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For debate: German as a scientific language

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Abstract:

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**1. Hermann H. Dieter, Udo E. Simonis, Fritz Vilmar
Press declaration and open letter**

Berlin, 25 July 2001

Press declaration

Group of scientists demand German (in addition to English) at all international conferences in Germany:

In an open letter to all 29 Ministers of Culture, Education and Science of the 16 Federal Laender, 37 scientists from a wide range of subjects and positions have yesterday appealed for the safeguarding and developing of German as a scientific language.

This could take the form of simultaneous German-English translating at international conferences in Germany, for example. This would be an interesting and important task for the largely unknown *Federal Office of Languages*.

Amongst the signatories are internationally renowned professors and leading figures such as the microbiologist and hygienist Martin *Exner* (Bonn), the toxicologist *Henschler* (Würzburg), the President of the Federal Environmental Agency Andreas *Troge* (Berlin) and the computer scientist Joseph *Weizenbaum* (Berlin/Cambridge).

"The Federal Office of Languages could offer such simultaneous translating", the letter states. It is, in fact, ideally suited, as it answers to the Federal Minister of Defence. Why should it not concern itself with the peaceful defence of our national language?

For example, the international *Innovations for an e-Society* in Berlin in October is strongly supported by the Federal Government (BMBF); it is aimed at the general public, yet the congress language is exclusively English.

All the national languages in Europe are facing strong competition and the threat of being superseded by Anglo-American in the fields of culture and the economy. Scientific publications are often only remunerated if they are written in English. More and more lectures take place in English, at the expense of German. In Bremen a purely English-language *International University Bremen (IUB)* is being founded at this time and is even receiving DM 230 million from public funds.

The signatories of the open letter fear that the original basis of exchange between science and "its" society will be lost in Germany if this trend continues. An elite will

then develop which loses contact to the everyday lives of people, because they can only speak and write a subject-specific English.

The letter ends with an appeal to the Conference of the Ministers of Culture to seize the political initiative in 2001, the European Year of Languages.

The open letter can be viewed at www.vds-ev.de/Aktuelles.

Responsible under the press law.: the signatories of the open letter of 24.7.2001

Dir. Prof. Dr. Hermann H. *Dieter*, Federal Environmental Agency

Berlin Prof. Dr. Udo E. *Simonis*, Center for Science

Berlin Prof. Dr. Fritz *Vilmar*, Free University of Berlin

Open Letter

To the

- Ministers of Culture,
- Ministers of Science,
- Ministers of Education of the 16 Laender of the Federal Republic of Germany.

Re.: Safeguarding and expanding the use of German as a national scientific language -

- I. at international conferences in Germany
- II. in scientific publications and in teaching

Berlin, 24 July 2001

Dear Minister,

The first three signatories of this letter and the further 34 co-signatories from various fields have observed with great concern the supplanting of the German language by English in the field of science in our country.

We would like to ask you to address this problem.

We see a danger otherwise that the original language base of our scientific thinking and exchange of knowledge in society will be lost in the next 5 to 10 years. This would also affect Germany as an independent scientific location.

In particular, we would ask that you examine two striking trends:

- I. Major international scientific conferences in Germany are increasingly held exclusively in English - even if they have been solely organised by or are the responsibility of German organisers or are intended for a predominantly German-speaking public.

One example of this: The international conference *Innovations for an e-Society* ("itas"; Berlin, 17- 20 October 2001) sponsored, amongst others, by BMBF. English is intended as the sole (!) language of the itas conference, although the event is specifically intended to attract a non-specialist public.

Of course, it is practical if English is also spoken at scientific conferences, particularly with international participation. The consequence, however, cannot be

that that the language of the host country, in our case German, no longer plays any role. The Ministers responsible for culture, education and science have the responsibility to put a halt to this development.

We therefore suggest that the Conference of the Ministers of Culture launch an initiative with the objective of ensuring that German is included as an official language as well as English at international conferences in Germany, in the same way as this is striven for in France with the French language.

However, since this concerns the protection of a common property, the costs should not be a burden on the organisers. Instead, employees of the Federal Office of Languages (www.bundessprachenamt.de) could, for example, be responsible for the simultaneous translating of important lectures and discussions from German into English, in so far as the authors are in agreement with this.

- II. A further critical point is the policy regarding publication and the teaching language in some areas of many courses of study. A great many of our scientists only publish in English or are forced to do so *de facto* by the publishers. Furthermore lectures in basic courses are increasingly offered in English at the expense of German lectures.

For example, teaching and research is to be carried out exclusively in English at the newly-founded "International University Bremen" (IUB) which is subsidised by the Land of Bremen to the extent of DM230 million. (FOCUS 25/01, S. 126/127).

We would therefore like to ask you, together with your fellow ministers and using the control options at your disposal, to ensure that

1. the results of research funded by tax-payers should remain accessible in German to the general public and
2. that the choice of German-language lectures in basic study courses should not be irresponsibly repressed in favour of English events.

With these two initiatives (1+2) the scientific language of German could be guaranteed a certain degree of development potential in Germany alongside English. Failing this, there is the risk that an isolated elite may develop, who no longer speak or write scientific German, only a subject-specific English.

In contrast to a general language which is suitable for science, a subject-specific English meets neither the requirements of interdisciplinary and intercultural exchange, nor the exchange of ideas between scientists and "their" public.

The issue is the safeguarding and expansion of German as the scientific language of our country, rather than the neglect of the language. We are *not* advocating its resurrection to the status of an international language for scientists of differing nationalities and subjects.

We request that you seize the political initiative and address these two problems in the Conference of the Ministers of Culture during the *2001 European Year of Languages*, also with regard to the safeguarding and expansion of the scientific languages of other European countries.

Yours faithfully

The writers and first signatories of this letter:

Hermann H. Dieter	Udo E. Simonis	Fritz Vilmar
Priv.Doz., Dr. rer. nat., Toxicologist, Dir. u. Prof., Umweltbundesamt (Federal Environmental Agency Berlin)	Prof. Dr. sc. pol., Wissenschaftszentrum Berlin (Center for Science Berlin) President of the World Society for EKISTICS	Prof. em., Dr. sc. pol., Sociologist Freie Universität Berlin (Free University of Berlin)

The following scientists support the contents of this open letter of 24.7. 2001 to the Ministers of Culture, Science and Education of the Laender of the Federal Republic of Germany (in alphabetical order):

Angerer, Jürgen, Prof. Dr. rer. nat., Director of the Institute of Environmental Medicine, University of Erlangen-Nürnberg

Bachmann, Peter, Prof. Dr. phil., Seminar for Arab Studies, University of Göttingen

Bezzel, Chris, Prof. Dr. phil., Seminar for German Literature and Language, University of Hanover

Bigl, Sigwart, Prof. Dr. med. habil., Vice-president and Director of the Department of Environmental Medicine, Land Office of Investigation for Health and Veterinary Affairs, Saxony, Chemnitz

Böhles, Hans-Josef, Prof. Dr. med., Managing Director of the Center for Paediatrics and Juvenile Medicine, University of Frankfurt a.M.

Dunkelberg, Hartmut, Prof. Dr. med., Head of the Department of General Hygiene and Environmental Medicine of the Center for Labour and Environmental Medicine, University of Göttingen

Elfe, Rudolf, Prof. Dr. med., Head of the Department of Nephrology of the von Haunerschen Children's Hospital of the University of Munich

Eikmann, Thomas, Prof. Dr. med., Director of the Institute of Hygiene. Justus-Liebig University Gießen; Chairman of the International Society of Environmental Medicine (ISEM)

Exner, Martin, Prof. Dr. med., Director of the Institute of Hygiene and Public Health, University of Bonn

Plessner, Axel, Prof. Dr. jur., Professor for German, European and International Private Law, Law Faculty, Humboldt-University in Berlin

Frimmel, Fritz, Prof. Dr. rer. nat., Director of the Engler-Bunte Institute, University of Karlsruhe

Gamillscheg, Franz, Prof. em., Dr. Dres h.c., Institute for Labour Law, Georg-August University of Göttingen

Gundermann, Knut-Olaf, Prof. em., Dr. med., former Director of the Institute of Hygiene, University of Kiel

Heinzow, Birger, Dr. rer. nat., Land Office for Nature and the Environment of the Land Schleswig-Holstein, Kiel

Henschler, Dietrich, Prof. em., Dr. med., Member of the Scientific Advisory Board on Soil Protection, former Chairman of the MAK Commission of the German Research Association, Würzburg

Irmer, Harald, Dr. rer. nat., President of the Land Office of the Environment Nordrhein-Westfalen, Essen
Krämer, Walter, Prof. Dr., Director of the Institute for Economic and Social Statistics, University of Dortmund
Kristof, Walter, Prof. em., Dr. phil. PhD, Institute for Sociology, University of Hamburg
Kümmerer, Klaus, Priv.Do., Dr. rer. nat., Institute of Environmental Medicine and Hospital Hygiene, University of Freiburg
Lang, Hans-Jürgen, Prof. Dr. rer. nat., Department of Cell Biology, University of Göttingen
Lehfeldt, Werner, Prof. Dr. phil., Seminar for Slavistic Philology, University of Göttingen
Luig, Heribert, Prof. Dr. rer. nat., Dr. med. habil., Head of the Working Group on Medical Physics of the Department of Nuclear Medicine, University of Göttingen
Mariensfeld, Wolfgang, Prof. em., Dr. phil., Historian, University of Hanover
Mersch-Sundermann, Klaus, Prof. Dr. med., Head of the Department of Ecotoxicology and Toxicology in the Geocenter of the University of Trier
Multhaupt, Gerd, Priv.Do., Dr. rer. nat., ZMBH, University of Heidelberg
Neumann, Klaus H., Prof. Dr. med., Clinic for Nephrology, University of Magdeburg
Raddatz, Klaus, Prof. em., Dr. phil., Seminar for Pre- and Early History, University of Göttingen
Sacre, Clara, Dr. med., Head of the Department of General Hygiene, Consumer Health Protection and Protection Against Infection; Deputy to the President of the Land Public Health Office Baden-Württemberg, Stuttgart
Sauer, Wolfgang, Prof. Dr. phil., Seminar for German Literature and Language, University of Hanover
Schwinning, Edelgard, Prof. em., Literature scientist, University of Hanover
Troge, Andreas, Prof. Dr., President of the Federal Environmental Agency, Berlin
Weizenbaum, Joseph, Prof. em, Dr. rer. nat., IT specialist, Berlin and Cambridge/USA
Wilss, Wolfram, Prof. em, Dr. Dr. b.c., Applied Linguistics, Translating and Interpreting, University of Saarland
Ziechmann, Wolfgang, Prof. Dr. rer. nat., Working Party on Soil Chemistry, University of Göttingen

Copies of this letter have been received by:

The Minister of State for Culture and the Media, Prof. Dr. Julian Nida-Rümelin
The President of the German Research Association, Prof. Dr. Ernst-Ludwig Winnacker
The President of the Max-Planck Society, Prof. Dr. Hubert Markl
The Chairman of the Hermann von Helmholtz Association of German Research, Prof. Dr. Detlev Ganten
The President of the Gottfried Wilhelm Leibniz Science Society e.V., Prof. Dr.-Ing. E.h. Hans-Olaf Henkel,
The President of the Fraunhofer Society, Prof. Dr. Hans-Jürgen Warnecke,
The President of the Alexander v. Humboldt Foundation, Prof. Dr. Wolfgang Frühwald,
The General Secretary of the Volkswagen Foundation, Dr. Wilhelm Krull,
The Chairman of the Association for the German Language (Wiesbaden) The Head of the Institute of German (Mannheim)
The Head of the Academy for German Language and Literature (Darmstadt)
All fractions of the German Bundestag, various student magazines and university newspapers, the magazine of the Association of German Universities, scientific journalists and editors as well as further institutions and personages of public life.

2. **Hans-Dieter Klingemann** **German as a Scientific Language? -Notes on the Open Letter**

Hermann H. Dieter, Udo E. Simonis and Fritz Vilmar "observe with great concern the supplanting of the German language by English in the field of science in our country". The grounds for their concerns are firstly the danger of the loss of the linguistic base of our (the German, HDK) scientific thinking and secondly the loss of the ability to exchange ideas and information with society. In an open letter they appeal to the Ministers of Culture, Education and Science of the Laender to address these two problems and to seize the political initiative in 2001, the European Year of Language, with regard to the safeguarding and expansion of the scientific languages of other European states." Is there imminent danger? In my opinion, these two arguments miss the point.

Will we really lose the "linguistic base of (the German, HDK) scientific thinking" if the scientific language of German is not guaranteed potential for development alongside English? It is, of course, a fact: there is no science without communication competence. But does it have to be the German language? Linguistics teaches us that almost all modern languages share the same essential features of grammar and pragmatics. According to these results, it does not matter in which language thoughts are formed and science is advanced. The mother tongue is part of the mother of all languages. Scientific knowledge does not only gain its full quality in German. Even post-modernists, who are intent on identifying differences, would not argue that communication between scientists from differing language groups is easier than between scientists and the non-scientific public within one language group. Added to this is the fact that formal codes, which have not been taken from any natural language, allow scientific communication to take place. It can be stated that a loss of the linguistic basis of scientific thinking is really not a fear.

Of course, one can advocate the safeguarding and expansion of German as a scientific language for politico-cultural reasons. Such a demand is legitimate. France has long tried to promote and enforce this in the case of French. It has failed due to the reality of everyday scientific life. In France the proportion of lectures, conferences and publications in English has steadily increased. The reason for this is easy to identify. Scientific discussions are facilitated by a "lingua franca". Such a language cannot be prescribed. It follows the center of gravitation of scientific productivity and innovation. And for many, in fact for most, this center of gravitation is located in the USA and thus in the English-speaking region. This can be regretted, but it could only be altered by a scientific policy which sustainably shifts such centers of gravitation I cannot identify such a policy in Germany or elsewhere at present. In the European Union, English has also long been established as the general scientific language. The idea of trying to stop such development by state intervention, even in the European Year of Languages, is unrealistic.

What is to be thought of the second argument, that of the loss of the ability to communicate between scientists and the public at large. This is also not a specifically German problem. It arises from the differentiation of science as a special social subsystem. The difficulties in communication lie in the complexity of the contents

which are to be communicated. It is not in the first instance the command of a mutual mother tongue which would make the problem disappear. The translation work required cannot be carried out by the Federal Office of Languages anyway.

Is an isolated scientific elite forming in Germany "who no longer speak or write scientific German, only a subject-specific English"? This is a daring thesis for which there are few empirical indications. On the contrary, it can be observed that German-speaking scientists who publish in English and are given prominent recognition in the English-speaking sphere know very well how to communicate in the German language. Scientific reputation correlates with language competence here. This argument therefore does not stand up to close examination.

What is the position in our society regarding furthering the mother tongue and the acquisition of foreign languages in general?

Furthering the mother tongue has always been a matter of importance for any nation. It has always been open to improvement and every generation of Germanists in Germany has bewailed the degeneration of linguistic usage. At the same time the duration of school education has increased for more and more pupils and with this the opportunity to be able to study their own language. The ability to communicate with members of other countries in their mother tongue is also increasing everywhere. This is not only true of the English language. A language policy is being practised in schools throughout Europe which aims at the acquisition of at least two foreign languages. Furthermore there is a growing group of people whose mobility of work forces them to cross borders and imposes a way of life which can only be mastered using three languages: the mother tongue is nurtured in the family, work requires the use of English and, without knowing the language of the host country, participation in day to day life is not possible for families with children dependent on the education system. This is a development which the colleagues Dieter, Simonis and Vilmar would surely not deplore.

It concerns the scientific system and the tendency to reduce transaction costs through communication in English. Hermann H. Dieter, Udo E. Simonis and Fritz Vilmar instead want a multifariousness of language. This is legitimate. I am afraid, however, that their wish cannot be met by the Ministers of Culture, Education and Science of the 16 Federal Laender.

3. Christian Wey German As A Scientific Language By Quality “Made In Germany”¹

Although the German language had already suffered irreparable damage with the loss of the First World War, the withdrawal of German from many scientific fields was not initiated until the National Socialist seizure of power in 1933, while the “law for the re-establishment of civil service with tenure” passed in April of that year formed the basis for the expulsion of non-Aryan and politically opposed scientists. Many of those exiled later belonged to the scientific elite in the United States which was verified by Frederic Scherer for the circle of economists for example, in his article “The Emigration of German-Speaking Economists after 1933” (*Journal of Economica Literature*, 2000).

In the course of globalisation the supplanting of the German language from the field of science has been accelerated once again— and, in the meantime, it is (almost) history. Thus, researchers nowadays from all over the world are in contact with each other via Internet. For many German scientists, a residential stay as a guest lecturer at an elite university in the USA, Great Britain, Israel or elsewhere is part of the compulsory programme. International workshops and conferences bring together specialists from every corner of the globe and research projects are realised in international networks. Of even greater importance is the fact that the job market for scientists and professors has become more international. Thus, a lot of German post-docs and on-going professors strive for positions in Great Britain and the United States, not because the salary of a professor in Germany is too low, but simply because the German university system is “occupied” or is not attractive enough for research.

In a globalise field of science with global job markets the advantages of a uniform language standard— the lingua franca - are obvious. Knowledge is public property and its provision and acquisition would be made considerably more easy through a lingua franca. Which is that of those who take an active part in scientific discourse and are able to examine thoughts and ideas critically. To this end, a lingua franca is required, a standard to guarantee the scientific discourse between as many *specialists* as possible. Standards make life easier and promote competition not only in everyday life but also in science in particular. It is not surprising that this lingua franca is English in view of the sheer amount and quality of research carried out in the United States and Great Britain. Dependencies, political power as well as economic importance also play an important role in the fact that English of all languages was able to assert itself and not German, French or Russian and that a change of the standard is illusionary in the foreseeable future.

While the new generation of scientists in Germany *is having* to face up to the new requirements of globalise research in order to be in a position to build a reputation in their respective disciplines, many established professors see their work marginalised and devalued by the change of the language standard. One cause of disquiet is the greater differentiation between the disciplines and their methods under the international research standards, which on many occasions can hardly be comprehended even by native specialists. Therefore it is hardly surprising that some established professors in particular are trying to establish limits for this development. An example of this is the

¹ I would particularly like to thank Lars-Hendrik Roller for his important suggestions and Justus Haucap and Paul Heidhues for their comments. I, of course, have sole responsibility for the content.

open letter of 24.7.2001 (“German as a scientific language”) to all Ministers of Culture, Education and Science of the *Laender* and signed by the professors Dr. Hermann H. Dieter, Dr. Udo E. Simonis and Dr. Fritz Vilmar. The letter points out how German is being supplanted, and calls for government-administered support for the use of the German language in science and teaching. The use of tax money to finance events which support the supplanting of the German language is condemned vehemently. Examples cited are the “substantial” funding of this year’s conference “Innovations for an e-society” where the conference language was English only, or the support for the purely English-language “International University Bremen” with “DM 230 million”. Instead, the demand is for the use of tax money to finance activities which promote the German language such as “simultaneous translations” from the Federal Office of Languages, and a recommendation for regulations against the use of the English language in teaching.

The main justification for these wishes is: if all researchers only use a subject-specific English in their disciplines, communication becomes impoverished in two directions: firstly, “the use of subject-specific English alone” is not suitable for “interdisciplinary and intercultural” communication and, secondly, it is unsuitable “for subject-specific exchanges between scientists with *their* public” or, as it is expressed in the open letter: “there is the risk that an isolated elite may develop, who no longer speak or write scientific German, only a subject-specific English”.

Neither of the points is convincing. Subject-specific language, *irrespective* of whether it is German or English, is almost always regarded as incomprehensible *specialist jargon* by those specialists in other fields and by the layman. German law, where the English language does not play any role at all, is the most vivid example of this. The second point opposes the development towards an academic elite who are *divorced from reality*. The theory is that researchers who write specialist English – and speak it in research circles – are not able to talk to ordinary people or “their public”. Here, as well, a specialist article *irrespective* of it being written in German or English is regarded as *specialist jargon* by the public. If a researcher addresses the public in a newspaper article, for example, he must dispense with both highly differentiated and extremely condensed specialist language and use an imprecise language which can be understood by all; in both cases, the article must therefore be translated and rewritten.

At this point, it is useful to separate purely scientific discourse between researchers from other tasks in the field of science. Research is comparable with top-class sport and has nothing to do with democracy where everyone has “a say”. Of course, anyone can participate in principle, but in reality only the best will publish their work in the most reputable specialist journals, while the rest will be left to practise quoting or, otherwise, be left to play in the second or even the third division. Driven by the motive of participation, the demand, to carry out research in a readily comprehensible form so that as many researchers as possible can air their views, necessarily leads to a weakening of the efficiency of research.

The understandable wish that scientists *should* be aware of their function in society, which is to communicate not only in public but also in interdisciplinary situations, can be achieved most effectively by making a clear separation between pure research activities and those events which take place *in other specialist fields*. The attempt to fulfil this wish by ostracising subject-specific *linguae francae* throws the baby out with

the bath water; what is required here are incentive systems which encourage the scientists to present their research to the respective target groups in a comprehensible way.

We emphasise: the demand to promote German as a scientific language while simultaneously limiting the use of the English language in the field of science will necessarily lead to a situation in which German research lags behind the world elite. There is also no assurance that *more* interdisciplinary exchange or *more* public exchange will take place if research is carried out increasingly in German, because it will still remain incomprehensible *specialist jargon* for non-experts.

With regard to teaching, the picture is more differentiated. Under closer observation, however, the nightmare image of the extensive introduction of English into German educational institutions is turning out to be an absolute necessity if Germany is to attract foreign students and researchers. Unlike smaller European language communities where Dutch or Danish is spoken, for example, German is spoken by a relatively large group. Considerable proportional advantages of the use of German in teaching and practice can be deduced from this and, therefore, a supplanting of the language to the same extent as in smaller countries is unrealistic.

There is every reason to believe that in the case of German as a scientific language the only pill to swallow is a bitter one: Quality research “Made in Germany”. The core of the problem is not the language used but the quality of the research carried out in Germany itself. Neither moaning about the decline of German as a scientific language nor a law to protect the language nor simultaneous translation are suitable ways of improving the quality of German research. Nowadays, quality work from German research institutions has to be imparted and published in English. (These are the global rules of the game in most disciplines); this is the only way to ensure a fast, international dissemination which guarantees inclusion in international quotation registers and leads to realistic employment prospects for German researchers at home and abroad. Students and professors from other countries can only be attracted here if English gains entry into university education. If the quality of the research, having been written in the *lingua franca* and thus respected globally, then becomes a part of the world elite once again – therefore quality in research “Made in Germany” - German as a scientific language will not be supplanted but, on the contrary, it will be strengthened.

This may sound paradox, but that is not the case. Firstly, German universities worldwide will become more attractive to the best minds in foreign countries as well as to the best German researchers if the quality (and career opportunities – particularly for foreigners) are acceptable. Research of the highest quality in Germany written in the *lingua franca* may drive German as a scientific language even further out in the short term (which in any case cannot be halted) but promotes it in the long term. Why is this so? The best research is accompanied not only by the best teaching – which in the future will also be done in German in the main – but also by a wider resonance and greater interest when scientists address their German public.

Here is an example from the recent history of the Association for Social Policy, a scientific organisation of *German-speaking* economists which was founded in 1873 with a membership of 2800 (most members come from Germany, Austria and Switzerland). From 1968 to 1999 the Association for Social Policy produced the

“Journal for Economics and Social Sciences” (ZWS) published by Duncker & Humblot. In the nineties, the number of articles in German and English in the ZWS balanced one other. In 2000 a fundamental change of course took place in the Association for Social Policy, which was under the overall control of the new Chairman Hans-Werner Sinn, when the relationship with the ZWS ended and two new journals were founded: the purely English-speaking “German Economic Review” (GER) and the purely German-speaking “Perspectives of Economic Policy” (PWP) which are both published by Blackwell. The GER calls for theoretical pure research, has a totally international orientation and strives for a readership world-wide so that German-speaking authors are not favoured in any way at all. The PWP, seen as the “mouthpiece of German-speaking economics, was created for a better understanding between theory and practice” (H.-W. Sinn, 2000, foreword of the Chairman, PWP,1(1), S.1).

The clear language division of the discourse platforms into “pure research” and “exchange with an interested public” is clearly recognisable here. The example shows that high-quality research in English and the cultivation of German as a scientific language do not exclude one other, but, on the contrary, they complement each other. It was particularly the recognition of English as a research language that led to the foundation of the purely German-speaking PWP, the journal which specifically promotes the discussion of political themes and is aimed explicitly at a wide audience. Furthermore, the market for scientific journals has *expanded* during this process so that the ZWS now appears as “Schmollers Year Book”, an independent publication in German containing research topics with German-speaking addressees first and foremost.

It would be fatal if German research lagged behind the world elite while continuing to converse in German! The cause of this potentially stoppable decline of German as a scientific language *after* the Second World War is a lack of quality in German research, which will only be improved when the best and most creative specialists are able to exchange their ideas with each other efficiently. The consistent recognition of the lingua franca in certain areas of disciplines is therefore the condition sine qua non for German research to catch up with the world elite. Regulations to protect the language do a disservice to the use of the German language in scientific fields in the end; they do nothing to alter the fact that specialist German language remains *specialist jargon* for the non-expert. They not only have the (French unpleasant) aftertaste of hubris and blocking of the *national* elite but, above all, they impede the promotion of German science by offering the wrong incentives to the new scientific generation. Out of necessity, the arduous reorganisation of the domestic scientific organisations is taking place in order to create the institutional prerequisites which will allow German universities and research institutions to become competitive. Consequently, the best students in the German-speaking area will once again be instructed by the best researchers. German will then find its place in the field of science with the clear language division of the discussion platforms into “pure research” (English) and “exchange with the public” (German), as seen by the economists. On the other hand, the promotion of interdisciplinary and public exchange requires the translation of the highly efficient specialist language into a language which is imprecise but is comprehensible for the addressee, but therefore has no place in the top-class research of disciplines.

4. Gerhard Stickel: Leibniz And German As A Language Of Science¹

Two years ago, one of the four major German science organisations representing about 80 institutes named itself "Wissenschaftsgemeinschaft Gottfried Wilhelm Leibniz" (Science Society Gottfried Wilhelm Leibniz; WGL). The German Language Institute is also a member of this society. It was predominantly the representatives of the natural science institutions who chose Leibniz as their patron, motivated by the wish to be recognised in the international world of science under the illustrious name of this eminent polymath. As I found to my surprise, most of the Leibniz admirers in the natural sciences were hardly aware that this eminent lawman, philosopher, mathematician, physicist and inventor had also given important impulses to linguistics. My intention is not to deal with Leibniz as a language theoretician and language researcher. Instead, I want to recall a small part of Leibniz's work which every now and then is also noted in the liberal arts: his writings on, and for, the German language.

The two minor works in question are no strictly scientific treatises, but essay-like memorials. The older of the two, presumably written around the year 1682, is entitled "Ermahnung an die Deutschen, ihren Verstand und ihre Sprache besser zu üben, samt beigefugtem Vorschlag einer deutschgesinnten Gesellschaft" (Exhortation to the Germans to better exercise their reason and their language, with the added suggestion of a German-minded society; EaD). In newer editions, the second essay carries the title "Unvorgreifliche Gedanken, betreffend die Ausübung und Verbesserung der deutschen Sprache" (Unpremeditated thoughts on the practice and the improvement of the German language; UG) and was written around the year 1697, almost 300 years ago. Both works were published posthumously².

In these writings, Leibniz perceives a crisis of language in late 17th century Germany. The crisis is determined by

- a society divided by two languages, the uneasy co-existence of the German vernacular and Latin and French as the language of politics and the scholars, and, related to it,
- a deficiency in use and in the development of the German language.

He quotes several reasons for the backward development of language culture in Germany: the Thirty-Year's War which had ended only a few decades earlier, the absence of a German capital, and the "religious schism" (EaD, 61). But the people most

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² In older editions, the titles are: „Ermahnung an die Teutsche, ihren verstand und ihre spräche beßer zu üben, sammt beygefügetem vorschlag einer Teutsch gesinten Gesellschaft" (first 1717, then in: Pietsch 1916, 292-312) and „Unvorgreifliche Gedancken betreffend die Ausübung und Verbesserung der Teutschen Sprache" (first in 1868, then in: Pietsch 1916, 327-356). The following quotations follow the edition of Uwe Pörksen 1983 which are easier accessible and modernised in terms of language and spelling. With reference to the texts used in this edition and on the full source history, cf. the details on p. 79 f. and p. 103 f.

to blame for the language misery, he says, are the scholars, many of whom feel little inclination to care for the German language:

“... partly because some appear to believe that wisdom cannot be clothed in anything but Latin and Greek; or because some may fear that the world may discover their secret ignorance masked in big words” (EaD, 62).

And a few lines later he writes:

“In Germany, however, too much has been ascribed to Latin and the Arts and too little to the Mother Tongue and to Nature, which has had a detrimental effect both among the scholars and on the Nation itself. The scholars, writing almost solely for other scholars, delve all too often into useless things; but those among the entire Nation who have no knowledge of Latin are, as it were, excluded from science [...]“.

Leibniz deals in a differentiated manner with the “mish-mashers” who “intersperse their writings with all kinds of languages” (EaD, 68), characterised by the offers at the semi-annual book fairs which, even at that time, were held at alternating venues in Frankfurt and Leipzig:

“I call as witnesses what comes forth from the half-yearly fairs; wherein much is thrown in such despicable disarray that many appear not to know what they write. Yea, it seems some people have forgotten their German and have not learned their French. I wish to God that one paper were to be among ten of such flying pamphlets which a stranger could read without laughing and a patriot could read without rage!” (EaD, 66f.)

Leibniz is anything but a language purist; he is against the pedantic avoidance of foreign words:

“Now I am not so superstitiously German to think that I wished to weaken the force of a powerful speech for the sake of a none too German word”. (EaD, 69)

But then he continues:

„This alone, however, is no excuse for those who sin not from need but from negligence [...]. If they say that, after much deep thought and nail-biting, they have found no German word good enough to express their wonderful ideas, they truly display more of the paucity of their alleged eloquence than the excellence of their ideas”. (EaD, 69)

Remarkably, Leibniz repeatedly advocates the development of German as a language of science in his “Exhortation” and later in his “Unpremeditated thoughts”, drawing a line between himself and the language societies which had already developed before his time and which aimed to establish German as the language of literature. Leibniz argues that it is not the language of poetry, but the language of science which ought to further the general positive language development (cf. EaD, 65). Besides some plausible statements and remarkable proposals, his “Exhortation to the Germans” also includes some utterances which, in their patriotic pathos, are today difficult to understand and misleading, for instance the autostereotype also recurring in his “Unpremeditated

thoughts” of the honest and guileless German who would be incapable of meaning anything false or ambiguous, or a maxim such as: “Better to be an original of a German than a copy of a Frenchman” (EaD, 75). These and other formulations have time and again been taken up with chauvinist undertones in the Leibniz reviews since the 19th century. For Leibniz, the patriot who had always seen himself as a European scholar, France had always been an admired ideal; his critique of language and culture was not directed against France, but against the Germans aping the French.

More attractive in linguistic terms are his “Unpremeditated thoughts on the practice and the improvement of the German language”, a small selection from which I wish to present here. His main thrust is again the development and upkeep of German as a language of science. He outlines a consistent, nominalist semantic theory which deserves attention to this day:

“In the use of the language, particular attention ought to be paid to the circumstance that the words are not only the symbols of thoughts but also of things and that we need symbols not merely to indicate a change of mind but also to help our thoughts themselves”. (UG, p.6)

And shortly after, he says:

“Words are therefore often needed as ciphers or as reckoning pennies instead of the images or things, until one gradually proceeds to the summary and reaches the thing per se in the logical conclusion” (UG, p. 7).

Evolving from here, Leibniz then discusses the German language and its condition and use at the time. His assessment of the status of development of German for terms expressing concrete things, for everything perceptible through the senses, is positive (s. UG, p. 8), although he sees substantial deficits in all things abstract, as he says:

“in our language in those things which we can neither see nor sense, but which we can reach only by observation...” (UG, p. 8f.).

Again, Leibniz blames the scholars for these developmental defects in the German language, because they

“make use of Latin or other foreign languages almost to the exclusion of everything else and almost to such an extent that it is not their lack of capability, but their lack of will which prevents the Germans from asserting their own language” (UG, p. 9).

But, in the same breath, he turns against any manifestation of petty language purism:

“The opinion is therefore not to become a purist in language and, in superstitious anxiety, to shun a foreign but convenient word like a deadly sin, and so to enfeeble oneself and to deprive one’s speech of weight” (UG, p. 11).

But the language “mish-mash” which has “grown repulsively out of hand” and with which “one spoils one’s German with abominable French” (UG, 12) he believes to be a serious danger. Replacing one language by another means confusion for “a hundred or more years“,

„[...] until everything that has been stirred up has settled again and, like a fermented beverage, has finally clarified. Meanwhile, the German minds, by necessity, must sense no small measure of obscuratation through the uncertainty in speaking and writing, because most will not grasp the power of foreign words for a long time and would write miserably and would think badly; not unlike languages changing noticeably in times of invading barbarity or foreign forces” (UG, 13).

Leibniz' appeal to scientists and politicians to apply the German language in an exemplary manner is followed by a detailed programme involving the exploration and cultivation of the German language, which is often invoked by later linguists and people concerned about their own language. His recommendations are aimed mainly at the acquisition and further development of the German vocabulary in several lexicographic projects, which he explains by means of many practical examples and suggestions. Leibniz thus became the great originator and driving force for the major dictionary projects since the 18th century.

Beyond practical lexicography, Leibniz' diagnosis of the state of the German language 300 years ago and his therapy suggestions will still allow us to gain some useful applications for the present and the near future.

With all the caution necessary when comparing the centuries, there are certain similarities between the Holy Roman Empire of the German Nation towards the end of the 17th century and Germany at the end of the 20th century. Both are post-war eras. The Thirty Year War had left most of Germany devastated. Victorious France had risen to become the leading power, with the small and medium German states taking their lead from France. Although Germany did not break up into many quasi-autonomous principalities after 1945 as it did after the Thirty Year War, the country was divided. Of the two initial superpowers USA and USSR, it is now English-speaking America which has prevailed. The USA is today seen as the dominant role model in politics, business,, science and in many fields of the everyday, increasingly 'macdonaldised' trivial culture.

In both eras, the German language is not particularly appreciated, especially by the more educated sections of the population. After all, German was, and is, the language of the losers. After the Second World War, the awareness also grew that German had also been the propaganda language of the Nazis, and that atrocious crimes had been planned in German and the commands for their execution had been screamed in German. In the minds of many sensitive Germans, their own language had also become guilty during the Nazi period. Although this does not make much sense when seen as a hypostatisation of language, it is nonetheless understandable, not least because of the symbolic quality which Leibniz also ascribes to language.

Linguistic auto-odium is only one of the reasons for the attitude to language in post-war Germany. English, particularly in its US American embodiment, has also grown in attractiveness in countries where there was no need to struggle with guilt or shame in the wake of the Nazi period. The path to English leads, above all, through practical communicative constraints which, in turn, arise from the increasing internationalisation of many walks of life. And, at this point, there are some very important differences between our times and those of Leibniz.

Leibniz wrote in pre-national Germany with a glance to France, England and Spain, countries which had already consolidated as unified nation states. In these countries, the former language of administration and learning – Latin – had been replaced in many important areas by the respective national language, i.e., by French, English and Spanish. This is a stage of evolution which the German language had not yet reached by the late 17th century. It was not until the middle of the 18th century with the works of Christian Wolff that German began to assert itself as a language of science, particularly as a language of philosophy. With his exhortations, Leibniz played his part in developing German after the period of Enlightenment not only into a language of literature and law, but gradually also into a language of science in the German-speaking countries and regions. In some disciplines such as philosophy and theology, but also in chemistry and medicine, German grew in importance at one time even beyond the borders of the German-speaking countries. German has so become the fully developed language of culture in which we live and communicate today. Or do we?

The language development which Leibniz had hoped for and promoted in his “Unpremeditated thoughts” and his “Exhortation to the Germans” appears to regress recently. In business and – particularly important for us - in science, everything can conceivably be said in German and, with adequate effort, may be seen as a matter of course, but we are now a long way away from saying and writing everything in German. The often unreflected and unthinking adoption of anglicisms as terms and workshop turns of phrase in many disciplines is only part of this development. What is more worrying is that a number of scientific disciplines have virtually abandoned the German language and have migrated to English, at least in their publications. The monolinguality of the scientific communication which prevailed in Germany in the first post-war years is so gradually being replaced by the monolinguality of scientific English.

The reasons for this development have already been addressed. Science needs discussion and cooperation beyond the language borders, and English (at present mostly in a reduced manifestation) is after all available as lingua franca, auxiliary language and language of communication. The proficiency in English of German-speaking scientists is normally sufficient for publications in which tables, diagrams, graphs or formulas are conveyed. But when it comes to discursive texts in which theoretical prerequisites, methods and results are developed both in interpretative and argumentative terms, the issue is more problematic as this entails a great deal of effort even with a good command of the foreign language and is often not very convincing as a product of formulation.

One factor which appears to be more serious than the often rather poor English of German scientists is that shifting essential areas of the scientific communication into another language excludes large portions of society – which, after all, carry science financially - from partaking in science. I am not going to indulge in the myth of a linguistically ideal science which is capable of making itself understood by everybody. But the access to scientific subjects, as difficult as these are already, should not be made unnecessarily more difficult for laymen – *and these include colleagues from other disciplines.*

There is also another factor: an acute danger to the continued language development. In the disciplines in which English is the sole or predominant language of communication,

German as technical language does not develop any further; it atrophies to the point of uselessness within the individual discipline, and even more so as the medium of communication among the disciplines and beyond the sciences. The argument that the knowledge of English among Germans is on the increase does not lead us any further. Several generations will pass before the majority of Germans are bilingual or even trilingual (even in Switzerland with its long tradition and experience in multilinguality, most people today are monolingual). The more English develops into the dominant or even exclusive language of science in Germany, or, more to the point: *is made into the dominant language by German scientists*, the more the German language will lose in value because a division of function will set in over time: important matters must be said and written in English, German is left for nice trivialities and for the evening among friends...

This development is currently being intensified (and there is nothing comparable in Leibniz' time) by the trend towards English as language of communication in the European Union. In the absence of a convincing concept in terms of linguistic policy, the wealth of languages in Europe, *i.e. the very basis of the cultural and linguistic variety in Europe*, could, for reasons of communicative economy alone, develop towards a Euro-English monolinguality and monotony, with languages such as German existing only as backward idioms in folkloristic niches.

Naturally, returning to German as the exclusive technical language of science provides no way out of this dilemma. Top research, in particular, should continue to speak English if it wants to be understood quickly within the international science community³. This does not mean, however, that the local scientists comply with their duty to disseminate information by adhering to English. A well-developed bilinguality or multilinguality also among those scientists who are especially dependent on international co-operation remains possible and desirable.

Natural scientists and their staff should be encouraged to lecture and publish both in German and in English. This may require some effort, for instance in terminology development, which should not be delegated solely to the German Institute for Standardisation (DIN) or to Germanistics. Also, the test suggested by Leibniz, namely to translate a foreign turn of phrase into German and to test it for its content (cf. UG, p.9) could be helpful and instructive.

The national patriotic motives which Leibniz quotes in his "Unpremeditated thoughts" and his "Exhortation" can no longer be quoted today as the crucial reasons for developing and sustaining German as the language of science. We ought to remember Leibniz who called for the linguistic responsibility of science towards a society essentially constituted in terms of language, a society which makes science possible and needs science. And equally important is the linguistic contribution which science can, and should, make in maintaining and developing German among Europe's rich and varied wealth of languages.

³ See Markl 1986

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