

The two cultures in German translation: Humanities, science, and Wissenschaft

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Abstract

German-English dictionaries give the impression that the modern terms *Wissenschaft* and “science” mean the same thing, and countless English translations reflect this simple one-to-one correspondence. In fact, there is no exact German equivalent for “science”, which refers primarily to natural sciences. Nor is there an English equivalent for the German *Wissenschaft*, which covers all research and scholarship plus associated teaching. “Science” implies positivistic ways of thinking about knowledge and its acquisition. Truth is held to be absolute, its validity independent of its physical, social, historical or cultural context. That is the basic idea behind quasi-objective, quantitatively oriented “scientific methods”. Humanities, including history, anthropology, arts, languages, and religious studies, are explicitly non-scientific forms of *Wissenschaft*, in which “truth” is judged relative to physical, social, historical or cultural context — although “facts” may also be said to exist (e.g. historical facts). There is surprisingly little contact between humanities and sciences: representatives of one side may know almost nothing about the ideas considered fundamental by the other (Snow’s “two cultures”). The humanities are often treated as disciplinary Others and humanities scholars subtly discriminated against; but one might equally argue that the humanities are normal, basic of *Wissenschaft*, the sciences being a special case. Within interdisciplinary humanities departments, humanities scholars may have a political disadvantage at the university level but an advantage at the departmental level; both imbalances are ultimately counterproductive for academic standards. Correct use of the term “science” in non-English contexts could improve the political standing of the humanities as equal partners with sciences — just as political correctness can contribute to a better balance between women and men in gender politics.

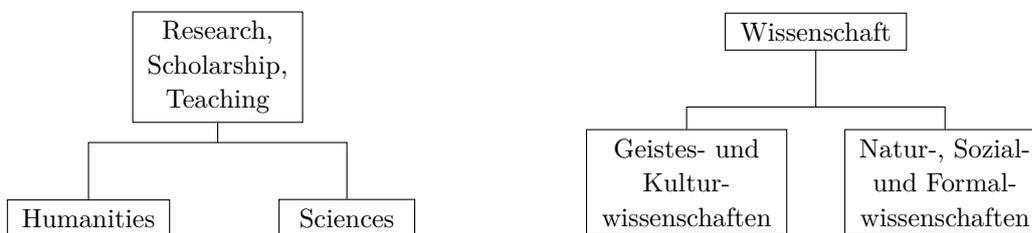


Figure 1: The division of *Wissenschaft* into humanities and sciences in English and German.

1: Introduction

Many people in the non-English-speaking academic world believe that the English word “science” and the German word *Wissenschaft* are equivalent. They are not. Nor is this a trivial error — there is a big difference between the two concepts, and this difference is fundamental to most research and scholarship in universities (see Figure 1).

The problem could be solved by improving German-English dictionary entries, which to my knowledge are invariably misleading. But as every scholar and professional practitioner of translation and interpretation knows (by which I mean *Translationswissenschaft*: translation studies, not “translation science”), correct translation often requires subtle background knowledge, and this knowledge is often implicit in the sense that people assume it but seldom talk about it. In this case, one needs implicit knowledge about the difference between humanities and sciences, and the chronic failure of representatives of both academic camps to understand each other.

Humanities scholars and scientists make surprisingly different assumptions (often tacit) about the meanings of words like “truth” and “knowledge”, and hence the general purpose of all academic work. The result is a deep and lasting tension between them, which can manifest itself as power play, unfairness, or discrimination. Humanities scholars are more likely to be on the receiving end of such injustices, because for the past century or so they have had less political power, on average, than the scientists.

Sometimes, the word “humanist” is used in the sense of “humanities scholar”. People are evidently looking for a label that is as short and direct as “scientist”. The trouble is, a modern “humanist” is a quite different phenomenon: an adherent of humanism, a post-religious atheist or agnostic movement based on the inherent value and responsibility of humans. If we are to avoid implicit discrimination against humanities scholars, we should avoid smudging their identity by the use of unclear terms. This problem does not exist in German, where the word *Geisteswissenschaftler* is as clear and common as *Naturwissenschaftler*, and *Humanist* is a different kind of category.

Academic quality ultimately boils down to a combination of truth content and practical (or social) relevance. It is normally evaluated either within the humanities or within the sciences; interdisciplinary work that crosses this boundary is problematic. If we want to compare quality across these two groups and promote interdisciplinarity at the highest level (which of course is generally desirable, assuming that important questions can hardly be answered by arbitrarily excluding relevant experts), we need a good fundamental understanding of the similarities and differences of humanities and sciences. Moreover, if we want to be realistic about academic quality and avoid neoliberal, market-based superlatives of the kind that one finds in TV commercials (For the world’s sweetest smile, brush with Smiley’s Toothpaste!), we should avoid the misleading term “excellence” and instead talk more realistically about “quality”. This point is especially important for universities who are struggling to complete in world university rankings.

In the following, I will address aspects of these complex issues and then consider possible solutions, with the ultimate goal of enhancing the quality of all research and scholarship. After all, the taxpayers who finance universities deserve to get value for their money. I will examine general academic processes, such as how (or why) we ask interesting questions, and how (or why) we put so much effort into constructing interesting answers to them, in all scholarship and research.

My ideal target reader is an academic colleague who would like to clear up the confusion surrounding “science” and *Wissenschaft*, while at the same time shedding light on the broader epistemological and institutional context. Target audiences include researchers in all countries and all disciplines,

but especially:

- Non-English speakers who have an uneasy feeling about inconsistent or misleading usages of the English word “science” in everyday non-English academic communication and are looking for solutions.
- Translators working within or for universities, with a similar motivation.
- Academic administrators in universities and granting agencies who are involved in the interdisciplinary evaluation and promotion of academic quality.

2: Science

I found the following discussion of the word “science” in Leo Translators’ Forum on 10.2.2014, and it hits the nail on the head:

Yes, ‘science’ and ‘scientific’ do exclude the arts and humanities. (See discussions in the archive on ‘wissenschaftlich’, which comes up every now and then.) Neither history nor art history is a science. Language and literature, philosophy, religion, music, none of those are sciences. True, the social and political sciences (sociology, psychology, education, political science, economics) are sort of halfway in between, but even they aren’t usually referred to just as sciences without any qualifying adjective.

The words ‘science’ and ‘scientific’ usually refer to the natural and applied sciences, including technology subjects like engineering and computer science. Even mathematics (pure, as opposed to applied) was often traditionally placed among the arts rather than the sciences, which is why many schools offer a BA rather than a BS in math. For a use of ‘science’ in English that corresponds more closely to *Wissenschaft*, you would have to go back to early modern English, before the Enlightenment. Another way to think of it: Science implies the scientific method, gaining empirical knowledge by observation, research, and experimentation.

The anonymous author of this passage gave a relatively general definition of “science”. In a more specific definition one might claim that science is based on assumptions that lead to quantitative predictions, that can be compared with quantitative measures. One problem with definitions of this sort is the assumption of determinism — the idea that if you know the initial state of a system and the laws that govern it you can predict its final state. Determinism certainly has its problems, but scientists tend to assume it in spite of the problems because it would be difficult to work any other way. That raises the thorny question of whether projects as diverse as Marxism (Burawoy 1990) and music theory (Agmon 1990) can be determinist.

(Sokal 2010:S. 264) explained that

The word science, as commonly used, has at least four distinct meanings: it denotes an intellectual endeavor aimed at a rational understanding of the natural and social world; it denotes a corpus of currently accepted substantive knowledge; it denotes the community of scientists, with its mores and its social and economic structure; and, finally, it denotes applied science and technology.

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Clearly, “science” means more than just “knowledge”, or *scientia* in Latin. *Scientia potentia est* means knowledge is power; the word *scientia* in this phrase has nothing to do with modern science. *Ex scientia vera* means from knowledge comes truth — not from science comes truth. *Scientia* can also imply something like *Wissenschaft* or “scholarship”. But scholarship was a very different enterprise in the ancient world than it is today, so the translation is problematic. We cannot rely on the meanings of ancient words when using modern words based on the same stems. To take one example, “democracy” in ancient Greece (δημοκρατία) did not include women or slaves. But when we use the word today, we are hopefully glad that it includes women and we no longer have slaves.

Some ancient philosophers (such as the Pythagoreans) were more quantitatively oriented — others qualitatively. But that does not mean that the quantitatively oriented were doing “science”. Today’s scientists regard (or should regard) Pythagorean theory as little more than hocus-pocus; it was certainly not based on scientific method (observation, data, theory, modelling, prediction), which today is a hallmark of the sciences. The meaning of *humanitas* was closer to today’s humanities; it referred to civilized human nature and implied research and teaching that express a love of humanity and the human condition. But the knowledge in the heads of experts in *humanitas*, like any other knowledge, was called *scientia*. A millennium later, in the Middle Ages, content taught at early universities was divided into a qualitative trivium (grammar, logic, rhetoric) and a quantitative quadrivium (arithmetic, geometry, music, astronomy), corresponding roughly to today’s humanities and sciences. The term *Studia humanitatis* first appeared in the 14th century (see Wikipedia “*Studia humanitatis*”) and essentially referred to the trivium.

What about the “scientific community” — an English expression that German speakers like to inject into German sentences because there is no exact German equivalent? This expression should be limited to the sciences. Outside the sciences or more generally, one can speak of “academic community”, “scholarly community”, or “research community”. In interdisciplinary fields that bring together humanities and sciences (not to mention within the humanities), the expression “scientific community” sounds discriminatory, giving the impression that the humanities don’t exist or are not worth mentioning.

3: *Wissenschaft*

The German *Wissenschaft* is another word that has no simple, direct translation. It includes all academic research, scholarship and teaching, and consequently all sciences and all humanities disciplines. At the start of a recent book, I read that “Oxford University Press (...) furthers the University’s objective of excellence in research, scholarship, and education by publishing worldwide.” We are used to German translations of English texts being slightly longer; in this case, the translation would be shorter, because the expression “research, scholarship, and education” can be replaced by one word: *Wissenschaft*.

Wissenschaft basically means scholarship, but the word has different shades of meaning in different contexts. Correct English translations include *academia* or *academe* (“the world of scholarship and research”), higher education (understood to include research at universities, where teachers are also researchers), “science and scholarship”, and study. The word “study” is more general than “science”: an academic study can happen either in the humanities or the sciences. The word “studies” is often an appropriate translation for *Wissenschaft*; e.g. *Anglistik* can be translated as English studies (“English science” would be nonsense).

One reason why non-English-speakers avoid the word “scholarship” when translating *Wissenschaft*

is its ambiguity: it can also mean *Stipendium*. Like *Wissenschaft*, “scholarship” can also sound arrogant: there is a long tradition of scholars pretending to be more important than practitioners, and defending their implied superiority by the use of impressive sounding titles. In Austria, where the author is living and working, it is still considered normal to decorate one’s name with a title like *Ao.Univ.-Prof. Bakk. Dipl.-Chem. Dr. rer.nat.* This may be one of several impediments standing in the way of productive collaboration between theory and practice (Koegeler-Abdi and Parncutt 2013). Academic titles also reinforce sexism (since women on average have fewer of them — for historical and social-structural reasons beyond their control) and racism (because the qualifications of foreigners are often not recognized or “nostrified”). Austria banned the use of hereditary titles such as “von” in 1919 (*Adelsaufhebungsgesetz*), but a century later quaint academic titles are still in common use.

4: Positivism versus relativism

The modern English word “science” implies a positivist approach to knowledge acquisition. Science’s core disciplines — physics, chemistry, biology — are based on the assumption that absolute truth exists, can be discovered, and is true in all times and all places. That may seem like a long shot, but this is the kind of knowledge that scientists are ultimately looking for, and it is certainly a valid enterprise to look for it.

The “laws of physics”, insofar as they are correct and will not be replaced by a new paradigm (which will surely be, if history is any guide), are at least conceptually valid in the entire universe, apart from identifiable exceptions (for example, the first fraction of a second after the big bang). If you jump out a 20th-floor window and land on the pavement, you will die — regardless of whether you are a positivist or a relativist. If there was intelligent life on other planets, and they were also good at physics (or better), positivism implies that they should be developing essentially the same theories, even if those theories are expressed in a different form, depending on their particular subjective way of thinking and communicating. Physicist Alan Sokal made fun of humanities scholars who reject the idea that “laws of physics” can in principle be absolute truths by submitting a hoax article to a journal of postmodern cultural studies. The article was published (Sokal 1996), poignantly illustrating (amongst other things) the chasm that separates humanities and sciences.

To discover potentially absolute truths, scientists advocate quasi-objective observation of the natural world, the collection and statistical analysis of quantitative data, and the development and testing of mathematical theory. This is the scientific method upon which all sciences are supposed to be based. It usually includes systematic observation and testing hypotheses, or comparing data with theoretical predictions based on mathematical equations or algorithms (modeling). The natural, social and formal sciences are united by positivistic epistemologies and empirical, quantitative approaches to research. If a research project does not use scientific method in this sense, it is wrong (or at least misleading) to call it “scientific”.

The humanities tend in the opposite direction, taking a relativist approach to knowledge and its acquisition. The distinction, like so many others, dates in one way or another to the ancient world, when for example Plato talked about innate knowledge, whereas Aristotle talked about induction and deduction. Today, in disciplines such as history, anthropology, philosophy, literature studies, art history, and musicology, scholars are uncomfortable with the idea of absolute truth or reject it outright. It is nevertheless possible to speak of historical facts. A statement can only be “true” relative to a given context, be it social, political, historical, or moral.

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The terms humanities and sciences, like the roughly corresponding German terms (Geisteswissenschaften and Naturwissenschaften, are thus mutually exclusive. “Science” excludes humanities and vice-versa. Academic research often involves mixtures of humanities’ approaches and scientific method; but the terms themselves are mutually exclusive, and that is how they are used in modern English, in US and UK universities.

Humanities scholars have identified a number of different (but often overlapping) approaches to relativistic knowledge acquisition; they include structured reflection, interpretation, criticism, argumentation, contextualisation, speculation, hermeneutics, semiotics and historical source analysis. Dilthey (1883) argued for the autonomy of, and collaboration between, humanities and sciences, humanities focusing on intuitive, socially and historically embedded “understanding” and interpretation (for example of psychological and social processes) and sciences on more objective “explanation”. I can barely touch upon the details here, but there are several general things we can say. One is that experts on methods and approaches in the humanities should also strive to be experts on scientific method, and vice-versa (following Dilthey). Another is that it is not possible to demonstrate that the humanities are fundamentally more or less important than the sciences. It is, however, possible to argue that many interesting academic questions would benefit from a collaboration between humanities scholars and scientists. This applies even to topics that at first glance appear to belong entirely to one side or the other. Consider for example an analysis of the physical properties of a chemical compound. The project may initially seem “purely scientific” until one considers that the compound has medical or social implications, which in turn can or should impinge upon the way scientific research is done. At a minimum, this aspect of the problem should not be ignored. Similarly, a purely intuitive or hermeneutic appraisal of a poem in the context of its author’s oeuvre and historical-cultural context should not entirely ignore the relevance of quantitative analyses of the frequency of occurrence of words in different relevant corpuses — or at least the way of thinking that goes along with that kind of research.

Some scientists talk about scientific method as if it were the best thing since sliced bread, but that may just reveal their ignorance of the humanities. Different research methods are needed for different questions. The research methods of the humanities and the sciences are not fundamentally better or worse than each other. Depending on the research question, one or the other may be more appropriate or feasible. In many cases, the best approach is to combine the two. Moreover, the term “research” is often an inappropriate or misleading label for what humanities scholars do.

5: Examples of incorrect usage

In most non-English-speaking countries, the word “science” is often used to mean all *Wissenschaft*, leading to misunderstandings, confusion and the occasional absurdity. It is difficult to believe that highly qualified academics at the highest level could repeatedly and consistently make such a monumental error. Consider the following examples:

- The “European Science Foundation” includes a “Scientific Review Group for the Humanities”, and “Science Europe” includes a “Humanities committee”.
- The “Swiss National Science Foundation” (SNF = Schweizerischer Nationalfonds zur Förderung wissenschaftlicher Forschung) includes a department called “Humanities and social sciences” (Geistes- und Sozialwissenschaften).

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- In Austria, the main national research agency (FWF = Fonds zur Förderung der wissenschaftlichen Forschung) is officially translated “Austrian Science Fund”. I once complained that the word Wissenschaft was consistently being translated with “science” in their otherwise excellent bilingual documentation. Later, I noticed that the word “science” had often been replaced by “science and scholarship”. In context, this change seemed condescending, suggesting that science is superior to scholarship, or that scholarship is at least worth a mention.
 - Academic positions in Austria - in both humanities and sciences - can be filled with Senior Scientists. Used in German-language contexts, this term sounds more important or prestigious than Wissenschaftliche/r Mitarbeiter/in - as if people had a subconscious problem with the humanities. It also allows for a greater number of promotional levels.
 - The Austrian Fachhochschulen are vocationally-oriented tertiary institutions. In translation, they are called “Universities of Applied Sciences”, although they offer Bachelor’s and Master’s degrees in areas like art and design (applied arts) or language and culture (applied linguistics, applied cultural studies). Admittedly, the British equivalent (polytechnic) is problematic and superseded. But these institutions do play an essential role in Austrian academia, and they are often more progressive and efficient than the more traditional, conservative universities. Why not “vocational colleges”?
 - “Science Space Styria” is an educational collaboration among nine universities in the Austrian province of Styria (Steiermark). The German term Steierischer Hochschulraum says this exactly, but the misleading English expression is preferred, even in German-language contexts.
 - “Citizen Science” is an approach to research in which interested amateurs participate in or contribute to the research process. In German-speaking countries, projects in the humanities are included on the same level as scientific projects. Similarly, “Sparkling Science” is an initiative by the Austrian government to fund projects in which experienced researchers in humanities and sciences work together with young people.

I am working at the University of Graz, Austria, where I have spotted many odd usages of the word “science”:

- The university hosts a “Science Park” to help young entrepreneurs with an academic qualification in any discipline (including humanities) to start independent businesses. Another organisation called “Science Fit” promotes collaboration between research and small/medium business.
- A computer-based research documentation system for all academic university employees — Forschungsportal, previously “Performance Record” — includes the categories “Science to science” for regular presentations and publications and “Science to public” for events that bring together researchers and the general public - including the humanities in both cases. These two expressions now crop up regularly in spoken and written German sentences. What is really meant is specialist (academic) versus public research presentations.
- In a series of popular research presentations called “Science Slam”, research and scholarship in all disciplines is communicated quickly, accessibly and entertainingly. I was asked to contribute

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and replied that I was unhappy with the implied discrimination against the humanities. My complaint was either misunderstood or dismissed as unimportant (or outrageous).

- An interesting new interdisciplinary Master's degree course has been developed called *Wissenschaftsgeschichte*, translated "History of Science". The term "history of science" is commonly used in English, but it has a different meaning, referring only to science (including the scientific revolution, a term which curiously does not seem to have a German equivalent). It is a great idea to expand this concept to include the humanities, but the name needs to be changed — perhaps to "history of academia", "history of universities", or "history of scholarship".
- The Austrian-Canadian Society bestows an annual "scientific award" on outstanding theses and dissertations in the area of Canadian Studies. The winning contributions have often been in the area of literature studies, which of course is pure humanities. To add to the confusion, the German term *Literaturwissenschaft* is sometimes translated "Literature science".

In these examples — and many more could be added — two errors are being made at the same time.

- First, unnecessary Anglicisms are being introduced into the German language, as if there were something wrong with it. There is not. On the contrary: the word *Wissenschaft* is more clearly defined than the word "science". There is no doubt whatsoever about the meaning of *Wissenschaft*: any discipline that ever had a department (*Institut*) or a professorship at a German speaking university was an example of it. Nor is there any confusion about the meaning of *Wissenschaft* among non-German speakers. Why, then, is the term avoided? Is it not sexy enough? If anything, we should be using this German word in English and not the other way around! German speakers should follow the example of the *Académie française* (or in Canada, the province of Québec), defending their language from dilution by foreign terms. Failing that, why not just switch to English?
- Second, "science" does not mean *Wissenschaft*. It means *Naturwissenschaft* and other similarly positivistic forms of *Wissenschaft*. "Science" excludes "humanities", just as "peaches" exclude "cream".

6: Skepticism and denial

After reading the above examples, some non-English speakers (and perhaps some English speakers as well) will still be skeptical. I ask those respected colleagues to enter the string "faculty of science" or "school of science" into Google. Such faculties mainly contain natural sciences like physics, chemistry, biology, botany, psychology, zoology, genetics, ecology, earth and ocean sciences. Often, they also include formal or structural sciences such as mathematics, statistics, computing. As a rule, you won't find a trace of the humanities in a faculty or school of science, although exceptions are always possible for administrative reasons. That is not surprising, because if "science" meant the same thing as *Wissenschaft*, every faculty or school of anything could be called "scientific" and the translation of "Faculty of Science" would be *Wissenschaftliche Fakultät* – tautological and meaningless.

Another justification for skepticism is the bandwagon argument, aka *argumentum ad populum*. If we non-English speakers have been translating the word *Wissenschaft* in this way for such a long

time (or so runs the argument), it cannot be wrong. The easiest option is to stay on the bandwagon. That reminds me of a widespread motivation behind passive climate denial: If just about everyone is driving cars, flying in aeroplanes and so on, and has been doing to for a long time, and the world has not ended, then it cannot be wrong to do these things. Another relevant logical fallacy is the appeal to authority: because authorities in non-English-speaking countries are supporting this translation at the highest level (consider all those “Academies of Science” and their humanities departments), it must be correct. Unfortunately, statements by authorities are not always true.

Even after reading and understanding these arguments, many will still be skeptical. What if even English speakers made the same mistake and used the word “science” in the sense of all *Wissenschaft*? That is not a strong argument. To my knowledge, in most cases where the word “science” is used incorrectly (regardless of the author’s first language) either a humanities scholar is failing to understand the basics of science, or vice-versa. Or perhaps a translator is struggling to find the right compromise between a literal and a natural translation.

Here is an interesting example. In 1882, philosopher Friedrich Nietzsche published his famous work *Die fröhliche Wissenschaft*, which today in English is known either as “The gay science” or “The joyful wisdom”. Both translations are problematic. The first is preferred because it is the title of the best-known translation, and because Nietzsche had given his book the odd subtitle *La gaya scienza*.

Does this reflect confusion about the meaning of *Wissenschaft* even among English-speaking philosophers — who are otherwise so careful in their analyses of words and their meanings? Possibly. On the Wikipedia page entitled “The Gay Science” I read on 20 September 2016 the following:

Another indicator of the deficiency of the original translation as *The Joyful Wisdom* is that the German *Wissenschaft* never indicates “wisdom” (wisdom = *Weisheit*), but a propensity toward any rigorous practice of a poised, controlled, and disciplined quest for knowledge, and is typically translated as “science”.

Needless to say, Nietzsche’s famous volume is about almost everything but science. It covers an enormous range of themes including theory of knowledge and philosophy of teaching; conscience, religion, and morality; art, poetry, and music; love, revenge, and passion; history and power; dignity, and character; and the “death of God”. The reason for the misleading translation of the title is evidently that no-one came up with a better one. An ironic title invites an ironic translation, but none has become accepted (why not “Jolly scholarship”?). There is no English equivalent for *Wissenschaft*, just as there is no English equivalent for Nietzsche’s concept of *Übermensch* (“superman” doesn’t quite do it justice).

The discussion could be continued, as if the point were not yet clear. But at some point it may be more productive to ask whether we are talking about skepticism or denial. If the truth is being denied, we should then ask who is benefiting from this error. There must be stakeholders, otherwise the problem would not have become so deep and resistant to correction.

7: Why?

How can concepts such as “science” and *Wissenschaft* — so fundamental for an understanding of research, epistemology and interdisciplinarity — be used incorrectly at the highest level? How is it possible that so many humanities scholars and scientists are undisturbed by such errors or consider them unimportant? I can think of several possible reasons:

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The translation science = *Wissenschaft* often seems to work. When German speakers see the word “science” in a normal English text, they guess that it means *Wissenschaft*, and the text seems to make sense. Take the “Union of Concerned Sciences” (UCS), an organisation of which I am a member. It would be great if humanities scholars were included in the name of this organisation. Political problems such as climate change, nuclear weapons and poverty are just as important for humanities scholars as for scientists, and both groups can contribute to solutions in different ways. But UCS is an organisation by and for scientists (i.e. physical, social and formal scientists); the organisation is also limited to the USA (I recommended in vain that they go global, because I couldn’t find anything quite like them in Europe). Unfortunately there is no “Union of Concerned Humanities Scholars” or “Union of Concerned Academics”.

The word *Wissenschaft* has a negative flavour to it, so people tend to avoid it. It can sound snobby, old fashioned, dusty or just plain uncool. The English equivalent “scholarship” may be even worse, given persistent associations with the British upper class sending their children to “public schools” followed by Oxford or Cambridge. The “Ivy League” in the USA has a similar reputation. In a German context, the word “science” sounds more open, modern, sexy. But then again English words in German sentences often sound cooler than their German equivalents - which does not mean one should bow to the pressure and use them. On the contrary, we should reflect about the political processes behind these feelings, and act accordingly.

When the matter is not directly discussed, positivism (in the sense of “science”) tends to be considered normal, and relativism exceptional. The Latin word *scientia* was used by philosophers like Aristotle (in Greek) and Boethius in a positivist way. That is not surprising — the modern word “knowledge” is itself positivist (what I “know” is assumed to be “true”).

The history of ideas, and along with it the history of scholarship and research, tends to be ignored. The “scientific revolution” of the 16th and 17th centuries was the work of thinkers like Copernicus and Vesalius in disciplines such as astronomy and biology. The subsequent creation or modernisation of the humanities is called the “enlightenment” (17th-18th centuries). Both these developments reinforced the old relativist idea that interesting questions have no clear answers. Between the 18th century (Newton) and the 20th (Einstein), physicists developed increasingly sophisticated explanations of things both very small (atoms) and very large (the universe). Inspired by these developments, disciplines like psychology and sociology became more “objective” (positivist, “scientific”), as reflected by more frequent use of the term “social sciences” in the 20th century, giving a new flavour to the word “science”. While relativism and subjectivity were strong in the 19th century academy, during the 20th positivism and quasi-objectivity came to the fore, and the sciences gradually took over. Humanities scholars continued to reject the idea of absolute truth, but they were increasingly ignored and their insights misunderstood.

These historical developments mean that humanities scholars tend to understand the distinction between humanities and sciences better than scientists do. They also tend to have a better understanding of terms such as positivism versus relativism, objectivity versus subjectivity, quantitative versus qualitative. The meanings of words are a more basic part of their trade, whereas scientists are more oriented toward numbers (measurement, statistics, mathematics, computing). Humanities scholars are also under more pressure to justify their approaches than scientists, whereas the scientists just do what scientists normally do without any particular need for explanation. As a result, humanities scholars can better explain the advantages and disadvantages of different epistemological approaches and ways of thinking for particular kinds of question, whereas scientists may be strug-

gling to explain what the word epistemology means or what it has to do with this discussion. That makes the incorrect use of the word “science” by some humanities scholars all the more surprising.

8: Humanities, sciences, and the grand academic enterprise

Mistranslations of “science” and *Wissenschaft* are symptomatic of a fundamental misunderstanding about the difference between humanities and sciences. To understand this fully, we must ask general questions about the nature of academic enquiry. This can even lead us to examine the *raison d’être* of public universities. Why do we have universities at all? Why not just close them all down and let the private sector take over?

Universities exist to answer difficult questions. To do this, they need people who are willing to devote their lives to developing the necessary expertise. These people must then be given sufficient freedom of expression, motivating them to creatively, energetically and often obsessively pursue plausible answers. Universities are environments of that kind, and they are best created and maintained by democratic governments. When trying to answer big questions, it is important to avoid bias or conflicts of interest. Academia needs to be independent of “free markets”, in which people are motivated by financial rewards rather than the truth.

The inroads that neoliberalism is making into the financial independence of universities could have serious long-term consequences for humanity. The phenomenon of climate change denial is an interesting example, threatening human survival by slowing progress toward solutions to the global climate crisis. Ultimately, climate deniers are financially motivated: the fossil fuel industry is worth enormous amounts of money. Academics should be up in arms at this flagrant distortion of scientific research findings, but many are too busy doing three jobs at once (research, teaching and administration) and under pressure from neoliberal performance indicators.

Some of the questions that academics ask are existential in the sense that our survival may depend on them. Others are simply issues that many people are curious about. Regardless of the type of question, good answers to difficult questions are more likely to be found and formulated if people are trained to answer a certain kind of question — a degree of specialisation is always desirable — and then given the freedom to explore the validity of different possible answers.

If we wanted to get a general, quasi-objective understanding of the kind of questions academics ask, we would begin by collecting examples and sorting them into categories (as often happens in qualitative research methods). The biggest categories that would emerge from such an analysis are inevitably humanities and sciences. Something similar to this division has existed for millennia — either as a difference between qualitative and quantitative questions, or between relativist or positivist approaches. If we misunderstand this distinction, we run the risk of misunderstanding the entire academic enterprise, which has accompanied and nourished “civilized” human development for millennia and without which so many aspects of modern life (politics, economics, technology, arts, education) could scarcely be imagined.

9: The two cultures

Different academic disciplines may address similar issues but have difficulties communicating. As a musicologist I am most familiar with examples from my discipline. Performers and music theorists (or analysts) come into contact when analysts claim that their analyses have implications for performance, or when performers verbalise the analyses that they assume to exist when they interpret a work (Binder 2016). Similarly, music theorists/analysts may have trouble communicating with

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music psychologists because of differences in ways of thinking and communicating, including specific terminologies (Clarke 1989). However, Zbikowski (1998) has argued that music theorists (who tend to identify with the humanities) and music psychologists (sciences) are not as different as they seem, and that the use of metaphor is something that links them together.

More generally, the distinction between humanities and sciences is commonly and profoundly misunderstood — not only by the general public, but also by the humanities scholars and scientists themselves. Snow (1959) reported:

For constantly I felt I was moving among two groups — comparable in intelligence, identical in race, not grossly different in social origin, earning about the same incomes, who had almost ceased to communicate at all, who in intellectual, moral and psychological climate had so little in common that instead of going from Burlington House or South Kensington to Chelsea, one might have crossed an ocean. (pp. 2–3)

Snow identified these groups as “literary intellectuals” and “scientists” and collectively called them the “two cultures”. Regarding the scientists’ ignorance of the humanities, he wrote:

There are about about fifty thousand working scientists [in the UK]... my colleagues and I have had to interview somewhere between thirty to forty thousand of these ... As one would expect, some of the very best scientists had and have plenty of energy and interest to spare, and we came across several who had read everything that literary people talk about. But that’s very rare. Most of the rest, when one tried to probe for what books they had read, would modestly confess, ‘Well, I’ve tried a bit of Dickens’, rather as though Dickens were an extraordinarily esoteric, tangled and dubiously rewarding writer, something like Rainer Maria Rilke. In fact that is exactly how they do regard him. (pp. 12–13)

Regarding the little that humanities scholars know about science, Snow explained:

Once or twice I have been provoked and have asked the company how many of them could describe the Second Law of Thermodynamics. The response was cold: it was also negative. Yet I was asking something which is about the scientific equivalent of: Have you read a work of Shakespeare’s? I now believe that if I had asked an even simpler question — such as, What do you mean by mass, or acceleration, which is the scientific equivalent of saying, Can you read? — not more than one in ten of the highly educated would have felt that I was speaking the same language. (p. 16)

The Second Law of Thermodynamics was perhaps not a good example, because many scientists could not spontaneously explain it. This “law” basically says that if you divide a physical compartment into two halves by a wall, put different gases in the two halves, and take out the wall, the gases will mix. This is a specific case of a general principle with interesting implications: the entropy of an isolated system tends to increase. Snow might instead have asked people to explain the concept of entropy, or better: everyday basic concepts like mass or acceleration. The inability of many humanities scholars to do this is comparable with the inability of many scientists to say anything sensible about the arts.

Have things improved in the half a century since Snow’s insights? Not to my knowledge. We still can seldom rely on humanities scholars to explain the foundations of science or vice-versa.

Said another way, we still cannot rely on professional academics to explain the foundations of *Wissenschaft*.

That is a shocking assertion and it would be interesting to test it in a qualitative interview study. Scientists could be asked to explain basic ways of thinking and approaches to asking questions in the humanities, and vice versa. We can anticipate some of the findings. The humanities scholars might complain that scientists are too positivist, but would be hard pressed to explain the details of scientific method. The scientists may complain that the humanities scholars are too wishy-washy, but have trouble saying anything at all about great literature, premodern history, or the role such things play in forming their own identity and happiness. The problem is evidently the same among English and German speakers, or in any other part of the world.

If that is true, we are not talking about a translation problem. The blame cannot be laid at the door of German speakers, or the speakers of any other language that regularly equate “science” and *Wissenschaft*. The humanities scholars and scientists simply do not understand each other. The solution (or something similar) was proposed centuries ago by Wilhelm von Humboldt: every humanities student should learn some basic science, and every science student should learn some basic humanities. Just one course unit would make a difference, and a combined and balanced humanities-sciences year at the start of every bachelor degree course would make a big difference.

Meanwhile, we still have a situation in which different groups of academics ask similar questions, answer them in contrasting ways, and fail to communicate with each other about their findings. Take for example the academic disciplines known as cultural studies, sociology, anthropology, and psychology. All four basically want to understand the same thing: human behaviour and experience. Each has a remarkable tendency to ignore the other three, justifying their *Alleingang* on the basis of methodological arguments, beliefs about the superiority of positivism or relativism, or other issues such as western versus non-western cultures, the present versus the past, or individuals versus groups. Quantitatively oriented psychologists stand at the positivist end of the spectrum, basing their research almost exclusively on measures and statistics. Cultural studies tend to the other extreme: quantitative measures are frowned upon and complex, speculative ideas are favoured to answer questions about political dynamics, historical change, cultural practices, and power systems, as they interface with ideology, class, ethnicity, sexual orientation and gender. “Cultural studies views cultures not as fixed, bounded, stable, and discrete entities, but rather as constantly interacting and changing sets of practices and processes” (Wikipedia, 23.9.2016). For psychologists, such questions are essentially unanswerable, because the variables involved are unmeasurable, empirically inseparable, or both. The problem could be solved at least in part if individual scholars qualified themselves in more than one discipline; but they might then risk diluting their specialist expertise. Perhaps a better solution is for experts in different disciplines to collaborate and learn from each other in an atmosphere of mutual tolerance and respect.

The two cultures also divide psychology itself (Kimble 1984). Scientifically oriented psychologists favor determinism, observation, laboratory studies, quantitative data, and generalization (nomothetic approach) based on analysis. Psychologists with a humanities orientation tend to be treated as Others; they favour indeterminism, intuition, field studies or case histories, qualitative data, a focus on specific examples or domains (idiographic approach), and a holistic approach. The tendency to separate rather than combine these two approaches is evidence of a lack of mutual respect coupled with poor understanding of complementary nature of the two approaches, and the need for constructive collaboration.

10: Musicology: A case study

Since the present text is appearing in a music journal, and I am a musicologist, I should consider musicology, a word with an exact German translation: Musikwissenschaft. Amazingly, even this word is sometimes translated “music science”, as the following examples (from the internet translator Linguee, September 2016) illustrate.

...the effort for authentic interpretation of early music ... became an extensive movement in England and in the German speaking countries, having full support in music science, school education, publishing and in musical instrument making as well (agsonata.cz).

The range of promotion of the Hermann Hauser Guitar Foundation concentrates on the domains of music culture, music science, research on instruments and promotion of young talents. (guitarfoundation.de)

This also became the topic of his 1997 thesis, for which he earned his doctorate in Music Science and was awarded an honorary doctorate by the National Music Academy, Sofia. (sadlo-percussion.de)

There he studied music science and, together with Alban Berg, was a student of Arnold Schönberg. (klangforum.at)

After finishing her viola studies she studied music science at the University of Leipzig. (rinascitaconsort.eu)

Perhaps the most disturbing thing about these examples is that they are so easy to find in the internet. Anyone who suspects that “music science” might be a good translation of Musikwissenschaft need only enter “music science” into Linguee to get confirmation. That is one way in which false or misleading translations can become self-perpetuating in the internet age.

Will processes of this kind eventually lead to a change in the meaning of the word “science”, vindicating those who insist that it is equivalent to *Wissenschaft*? Hardly. There is a strong and highly resilient tradition in scientific disciplines of using the terms “science” and “scientific method” in clearly defined ways, and this tradition is quite unaffected by errors propagated unintentionally by Linguee or similar webcrawlers. The long-term stability of the meanings of central terms in science, including “science” itself, is unquestioned. The cited usages are simply wrong.

Speaking of musicology, the following is an extract from the (so-called) “Scientific report” following the Exploratory Workshop on Cognition of Early Polyphony, which I organized at the University of Graz in April 2012. This international meeting was generously sponsored by the (again so-called) “European Science Foundation” (ESF). The “Scientific report” is significant because a group of ten leading humanities scholars and ten leading scientists from different countries (including several whose first language was French, German and English) agreed on its content, following detailed discussion of the question “What exactly is the difference between humanities and sciences?” Although this was a music conference, the question applied to any discipline. Constructive interactions between humanities and sciences were the aim of the workshop, and we were remarkably successful in achieving such productive interactions. Here is the extract in question, and it speaks for itself:

There was considerable discussion about the definition of the terms “humanities” and “sciences” (including translations of these terms into other European languages) and the extent to which a given discipline or department belongs to one group or the other.

Generally, differences in the meanings of disciplinary labels are due in part to different histories of epistemology in different research cultures. There was general agreement that “humanities” corresponds roughly to *Geisteswissenschaften* in German and *lettres et sciences humaines* in French (although in English and German the humanities are not normally divided into these two groups). Researchers interpret these terms differently, depending for example on where their research is situated on the humanities-sciences continuum. Many (but not all) researchers would agree with the following statement: Humanities and social sciences are similar in that they both address society and the human condition, but social sciences tend to be more positivist (“truth” is assumed to exist) and humanities tend to be more relativist (ideas and claims are considered relative to their social, historical, cultural, or political context). For clarity, the English term “sciences” should be confined to the natural, social and formal/structural sciences (the “formal/structural” idea is less common and brings together mathematics and computer science), but such a definition should not be misconstrued as a value judgment; the tacit assumption among some scientists that science (or at least “scientific method”) is somehow inherently superior to humanities is an important obstacle to constructive synergetic interdisciplinarity.

The word “science” has a different meaning in French and English. According to Wikipedia (consulted on 11 June 2012), French science means “un ensemble organisé de connaissances objectives, établies selon une démarche rationnelle, dans un domaine déterminé”. That is broader than English “science”, which may be defined as “a systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the universe”. Both kinds of “science” can include “testable explanations”, but English “science” is more positivist. The English term science and the French term science are thus *faux amis*. French science includes *sciences humaines* (part of the humanities), but English “science” does not. Sociology, linguistics and economics are usually considered to be social sciences (*sciences sociales*, *Sozialwissenschaften*) but for some researchers they are also humanities (*sciences humaines*, *Geisteswissenschaften*); conversely, history, philosophy and anthropology are primarily humanities, but can also be social sciences.

The German term *Wissenschaft* has yet another meaning. *Wissenschaft* covers all academic research and teaching — including for example *lettres* in French and *Kulturwissenschaft* in German. *Wissenschaft* is broader than French science, which in turn is broader than English “science”. The ESF often uses the English word science in the sense of *Wissenschaft*. It follows from our discussion that this usage is incorrect or at least misleading. The present document, for example, is not a “scientific report”; it might better be labeled “research report”, “summary of workshop findings”, or “workshop report”. A general correction of this error in the terminology and documentation of the ESF and other research infrastructures in continental Europe would promote interdisciplinary interactions among humanities scholars and scientists, and hence the goal of this workshop, by clarifying the independent and equal status of humanities scholars. It would avoid the disciplinary othering (or indirect discrimination) that can result from ambiguous or value-laden usage of the word “science”. When reformulating existing documents, it would be necessary to consider contextualized shades of meaning of English expressions such as *academia*, *research*, *research and teaching*, *higher education*,

scholarship, and study — all of which can be translations of *Wissenschaft*.

There is a long tradition in musicology of making up for global, university-level discrimination against humanities by a different form of discrimination at the local department level, where it is common for humanities to prevail in internal departmental politics. To achieve this, humanities scholars in music (especially music historians) call themselves “musicologists” but give more specific labels to other music scholars and researchers such as ethnomusicologists, music psychologists and so on, implying that they are not (real) musicologists. It would be easier just to call all music scholars and researchers “musicologists” and stop pretending that some are intrinsically more important than others, but resistance to this idea is surprisingly strong. Given what happens at higher academic levels, one cannot blame the “musicologists” for defending their turf. It would nevertheless be desirable to create a more level playing field at all levels, both within department and between them, facilitating interdisciplinary interaction and ultimately promoting research quality.

11: Linguistic discrimination: Sexism and disciplinism

In a patriarchal society, in which men are usually in control and women are considered subsidiary, men are implicitly regarded as “normal” or stereotypical people, while women are Other people. Women, of course, may see the situation differently; they may regard women as normal and men as Others. But because they have less political power, their perspective does not prevail.

Decades of feminism should have solved these problems, but success was only partial. In the English language, for example, there is still a serious problem with titles. Men are called “Mr” whether they are married or not; their independence is unquestioned. Women are called “Mrs” only if they are married, implying that they have taken the family name of their husband and thereby somehow lost their previous identity. Women are called “Miss” if they are not married, implying that they are either sexually available or on the shelf. Feminists tried to replace both titles by “Ms”, but this alternative title quickly acquired a negative flavour (like the word “feminism” itself). We somehow tolerate these culturally transmitted clichés, although they are so outrageous that it is embarrassing to mention them. Things are getting better, to be sure — especially in academia. Women breathe a sigh of relief when they can finally call themselves “Dr”. The journal “Man” changed its name to “Journal of the Royal Anthropological Institute”. But when anthropologists and their audiences speak of “early humans”, we still tend spontaneously to think of men unless someone specifically mentions that we are talking about women. Women are still the Other humans, it seems.

Non-sexist language requires that women be made linguistically visible in their individuality and uniqueness, and not subsumed under male-oriented terminologies and assumptions. If, for example, men who post letters are postmen, women who post letters are postwomen — and if this term grates, it is necessary to find a new term that applies equally to women and men. This issue is more important in languages other than English that contain more frequent gender distinctions. Consider for example the word *Wissenschaftler* (or *Wissenschaftler*) in German. It can either refer either to all academics or just the male ones. But *Wissenschaftlerin* refers only to female academics. This asymmetry and ambiguity can easily produce linguistic sexism if words are not chosen carefully. Solutions exist, but they are often ignored. Most newspapers refuse to solve the problem, merely because it would make newspaper texts a little longer. They are not trying very hard.

Disciplinism is the belief in the (inherent) superiority of one’s own academic discipline and its methods and epistemologies. It makes sense: people choose their discipline because they prefer it to

others and often this impression is reinforced by years of study, research and teaching. It can apply to smaller and larger disciplinary categories; a historian may feel (but never say, let alone write) that history as a discipline is inherently superior to other humanities disciplines; s/he may also feel that the humanities as a whole are inherently superior to the sciences. Disciplinism is not all bad — it is an important driving force within universities, motivating academics to work hard within their home discipline to demonstrate that their ideas are correct. But if disciplinism in combination with power imbalances leads to discrimination against certain disciplinary groups or impedes interdisciplinary collaboration, there is a problem.

Some readers will find the comparison between disciplinism and sexism far-fetched. I should explain that I am not implying a causal relationship between these two kinds of discrimination; they are merely two examples of a general phenomenon. Any identifiable group of people that gets more power than another may end up treating the other one unfairly — deliberately or otherwise. Discrimination can also merely mean exclusion, for example exclusion from decision-making processes.

Discrimination can arise from ambiguous use of everyday terms. If the word “science” can mean either *Wissenschaft* in general or positivistic *Wissenschaft* in particular, and the word “humanities” can only mean one thing, namely relativistic *Wissenschaft*, one can fall into the trap of treating humanities as Other disciplines. To avoid this trap, we must strive for a kind of “non-disciplinist language” (by analogy to non-sexist language). Our formulations should make humanities scholars linguistically visible in their individuality and uniqueness. The problem can be solved by correct use of the terms “humanities scholar” and “scientist”. To call a humanities scholar a “scientist” is “disciplinist” in the same way that calling a female academic a *Wissenschaftler*, or translating *Mensch* (human being) to “man”, is sexist. In the first case, the humanities are left out as if they did not exist, did not matter, or were somehow problematic. In the second case, women are left out as if they did not exist, did not matter, or were somehow problematic.

One reason for using the word “science” incorrectly, even in an Anglophone context, is that some humanities scholars think the word makes their research seem somehow better or more important — as if there was something intrinsically wrong with the humanities. Pardon the analogy, but that is a bit like a woman making herself seem important by calling herself a man. We had a famous example in Graz, Austria: The first female governor of the state (Land) of Styria (Steiermark) did not like the word *Landeshauptfrau*. Maybe it sounded a bit like *Hausfrau* (housewife)? Anyway she preferred to call herself *Frau Landeshauptmann*.

To refer to a humanities discipline as a “science”, as happens when the German word *Wissenschaft* is translated as “science”, or to refer to a humanities scholar as a “scientist”, is not only *inhaltlich falsch* (literally wrong), it also negates the personal identity of individual academic colleagues. It is to pretend that a humanities scholar would be satisfied with a positivistic approach, when in fact just about every humanities scholar will soundly reject that notion. If provoked, a humanities scholar will improvise a short lecture on the spot, explaining the central role of relativistic thought in the humanities, with reference to examples from different humanities disciplines. Scientists may be unsure what the words “positivism” and “relativism” mean, but they sure can explain to you what scientific method is, and from their explanation it will be clear that it excludes the humanities.

Designating a historian a “scientist”, as the Austrian government often does these days, suggests that historians are performing controlled experiments and explaining their findings with computer models. Calling a religious scholar a “scientist” is like replacing papal regalia with a lab coat.

Of course humanities scholars do sometimes use scientific methods, and scientists do sometimes approach difficult issues by surveying the history of ideas on that topic and considering speculative interpretations, in the tradition of the humanities. Such interactions are to be welcomed — but they do not alter the mutually exclusive definition of the words humanities and sciences.

12: Promoting humanities

If my account is correct, humanities scholars are often subjected to indirect or implicit discrimination, but they don't object. Many will even find this text irritating (for which I apologize), even though its obvious intention is to promote the humanities. I can think of various reasons. First, humanities scholars may be aware of their miserable understanding of science, just as scientists are aware of their miserable understanding of humanities. They are reluctant to get into any discussion that could expose that problem. Second, humanities scholars do not want to present themselves as victims. They know from bitter experience that trying to clarify this terminology could intensify rather than relieve the subtle forms of discrimination (and less subtle forms of ignorance) that they experience at the hands of scientists, university administrators, granting agencies, journalists, and the general public. I have the lucky advantage of being a psychologist and physicist, that is, primarily a scientist, while at the same time working within the humanities, in musicology. I can claim that this mistranslation is a form of discrimination without seeming biased, because the discrimination is not against me personally.

Many humanities scholars are unaware of any discrimination against them. For them, this discussion may be meaningless. Similarly, many women or representatives of minority groups are unaware of discrimination against them. But few would deny that discrimination of this kind exists.

Evidently, we should be doing more to promote the humanities and the rights of humanities scholars. They (we) are asking fundamental questions about why we are here and what meaning our lives have. If our lives have no meaning, or if we perceive our lives as meaningless, no amount of scientific progress can solve the problem.

But there are even bigger issues at stake. For centuries, the sciences have enabled the development of both good and bad technologies. The good technologies have totally changed our lives for the better (at least in the richer countries) with cars, aeroplanes, electric lights, washing machines, computers, internet, mobile phones, and ever-improving medicines and medical technologies. The bad developments include climate change and the chance of nuclear war or a genetically manipulated pandemic wiping out much of the world's population. All these things were made possible by the sciences, so it is no wonder we think they are important, even if the climate deniers are going through a phase of pretending that scientists are involved in massive international plots and hoaxes. The positive developments that science has given us are here to stay; the problem is now how to reduce the probability that the predicted catastrophes will become reality.

Both humanities scholars and scientists can contribute to resolution of existential global issues. The essential role of humanities scholars is often underestimated (not least by humanities scholars). Humanities scholars understand culture, languages, art and identity in society, politics, history and religion. This is the kind of background knowledge that one needs to negotiate sustainable solutions to the massive problems facing the modern world.

13: National character: German versus British

In a German cultural context, according to a humorous book Barkow and Zeidenitz (2008), one is not allowed to crack a joke without first submitting an application — unless an authority of some kind has officially announced that jokes are allowed. For the English, however, “humour is the balm that makes life bearable” (Miall 1993:53). In academic writing, jokes are banned in both cultures, with very few exceptions (such as research about jokes). Given this complex background and context, I applied to the editors of this special issue for permission to add a humorous (or at least slightly ironic) section to this article. I am pleased to announce that the request was granted. The following should consequently be taken with a grain of salt — but it also contains some important grains of truth.

After reading this article, you would think my German-speaking colleagues would immediately agree with me and stop using the word “science” as a translation of *Wissenschaft*. It is so obviously wrong. That was what I thought when I first started talking to people about this problem. A few years later, I can see that I was successful only once. That was at an international conference (referred to above) in which scholars from several different European countries were talking about the relationship between humanities and sciences. Such a discussion is impossible without clear definitions. We also considered in some detail the difference between “science” in English and *ciencia* (Spanish), *scienza* (Italian) and *science* (French), which seemed to convince everyone.

Apart from that one success, there have been a long series of failures. Many people, it seems, are blissfully unconcerned that they are saying “dog” and meaning “cat” (but without a footnote to that effect). My suggestion that this is discrimination against the humanities falls on deaf ears, as if either the concept of humanities or the phenomenon discrimination did not exist, or did not matter. The people responsible for misleading use of the word “science” are usually sensible, intelligent and well meaning. How can this be explained?

I found a possible answer in Barkow and Zeidenitz (2008). Tongue in cheek, of course, but with a frightening grain of truth. On p. 9 they wrote:

[The Germans] would like to be respected for their devotion to truth and honesty. They are surprised that this is sometimes taken as tactlessness, or worse. After all, if I know you to be in error, surely it is my duty to correct you? Surely the Truth is more important than pretending to like your ghastly shirt or sports car? Foreigners just cannot seem to appreciate this.

At first, this is no explanation at all. In the foregoing text, I am the one who is behaving like a stereotypical German, according to Barkow and Zeidenitz. I am unsolicitedly and relentlessly explaining the Truth about “science” and complaining that just about the whole of continental Europe is refusing to understand me. But if you look deeper at this quote, you can find a new explanation for the translation problem. Since the Germans like the British so much (as Barkow and Zeidenitz emphasize), maybe the Germans are simply expecting the British to be like them? Maybe they are expecting the British to do their duty to Truth and politely inform the Germans that they are using the word “science” incorrectly?

To fully understand this, we also have to know that stereotypical Germans will only accept advice from a person in an appropriate position of authority (as also pointed out by Barkow and Zeidenitz). I am evidently not that person, given my doubly problematic status as an English-speaking refugee in a German-speaking university and a scientific refugee in a humanities faculty.

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My status is suspect regardless of my h-index (a concept that German humanities scholars have yet to fully understand; besides, Hirsch means either deer or fool), regardless of the obvious benefits of promoting communication between humanities and sciences and between the German- and English-speaking academic worlds. My academic reputation is also tainted by my repeated attempts to do something good for the world, contradicting powerful interests. Unwritten laws of obedience and obsequiousness require that such colleagues be politely marginalized, while at the same time acknowledging and respecting their freedom of speech.

The problem could perhaps be solved if respected British academic authority figures would correct the Germans. The trouble is, they don't, and they won't. That is because British authority figures suffer from a similarly problematic trait, namely exaggerated politeness. A British person wanting to correct a German about the meaning of "science" would do so only in an indirect fashion that may never be understood. They would never correct someone without being asked, even if it was clear that the person making the mistake was getting themselves into a downright mess. If a British person ever did make an unsolicited suggestion of this kind, British standards of behaviour would demand that she or he apologize immediately for breaking unwritten rules of social interaction. As British parents drill their children — it's not nice to intrude! Miall (1993:15) explained it like this: "English people believe in minding their own business. Few outsiders understand how deeply ingrained this belief is." Actually, the same may be said for German or Austrian colleagues who carefully avoid interfering (*einmischen*) in the affairs of their colleagues.

The solution is to promote openness to different ways of thinking, coupled with willingness to offer and accept support. Those are also the principles upon which good, constructive peer review procedures are (or should be) based. Peer review should help authors to improve their work; it should also encourage innovation rather than the status quo (Armstrong 1997).

Incidentally, this text itself gets a discriminatory flavor when I use the word "German" in two senses — German-speaking and German by nationality — or when I use "British" and "English" almost interchangeably. Readers are asked to accept my (somewhat British) apologies for this problem. It is hard to fix, because I am ignorant of Scottish, Irish, and Welsh clichés, and similarly unsure about stereotypical differences between Germans, Austrians and Swiss. That this paper is being published in a Scottish journal is an ironic touch.

Another reason for lack of communication about the meaning of "science" and *Wissenschaft* may be British embarrassment about their limited command of foreign languages. Or maybe they fear, somewhere deep down, that the Germans, with their superior balance between capitalism and socialism, their quietly functioning national health service, their fast cars and trains, their solid buildings with functioning plumbing, their logical spelling, and (dare I say it) their better beer, are as inherently superior as they once believed themselves to be?

A further problem is the different role of definitions in German and English academic cultures. In some German academic traditions, books with the word *Begriffsbestimmung* in their titles are common. The German legal tradition focuses on the letter of the law (i.e. its exact formulation), whose interpretation depends on the letters of other laws; the meaning or motivation behind the law is less important. By comparison, "The English legal system is a pile of clutter that has accumulated over the centuries ... The law, like many aspects of English life, is based on precedent. Everything is decided on what has been done in the past" (Miall 1993:72). Strict definitions are avoided for fear of exceptions, which incidentally makes the aim of this article — to define and explain the terms "science" and *Wissenschaft* (a form of *Begriffsbestimmung*) — problematic from a British

legal viewpoint, according to which the listed translation errors should be accepted as precedents.

And there's yet another problem, which was also nicely (but also outrageously ironically) explained by Zeidenitz and Barko (2008:30): "The Germans are constitutionally unable to admit being wrong or having made a mistake. With their unshakable conviction that there is a right answer to everything, they have difficulty with shades of opinion." If you disagree with that, and of course there are countless counterexamples, I invite you, as a German speaker reading this article, to take the radical and courageous step of taking my message seriously and to stop equating Wissenschaft with science. Just do it!

14: Postscript: My personal motivation

Readers will wonder why this is an important issue for me personally. I grew up in Melbourne, Australia. At school we studied "science", which comprised physics, chemistry and biology. At the University of Melbourne I studied "science" and continued at the University of New England, ending up with a "Bachelor of Science with Honours" in physics (equivalent to a master's). That a "Bachelor of Science" had nothing to do with arts and humanities could not have been clearer. If there was any confusion at all about this matter, I would have to revise half of my academic publications. Every time there was talk of humanities and sciences, new footnotes would be necessary.

I am co-founder of a conference series on interdisciplinary musicology (CIM) and the Journal of Interdisciplinary Music Studies (JIMS). The goal of both is to bring together humanities scholars and scientists as co-authors in direct collaboration to shed new light on fundamental musical and musicological questions. If there was any confusion about the meaning of the word "science", as implied by the false translations of the word Wissenschaft into English, the guidelines for these research infrastructures would have to be rewritten.

My personal interest in this topic is also based on political projects that I instigated at the University of Graz, the main ones being the Conference on Applied Interdisciplinary Research in 2010 and the Universitäre Initiativen gegen Fremdenfeindlichkeit (University Initiatives Against Xenophobia) at the same university during the previous decade. I have published academic contributions in the area of interculturality, both in general and in music (Koegeler-Abdi and Parncutt 2013; Parncutt and Dorfer 2011). I am concerned that we learn to recognize and label the different forms of discrimination against humanities that regularly occur in academic contexts, with a view to creating a more level playing field and, in the long term, improving the quality and relevance of our academic output.

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