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In cooperation with:

- Institute for Culture Studies and History of Theatre, Austrian Academy of Sciences
- Working Group History of Science, History Department, University of Vienna
- Department of English and German Philology, Universidad de Granada
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Language as a Scientific Tool
Managing Language as a Variable of Practice and Presentation in History

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29th–30th November 2010
Austrian Academy of Sciences
Clubraum
Dr. Ignaz Seipel-Platz 2
1010 Vienna

Monday 29th November

9:00–9:15	**Registration**
9:15–9:45	Welcome Address and Introductory Remarks **Mitchell G. Ash** and **Michael Rössner**
9:45–10:45	**KEYNOTE LECTURE** **Matthias Dörries** *Modern science and the spirit of language and philology*
10:45–11:00	Coffee Break
11:00–12:30	**SESSION 1: LANGUAGE AND SCIENCE: GENERAL REFLECTIONS** (Chair: **Mitchell G. Ash**)
	Jacob Meyer Thygesen *Euclid in Print – shaping languages of space between philology, typography and geometry* **Jan Surman** *Semiosphere. „Spirit of Language" and Creation of Scientific Spaces*
12:30–14:00	Lunch Break
14:00–16:15	**SESSION 2: LANGUAGE AND THE POLITICS OF NEW SCIENCE: EARLY MODERN EUROPE** (Chair: **Jan Surman**)
	Miles MacLeod *Making language safe for natural philosophy: the reconception of language that ground the empirical turn in 17th century Britain* **Rocío G. Sumillera** *The scientific seventeenth-century quest for a universal language: Cave Beck, George Dalgarno and John Wilkins* **Tilmann Walter** *Communication among Scientists as a Social Engagement – the Pragmatics of the "Medical Republic of Letters" and the Early Modern Scientific Revolution*
16:15–16:30	Coffee Break
16:30–18:00	**SESSION 3: LANGUAGE AND THE POLITICS OF SCIENCE: 20TH CENTURY** (Chair: **Rocío G. Sumillera**)
	Helena Durnová *Mathematical Machines: Automating Thinking?* **Janet Martin-Nielsen** *No to Vietnam: American linguistics and the politicization of data, 1968–1974*

Tuesday 30th November

9:30–11:00	**SESSION 4: SCIENCE, LANGUAGE AND TRANSLATION** (Chair: **Miles MacLeod**)
	Josefina Rodríguez Arribas *Reading Astrolabes in Medieval Hebrew* **Taťána Petrasová** *The linguistic concept of vernacular language and translations of treatises on architecture (1750–1790)*
11:00–11:15	Coffee Break
11:15–12:45	**SESSION 5: SCIENTIFIC TERMINOLOGY AND VERNACULAR LANGUAGE I** (Chair: **Johannes Feichtinger**)
	Liborio Dibattista *The Creation of Neurology Proper Scientific Language by Jean Martin Charcot (1824–1893)* **Ekaterina Smirnova** *"Opyt" in the Social Lexicon of Modernity: the Dichotomy of Experience/Experiment*
12:45–14:30	Lunch Break
14:30–16:00	**SESSION 6: SCIENTIFIC TERMINOLOGY AND VERNACULAR LANGUAGE II** (Chair: **Ekaterina Smirnova**)
	Teodora Daniela Sechel *Transylvanian learned societies and building of the national languages (1770–1830)* **Priya Venkatesan** *Contested Boundaries: How Scientists Deal With Uncertainty in Language*
16:00–16:30	Coffee Break
16:30–17:30	**Final discussion: Round Table**
17:30	End of the Conference

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Abstracts

Keynote Lecture

Matthias Dörries
Modern science and the spirit of language and philology

The emergence of modern physics is inseparable from the practices and knowledge of languages. While the statement that modern science in Europe evolved from Renaissance culture and its study of ancient texts and languages is a commonplace in standard histories of science, historians have only recently started to study systematically the linguistic and literary environments that nurtured strikingly new ideas in early-modern natural philosophy. This paper will compare ways in which the research of three physicists (Galileo, Heinrich Kayser, and Werner Heisenberg) referred to language in their scientific research.

After discussing some recent historical work on Galileo as a literary and linguistic critic, the paper will focus on a late nineteenth-century physicist, Heinrich Kayser, whose approach to physics was inspired by his intense study of languages. The young Kayser had visited Egypt and taken lectures in Egyptology at the University of Strasbourg. Like many nineteenth-century scientists who were in close contact with linguists and philologists, he was fascinated by Egyptian hieroglyphics and their decipherment by Champollion. In physics, Kayser focussed on the analysis and recording of spectral lines, a project I have called a "philology of physics." This work entailed both the recording, reading and editing of thousands of lines of spectra, instigating a philology of optical phenomena, and the recording, reading, and editing of numerous scientific texts, which then entered Kayser's multi-volume

Handbook of Spectroscopy. Kayser's "philological" approach meant restricting himself to a surface reading of phenomena that disavowed deeper theoretical studies; as a result he ultimately failed to understand the "language of spectra," (in the physicist Arnold Sommerfeld's term). Kayser's philology was soon superseded by the theoretical physics of the early 20th century.

In conclusion, I will discuss reflections on language by the one of the architects of that physics, Werner Heisenberg (himself the son of a philologist and professor of Byzantine studies), who spoke of the "failure" of both everyday language and the language of classical physics in the face of the new theoretical physics of relativity and quantum mechanics which, in his view, necessitated a new language, designed to express a new way of thinking.

Presentations (in alphabetical order)

Liborio Dibattista
The Creation of Neurology Proper Scientific Language by Jean Martin Charcot (1824-1893)

The medical terminology of vernacular languages, in its process of formation has tended to constitute an esoteric vocabulary, falling back on lemmas with Latin and Greek roots, finding a quite well-defined linguistic territory there that has always allowed the practitioners of the profession to communicate with each other. In particular, the present essay analyzes Jean-M. Charcot ' contribution to the foundation of neuropathology as a "distinctive" scientific discipline considering the elaboration of a "distinctive" scientific dictionary.

Thomas Kuhn tends to give value to scientific languages as central in the broad and widely criticised conception of the paradigm: the scientific revolutions become *mutations of taxonomy*. This paper will analyze the scientific language used by Charcot from three different yet subsidiary perspectives:

1.The creation of a new linguistic room different from his contemporary scientific taxonomy

2.The shift in meaning of terms belonging to the previous paradigm

3.The use of scientific language as a rhetorical strategy aimed at persuading his lectures' audience in adhering to his paradigm

So, for example, is Charcot's *myopathie* something different from Duchenne de Boulogne's *myopathie*, that in its turn had set up the conditions for the possibility that "*myopathie*" be thinkable in absolute terms? What holistic constellation of lexical intentions do we need to make common to these authors and to the historians who try to interpret it – by translation – their scientific thought, so that its understanding be total, the commensurability possible?

For the study of Charcot's language, with these aims, a methodological instrument has been proposed that up until now has been applied to literary languages: computational linguistics, or rather, the computational lexicography of textual corpora, meaning by this definition a methodology that avails itself of grammars and vocabulary constructed with the assistance of IT.

Helena Durnová
Mathematical Machines: Automating Thinking?

That history of cybernetics involves an enormous amount of language concerns has been shown by well by Slava Gerovitch in his book *From newspeak to cyberspeak* (MIT Press, 2002). Like cybernetics, computing technology also started to develop in the wake of the Cold War. Unlike cybernetics, however, the development of computing technology was supported from the very start on both sides of the Iron Curtain.

When studying the early history of computing technology, we encounter several names for computers, of which mathematical machines and information processing machines are most prominent. In the 1950s, the terminology of the field was still unstable and different terms were chosen by different groups. As in the case of cybernetics, the choices had rhetorical connotations: for example, while the term 'information processing machine' suggested that the machine is able to do more than just compute, the term 'mathematical machine' emphasized the connection with mathematics and seems to have been less connected with cybernetics, a science that was not supported in the Soviet bloc countries until the mid-1950s. The term 'calculating machine' seems to be the least ideological of all.

Concentrating on the use of language in the computing technology communities in the Soviet bloc, in particular in Czechoslovakia, I will map the use of the various terms and discuss the possible strategic choices as well as their influence on the scientists. I will concentrate on the time when the scientists still had the time to look for an adequate translation into their own language – the time when dictionaries for translations into several languages were compiled – and will try to show how their belief in power of the new technology is reflected in the terminology.

Fern Elsdon-Baker
Historiographical Constraints: the legacy of the historical polysemy of the term 'inheritance of acquired characters'

The historiographical representation of the development of evolutionary theories has tended until recently to uphold various inaccuracies about what Darwin's 'Darwinism' actually involved. These inaccuracies are related to the contemporaneous understanding of evolutionary theory at the time of the documenting historian/scientist. Nowhere does this seem more evident than in the reaction to Darwinian Pangenesis after his death in 1882. The roots of the notion that allowing any role for the inheritance of acquired characteristics is 'anti-Darwinian' are to be found in the work of the 'pure Darwinians' of the late 1800s. These works and later historical accounts of this period tended to present simplified conceptions of the inheritance of acquired characteristics, as representing solely 'use and disuse'.

However, the term 'inheritance of acquired characters' was widely used as an umbrella term throughout the 19th century, and the early 20th century. It is used to refer to mechanisms of inheritance that allow for any indirect or direct effect upon, or modification in, a parent organism which is caused by its 'environment' to then be inherited by its offspring.

This historiographical and to some extent political reconstruction of the term 'inheritance of acquired characters' is reflected in recent debates between advocates of the 'Lamarckian' and Neo-Darwinian or 'Weismannist' positions, for example Steele vs. Dawkins. This paper will explore the semantic barriers between these protagonists, created by historical terminological constraints. It is argued that the it was the use of an undifferentiated terminology (in this case 'inheritance of acquired characteristics') to represent what are in fact different theoretical positions or research directions that in part led to their respective perception of the current research data as conflicted. Thus as both sides in this 'Neo-Lamarckian/Neo-Darwinian' debate appear to accept conflicting historiographically constructed conception of the term 'inheritance of acquired characters' which is far from being the only one possible, they partly misunderstand one another and, indeed, themselves.

Miles MacLeod
Making language safe for natural philosophy: the reconception of language that ground the empirical turn in 17th century Britain

The transformation of science in Britain during the 17th century is usually presented as primarily the result of changes in epistemology and methodology. This is why of course we refer to the British 'empiricists' and characterize this new science as empirical, or talk of the 'experimental' philosophy. But in doing so we conceal the important role that language, and thinking about language, played in the creation of this as a coherent and distinct new enterprise. Yet words themselves were a fundamental concern of those that set about constructing the new empiricism and experimental philosophy. For these individuals, of whom we count Bacon, Boyle, Locke, and Berkeley among their number, as well as the Royal Society in general, science and language were not separable. Reasoning took place in the context of language, and thus questions of proper natural philosophy were often bound to those of language. The very power of language was the significant cause of the 'castles in the air' that were speculative or scholastic natural philosophy. Indeed a lack of insight into how language worked could be credited with much of their futility. The result was a reformation in ideas about language and the language considered appropriate to natural philosophy which devolved for them around a proper understanding of how it operated, and the conditions under which it needed to function adequately for natural historical and experimental endeavors, while avoiding the mistakes of the past. However in the process these thinkers effected arguably a significant and dramatic change in the way language had been thought about away from what Ashworth has referred to as the 'emblematic world view' in which meaning and words were highly entwined, towards a functional perspective which conceived of words as signs, that carried no intrinsic meaning, but were to be given carefully controlled meaning at the researcher's behest. Whatever the empirical revolution might have been we can't ignore the basic part the reconceptualisation of language played in it, politically, rhetorically, or philosophically.

Janet Martin-Nielsen
No to Vietnam: American linguistics and the politicization of data, 1968-1974

Theoretical linguists work daily with language: indeed, their research centers on understanding natural language sentence structure. In this endeavor, their primary data are sentences from natural language itself. While the data sentences used are typically unexciting (canonical examples include the active/passive pair of sentences "John threw the ball" and "The ball was thrown by John"), between 1968 and 1974 American linguists established a very different method of constructing data sentences. Driven by their opposition to the Vietnam war, these linguists began to use "politicized data" -- that is, data sentences which made political points. For example, instead of the neutral active/passive pair of sentences given above, they used sentences such as "McNamara blew Vietnam to hell" and "Vietnam was blown to hell by McNamara". Importantly, the structural content of these two pairs of sentences is identical (in each case, the first sentence is a simple active clause and the second sentence is the corresponding simple passive clause) -- but the intent and implication of the sentence pairs is very different. In this six-year period, American linguists frequently employed data sentences commenting on Vietnam, imperialism, and domestic politics. These linguists were also connected by numerous other factors, including a hostility to the dominant syntactic theory of the day, a shared theoretical approach, and a witty and exuberant writing style. The politicization of data in American linguistics leads to three important questions: (1) How and why, precisely, did American linguists use language to simultaneously present data and make political protests? (2) What impact did the politicization of data have within the linguistics community, and more broadly in academic and political circles? and (3) How does this phenomenon tie into broader questions concerning the politicization of language in scientific discourse? This paper aims to answer these questions. In doing so, it will touch on a number of critical issues in the relationship between science, language, data and politics.

Tat'ana Petrasova
The linguistic concept of vernacular language and translations of treatises on architecture (1750–1790)

There is a thesis in the Czech literary history that translated texts imported a new classical value into the Czech culture from the 1770s. This process of cultivation of the nation and the language was recently described as a kind of vernacularism and compared with the situation of Italian humanists in the 15th century. They began to write their essays in Italian dialects rather than in Latin, yet, they used the ancient form of the rhetoric. The translation of texts about architecture familiarized Czechs not only with canonic texts like Vitruvius, *The Ten Book on Architecture*, but his *Five Ordens* became the most discussed. The paper will compare Czech translations of Vignola (*Cinque Ordini*) and *Unterricht zu Aufreißung der fünf Säulenordnungen* by Lucas Voch to consider the extent to which the principle of the vernacularism helped the acceptance the Neoclassicism.

Josefina Rodríguez Arribas
Reading Astrolabes in Medieval Hebrew

The twelfth century was the period of an impressive production of scientific treatises in Hebrew. At the same time, the Hebrew language experienced a process of specialization and creation of technical terms that became really noticeable in the Iberian Peninsula with Abraham bar Hiyya (Barcelone, d. after 1136) and Abraham ibn Ezra (Tudela, 1089/92-1164/67), but continued in Spain and southern France in the following century. The scientific writings of these writers and translators made medieval Hebrew a language capable of diffusing science and, eventually, capable of scientific research (as it had become a perfect vehicle for poetry in the previous century).

I am going to focus my paper on the evolution and features of the scientific Hebrew language as it emerges in the three Hebrew treatises that Abraham ibn Ezra devoted to the description and explanation of astrolabes. These treatises are the first samples of instrument-book in Hebrew and are among the earliest manifestations of scientific writing in this language. I want to pay attention to the following questions. Firstly, what were Ibn Ezra's position and strategy with respect to the Arabic models that he knew and surely had in mind when he was coining new technical terms for the astrolabe. Secondly, the way this scientific instrument is displayed in Ibn Ezra's words conveys the impression that Ibn Ezra's words are virtually re-making the astrolabe in Hebrew. What does this imply? Finally, the fact that two of the three treatises start with a reflection on the limits of Hebrew to convey science places Ibn Ezra's position and strategies with respect to the Hebrew language in the foreground. Is this only the writer and translator's concern about the limits of his tools or there is something else?

Falko Schmieder
Conceptual History of the Natural Sciences

In the light of the current need for new forms of interdisciplinary and intercultural conceptual history I would like to discuss approaches of a historical epistemology founded by Gaston Bachelard and Ludwik Fleck in the context of the crisis of science in the 1930s. My special aim is to focus their new understanding of the importance of techniques and language for the development of science. Experimental techniques and linguistic processes have been recognized as important for the production of new knowledge. The object of science, they have shown, is not given nature, but the human manufacturing activity, our intervening in and transforming of nature, which is inescapably penetrated by interests and objectives. Both the technology and language are not mere epiphenomenon of the scientific research process; rather they have proved to be of constitutive importance for our knowledge of nature. So called 'scientific facts' (*wissenschaftliche Tatsachen*) acquire only through linguistic construction work their meaning as objects of research; language brings the cause of science first and foremost to speak, and is thus constitutively involved and implicated in the scientific research process. As stated concerning the terms of the humanities and social sciences many scientific concepts too are characterized by surplus dimensions of meaning in

which are reflected antecedent experiences, looking expectations, cultural values and political interests. – In a second part I want to discuss the consequences of this approach for new forms of conceptual history mentioned above. I will argue that History of Concepts necessarily includes rhetorics, discourse theory, epistemology and iconic semantics. The underlying thesis is that the formation of the disciplines of modern knowledge and their specific semantics must from the beginning on be understood as resulting from crossing-boarder processes of semantic transfers, metaphorizations and shifts of meaning between the semantic of disciplines as well as between ordinary language, metaphorical and terminologically defined semantics.

Ekaterina Smirnova
"Opyt" in the Social Lexicon of Modernity: the Dichotomy of Experience/Experiment

In Russian the term **opyt** designates two different concepts: 1) Opyt as a whole of knowledge and skills; 2) Opyt as a specially conducted and controlled procedure of testing/examination. In European languages these different meanings are expressed by different words — experience and experiment respectively.

Regarding the European context, it was Aristotle who marked the distinction between these two concepts. *Experientia* refers to the study of the state of affairs in general. *Experimentum* concerns the study of a certain phenomena in artificially created conditions. It has probabilistic character and access to it is limited to a certain circle of experienced (possessing particular skills) individuals.

So he distinguished two ways of learning — observation and reasoning (experientia) and practical "opyt" — experimentum. According to Aristotle experientia is superior to experimentum, since the first expresses the essence and the second — just a fact. Robert Boyle and other pioneers of natural sciences proclaimed the superiority of experimentum over experientia because only by experimentum, true experientia can be gained.

In the European tradition the distinction between experience and experiment once established by Aristotle is still actual, whereas in the Russian context the divergence between these two meanings happened only in the Early Modern period following the emergence of exact sciences.

The institutionalization of experimental science in Russia was accompanied by the adoption of scientific terminology mostly originated from Latin. However the formation of national scientific terminology often was a result of the process of direct replication. The Latin terms, such as "natura, "phaenomenon", "observatio" were replaced by the Russian equivalents "priroda" (nature), "yavlenie" (phenomenon) and "nabluydenie" (observation). "Experientia" completely got out of use.

At the same the Russian word "opyt" was not only imported from the West but incorporated two different meanings: experience and experiment. In this regard, its history seems outstanding.

So the main question which I would like to focus on is — why in Russian do we find two different notions — experiment and experience expressed by the same word opyt?

Rocío G. Sumillera
***The Scientific Seventeenth-Century Quest for a Universal Language*:**
Cave Beck, George Dalgarno and John Wilkins

The privileged position that for centuries Latin had had as the international language of Europe was deteriorating by the beginning of the seventeenth century, when the vernaculars had already demonstrated that they could also be means for the transmission of culture. The seventeenth century moreover witnessed an increasing interest in the creation of a universal language that would both overcome the obstacle of the multiplicity of languages, as well as solve the arbitrary relationship between things and the words used to express them. Inspired by the news from returning missionaries and travelers from China, the example of Egyptian hieroglyphs, and the century's fascination with secret codes, a number of seventeenth century authors set to construct a universal and philosophical tongue. In England, efforts to this end are represented by Cave Beck's *The Universal Character* (1657), George Dalgarno's *Ars signorum* (1661), and John Wilkins' *An Essay towards a Real Character, and a Philosophical Language* (1668), commissioned by the Royal Society six years before. It is on these three works that my presentation will focus, paying particular attention to John Wilkins' project and its impact on eighteenth century English literature.

Jan Surman
Semiosphere. „Spirit of Language" and Creation of Scientific Spaces

In the late 18th century scientists in Central Europe met with a new political configuration: German replaced Latin, previously the language of scientific communication. German language though was also the language of central political power and in the period of nationalism, this combination met with rejection and turn to vernaculars. The creation of scientific vocabulary through use of vernacular proved to be tricky though: the nationalists not only lacked linguistic basis for this endeavor, but also there was no social space in which this langue would perpetuate and stabilize. As a result most of the terms developed in this time passed into oblivion. The 'Slaw' linguistic project, which had to strengthen communication among 'Slaws' and ensure emancipation from 'German' science proved to be similarly futile – later in the century Slaw congresses were held in German, as 'national' languages were mutually incomprehensible. And even within one 'nation' language was an obstacle – in the late 19th century scientists from Cracow and Warsaw complained, that they do not understand each other any more, as distinct schools of e.g. chemistry or zoology developed different nomenclature. Creation of distinct communication spaces, the main feature of which was not to imitate Western languages, resulted finally in the rupture of the 'universality' of science – at least as perceived by scholars themselves; this lead not only to reevaluation of previous development, but in propositions of reorganization of language.

In my presentation I follow the interrelations between science, language and nationalism in Central Europe. Centering on linguistic purism, I argue that forced nationalization deeply transformed not only transmission of knowledge, but also features of its production and validation. Following Yuri

Lotman, I argue that vernacularism resulted in an increasing disengagement from scientific community, which finally caused denunciation of this project as more harmful than fruitful for the national cause. Threat of monolingualism (expressed by multilingual scholars) led to revaluation of social and political impact of national scholarship. Slightly more than hundred years after first wave of language reforms, it was language that had to be changed once more, this time in order to meet the claim of 'universality'.

Priya Venkatesan
Contested Boundaries: How Scientists Deal With Uncertainty in Language

On the question of uncertainty in scientific language, politicians and scientists seem to be on opposite ends of the epistemological spectrum. Politicians would like for scientists to caveat their claims. For example, John Beddington, the UK government's Chief Scientific Advisor, thinks the key challenge in the global discussion of climate change is that scientists don't caveat their work extensively enough. According to a report in the Guardian, [Beddington] said "Certain unqualified statements have been unfortunate. We have a problem in communicating uncertainty… All of these predictions have to be caveated by saying, 'There's a level of uncertainty about that'."

However, among scientists the opposite trend is occurring. Scientists are proposing the elimination of uncertainty and ambiguity in their work. Many studies claim that due to the nature of scientific methodology, research articles are rich in speculative and tentative statements, also known as hedges, and to counter this, a linguistically motivated approach is used to address the problem of recognizing such language in biomedical research articles. (Kilicoglu and Berger 2008). Other studies claim that biomedical documents contain a range of terms with more than one possible meaning, and that these ambiguities form a significant obstacle to the processing of biomedical texts. (Stevenson, et al, 2008). Databases such as BioScope are being produced to handle negation and uncertainty in biomedical texts (Vincze et al., 2008).

This paper addresses how scientists mediate the uncertainty and ambiguity of language to manage the rhetorical effects of language in their work. Scientists seem to have disavowed the embedding of certain qualities inherent in language in their texts, which politicians have unwittingly espoused for political reasons.

Tilmann Walter
Communication among Scientists as a Social Engagement – the Pragmatics of the "Medical Republic of Letters" and the Early Modern Scientific Revolution

Although it was still influenced by rhetorical norms of humanist Latin, letter writing played a crucial part in the publication and dissemination of new discoveries and theories in 16th- and 17th-century science. At a time, when scientific academies and journals were only just about to emerge, it was the success in the "republic of letters" that decided on the success or failure of new observations and ideas. In my paper I want to present results of my

analysis of hundreds of letters written by 16th- and 17th-century physicians within the research-project "Frühneuzeitliche Ärztekorrespondenzen", sponsored by the Bavarian Academy of Sciences. The "medical republic of letters", as the contemporaries termed it, was a decisive forum in which a profound methodological and epistemological change took place which, as Andrew Cunningham suggested, in many ways anticipated the so-called "scientific revolution" of the 17th century.

In their letters, physicians spread and debated new empirical and theoretical findings, especially in botany, anatomy and iatrochemistry which, already in the course of the 16th-century brought about a marked shift from the authority of the ancients to the new ideal of "autopsia" or empirical observation. Progress, in the sense of original findings and innovative approaches, increasingly came to be valued as the basis of true medical knowledge. The "medical republic of letters" also became the place where conflicting and contradictory perceptions in nature and their explanations were debated rather than interpretations of authoritative works. As a result, ideas of scientific progress and cumulative knowledge as good as textual traces of empirical and experimental practice can be identified in numerous letters written by medics of the second half of the 16th century. For example, in a letter to Leonhard Fuchs the physician and naturalist Konrad Gessner already by 1555 sketched out a new epistemology which gave priority to "useful" pharmaceutical knowledge and inductive reasoning and propagated an open exchange of knowledge among scholars which comes very close to Francis Bacon's and Robert Boyle's ideal of a *New Science*. Thus, a very intensive practice of collecting, observing and exchanging useful new knowledge by letter preceded the *New Science* by decades, especially among botanists and chymists trained as men of medicine.

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Curricula Vitae

Mitchell G. Ash is Professor of Modern History and Head of the Working Group in History of Science in the Department of History at the University of Vienna. His main research areas are: History of science, in particular the interconnections between science, politics, and culture in the 19th and 20th centuries; history of higher education and of educational and research policies; history of eugenics; history of modern psychology. He is speaker of the Initiativkolleg "The Sciences in Historical Context" at the University of Vienna, and member of the Berlin-Brandenburg Academy of Sciences and Humanities. He is author or editor of several books, e.g.: *Gestalt Psychology in German Culture 1890-1967: Holism and the Quest for Objectivity*. Cambridge and New York: Cambridge University Press, 1995; *Forced Migration and Scientific Change: Emigré German-Speaking Scientists after 1933* (first editor, with Alfons Söllner). Cambridge and New York: Cambridge University Press, 1996. *Wissenschaft, Politik und Öffentlichkeit. Von der Wiener Moderne bis zur Gegenwart* (first editor, with Christian Stifter). Vienna: Wiener Universitätsverlag, 2002; *Psychology's Territories. Historical and Contemporary Perspectives from different Disciplines* (first editor, with Thomas Sturm). Mahwah, NJ: Lawrence Erlbaum, 2007.

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