

THE ANALYTIC PHILOSOPHY OF SCIENCE AT THE WESTERN UNIVERSITY OF TIMIȘOARA

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The symposium we participate in has a special character. Its purpose is to celebrate two decades of functioning of the Philosophy Department of the Western University of Timișoara. As it is well-known, this university did not benefit from the existence of a major in humanities or social sciences for a very long time, so we can't compare it from this point of view – in the beginning of the 1990's – with the universities in Bucharest, Cluj-Napoca or Iasi. A Philosophy Institute existed in Timișoara for a brief period of time during the 1840's, so that one can say that philosophy was not totally misrepresented in our university center.

But we can also say that in Timișoara, starting with two or three decades before 1990, an intense and interesting activity was starting to develop, although a faculty or a specialised philosophy department did not exist. This was made possible especially due to the presence of some specialists in philosophy at the socio-humanist chairs from various universities in Timișoara, as Constantin Grecu, Viorel Colțescu, Cornel Haranguș, Ilona Bârzescu, Aurelia Mariș, Gustav Erdely, and others. There were also some informal groups, such as “The anthropology Circle” of Timișoara (where Eduard Pamfil, Doru Ogodescu, Mircea Lăzărescu, and Corneliu Mircea were well-known) and also some formal institutions which still exist today, like the Committee of History and Philosophy of Science and Technique of the Romanian Academy of Timișoara, where such university professors as Constantin Grecu, Dumitru Daba, Tiberiu Toró, Mircea Lăzărescu, Constantin Ursoniu, Alexandru Nichici, Sorin Ursoniu, and others (including myself) were preoccupied (and still are) with research in the area of philosophy and theory of science.

¹Speech in honor of Professor Constantin Grecu.

²Prof. dr. Ioan Biriș, Western University of Timișoara.

This is a brief outline one should acknowledge when talking about the background of philosophy in Timișoara, before the establishment of the Philosophy Department in 1990, the event which we are now celebrating. If one wishes to view the two decades of institutionalized philosophy at the University of Timișoara in a broad historical context, then this event may indeed seem a 'small' event. However, when looking at this period through the eyes of those who contributed to the creation of this institution, dedicating their entire career to this activity, the event gains great importance, as two decades signify an 'entire human life'.

Taking into account the process of creating this institution, I would like to refer to the activity of professor Constantin Grecu, the initiator of the Philosophy Department of The Western University of Timișoara. Constantin Grecu also established the basis of the academic programme focusing on philosophy of science and analytic philosophy. Before 1989, Constantin Grecu was for many years the leader of the social sciences and humanities department of the Polytechnic Institute, today known as the Polytechnic University of Timișoara, where he was also a lecturer. He had been there since 1962, when he graduated from the Philosophy Department of the University of Bucharest, being one of the top students there. He had taught philosophy courses until 1989, focusing on a course of Logic and methodology of science at the Electrotechnics Department; he was granted a scholarship in Paris by the French Ministry of Foreign Affairs (1972). He participated in numerous congresses and conferences, like The 4th Congress of Logic, Methodology and Philosophy of Science which took place Bucharest in 1971, with a paper entitled "The Observational and the Theoretical in Scientific Knowledge", The International Conference Formal methods in the methodology of empirical sciences (Warsaw, 1974) with a paper entitled "Explanation and Relevance", The International Conference Explanation in sciences (Dubrovnik, 1988) with the paper "Alternative Explanations in Science". Constantin Grecu became a member of the various committees that edited publications such as the international journal *Questioning Exchange*¹, *The Philosophy Journal* of the Romanian Academy, *Revue Roumaine de Philosophie* of the Romanian Academy, *Noesis* of the Romanian Academy, *The Journal of Essays, Reviews and Synthesis* of C.I.D.S.P., Bucharest. Constantin Grecu received the "Simion Bărnuțiu" award from the Romanian Academy in 1983. Before 1989 the

¹ *Questioning Exchange*, Taylor & Francis, London, 1987-1988.

volume *The interrogative logic and its applications*² was published under his guidance. I would like to mention a personal experience I had not so long ago. While participating in a symposium, I happened to meet Professor G. Constandache from Bucharest. During a break he asked me how is Professor Grecu doing and then he told me that he is still using in his seminars at the Polytechnic University the work of Professor Grecu on interrogative logic. This is indeed the greatest appreciation one can get for his work – knowing that for three decades professors and students from other universities are constantly using your work as didactic material. Thus, even without a specialized department, Professor Constantin Grecu made Timișoara known to other Romanian universities, which was a very important thing. During that period he published a great number of studies on the philosophy of science in the *Philosophy Journal* and also in other volumes, such as *The Theory of Scientific Knowledge*³ (a treatise comprising the works of 11 authors), *The Epistemology and Logical Analysis of The language of Science*⁴ (13 authors), *Existence, knowledge, action*⁵ (7 authors), *Knowledge and action*⁶ (10 authors), *Moments in the genesis and evolution of the philosophy of science*⁷ (7 authors), *Scientific knowledge and information in the contemporary culture*⁸ (13 authors), *Aspects of the scientific creation*⁹ (8 authors).

From a survey of these publications we can notice that almost every collective volume dedicated to the philosophy of science that was published in that period had Professor Constantin Grecu among the important contributors. Professor Grecu's name stands together with many of the most representative figures of the analytic philosophy and of the philosophy of science in Romania: Mircea Flonta, Ilie Pârvu, Cornel Popa, Teodor Dima, Călina Mare, and Andrei

² Grecu, Constantin, *The interrogative logic and its applications*, Editura Științifică și Enciclopedică, Bucharest, 1982, 334 pg.

³ Șt. Georgescu, M. Flonta, I. Pârvu (coord.), *The Theory of Scientific Knowledge*, Romanian Academy, Bucharest, 1982, 476 pg.

⁴ M. Flonta (coord.), *The Epistemology and Logical Analysis of The language of Science*, Editura Politică, Bucharest, 1975, 307 pg.

⁵ C. Popa (coord.), *Existence, knowledge, action*, Editura Politică, Bucharest, 1971, 345 pg.

⁶ A. Marga (coord.), *Knowledge and action*, Dacia, Cluj-Napoca, 1986, 334 pg.

⁷ C. Damian, I. Pârvu (coord.), *Moments in the genesis and evolution of the philosophy of science*, Romanian Academy, Bucharest, 1981, 320 pg.

⁸ C. Grecu, D. Luminosu (coord.), *Scientific knowledge and information in the contemporary culture*, Bucharest and Timișoara, 1987, 276 pg.

⁹ C. Mare, A. Marga, *Aspects of the scientific creation*, Cluj-Napoca, 1989, 230 pg.

Marga. The volumes focusing on the philosophy of science could not be published without contributions from Timișoara, together with those from Bucharest, Iași and Cluj-Napoca. In other words, the philosophy of science and the analytical philosophy in Romania in the 1980s was represented by universities with a long tradition, such as Bucharest, Cluj-Napoca, and Iasi, as well as Timișoara. This proves that the flourishing activity of some people can compensate for (and even substitute) the lack of institutions. Professor Grecu managed to do this for Timișoara for more than a quarter of a century. In this sense, one can be right in saying that the philosophy of science in Timișoara is older than the Philosophy Department, the institution which we are celebrating today for its two decades of existence.

Taking into account Professor Grecu's impressive reputation, it was only natural for Eugen Todoran, the new rector of the University of Timișoara in 1990, to ask Professor Grecu to take over the task of establishing a Philosophy Department. The Philosophy Department was conceived as a part of the Faculty of Letters, as Eugen Todoran, philology specialist, tried to restore the tradition of having a Faculty of Letters and Philosophy, a tradition specific for the interwar period. Professor Constantin Grecu accepted the 'challenge' and result of his work can be seen today. The Philosophy Department of The Western University of Timișoara developed in surprising ways. More than a half of the members forming the teaching staff are postgraduate students of Professor Grecu. During our numerous conversations, Professor Grecu confessed that he joyfully accepted the 'challenge' of establishing a Philosophy Department. He felt joy at the thought that Timișoara was finally recognized in the Romanian philosophical landscape and that he was able to contribute to the process. I use the term joy instead of pleasure (or personal pleasure) because joy is the proper term for describing a state of mind like the one Professor Grecu had: he didn't feel a merely momentary pleasure, but joy and enthusiasm and he tried to infuse young people with these feelings. Those who confuse pleasure with joy make a huge mistake, as they are not able to distinguish the animality of pleasure from the humanity of joy.

Maybe only a few people know that before 1989 Constantin Grecu has entertained a rich correspondence with professors and researchers in the fields of philosophy of science, logic and analytical philosophy. This allowed him to get knowledge of the latest developments in this area of research, to foster a collaboration with many professors and researchers and also to promote

Timișoara abroad. Professor Grecu's acknowledgement is proved by the large number of international conferences and congresses he was invited to attend and by the fact that he was a member of many international associations and an editorial staff member of various journals.

Starting with 1990, Professor Constantin Grecu has been diversifying the courses he is teaching at the Philosophy Department; thus, he has been teaching over the years Logic, Philosophy of logic, Rhetoric and the theory of argumentation, Interrogative logic, Theories of the scientific explanation, The analytical philosophy of science, The logic of time; he also taught courses in English (The logic and methodology of science, The history of the philosophical ideas, both at the Polytechnic University). He is also a member (and former president) of the Committee for History and Philosophy of Science and Technique at the Romanian Academy of Timișoara.

The studies published by Constantin Grecu stand as a proof of his unceasing effort and systematic research, with remarkable results concerning the structure and functions of interrogative logic, the analytical theories of knowledge, the problem of information and explanatory power, the logic of time, the alternative explanations in science, the problem of simplicity, the relationship between explanation and understanding, the concept of scientific law, quantity and structure in mathematics, the formal methods in the scientific knowledge, the presuppositions in the scientific knowledge, the thematic analysis of science, and many others.

Let us take for example the famous theme of the scientific explanation: Hempel's model of scientific explanation led to numerous discussions, but Hempel systematically defended his model by making various adjustments taking into account diverse situations – not only deductive but also inductive, not only for necessary laws but also for statistical laws, not only for syntactic-structural aspects but also for pragmatic contexts etc. Professor Constantin Grecu made some extremely subtle and useful observations regarding the functioning of Hempel's schema. Thus, Constantin Grecu establishes that between the logical examination (from *explanans* to *explanandum*) and the pragmatic examination (from *explanandum* to *explanans*) an inverted rapport is being established. This means that in particular situations we first get the *explanandum* and it is in this context that one must formulate an explanatory question in order to get to the *explanans*. This way of explaining is inductive and it is only after stating the premises (*explanans*) that the way of explaining becomes deductive, by inversion,

so that we are to infer a conclusion. Another interesting observation is that some variables might be implied while stating the premises and thus the question regarding the relevance of the *explanans* needs to be addressed. Other original observations are made regarding the problem of simplicity in scientific knowledge and the developments in the interrogative logic and in the logic of time.

The sociology and the phenomenology of human acts of creation reveal that there are at least three types of response to the act of innovation: a) a positive response, one that encourages individuals to cultivate the idea (first by imitation and then by developing it), a response that contributes massively to the growth of and progress of the community; b) the “free-rider” response, which means that some use the idea to their benefit but don't contribute in any way to its development. The idea becomes a public good and people who have this type of reaction are 'free-riders'; c) the “dentist” response. The term ‘dentist’ doesn't refer here to the medical profession known as dentistry, but to a Romanian proverb about envy, which can be literally translated as 'someone having a tooth against someone else' (an English equivalent would be 'being green with envy'). So people in this category are green with envy that someone managed to produce an innovation. Between the three types of responses there are no rigid boundaries and there are many transitions. For example, most people are 'free-riders' in the immediate period following the statement of the new idea, but some move to the first category and become interested in developing the idea, while others may remain 'free-riders' forever. The case of 'the dentist' is unique – he's usually a 'free-rider' in the beginning and at some point he starts to deny the merits of the new idea. It's not only envy, but a strange mix of self-loathing, frustration and malevolence.

Any anniversary is inevitably both a celebration and a moment of lucid reflection. Thus, we must acknowledge the values that guide the innovator and we must support his struggle at any price, and this might remind us of Luther's famous saying: *Hier stehe ich, ich kann nicht anders, Gott helfe mir!* We rarely meet a metaphysics that is centered on the individual in such a high degree. The Romanian legend of Manole reminds us of the sacrifice one must make in order to create (the legend says that Manole had to sacrifice his wife for his creation, a monastery which would gain durability only by sacrificing the life of the creator's most cherished person). The myth alludes to human malevolent tendencies, as

the other masons took pleasure in Manole's sacrifice because they envied him for his knowledge.

The history of Romanian philosophy has Lucian Blaga as a representative example of the solitary creator. Lucian Blaga was founder and chairman at the Faculty of Philosophy in Cluj and creator of a philosophical system. Unlike other cultures, mainly the western ones, Romanian culture is marked by a gap between the creation of new ideas and institutions and the acknowledgement of these ideas and institutions, which are often treated with indifference. This happened to Lucian Blaga, who was dismissed from University by Erdős, who actually owed his position to Lucian Blaga. Erdős proved to be a 'dentist'. History often repeats itself, so all founders have their own 'dentists'.

Anniversaries are nonetheless based on the first type of response – the positive response that encourages individuals to cultivate the idea and through which a community succeeds to assert itself and to enter in competition with other similar communities. The Philosophy Department at The Western University of Timișoara went through this phase of development. Under the guidance of its initiator, Professor Constantin Grecu, who was chairman until his retirement, the department grew significantly: several masters programmes were introduced besides the B.A programme, including a masters programme in Philosophy of science. Professor Grecu taught courses focusing on scientific explanation, interrogative logic, logic of time, analytic philosophy of science, rhetoric of science, courses that were highly appreciated. I myself taught for several a course on the structuralist theory of science, after specializing at the Institute of Philosophy, Logic, and Theory of Science University of Munich. This explains why many of the students of the Philosophy Department became Phd researchers in the field of Philosophy of Science, under Professor Grecu's guidance or mine.

With the three programmes that were introduced (bachelor studies, masters programme and doctoral programme), the Philosophy Department whose existence we are now celebrating reached a high level of development. From 1990 Professor Grecu has been a supervisor for Phd students from "Babeș-Bolyai" University in Cluj-Napoca. At that time, the Philosophy Department from Timișoara didn't have a Phd programme.

I would like to share with you a personal experience, one that I rarely mention when talking in public. I decided to study at the University of Cluj because of philosopher Lucian Blaga, whom I studied in high-school. My high-

school studies focused on sciences and my teachers were quite sure that I am going to study math or engineering after graduating from high-school. They were surprised when they found out about my decision to study philosophy. Studying philosophy in Cluj, I often took the same routes Lucian Blaga took to the library of the Transylvanian capital. I was the best student in my class and after graduating my academic advisor wanted me to teach in the Philosophy Department, but there were no positions available at that point. However, after 1990 positions were available and my advisor, Professor Ion Aluaş, kept a lecturer position for me until 1995, when he passed away, just in case I would decide to come back to Cluj. I was often tempted to go back to Cluj but I decided to stay in Timișoara because of the atmosphere created by Professor Grecu. I supported his efforts to create an institution dedicated to the study of philosophy, an institution that could compete with philosophy departments that have a long tradition. Having this in mind, I asked Professor Grecu, at some point, to become a Phd supervisor in Timișoara. In this way, Professor Constantin Grecu, Professor Viorel Colțescu and myself initiated the doctoral programme in 2004. After Professor Viorel Colțescu passed away, Professor Ion Ceapraz, founder of the Philosophy Department at the University of Craiova and former colleague of Professor Grecu, joined us. The postgraduate school of philosophy focuses on philosophy of science and analytical philosophy, as many professors who are teaching here have been specializing in this field. Besides the professors who founded the programme and Professor Florin Lucaci, who joined us a few years ago, there are many others who taught here and some of them still do: Gheorghe Clitan, Ilona Bârzescu, Alexandru Petrescu, Mircea Dumitru from the University of Bucharest, Gabriel Sandu from the University of Helsinki and Ștefan Bratosin from the University of Toulouse. I also took the initiative of establishing a research center, an element that is very important for any higher education institution, as a doctoral programme and a research center are the two pillars of strength of a department.

I tried to make a brief presentation of the manner in which the analytic philosophy of science developed at the Western University of Timișoara. As we know that this philosophical perspective is one of the most influential in the contemporary philosophical landscape, we hope that it will be well represented in our university. As long as there are teachers who think that a university can't function properly without a Philosophy Department, a programme for studying philosophy of science has a secure future here. A mathematician from Bucharest,

with a passion for statistics and an interest in the geography of creativity, pointed out that the literary creations seem to prevail in the area of Moldova, while scientific creations seem to be dominant in Banat. If this is true, then the philosophy of science is most fitting in Timișoara.