

BOOK OF ABSTRACTS

Hermeneutics of Science and Technology -
A Reconsideration



20th Anniversary Conference of the
International Society for Hermeneutics &
Science

with support of the Eötvös University, Budapest

Vienna, Austria - Budapest, Hungary

28 July - 3 August 2013

Program

Part One: in Vienna (28-31 July 2013)

28 July 2013, Sunday, Vienna

Arrival at Vienna

Registration in the lobby of the Hotel Schloss Wilhelminenberg from 6 pm.

Evening: Informal Meeting at the Hotel Bar

29 July 2013 Monday, Vienna

9.00 – 10:00 Registration in the lobby of the Hotel Schloss Wilhelminenberg

10:00 – 10:15 Opening

10.15 - 10.45 Ragnar Fjelland: *From Democratization of Knowledge to Democratization of Ignorance – and the Importance of Hermeneutics*

10.45 – 11:15 Andreas Beinsteiner: *Das Wesen der Technik: Relating Heidegger's Philosophy of Technology to Media Studies*

11:15 – 11:45 László Székely: *Melchior Palágyi and the Four-Dimensional Space-Time: a Philosophico-Hemeneutic Theory of Time and Space-Time by a Philosopher from the Austro-Hungarian Monarchy at the Turn of the 19th-20th Century*

11.45 – 12:15 Coffee break

12.15 – 13:15 Keynote address: Tihamér Margitay: *How is Complex and Science Compatible Ontology Possible?*

13:15 – 15:00 Lunch break

15.00 - 15:30 László Ropolyi: *Interpretation, Information, Internet*

15:30 – 16:00 Jeremy Jager: *The Question of the Meaning of Being and the Geometry of Interaction (optional online presentation, depending on the technological conditions)*

16.00 – 16: 30 Coffee break

18:30 Bus travel to Pfaffstätten visiting a Heurigen

Melchior Palágyi and the Four-Dimensional Space-Time. A Philosophico-Hermeneutic Theory of Space-Time from the Austro-Hungarian Monarchy at the Turn of the 19th-20th Century.

László Székely

Key words: Minkowski, Palágyi, time, space-time, philosophy of space and time, relativity theory, hermeneutics of science

According to the generally accepted history of 20th century physics it was Hermann Minkowski who invented the four-dimensional space-time, which - after it was built into the general theory of relativity by Einstein - became one of the basic concepts of modern physics. However, while Minkowski delivered his famous paper on the topic in 1908 (Minkowski 1908), Melchior Palágyi, a Hungarian mathematician, 'man of letters' and philosopher from the Austro-Hungarian Monarchy had proposed to introduce this concept into physics in 1901 (Palágyi 1901), that is, seven years before Minkowski's paper. Palágyi's space-time does not involve the special Lorentzian-Minkowskian metric and, therefore, Palágyi does not anticipate the Minkowskian representation of Einstein's special theory of relativity. However, his space-time is similar to that of Minkowski, not only in its four-dimensional character, but also in the fact that, in it, time corresponds to the imaginary unit in a similar way as in Minkowski's theory. This means that the Hungarian philosopher - without anticipating the special Minkowskian metric - preceded Minkowski in the idea that future physics should represent physical processes in the framework of a unified, four-dimensional space-time and time should be introduced in this representation as a dimension, which is orthogonal to space and which, accordingly, should be represented by the imaginary unit. On the other hand, besides the similarities, there are also important differences between Palágyi and Minkowski. Namely, Minkowski arrives at the idea of the four-dimensional space-time by mathematical calculation based on the mathematical properties of Lorentz transformation. Palágyi, by contrast, introduces space-time on the basis of philosophical-hermeneutical considerations. For Minkowski and for the interpretation of the special theory of relativity in Minkowski's wake, mathematical calculation overshadows philosophical reflection. The followers of this attitude require to adjust philosophy to the new mathematical idea of space-time and - as a part of this adjustment - to

consider time as a mere dimension, which does not differ qualitatively from the other three dimensions. Palágyi, by contrast, did not forget that a mathematical model in itself, no matter how successful, is only human construction, the epistemological and ontological value and meaning of which can be revealed only by philosophical reflection. In this way Palágyi's philosophy of space-time developed in his work entitled *A New Theory of Space-Time* and published in 1901 has a *hermeneutic* role: it serves as the *hermeneutic framework* for the investigations of the epistemological and ontological meaning of the mathematical space-time of physics. Whereas he suggests to substitute the traditional concepts of space and time with the four-dimensional space-time, he criticizes the one-sided mathematical perspective characterizing Minkowski's and Einstein's approach and defends the right of philosophico-hermeneutic reflection on scientific theories in that hermeneutic framework. As a part of this criticism, he rejects the radical spatialization of time, which eliminates its special temporal features, and insists on its ontological priority over space similarly to Bergson and Heidegger. (Palágyi 1901, 1914, 1925, Gibson 1928)

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References

Gibson, W: R. Boyce 1928. "The philosophy of Melchior Palágyi. (I) Space-Time and the criticism of relativity." *Journal of Philosophical Studies* 3, pp. 15-28.

Minkowski, Hermann 1908. „Raum und Zeit. Vortrag, gehalten auf der 80. Naturforscher-Versammlung zu Köln am 21. September 1908. von Hermann Minkowski." *Jahresberichte der Deutschen Mathematiker-Vereinigung*, Band 18. Leipzig: Teubner, 1909. pp. 75-88. (Also in: Lorentz, Einstein, Minkowski: *Das Relativitätsprinzip*. Leipzig und Berlin: Teubner 1915, pp.56-68. and [http://de.wikisource.org/wiki/Raum_und_Zeit_\(Minkowski\)](http://de.wikisource.org/wiki/Raum_und_Zeit_(Minkowski)))

Palágyi, Melchior 1901. *Neue Theorie des Raumes und Zeit. Die Grundbegriffe einer Metageometrie*. Leipzig: Verlag von Wilhelm Engelmann (Also in Palágyi 1925 and

http://de.wikisource.org/wiki/Neue_Theorie_des_Raumes_und_der_Zeit)

Palágyi, Melchior 1914. *Die Relativitätstheorie in der modernen Physik*. Vortrag gehalten auf dem 85 Naturforschertag in Wien. Berlin: G. Reimer. (Also in Palágyi 1925.)

Palágyi, Melchior 1925. *Ausgewählte Werke von Prof. Melchior Palágyi, Band III. Zur Wellenmechanik. (Beiträge zur Metaphysik der Physik.)* Hrg.: Prof. Gehrcke. Leipzig: Verlag von Johann Ambrosius Barth.

Nature in Geography and the Oblivion of Geography

Barbara Zahnen

The presentation should be of particular interest with respect to a hermeneutic philosophy of science (or a strong hermeneutics of science) which, implicitly or explicitly, is concerned with the oblivion of being. It will reveal a possibility of thinking which can be regarded as being in line with the thinking undertaken by such a hermeneutic philosophy of science, but which is not based on this philosophy of science, nor on its (seeming) philosophical foundations. If the thinking to be introduced can be said to be based on anything at all, then it's probably appropriate to say that its based on nothing but the lived experience of a geographer (I am geographer myself), and, at the same time, on the oblivion of geography, even within academic geography itself. While there would be many ways to elucidate the above-said, the presentation will try to do so by rethinking the notion of nature in geography in a way that reveals "fallow potentials" of academic geography (or, put differently: overlooked but worthwhile possibilities of practising academic geography).

1985-2001: Student Adviser at the Carl von Ossietzky University Oldenburg.
1986-1996: Teaching assistant for philosophy.
1991-1993: Research scholarship for philosophy of nature.
1996-2005: Lecturer for philosophy at the university of Vechta.
Since 1996: Director of the "Karl Jaspers Vorlesungen zu Fragen der Zeit."
2000: Post-doctoral lecturer in philosophy.
2006: Professorship in philosophy.
2008: Organization of the Karl Jaspers year in Oldenburg.
Since 2010: Member of the DFG graduate school: "Self-Making. Practices of subjectivation in historical and interdisciplinary perspective."
Since 2012: Editor in the project: „Gesamtedition und Kommentierung der Werke von Karl Jaspers, des Nachlasses und der Briefe in Auswahl" of the Heidelberger Academy of Sciences.

Focus of research

Hermeneutics, philosophy of nature, anthropology, research on Immanuel Kant and Karl Jaspers; system theory and science studies, practices of subjectivation, in particular the works of Maurice Merleau-Ponty, Michel Foucault, Bruno Latour and Ludwig Wittgenstein.

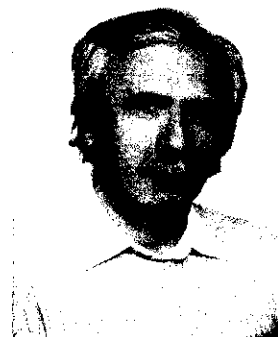
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László Székely (1954): graduation in mathematics: 1978; graduation in philosophy: 1982. Ph. D. in the philosophy of science: 1990 (Hungarian Academy of Sciences). The title of the dissertation: *Science and philosophy in 20th century cosmology*. 1979-1985: lecturer of philosophy, Juhász Gyula Teacher Training College, Szeged, Hungary; 1985-1987: research fellow, Technical University, Budapest, 1988-: senior research fellow, Institute of Philosophy of Research Centre for the Humanities of the Hungarian Academy of Sciences.



Monographs: *From Einstein's Cosmos to the Inflationary Universe: the History and the Philosophical-Epistemological Background of the Standard Cosmological Paradigm*. Budapest: 1990. (In Hungarian.) *Cosmos with a Human Face: the Anthropic Principle*. Budapest, 1997. (In Hungarian.) *Julius Fenyi and the Jesuit Science*. Budapest: 1999 (In Hungarian.) Some recent publications: „Lajos Jánossy's Reformulation of Relativity Theory in the Contexts of 'Dialectical Materialism' and Traditional Scientific Rationalism." In: Breidbach, Olaf and Poggi, Stefano (eds.), Forstner, Christian (guest

ed.): *Yearbook for European Culture of Science, 2011*. Stuttgart: Franz Steiner Verlag, 2012. pp. 253-270.; László Székely and László Ropolyi: „Lorentzian versus Einsteinian relativity as a philosophical issue.” *The Physics of Reality. 8th Vigier Symposium*. London 2012. (<http://www.mindspring.com/~cerebroscopic/Laszlo.pdf> „William Paley’s Natural Theology Today” *VIGILIA* 77/3.(2012) pp. 188-195. (in Hungarian)

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