

# Newsletter of The History of Philosophy of Science (HOPOS) Working Group

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The History of Philosophy of Science (HOPOS)  
Working Group  
<http://scistud.umkc.edu/hopos>

## From the Editor

In the half-year that has passed since the last issue of the Newsletter, HOPOS has had a Steering Committee election—and the Steering Committee has a new Chair, Alan Richardson. A full list of new Committee members can be found on page 16.

The other primary piece of HOPOS news is that preparations are ongoing for HOPOS 2000 in Vienna. Our first conference to be held outside the United States is a likely success as a scholarly gathering and a surefire bet as a tourism opportunity. We are assured of a large attendance by our co-sponsors, the Vienna-based Institut Wiener Kreis. At a minimum, we know that *they* will be there! Details on submitting abstracts for HOPOS 2000 appear on page 2 of this Newsletter.

Another major event in HPS studies is even closer on the horizon: this summer's gathering of the Logic, Methodology, and Philosophy of Science (LMPS) division of the International Union of History and Philosophy of Science (IUHPS) in Cracow, Poland. The history-related programs promise to be of special interest to HOPOI. Our own Alan Richardson will be speaking at a symposium on "One hundred years of philosophy of science" (presumably the preceding one hundred years). In this Newsletter, you will find the program of invited speakers for the history sections of LMPS '99 and important contact information.

Wholly uncoincidentally, this issue also features a guide to HOPOS-related resources of Poland, as the latest installment in our series of scholarly-oriented travelogues. Pavel

Kawelec has assembled, in record time, an overview of Poland's personal and supra-personal intellectual assets in history and philosophy of science, as a service to this summer's visitors to LMPS '99. Beyond Poland's storied past in logic, there are many contemporary resources that are well worth seeking out.

Finally, this Newsletter features two reviews of re-editions of classic scientific writings. The first looks at Ptolemy's *Almagest*, recently reprinted by Princeton University Press; the second looks at Raymond Aron's historical review of sociological theory, a new reprint from Transaction Publishers. We all know the stereotypical HOPOS study, which concerns seventeenth or twentieth century discussions of physics or method. This issue's reviews sample the myriad other fields that fall under HOPOS's range.

One last note: I thank HOPOI for their kind words about the previous issue of the Newsletter, and I appreciate the assistance of members in the continuous effort to improve our 'party organ'. I only ask each of you to conceive of this publication as a potentially better resource. If you can think of a possible way to further improve the Newsletter—a single announcement or article, a small series, or a large overhaul—please do not hesitate to share your contribution or idea. Thanks in advance.

Cheers,  
Saul Fisher



# HOPOS 2000

*July 6-9, 2000, University of Vienna, Vienna, Austria*

## *Call for Papers and General Information*

The History of Philosophy of Science Working Group announces its Third International Conference in July 2000, organized together with the Institute Vienna Circle (Institut Wiener Kreis) and the Zentrum für Internationale und Interdisziplinäre Studien der Universität Wien [ZIIS] (Center for International and Interdisciplinary Studies of the University of Vienna).

The Conference invites contributions concerning all time periods and from all scholarly approaches. Conference languages include English, German, and French.

HOPOS's partner in organizing HOPOS 2000, the Institute Vienna Circle (IVC), is an international society for the advancement of a scientific world view. The IVC aims at promoting, cultivating, and disseminating the philosophy of the Vienna Circle/Logical Empiricism. This includes also the documentation, application, and development of its results. In the spirit of the members of the Vienna Circle, the IVC adheres to an enlightenment conception of science which includes a commitment to the democratization of knowledge and science, and the critique of irrationalism, dogmatism, and fundamentalism in any form. In order to realize these goals, the IVC organizes conferences, lectures, edits three book series, and maintains a library and archive with material by and on Vienna Circle members and related philosophers. For information, go to [hhobel.phl.univie.ac.at/wk](http://hhobel.phl.univie.ac.at/wk)

### *Program Committee*

Co-Chairs: Michael Heidelberger

(Humboldt-Universität zu Berlin) and Friedrich Stadler (Universität Wien, and Institut Wiener Kreis)  
Gary Hatfield (University of Pennsylvania), Don Howard (University of Notre Dame), Cassandra Pinnick (Western Kentucky University), Joelle Proust (Ecole Polytechnique CREA, C.N.R.S Paris), G. A. John Rogers (University of Keele), Rose Mary Sargent (Merrimack College), Thomas Uebel (University of Manchester), Catherine Wilson (University of British Columbia)

### *Guidelines for Submissions*

Submissions of (a) abstracts of papers of approximately 30 minutes' reading length, or (b) a full panel of three to four papers, will be considered for the program. Abstracts of individual paper submissions should be between 300 and 500 words in length. Panel proposals should include one panel abstract, names and contact addresses of all participants, and abstracts of approximately 500 words for each paper.

Although the conference languages are English, German and French, all abstracts should be in English. All submissions should arrive by November 1, 1999. Acknowledgments will be sent by December 1, 1999. Notification of acceptance of submissions will be provided by January 15, 2000.

Submissions should be delivered by electronic mail to Angelika Rzhigacek at the Institute Vienna Circle ([i\\_v\\_c@ping.at](mailto:i_v_c@ping.at)) with "HOPOS Submission" in the subject line of the email. If you do not use Windows 95, please submit your file in RTF-format. Other submissions should include three paper copies and one copy on 3.5" diskette.

### *Registration and other questions*

Details regarding registration, hotel, travel, discounted airfare, side program, etc. will be provided at a later date. All inquiries on these matters should be sent to: Institut

Wiener Kreis / Institute Vienna Circle, Museumstrasse 5/2/17, A-1070 Wien, Austria - tel./fax: +431-5261005 ([i\\_v\\_c@ping.at](mailto:i_v_c@ping.at)) Please refer to "HOPOS 2000" in your mail.

For further information, contact: Michael Heidelberger ([Michael=Heidelberger@rz.hu-berlin.de](mailto:Michael=Heidelberger@rz.hu-berlin.de)) or Friedrich Stadler ([Friedrich.Stadler@univie.ac.at](mailto:Friedrich.Stadler@univie.ac.at))  
Conference Website: [hhobel.phl.univie.ac.at/wk](http://hhobel.phl.univie.ac.at/wk)



## News of the profession.

### Call for Reports.

In future issues of the Newsletter, we hope to offer concise reports on conferences of interest to HOPOI. If you are interested in writing such reports, please contact the Editor.

### Conference Calendar.

- May 21-23, 1999, The University of Chicago  
Conference to honor Howard Stein on his 70<sup>th</sup> birthday. Talks will be held in the Classics Building, Room 10, 1010 East 59<sup>th</sup> Street, Chicago. For information, contact J. Grencius at [jg30@midway.uchicago.edu](mailto:jg30@midway.uchicago.edu) or go to [humanities.uchicago.edu/humanities/philosophy/Steinfest.html](http://humanities.uchicago.edu/humanities/philosophy/Steinfest.html).
- May 26-29, 1999, Konstanz, Germany  
Fifth meeting of the Pittsburgh-Konstanz Colloquium in the Philosophy of Science - "Philosophical Problems in the Neurosciences". For information, go to [www.uni-konstanz.de/FuF/Philo/Philosophie/PittsburghKonstanzColl.html](http://www.uni-konstanz.de/FuF/Philo/Philosophie/PittsburghKonstanzColl.html).
- May 29-30, 1999, Deutsches Museum, Munich, Germany  
Joint Conference of the IUHPS/DHS Commissions on the History of

Modern Chemistry and the History of Modern Physics. For information, contact Christoph Meinel at [christoph.meinel@psk.uni-regensburg.de](mailto:christoph.meinel@psk.uni-regensburg.de).

- June 7-10, 1999, Universidade Estadual Paulista, Marilla Campus, Brazil  
III Simposium in Philosophy and Science: "Educação, Universidade e Pesquisa: Paradigmas do Conhecimento no Final do Milênio". For information, go to [www.marilia.unesp.br/eventos/simpós.htm](http://www.marilia.unesp.br/eventos/simpós.htm)
- June 13-16, 1999, Zentrale Einrichtung für Wissenschaftstheorie und Wissenschaftsethik, Universität Hannover  
Conference on Incommensurability (and related matters). For information, contact Paul Hoyningen-Huene at [hoyningen@mbox.wv.uni-hannover.de](mailto:hoyningen@mbox.wv.uni-hannover.de) or Howard Sankey at [sankey@mbox.wv.uni-hannover.de](mailto:sankey@mbox.wv.uni-hannover.de); or go to [sun1.rzn.uni-hannover.de/zeww/inc.conf.html](http://sun1.rzn.uni-hannover.de/zeww/inc.conf.html).
- June 3-5, 1999, Université de Sherbrooke, Quebec.  
Canadian Society for the History and Philosophy of Science (CSHPS) annual meeting. For information, contact Gordon McOuat at [gmcouat@is.dal.ca](mailto:gmcouat@is.dal.ca).
- July 7-11, 1999, Oaxaca, Mexico.  
International Society of History, Philosophy, and Social Studies of Biology meeting. For information, go to [www.phil.vt.edu/ishpssb](http://www.phil.vt.edu/ishpssb).
- July 8-11, 1999, University of Notre Dame, Notre Dame, Indiana  
Fifth International Conference on the History and Foundations of General Relativity. For information, contact Don Howard at [Don.A.Howard.43@nd.edu](mailto:Don.A.Howard.43@nd.edu)

- July 28, 1999-August 1, 1999, University of South Carolina, Columbia, SC  
Third Summer Symposium on the Philosophy of Chemistry and Biochemistry. For information, contact Davis Baird at [bairdd@garnet.cla.sc.edu](mailto:bairdd@garnet.cla.sc.edu).
- August 1-6, 1999, University of Utrecht, the Netherlands  
Logic Colloquium '99. European Summer Meeting of the Association for Symbolic Logic. For information contact Simone Panka at [simone@cw.nl](mailto:simone@cw.nl) or go to [www.cwi.nl/lc99](http://www.cwi.nl/lc99).
- August 8-20, 1999, Warsaw-Madralin, Poland  
Second School for Theory of Knowledge. For information, contact Anna Szczesna at [caracol1@psk2.am.lodz.pl](mailto:caracol1@psk2.am.lodz.pl) or go to [hektor.umcs.lublin.pl/~zlimn/school](http://hektor.umcs.lublin.pl/~zlimn/school).
- August 15-19, 1999, Mexico City  
Conference on "Alexander von Humboldt y la ciencia americana". Sponsored by the Mexican Society for History of Science and Technology (SMHCT). For information, contact José Omar Moncada at [acad@igiris.igeograf.unam.mx](mailto:acad@igiris.igeograf.unam.mx).
- August 20-26, 1999, Cracow, Poland  
LMPS '99 (See article below).
- Second week, September 1999  
History and Philosophy Section of the Annual Meeting of the Deutsche Mathematiker Vereinigung. For information, contact David Rowe at [ROWE@MAT.Mathematik.Uni-Mainz.DE](mailto:ROWE@MAT.Mathematik.Uni-Mainz.DE).
- September 20-25, 1999, Luminy  
"Méthodes et Corpus en Histoire des mathématiques - Extensions et nouvelles perspectives" – International Colloquium on the History of Mathematics. For information, contact Michel Armatte at [armatte@dauphine.fr](mailto:armatte@dauphine.fr) or go to

[news://cip7.recherche.dauphine.fr](http://news://cip7.recherche.dauphine.fr), and subscribe to the Luminy99 forum.

- October 1-2, 1999, Institute Vienna Circle, Vienna  
International Workshop: "Conceptions of Knowledge and Economics by/on Otto Neurath and Josef Popper-Lynkeus"
- October 7-10, 1999, University of Oklahoma, Norman, OK.  
"Historicizing Literature, Science, and the Arts", Conference of the Society for Literature and Science. For information, contact R. Schleifer at [schleifer@ou.edu](mailto:schleifer@ou.edu), or P. Gossin at [psgossin@utdallas.edu](mailto:psgossin@utdallas.edu).
- October 28-31, 1999, San Diego, CA  
The Society for Social Studies of Science (4S) will be holding its 1999 Annual Meeting in San Diego. For information go to [www.u.arizona.edu/~jlc](http://www.u.arizona.edu/~jlc).
- November 3-7, 1999, Pittsburgh, PA  
The History of Science Society will mark its 75<sup>th</sup> anniversary at its annual meeting. For information, go to [weber.u.washington.edu/~hssexec](http://weber.u.washington.edu/~hssexec) or contact the HSS Executive Office at [hssexec@u.washington.edu](mailto:hssexec@u.washington.edu).
- December 17 or 18, 1999, Lyon  
Colloquium on J. E. Montucla. For information, contact P. Crépel at [crepel@lan.univ-lyon1.fr](mailto:crepel@lan.univ-lyon1.fr)
- July 17-18, 2000, Southampton, UK  
Society for the Social History of Medicine Annual Conference, "Medicine-Magic-Religion". For information, contact Dr Waltraud Ernst at [WER@soton.ac.uk](mailto:WER@soton.ac.uk).
- February, 2001, Tenerife, Canary Islands  
International Symposium on Galileo: 2001. For information, contact J E Beckman at [jeb@ll.iac.es](mailto:jeb@ll.iac.es) or the Canary Orotava Foundation for the

History of Science at  
[s\\_orotava@redestb.es](mailto:s_orotava@redestb.es).

## Symposia.

- Collège de France Seminar on “Paléontologie et Evolutionnisme en France”, May 5-June 18, 1999 at 5pm in the Amphithéâtre Guillaume Budé of the Collège de France. For information, contact Jean Gayon at [jean.gayon.1@nd.edu](mailto:jean.gayon.1@nd.edu).
- Maison Française d’Oxford Seminar in “Science and the new century: Britain, France and Germany, c. 1900” will meet in the History of Science Seminar Room (Modern History Faculty), Thursdays at 5 pm, April 29, May 6, 13, 27, June 3, 10. For information, contact the Maison at [maison@sable.ox.ac.uk](mailto:maison@sable.ox.ac.uk).
- Maison Française d’Oxford Ludwig Fleck day of study, May 22, 1999. For information, contact Nathalie Jas at [n\\_jas@hotmail.com](mailto:n_jas@hotmail.com).
- Università di Padova - Centro Interdipartimentale di Ricerca in Storia e Filosofia delle Scienze Spring 1999 Seminars on History and Philosophy of Science, near the Centro Interchimico, in Hall G (1<sup>st</sup> Floor), Wednesdays, 5:30 pm, April 14, 21, 28, May 5, 12, 19. For information, go to [147.162.56.20/~cirsfis](http://147.162.56.20/~cirsfis).

## Journals.

- Foundations of Science (FOS). *Call For Papers*. The new editorial board of FOS calls for papers that adhere to its new structure. For information, go to [www.vub.ac.be/CLEA/FOS](http://www.vub.ac.be/CLEA/FOS) or contact Diederik Aerts, Editor-in-Chief at [diraerts@vub.ac.be](mailto:diraerts@vub.ac.be).
- The Monist. *Call For Papers*. The Monist will dedicate two upcoming issues to topics of interest to HOPOI: ‘Physics

Before Newton’ (October, 2001; deadline for submissions: October 2000), and ‘The Philosophy of Biology’ (January, 2002; deadline for submissions: January 2000). For information go to [wings.buffalo.edu/philosophy/Publications/Monet](http://wings.buffalo.edu/philosophy/Publications/Monet).

- Oriens-Occidens. Number 2 is dedicated to “La science grecque, ses commentaires et ses critiques: La Physique d’Aristote et l’Arithmétique d’Euclide”. It is available for 70F plus postage from the Centre d’Histoire des Sciences et des Philosophies arabes et médiévales, CNRS, ESA 7062, 8, rue Guy Môquet, 94801 Villejuif France (make payment to: Agent comptable de l’Université Paris 7).

• Philosophia Scientae. Philosophia Scientae announces three publications:

- ◆ A reissue of Poincaré’s *Sciences et Méthodes*, published by L. Rollet (160 FF);
- ◆ Vol 3, no. 2: “Interférences et transformations dans la philosophie française et autrichienne (Mach, Poincaré, Duhem, Boltzmann)”, published by Éditions Kimé, 2 impasse des Peintres, 75 002 Paris (550 FF); and
- ◆ Cahier Spécial 2 (1998-1999): “Themes on the history of biology on the occasion of the 60<sup>th</sup> birthday of Professor Armin Geus (Marburg)” (130 FF).

For information and orders, contact Gerhard Müller at [gmuller@clsh.u-nancy.fr](mailto:gmuller@clsh.u-nancy.fr).

- Taiwanese Journal for the Study of Science, Technology and Medicine.

This bilingual (Chinese and English) journal—dedicated to interdisciplinary studies of Taiwanese and Chinese science, technology and medicine—is now accepting subscriptions and submissions. For subscriptions contact Daiwie Fu at [Daiwie@hist.nthu.edu.tw](mailto:Daiwie@hist.nthu.edu.tw); for

editorial correspondence contact Chu Pingyi at [kaihsin@pluto.sinica.edu.tw](mailto:kaihsin@pluto.sinica.edu.tw).

## Electronic Mailing Lists.

- EPISTEMICA-L  
 A new lusophone (Portuguese) electronic mailing list dedicated to the history and philosophy of science has been established at the Universidade Estadual de Londrina (PR–Brasil). The list is directed by Eduardo Barra ([filhfc@uel.br](mailto:filhfc@uel.br)). To subscribe, write to: [majordomo@uel.br](mailto:majordomo@uel.br) and put in your subscription message: ‘subscribe EPISTEMICA-L’

## Publications.

- \* Kvasz, L., Kampis, G., and M. Stöltzner. (ed.s) *The Philosophy of Imre Lakatos - Its Roots, Content and Limitations*. Dordrecht: Kluwer 1999.
- \* Rashed, R., Houzel, C., and G. Chrisol, (eds.), *Théorie des nombres, Volume I of the Collected Works of P. de Fermat*. Paris: Editions A. Blanchard.
- \* Stadler, Friedrich. *The Vienna Circle -- Studies in the Origins, Development and Influence of Logical Empiricism*. Wien-New York: Springer, 1999 (Publications of the Institute Vienna Circle).
- \* Uebel, Thomas E.. *Vernunftkritik und Wissenschaft. Otto Neurath und der Erste Wiener Kreis im Diskurs der Moderne—eine verspätete Rückkehr*. Wien-New York: Springer, 1999 (Publications of the Institute Vienna Circle).

## Jobs, Fellowships, Grants and Awards.

Note: These announcements are truncated in the interests of space and lack crucial application information. Please contact any relevant parties listed here *in advance* of actually

applying, and be advised that these notices are not advertisements and do not meet the requirements of formal notification on the part of prospective employers.

- International Laboratory for the History of Science-Postdoctoral Fellows

The Dibner Institute's International Laboratory in the History of Science brings together postdoctoral fellows and senior scholars for an intensive seminar. For information, contact Trudy Kontoff at [kontoff@mit.edu](mailto:kontoff@mit.edu). The sites and topics for upcoming years are as follows:

- ◆ *Max Planck Institut für Wissenschaftsgeschichte*, Berlin, 1999 - Material culture of calculation.
- ◆ *Cohn Center, Tel-Aviv University*, Tel Aviv, 2000 - Jewish and Islamic attitudes towards material culture and science in the Middle Ages.
- ◆ *Istituto e Museo di Storia della Scienza*, Florence, 2001 - Science, techniques, and the arts in the Renaissance.
- ◆ *Center for the History of Science*, University of Athens, Athens, 2002 - Texts as instruments for the transmission of scientific knowledge from center to periphery.
- French University posts *Professeur des Universités* - Section 72 (Epistémologie, histoire des sciences et des techniques)
  - ◆ Université de Brest-Emploi n° 0711
  - ◆ Institut universitaire de formation des maîtres de Lyon-Emploi n° 0008
  - ◆ Université Nancy II-Emploi n° 0747
  - ◆ Université Paris I-Emploi n° 1096
 For information, go to [www.education.gouv.fr/bo/1999/special1](http://www.education.gouv.fr/bo/1999/special1).
- American Institute of Physics, Center for History of Physics  
The 1999 Grants to Archives are available for researching significant

records and papers which document the history of modern physics and allied fields. For information, go to [www.aip.org/history/grntgde.htm](http://www.aip.org/history/grntgde.htm) or contact the Center at [chp@aip.org](mailto:chp@aip.org). Closing date for applications is July 1, 1999.

- Johns Hopkins University, Department of History of Science/Medicine/Technology  
Johns Hopkins invites applications for a two-year Postdoctoral Fellowship in History of Science/Medicine/Technology, beginning September 1, 1999. For information go to [www.matrix.msu.edu/jobs/showjob.cf?JobID=4562](http://www.matrix.msu.edu/jobs/showjob.cf?JobID=4562). Review of applications begins 1 April.
- Society for the History of Alchemy and Chemistry  
The Society invites entries to the Partington Prize Competition for an original and unpublished essay on any aspect of the history of alchemy or chemistry. For information, contact John Hudson at [J.A.Hudson@anglia.ac.uk](mailto:J.A.Hudson@anglia.ac.uk). The closing date is December 31, 1999.
- James F. McDonnell Foundation Centennial Awards  
The McDonnell Foundation Centennial Awards for History and Philosophy of Science have been granted to Kathleen Akins (Simon Fraser University) and Keith Wailoo (University of North Carolina). For information, go to [www.jsmf.org/cf/fellowsbios/H&PFellows.htm](http://www.jsmf.org/cf/fellowsbios/H&PFellows.htm).

## LMPS '99 Cracow, Poland

The Organizing Committee invites you to take part in the 11<sup>th</sup> International Congress of Logic, Methodology and Philosophy of Science, which will be held in Cracow, Poland, on August 20-26, 1999. The Congress will be held at Collegium Chemicum, 3 R. Ingardena

St., in the center of Cracow. The working language of the Congress is English.

The proceedings of the Congress will be divided into 17 sections (*cf. below—Editor*). Several tours have been organized especially for the Congress during this week, and also on August 27 and 28. The registration fee is 225 US (students 125 US) until May 30, and 300 US (students 175 US) before August 20. The accompanying person's fee is 70 US. We advise early registration to ensure the best possible accommodation. The registration and hotel booking form can be downloaded from the Congress website, [www.uj.edu.pl/Phils/congress/lmps99.htm](http://www.uj.edu.pl/Phils/congress/lmps99.htm).

A final circular, which will contain the full program of the Congress, will appear in July.

On behalf of the Organizing Committee I look forward to welcoming you to Cracow.

*Jan Wolenski*

*Chairman of the Organizing Committee  
Cracow, November 30, 1998*

Send correspondence to:  
[lmps99@jetta.if.uj.edu.pl](mailto:lmps99@jetta.if.uj.edu.pl)

### *Congress Sections*

#### *Logic*

1. Proof Theory
2. Model Theory
3. Recursion Theory
4. Axiomatic Set Theory
5. Logic and Computation
6. Logic, Language and Cognition

#### *General Philosophy of Science*

7. Methodology
8. Probability, Induction, and Decision Theory

#### *Philosophical Problems concerning the Sciences*

9. Philosophy of Logic, Mathematics, and Computer Science
10. Philosophy of Physical Sciences
11. Philosophy of Biological Sciences

- 12. Philosophy of Cognitive Sciences and Artificial Intelligence
- 13. Philosophy of Linguistics
- 14. Philosophy of Social Sciences

*Ethical, Historical, and Social Perspectives on Philosophy of Science*

- 15. Ethics of Science and Technology
- 16. History of Logic, Methodology, and Philosophy of Science: *H. Ishiguro, M. Carrier, H. Sinaceur, G. Sundholm*
- 17. Philosophical Questions Raised by the History and Sociology of Science: *S. Gaukroger, N. Cartwright, I. Hacking, M. Kusch*

*Plenary Lectures*

Andrzej K. Wroblewski  
John Maynard Smith  
Stanislaw Lem

*Special Symposia*

- 1. A hundred years of philosophy of science. *G. Gutting, G. Irzik, A. Richardson.*
- 2. Cognitive science meets philosophy of science.

*Social Program*

Congress social events will include an opening reception, concert, and farewell banquet. Various tours will be organized for Congress participants and accompanying persons, including sights in and around Cracow.



## Regional maps of HOPOS activity and infrastructure.

### Poland (No. 2).

*Report on HOPOS-related resources in Poland.*

If there is a good point of reference with which to begin a report on HOPOS-related resources in Poland, it surely is Stanislaw Kaminski

(1919-86) (Dean of the WF KUL—see below) and his monumental book The Concept of Science (1961, 1<sup>st</sup> edition). His idea of four great conceptions of science parallels Kuhn's SSR (1962), and is grounded in a comprehensive study of history and philosophy of science (the 1981 edition of Kaminski's book covers more than 1100 greatest scientists and philosophers of science, in greater or lesser detail).

A preliminary note. I have covered a huge subject in a very short space, and some may feel (rightly) that the report unjustly omits them or distorts the character of their research. I have focused on some institutions in greater detail than others, especially where I took them to be more easily accessible to HOPOI coming to Poland for LMPS'99. Accordingly, for these visitors I have included names of researchers (to facilitate contacts). The format of telephone numbers given here is appropriate when used in one area of Poland to reach a second area; when in the same area, skip the '0-xx'; and when abroad, insert '48' (country code for Poland) instead of '0-'.

As with Kaminski, HOPOS-related research in Poland is generally an individual pursuit, and global HOPOS-related studies are hardly centered in any particular institution. Yet some institutions specialize in disciplines such as philosophy of medicine, philosophy of economics, and ancient and medieval philosophy of science. A notable exception to this pattern is a monthly research seminar directed by A. Motycka (IFiS PAN—see below) and S. Zamecki (IHN PAN—see below) which is attended by philosophers and historians of science. However, for most scholars noted here, HOPOS-oriented interests lie beyond their primary interests in history or philosophy of science.

Educational and research institutions.

If you know Polish history even roughly, you will not be surprised to

learn that state-governed science institutions in Poland are of quite recent origin. The now autonomous and most important research institution in Poland—PAN (the Polish Academy of Sciences)—was established in 1951 as a communist state agency for the central administration of science. It replaced spontaneously-grown and well-established scientific institutions with a prominent past: Polska Akademia Umiejtnosci and Towarzystwo Naukowe Warszawskie. The majority of Polish universities and higher education institutions are also state institutions, except for the KUL, ATK, PAT, and TJ (see below). This is also true of all other institutions noted below: museums, libraries, archives, and publishing houses.

*Principal universities and other institutions of higher education.*

For HOPOI, probably the most interesting kind of research is carried out by the *Institute of History of Science at PAN* (IHN PAN) (00-330 Warsaw, ul. Nowy Swiat 72/9, 0-22 826.87.54, [www.ihnpan.waw.pl/start.html](http://www.ihnpan.waw.pl/start.html)). It was set up in 1954, and now has two branches: in Cracow (ul. Sw. Jana 24) and Wroclaw (ul. Parkowa 13, 0-71 48.22.48). The director is A. Srodka, and research interests include medieval European science, early modern science, and history of schooling and education. IHN PAN has 6 departments, a library and a publishing house (see below). The departments include: Copernican Research (0-22 657.28.36, director: G. Rosinska; W. Wojcik); History of Schooling (0-22 657.28.63, director: J. Miaso); History of Biological Sciences and Pharmacy (0-22 657.27.32, director: B. Kuznicka); History of Medical Sciences (director: A. Srodka); History of Social Sciences (0-22 657.27.30, director: I. Stasiewicz-Jasiukowa); and History of Empirical and Technical Sciences (0-22 657.27.13, director: B. Orlowski).

Also of note at PAN is the *Institute of Philosophy and Sociology* (IFiS PAN) (00-330 Warsaw, ul. Nowy Swiat 72). Research interests include history of ancient philosophy and early science—especially pre-Copernican studies concerning Cracow University (M. Markowski); Polish philosophy of science in the 19<sup>th</sup> and 20<sup>th</sup> c. (S. Borzym); 20<sup>th</sup> c. philosophy of science, including philosophy of formal and empirical sciences (R. Wojcicki, M. Tempczyk, M. Czarnocka, E. Kaluszynska, J. Malinowski, H. Buczynska-Garewicz, A. Motycka, W. Lugowski); philosophy and history of praxiology (W. Gasparski); German 19<sup>th</sup> and 20<sup>th</sup> c. philosophy of science (S. Czerniak). The Institute has also a Research Group in the Retrospective Bibliography of Polish Philosophy (A. Przymusiala, M. Mloczkowska).

The most comprehensive coverage of philosophy of science, including HOPOS-related studies, is found at the *Institute of Philosophy at the Adam Mickiewicz University* (IF UAM) in Poznan (60-769 Poznan, ul. Szamarzewskiego 89c, 0-61 847.64.61 ext. 280, [main.amu.edu.pl/~filozof](http://main.amu.edu.pl/~filozof)). Research interests include Marxist philosophy of science, philosophy of biology, and 20<sup>th</sup> c. philosophy of science (L. Nowak, K. Lastowski, A. Klawiter); philosophy of history and religious studies (T. Buksinski, J. Baniak); history of methodology of science, philosophy of the humanities, history and philosophy of mathematics, physics, cosmology, biology, chemistry, and 18<sup>th</sup>-20<sup>th</sup> c. German philosophy of science (J. Such, B. Kotowa, I. Nowak, E. Piotrowska, J. Wisniewski, M. Kilijanek, I. Czerwonogora, E. Pakszys, M. Szczesniak); history and philosophy of technology and experimental applications (J. Szymanski, W. Heller, D. Sobczynska, A. Szczucinski, E. Zielonacka-Lis); 20<sup>th</sup> c. philosophy of science and 19<sup>th</sup> c. German philosophy of science (W. Lawniczak, P. Zeidler, R. Kubicki, Z.

Tworak, J. Pogonowski); and 19<sup>th</sup> and 20<sup>th</sup> c. history and philosophy of mathematics and logic (T. Batog - Dept. of Mathematical Logic, 60-769 Poznan, ul. Matejki 48/49, 0-61 866.86.51 ext. 26).

A wide variety of HOPOS-related research is conducted at the *Faculty of Philosophy of the Catholic University of Lublin* (WF KUL) (20-950 Lublin, al. Raclawickie 14, 0-81 533.89.11, [eber.kul.lublin.pl/~istvan](http://eber.kul.lublin.pl/~istvan)). The fields covered include philosophy and history of 20<sup>th</sup> c. logic (and applications to physics) and AI (Z. Dywan - A.I. Lab; S. Kiczuk, L. Koj, M. Lechniak); history of philosophy of science (A. Stepien, S. Judycki, A. Bronk, S. Majdanski); ancient history and philosophy of science, and history of philosophy of science in Poland until the 19<sup>th</sup> c. (S. Wielgus, S. Janeczek); 19<sup>th</sup> and 20<sup>th</sup> c. history of philosophy of science, and history of formal sciences, physics, and cosmology (Z. Hajduk, Z. Roskal); history and philosophy of technology and ecological philosophy (S. Zieba); philosophy and history of biological sciences (M. Wnuk, J. Zon); philosophy and history of physics and cosmology (J. Turek); philosophy of chemistry and medicine (W. Tyburczyk); bioethics (A. Szostek, B. Chyrowicz); and history of relations between science, philosophy of science, and religion (J. Zycinski). One professor emeritus of the WF KUL is S. Swiezawski, a member of the Lvov-Warsaw school, and the author of an unprecedented monograph (6 volumes) on 15<sup>th</sup> c. philosophy which discusses a great many HOPOS-related issues.

Probably the most widely known research on 20<sup>th</sup> c. history of Polish philosophy of science has been pursued by scholars at the *Institute of Philosophy of the Jagiellonian University* (IF UJ), 31-044 Cracow, ul. Grodzka 52, 0-12 422.49.16, [www.uj.edu.pl/uj-guide/inst\\_phi.html](http://www.uj.edu.pl/uj-guide/inst_phi.html). The scope of IF UJ based research includes Polish 20<sup>th</sup> c. philosophy of science, 19<sup>th</sup> and

20<sup>th</sup> c. history and philosophy of mathematics and QM, and ancient to contemporary history of logic (J. Wolenski, T. Placek, A. Rojszczak, J. Perzanowski, E. Zarnecka-Bialy, J. Kabzinski); and philosophy and history of biology, physics, and psychology (Z. Piatek, J. Misiek, K. Gurba, J. Czerniawski, M. Suwara, J. Werszowiec). In August of 1999, the IF UJ hosts the 11<sup>th</sup> International Congress of Logic, Methodology, and Philosophy of Science ([www.uj.edu.pl/Phils/congress](http://www.uj.edu.pl/Phils/congress)).

*Institute of Philosophy at the Warsaw University* (IF UW) (00-047 Warsaw, ul. Cracowskie Przedmiescie 3, 0-22 826.57.34, [www.uw.edu.pl/o\\_uwang/wydang.htm#soc](http://www.uw.edu.pl/o_uwang/wydang.htm#soc)). W. Krajewski, M. Przelecki and B. Skarga have retired from the Institute, but are still active. In the mid 1990's B. Skarga started a book series—a guide to 20<sup>th</sup> c. philosophical literature (5 volumes have been published thusfar by the PWN—see ‘miscellanea’), a large part of which deals with philosophy of science books. Research interests include history and philosophy of chemistry (E. Pietruska-Madej); philosophy of physics (Z. Augustynek, T. Bigaj); 16<sup>th</sup>-20<sup>th</sup> c. Polish philosophy of science and formal sciences with applications (J. Jadacki, J. Pelc); and 19<sup>th</sup> and 20<sup>th</sup> c. philosophy of formal sciences (M. Omyla, T. Holowka, A. Jedynek, K. Misiuna, M. Mostowski, W. Zandaroska, J. Pasek).

The most prestigious colloquium in Poland (once a year in May) groups some 30 practicing scientists and philosophers, and is organized by the *Faculty of Philosophy at the Papal Academy of Theology* in Cracow (WF PAT) (31-004 Cracow, ul. Franciszkanska 1, 0-12 422.98.04, [jadwiga.pat.Cracow.pl/pt/adresy.html](http://jadwiga.pat.Cracow.pl/pt/adresy.html)) and the Center for Interdisciplinary Research (OBI, hosted by the WF PAT). Research interests include 20<sup>th</sup> c. history and philosophy of mathematics with applications to cosmology (M. Heller, head of OBI;

M. Pienkowski); and bioethics (K. Szczygiel). The OBI publishes *Zagadnienia Filozoficzne w Nauce* (see 'journals' below) and book series on philosophy and history of science, *Academica* and *Universum* (by Biblos Publ.). For contents of the 1996 and 1998 colloquia, go to

[www.pip.com.pl/LogBank/Meetings/Crac96/progr96.txt](http://www.pip.com.pl/LogBank/Meetings/Crac96/progr96.txt) and [www.ii.uj.edu.pl/~urbaniec/jednosc](http://www.ii.uj.edu.pl/~urbaniec/jednosc).

*Other prominent departments*

- *Faculty of Christian Philosophy at the Academy of Catholic Theology* (WFCh ATK) (01-815 Warsaw, ul. Dewajtis 5, 0-22 832.91.46). Research interests include philosophy of evolution, bioethics, and genetics (K. Kloskowski, J. Dolega, S. Kornas); history of philosophical logic (E. Nieznanski); philosophy of physics and the humanities (M. Bombik); philosophy and history of mathematics and empirical applications; philosophy of information sciences and applications to biological systems (A. Latawiec); and philosophy of anthropology (B. Halaczek, Z. Lepko).
- *Institute of Philosophy at the Kopernik University in Torun* (IF UMK) (87-100 Torun, ul. Podmurna 74, 0-56 652.27.57, [www.uni.torun.pl/Wydzialy\\_i\\_inne\\_jednostki/WH/if.html](http://www.uni.torun.pl/Wydzialy_i_inne_jednostki/WH/if.html)). Research interests include 19<sup>th</sup> and 20<sup>th</sup> c. Italian, French, American and 18<sup>th</sup>-20<sup>th</sup> c. German philosophy of science (L. Witkowski, M. Grabowski, A. Dubik, T. Komendzinski, A. Szahaj, U. Zeglen, S. Czerniak, J. Rolewski); and 20<sup>th</sup> c. philosophy of formal sciences (J. Perzanowski, L. Gumanski, M. Urchs, A. Pietruszczak).
- *Institute of Philosophy at the Wroclaw University* (IF UW) (51-149 Wroclaw, ul. Koszarowa 3, [www.adm.uni.wroc.pl/filozofia](http://www.adm.uni.wroc.pl/filozofia)). Research interests include Popper's philosophy (A. Chmielewski); history of conventionalism in France; contemporary philosophy of physics,

and 19<sup>th</sup> c. Polish and German philosophy of science (A. Siemanowski, A. Zabierowski, K. Rotter, K. Szlachcic); and 20<sup>th</sup> c. philosophy of mathematics and history of formalizations of empirical sciences (J. Zygmunt, J. Hawranek).

- *Faculty of Philosophy of the Jesuit Order in Cracow* (WFTJ w Cracowie) (31-501 Cracow, ul. Kopernika 26, 0-12 421.31.55). Research interests include philosophy and history of science of Polish Jesuits in the 16<sup>th</sup>-18<sup>th</sup> c. (R. Darowski, F. Bargiel); modern history of philosophy of science (L. Grzeben); philosophy of evolution and genetics (P. Lenartowicz); history of relativistic cosmology; and ancient and medieval philosophy of science (S. Ziemianski).
- *Institute of Philosophy at the Maria Sklodowska-Curie University* (IF UMCS) (20-031 Lublin, pl. Curie-Sklodowskiej 4, 0-81 537.54.81, [hektor.umcs.lublin.pl/~zlimn/WFiS/pl/index.htm](http://hektor.umcs.lublin.pl/~zlimn/WFiS/pl/index.htm)). Research interests include ancient and medieval philosophy of formal sciences and the Lvov-Warsaw School (T. Kwiatkowski, J. Swiderek); and 19<sup>th</sup> and 20<sup>th</sup> c. philosophy of formal sciences and sociology (J. Pasniczek, P. Giza, Z. Kowalski, A. Bilat, A. Koterski; Ogryzko-Wiewiorkowski).
- *Faculty of Philosophy at the Lodz University* (WF UL) (90-237 Lodz, ul. Matejki 34a, 0-42 78.39.84, [maciek.uni.lodz.pl/ulan/katfiloz.htm](http://maciek.uni.lodz.pl/ulan/katfiloz.htm)). Research interests include history of science and philosophy of biology (B. Tuchanska, A. Pobjowska, E. Mickiewicz-Olczyk); and 19<sup>th</sup> and 20<sup>th</sup> c. philosophy of formal sciences and applications (G. Malinowski, [maciek.uni.lodz.pl/ulan/his3.htm](http://maciek.uni.lodz.pl/ulan/his3.htm); A. Nowaczyk).
- *Institute of Philosophy at the Slaski University* (IF USI) (40-007 Katowice, ul. Bankowa 11). Research interests include 20<sup>th</sup> c. philosophy and history of logic and mathematics

(A. Wojcik, K. Szymanek, I. Marek); history and philosophy of geology (K. Slecza); philosophy of technology, biology, and Marxist philosophy of science (K. Sztumski); and history and ethical issues in technology (A. Kiejias)

- *Institute of Philosophy at the University of Bialystok* (IF UB) (15-420 Bialystok, Liniarskiego 4, 0-85 745.75.10). Research interests include modern philosophy of science and positivism (Z. Kuderowicz, J. Chwal); and historical and philosophical foundations of automated deduction, esp. of 17<sup>th</sup> c. (W. Marciszewski, K. Trzesicki, [www.calculamus.org/clips.html](http://www.calculamus.org/clips.html)).
- *Institute of Philosophy at the WSP Zielona Gora* (65-762 Zielona Gora, al. Wojska Polskiego 65, 0-68 26.35.20 ext. 520, [asia.aw.wsp.zgora.pl/~filozof/logika/ogika.html](http://asia.aw.wsp.zgora.pl/~filozof/logika/ogika.html)). Research interests include 20<sup>th</sup> c. philosophy of science (A. Wisniewski, A. Grobler, K. Jodkowski, W. Sady).
- *Institute of Philosophy and Sociology at the Gdansk University* (IFiS UG) (80-851 Gdansk, ul. Bielanska 5, 0-58 301.22.08). Research interests include 19<sup>th</sup> and 20<sup>th</sup> c. history and philosophy of physics (L. Kostro, J. Przybylowski); and Marxist philosophy of mathematics (J. Mrozek).
- *Institute of Philosophy WSP w Rzeszowie* (IF WSP) (35-959 Rzeszow, ul. Rejtana 16c, 0-17 852.21.04). Research interests include anti-naturalism, esp. German philosophy (A. Zachariasz, M. Szulakiewicz).

*Other research teams*

- Chair and Dept. of the History of Medicine and Pharmacy, Collegium Medicum UJ (KiZHMIF CMUJ) (31-034 Cracow, ul. Kopernika 7, 0-12 422.21.16, [www.uj.edu.pl/CollMedicum/cm41316.html](http://www.uj.edu.pl/CollMedicum/cm41316.html)). Director: Z. Gajda. Research

interests include history of Polish medicine, esp. since the 18<sup>th</sup> c. in Cracow. The KiZHMIF has an affiliated Museum of Medical Faculty (see ‘museums’).

- Dept. of History of Medicine and Philosophy at the Medical Academy in Warsaw (ZHMIF AM) (00-019 Warsaw, ul. Zlota 7, 0-22 827.03.07). Director: M. Luskanowski. Research interests include history of medicine and pharmacy; and Marxist philosophy of medicine.
- Dept. of History of Medicine at Lodz University (ZHM UL) (90-752 Lodz, ul. Zeligowskiego 7/9, 0-42 633.96.60 ext. 29). Director: C. Jesman. Research interests include history of medicine in Poland.
- Dept. of Philosophy of Medicine CMUJ (ZFM CMUJ) (31-010 Cracow, ul. Rynek Glowny 34, 0-12 421.36.26). Director: B. Maroczynska-Jezowa. Research interests include philosophy of medicine.
- III Chair and Dept. of General Surgery CMUJ (III KiZC CMUJ) (31-202 Cracow, ul. Pradnicka 37, 0-12 633.19.95, [www.uj.edu.pl/CollMedicum/cm4149.html](http://www.uj.edu.pl/CollMedicum/cm4149.html)). Research interests include ancient and mediaeval history and philosophy of medicine (A. Jonecko).
- Chair in Social Sciences at the Medical Academy in Poznan (KNS AM) (60-770 Poznan, ul. Dabrowskiego 79). Research interests include history and philosophy of medicine in Poland (Z. Mackowiak).
- Chair in History of Economic Thought at the UW (KHME UW) (00-241 Warsaw, ul. Długa 44/50, 0-22 831.32.01 ext. 155). Research interests include history of Polish and contemporary American economic thought (J. Dziewulski, Z. Hockuba).
- Chair in History of Economic Thought and Economic History at the UL (KHMEiHG UL) (90-214 Lodz, ul. Rewolucji 1905r. 41/43, 0-42 635.51.60). Research interests include history of philosophy of economics (W. Piatkowski).
- Chair in History of Economic Thought at the Academy of Economics in Poznan (KHME AE) (60-967 Poznan, al. Niepodleglosci 10, 0-61 854.30.27). Research interests include philosophy of economics (Z. Romanow).
- Institute of History of Architecture, Art and Technology at Wroclaw Institute of Technology (IHASiT PWr) (50-317 Wroclaw, ul. Prusa 53, 0-71 320.62.31). Research interests include history of technology and applications (P. Gerber, R. Sroczynski).
- Chair in the Humanities at Koszalin Institute of Technology (KNH PK) (75-620 Koszalin, ul. Raclawicka 15A, 0-94 42.78.81 ext 295). Research interests include history of science and technology (B. Polak).
- Chair in History of Schooling and Education at the WSP in Cracow (KHOiW WSP) (30-089 Cracow, ul. Podchorazych 2, 0-12 637.47.77 ext. 290). Director: Z. Ruta.
- Chair in Philosophy at SGH (KF SGH) (02-520 Warsaw, ul. Wisniowa 41, 0-22 49.21.17 ext. 105). Research interests include the history of 20<sup>th</sup> c. philosophy of science (T. Pluzanski).
- Chair in the Humanities of Lodz Institute of Technology (KNH PL) (90-217 Lodz, ul. Sterlinga 16/18, 0-42 632.07.93). Research interests include German philosophy and history of science, history of science in Poland (K. Baranowski, W. Kaniowski)
- Baltic Institute (BI) (80-836 Gdansk, ul. Tkacka 11/13, 0-58 301.47.86). Director: C. Ciesielski. Research interests include history of science in Polish-Scandinavian-German relations.
- Institute of Culture Studies UAM (IK UAM) (60-568 Poznan, ul. Szamarzewskiego 89, 0-61 847.64.61 ext. 229). Research interests include science studies (K. Zamiara).
- Faculty of Mathematics and Computer Science UAM (WMIU UAM) (60-769 Poznan, ul. Matejki 48/49, 0-61 866.66.15). Research interests include 19<sup>th</sup> and 20<sup>th</sup> c. philosophy of mathematics and logic (R. Murawski).

- Institute of Physics UMK (IF UMK) (87-100 Torun, ul. Grudziadzka 5/7, 0-56 210.65). Research interests include history and philosophy of contemporary science, esp. physics (R. S. Ingarden).
- Chair in Physics KUL (KF KUL) (20-950 Lublin, al. Raclawickie 14, 0-81 445.35.44). Affiliation: Faculty of Mathematics and Empirical Sciences KUL. Research interests include philosophy and history of physics (H. Piersa, T. Michniowski).
- Chair in Social Sciences at Gdansk Institute of Technology (KNS PG) (80-952 Gdansk, ul. Narutowicza 11/13, 0-58 47.23.79). Research interests include philosophy of biology and chemistry (A. Synowiecki).
- Dept. of Philosophy at the Academy of Mining and Metallurgy in Cracow (ZF AGH) (30-071 Cracow, ul. Gramatyka 8a). Research interests include philosophical analysis of Lorenz’ concepts (J. Fiut).
- Institut de la Culture Médiévale KUL (MZHKS KUL) (20-950 Lublin, al. Raclawickie 14, 0-81 445.32.37). Research interests include pre-Copernican history of science at the Jagiellonian University; history of philosophy of science in middle ages (S. Wielgus, M. Markowski).

#### Museums.

- I used two criteria to select among Polish museums: HOPOS relevance and accessibility for LMPS’99 attendants. These two museums off the beaten track but are worth a visit:
- Muzeum Mikołaja Kopernika, 14-530 Frombork, ul. Katedralna 8, 0-55 43.72.18, [frombork@softel.elblag.pl](mailto:frombork@softel.elblag.pl), [www.frombork.art.pl](http://www.frombork.art.pl). Director: H. Szkop. The collection includes Copernicus’ manuscripts, and covers history of astronomy and medicine. You can also visit the planetarium (Carl Zeiss equipment) and astronomical observatory.
  - Muzeum Okregowe w Toruniu, 87-100 Torun, Rynek Staromiejski 1, 0-56 270.38. Director: M. Wozniak. Exhibit on Copernicus—the person, his work, and epoch.

Both in Frombork and Torun there are lots of preserved historical buildings (including the birthplace of Copernicus in Torun).

In Warsaw you will find the Muzeum Marii Skłodowskiej-Curie, ul. Freta 16, 0-22 831.80.92. The museum is located in the private house of Skłodowska-Curie. Films on her life and work, and collections on the history of chemistry, are available here. Director: M. Sobieszczak-Marciniak.

While in Warsaw, it is worth visiting these museums:

- Muzeum Techniki NOT, 00-901 Warsaw, Palac Kultury i Nauki, 0-22 620.47.10. Director: J. Jasiuk. This broad collection on the history of science and technology covers 29 disciplines. The museum has 6 branches all over Poland. Some exhibits may be seen by special request only.
- Muzeum Zup Krakowskich, 32-020 Wieliczka, ul. Zamkowa 8, 0-12 422.19.47. Director: A. Jodłowski. 16<sup>th</sup>-20<sup>th</sup> c. salt-miners' tools and appliances, and salt specimens, as well as a tour of the galleries and chambers of the fabled salt mines (a UNESCO site). LMPS'99 organizers offer a tour on August 25<sup>th</sup> and 27<sup>th</sup>.
- Muzeum Miar, Warsaw, ul. Elektoralna 2, 0-22 620.02.41 ext. 503. Director: J. Mikoszewski. Affiliation: Główny Urząd Miar. Over 3000 measuring devices (time, volume, mass, force, length, etc.).
- Muzeum Zegarow, Kielce, plac Kosciuszki 7/8, 0-41 386.24.45. Exhibition of over 650 types of clocks including 15<sup>th</sup> c. sun-dials. Presents also original interiors and book collection of the 19<sup>th</sup> c. physician, F. Przypkowski.
- Muzeum Farmacji im. A. Lesniewskiej, Warsaw, ul. Skierniewicka 16/20, 0-22 632.00.21. Director: I. Arabas. Affiliation: PZF CEFARM. Early 20<sup>th</sup> c. pharmacy equipment.

There are numerous additional museums dedicated to technology and industry; consult the Polish National Tourist Office for further information.

Additionally, some 60 regional museums have sections on natural history and the history of technology and engineering. Here are some archeological museums of interest for HOPOI (arranged by city):

- Biskupin, 88-410 Gasawa, t. 0-534 250.25, [gray.logonet.com.pl/bydgoszcz/biskupin.html](http://gray.logonet.com.pl/bydgoszcz/biskupin.html)
- Cracow, 31-002 Cracow, ul. Senacka 3, 0-12 422.92.86, [www.Cracow.pl/muzea/archeol/index.html](http://www.Cracow.pl/muzea/archeol/index.html). There are four natural history museums in Cracow: Muzeum Geologiczne AGH; Muzeum Przyrodnicze (ul. Sławkowska 17); Muzeum Przyrodnicze (ul. Sw. Sebastiana 9); and Muzeum Zoologiczne (ul. Grodzka 53).
- Poznan, 61-781 Poznan, ul. Wodna 27, 0-61 852.82.51, [www.muzarp.poznan.pl](http://www.muzarp.poznan.pl), e-mail: [muzarp@man.poznan.pl](mailto:muzarp@man.poznan.pl).
- Warsaw, ul. Długa 52, 0-22 831.15.37. Director: J. Jaskanis. Features prehistory of Poland through the early middle ages.
- Wrocław, ul. Kazimierza Wielkiego 34, 0-71 44 28 29. Other important archeological museums are in Lodz, Gdansk, and Ostrowiec Swietokrzyski.

#### *Natural history museums*

- Muzeum Ewolucji, Palac Kultury i Nauki, 0-22 656.66.37, [paleo@twarda.pan.pl](mailto:paleo@twarda.pan.pl). Director: K. Malkowski. Affiliation: Institute of Paleobiology PAN. Exhibits on extinct forms of life and general natural history.
- Muzeum Ziemi, 00-488 Warsaw 27, aleja na Skarpie 20/26, 0-22 629.74.97, [venus.ci.uw.edu.pl/alf/mz](http://venus.ci.uw.edu.pl/alf/mz). Director: K. Jakubowski. Affiliation: Institute of Geology PAN. Broad collection of monuments of inanimate nature (over 150,000 objects) and history of geological sciences.

- Muzeum Wydziału Geologii UW, Warsaw, ul. Zwirki i Wigury 93, 0-22 22.30.51 ext 101. Director: A. Pelc. Affiliation: Dept. of Geology of UW. Collection of minerals and fossils (over 10,000 objects).
- Muzeum Geologiczne, 00-975 Warsaw, ul. Rakowiecka 4, 0-22 49.53.51 ext. 386, [www.pgi.waw.pl/muzeum](http://www.pgi.waw.pl/muzeum), or write to [wmiz@pgi.waw.pl](mailto:wmiz@pgi.waw.pl). Director: W. Mizerski. Minerals and fossils.
- Muzeum Ziemi, 41-200 Sosnowiec, ul. Bedzinska 60, 0-32 291.83.81 ext. 464. Director: L. Karwowski.
- Muzeum Minearologiczne, Wrocław ul. Kuznicza 21/22, 0-71 40.26.68. Minerals and meteorites found in Poland, and moon samples.
- Muzeum i Instytut Zoologii PAN, 00-950 Warsaw, ul. Wilcza 64, PO BOX 1007, 0-22 629.32.21. Director: S. Slipinski ([dyr@robal.miiz.waw.pl](mailto:dyr@robal.miiz.waw.pl)). Affiliation: Institute of Zoology PAN.
- Muzeum Oceanograficzne i Akwarium Morskie MIR, 81-345 Gdynia, al. Zjednoczenia 1, [www.mir.gdynia.pl/akw/glowna.htm](http://www.mir.gdynia.pl/akw/glowna.htm), [muzeum@mir.gdynia.pl](http://muzeum@mir.gdynia.pl). Marine biology museum and aquarium.
- Muzeum Puszczy Kampinowskiej, wieś Granica, 0-22 725.01.23. Fauna and flora of one of Europe's largest forest regions.
- Muzeum Przyrodnicze, Wrocław, ul. Sienkiewicza 21, 0-71 22.50.41.

#### *Museums of academic life in Poland.*

- Muzeum UJ, 31-010 Cracow, ul. Jagiellońska 15, 0-12 422.05.49, [www.uj.edu.pl/muzeum](http://www.uj.edu.pl/muzeum), [info@maius.in.uj.edu.pl](mailto:info@maius.in.uj.edu.pl). Director: S. Waltos. Exhibits on the development of science at one of the world's oldest academic institutions.
- Muzeum Wydziału Lekarskiego UJ, Cracow, ul. Radziwillowska 4, 0-12 422.21.16. History of Collegium Medicum of the Jagiellonian University.
- Muzeum Uniwersytetu Warszawskiego, Palac Kazimierzowski, Sala im. J. Mianowskiego, ul. Cracowskie Przedmieście 26/28, 0-22 620.03.81 ext. 107. Director: J. Halbersztadt.

Documents biographies of Warsaw University scientists and history of the University.

- Muzeum Architektury, Wrocław, ul. Bernardynska 5, 0-71 44.82.78. Permanent exposition on the art and history of geometry.

Libraries and archives.

- Biblioteka Narodowa. 00-973 Warsaw, al. Niepodleglosci 213, PO Box 36, 0-22 608 29 99, [www.bn.org.pl](http://www.bn.org.pl), [bninform@biblnar.bn.org.pl](mailto:bninform@biblnar.bn.org.pl). Director: M. Jagiello ([bandyrekt@biblnar.bn.org.pl](mailto:bandyrekt@biblnar.bn.org.pl)). The central state library opened in 1928. The collection of over 4.7 million items includes documents that originated in Poland and documents of Polish origin world-wide.
- Zakład Narodowy im. Ossolinskich. 50-139 Wrocław, ul. Szewska 37, 0-71 344.44.76, [www.ossolineum.wroc.pl](http://www.ossolineum.wroc.pl), [ZNiO@win.oss.wroc.pl](mailto:ZNiO@win.oss.wroc.pl). Founded in 1817 as a private institution. Lost some 60% of its collection while moving from Lvov (now in Ukraine) to Wrocław—its present location. A unique collection in the humanities and arts.
- Biblioteka Jagiellonska. 30-059 Cracow, al. Mickiewicza 22, 0-12 633.63.77, [www.bj.uj.edu.pl](http://www.bj.uj.edu.pl). Director: K. Zamorski. The oldest Polish library founded in 1364—a must for LMPS'99 attendants. Over 3.5 millions items now—a unique collection of Polish prints up to 1800.
- Biblioteka Uniwersytecka KUL. 20-030 Lublin, ul. Chopina 27, 0-81 743.73.88, [www.bukul.lublin.pl](http://www.bukul.lublin.pl), [inf nauk@nestor.kul.lublin.pl](mailto:inf nauk@nestor.kul.lublin.pl). Director: T. Stolz. Broad collection (1.2 million volumes), including 19<sup>th</sup> and early 20<sup>th</sup> c. German and English HOPOS-related resources.
- Biblioteka IHN PAN. 0-22 657.28.58, [bibl@ihnpan.waw.pl](mailto:bibl@ihnpan.waw.pl). Director: D. Kozłowska. Founded in 1955, this collection serves the IHN PAN departments.
- Biblioteka PAN. 00-901 Warsaw, Pałac Kultury i Nauki, VI p., 0-22 620

33 02, [biblpan@warman.com.pl](mailto:biblpan@warman.com.pl). Director: B. Sordylowa. History of science and technology in Poland (branch in Cracow: 31-016 Cracow, ul. Sławkowska 17, 0-12 422.29.15. Director: K. Grodziska).

- Biblioteka Publiczna m. st. Warszawy, 00-950 Warsaw, ul. Koszykowa 26, PO Box 365. Director: J. Jagielska ([bpwgkosz@plearn.edu.pl](mailto:bpwgkosz@plearn.edu.pl)). 19<sup>th</sup> c. manuscripts of the Polish positivists.
- Biblioteka Instytutu Badan Edukacyjnych. 01-180 Warsaw, ul. Górczewska 8, 0-22 632.02.25. Director: K. Rurawska. History of schooling and education in Poland.
- Biblioteka Muzeum i Instytutu Zoologii PAN. 00-679 Warsaw, ul. Wilcza 64, 0-22 629 32 21. Director: D. Keller. History of zoology in Poland.
- Wojewodzka Biblioteka Publiczna i Książnica Miejska im. M. Kopernika w Toruniu. 87-100 Torun, ul. Słowackiego 8, 0-56 240.55. Director: T. Szymorowska. Copernicana, Towarzystwa Nauk w Toruniu (Learned Society of Torun) collection of books since 1875.
- Biblioteka Poznańskiego Towarzystwa Przyjaciół Nauk. 61-725 Poznań, ul. Mielżyńskiego 27/29, 0-61 852.74.41. Director: R. Marciniak. Polish 19<sup>th</sup> c. texts from the area of Wielkopolska.
- Główna Biblioteka Lekarska im. S. Konopki. 00-791 Warsaw, ul. Chocimska 22, 0-22 49.78.51, [gbl@warman.com.pl](mailto:gbl@warman.com.pl). Director: J. Kapuscik. History of medicine, including prints, manuscripts, and bibliographical data.
- Biblioteka Główna AGH. 30-059 Cracow, al. Mickiewicza 30, 0-12 634.14.04, [bhagh@libnvl.biblio.agh.edu.pl](mailto:bhagh@libnvl.biblio.agh.edu.pl). History of technology.
- Biblioteka Uniwersytecka UW. 00-927 Warsaw, ul. Cracowskie Przedmieście 32, 0-22 29.96.19, [dakrstar.ci.uw.edu.pl/uw.buw](http://dakrstar.ci.uw.edu.pl/uw.buw). Collection of 19<sup>th</sup> and 20<sup>th</sup> c. Russian writings and 16<sup>th</sup> and 18<sup>th</sup> c. prints.
- Biblioteka Uniwersytecka UMK. 87-100 Torun, ul. Gagarina 13, 0-56

654.29.52, [www.bu.uni.torun.pl](http://www.bu.uni.torun.pl), [umklibr@bu.uni.torun.pl](mailto:umklibr@bu.uni.torun.pl).

- Biblioteka Filozoficzna WFTJ w Cracowie. 31-501 Cracow, ul. Kopernika 26. Director: C. Michalunio.

Two archives contain a wealth of HOPOS-relevant materials: manuscripts of the Lvov-Warsaw philosophers, and manuscripts of the Jagiellonian University scholars, dating from the 14<sup>th</sup> c. on.

- Archiwum PAN, ul. Nowy Świat 72, 0-22 826.81.30. Director: H. Krajewska. Archives of Akademia Umiejętności, Polska Akademia Umiejętności, Polska Akademia Nauk (the most important Polish learned societies), central inventory of resources for studies of the Polish history of science and technology.
- Archiwum UJ, 31-008 Cracow, ul. Św. Anny 6, 0-12 422.60.18. Director: J. Michalewicz. History of science and schooling, especially of the Jagiellonian University (since 1364). Large collection of old manuscripts and prints.

Journals.

Perhaps only one journal in Poland can be adequately characterized as covering HOPOS-related topics: Kwartalnik Historii Nauki i Techniki (Quarterly Journal of the History of Science and Technology). Published since 1995 by IHN PAN. Editor: J. Roziewicz, 00-330 Warsaw, ul. Nowy Świat 72/245, 0-22 657.28.64. This journal covers the history of philosophy of science, science resources, collections, education, and researchers. It also reports on science-related activities, and provides a comprehensive recent Polish bibliography. Contents and abstracts are in English.

Most of the following journals only occasionally publish HOPOS-related materials:

- Analecta. Studia i Materiały z Dziejów Nauki. Published since 1991 by IHN PAN. Editors: H. Lichočka, J. Kurkowski, 00-330 Warsaw, ul.

- Nowy Swiat 72/245, 0-22 657.28.64. History of science (understood broadly to include conceptual foundations). English abstracts.
- Archiwum Historii i Filozofii Medycyny. Published by Polskie Towarzystwo Historii Medycyny i Farmacji since 1924. Editors: H. Gaertner, Z. Gajda, 31-034 Cracow, ul. Kopernika 7, 0-12 622.21.16. English abstracts. Supplementary volume 5 (1997) lists habilitation, doctoral, and master's degree theses written in medicine, dentistry and pharmacy, and related disciplines in Poland (1900-95).
  - Archiwum Historii Filozofii i Mysli Społecznej. Published since 1957 by IFiS PAN. Editors: Z. Ogonowski, S. Borzym, IFiS PAN, 00-330 Warsaw, ul. Nowy Swiat 72/106, 0-22 26.52.31 ext. 235. Contents in English and German.
  - Filozofia Nauki. Published since 1993 by IF UW, and Fundacja na rzecz Transdyscyplinarnych Badan nad Komunikowaniem. Editors: J. Jadacki ([jadacki@plearn.edu.pl](mailto:jadacki@plearn.edu.pl)), A. Wojtowicz. IF UW, 00-047 Warsaw, ul. Cracowskie Przedmiescie 3/17. Philosophy of science, and occasional HOPOS-related studies.
  - Foundations of Science. Published by AFOS (Kluwer). Editor-in-chief: D. Aerts ([diraerts@vub.ac.be](mailto:diraerts@vub.ac.be)), [www.vub.ac.be/CLEA/FOS](http://www.vub.ac.be/CLEA/FOS). Occasional papers on the history of foundational issues in science.
  - Kwartalnik Filozoficzny. Published 1923-38, 1946-50, since 1990 (new series) by IF UJ. Editors: W. Strozewski, M. Baranowska. Section on archives of Polish philosophy
  - Mathesis Universalis. On-line journal published by IF UB, [www.calculemus.org/MathUniversalis/index.html](http://www.calculemus.org/MathUniversalis/index.html). Editor: W. Marciszewski. Regular section on Leibnizian philosophy.
  - Medycyna Nowozytna published by IHN PAN (pok. 144a). Editor: Z. Podgorska-Klawe, 0-22 657.28.54. Modern history of medicine.
  - Nauka polska: jej potrzeby, organizacja i rozwoj. Published by Kasa im. J. Mianowskiego. Editors: J. Piskurewicz, L. Zasztowt. Studies and materials on the history of science in Poland, and biographies of Polish scientists, with occasional papers on the history of philosophy of science in Poland.
  - Organon. Published by IHN PAN. Editor: A. Biernacki. 0-22 657.28.30.
  - Poznan Studies in the Philosophy of the Sciences and the Humanities. Published since 1975, now by Rodopi. Editor-in-chief: L. Nowak ([epistemo@hum.amu.edu.pl](mailto:epistemo@hum.amu.edu.pl)), [main.amu.edu.pl/~pozn-stu](http://main.amu.edu.pl/~pozn-stu), 60-247 Poznan, ul. Cybulskiego 13, 0-61 847.70.79. This former journal is now a book series in philosophy of science.
  - Prakseologia. Published since 1962 by IFiS PAN. Editor: W. Gasparski, D. Miller. 0-22 657.28.25
  - Projektowanie i Systemy. Published by Komitet Naukoznawstwa PAN. Editors: W. Gasparski, D. Miller. History of methodology of practical sciences.
  - Przegląd Filozoficzny. Published since 1949 by Komitet Nauk Filozoficznych IFiS PAN. Editor: J. Holowka. 00-330 Warsaw, ul. Nowy Swiat 72/233, 0-22 657.27.87.
  - Roczniki Filozoficzne (Annals of Philosophy). Published since 1948 in thematic series, including (1) Logic, Metaphysics, Philosophy of Science (ed.s A. Stepien, S. Kiczuk, J. Czerkawski) and (3) Philosophy of Nature and Environment Protection (ed.s M. Heller, M. Wnuk, S. Zieba, Z. Hajduk. [eber.kul.lublin.pl/ext/tn/pucfr.html](http://eber.kul.lublin.pl/ext/tn/pucfr.html).) English and German abstracts and contents.
  - Ruch Filozoficzny. Published by Polskie Towarzystwo Filozoficzne (Polish Philosophical Association). Editor: L. Gumanski. IF UMK, 87-100 Torun, I. Podmurna 74. HOPOS-related papers, reports, conferences and bibliography. The journal launched by K. Twardowski in Lvov.
  - Studia Copernicana. Published since 1970 by IHN PAN. Editors: P. Czartoryski, J. Malicki, J. Soczynski. 0-22 657.28.64
  - Studia Mediewistyczne. Published since 1969 by IFiS PAN. Editors: J. Domanski, Z. Kuksewicz, S. Wielgus. Medieval philosophy and history of science. English abstracts.
  - Theoria et Historia Scientiarum. Published occasionally since 1991. Editors: T. Komendzinski, W. Mincer. Address: W. Mincer, ul. Kraszewskiego 20/22, 87-100 Torun.
  - Zagadnienia Filozoficzne w Nauce. Published since 1978 by OBI. Editors: M. Heller, J. Zycinski. OBI, WF PAT, 31-004 Cracow, ul. Franciszkanska 1. Occasional papers on the history of physics (esp. cosmology) and mathematics.
  - Zagadnienia Naukoznawstwa. Editors: S. Kowalewska, S. Zamecki. 00-901 Warsaw, Palac Kultury i Nauki, Biblioteka PAN, VI pietro, 0-22 656.65.90. HOPOS-related survey of Polish literature and occasional papers on history of philosophy of science in Poland. English abstracts and contents.
- Many of the other philosophy journals in Poland can be tracked through Principia - Ekspres Filozoficzny, which provides information as well on conferences, seminars, symposia, research, grants, degrees, publications, and reports. Published by Centrum Dokumentacji Filozofii Polskiej Komitetu Nauk Filozoficznych PAN (Center for Documentation of Polish Philosophy of the Committee of Philosophical Sciences PAN; 31-044 Cracow, ul. Grodzka 52/19, [www.cyf-kr.edu.pl/academic/CDFP/czaso.htm](http://www.cyf-kr.edu.pl/academic/CDFP/czaso.htm)).
- Miscellanea.
- Learned societies have a long tradition in Poland, already well established in the 19<sup>th</sup> c. Almost 50 largest cities in Poland have their own societies or branches of larger societies, and every scientific discipline has its own society—and almost every society is occupied with history of the relevant science. However, out of the scientific

societies, only two have HOPOS-related issues as their main mission:

- Polskie Towarzystwo Historii Medycyny i Farmacji (Polish Society for the History of Medicine and Pharmacy) (00-019 Warsaw, ul. Złota 7, 0-22 627.03.07). Active since 1957. President: A. Srodka. The society has 13 regional branches, and 400 members. Publishes Archiwum Historii i Filozofii Medycyny (see 'journals').
- Polskie Towarzystwo Historii Techniki (Polish Society for the History of Technology) (00-811 Warsaw, PO Box 44, ul. Towarowa 1, 0-22 36.54.75). Active since 1984. President: Z. Mikulski. Publishes Inżynierowie polscy XIX i XXw. (Polish Engineers of the 19<sup>th</sup> & 20<sup>th</sup> c.)

There are no philosophical societies whose primary activity focuses on HOPOS-related issues; these learned societies fulfill a similar role in Poland:

- Polskie Towarzystwo Filozoficzne (PTF; Polish Philosophical Association) (00-330 Warsaw, ul. Nowy Świat 72). President: W. Strozewski. Active since 1902. PTF has 860 members and 12 regional branches.
- Polskie Towarzystwo Logiki i Filozofii Nauki (Polish Association for Logic and Philosophy of Science) ([www.calculemus.org/LogBank/HTPL/pal.txt](http://www.calculemus.org/LogBank/HTPL/pal.txt)). President: E. Orłowska ([orłowska@itl.waw.pl](mailto:orłowska@itl.waw.pl)). This association continues the initiative of J. Łukasiewicz (Polish Logical Society, founded 1936).
- Towarzystwo Naukowe KUL (TN KUL; Learned Society of the CUL) (20-616 Lublin, PO Box 123, ul. Gliniana 21, 0-81 525.01.93, [eber.kul.lublin.pl/ext/tn\\_tnkul@kul.lublin.pl](http://eber.kul.lublin.pl/ext/tn_tnkul@kul.lublin.pl)). President: A. Bronk. Active since 1934. 550 members. Within the TN KUL, most HOPOS-related activities—conferences, symposia, lectures, science communication and research—are conducted by the Komisja Filozofii Przyrody WF KUL

(Committee for the Philosophy of Nature, founded in 1965). President: H. Piersa (IF KUL). TN KUL publishes Roczniki Filozoficzne and 21 other scientific journals.

- Association for the Foundations of Science (AFOS), Polish chapter ([pespmc1.vub.ac.be/AFOS](http://pespmc1.vub.ac.be/AFOS)). President: R. Wojcicki. Activities include discussion of foundational and historical issues of science, organization of conferences, workshops, publications, and sponsoring research projects.

#### *Print and electronic references*

As a general reference, HOPOI may want to look at the Directory of Polish Philosophy (J. Jastal, Ed., Cracow: Aureus, 1995), a Polish-English guide to philosophical institutions, directories, journals, and editorial series in Poland, with a bibliography for 1990-95 and 6 different indexes. As it is a bit out of date now, one may wish to look at the Pagina Philosophorum Polonorum ([www.cyf-kr.edu.pl/academic/CDFP](http://www.cyf-kr.edu.pl/academic/CDFP)) maintained by the Center for Documentation of Polish Philosophy of the Committee of Philosophical Sciences PAN, ul. Grodzka 52/19, 31-044 Cracow. This site features news concerning conferences, seminars, nominations, research grants, books, and journals—and information on institutions and courses. Another general source of web-based information is the Polish Philosophy Page ([www.fmag.unict.it/polhome.html](http://www.fmag.unict.it/polhome.html)) maintained by F. Coniglione of the Università di Catania in Italy. This site contains good capsule-histories of the various 20<sup>th</sup> c. Polish schools of philosophy.

The most comprehensive website on science in Poland ([hum.amu.edu.pl/~zbzw/ph/sci/naupo1.htm](http://hum.amu.edu.pl/~zbzw/ph/sci/naupo1.htm)) has a guide to Polish Nobelists, distinguished scientists, discoverers, and travelers, as well as a directory of Polish scientific institutions and libraries, and information about the summer science festivals (which

present scientific developments to the public).

#### *Publishers*

There are many book series on science history and philosophy, but these are mostly translations. The greatest publishers of scientific work in Poland, including HOPOS-related studies, are PWN ([www.pwn.com.pl/pwn\\_pol/index.htm](http://www.pwn.com.pl/pwn_pol/index.htm)) and WNT ([www.wnt.com.pl](http://www.wnt.com.pl)). However, HOPOS-related books and journals appear in the Publishing House of the IHN PAN (WYDAWNICTWO IHN PAN, 0-22 657.27.48), founded in 1990. Their catalogue includes Kwartalnik Historii Nauki i Techniki, Analecta, Studia Copernicana (see 'journals') and these book series: the Biographic Dictionary of Polish Medical Sciences, and the monumental History of Polish Science (over 20 volumes now).

*Paweł Kawalec*

*Stypendysta Fundacji na Rzecz Nauki Polskiej, WF KUL*



## Book Reviews

### *Ptolemy's Almagest*

*Trans. G. J. Toomer. Princeton: Princeton University Press, 1998, xvii + 691.*

Overemphasizing the importance of Ptolemy's *Almagest* for the history of science is difficult. Not only is it the only major astronomical work that remains to us from antiquity, it was also the dominant, if not the only, textbook of astronomy for about fourteen centuries, and lies at the very foundation of the Copernican revolution. In this respect the *Almagest* can compete with Euclid's *Elements*, upon which it draws heavily. Nevertheless, the *Almagest* received little or no attention during the modern era. The Copernican revolution had close to the same

effect on the *Almagest* as the latter had on the writings of Hipparchos—Ptolemy’s most illustrious predecessor—whose work is lost, apart from one early work and some fragments. That the first English translation of Ptolemy appears only in 1952 is a clear sign of this lack of attention (German and French translations appeared in the 19<sup>th</sup> century). The Princeton paperback edition makes the *Almagest* readily available for the first time.

The *Almagest* is clearly intended as a comprehensive textbook in astronomy. Ptolemy begins with a brief discussion of the nature of the universe and the trigonometrical method used throughout the work. He then addresses those aspects of spherical astronomy that relate to the observer’s position on earth, such as the length of daylight. Next he discusses his theory of the sun. Ptolemy treats the sun before the moon, as his use of lunar eclipses demands the calculation of the sun’s position. After his discussion of the moon, Ptolemy addresses the fixed stars in which he uses the just-developed lunar theory to determine the position of some crucial stars. This part of the *Almagest* also contains Ptolemy’s star catalogue. This star catalogue, finally, plays a role in Ptolemy’s account of the planets, as some planetary observations are made with reference to the fixed stars.



Claudius Ptolemaeus

Ptolemy’s star catalogue (which is actually Hipparchos’ catalogue updated and enlarged) survived the longest as a work of scientific importance. For instance, in his 1878 catalogue of latitude stars for the US Coast Survey, Charles S. Peirce begins by carefully comparing the star catalogues of no less than eight editions of the *Almagest* (including among others, the ninth century *Parisinus graecus* and an Arabic manuscript of 1218 in the British Library), alongside the work of others, before presenting his own observations on the brightness of the stars (*Photometric Researches*, Leipzig: Wilhelm Engelmann, 1878). This can be seen as the first critical edition of Ptolemy’s star catalogue in the English language. Peirce concludes his report with a detailed examination of the discrepancies in the results of the different observers. In his evaluation of these discrepancies, Peirce suggests that they are due in part to the various techniques used by different observers. Ptolemy made red stars too faint, Peirce argues, probably because he estimated the magnitudes of stars while looking at them through a pinhole. Observers who instead used a telescope to determine the magnitude of stars, made red stars too bright. Peirce himself used a Zöllner’s astrophotometer.

The Princeton edition of the *Almagest* is the paperback version of a 1984 hardback edition published by Duckworth. The two editions are identical. No changes are made in the translation, and the pagination is the same for both. The paperback edition, however, includes a list of corrections and addenda, which is worth exploring even if one owns the hardback. Toomer’s translation is clearly superior to that of R.C. Taliaferro, which appears in the Britannica Great Books collection.

The book is much more, however, than just a translation. Toomer’s aim is to get as close as possible to the

authentic text. Thus, although he follows Taliaferro in taking Heiberg’s Greek text as the basis of his translation, he does so not without comparing it with several Greek and Arabic manuscripts, which results in, as Toomer puts it, “several hundred corrections”. To filter out scribal errors in the numerical data further, Toomer uses a computer to recalculate the tables and the numerical results in the text. Where these recalculations revealed computing errors of Ptolemy, or non-random rounding errors, the departures are recorded in footnotes. In this way Toomer’s edition sheds invaluable light on how Ptolemy presents his material when a tension arises between theory and observation, and allows the reader to judge it. This provides an excellent opportunity to address some interesting issues in the philosophy of science. One may recall in this regard Robert Newton’s scandalous *The Crime of Claudius Ptolemy* (Baltimore: Johns Hopkins University Press, 1977) in which he paints Ptolemy as the most successful fraud in the history of science.

Toomer’s *Almagest* includes many textual insertions and annotations. The insertions, set in square brackets within the text, are meant to render the text more clear. Toomer acknowledges that he has been liberal with his insertions, and it must be admitted that they are not always necessary. The large number of valuable footnotes, however, makes this edition particularly stand out. Toomer takes a modern approach toward mathematical formulae by setting them apart from the body text—which makes them easy to follow. The edition is moreover accompanied by a brief introduction to Ptolemy’s less familiar mathematical techniques. The book has a good index and bibliography.

Cornelis de Waal  
Peirce Edition Project, Indiana University  
Indianapolis, IN



**Raymond Aron, *Main Currents in Sociological Thought*.**

*Trans. Richard Howard and Helen Weaver, with new intro. by Daniel J. Mahoney and Brian C. Anderson., New Brunswick, New Jersey: Transaction Publishers, 1999, 2 vols.*

It is good that Aron’s beautiful work-based on lectures at the Sorbonne in 1959 and published in English in 1965-1967-has been reissued.

I first heard of Aron from my secondary school barber, Skib. While cutting hair he lectured on politics, basing himself on Aron’s *Century of Total War*. Skib thought himself a communist, and was as well the village atheist at a religious school. It is ironic that he learned his sympathy for Marxism during the McCarthy era from Aron who-as author of *The Opium of the Intellectuals* and later critiques of Sartre and Althusser-is generally considered the leading liberal critic of communism in France among Parisian intellectuals from WW II to the 1970s. Actually, from this survey of Aron’s, Skib could learn a balanced and accurate, sympathetic but critical account of Marx, superior to those of many self-proclaimed Marxists of the period. These lectures lack the polemical bias of some of Aron’s writings on current events in opposition to the French Communist Party and its fellow-traveling philosophers.

Aron, a French Weberian, was a pre-war friend and later intellectual opponent of Sartre. In the late 1930s Aron wrote on German critical philosophy of history and sociology. While Sartre, Merleau-Ponty, and numerous others were learning Kojève’s Marxianized Hegel, Aron was allying himself with the late-nineteenth century neo-Kantian

critique of French positivist views of history.

Aron’s survey of sociology was originally entitled *The Great Doctrines of Historical Sociology*. As this title suggests, he focuses on historical sociology, which studies development and change of social institutions using historical literature and records, rather than experiment. It starts from concerns with contemporary problems and issues but investigates the historical genesis of the institutional trends with which it was initially focused. Historical sociology implicitly (in Aron’s case) or explicitly in some later followers, uses Mill’s *Methods of Agreement and Difference* to compare features of society or social processes (such as revolutions) to search for causes.

Historical sociology helps reduce the temporal provincialism of much sociological literature. On the one hand it shows how features popularly cited as ‘new’ or unique to our times were present to greater or lesser degree in past eras. It also corrects the opposite sort of implicit assumptions that certain economic or family arrangements are culturally universal and timeless, part of the ‘nature of things’. Historical sociologists search for cause and effect relationships between features of institutions in a systematic way. In the case of comparative analysis of political revolutions, for instance, some historians, such as Crane Brinton (who supplied Thomas Kuhn’s description of scientific revolution) present a ‘natural history’ of revolutions, claiming that revolutions have a natural pattern of growth and death, like an individual. This raises the problems of theories of notions of categorical, unconditioned sequences of historical stages that Popper and others have criticized. A comparative analysis of regimes and periods when revolutions occurred (or failed to occur) gives a much more incisive analysis of cause and effect relationships. Had Kuhn followed Harvard historical

sociologist Barrington Moore, rather than Harvard historian Brinton, his own ‘anatomy of revolution’ might have been less schematic (though probably less of a popular sensation), but would probably have been more sensitive to differences as well as similarities among various ‘scientific revolutions’. Sociologists who demand large samples, such as those from survey data, are distrustful of historical sociology, because of its relatively small numbers of cases. But if one’s concern is systematic, causal analysis, historical sociology offers more than do impressionistic historical portraits, or studies that focus on a single ‘great man’ as exemplary of a whole phenomenon or movement.

Aron’s sociology is also institutional, in that it focuses on large scale social institutions rather than small groups, examining nation states, religious organizations, business corporations, unions and political parties.

In this survey of historical and institutional sociology, Aron discusses Comte, Marx, Durkheim, Pareto and Weber, as well as Montesquieu and de Tocqueville. At the same time he ignores Simmel and Mead (whom many think are theorists superior to Pareto) because they concentrated on social psychology and small group sociology. Aron thinks that Montesquieu and de Tocqueville share a concreteness and unwillingness to present an overly schematic and abstract theory that makes them superior to Comte and Marx as portrayers of the society of their day. He considers them part of a ‘French School’ of historical sociology.

Towards the end of volume two, Aron presents a powerful tribute to and criticism of Weber, whom he calls “the sociologist” (v 2, p 294). Aron admires Weber’s combination of historical scope with analytical care, his skepticism toward deterministic theories of history, and his concern for the great questions of

values. Aron parts company from Weber with the latter's existentialism and decisionism—the denial of the possibility of rational resolution of value-conflicts—that Aron sees as mistaken and dangerous (v 2, p 302). Because of the simplicity of his style and the smoothness of his narration Aron has been underestimated as a sociological theorist in his own right. Aron was too lucid and reasonable to be thought profound. His work has been popular as a text for undergraduate courses but his thought has not been carefully analyzed by scholars, as have more labored expositions of Talcott Parsons or various aspiring adherents.



Raymond Aron

In Aron's vision of social theory, class, industrial technology and institutions, and democratic politics all play roles, yet class is not as directly expressed in political alignments. Scarcity, the size of modern societies, and economic class limit the degree to which democracy is implemented. Elites play an important role in the parliamentary process but Pareto's total cynicism toward the possibility of morally driven social reform movements is unfounded. There is the possibility of reasoned argument concerning values, contra Weber and Marx, but the realistic assessment of existing social movements and powerful

groups and institutions cannot be idealistically ignored.

These days, sociology itself has declined in enrollment, and is said to be in crisis. A Cultural Studies section has replaced the Sociology one in my college bookstore. An ever-more statistically sophisticated but progressively less theoretical empiricism now squares off against postmodernist relativism and subjectivism. This dichotomy—with empiricists tending to focus either on surveyed opinions of individuals or experiments on small groups, and cultural studies devotees on literary texts and media representations—has left institutional analysis neglected. When C. Wright Mills inveighed against both 'abstracted empiricism' and 'grand theory' decades ago, his enemy on the overly theoretical side was Parsons, but at least Parsons kept alive (even if in somewhat muddled form) the great traditions of Durkheim, Pareto and Weber. A sociologist/statistician colleague of mine informed me that those students who read Marx and Weber did so simply because they were "too dumb to do statistics". Let us hope that the reissue of Aron's survey rekindles in students an interest in historical sociology.

The translation is very readable and quite accurate. The bibliography at the end is not Aron's original bibliography, but one chosen for the English language audience. The selection there is quite good for its time (the 1960s) but has not been updated. An enormous English language literature on Marxism has appeared since 1970, as well as numerous translations of German, French, and Italian works on Marxism.

Those who want to investigate social approaches to science, and micro-sociologists of scientific knowledge and technology interested in macro-sociological considerations, will find no better and more pleasurable introduction to what historical

sociology and sociological theory has to offer than Aron's survey.

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## About HOPOS

HOPOS, The History of Philosophy of Science Working Group, is an informal, international society of scholars who share an interest in promoting serious, scholarly research on the history of the philosophy of science and related topics in the history of the natural and social sciences, logic, philosophy, and mathematics. We interpret this statement of shared interest broadly, to include all historical periods and diverse methods. We aim to promote historical work in a variety of ways, including the sponsorship of meetings and conference sessions, the publication of books and special issues of journals, the dissemination of information about libraries, archives and collections, and the preparation of bibliographies and research guides.

The HOPOS electronic mailing list is a genial virtual medium for the exchange of news, ideas, and queries regarding the history of the philosophy of science.

For information on HOPOS and the HOPOS listserv, go to:

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