring also to certain knowledge of the Polish language. To make it clear, this article is not about Ontology as a formal theory of language. It is solely an attempt to assess whether some syntactical constructs of the Polish language and this language’s properties are significant conditions of a proper understanding of Ontology, and whether Ontology is, in fact, in a relationship with the ethnic language of its author.

Świetorzęcka, Kordula


Świetorzęcka, Kordula and Porwlik, Marek


Szachniewicz, Artur


This paper reconstructs Stanisław Ignacy Witkiewicz’s understanding of logic, accentuating the differences in his evaluation of logic and systems of ‘logistics.’ Leśniewski’s theory of collective sets (mereology) exemplifies logistics as understood by Witkiewicz. I present an outline of Leśniewski’s nominalism, which entails a belief in a non-abstract nature of sets. I focus on these features of mereology that could have led Witkiewicz to interpreting it as an ontological system. Witkacy (Witkiewicz’s penname) was skeptical of the usefulness of formal systems (or logistics), and of mereology in particular, for the purposes of designing a unified ontological system describing essential properties of objects (the world). According to Witkiewicz, such formal systems assumed the role of ontology but severely lacked in philosophical justification. I argue that regardless of his nominalism and corporeal conception of individuals, mereology cannot be considered a formal theory of Witkiewicz’s monads.

Sznajder, Roman

2010 “906th anniversary of emergence of the Polish School of Mathematics; Polish mathematics between the world wars,” an extended version of the presentation given at HPM Americas, March 13–14, 2010, Washington, D.C. Full text

As the title indicates this is primarily about the mathematicians, but several logicians are mentioned.

Takano, Mitio


Cites a paper of V. A. Smirnov.


**Tanaka, Shotaro**


The equivalential calculus can be axiomatized with $EEpqEEprErq$ as a single axiom.


The equivalential calculus can be axiomatized with $EEpqEqp$ and $EEpEqrqESqqESpr$.

1966c “On the propositional calculus with a variable functor, $C\delta qC\delta Np\delta q$,” *Proceedings of the Japan Academy*, 42, 1161–1163.

Derives the $CN$-calculus from the thesis mentioned in the title.


Contains a proof that Leśniewski’s 1921 axiom $F$ for ontology implies his 1920 axiom $A$. A simpler proof is in Sobociński1967.


Shows that strict inclusion can be used as a primitive term of ontology.

1969a “On the proposition $C\delta CpqC\delta p\delta q$ with a variable functor,” *Proceedings of the Japan Academy*, 45, 95–96.

Derives the implicational calculus from the thesis mentioned in the title.


Proves, in the notation of Slupecki 1955, that every thesis of $S_2$ is a thesis of $S_1$.


Proof that Leśniewski’s 1921 axiom $F$ is equivalent to his 1920 axiom $A$. His proof that $F$ implies $A$ uses extensionality and, consequently, is more complicated than the same result in his 1968a.

**Tarski, Alfred** (1901–1983)

This is Tarski’s first publication. It was a report to Leśniewski’s seminar (this is the only mention of Leśniewski in the paper). Later Tarski made a “big deal” of this, claiming that because of this work he changed from the study of biology to logic. This is disputed in Feferman and Feferman 2004, p. 26–27.


This is the doctoral dissertation of Tarski written under the direction of Leśniewski. A modified French version appears in Tarski 1923a and 1924. An English translation appears in Tarski 1956, pp. 1–23; this English translation is based partly on Tarski 1923a and 1924.


Check out: http://matwbn.icm.edu.pl/


This paper contains the following paragraph (p. 61) which does not appear in Tarski 1956b: “Ma Note citée “Sur le terme primitif de la Logistique” et le Mémoire présenté constituent deux parties de ma Thèse, présentée en 1923 à l’Université de Vasovie pour obtenir le grade de docteur en philosophie. À cette occasion je tiens à exprimer ici mon affectueuse gratitude à mes Professeurs MM. S. Leśniewski et J. Łukasiewica pour leurs précieux conseils qui m’ont aidé considérablement dans mes recherches sur la Logistique.”

Tarski’s family name was “Tajtelbaum.” “Official governmental approval [of the change of name to “Tarski”] was granted on 19 March 1924, and the change was duly registered at the university two days later, only three days before the examination and granting of the doctoral degree on 24 March 1924.” [Feferman and Feferman 2004, p. 39]. Sobociński related to Rickey that Polish law required the use of a hyphenated name for a period after the change. Thus the use of “Tajtelbaum-Tarski” on 1924.


Lesniewski 1930a cites this paper in footnote 7, p. 608 of his 1992.


See Clay 1970 for a correction.

1930 O pojęciu prawdy w odniesieniu do sformalizowanych nauk dedukcyjnych (Sur la notion de vérité relativement aux sciences déductives formalisées), *Ruch Filozoficzny* 12, 210-211.

1933 Pojęcie prawdy w językach nauk dedukcyjnych (Le concept de vérité dans le langage des sciences déductives), Prace Towarzystwa Naukowego Warszawskiego, Wydział III, nauk matematyczno-fizycznych (Travaux de la Société des Sciences et des Lettres de Varsovie, Classe III, Sciences Mathématiques et Physiques) 34, Warsaw. Trad. all. [1936a], angl. [1956a], fr. [1972d].


1936a Der Wahrheitsbegriff in den formalisierten Sprachen, Studia Philosophica 1, 261-405. Trad. de [1933].

1936b O ugruntowaniu naukowej semantyki, Przeglad Filozoficzny 39, 50-57.

1936c Grundlegung der wissenschaftlichen Semantik, Actes du Congrès International de Philosophie Scientifique.

1939 On Well-Ordered Subsets of any Set, Fundamenta Mathematicae 32, 176-183.


This volume is dedicated by Tarski “To his teacher / TADEUSZ KOTARBIŃSKI / The author”. Indeed Kotarbiński was one of Tarski’s teachers, but not his “doctor-father.” See Feferman and Feferman 2004, pp. 39–42.


From the description of the editing of this volume in Feferman and Feferman 2004, pp. 366-368, one should be alert for changes in wording made in 1956a and the original papers.


Tarski, Alfred and Givant, S.


Tatarkiewicz, Krzysztof (1923–2011)
1998a “Profesor Sobociński i kolega Bum,” *Wiadomości Matematyczne*, 34, 123–146.
This paper, in Polish, has a wealth of information about Sobociński.

This contains a good deal of information about Sobociński life during WW II. A copy of this volume is at the Library of Congress.

**Terrel, Burnham**


**Tharp, Leslie H.**


**Thom, Paul**

Some propositions of the formal ontology of Parmenides are interpreted as modifications of a Leśniewskian system [Canty, MR88a:03004]

**Trentman, John**


**Trew, Anthony**


**Truszczyński, Mirek**

2009 “ICLP 2009 dinner speech.” Full text.
Trypuz, Robert

2014 “O nazywaniu przedmiotów — czym Jak Tadeusz Kotarbiński uczy rozumieć Ontologię Stanisława Leśniewskiego,” (About Putting Names to Objects, i.e., How Tadeusz Kotarbiński Teaches Stanisław Leśniewski’s Ontology,” Roczniki Filozoficzne (Annals of Philosophy), Vol. 62 (1)/2014, pp. 37–51. This article presents an attempt to found the Ontology of Stanisław Leśniewski on a simple theory with one primitive relation “being denoted by.” The theory developed shows that to the linguistic model of the Ontology can belong only such general names that in their extensions have at least two objects (references) denoted by individual names.

Tsai, Hsing-chien


Twardowski, Kazimierz (1866–1938)


Uckelman, Sara L.


Ugarte A., Eugenio,
1981 *Definiciones de clase y axiomas unicos de la Mereologia de Lesniewski para contetivo y cota inferior*, Universidad de Oriente, Venezuela. MS Degree under the direction of Robert E. Clay.

**Urbaniak, Rafał**


2005 *On Ontological Functors in Leśniewski’s Ontology*, Master’s Thesis, University of Gdańsk, 2005. The supervisor was Jarosław Mrozek, the referee, Andrzej Włodzimierz Mostowski. [Full text.](#)


Presents an algorithm to define any possible sentence-forming functor of Leśniewski Elementary Ontology (LEO), whose arguments belong to the category of names.


Extends Leśniewski’s wheel-and-spoke notation to sentential connectives with 3 or more variables.


???? “Some Problems with the Leśniewskiian foundations of mathematics,” [Full text.](#)

2008 *Leśniewski’s Systems of Logic and Mereology; History and Re-evaluation*, Ph.D. dissertation under the direction of Richard Zach, Department of Philosophy, University of Calgary, 298pp. [Full text.](#)


Discusses the argument in Sobociński 1949a. In several very long footnotes the author gives a very nice survey of the most important literature dealing with the Leśniewskiian systems.


20xx “Lesniewski’s quantifiers. A modal interpretation,” a talk given at the University of Latvia, 28 August 2008. No abstract is available.

“The Lvov-Warsaw school of logic and analytic philosophy was one of the most important schools of philosophical thought in twentieth century. In early 1910s its members already discussed the validity of the principles of excluded middle and contradiction. Among ideas developed in this school one might count Łukasiewicz’s view that one can believe a contradiction and that certain sentences can be neither true nor false. This led to the construction of his three-valued logic. Another example is Ajdukiewicz’s conventionalism about meaning and his formal work on definitions (it seems that it was Ajdukiewicz and Łukasiewicz who first focused on the consistency, translatability and non-creativity conditions on definitions, at least on the Polish ground). Other examples include Jaśkowski’s approach to natural deduction and his work on discursive logics, Lindenbaum’s lemma on maximally consistent sets of formulas, Presburger’s work on arithmetic, Kotarbiński’s semantical reism, and Tarski’s work on formal semantics and truth.

One of the representatives of this school was Stanisław Leśniewski (1886–1939) (Alfred Tarski, whose importance in twentieth century logic it is hard to overestimate, was his only PhD student). Leśniewski developed his system of foundations of mathematics as an alternative to the system of Principia Mathematica. He constructed three systems: Protothetic, which is his version of a generalized propositional calculus, his own (higher-order) logic of predication called Ontology, and a theory of parthood called Mereology.

This book is devoted to a presentation of Leśniewski’s achievements and their critical evaluation. I discuss his philosophical views, describe his systems and evaluate the role they can play in the foundations of mathematics. It was my purpose to focus on primary sources and present Leśniewski’s own views and results rather than those present in secondary literature. For this reason, later developments are not treated in detail but rather either mentioned in passing, or described in sections devoted to secondary literature included in some chapters. The intended audience of this book includes philosophy majors, graduate students and professional philosophers interested in logic, mathematics and their philosophy and history.”


Author’s Abstract: One of the streams in the early development of set theory was an attempt to use mereology, a formal theory of parthood, as a foundational tool. The first such attempt is due to a Polish logician, Stanisław Leśniewski (1886–1939). The attempt failed, but there is another, *prima facie* more promising attempt by Jerzy Śłupecki (1904–1987), who employed his *generalized mereology* to build mereological foundations for type theory. In this paper I (1) situate Leśniewski’s attempt in the development of set theory, (2) describe and evaluate Leśniewski’s approach, (3) describe Śłupecki’s strategy without unnecessary technical details, and (4) evaluate it with a rather negative outcome. The issues discussed go beyond merely historical interests due to the current popularity of mereology and because they are related to nominalistic attempts to understand mathematics in general. The introduction describes very briefly the situation in which mereology entered the scene of foundations of mathematics. It can be safely skipped by anyone familiar with the early development of set theory. Section
2 describes and evaluates Leśniewski’s attempt to use mereology as a foundational tool. In Section 3, I describe an attempt by Słupecki to improve on Leśniewski’s work, which resulted in a system called generalized mereology. In Section 4, I point out the reasons why this attempt is still not successful. Section 5 contains an explanation of why Leśniewski’s use of Ontology in developing arithmetic also is not nominalistically satisfactory. [Abstracted quoted in MR3227814]


Author’s Abstract: Near the end of the nineteenth century, a part of mathematical research was focused on unification: the goal was to find ‘one sort of thing’ that mathematics is (or could be taken to be) about. Quite quickly sets became the main candidate for this position. While the enterprise hit a rough patch with Frege’s failure and set-theoretic paradoxes, by the 1920s mathematicians (roughly speaking) settled on a promising axiomatization of set theory and considered it foundational. In parallel to this development was the work of Stanislaw Leśniewski (1886–1939), a Polish logician who did not accept the existence of abstract (aspatial, atemporal and acausal) objects such as sets. Leśniewski attempted to find a nominalistically acceptable replacement for set theory in the foundations of mathematics. His candidate was Mereology — a theory which, instead of sets and elements, spoke of wholes and parts. The goal of this paper will be to present Mereology in this context, to evaluate the feasibility of Leśniewski’s project and to briefly comment on its contemporary relevance.

Urbaniak, Rafal, and Severi Hämäri, K.

2012 “Busting a myth about Leśniewski and definitions.” History and Philosophy of Logic, 33, 159–189. Have copy.

“A theory of definitions which places the eliminability and conservativeness requirements on definitions is usually called the standard theory. We examine a persistent myth which credits this theory to Leśniewski, a Polish logician. After a brief survey of its origins, we show that the myth is highly dubious. First, no place in Leśniewski’s published or unpublished work is known where the standard conditions are discussed. Second, Leśniewski’s own logical theories allow for creative definitions. Third, Leśniewski’s celebrated ‘rules of definition’ lay merely syntactical restrictions on the form of definitions: they do not provide definitions with such meta-theoretical requirements as eliminability or conservativeness. On the positive side, we point out that among the Polish logicians, in the 1920s and 1930s, a study of these meta-theoretical conditions is more readily found in the works of Łukasiewicz and Ajdukiewicz.”

Vaccarino, Giuseppe (Born 1919)


Vanderveken, Daniel R.


**Van Fraassen, Bas** (Born 1941)


**van Heijenoort, Jean** (1912–1986)


**Varzi, Achille C.**

A full list of his publications is online.


2017 “Natural Axioms for Classical Mereology.”

**Varzi, Achille C. and Aaron J. Cotnoir**


Abstract. Mereology “the formal theory of parthood relations” has become a chapter of central interest not only in metaphysics but also in logic, the philosophy of mathematics, and the philosophy of science, which is to say in every field where part-whole theorizing plays a fundamental role. This book provides a critical survey and an up-to-date assessment of the main results in this area, with an eye to both their philosophical underpinnings and their formal properties. In doing so, it also aims to investigate the varieties of formal systems currently available, including different

**Vasyukov, Vladimir L.**


**Vernant, Denis** Have copy.


von Neumann, John

See Neumann, John von.

Vuillemin, Jules (1920–2001)


Wajsburg, Mordecai (Died circa 1943)


Presents four axiom systems of the equivalential calculus, including the first two single axioms.


Contains completeness proofs for the axioms given in his 1932.

Wallace, John


Wallis, John R.


Wang, Hao (1921–1995)


Waragai, Toshiharu


1990 “Ontology as a natural extension of predicate calculus with identity equipped with description,” _Annals of the Japan Association for the Philosophy of Science_, 7 (1990), no. 5, 233–250 (23–40 is another set of page numbers on the reprint.


1994 _Ontology as a Natural Extension of Predicate Calculus is Expressible in which IS-A Relation_ [In Japanese], Doctor of Science, Tokyo Institute of Technology, 1, 1994.


The main aim of this paper is to propose an appropriate logical system that is suitable to describe the notion of IS-A link as well as is-a link. The most important point to be realized is that those relations are not set theoretical ones. They connect two ‘general names’ to construct a proposition, so that what is needed for proper descriptions of the relations in question is a theory of general names. It will be shown that is-a is a logical unit of axiomatically determined behaviour. The axiom concerning is-a relation was established by S. Lesniewski who named his theory of general names ontology. Today ‘ontology’ has also become a common term for AI researchers. I intend to make it clear that there is a close connection between ‘ontology’
used by Lesniewski and by AI researchers, even though they developed quite independently. I wish to stress that ontology created by Lesniewski is a system of syllogistic equipped with singular propositions and the theory of quantification. To make this point clear, I proposed a fragment of syllogism that I called MO (minimal ontology). This paper includes comments and examples articulating the logical power of ontology.


Waragai, Toshiharu and Oyamada, Keiichi


Watanabe, Syozo

1974a On many-valued protothetics, Ph.D. dissertation at the University of Manchester under the direction of Lejewski.


Wciórka, Wojciech


Mariusz Grygianiec has criticized the so called ‘proofs of nonexistence of general objects’ as based on a wrong definition. In this paper one of his arguments is shown to depend on an unsatisfiable condition (contradictory to some basic ontological intuitions) without which, however, it is inconclusive as a ‘reductio ad absurdum.’ Furthermore, it is suggested that even if the argument were sound, it could by no means be counted — contrary to the author’s intention — as a counterargument to Stanislaw Leśniewski’s and Tadeusz Kotarbiński’s argument.

Weingartner, Paul (born 1931)


1965 “Can one say of definitions that they are true or false?,” Ratio, 7 (1965), 61–93.


Wells, Rulon S.


Welsh, Paul J.


Weston, T. S.


Wherritt, Robert C. (2011–1927)


White, George Graham,

Whitehead, Alfred North (1861–1947)

1919 Enquiry Concerning the Principles of Natural Knowledge, Cambridge 1919.

Tarski called this paper to Leśniewski’s attention in 1926 and he discussed it in 1928 in “O podstawach matematyki, Rozdział,” pp. 258–263 in his 1992. For a different translation, see footnote 186 in Leśniewski 1983, p. 51.

This is discussed in Sinisi 1966. Leśniewski’s lecture notes on this topic are in his 1988, pp. 171–178.

Whitehead, Alfred North and Russell, Bertrand


Wiegner, Adam (1889–1967)

1948 Elementy logiki formalnej (Elements of Formal Logic), Poznan: Ksiegarnia Akademicka.

Wielądek, Romuald


Wójcicki, Ryszard


Wójcicki, Ryszard and Zygmunt, Jan


Get Google copy.

Wojciechowski, Eugeniusz


Interprets “oblique systems” in protothetic.


Summary: Ludwik Borkowski has constructed a quantifierless calculus of names, which is taken as the base system here. The system can be extended with the use of the deductive power of rules of introduction and omission of functors \( \pi \) and \( \sigma \), which serve here as the substitutes of quantifiers. If we adopt the extensionality rule for the functor of singular inclusion, we obtain yet another extending of the system accompanied by simultaneous considerable reduction of the primary rules. The interpretation of the last system in elementary ontology is included.

**Wojtasiewicz, Olgierd 1916–1995**


**Woleński, Jan**


This paper is devoted to the phenomenon of the Warsaw school of logic. The author describes its history (starting from Twardowski and discussing Łukasiewicz, Leśniewski, Tarski, Kotarbiński, Mostowski and others) and tries to answer the question: what were the reasons for the rise and magnificent development of logic in Poland between the Wars? MR840210 by Roman Murawski. +


This paper examines relations between reism, the metaphysical theory invented by Tadeusz Kotarbiński, and Leśniewski’s calculus of names. It is shown that Kotarbiński’s interpretation of common nouns as genuine names, i.e. names of things is essentially based on Leśniewski’s logical ideas. It is pointed out that Leśniewskian semantics offers better prospects for nominalism than does semantics of the standard first order predicate calculus [Canty, MR88b:03040]

1987 “Stanisław Leśniewski i jego rola w historii logiki” (Leśniewski and his role in the history of logic), Edukacja Filozoficzna, 2 (1987), 207–226.

1988 “Stanisław Leśniewski; Matematyka przełomu XIX i XX wieku” (Stanisław Leśniewski; Mathematics at the turn of the 19th century), Prace Naukowe Uniwersytetu Śląskiego w Katowicach, no. 1253; Jaworze 1988. 39–44

Chapter 7 is devoted to Leśniewski’s systems.


Woleński argues that Leśniewski was a philosopher, because he graduated in Philosophy, he was interested in philosophy and has expressed those interests for whole his life; he worked within the institutional framework of philosophy, had original philosophical ideas, has influenced the development of philosophy and has been regarded as a philosopher.


Deals with the Cracow Circle.


2017 “Leśniewski and Polish mereology,” in Handbook of Mereology

Woleński, Jan and Köhler, Eckehart


Woleński, Jan and Murawski, R.

2008 “Tarski and his Polish Predecessors on Truth,” In Patterson 2008. Shows “how some of the philosophical views held by the members of the Lvov-Warsaw School anticipate Tarski’s work on truth.” [From the review of the volume by Berber.] This chapter presents and analyzes views towards the concept of truth of Polish philosophers. In particular, views of Twardowski, Łukasiewicz, Leśniewski Zawirski, Czeżowski, and Kotarbiński are discussed. Connections between those views and Tarski’s conception are considered.

Woleński, Jan and Simons, Peter


Woleński Jan and Zygmunt J.


Wolniewicz, J.


Woodger, Joseph Henry (1894–1981)

His papers (25 boxes) are at University College, London.


1952c Biology and Language, Cambridge: CUP.


Woods, John


Woods, John and Walton, Douglas


Wos, Larry; Ulrich, Dolph; Fitelson, Branden


Woytak, Richard


Wroński, Andrzej


Wybraniec-Skardowska, Urszula

She is a student of Słupecki.


2009 “Polish Logic. Some lines from a personal perspective.” There are items in the bibliography that probably should be included here.

Wybraniec-Skardowska, Urusza and Rogalski, Andrzej K.
“On universal grammar and its formalization,”

Yashin, A. D.


Yoes, M. G. Jr.


Zanasi, Fabio

2010 *La Definizione nell’Ontologia di S. Leśniewski — uno Studio sulle Definizioni Creative* (On Creative Definitions in Leśniewski’s Ontology), thesis for Bachelor of Arts in Philosophy, “cum laude” at the University of Siena, supervised by D. Pianigiani.


Zanasi, Fausto


Zaremba, Stanisław (1863–1942)

1915 *Arytmetyka teoretyczna* (Theoretical Arithmetic), Kraków: Polska Adademia Umiejętności, 1915. World Cat has this listed as 1912. Are there two editions? Łukasiewicz’s criticism of this work led to

Żarnecka-Biały, Ewa


Zermelo, Ernst F. F. (1871–1953)


Zielonka, W.


Znaniecki, Florian (1882–1958)

1912 *Humanizm i poznanie* (Humanism and Knowledge), Warsaw, 1912.


Zuber, Ryszard (Born 1943)


Zygmunt, J.


Żyliński, Eustachy (1889–1954)


Proves that there are only two binary Sheffer functions. Cited by Sobociński 1998.


NOTE: In Polish words every cedilla (ą) should be an ogonek, but need to look up how to do this in TeX. The word “Przegląd” always has an ogonek on the a.