

Jerzy Perzanowski
Art of Philosophy
A Selection of Jerzy Perzanowski's Works
Edited by Janusz Sytnik-Czetwertyński

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Volume 3

Jerzy Perzanowski

Art of Philosophy

A Selection of Jerzy Perzanowski's Works

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verlag

Frankfurt | Paris | Lancaster | New Brunswick

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>.



North and South America by
Transaction Books
Rutgers University
Piscataway, NJ 08854-8042
trans@transactionpub.com



United Kingdom, Ireland, Iceland, Turkey, Malta, Portugal by
Gazelle Books Services Limited
White Cross Mills
Hightown
LANCASTER, LA1 4XS
sales@gazellebooks.co.uk



Livraison pour la France et la Belgique:
Librairie Philosophique J. Vrin
6, place de la Sorbonne; F-75005 PARIS
Tel. +33 (0)1 43 54 03 47; Fax +33 (0)1 43 54 48 18
www.vrin.fr

©2012 ontos verlag
P.O. Box 15 41, D-63133 Heusenstamm
www.ontosverlag.com

ISBN 978-3-86838-130-6

2012

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Printed on acid-free paper
FSC-certified (Forest Stewardship Council)
This hardcover binding meets the International Library standard

Printed in Germany
by buch bücher.de



JERZY PERZANOWSKI
(1943-2009)

SOURCES

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CONTENS

BIOGRAPHICAL NOTE & PREFACE

Janusz Sytnik-Czetwertyński: <i>Jerzy Perzanowski – real man and real philosopher</i>	9
Janusz Sytnik-Czetwertyński: <i>Introduction to Jerzy Perzanowski's Way to the Monadology</i>	15

ART OF PHILOSOPHY

<i>In Praise of Philosophy</i>	25
<i>Reasons for Monodeism</i>	41
<i>Towards combination metaphysics</i>	45
<i>Onto\logical Melioration</i>	69
<i>Locative Ontology</i>	87
<i>In Search of Onto\logical Conditions for Emergence</i>	121
<i>Towards Psycho-ontology</i>	135
<i>Modal Logics of Truth and Falsity</i>	147
<i>Classical (Modal) Logics of the Square of Oppositions</i>	165
<i>Combination Semantics for Intensional Logics makings and their use in making Combination Semantics</i>	175
<i>A profile of Masonic Synthesis</i>	199

BIBLIOGRAPHY	223
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Biographical Note

Janusz Sytnik-Czetwertyński

Jerzy Perzanowski –
Real Man and Real Philosopher

Jerzy Perzanowski, born on 23rd April 1943 in Aix-Les-Bains. An outstanding Polish philosopher of international renown, he passed away on 17th May 2009 in Bydgoszcz. His original philosophical ideas include “informatic monadology”, “protophysics”, and a rather un-usual blend of logic and ontology in what he called onto/logic where the slash is meant to suggest a quotient of ontology by logic. Perzanowski began as a logician, his early works being on modal logic, then gradually shifted his interest to “logical philosophy” (another of Perzanowski's coinages, meaning not so much philosophy of logic as philosophy informed by logic). Later, his interests turned to cognitive science and finally even to mysticism, again of a particular, logically informed, kind.

Education

Perzanowski studied philosophy and mathematics at the Jagellonian University (hence-forth JU). His philosophy teachers were Roman Ingarden and Izydora Dąmbska; his logic teacher and advisor for both his master and doctoral theses was Kazimierz Pasenkiewicz. Perzanowski defended his master thesis, on Cantor's notion of set, in 1967. Upon reading it, Father Józef M. Bocheński was prompted to call Perzanowski one of the best philosophers of the young generation. One year later Perzanowski defended his master thesis in mathematics, presenting an elementary proof of Brouwer's theorem that the real line cannot be split (an important tool for certain applications in intuitionist mathematics).

He was then offered a position at the Department of Logic of the Institute of Philosophy of JU, which remained his academic home for most of his life. In 1973 Perzanowski was awarded a doctorate of philosophy on defending a dissertation entitled “The Deduction Theorems for the Modal

Propositional Calculi Formalized After the Manner of Lemmon”. He earned his habilitation in philosophy and logic on the basis of dissertation entitled “Logiki modalne a filozofia” (Modal Logics and Philosophy). On 7th June 1995 the title of Professor was conferred upon Perzanowski (in Poland's curiously convoluted academic system, only some university professors receive a title of Professor, which is conferred by the President of the Republic of Poland).

Academic Career

Jerzy Perzanowski's entire professional career was linked with JU in Cracow. He retained a part-time position there even in the period 1992-2004, when he was Head of the Department of Logic at Nicolaus Copernicus University in Toruń. He contributed greatly to the re-establishment of the logic department in Toruń as an important centre of research. He founded “Logic and Logical Philosophy” journal, which was intended to be a sister journal to “Reports on Mathematical Logic”, of which he was one of editors-in-chief. In 2005 Perzanowski returned to full-time work at the Department of Logic at JU, and in 2006-2009 he was also Head of the Department of Logic at the Jesuit University of Philosophy and Education “Ignatianum” in Cracow. He was invited to lecture at Cambridge University (1985), Universität Salzburg (1990), Universidade Federal da Paraíba (1991), Internationale Akademie für Philosophie in Fürstentum Liechtenstein (1992), Jan Kochanowski University in Kielce (2004-2006) and at University of Rzeszów. After returning to Cracow from Toruń, already fighting a terrible illness (and quite a fight did he give, but that is another story), he devoted much time and effort to the establishment of the Institute of Cognitive Science and Logical Philosophy, which almost immediately became a significant centre of theoretical research in cognitive science in Poland. He was also instrumental in introducing cognitive science as a separate discipline at JU. He was the convenor of the Świętokrzyskie Sympozjum Filozoficzne (Philosophical Symposium at Jan Kochanowski University in Kielce), which annually brings together a group of outstanding Polish philosophers.

Scientific Societies

Perzanowski was a member of Polish Philosophical Society, the Committee of the Philosophical Science of the Polish Academy of Science, the Polish Semiotic Society, the Polish Society of Logic and of the

Philosophy of Science, the Ludwig Wittgenstein Society, the Polish Cognitive Society, the Association for Symbolic Logic, the American Metaphysical Society, the Society for Advancement of American Philosophy, Gesellschaft für Analytische Philosophie, the European Society for Analytic Philosophy, the Society for Exact Philosophy, Philosophia Scientifica, and the Association for the Foundations of Science. He was editor-in-chief of “Reports on Mathematical Logic” and editorial board member for “Studia Logica”, “European Yearbook of Philosophy, Axiomathes”, “Logical Analysis and History of Philosophy”, “Western Philosophy Series”, “Metaphysica”, “Logique et Analyse”, “Polish Journal of Philosophy” and “Polish Philosophical Review”, as well as for the Polish-language journals “Filozofia Nauki”, “Kognitywistyka i media w Edukacji”, “Principia” and “Roczniki Filozoficzne TN KUL”.

Publications

Jerzy Perzanowski’s publications concern mainly the problems of metaphysics and logic. His numerous unpublished works form an important part of his total output, and actions are being taken to arrange, edit and publish these works.

Views

Perzanowski was a rare breed of analytical philosopher who thought that a philosophical “theory of everything” was worthwhile. In this systematic spirit, he began with method. He presented his “method of total analysis and synthesis” quite simply: reduce the object of research to its simplest possible constituents, and then combine them in some way. Better still, combine them in *every possible* way, thereby producing a space of possibilities analogous to (and in certain cases identical with) the logical space. Thus, analysis and synthesis differ from a trivial disassembly and reassembly. Satisfied with the method, Perzanowski moved on to laying the foundations for his theory of everything, which he called “informatic monadology”.

As the name suggests, this is a Leibnizian theory, although in many respects rather distant from it. It stipulates a substance consisting of fundamental particles (monads, pieces of information), and existing on the borderline between ontological space (natural space, perhaps physical but not necessarily so) and logical space (the space of all possibilities). Thus, just as Leibniz envisaged, monads pre-exist. Perzanowski, however,

rejected the Leibnizian notion of windowless monads, if “windowless” meant “with no information exchange”. He maintained that simple monads form complex configurations, and do so on the basis of information exchange of a certain kind, namely by entering configurations that seem to be the most rational on the basis of all the information available to them. Since some relevant information may be unavailable to a monad, errors occur. Perzanowski liked to express this thought by saying that we do not live in the best of possible worlds, but only in a world that *seems to be* the best. He believed that if sufficiently developed, informatic monadology would have ramifications in the theory of cognition, psychology, and even ethics and aesthetics.

Perzanowski's interests were very wide, as behooves a philosopher. He worked on philosophical aspects of psychology and theology (calling them, respectively, psycho-ontology and theo/logic), but his main interest lay in ontology (again denoted with a typically Perzanowskian neologism: onto/logic). He developed a theory of combination ontology and locative ontology, each accompanied by a theory of modality. He was interested in St. Anselm's Ontological Argument, of which an extended analysis is included in the present volume. His works on modal logic should also be mentioned, among them especially: (i) a general deduction theorem for modal logics, which can be seen as a first step towards much more general deduction theorems in algebraic logic formulated by Blok and Pigozzi, and (ii) a topography of modal logics developed in his habilitation dissertation.

One of Perzanowski's last ideas was that of *proto-physics*. This originated in the notion that metaphysics – so named because of the accidental fact that Aristotle's works were ordered in this way rather than another – is indeed a *meta*-physics, that is, a philosophical reflection on physics which comes only after physics itself. However, apart from the “meta” questions, there are also “proto” questions – about what comes *before* physics and makes it possible. Such questions presuppose that the physical universe is not metaphysically closed, and there must be some reason why there is something rather than nothing, to use Leibniz's phrase.

Students

Perzanowski supervised doctoral theses. Three of his students continue his thoughts in the following fields: Tomasz Kowalski in mathematical logic and algebra, Piotr Wasilewski in cognitive science, and Janusz Sytnik-Czetwertyński in philosophy.

Public Activity

Perzanowski was not a denizen of the ivory tower. He was prominently active as a member of “Solidarity” at JU in the years 1980-1991, and especially during the martial law period of the early 1980s, when such activity entailed considerable risks to his academic career, a serious threat to his personal freedom, and a good chance of being a victim of physical violence. After the regime change in 1989, his involvement in the struggle against communism was recognised by a number of awards, including the Golden Cross of Merit.

Perzanowski was also a philanthropist. He founded and supported the foundation entitled “Wspólnota Nadziei” (Community of Hope), which aids people suffering from autism – the first initiative of this kind in Eastern Europe. He supported the Centre for Blind Children in Laski, and was engaged in projects aiding Poles living in the Ukraine, Belarus and Lithuania.

Attitude

Jerzy Perzanowski was a person of integrity, a philosopher in the Socratic tradition. To turn around the saying of another Polish philosopher, he was a road sign that walks the road that it indicates. He was an example to follow for a large group of students, a gentle teacher, but also a formidable opponent in discussion. Above all, he was a man of unwavering principles, devoted heart and soul to what he often called his academic duty.

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Preface

Janusz Sytnik-Czetwertyński

Jerzy Perzanowski's Way to the Monadology

This is a conceptual introduction. That is to say, I do not claim to give a faithful representation of Perzanowski's motivations and how he arrived at his philosophical views. Instead, I assume for simplicity's sake, contrary to fact, that a single philosophical problem was the prime mover of Perzanowski's thought. The problem did occupy him a great deal, though, as witness his interest in and advocacy of cognitive science as a philosophical discipline.

I believe that this introduction, although not faithful to Perzanowski to the letter, is faithful to him in spirit.

The Psycho-physical Problem

The mind-body problem is one of the most important issues for science and philosophy. How is it that a body – a physical, tangible thing – unites with something totally different – a mental process, perhaps – whose nature remains by and large a mystery? That they do unite we know very well: we feel it from within. But what causes physical phenomena to correlate with mental ones in this way? What makes the world of matter and the world of spirit walk in step? Many answers have been ventured. Historians of philosophy could categorize them as follows:

- materialistic monism (Newton), on which view matter is a necessary substance and mental phenomena are dependent on it;
- spiritual monism (Leibniz), according to which spiritual substance is the necessary one and matter is dependent on it¹;

¹ Although Leibniz is often referred to as a pluralist, since he believed there were many monads. But as for the *kinds* of being he was a monist, of course.

- psycho-physical monism (St. Thomas Aquinas, Spinoza, Bošković, early Kant), which claims that there exists one kind of substance, uniting the properties of bodies and souls;
- dualism (Descartes), which recognizes the existence of two independent kinds of substance: spiritual and material;
- pluralism, which admits to the possibility of other kinds of substance apart from bodies and souls: Pascal's *heart* as opposed to *reason* could be an example, if taken seriously.

Pluralist solutions have been generally overshadowed by the monist ones, both in the history of philosophy and in the discussions of the problem to date. Indeed, a view commonly held today by scientists, philosophizing and otherwise, is epiphenomenalism.

A different kind of monism, however, is of interest to us here: Spinoza's. Spinoza did not seek a common generalization of spirit and matter along the lines, say, of Aquinas's "unio substantialis", but instead looked for their common root at a deeper level.

Spinoza's attempt to explain away the psycho-physical problem runs as follows. Question: why do material and spiritual elements create a common, unified reality? Answer: because deep down they are one and the same. Which immediately brings us to the question of what the "deep-down" is.

The answer to this question is inherent in an analysis of the "shallow-up": the world as we know it, the world of our experience. Spinoza calls this Nature and – to cut a sixteenth-century metaphysical story short – finds its "deep-down" in God. What matters for us here, however, is not the content but the method. On asking whether the concepts of God and Nature allow for unification, we find that both God (mind) of the spiritualists and Nature (matter) of the materialists are not as different as they seem, at least not ontologically. Various terms are used, but "ultimately positive", "prime", "the most general", "the most perfect" and suchlike recur.

Hence, if one wishes to solve the psycho-physical problem in Spinoza's way, it seems one should seek ontological generality on both sides, and then unify.

Perzanowski wanted no less. His was an attempt to find a genuinely prime level of being. He had a name for such investigations: he called them

“protophysics”². Good old metaphysics was not good enough, because it should be *meta*-physics, that is, a reflection on the foundations of physics, and which comes *after* physics. Now, there are questions that can be investigated independently of any physical theory, and in this sense they come *before* physics, so that they are *proto*-physical rather than *meta*-physical?

The Method of Analysis and Synthesis

A cornerstone of Perzanowski's investigations was his method of analysis and synthesis. The first half of the method is familiar to any child: start from something given and dismantle it as much as you can. This is analysis. Then comes a bonus: from the simple, irreducible parts not only can you reconstruct the original given, but typically you can construct many other things as well. This is synthesis. Note that synthesis creates a space of possibilities: you can put the parts together in many different ways, but only in one way at a time.

Now, what kind of space you get depends on what kind of tools you apply? Apply logical tools, and you get a logical space. Apply ontological tools, and you get an ontological space, where the appropriate modalities are: *make X possible*, *make Y actual*, and the like. We will meet these again.

The Notion of Being

In ontology everything starts from being. Perzanowski arrives at this notion in a fairly traditional way, perhaps reminiscent of scholasticism. Consider the following questions:

- Is x (Does x exist)? Is it possible that x (exists)?
- Why x (exists)? Why is it possible that x (exists)?

These questions are meant to have an increasingly general character. The last one: *why is it possible that x* , is so general that it can be thought of as the question about the nature of the world.

² Perzanowski invented many new names. We will meet a few of them later. His inventiveness in this department was overwhelming, with many unfortunate side-effects. Just consider “modal ontics”, or “psycho-ontology”.

We can go even further. We can ask: *how is it possible that x?* And then: *how is whatever there is possible?* Here grammar begins to falter. *How is (a) being possible?* may be better, and some sort of symbolism is best: *how is x possible?* with *x* ranging over the whole domain of existents, or, on another reading, with *x* denoting the whole domain of existents. Paradoxes lurk in this neighbourhood, but Perzanowski claims he can steer clear of them because the underlying logic is not the usual predicate calculus. Something akin to Stanislaw Lesniewski's "protothetics" is used in "The Way of Truth"; other choices may be appropriate elsewhere. Finally, we ask the most general question – the question about the principle of being: *how is whatever is possible, possible?* How is it possible to make sense of this question, one might ask. We may resort to ontological space. Perzanowski's favourite answer would go somewhat like this: whatever is possible, is possible because of the fundamental simple constituents of the ontological space. The "simples" determine the space, and the space in turn delineates the realm of possibility.

Taking an appropriate *x*, we can pass from generic questions to specific ones. In so doing we define a number of philosophical disciplines, some old, some new:

- Metaphysics: *how is whatever exists possible?* (how are possible things, events, processes)
- Axio/ontology: *how are values possible?*
- Anthro/ontology: *how is a man possible?*
- Epistemo/ontology: *how is cognition possible?*
- Psycho/ontology: *how is the mental possible?*

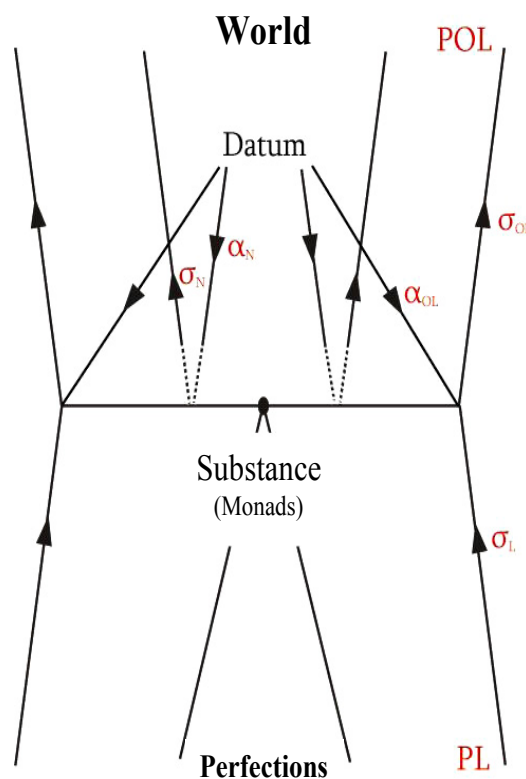
Regardless of what we think of the names, one thing is clear: for Perzanowski ontology deals with possibilities. Less clearly, his preferred reading of *how is x possible?* would be *what is it that makes x possible?*

The Grand Scheme of Things (or the "Double-bucket" Diagram)

If one cornerstone of Perzanowski's work is his analysis-cum-synthesis, then another (or perhaps the other) is the observation that "ontologically simple things need not be logically simple". And if they need not be so, they probably are not. Ontological space is different from logical space. Taken to its conclusion, this means that ontological space and logical space

should be disjoint. But they should also be connected in some way, on pain of ontology being completely divorced from logic.

The cement is provided by substance, which is fundamental for both ontological and logical space, yet belongs to neither. For Perzanowski ‘substance’ is a collective noun, its distributive counterpart being monads. Ontologically, monads are simples; logically, they are bundles of perfections, which are the stuff of logic; they resemble properties, but Perzanowski does not go so far as to say so. In their most mature form these thoughts are fleshed out in “PL-Metaphysics” and presented in the following diagram:



POL stands for “ontological space”, PL for “logical space”, alpha for “analysis”, sigma for “synthesis”. The diagram shows monads on the borderline between ontological and logical space, but the borderline is not a part of either of them. A good analogy for the upper bucket is set-theory with ur-elements, elements that are not themselves sets.

Monads do not belong to logical space either, because, in Perzanowski's own words, “they are not only ideas or qualities, but they are their entanglements in action. They are as if they were super-powerful computers entangling qualities and ideas.” It is by no means clear why

monads should be computers, let alone super-powerful ones. It seems, however, that Perzanowski's thought goes something like this: Monads are condensation kernels of perfections, which are the stuff of logic. Logic is about information processing. Therefore, monads are information processing devices. Far from being a syllogism, this thought has a certain appeal.

Incidentally, this solves the psycho-physical problem that I began with: if we are monads, we are a link between the world of flesh (brute facts of ontology) and the world of spirit (information processing of logic), whereas “deep-down” we live in neither.

Basic Tenets of Informatic Monadology

There follows a summary of Perzanowski's informatic monadology, in a form resembling (I hope) Wittgenstein's “Tractatus”, of whom Perzanowski was a great admirer:

- Individual monads are the substance of the world.
- Monads are bundles of perfections. From the ontological point of view a monad is a simple object; from the logical point of view it has a structure.
- Perfections are information-like in nature. Monads are information processing devices.
- Monads sense external stimuli. Monads build their models of the outer world on the basis of these external stimuli.
- Monads contact each other. They have certain preloaded (innate) knowledge, but they can also exchange information.
- Matter, time, space, space-time and suchlike are relational concepts.
- Preloaded in a monad is a certain way of perceiving the world: its personality, or mentality, we can say. This perceptive bias affects all the actions of a monad, but does not force them.
- Monads are carriers of information. Their task is to form complexes. Monads enter complexes according to the information that they carry and to an assessment of the complex structures that they can (want to) form.
- God is a thus monad, a bundle of perfections. Eternal truths derive from the bundles of ideas that constitute God's mentality.
- God activated the world to existence by forming an ontological complex. Matter, being relational, is not created.

Conclusion

Perzanowski was a rarity in twentieth-century philosophy: he was a systemic (continental) philosopher working with the tools and methods of an analytic philosopher. His vision owes a great deal to Leibniz and Spinoza, but also to Pascal, Russell and Wittgenstein. Although he began with the comparatively modest project of creating a formal framework for ontological theories, he became increasingly driven by a quest for a Theory of Everything. I, for one, think is a noble quest.