

Say It in English, Please!*

Von Robert Schoenfeld †

Robert Schoenfeld, bis zu seiner Pensionierung 1985 „Managing Editor“ des *Australian Journal of Chemistry*, war zahlreichen Wissenschaftlern – nicht nur englischsprachigen – als Autor von *The Chemist's English* bekannt. Viele haben seine immer von Freundlichkeit getragene Offenheit, seinen Sinn für Humor sowie seinen tiefen Einblick in das Wechselspiel von Sprache und Wissenschaft sehr geschätzt. Kurz vor seinem Tod am 24. November 1987 begann er eine neue Serie von Artikeln zu schreiben. Mit „Say It in English, Please!“ wollte er Wissenschaftler ansprechen, deren Muttersprache nicht Englisch ist, die aber trotzdem ihre Veröffentlichungen auf Englisch verfassen müssen. Die folgenden neun Artikel hat er noch zu Ende schreiben können. Sie behandeln Probleme, die vor allem deutschsprachige Wissenschaftler betreffen. Nicht starre Regeln wollte er lehren, sondern seine Erfahrungen und Ansichten mitteilen, und sein Hauptziel war immer, Freude am guten Schreiben zu wecken. Bob hätte seine Serie vielleicht so angefangen: „Diese Artikel überlasse ich der wohlwollenden Beurteilung meiner Leser.“

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1. A Singular Beginning

What's that? What you said just now sounded pretty strange. Of course I understood what you meant: you wanted some help with your written English. I'll be glad to do my best. But one of the words you just used was not quite right. You said: I want *advices*. You should have stuck to the singular: I want *advice*.

It is one of the mysterious features of idiomatic English that *advice*, in the sense of “helpful recommendation”, is practically never found in the plural. The word apparently suggests “an ensemble of recommendations”, something not countable, therefore not multipliable. In a German-English dictionary *advice* is likely to be given as synonym for both *Rat* and *Ratschlag*. But in spirit it is closer to *Rat*, which in idiomatic German also is seldom found in the plural form. No native German speaker (or am I mistaken?) is likely to say “Geben Sie mir einige Räte”. He or she will say “einige Ratschläge”. You had this last phrase in mind and let your dictionary betray you into misusing *advice* as its plural. Don't ever ask for “some advices” in an English-speaking country, or you'll be greeted by a condescending smile and a reply in very basic English.

But I have been talking about advice without explaining who I am and what right I have to offer you any. I am the author of a book on the English language that most critics found pretty entertaining. This book dealt mostly with the needs of native English writers, but it provoked surprising interest among those “non-natives” who often publish papers or reports in English. My publisher, VCH, thought that I should try to write some short articles specially for this second group.

Please don't expect miracles, and above all don't believe that you can learn a second language as you learn geometry, by filling your mind with rule after rule. First of all, English is so capricious that, no sooner do you think you have found a general rule, you can think of an exception to it.^[†] And then, if you really want to master a language, you must reach a point where you can forget all the rules. In other words, I don't set out to teach, but to entertain. I hope to give you a feeling for the English language, and to communicate some of my love for it.

Just how hard it is to teach the finer points of a language, and to devise rules for them, can be seen from the example I have given. English usage treats *advice*, in most of its meanings, as a “noncount noun”. It cannot be divided into units, hence cannot be multiplied, and therefore does not take the plural **advices* (the asterisk is the grammarian's way of telling the reader that what follows is wrong). The same is true of *information*, which the English mind treats as an indivisible continuum (just like the German *Wissen*), and *progress*. A German speaker, thinking of *Informationen*, is apt to write **informations* but an English editor, with a shudder, will cross the plural out.

Now you may well ask: What is the rule concerning noncount nouns?; How do I spot them?; How does English usage differ from German? Sorry, there I cannot help you at all. Noncount nouns are not specially marked in the dictionary. Many nouns (as in German) have a sense in which they are noncount, and another in which they take the plural:

The philosopher seeks after *truth*.
I told him some unpleasant *truths*.

This last pair of sentences is perfectly translatable into German, and so are many others. But in words like *advice*

[*] Kostenlose Sonderdrucke dieses Artikels sind in begrenzter Zahl verfügbar. Bitte schreiben Sie an: Redaktion Angewandte Chemie, Postfach 1260/1280, D-6940 Weinheim.

[†] Modern linguists, who do not like to lose an argument, do not talk of “exceptions” but of “optional transformation rules”.

customs differ, and there are no rules to help the non-native. He has to develop his own feeling for English, until he stops using his native language as a crutch. In fact, if you want to learn the finest details of a strange language, you have to proceed exactly as you did when you learned your native language as a child: pay attention to the data base of words and sentences around you, try analogous sentences, be prepared to make the occasional mistake, and figure out where you went wrong.

Let me, to help you get into the right mood, say something in praise of this great love of mine, English. Books on linguistics proclaim that all languages are equally efficient, and that only the known cultural and economic factors have made English into the international language of science. I beg to disagree. English is predestined for its dominant role by its peculiar virtues. It is the perfect language "in between". It is, for instance, easier to learn for a German speaker than is Chinese, and easier for a Chinese speaker than is German.

Let me explain. Linguists would classify German as very strongly "inflected"; that means, the word stems are modified so as to show how the words of the sentence are connected. When you write

Die bekannte Zeitschrift veröffentlichte einen interessanten Artikel

the ending of the verb indicates the third person singular, and the changes to the articles and adjectives show which noun they belong to, which is the subject and which the object.

Chinese is an "isolating" language. The words remain unmodified and sit loosely side by side. Anyone studying such a language does not have to conjugate verbs or decline nouns; all he or she has to do is to pay attention to the order of the words.

English is inflecting (inflect, inflects, inflected) but only weakly so—think of how the adjective sits unmodified beside the noun. Its basic rules of grammar will not seem unduly difficult to a Chinese speaker, and they will seem ridiculously simple to a German speaker. It is easy to get a start in English—the difficulties come afterwards.

2. Caesar's Revenge

I made the point that English was a "weakly inflecting" language and its grammar was about halfway between German and Chinese. Let me follow that thought a little further.

Latin is one of the most heavily inflected languages—I still remember with horror the many endings to nouns and verbs: *amo, amas, amat*, etc. But these endings had a practical use: they served as grammatical labels. This word, so the labels said, will be the verb of the sentence, this the subject, this the direct object, this the indirect object, and so on.

With words so carefully labeled, there is really no need to insist that they be kept in a rigid order. At some stage, every Latin student is asked to translate *Brutus killed Caesar* and he dutifully comes up with *Brutus Caesarem interfecit*. But the endings *-us* and *-em* so clearly indicate killer and victim that the meaning remains the same no matter how the words of the sentence are permuted. In fact, Latin

poets shuffle their words about so radically to make them fit their hexameters that the poor student is left dizzy.

Now let us try less inflected languages. If you change the nouns about in *Brutus tötete Caesar* you have changed the meaning: the boot is now on the other foot, or rather the dagger is in the other man's hand. And now remember that English is an even more weakly inflecting language than German—that means, the order of words is even more rigid.

In fact, English is what linguists call an SVO language. In every normal sentence the expectation is that the subject S will precede the verb V and this will then be followed (if the sense permits) by the object O. Every 18-month-old child who lisps *Bobby want banana* or *Daddy drive car* has mastered the SVO principle.

German, being more inflected, is less rigid. It is true that the standard sentence is SVO but there are numerous inversions between S and V. Consider

Sobald ich rufe, *kommt er* gelaufen.
As soon as I call *he comes* running.

In fact, English puts up a furious resistance to this inversion. If it does occur, it inevitably involves an auxiliary verb. Here we go again:

Sprechen Sie Englisch?
Do you speak English?

In the last sentence, the "dummy" auxiliary verb *to do* has been created specially so that you/speak/English will appear in their customary SVO order.

So what is the non-native to do about English word order? If he is not confident, he should stick to SVO and avoid inversions like the plague. But, at the same time, he should develop an eye for exceptions. There *are* some exceptions. For example, they often occur if in a normal sentence the predicate or some part of it is moved to the front for emphasis:

<i>Inversion occurs</i> only in exceptional circumstances.	(normal)
Only in exceptional circumstances <i>does inversion</i> occur.	(emphasis)
Of particular importance <i>were the two peaks</i> in the high-frequency region.	(emphasis)

Note that the second sentence resorts to the dummy auxiliary *does* and the third has the normal auxiliary *were*. Only in such conditions *will the inversion* be acceptable.

There are some other exceptions, one of which was made famous by the early years of *Time* magazine: "Said President Coolidge ..."; "Spoke J. Edgar Hoover ..."

But these exceptions belong to literary style and not to the plain prose of the simple scientist. Let us draw the conclusion that English is a pretty rigid SVO language, almost as rigid as Chinese. Wenn Sie da etwas ändern wollen, *brauchen Sie (you need)* ein feines Ohr.

3. Where Is the Verb?

German and English, you might think, are closely related languages; their kinship expresses itself in such similarities as *house* and *Haus*. But the differences between the

languages are deep-seated and important. To startle you, I shall now argue that English grammar is nearer to Chinese than to German grammar!

That is so because both Chinese and English are dominated by the SVO word order (English admits some rare exceptions).

German is not dominated so absolutely by the SVO pattern. Most of the *Hauptsätze*, it is true, appear in this form, but we have already noted how readily the inversion to VSO occurs. About an even more radical reshuffling of the order, more in a moment.

How did German and English, whose grammars were practically identical through most of the Middle Ages, drift so far apart? Professional philologists will give you a multitude of reasons, but I shall wildly oversimplify and point out the two main ones.

First, when modern high German (*Neuhochdeutsch*) replaced middle high German (*Mittelhochdeutsch*), there occurred a change in word order. The main clause remained SVO (like Chinese) but the *Nebensatz* took the form SOV (like Japanese!).

Second, an even more fateful development took place in England. Towards the late Middle Ages, its language shed many of its inflected forms, and above all the ending of the infinitive: *werk-en/work-en* and *drink-en* became *work* and *drink*. That meant that noun and verb became formally indistinguishable, and one could be readily formed from the other. Note how easy it is to tell the verb from the noun in German, and how hard in English:

I *drink* (verb). I enjoy my *drink* (noun).

Ich *trinke* (verb). Ich genieße meinen *Trunk* (noun).

In German, you never have any doubt which is which. But as you “enter” an English sentence, you are forced to ask yourself instantly, Where is the verb?

These differences between English and German are so fundamental that I beg my readers to retain this mental image of the two languages:

German has a relatively elastic word order: the verb stands out sharply; the subordinate clauses are neatly distinguished from the main clause. This allows the construction of long sentences and, if the verb appears late at their end, this may be helpful to create emphasis.

English is firmly based on the SVO principle. The effective sentence is the one in which the reader understands immediately what the subject is and where the verb is.

I shall give an example, not infrequently found in the literature, in which a perfectly sound German sentence has been translated all-too-faithfully into English:

With light petroleum 8–10% of a green waxy material and with chloroform 25–27% of a tarry fraction of high molecular weight were obtained.

It is not that the English version is grammatically incorrect, it is just that it is clumsy. First of all, where is the subject S? A careful search reveals the unexpected: the first of two subjects is 8–10%. And which and where is the verb? It is *were*, and it occurs right near the end of the sentence, miles away from the subject, when the reader has just about given up hope.

Of course, it is easy enough to remedy our limping text. Here are two suggestions:

Chromatography gave, with light petroleum, 8–10% ...
Elution with light petroleum gave 8–10% ...

Here our S is very prominent, V and O follow promptly, and our two versions have the additional advantage that V is in the more colorful active form.

Perhaps a comparison will make the meaning of this essay clear. German and English are two different card games. In German you are free to finesse about, play your weaker cards first and finally, with great effect, throw your trumps on the table. In English the best strategy is to lead with your strong cards.

I said “the *best* strategy”. English is flexible enough to permit unorthodox strategies, and often the most brilliant stylists are the ones who defy the rules. If your English is advanced enough to let you read *William Faulkner* or *James Joyce*, you will find that these two obsessed sentence-spinners have turned the English language on its head. But you are not *Faulkner* or *Joyce*, your editors are not *Maxwell Perkins*^[*] or *Sylvia Beach*^[**] and these articles are not a guaranteed cookbook for the English sentence. All I can do is to increase your appetite, and to a humble extent improve your taste. Don't give yourself any complexes about being a non-native. Cooking sentences is a delicate art, and “natives” have their troubles, too.

4. That Strange Particle, the Article

What a nice, helpful, user-friendly language English seems at first! Think only of the article. Just *the* one for all genders, and the choice of genders is usually dictated by logic, not custom! One should think no foreigner could have trouble with the English article—unless of course such a foreigner comes from a language like Russian or Japanese, where such particles of speech are unknown. But even with the simplest parts of a sentence there are tricky differences between languages, so let us have a look at *the* English article.

German or French speakers will have little trouble with the indefinite article. In their languages, this word (*ein/eine* or *un/une*) means “one”. In English, the indefinite article started the same way. “One” became corrupted to *an* and the final *n* of that word then disappeared before consonants.

That gives us an approximate rule for the function of the indefinite article. It pulls a single item or individual, about which or whom nothing definite is known, out of a group. When we say “I saw *a* house”, what we mean is that “I saw *one unspecified member of the class* house”.

Such a complex explanation for such a simple word! Things now get worse, because we must remember that by saying *a* we have indicated (1) that nothing specific is known about the noun that follows and (2) that the noun belongs to a class that can be divided into units (in other words, it is countable).

[*] *Maxwell Perkins* (1884–1947), editor of many major American writers, including *F. Scott Fitzgerald* and *Ernest Hemingway*.

[**] *Sylvia Beach* (1887–1962), first publisher of *James Joyce's Ulysses*.

Since the indefinite article means one, no such article can occur with plural nouns:

I saw *a* house.

I saw houses.

Among the pyrolysis products were *a* ketone and several olefins.

Notice that here German runs exactly parallel to English.

When do we exchange an indefinite article for the definite article, then? As soon as the noun is either specified beforehand (I saw *a* house; *The* house was large) or will be specified right away (*The* largest house in the street was painted in white). It goes without saying (but does anything ever go without saying in linguistics?) that the definite article can be used with plural nouns (He investigated *the* pyrolysis products).

Back to the indefinite article. Suppose our sentence contains a singular, unspecified noun [condition (1)] but this noun fails condition (2) by not being countable? In that case no article is used at all (modern grammarians say “the zero article is used”). Let us have some examples:

I saw *destruction* everywhere.

We used *chromatography* to separate the mixture.

In the second example, *chromatography* clearly has non-countable status. But this status can be subtly changed:

We separated the components by *a* chromatographic technique.

Thus, chromatography is perceived as an unstructured concept, whereas techniques are countable.

All the above are just rough rules, designed to give the non-native writer a start. In the great English grammars, the rules about articles go on for dozens of pages, and there is no unifying logic that holds them together. For instance, why do we say *a* in “Such *a* technique is helpful”? Surely the use of *such* specifies the noun *technique*? All I can say is that between *such* and a singular noun there occurs either *a(n)* or the zero article (I approve of *such* determination) but never *the*.

German speakers will be relieved to learn how little English differs from their native language. The main problems come with the use of the zero article. The German speaker is a bit hesitant about this, and prefers “*Die* Chemie ist eine noble Wissenschaft” and “*Das* Klettern macht mir Vergnügen”. The English speaker just “zeroes” the two articles out (Chemistry is a noble science; I enjoy climbing).

The French language is at one with German and English about the indefinite article, but has a real horror of the zero article. A French speaker says “J’aime *les* chats”, but an English speaker says “I love cats”. And, alas, *le langage se moque de la logique* translates as *language laughs at logic*.

5. Lest We Forget

Recently, for the first time in my life, I had occasion to help translate a book from the German, and that caused me to wonder about what must have caused multitudes of translators to wonder before me: how hard it is to replace *a single word* in one language with a completely equivalent

word in another. If the word is highly scientific or technical, there is generally no trouble: *acetone* is *Aceton* in German, not an electron more or less; and an equally efficient exchange is *Schraubenzieher* for *screwdriver*. But the nearer you get to everyday life, the harder it is to achieve such a perfect match. Words acquire multiple meanings, and each of these meanings resonates with characteristic cultural overtones. For instance, the meaning of English *security* may oscillate between German *Sicherheit* and *Sorgenfreiheit*, and *Sicherheit* may mean *security* in one sentence and *certainty* in another.

Eventually (note that this word means *später* or *schließlich* in German but never *eventuell*) we reach the domain of the so-called untranslatable words—words so characteristic of one language they simply cannot be expressed in another, except perhaps by paraphrasing. It is often said that German *Gemütlichkeit* is such a word, and psychologists generally do not attempt to translate *Schadenfreude* but write it in the original language (along with *Gestalt* and *Angst*). During my recent attempt at translation I had trouble with *Verlauf*; several English words suggested themselves but none was a perfect fit—in the end I had to reword the difficult phrases. And I do believe Italian has the delightful words *magari* and *pure* all to itself. *Cercate pure, cari lettori, magari troverete qualcosa!* ([Go ahead and] look, dear readers, [with some luck] you may find something!)

However, my article is not about these oddities of the vocabulary but about something far more surprising. One expects that nouns, verbs, or adverbs will not match perfectly in translation, but the other day it occurred to me, to my astonishment, that there is no perfect one-to-one correspondence even among conjunctions. These words, after all, are so simple, so impersonal, so devoid of double meanings, that one would assume they must match from language to language, and no vocabulary could exist without a one-word expression for *and*, *or*, *but*, *if*, and the like.

Of simple, one-word conjunctions the English language contains at most three dozen. One should think other languages would have a perfectly matching set of equivalents for these humble and elementary tools of language, but no. *But* no? The commonplace English conjunction *but* translates perfectly into French *mais*, but in German it sometimes means *aber*, sometimes *doch*, sometimes (especially when followed by *instead* or *rather*) *sondern*. In fact, the conjunction *sondern* is rather a specialty of the German language because at times it implies a sharp contrast between two alternatives:

Schweitzer verfolgte seine Konzert-Karriere nicht weiter, *sondern* vergrub sich in Afrika.

In such cases it takes the two words *but instead* to translate one simple conjunction.

I shall now talk about two conjunctions that are highly peculiar to English, and which non-natives are therefore afraid to use. One of these, *lest*, is a rather literary word and more at home in a novel than in a scientific paper. The other, *unless*, is in common and frequent use, and anyone who wants to be confident in the English language should get to the point where he or she employs the word spontaneously.

Unless is the synonym of the two words *if ... not*, and can take the place of *wenn ... nicht*. I shall give a few examples, to make readers familiar with its use:

You cannot be certain of priority *unless* you check the literature.

Unless conditions are rigorously followed the yields will be low.

And a very vivid poetic example, from *Yeats*:

An aged man is but a paltry thing,
a tattered coat upon a stick, *unless*
soul clap its hands and sing, and louder sing
for every tatter in its mortal dress.

Such splendid language should make you feel at home with this conjunction, *unless* of course you have no ear for verse. In that case you need not bother with the second conjunction, *lest*, which is a word so literary that it is always used with the subjunctive. In German it can be translated with *damit ... nicht*, but with *lest* there is always an implication that the motive of the action is fear. *Lest* I be accused of negligence I shall give you two examples, both from poetry. In the first, *Kipling*, at the height of British imperialism, has a sudden premonition of the crumbling of the Empire:

Lord God of Hosts, be with us yet,
lest we forget ... *Lest* we forget.

In the second, *Oscar Wilde* imagines a fellow prisoner in Reading Gaol, about to be hanged, under the supervision of warders:

... who watched him *lest* himself should rob their
scaffold of its prey.

There, *unless* you have hearts of stone, you will not want to forget these two characteristic conjunctions, *lest* they give you bad dreams. There is a lesson in this. If you wish to become confident in scientific English, you will of course read the appropriate scientific books, and learn the required nouns and verbs from these. But *unless* you spare some time for poetry, your sentences will sound creaky, because you will not know how to link them together properly. So study your poets, *lest* you forget your conjunctions.

6. The Great Ugliness Contest

There are some German words, especially simple and honest ones like *gelassen* and *schlicht*, that I love and admire. Indeed, they make me feel envious, like the child who sees an attractive toy in a neighbor's household and complains, "Why can't we have that, Daddy?"

On the other hand, there are some German words that get enormously on my nerves, and among these *beziehungsweise* is in the front rank. Such a bumbling, pompous, bureaucratic-sounding word! And how can a modern language tolerate a conjunction five syllables long?

Many writers, in fact, seem to be aware that the word is too long for its grammatical function, and abbreviate it to *bzw.* (I must confess that, when I first saw these letters in a German manuscript, I guessed at Bayerische Zündkerzen-Werke!)

Be that as it may, German speakers, who, after all, are perfectly free to disregard my personal prejudices, have become fond of the word and it may appear not only in official documents, newspaper reports, and scientific texts, but also in serious novels. I found it in one recently, by a respectable Swiss writer. It described a celebration on board a ship whose passengers were of various nationalities, and read:

Die Deutschen tranken Champagner, *beziehungsweise* Sekt.

Now of course I have no business teaching Swiss novelists their trade. But what does the 15-letter monster right after the comma contribute to the meaning of the sentence? Would not a simple *oder* have been sufficient?

All right. Dear readers, I know that the correct use of *beziehungsweise* is a point of contention and apologize for inflicting my personal prejudices on you. You don't have to take the slightest notice of outsiders, and in your own writings you can spark off as many Bayerische Zündkerzen as you like. What concerns me, though, is what happens if you export your BZW into the English language.

It is at this moment that trouble strikes. The German speaker looks at his text and finds that the word *beziehungsweise*, abbreviated to *bzw.*, occurs frequently. He next looks at the English journals on his desk and finds that in these the word *respectively*, abbreviated to *resp.*, is of common occurrence. He then makes the fatal mistake of believing that the two words are equivalent in meaning.

Now it is true that there are occasions when the meanings of *bzw.* and *resp.* overlap, but this does not happen all that often. Let us examine what each word means. German usage may be typified by the following sentence:

Die beiliegende Tabelle gibt eine Übersicht über die elektropositiven *bzw.* elektronegativen Eigenschaften der Reagentien.

What does the word *beziehungsweise* mean here? Surely only "or, according to circumstances". The word *or* offers a choice. *Beziehungsweise* adds to this the information that the choice obeys certain laws. Let us push semantic analysis one step deeper: in German usage *beziehungsweise* applies to a situation where a certain number of entities will vary in properties or behavior, but this variation is nonrandom. It is not necessary (but it is permissible), in German, to list these entities one by one.

In this lies the key difference to *respectively*. This word means exclusively "in the order named". In other words, it is obligatory to name the members of the set of entities one by one (E_1, E_2 , etc.) and then match them, in the same order, to the properties P_1, P_2 , etc. An example is provided by the following sentence:

The percentages of iron, manganese, nickel, and zinc were, *respectively*, 30, 26, 24, and 20.

Here it would indeed be legitimate to translate *respectively* with *beziehungsweise* (if this was placed before the last number). The question is: Is *respectively* in this example really needed?

The two ugly sisters, *beziehungsweise* and *respectively*, so often confused by translators, have this in common: They sound clumsy, and nearly always they are useless. Let German writers ask themselves if, most of the time, they cannot replace *bzw.* by a simple *und* or *oder*. And let English writers ask themselves whether they really need *respectively*—after all, the orderly correspondence of E_1 , E_2 , etc. to P_1 , P_2 , etc. emerges generally quite obviously from the text.

I hasten to add that *beziehungsweise* cannot be translated by **relationwise*—thank goodness, nobody has added this ghastly word to the English language yet. Since we are engaged in an interlanguage ugliness contest, and I have mentioned *relation*, let me parade another unlovely word that turns up frequently in everyday and scientific writing, namely *relationship*. Not only is the word unaesthetic but most writers (and especially English-language journalists) misuse it most of the time. A *Beziehung* between two people or things is, in correct English, a *relation*. *Relationship* is, all too frequently, used interchangeably with *relation*, but it should not be; it really means “the nature of a relation”. But why should I ask my readers to be careful with words that are daily misused in the Anglo-Saxon press? I shall already be happy if they do not create improper *Beziehungen* between *resp.* and *bzw.*!

7. A Meticulous Investigation into a “Non-Problem”

So you want to submit a paper in English. To a journal of the American Chemical Society? Of the Royal Society of Chemistry? Or an international multilingual journal?

You are probably worried about what “subspecies” of English to write, and how to spell it. No doubt you have been told that there are great differences between British and American usage. I note that in the literary pages of the best West German dailies it is always meticulously stated that the novel reviewed has been translated “aus dem Englischen” or “aus dem Amerikanischen”.

There, I think, meticulous Germans are going too far. There is no such thing as a separate “amerikanische” language. Indeed, when it comes to Spoken Everyday English, there will be problems of communications for a resident of Newcastle-on-Tyne who has suddenly decided to settle in Peoria, Illinois. There are also certain differences (but definitely not leading to a communications gap) in The Journalist’s English because of the highly personal style of certain popular American columnists.

In The Novelist’s English, in our times, the differences have been reduced to the vanishing point (except, naturally, for the spoken word the novelist records). A German publishing house, satisfied with the rendering “aus dem Englischen” of a novel by Anita Brooker, may well ask the translator to try his or her hand next on a book by Joyce Carol Oates, “aus dem Amerikanischen”. There are, of course, the oft-quoted differences in vocabulary, such as (American usage first) *faucet/tap*, *gas/petrol*, *trunk/boot*, and *store/shop*. As for differences in grammar, it is very hard to think of any, and in most cases usages overlap. American English has two past participles for the word *to get*: *got* to express a condition or state (you’ve got a problem there, pal) and *gotten* to express completed action (I’ve just gotten a new car). Americans also have a prefer-

ence for the present subjunctive (I suggested that he *take* immediate action) where the British favor the auxiliary verb (... that he *should take* ...). I confess that my sympathies in the matter are with the Americans, for I should hate to see such an interesting verb form as the subjunctive driven out of the language altogether.

If differences in The Novelist’s English are small, in The Chemist’s English (that is, the English you write your papers in) they are practically nonexistent. These days, if you do not glance at the authors’ names and addresses, you have little chance of knowing whether the work originated in the United States, Canada, Great Britain, or Australia (as every editor knows, if the English is particularly faultless, the authors are likely to be Dutch or Scandinavian!).

It was not always so, and when I wrote my first essays on language in 1972 I thought I could detect a slight preference by American authors for the first person plural over the passive voice. But these days we all publish so much, and travel so much, that the “accents” in our writing have disappeared. Moreover, we all dream of writing one day the definitive text on our special subject, and we do not wish to limit the sales of this masterpiece on either side of the Atlantic.

There remains only, really, the question of spelling, and even that is not truly a problem. In the case of ACS or RSC publications, there are efficient copy editors at work, and anyway corrections such as *favor/favour* will almost automatically trip out of the keyboard operator’s fingers—as for international journals, they will generally remain neutral. The only thing you really need watch out for is consistency—don’t start out the British way and then suddenly opt for the American. Bear in mind the distinctions *meter/metre*, *liter/litre*, and remember that in the United States you might find your lecture theatre in the conference center.

One point you might care to note is the doubling of the last consonant in a verb before *-ing* and *-ed*, if the preceding vowel is spelled with a single letter (so *to seem* is outside the rule). The general rule is: if the last syllable is stressed in pronunciation, double the consonant (*occurring*, *distilled*, *pipetting*), otherwise do not (*entering*).

Now the British have a habit of transgressing this rule for the unstressed form of final *-l* (*travelled*, *counselled*, *cancelled*, *modelled*); the majority of Americans stay true to the rule. The British also double unstressed *-p* in *worshipping* and many Americans join them in this in *handicapped*.

Note also that the doubling of *-c*, even in unstressed syllables, expresses itself as *-ck* (*panicked*). But, with verbs like *panic* and *worship*, we have already left the realm of the more unemotional Chemist’s English. Why *plow/plough* over minuscule differences about how a word is *spelled/spelt*? How about going *picnicking*, everybody?

8. Say It Out Loud

I was recently privileged to help in the translation of a most instructive and entertaining German book. Its author is Professor Volker Neuhoﬀ and its German title is *Der Kongress*, which we changed to *Scientists in Conference* because a literal translation might have misled American

readers into thinking of the legislative body in the Capitol. The author and his translator-consultant had a most enjoyably stimulating time and became firm friends. The book, for all its careful coverage of its subject matter, sparkles with human insight and humor and our task was to see that the English paragraphs gave off a similar sparkle. The translation grew almost by itself and wittily annotated drafts flew across the continents. My feeling is that, during a few months of translation, I gained more insight into the German language than I would have acquired during a full-time course in Germanistics at an Australian university. My friend felt similarly enriched.

Anyhow, the book is about scientific conferences; and all the preparatory work that precedes them bears fruit at the moment when a lecturer faces an audience, which is intent on *hearing* his or her words.

This prompts me to take the title of this series literally and to consider the case when you, a native German speaker, deliver a lecture in English to a British, American, or international audience. First of all, are you worried about an accent? Don't be. Audiences at scientific meetings are tolerant. In Australia, most visiting German-speaking scientists, seniors or young postdocs, have gained the admiration of their listeners for their fluency, and the teaching of English in modern *Gymnasien* or *Gesamtschulen* (called *high schools* in the Anglo-Saxon world) deserves the highest praise.

If you are in a higher age group, have not benefited from modern teaching methods, and have ingrained habits of speech, your best allies are the English-speaking research scholars in your department. Read your manuscript to them and ask them to point out recurrent errors, then record the talk again and ask them to be so kind as to check it once more.

If you do not have access to such help, and are worried about how a certain word should be pronounced, consult a good dictionary. Note that certain English words have stresses that are in totally illogical contradiction to etymology: PREFerable, COMParable, PREValent. (My own pet explanation for this phenomenon is that, in the Age of Humanism and in the High English Renaissance under *Elizabeth I*, educated men enriched the vocabulary by borrowing very large numbers of words from Latin and Greek, but were not sure of the pronunciation themselves. What we now stress as PARasite was pronounced as paRAsite by *Shakespeare*.)

The most painful proof of this total lack of logic is the difference between PERjure (swear a false oath) and abJURE (renounce a vice). Consider the difference in how the vowel is pronounced, and you will ask yourself why etymology was ever so trampled on.

If in doubt, stick to etymological logic; pronounce the syllables clearly and you will be understood. Certain stresses vary throughout the Anglo-Saxon world: LABoratory/laBORatory; REsearch/reSEARCH. Let me repeat that the main thing to do is to speak clearly and not to try to solve your problems by mumbling. Your audience will follow you.

Your audience will follow you, anyway, once you are well launched into your talk and showing your slides. There is no greater magic of communication than that between an audience and a lecturer animatedly discussing a

slide. It is your opening remarks and historical review you have to worry about. Here take note of cultural gaps, especially at international congresses. Professor *Potapenko* may not be familiar with a quotation from the Bible, and Dr. *Hirakawa* may not know what the "labors of Hercules" were.

I speak as repentant sinner. I once arrived in Vancouver, Canada, at an IUPAC Congress with a prepared speech in which I referred to a certain type of organizational structure as a "hydra-headed monster". I saw a number of Chinese and Japanese faces stare at me in incomprehension, apologized to my colleagues from the Far East, and explained at the blackboard that "hydra" had nothing to do with hydrogen but was a creature from Greek fable, a snake with many heads.

There may be moments of confusion during discussion time after a lecture. Most Japanese laboratory chemists travel frequently and are therefore as good in their spoken as in their written English, but "computer chemists" travel less often (perhaps because there is less need) and there may be difficulties. Or an Indian delegate may address a question to you in excellent but to your ears monotonous English. A little blackboard work may be of help there.

In these and similar circumstances the best way is to turn to the Chair with a smile: "Mr. Chairman, we seem to have a little communications problem there." If your Chairman is good, he will help out ever so tactfully; and he is bound to be good if he has first read the proper chapter in *Volker Neuhoff's* volume. Not for nothing does this bear the subtitle *The Congress Organizer's Handbook. The Congress Visitor's Companion*.

9. No Flamin' Flashbacks!

Students at the University of Melbourne are often required to do a "prac". For this "practical exercise" they have to prepare a compound known from the literature of the thirties and forties and then to characterize it according to modern physical organic methods. And so, during "prac" time, there is often a knock at my door, and a student thrusts a photocopy of a paper at me with the words: "Bob, you know the language. Can you tell me what it means?"

I look and find that the author is someone I used to hero-worship in my youth: *Butenandt*, *Diels*, *Ruzicka* ... I say "sure", pick up the copy confidently enough and find myself confronted with a typical specimen of *Geheimratsdeutsch* such as this:

Die gekühlte und filtrierte Lösung wurde, nach sorgfältigem Auswaschen, in einen Kolben transferiert.

I rattle the words off and I find my student is more perplexed than ever. "So what am I to do first, Bob? Cool? Filter? Wash?"

I laugh. "You know what your problem is, Jim? Your author published his paper before the last chapter of *The Chemist's English* appeared in print."

And indeed, in this last chapter of my book I got ambitious and proposed a "universal stylistic grammar". It took the following form: take the meaning of what you have written and transcribe it into the script for a silent documentary film. The version in which the images follow in

the most logical order, so that the script is shortest, is the best version:

The solution was cooled. It was then filtered, and the solid material washed.

Now the *Geheimräte* had no way of reading my mind. Their great classical papers are full of “*zuerst auf eine Aluminiumoxydsäule gegossenen Extrakten*” and of such phrases as “*nach Ausschüttelung*” and “*vorher aufgearbeitet*”. The *Geheimräte*, in their movie-making, were all too fond of the device known as flashback and used it with the enthusiasm of *Alain Resnais* in *Last Year in Marienbad*. I loved that film, but only because I yielded to its sweet confusion. But for your next chemistry paper, would you go to the scriptwriter *Robbe-Grillet* and ask him for help with its structure?

Now I don't want to be accused of disrespect towards the heroes of my youth. I proudly proclaimed my “documentary” device as a universal grammar. It works pretty well in English; sentence by sentence and paragraph by paragraph it points the way towards the logical order of presentation. But in “heavily inflected” languages it may work less well on the sentence level. The words hang more

closely together, and *Die Lösung nach Neutralisierung* or *le précipité après calcination* may well constitute *one* image in the reader's mind.

But such constructions sound pretty awkward in English. This brings me to the following problem: You want to publish a paper in the English language. Do you write in German first, and then translate? Or straight in English?

Here my advice is very firm, and I am sure my readers have no need of it. If you want to be published in English, start writing your first version in that language. If you use your native language as a crutch, your prose will limp. Scholarly readers please correct me if I am wrong, but my guess is that, in the past, the great German-speaking Nobel Prize winners in chemistry were stronger in their French than in their English. Had this not been so, and had they read more *Hemingway* and less *Jules Romains*, then perhaps there might have been a slight movement away from *Geheimratsdeutsch*. Anyhow there is no excuse for you good fellows: you are not *Geheimräte*, and you have my last chapter. So fill that blank sheet with lovely, lively, loosely inflected English. But please (and here comes a vigorous Australian word), no flamin' flashbacks!