
The Write Stuff

The Journal of the European Medical Writers Association

Directions



EMWA 14th Annual Conference



17-21 May 2005, Malta

The Executive Committee would like to remind members that EMWA's 14th annual conference will be held from 17 to 21 May 2005 at The Westin Dragonara Resort in the St Julian's region of Malta.

Further details are available on the website www.emwa.org.

This conference will see the launch of our advanced curriculum, so it's definitely not one to miss.

Looking forward to seeing you there!

Michelle Derbyshire
EMWA Vice President and Conference Manager

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Vol. 14, No. 1, 2005

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Journal insights

The Write Stuff is the official publication of the European Medical Writers Association. It is issued 3 times a year and aims to provide EMWA members with relevant, informative and interesting articles and news addressing issues relating to the broad arena of medical writing. We are open to contributions from anyone whose ideas can complement these aims.

Articles or ideas should be submitted to the Editor-in-Chief (see back cover) or another member of the Editorial Board.

Subscriptions

Subscriptions are included in EMWA membership fees. Non-members can subscribe at an annual rate of:

- €35 within Europe
- €50 outside Europe

Instructions for contributors

- **The Write Stuff** typically publishes articles of 500 - 1500 words although longer pieces or those with tables or graphics will be considered.
- All articles are subject to editing and revision by the Editorial Board. Any changes will be discussed with the author before publication.
- Submissions should include the full address of the author, including the telephone and fax numbers and email address. Suitable quotes for side boxes can be indicated or they can be selected by the Editorial Board.
- Material should be submitted electronically on computer diskette or by email as an MS Word file using Arial font (or equivalent), 11 point size, and single spacing.
- Published articles generally include a recent photograph of the author (portrait picture, CV or passport style).

Back issues

Subject to availability, previous issues of **The Write Stuff** can be obtained for the cost of mailing by contacting the EMWA Head Office (see back cover for address).

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From the editor's desk: directions

by Elise Langdon-Neuner

Directions can go anywhere. Sometimes their destiny is no more apparent to us than those that are totally obvious to Adam's penguins but not to him. Let's start with the language, go onto journals and medical writing, and finally tuck ourselves up with a round robin.

Few of us would describe our work as an adventure. As a whole we medical writers do not bounce out of bed in the morning and say, "Hey ho, I'm off to a day of new adventures at work." But according to Melvin Bragg we all work with an adventure. "The Adventure of English" is the title he gives his biography of the English language. Adventures are fraught with twists and turns, and directions can take you somewhere better or worse.

Bragg narrates how the language that became English evolved from the language of mercenaries who arrived in England in the fifth century. These mercenaries, the Saxons, Angles and Jutes, were invited by the native Celts to maintain order after the collapse of the Roman Empire. Instead they slaughtered their hosts and exterminated their language. No more than two dozen Celtic words remain in the English language. The language the Germanic mercenaries brought with them was later enriched with Latin peacefully reintroduced by Christian missionaries from Rome. For almost three centuries this promising language evolution was then threatened by the same devastation Scandinavian warriors wrought upon the citizens across the British Isles. Probably the least of these invaders' brutalities was ripping jewels from manuscripts like the Lindisfarne gospels to wear as ornaments. Alfred the Great, the only English king to gain this title, stopped the savages and it is he who is credited with saving the English language. The only three Old Norse utterances that remain are they, their and them.

The ultimate success of English has been credited to its willingness to absorb other languages. In this issue Gernot Neuwirth's article on sound shifts formulates the systematic divergent directions of English and German into an etymological quiz. He explains that after the Norman Conquest tens of thousands of words were imported from French and other languages leaving only several thousand of the Old English words to survive. But survive they did. The only word that is not Old English in Churchill's famous rally of 1940, "We shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills, we shall never surrender" is the last one which, as Bragg points out, might in itself be significant.

A later war gave a direction to a small medical journal. The *Croatian Medical Journal* was founded in 1991 while war was raging in the country. Starting a medical journal during such a conflict led to insights into article writing that otherwise might not have been evident, and a better direction of teaching authors in Croatia that otherwise might never have come about. However, if lunch hours, salary, employment and ultimate outsourc-

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From the Editor's Desk

ing to third world countries are the markers, the direction being taken by the much larger journal, the *BMJ*, might not be so good— at least for home-grown technical/copyeditors. If as debated in 'Hey, it's only my opinion' pharmaceutical companies, CROs and medical communications companies start heading in the same direction more ghosts than we imagine maybe looming on the medical writing horizon.

Looking in a brighter direction, other people's lives are always of great interest. Medical writers might like to think that transmitting knowledge is the principle function of language. Not so, according to Webscout it's gossiping and maintaining social relationships that's most important. Alison's seasonal round robin with its free entry into the world of the freelancer is just what we want then. It made me wonder what I do all day. I spend most of most days and evening writing. Sometimes I read something but that is not always a good idea. This week I read that studies at the Toho University School of Medicine in Tokyo have found that if you are short-sighted and work intensively with a computer you have an increased risk of developing glaucoma. Gazing into a computer monitor more than 8 hours a day increases the risk by 82% [www.toho-u.ac.jp/english/]. All medical writers should therefore have regular eye tests for glaucoma. No, their study did not say this. I just thought I might add it as a new direction.

Elise Langdon-Neuner

Editor-in-Chief

langdoe@baxter.com

**Are you limited for choice in foundation courses?
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EMWA's Professional Development Committee (EPDC) is delighted to launch:

The Advanced Level Curriculum for the EMWA Professional Development Programme at the Spring Conference in Malta 17-21 May 2005

The advanced level curriculum will:

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5 advanced courses will be offered in Malta to complement the existing foundation programme:
For more information visit **www.EMWA.org** or see the next issue of The Write Stuff



Message from the President

by Adam Jacobs

I have recently returned from a holiday in Antarctica. Antarctica is a truly wonderful place, and I don't think I'd ever really understood the meaning of the phrase 'spectacular scenery' before I went there. As well as the most beautiful ice formations, Antarctica is of course home to countless penguins, and I spent much of my holiday watching them.



The fascinating thing about penguins is that they always seem to be very busy. The beaches I walked on in Antarctica were full of penguins waddling along in various directions: some going from their nests into the water, some from the water to their nests, and some just wandering around towards a destination that was not at all obvious to me, but appeared totally obvious to the penguin. Every one of them seemed to understand their purpose and how it fitted in with ensuring the continued well-being of penguinkind. Of course, it could be that they just looked purposeful but were in fact just randomly walking backwards and forwards because they had nothing better to do. I never stopped watching them long enough to ask them.

I'm sure there must be an analogy with medical writing there somewhere. But to be honest I can't think what it is. Answers on a postcard please...

One way in which I and other EMWA members have certainly been busy with a clear purpose was in preparing our guidelines for medical writers who work on publications for peer reviewed journals. First of all, many thanks to all those of you who helped by contributing your many sensible suggestions that helped to shape and refine the guidelines.

The good news is that the guidelines have now been finalised and approved by EMWA's executive committee. The even better news is that they have recently been accepted for publication in *Current Medical Research and Opinion*, and I hope that they will have been published by the time you read this. Have a look at the EMWA website for the latest news. Now all we need to do is make sure everybody follows them. If you know any medical writers working in publications who aren't EMWA members, then apart from telling them that they really should be EMWA members, do make sure they know about the guidelines.

I hope that by following these guidelines, those of you who work on publications will be less likely to find yourselves waddling randomly along the penguin beach of life with no clear destination.

Adam Jacobs

Dianthus Medical Limited
London, UK
ajacobs@dianthus.co.uk
web: www.dianthus.co.uk



Games with sound shifts and etymologies

by Gernot Neuwirth

At the time of the conquest of England by William the Conqueror in 1066, Old English (= "Anglo-Saxon") was still an overwhelmingly Germanic¹ language. William and his entourage brought with them Norman-French, which eroded the Anglo-Saxon language base considerably. Only several thousand Old English words survived in modern English (after the appropriate sound changes), as opposed to tens of thousands of French words and many from other languages. However, the basic grammar structure and most of its building blocks such as pronouns, prepositions, conjunctions and auxiliary verbs hail from Anglo-Saxon, as do many household words². A case in point are the names of domestic animals such as ox, cow, calf and sheep. The animals were raised by the Anglo-Saxon serfs, but their meat was eaten - and named - by their Norman masters as beef, veal, mutton, etc.

It is fascinating to look at some of the original Anglo-Saxon words still present in the English language and to compare them with, say, their German equivalents. The sound changes that led to the separation of English and German appear to have been of an uncanny regularity. A comparison can therefore be turned into an investigative game.

1. Playing with loam and foam

If one takes a word like soap, it is pretty obvious that its German translation, Seife, is somehow related to it. In most Austrian dialects, *Seife*³ turns up as *Soaf*⁴, in Viennese as *Saf*. By chance, the Viennese vowel happens to be the same as in Old English *sap*. All these forms ultimately stem from Germanic **saipon*, the asterisk denoting that the word has never been seen by a linguist. It had to be inferred because Germanic has not left us any written texts.

What is intriguing is that a whole array of other words follow exactly the same pattern in the pronunciation of their vowel (or diphthong) if not always in their spelling. Two examples are loaf and stone:

Old English	English	German	Austrian dialects	Viennese dialect
<i>hlaf</i>	<i>loaf</i>	<i>Laib</i>	<i>Loab</i>	<i>Lab</i>
<i>stan</i>	<i>stone</i>	<i>Stein</i>	<i>Stoa(n)</i>	<i>Sta(n)</i>

Thus, even if you don't know any German, you can now probably deduce the English etymological⁵ twins of *Bein*, *allein*, *Leid* (German *d* ~ English *th*), *Reif* (in the latter, com-

1 Germanic is the language which evolved into English, German, Dutch, the Scandinavian languages, and Gothic (which became extinct with the Goths).

2 In fact, the most frequent 100 words in English are of Anglo-Saxon origin, as are 83 of the second most frequent 100.

3 German *ei* and *ai* are pronounced like *i* in English *life*.

4 This *oa* is pronounced approximately like the diphthong in English *Noah*.

5 Etymology is the discipline which studies the derivation of words. For our purpose, "etymological twins" are words in two languages which go back to the same root, such as English *water* and German *Wasser*, which both derive from Germanic **watar*.

pare *Seife* for the English equivalent of German *f*). Incidentally, in the course of the centuries, the semantic contents of one and the same word in different languages can have diverged, the German word *Reif* meaning hoop, but its English etymological twin meaning cable. Got it? In the case of *Leid*, the German word means suffering, whereas its English etymological twin means to feel disgust. Should you still be at a loss, you can find the solutions at the end of this article.

Where there seem to be exceptions, there is usually a plausible explanation:

Old English	English	German	Austrian dialects	Viennese dialect
<i>lam</i>	<i>loam</i>	<i>Lehm</i> ⁶	<i>Loam</i>	<i>Lam</i>
<i>fam</i>	<i>foam</i>	-----	<i>Foam</i>	<i>Fam</i>

Shouldn't *Lehm* be *Leim*? Well, in past times it was indeed. Good old Goethe still used an *ei*-form. But more recently, the word for soil of clay and sand was re-introduced into standard German from a German dialect as *Lehm* and monopolised one of the original two meanings of *Leim*, which retained the meaning of glue. In Vienna, though, we still have a *Laimgrubengasse* (loam pit lane) and a *Laimäckergasse* (loam field lane).

Feim, on the other hand, has to all intents and purposes disappeared from standard German. Even the dialect forms (which my mother still used when she was doing the laundry the old-fashioned way) are no longer recognised by many of my students, although some report that they still use them for beer froth. And yet, even in standard German, there is a trace of foam, so to speak: An *abgefeimter Schurke* is an utter scoundrel, a seasoned criminal, like a beverage from which all froth has been removed.

The fact that like sounds in different words undergo exactly identical developments, or in other words, that language systems are subject to mechanistic laws of nature like any technical apparatus, surely worried some people in the nineteenth century.

2. The Grimm Brothers as a cultural shock

To most of us, Jacob and Wilhelm Grimm are known as collectors of popular tales. In fact, their work as comparative linguists was probably more important. They were the first to systematically explore, among other things, certain sound shifts from Indo-European⁷ into Germanic (Grimm's Second Law, Germanic Consonant Shift, Erste Lautverschiebung) and from Germanic into German (Grimm's First Law, High German Consonant Shift, Zweite Lautverschiebung). The former occurred several centuries B.C., the latter several centuries A.D., but the exact dates are controversial.

Grimm's Second Law states, among other things, that Indo-European *p*, *t* and *k* turned into Germanic *f*, *th* and *h* respectively, i.e. (ex)plosive sounds turned into fricatives which were, however, formed in the same places in the mouth as their respective predecessors were.

This explains why Indo-European **ker-* turns up in Latin (which retained the old consonant) as *cornu*, while English has *horn*. Latin *tres* corresponds to *three*, *pater* to *father*. Note that none of these English words derive from Latin ones. Rather, the English and respective Latin words go back to identical Indo-European roots.

⁶ German *eh* is pronounced like a lengthened version of the vowel in English *red*.

⁷ Indo-European, variously also termed Indo-Germanic, Indo-Celtic, or even Aryan, is the mysterious lost language from which most European and some Asian languages derive, e.g. the Germanic, Romance, and Slavonic languages as well as Greek, Persian, Hindi, etc.

Sound shifts

Again, long lists of corresponding twins could be given (for our purpose, please regard the initial consonants only), e.g. *centum* - *hundred*, *cor* - *heart*, *tonare* - *thunder*, *tegere* (to cover) - *thatch*, *pes* - *foot*, *piscis* - *fish*).

Grimm's Law worked for the bulk of the words to which it was applicable. However, there were a minority which all went in a different direction. Thus, English *seethe* and *sodden* should both have *th*, according to Grimm's Law. But apparently there was an exception. To note such seemingly inexplicable deviations from the rule was reassuring to people to whom Grimm's Law appeared dangerously deterministic. So language, the God-given differentiation between man and beast, the basis of all intellectual accomplishments, could not be pressed into a set of mechanistic rules, after all. The exceptions might even serve as proof that there was such a thing as free will.

Then, fifty years after Grimm's Law, a Danish linguist exploded such considerations. Karl Verner's Law proved that the exceptions solely depended on the position of the stress in the word. If it was immediately before the sound in question, it developed one way. If not, the other.

3. Playing with three tame doves

To return to more games here is one relating to Grimm's First Law, which deals with certain consonant shifts from Germanic into (High) German. (Low German like English retained the old consonants.)

Again, the sounds stayed close to their respective places in the mouth but changed their categories. For example, the Germanic dental or alveolar⁸ fricative *th* turned into the dental or alveolar plosive *d* (*three* - *drei*), the voiced dental/alveolar plosive *d* became the voiceless dental/alveolar plosive *t* (*dove* - *Taube*), and the old *t* turned into the alveolar fricative *s* or, depending on its position in the word, into *ts* (spelt *z* in German, cf. *tame* - *zahn*, *water* - *Wasser*).

Remembering the words *three tame doves* and their respective German etymological twins, viz. *drei zahme Tauben*, more etymology games can be played. No knowledge of German is required to guess the English opposite numbers of *zahn* (the opposite of wild) or of the numeral *zehn*, or of *Zinn* (a metal), *zu* (a preposition), *Zange* (a tool), *Zoll* (customs duty, with a meaning just slightly different from the present-day meaning of its English twin).

What may be found more exciting are the words whose semantic relationships are not immediately recognisable. Take *Zaun* (fence), which is clearly the twin of an English word with a different meaning today. Indeed, the original root word meant both the fence and the fenced-in area, i.e. a garden, or a village or the like. Got it? Similarly, the English etymological twin of *Zaum* (bridle) today denotes a pair of draught animals controlled by a bridle. If you have a problem with the vowel after the *t*, the reason is that the two *au*'s in *Zaun* and *Zaum* respectively are of different origin, the latter being of the same origin as in *Traum* (= images and sensations during sleep). Got those, too?

Zeit (= time) reveals its true English etymological twin when we look at it in the form of *Gezeiten* (= the ebb and flow of the sea). *Zeitung* (= newspaper) had an older meaning of message, news, and its somewhat literary English etymological twin is easier to

⁸ Alveolar = articulated at the upper front alveoli (sockets of the teeth)

guess if one knows that the German suffix *-ung* is the equivalent of English *-ing*. A *Zecke* (never mind the vowel after the Z - it has followed its own sound shifts) is a parasitic insect, which attaches itself to the skin from which it sucks blood, and can pass on diseases in Austria and in the Rocky Mountains.

For more revelations about the etymological twins of English words in other languages (or triplets etc., for that matter), the cheapest source is an old Concise Oxford Dictionary. Old because newer editions no longer list etymological twins etc., but limit themselves to the Anglo-Saxon root words.

4. Playing with money, animals and heads

When teaching business English for the Vienna University of Economics and Business Administration, I never had much chance of squeezing a discussion of sound shifts and etymologies into the tight curriculum. However, I was usually able to sneak in a short linguistic consideration of something that is of considerable interest to business students and to all of us, viz. money.

While the word itself ultimately derives from *Moneta*, the second name of the goddess Juno, in whose temple an ancient mint was located, a comparison of some semantically related words is more exciting.

English *pecuniary* and German *pekuniär* are loan words from Latin *pecunia* (= wealth, money). *Pecunia* in turn derives from *pecus*, which denotes small domestic animals such as sheep, goats and pigs. *Pecuniary* thus mirrors a time when wealth was expressed in terms of animals rather than bank notes, shares or automobiles. The double meaning of animal and money must have been there in the pre-Latin, pre-Germanic, i.e. Indo-European root **peku*, which became *pecus* in Latin but **fehu* in Germanic according to Grimm's Second Law as discussed above. **Fehu* in its turn exists today in German as *Vieh* (= animal), with its *-ieh* pronounced like the vowel in English *see*. Its English etymological twin, however, has completely lost its animal traits and now means money only, viz. the charge we pay for admission or for the services of a doctor or a lawyer. Got it?

The animal-money tandem is also visible in another word that fascinates both business students and all of us, viz. *capital*. Like its German equivalent, *Kapital*, it ultimately goes back to Latin *capitalis* (= main, head, as columns of sums in Roman times had the total at the top). *Capitalis* in turn derives from *caput* (head) and thus from Indo-European **kaput*. While it is rewarding to quickly follow **kaput*'s somewhat complex ramifications into German *Haupt* (= head) and English *head* (better recognisable if we know its old English form was *heafod*), the animal connection comes in with *cattle* and *chattel*, which also go back to Latin *capitalis*.

And if your **kaput* spins by now, your doctor will be only too glad to help you for a moderate **fehu*.

Gernot D. Neuwirth

English Department
Vienna University of Economics and Business Administration
Austria
gernot.neuwirth@wu-wien.ac.at

Solutions: bone - alone - loathe - rope, tame - ten - tin - to - tongs - toll, town - team - dream, tide - tidings - tick, fee



Not only English: editing a small medical journal

by Ana Marušić and Matko Marušić

Journal editors around the world would agree that the quality of writing and language in scientific manuscripts submitted for publication is frequently disappointing. In English speaking countries, manuscript and copy editors - whose job is to improve the language of the manuscript - have an advantage of being native speakers of English, with excellent knowledge of their mother tongue, grammar, and house style used by the journal. In non-English-speaking countries, journal and copy editors are almost never native English speakers, and despite their generally good command of English as a foreign language, they can never measure up to their native English-speaking colleagues. However, the problem of the language quality is not among the most difficult ones that editors of journals published in English in non-English-speaking countries encounter.

Our experience as editors of a small general medical journal in a small country undergoing great socioeconomic changes has helped us identify three additional areas that undermine the quality of submitted articles. We probably would not have learned this if we had not lived through the horrible and devastating war in Croatia in 1991-1995.

Croatian Medical Journal and war

We did not start the *Croatian Medical Journal* (CMJ) in 1991 because of the war, and certainly the war did not break out because of the journal. Our wish and plans at that time were to have a journal which would open the windows of the Croatian scientific community to the world [1] to demonstrate that there is medical research done in

Some thought starting a scientific journal in times of war was absurd

Croatia and other small countries, which is relevant for the mainstream medical science. The journal would also open the doors for international scientific criteria of excellence to enter a closed research community such as Croatian, heavily influenced by the communist ideology and economy [2]. Some members of the Editorial Board thought that we should postpone the publication of the first issue because our country's and our own destinies were uncertain. Others felt that the mere idea of starting and editing a scientific journal in the times of war and destruction was absurd. The third group insisted that we strictly separate scientific matters in the journal from the war matters. Finally, a few of us felt that our journal-to-be should face the war by documenting all its medical aspects [3]. Eventually the consensus was reached and we continued our work to launch the first issue. The dilemma whether or not to report on the war was solved by a compromise: scientific articles were to be published in regular issues while war medicine would be covered in special supplements.

The conflict in Croatia quickly escalated from police skirmishes with paramilitaries in the spring of 1991 to the real war; by the end of 1991 over a quarter of the country was under occupation. The agreement on cease-fire was reached in January 1992, but April

of 1992 brought an even more horrible war in neighbouring Bosnia and Herzegovina [4]. Croatia received many refugees from this country, and the health burden to its population increased immensely. The manuscripts addressing medical problems caused by war, from mine injuries to posttraumatic stress disorder, could not be published only in supplements anymore. We realized that they should be published in regular journal issues, which implied a strict international peer review process.

Learning about journal's authors and their problems

Had we simply made an appeal to the Croatian medical community to write for us and then waited for reports, we would not have reached our aim to cover medical issues in war. We knew we had to leave our editorial office and teaching rooms [5] and go to the battlefields, to the physicians on the frontline [6]. Many of these young and brave men and women who loved their country and their profession had enormous and important medical experience, but did not know how to translate it into writing. As editors, we had to help and teach them [7], sit down with them and listen for hours and hours (sometimes drinking helped!), and actually write the article with them. It had to be a joint venture because the authors would soon lose the track of IMRaD, and we had no competence to make professional medical judgements.

Work during the war helped identify three areas that undermine article quality

This collaboration resulted in publication of many articles in the CMJ and other international journals [1]. Some would describe our role in that process as ghost authorship, but what we really did was teaching. Such an approach also gave us an opportunity to build some great friendships and gain faithful readers, authors and supporters of the journal. Although our teaching efforts were not systematic and we cannot tell the extent of the effects of our intervention, our retrospective analysis of the academic development of authors we tutored during the war showed that we actually helped them become academic professionals. They have had higher numbers of subsequent publications and have advanced further in their career than their colleagues who did not receive such tutoring from the journal [8].

Editors and battlefield doctors

In the beginning, we thought that the major obstacle in our work with colleagues from the frontlines would be writing in English. Soon we realized that this was the least problem of all. What produced the greatest difficulties was their lack of skills in data analysis and presentation and lack of knowledge about the structure of a scientific article [9].

Most of the war medicine reports at that time were neither planned nor controlled studies, for obvious reasons. As a rule, they were all retrospective studies without proper controls - narratives with numbers, tables, and occasionally a map or some terrible illustration. Many of the prestigious international medical journals realized that proper clinical trials were not possible in war circumstances; however, the medical experience gained in the war was important and had to be shared with the global medical community.

Peace writing is war writing by other means

Famous Carl von Clausewitz once said, "War is the continuation of policy (politics) by other means" [10]. We can paraphrase his words in describing our work with authors after the war: the problems we had with authors in time of peace were the same as

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Not only English

those we had in times of war. The only difference was that outside the war context, the authors were more numerous and less aware of their shortcomings.

Our authors learned about our editorial author-helpful policy during the war and expected help. In a small scientific community, which did not stimulate excellence and international testing of ideas and results [2], they needed help indeed. We also realized that the journal would not get enough publishable manuscripts if we did not extend our war

The authors lacked skills in data analysis, presentation and article structure

policy to peacetime. However, we could no longer work with authors individually because there were too many of them. We had to develop a totally new strategy for education in scientific writing and research methodology [11]. Thus, today our editors play four roles instead of one: they act as 1) teachers working individually with very inexperienced authors, who have excellent data lost in extremely poor presentation, 2) teachers providing mandatory courses for medical students at all four Croatian universities and a medical school in neighbouring Bosnia-Herzegovina, 3) mentors offering electives in research experience and writing for medical students, and 4) educators providing continuing medical education courses.

It is still too early to see if we have made an impact [12] but now, when we receive a poorly written manuscript from authors who have attended our course, we can refer them back to their notes and handouts from our course.

The four requirements for editing manuscripts

The lesson we learned was "don't bother with English first, start with data presentation and insist on strict adherence to guidelines for authors." We now have four levels of manuscript editing for each article - surprisingly, this is true not only for articles coming from less privileged communities, but often for those coming from the developed world as well. We first address the design of the study - the editor cannot change poor work in the past, but we can insist that it is clearly described. Then we look at the logic, completeness and clarity of the story, which should start with a hypothesis and end with a conclusion based on that hypothesis. After that we adjust the manuscript to the IMRaD structure. English grammar and style come last, as tasty ornaments on a cake.

Ana and Matko Marušić

Croatian Medical Journal

Zagreb University School of Medicine
marusica@mef.hr, mmarusic@mef.hr

References

1. Marušić A, Mišak A, Kljaković-Gašpić M, Marušić M. Educatione ad excelentiam - ten years of the *Croatian Medical Journal*. *Croat Med J*. 2002;43:1-7.
2. Marušić A, Marušić M. Small scientific journals from small countries: breaking from a vicious circle of inadequacy. *Croat Med J*. 1999;40:508-14.
3. Marušić A, Marušić M. What can medical journal editors do in war? *The Lancet*. 2002;360 Suppl: s59-s60.
4. Bagarić I. Medical services of Croat people in Bosnia and Herzegovina during 1992-1995 war: losses, adaptation, organization, and transformation. *Croat Med J*. 2000;41:124-40.
5. Marušić M. War and medical education in Croatia. *Acad Med*. 1994;69:111-3.
6. Marušić A, Marušić M. Clinical teaching in a time of war. *Clinical Teacher*. 2004;1:19-22.
7. Marušić M, Marušić A. Good editorial practice: editors as educators. *Croat Med J*. 2001;42:113-20.
8. Marušić M, Markulin H, Lukić IK, Marušić A. Academic Advancement of Authors Receiving Tutoring from a Medical Journal. *Med Teacher*. in press.
9. Sharp D. Kipling's guide to writing a scientific paper. *Croat Med J*. 2002;43:262-7.
10. von Clausewitz, C. *On war*. New York: Everyman's Library, 1993.
11. Marušić A, Marušić M. Teaching students how to read and write science: a mandatory course on scientific research and communication in medicine. *Acad Med*. 2003;78:1235-9.
12. Hren D, Lukić IK, Marušić A, Vodopivec I, Vujaklija A, Hrabak M, Marušić M. Medical students' attitude towards and knowledge about science and scientific research. *Med Edu*. 2004;38:81-6.

Editing at the *BMJ*: then and now

By Margaret Cooter

The *BMJ* has been appearing, week after week, for 165 years. I've been helping make this happen for just 18. During those two decades, what technical editors have been required to do has changed tremendously. Authors' expectations surely have changed as well.

When I joined the *BMJ* as a raw trainee in 1987, wondering what to expect, I was told: "You'll be editing for 5 hours a day, and proofreading for 2." We novices - three, then four, then five in a large room with a shared telephone and a rarely used computer - worked on paper, using pencil to make our careful, plentiful changes. These were overseen by a senior editor, painstakingly revised (in pen) during the 6 or more months of our training. House style was taken extremely seriously, especially the famous "no hyphens" dictum (see box). Trips to the BMA library to check references were frequent, and the lunch hour was a very important part of the day.

No hyphens in the *BMJ*?

Contrary to popular belief (and easily verified by a glance at any page), the *BMJ* does allow hyphens. But not just any hyphen!

The paucity of hyphens, no doubt the diktat of a long-ago editor, is nicely complemented by another linchpin of *BMJ* style, the desire to eliminate "noun strings". These are often sloppily strung together with hyphens and crop up commonly as jargon in scientific writing, making understanding difficult. The temptation in editing is simply to readjust the hyphens where necessary, so the "no hyphens rule" improves matters by requiring these noun clusters to be clarified during editing. If you think about these phrases, what do they actually mean? "Movie tobacco-use exposure category" is difficult and lengthy to unscramble. On a seemingly simpler level, are "doctor visits" visits from the doctor or visits to the doctor?

BMJ style has never banned hyphens when they need to be used to avoid ambiguity (re-creation, for example, or two-day cases). Recently, as we've been thinking about readability, more and more uses of hyphens have been approved - for example, in two-word noun or adjectival phrases that include a preposition (run-in, trade-off, in-house). From the memorable "jelly-like mucus", the use of hyphens with such suffixes has spread to -wide, -style, -type, -free - but it has yet to apply to prefixes, apart from non-, mini- and sometimes mid- and anti-.

The Write Stuff

Editing at the BMJ

Once edited, papers went to our typesetters to be turned into galley proofs, which were read against copy (sometimes heroically, given the many changes in both pencil and pen on the original), corrected, and then returned to the *BMJ* office for mailing to authors [1]. On their return, which could take 2 to 4 weeks, the author's changes were "dealt with" and the proofs read for sense and conformity by a colleague and then carefully checked by The Editor - who was always alert to deviations from house style. Our style book was long and detailed, and I volunteered to put it on the computer. All changes to style were agreed in meetings that involved everyone in the office. Change was slow.

In the late '80s, the aim was to have a homogeneous product, arrived at by all technical editors being trained by the same person to very rigid standards, and maintained through proofreading each others' work (and the threat of The Editor's reprimand). Authors received proofs that had been drastically revised. Whether to take in authors' changes was up to the technical editor, who contacted the author only in cases of extreme difficulty. "Man proposes, God disposes" was the *modus operandi*.

The 21st century

In 2005, the computer is ubiquitous at the *BMJ*, along with email - and just about everyone involved in putting the journal together mixes and mingles in an open-plan office. Technical editors no longer proofread; freelance proofreaders come into the office (and they read on paper, not on screen). Half the technical editors are freelance; all have had intensive training in *BMJ* style. Paste-up of pages is a thing of the past, and typesetting - once a matter of retyping by anonymous operators in Bedford, with a one-armed messenger taking "the bag" of copy and proofs back and forth - is now given to Colin, Malcolm, Gordon, and Clinton. Authors no longer submit three copies, double-spaced, when they send their articles for consideration - submission and notification of acceptance is done on line, but "the hanging committee" still sits around a table every week, selecting papers for publication. Communication with authors is usually by email - and there is much, much more of it - but because of the steps in the reviewing and editing processes, notification of acceptance and arrival of proofs are not necessarily quicker.

New sections have been added to the print journal, starting with News, which now occupies six and sometimes eight pages an issue. It has its own set of editing requirements and conventions, and of course must be prepared as near to press day as possible. Commentaries on papers are common now, commissioned from experts and (to avoid unpleasant surprises) sent to the paper's authors along with their proofs. New sections have been added; entire new publications have arisen. The careers supplement (*bmj-careers.com*), with articles of interest to doctors scanning the job advertisements, is constantly enlarging its editorial content, and the student *BMJ* was launched 10 years ago; it appears monthly and contains a mixture of articles from the *BMJ* and its own material relevant to medical students.

The freedom of the web

With computers and the internet came *bmj.com* - a quantum leap not just in accessibility but, for us, in the different processes needed for preparing material and the new kinds of material it made possible. Access to *bmj.com* was free from its inception in 1995 [2] (full text arrived in 1998) until January 2005. Now the personal subscription is

£ 20 (\$37, €30) a year, which gives access to the previous 52 weeks of the journal. Everyone currently has free access to all content prior to that, all research papers, and the current week's journal, and Rapid Responses, the electronic letters page [3].

For reports of research, the web's possibilities led first to ELPS (electronic long, paper short), whereby two versions of an article are prepared, a detailed one for the web and an abridgement for print. Later we jumped on the "pre-publication" bandwagon and now post articles on bmj.com as soon as they've been edited, checked by authors, and proof-read. The difficulty of making changes to Online First articles once they've been posted on bmj.com makes it even more important for authors to check their proofs carefully.

The workload in other sections of the journal, not just the research papers, has increased - "web extras" sometimes are posted as supplied by author (long obituaries, statistical appendices, extra references, for example) and sometimes are carefully edited (news items). Deadlines and timing have always been important, but with electronic publication, timeliness becomes more of an issue.

"Five hours of editing ..."

On a good day, technical editors may actually spend 5 hours doing "real editing" - the problem solving involved in making the paper clear, concise, and correct. The main task of the technical editor, along with correcting spelling and grammar, may seem to be "imposing house style", but in editing we are really aiming at something deeper - namely, making articles understandable by non-specialists and foreign readers [4]. Editing requires not just a knowledge of grammar and punctuation, but a level of critical analysis. The technical editor is the person who will read the paper most carefully.

"... and 2 hours of ..."

Then what do we do in the remainder of the work day? Processing and administration, mainly, which includes more and more emails. Nowadays technical editors have a lot of communication with authors - during editing if a major question arises, such as numbers not being supplied along with percentages; while sending proofs (which go as Word files; authors use Track Changes for amendments); on queries still remaining after proof stage; about the date of Online First publication; and sometimes about corrections. All this communication is definitely a good thing for both editors and authors - they can work together, exercising the fine art of compromise. Much more guidance is available for authors (bmj.com/advice) and the feedback during the review process has also been augmented [5]. The drive towards transparency [6] has resulted in the addition of contributors [7], detailing who did what in the research and writing the paper, the declaration of competing interests [8], and statements regarding ethical approval.

Production changes

The *BMJ* certainly looks different than it did 160, or even 20, years ago. Late last century it was properly redesigned, rather than left to evolve [9]. The sedate blue cover with its list of contents has been replaced by attention-grabbing photos and teasing tag lines. Fitting new features into the design, along with a typesetting system that uses tagging

The Write Stuff

Editing at the BMJ

to put elements within articles into the design of the page, makes new challenges for editors and brings them into close contact with IT specialists. Any new section has either to be modelled on an existing one or to be designed from scratch and new tags and conversions developed. The elements needed include article identification lines, DOIs, titles, authors, addresses, acceptance dates, levels of headings, types of boxes, pull quotes, captions, references. As the numbers of sections proliferate, each with its own tagging quirks, confusion and error lurk just around the corner, so we've developed something that didn't exist 20 years ago - a set of written procedures that threatens to take over the style book in length and complexity.

Although technology has made much possible in terms of production, we're still using pencil-and-paper methods to track editing and proofing - but we're developing a content management system to manage workflow of accepted articles (in much the same way that our electronic submission system BenchPress manages articles). This will of course mean yet another adaptation to new processes. But still we glide on, serene as a swan ... all the action is hidden below the surface.

When the content management system kicks in, we'll have gone full circle to something resembling galley proofs. The aim of the system is to produce "stable copy" which can then be formatted for web, print, or republication elsewhere. This edited, checked, read neo-galley can be published on the web (as soon as ready) or gathered into an issue for publication in print, with proofreaders checking at this stage for layout (word breaks, spacing in tables, placement of figures, etc).

And the future?

The economics of journal production seem to be coming to the fore – not just the move to charge for access to some sections of *bmj.com*, but other developments that are common throughout publishing. One initiative at the *BMJ* is out-of-office "flexible workers" who work from home 3 or 4 days a week. This benefits workers by cutting out their commuting time, but a greater benefit is that it reduces the need for expensive inner-London working space. We've experienced our fair share of exercises to save money, run by expensive consultants, and new salary scales (adjusted downwards). Journals are becoming more and more market driven and their marketing departments often have the draconian final say, over-riding experienced editors. Outsourcing of aspects of production is becoming a reality, such as "preprocessing" of articles (electronic clean-up and tagging) in China. At the time of writing, we're awaiting the appointment of a new editor. Meanwhile, emails and urgency have eaten up what used to be the lunch hour.

The five most common editing changes at *BMJ*

- Making the antecedent of pronouns clear: what does "it" or "they" or "this" actually refer to?
- Changing passive verbs to active verbs
- Providing the missing comma in a pair (e.g. in: Dr Smith former editor of the *BMJ*, said...)
- Removing unnecessary words ("it is possible that" is better expressed as "may")
- Making data consistent in the paper (e.g. percentage was given in abstract and number in text - and they didn't correspond)

Margaret Cooter

Managing technical editor,
BMJ, London
mcooter@bmj.com

References

1. Cooter M. Countdown to the *BMJ*. *BMJ* 1991;303:1615-9.
2. Delamothe T. *BMJ* on the internet. *BMJ* 1995;310:1343-4. (<http://bmj.com/cgi/content/full/310/6991/1343>)
3. Editor's choice. Rapid responses and the death of the editor's arts. *BMJ* 1999;318(9 January). (<http://bmj.com/cgi/content/full/318/7176/0>)
4. Cooter M. Putting on the style. *BMJ* 1999;319:1592. (<http://bmj.com/cgi/content/full/319/7225/1592>)
5. Smith R. Opening up *BMJ* peer review. *BMJ* 1999;318:4-5. (<http://bmj.com/cgi/content/full/318/7175/4>)
6. Smith R. Beyond conflict of interest. *BMJ* 1998;317:291-2. (<http://bmj.com/cgi/content/full/317/7154/291>)
7. Smith R. Authorship is dying: long live contributorship. *BMJ* 1997;315:696. (<http://bmj.com/cgi/content/full/315/7110/696>)
8. Smith R. Making progress with competing interests. *BMJ* 2002;325:1375-6. (<http://bmj.com/cgi/content/full/325/7377/1375>)
9. Delamothe T, Smith R. Redesigning the journal: having your say. *BMJ* 1996;312:232. (<http://bmj.com/cgi/content/full/312/7025/232>)

Help for medical writers.

How to tell the difference between male and female medical writers

This is not one of those jokes. Sometimes it is hard to tell whether a medical writer is male or female. A lot of our correspondence is by email with people we have never met. Maybe hundreds of emails are exchanged before one day you need to know whether your correspondent is male or female, perhaps merely to report what he or she has told you to someone else. In such a report it might be monotonous to continually state Sandy (or Terry) said this, Sandy said that. The occasional pronoun might lighten the text.

As usual help is at hand in the Internet. Next time you're perplexed just enter a block of your correspondent's text onto Gender Genie at www.bookblog.net/gender/genie.html. This site analyses whether the author of text is male or female. The analysis is based on research suggesting that generally women tend to write in a more personal, "involved" style and men in a more "informational" style.



Round robin

by Alison McIntosh

I'm not sure if "Round robin" letters are something that people receive outside the UK, but every year around Christmas time the post bag is full of these little ditties from people who lead exhausting lives, full to the brim with exciting news of people you are never likely to meet! Here is my contribution to the pastime: a year in the life of this freelance medical writer.

When I look back over 2004 and pick out the highlights I find my year got off to a hectic start, I had plenty of work to keep me busy and as a consequence I was back in the office by 2nd January. I kicked off 2004 by completing an abbreviated Clinical Study Report (CSR) for a client within the month. By mid February I had three pieces of work on the go for different clients all with deadlines that clashed. I kept my head and as expected at least one of the deadlines slipped, leaving room to breathe.

As the March deadline approached for preparing handouts, homework etc for my QC workshop at the EMWA Budapest Spring conference I was working on a brochure for a communications company and finishing off a manuscript needed for an International AIDS conference in June (with a deadline for submitting to the client's publisher of late April). To gain my EMWA PDP certificate I needed to complete two additional workshops, so my pre-workshop homework had to be submitted on time. I worked hard and managed to board the plane on the 6th April for Budapest with my pre-workshop homework submitted, both jobs completed and both clients declaring satisfaction.

The plane journey from Heathrow to Budapest was amazing, full of medical writers all chatting like long-lost buddies and catching up on experiences from the last year. I always feel I meet lots of friends at the EMWA Spring conference. Beginning the minute I bump into another medical writer in the airport lounge, I manage to complete most of my "office chat" for the year in that one, short week. The conference is the ideal place to go to recharge your medical writing batteries and reassure yourself that you are not "home alone."

When I returned from Budapest one of my first tasks was to complete my accounts as my year end is April, this together with completing my EMWA post workshop homework was top of my "to do" list. Also at the top of my list was marking the post workshop homework that delegates had submitted for the QC workshop I presented at the conference. My post workshop homework was completed more or less on time, the marking I finally achieved sometime in July, and the accounts I'm embarrassed to say came a good deal later (exactly when is a secret between me and my accountant!)

In April I had been asked by a client to submit a costing for a CSR and I finally heard in July that this was not going ahead. I also submitted costings for at least two other tasks in June and July which did not come to fruition. Although this can seem like a time-consuming exercise, it is an experience you must get used to as a freelance writer. Often, enquiries are from people who are only at the stage of pitching for a task, or they are

gathering several quotes from different writers in order to make an informed choice. Once you understand this it stops being so disappointing.

By July I was involved in writing a protocol for a client, but the timeline began to slip, and writing finally got underway in August. However, I was also contracted to write a CSR beginning in September, so not for the first time, I had two deadlines careering towards one another. Compounding this my daughter started school in September and was part-time for the first 3 weeks. Evenings and weekends disappeared and I would not like to relive September 2004 again in a great hurry.

By the end of September, beginning of October, I had completed most of the work for the protocol and had almost finished the first draft of the CSR. Things had eased considerably. October and November passed by fairly routinely, with enough work to keep me busy. I received my EMWA PDP certificate (Pharmaceutical Option) at the beginning of December and completed the CSR around the same time. I was just looking forward to a relatively quiet December when I received requests to complete a large number of case narratives, a manuscript outline and a conference abstract. The case narratives I carried forward into 2005, the manuscript outline and abstract were completed and returned to the client just before Christmas.

As a freelance medical writer you start the year never really knowing exactly what medical writing tasks you are going to be asked to complete, and I would have to say that 2004 was a fairly typical year. If I had written the round robin about the previous year I would have told you I was flown to San Diego for the 2003 ICAAC conference, put up at the Hotel del Coronado where 'Some Like it Hot' was filmed, and paddled in the Pacific Ocean all at the client's expense, but that unfortunately was not a typical year. On the other hand.....I do still have the memories!



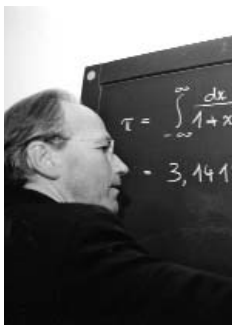
Alison McIntosh

AAG Medical Writing
Loughborough, UK
<http://www.aagmedicalwriting.co.uk>
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The art of counting infinity (Part 2)

by Rudolf Taschner

Continuing from part 1 of this article published in volume 13 Number 2...

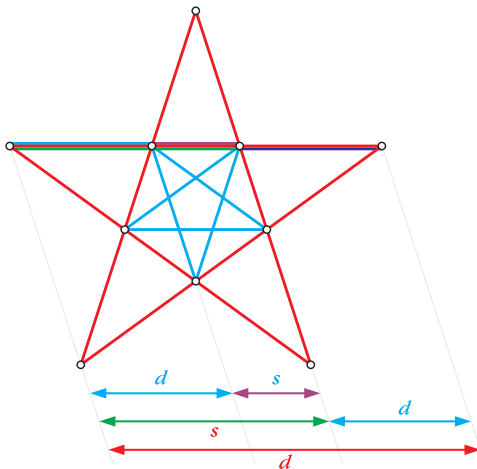


Fig. 2: The pentagram

The pentagram was used by the Pythagoreans as the seal of their secret society and according to a quite plausible legend here again they tried to discover the common measure of two lines. The pentagram, drawn in red, distinguishes itself by the remarkable fact that the points of intersection of the diagonals are the vertices of another, smaller, inscribed pentagram, drawn in blue. Thus we see not only the lengths of the red diagonals d and the red laterals s , the connection between two contiguous points, but also the lengths of the blue diagonals d and the blue laterals s .

How many times will the red lateral fit into the red diagonal? One glance at the symmetry of the figure will tell us: once, with the blue diagonal as remainder. Now we ask, taking our cue from the ancient Greeks' method of alternate removal, how many times will the blue diagonal fit into the red lateral? Again, the symmetry of the figure tells us: once, the blue lateral being the remainder. And yet again, according to the method of alternate removal, we have to ask ourselves, how many times will the blue lateral fit into the blue diagonal? But we have already asked this very question concerning the red lateral and the red diagonal. It will always lead to the same series of answers, a never-ending sequence, just as in every pentagram yet another pentagram can be inscribed, on and on to infinity.

The Pythagoreans formulated their discovery by saying, "The diagonal and the lateral of a pentagram have no common measure". No straight line, however conceivably short, will fit in both the diagonal and the lateral of a pentagram as an integer. The ratio of diagonal and lateral of a pentagram has since been fittingly defined as "irrational".

This, however, is only the beginning. Archimedes had already discovered another geometrical ratio which later turned out to be "irrational": the ratio

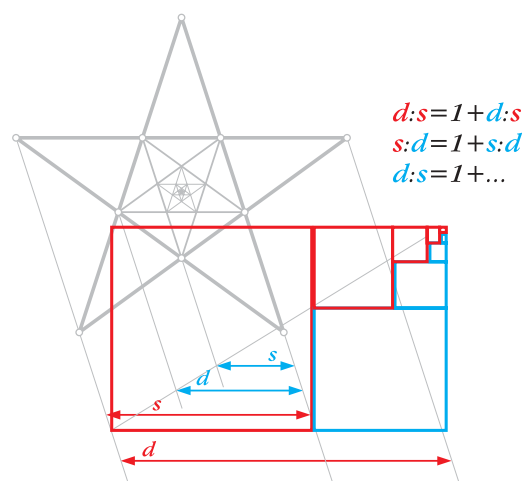


Fig. 3: The division of the diagonal by the lateral of the pentagram

between circumference and diameter of a circle, which is designated by the Greek letter π . Since it is irrational, π cannot be represented as a finite decimal number - the commonly known value of 3.14159 is only a crude approximation - and cannot ever have a periodical sequence in its decimals. At around 1600, the Dutchman Ludolph van Ceulen inscribed - only as a mental operation of course - a polygon of 4.6 quadrillion vertices into a circle, and thus computed 35 digits after the decimal point of π . Naturally, this is not the exact value either. The most powerful computer available today has produced a far greater number of digits after the decimal point; the current record is at more than 1.24 trillion digits. What this means is best conveyed by the image of a book, or rather a huge library with a quarter of a million books containing a thousand pages each, 248 million pages with 5000 characters a page, and page after page most monotonously filled with the decimal digits of π , and no hope of even the slightest regularity in the sequence of numbers. On the contrary, the figures 0 to 9 seem to crop up as randomly as the numbers 0 to 36 at the roulette tables of Monte Carlo.

The weirdest thing about this obstinate computation of the digits of π is that even knowing a trillion digits will tell us next to nothing about its further decimal development. Whatever the might and capacity of the most powerful computer ever to be devised by man, it will never be able to deliver to us the infinite number of decimal digits of π .

And this is only the starting point of the story of infinity, because both the irrational ratio of diagonal and lateral in a pentagram and the irrational ratio of circumference and diameter in a circle that we call π , are only two out of an infinite number of irrational ratios, which can be visualised as points on a scale - even though we should mistrust plausible arguments drawn from sensory perceptions, particularly when dealing with matters infinite. We can also accommodate all "rational" ratios on this scale, the results of divisions of integers. The German mathematician Georg Cantor even demonstrated that these rational ratios can be enumerated as completely as the numbers themselves. In other words, there is a procedure that keeps producing rational ratios and will, assuming one waits around long enough, include each arbitrary given rational ratio. This may not seem too amazing. What Cantor went on to prove, though, was astounding indeed. If somebody came up with a procedure that kept producing irrational ratios such as the two mentioned before, it would *never* be able to be exhaustive, no matter how sophisticated it might be. There would always be one more irrational ratio than one could track down and which the procedure had failed to discover.

Cantor thought that, beyond the infinity of numbers he had discovered, there existed even more complex degrees of infinity, saying that the infinity of points on a scale by far surpasses the infinity of numbers. This deduction, however, might possibly take us the wrong way. The eminent mathematician Luitzen Egbertus Jan Brouwer even had serious doubts as to whether human logic was permitted to ponder the infinite in the same way it does the world of the finite. In this case, we would not be free to conceive and represent infinity as a given entity and object of mathematical enquiry, unlike numbers. Rather, it is a borderland term which eludes the human quest for knowledge.

Therefore we have but the poet's words to speak about infinity. There is hardly a more poignant description of the perception of infinity than this key passage from Robert Musil's novel "The Confusions of Young Törless". To overcome some inner restlessness, Törless lies down on the lawn of the boarding school. He "threw himself down in

Infinity

the pale, rustling grass at the foot of the almost windowless side wall. The sky spread out above him, in that pale, ailing blue, so typical of autumn, and little white round clouds scudded across it. Törless lay stretched out on his back and, dreaming vaguely, squinted between two treetops in front of him that were shedding their leaves. (...)

And suddenly he noticed— and he felt as though this was happening for the first time — how high the sky really was.

It came to him like a shock. Right above him there gleamed a little blue, unimaginably deep hole between the clouds.

It seemed to him that if one had a long, long ladder, one should be able to climb into that hole. But the further he pushed his way in, lifting himself up with this gaze, the further away the blue glowing background retreated. And yet he felt as though it should be possible to reach it and hold it, merely with one's gaze. The desire became painfully intense.

It was as though the power of vision, strained to its limit, was flinging glances like arrows between the clouds, and as though, aim as far as they might, they always fell short.

Törless thought about this now; he tried to remain as calm and sensible as he possibly could. 'Of course there is no end,' he said to himself, 'it goes on and on, ever onward, into infinity.' He kept his eyes fixed on the sky and said this out loud, as though to test the power of a magic spell. But without success; the words said nothing, or rather they said something quite different, as though they were referring to the same object, but to another strange, indifferent side of it.

'Infinity!' Törless knew the word from maths class. He had never imagined anything particular by it. It was forever returning; someone must have invented it once, and since then it had become possible to calculate with it as surely as one did with anything solid. It was whatever its value happened to be in the calculation; Törless had never ventured further than that.

And now, all of a sudden, the idea flashed through him that there was something terribly unsettling about the word. It struck him as a concept that had formerly been tamed, one with which he had performed his daily little tricks, and which had now been suddenly unleashed. Something beyond understanding, something wild and destructive seemed to have been put to sleep by the work of some clever inventor, and had now suddenly been woken to life, and grown terrible before him. There, in that sky, it now stood vividly above him and menaced and mocked.

Finally he closed his eyes, because the vision tormented him so."

Rudolf Taschner

Institute for Analysis and Scientific Computing
Technical University of Vienna, Austria
Rudolf.Taschner@tuwien.ac.at
Taschner@math.space.or.at



The webscout: the nature of language

by Joeyn Flauaus

Approximately 6,800 different languages are spoken world-wide. Mandarin Chinese is the most widely spoken language, by about 800 million people, followed by English. English is assumed to be spoken as a native language by around 400 million people in the world and as a second language by 350 million to possibly 1 billion.

What caused the evolution of language? Communication is the source and motivation of language evolution, and language changes primarily through communication. Gossiping and maintaining social relationships is the principal function of language. Surprisingly, the function of human language as a tool for transmitting knowledge is of secondary importance. Language essentially communicates thoughts and feelings and therefore constitutes the basis for our social, emotional and cognitive development.

The use of language clearly distinguishes *Homo sapiens* from other species. Although most scientists agree to a great extent on the principles of language evolution, how the human brain processes language still needs to be unveiled. The linguistic theory of a "universal grammar", proposed by N. Chomsky, E. Sapir and R. Montague, assumes that principles of grammar, shared by all languages, are innate and fixed and are part of the genetic endowment of human beings.

But what is the origin of a specific language, e.g. English? How do we create new terms? How many kinds of languages are invented by humans? The following links provide some insights into different aspects of language.

www.krystal.com/english.html: This page provides interesting facts about the origin and history of the English Language. The huge selection of borrowed words from other languages (e.g. German, French, Greek, and Latin) is a nice add-on to broaden your horizon and to impress other people. Did you know that "taboo" is a borrowed word from the Tongan language?

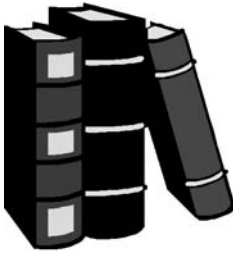
www.kami.demon.co.uk/gesithas/index.html: The web page of the historical society "Da Engliscan Gesipas" is devoted to the study of the Anglo-Saxon period. Many facets of Anglo-Saxon culture and language are covered, including literature, anthropology and mythology. Readings of Old English poetry with audio files and a short introduction to Old English is provided.

www.handspeak.com: This page gives an overview of all kinds of visual languages, such as sign languages (with animated graphics), body languages, baby sign, international sign, and animal sign. Interesting insights into the world of deaf people are pointed out. Did you know that American sign language shares more with spoken Japanese than it does with spoken English?

www.wordspy.com: This page provides a glossary of new words and phrases that have appeared several times in written form. The index clearly shows that language is a flexible tool which changes a lot over time and mirrors cultural and scientific development in each society.

Joeyn Flauaus
Trilogy Writing & Consulting GmbH
Frankfurt, Germany
joeyn@trilogywriting.com

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**In the bookstores:
What malady shall I have today?**

by Karen Shashok

VanderMeer J and Roberts M, editors. The Thackery T. Lamshead Pocket Guide to Eccentric & Discredited Diseases. San Francisco, Portland: Night Shade Books, 2003. ISBN 1 892389 54 1 (hardcover). 297 pages, about 25.00 euros (hardcover).

Any book with its own website (www.lamsheadguide.com) and about 745 Google hits more than a year after publication will clearly have attracted the attention of a lot of people. Most of those people, to judge from the many glowing reviews on the net, will have laughed themselves almost to death while reading this eccentric opus about imaginary diseases and their fictitious compiler. For readers who enjoy sophisticated science spoofs, the book is a slick example of this uncommon genre, and has been highly acclaimed in science fiction circles. For those of you who work daily with information about medical conditions, the parade of freak diseases and disorders, described and illustrated as though they were actual chapters from an early 20th century medical textbook, will either go straight to your heart or touch a nerve.

The The Thackery T. Lamshead Pocket Guide to Eccentric & Discredited Diseases is funny on several different levels, and the skill in parodying all of them holds delights for readers with an interest in historical elements of layout, typesetting and illustration as well as pathology and medical education. The odd-ball and often gruesome texts, which often deal with bizarrely horrifying symptoms, may not quite be everyone's idea of humour. But readers ready for some ghoulish, gothic medical and literary satire spiked with a generous dose of creative West Coast mind bending will welcome the Guide as the greatest thing since disposable syringes.

The ailments collected here are surreal. Many of them involve mental as well as physical processes, and paranormal phenomena are treated in the same matter-of-fact manner as signs and symptoms that might be considered objectively observable. What contributes to the fun is that it is sometimes hard to figure out where the patient's altered state ends and where the fictitious (Dr Lamshead) author's altered state begins, and where the real authors are peeking out from behind their alias like mischievous kids playing hide-and-seek with grown-ups, revealing their whereabouts on purpose to get caught. Current English usage intrudes frequently on the mock early-twentieth-century academic writing style, leading a number of reviewers to conclude that the Guide is a quintessentially postmodern opus. The authors, however, are probably not in the least concerned which label people with a degree in literary criticism wish to attach to their work.

Several of the diseases are especially interesting for medical writers, editors, translators, and communications experts. For example, Buscard's Murrain (Wormword) involves an unlikely mechanism of pathogenesis for a disorder culminating in "a feverish seeking out of the largest audience possible, and a state of loud, hysterical glosso-lalia". The main symptoms of Download Syndrome are reportedly "constant talking with

the aid of mobile phones and email, near-zero memory retention, dead stare, and blithely confident attitude". The chapter on Logrolling Ephesus will have readers digging into their library to retrieve and savour their copy of John Lennon's *A Spaniard in the Works*. Menard's Disease (Biblioartifexism) will be sadly familiar to some of us, as its sufferers "present to the public...an actual copy of a well-known literary work as their own accomplishment...by excruciating protocols of self-denial and reenvisionment". (EMWA members are apt to be familiar with the academic or scientific form of the disorder, rather than the literary form.) In *Printer's Evil*, the addition of inks and other materials to paper during the printing process triggers "rapid zoosporangia proliferation" of the usually harmless slime mould *Papyroplasma ppora infestans*. Mayhem results as the printed words appear to rearrange themselves on the page while the skin of persons who handle the infected book comes to resemble passages of cursive script formed by dark, thread-like rhizoids. Literacy, "involving both perception and comprehension of the written word", is a pre-requisite for infection by the agent that causes The Wuhan Flu (Wangji-Cunzai or Forgetfulness-of-Being).

The section titled "Reminiscences" parodies the *festschrift*, consisting of testimonials by health care professionals whose lives were touched by Dr Lamshead. For bibliophiles, the section titled "Autopsy" is an elaborate publishing history of previous editions of the Guide. (The title page would have us believe we have acquired the 83rd edition, although the copyright page clarifies—in deceptively quaint small caps—that this is indeed the first edition.) Here we are treated to reproductions of the original typescript from 1921 and to the front cover of several earlier editions, each of which is described briefly. There is even a picture of the front cover of "the Argentine Spanish-language edition" titled *La Guía del Bolsillo a Las Enfermedades Metafísicas*, compiled by one Jorge Luis Borges. The additions and deletions to successive editions as diseases came into fashion and were later discredited are recounted in true philological fashion as though the Guide had actually existed on the desks and bookshelves of several generations of GPs the world over.

The "Autopsy" section also contains an assortment of short fiction touching on medical history, substance abuse and biography. Here you can read how the Guide affected the lives of Margaret Mead, Nikola Tesla, Lon Chaney, Jim Morrison, and many others, and how it was involved in key twentieth century phenomena such as the Space Race, the appearance of AIDS and terrorism. Many different contemporary authors contributed to the book, which ends with brief and fanciful biographical sketch of each.

From the List of Contributors to the last page, the book misses no opportunity to parody text and typographical elements of academic writing and publishing that will be familiar to anyone who has consulted medical textbooks and multi-authored compilations. Amazon was offering the US hardback edition at a fair discount at the time of writing, and there was news on the net of a possible paperback edition or a UK edition for this side of the Atlantic. So by the time you read this issue of *TWS* an edition of the Guide for the European market may well be available, which would save you overseas shipping costs for the original hardback edition published in the USA.

Karen Shashok

Translator - Editorial Consultant
Granada, Spain
kshashok@auna.com

**Vital Signs:
So you think you know English?**

Dear TWS,

I was interested to read in your "So you think you know English?" (*TWS* 2004; 13 (3): 90) that "No word in the English language rhymes with orange". Well, I recall reading years ago in the Los Angeles Times that the famous English poet John Milton (1608-1674) is reputed to have bemoaned that he could not find a rhyme for the word "oranges". Some newspaper (unfortunately I can't remember which one and the internet was of no help whatsoever) decided to run a competition to see if anyone could come up with a rhyme. The winning entry was "door hinges", spoken in a cockney accent for best effect. I was discussing this with my 13-year-old son, Christopher Drees, and he recognized that this was the rhyme that was featured in episode 3 (Rhyme Time) of the popular Canadian cartoon series "What's up with Andy" (it could be seen on the German TV station Super RTL until recently). And I'll bet you all thought that watching cartoons was a complete waste of time. Au contraire! So there you go, I guess that there are only 3 words in the English language with no rhymes. Anyone want to take a stab at the others?

Barry Drees
Germany

Dear TWS,

I very much enjoyed "So you think you know English?" (*TWS* 2004; 13 (3): 90) particularly the bit about 'dreamt'. I'm probably going to spend weeks now trying to think of another one that ends in 'mt' before I finally admit defeat.

We were also told that 'The quick brown fox jumps over the lazy dog' uses every letter of the alphabet. This is true, but a little known fact is that, at 35 letters, it is not the shortest sentence to do so. The following sentences also contain all 26 letters of the alphabet:

Pack my box with five dozen liquor jugs (32 letters)
How quickly daft jumping zebras vex (30 letters)
Sphinx of black quartz: judge my vow (29 letters)
Quick zephyrs blow, vexing daft Jim (29 letters)
Waltz, bad nymph, for quick jigs vex (28 letters)

If you're prepared to take the sort of liberties that would make most Scrabble players reach indignantly for their rule book, it can even be pared down to the minimum possible, 26 letters:

Blowzy night-frumps vex'd Jack Q

Adam Jacobs
London



Hey, it's only my opinion: outsourcing

by Diana Epstein

It's hit the insurance industry, call centres and computer companies among others, but is our profession in danger of "outsourcing"? It may be closer than many of us think.

My colleagues at Springer in Berlin were sure they had safe jobs. After all, Springer is part of a large conglomerate. It came as quite a surprise to many when the Berlin office was closed towards the end of last year. Kluwer in Holland seems to be following suite. Jobs are being outsourced to India, Philippines or China where there is low-cost labour; costs are about a third of those in Europe.

Does it mean that medical writers too are in danger of being outsourced?

First of all the reasoning behind outsourcing needs to be understood. With the reduction in communication costs and standardization of software it is now possible and "easy" to outsource business functions, copyediting services and production services abroad. The globality of the Internet is causing an electronic revolution, with effects similar to those wrought by the industrial revolution in the late 1800s through mechanisation, and the invention of the train and automobile.

So are we in danger? Well many of us may be closer to the danger zone than we care to think, especially with highly qualified personnel in developing countries willing to carry out the same work as us but for a third of the price.

I would suggest that this topic be given an airing at the network lunch during this year's annual conference in Malta. It would be interesting to hear what other EMWA members have to say and perhaps we have some members who are "casualties" of the offshore outsourcing.

But, hey it's only my opinion!

So you think you know English?

On some air bases the Air Force is on one side of the field and civilian aircraft use the other side of the field, with the control tower in the middle.

One day the tower received a call from an aircraft asking, "What time is it?"

The tower responded, "Who is calling?"

The aircraft replied, "What difference does it make?"

The tower replied, "It makes a lot of difference.

If it is an American Airlines flight, it is 3 o'clock.

If it is an Air Force plane, it is 1500 hours.

If it is a Navy aircraft, it is 6 bells.

If it is an Army aircraft, the big hand is on the 12 and the little hand is on the 3.

Call for nominations: EMWA Executive Committee (EC)

In view of the transfer of EMWA to a new Swiss legal entity, we are opening all the elected posts on the EC for election this year at our Annual General Meeting in Malta. (Please note that the President and immediate past President positions are filled automatically by the existing Vice President and President respectively, and are therefore not elected, and the posts of web editor and *TWS* editor are appointed by the rest of the EC.) To be eligible for election, you must be an EMWA member and have attended at least one annual spring conference in the last 3 years. Candidates are asked to provide a short statement explaining why they would like to be elected, for publication in the next edition of *TWS*.

If you would like to stand for election, or you would like to nominate someone for election, please send your nomination to Adam Jacobs and Michelle Derbyshire (contact details on back cover). The seven posts that are open for election are described below. If you want to know more about a specific post, please feel free to contact the current holder of the post.

Vice President

1. The Vice President assists the President and in the absence of the President serves as chief executive officer.
2. The Vice President must have held an EMWA office or represented EMWA in some function in the last 5 years in order to be eligible for nomination for the office.
3. The Vice President serves as conference chairperson for the annual conference. In this capacity, the Vice President plans, co-ordinates, and supervises the activities of the annual conference, arranges the venue for the annual conference, and solicits sponsorship funds for the annual conference. The Vice President is assisted by the education officer.
4. The Vice President assumes the office of the President at the Annual General Meeting following his/her election.
5. When the office of President is vacant, the Vice President immediately and automatically assumes the office for the unexpired term and subsequently serves the term for which he or she was originally elected as Vice President. The office of Vice President remains vacant until the next Annual General Meeting.

Treasurer

1. The treasurer is the chief financial officer of EMWA and has the duties normally associated with that office.
2. The treasurer is the account holder or assigns the account holder for EMWA funds and disburses funds at the direction of the President.
3. The treasurer prepares an annual financial statement and presents this statement at the Annual General Meeting.

Secretary

1. The secretary is responsible for overseeing the activities of the EMWA head office.
2. Together with the President and the treasurer, the secretary monitors the activities of the head office, has regular performance review meetings with the head office, and makes suggestions for improving the services of the head office.

Membership Officer

1. The membership officer is responsible for all aspects of policy relating to membership.
2. Duties include ensuring members are well served by the organisation, that they are aware of the benefits of belonging to the organisation, that new members are recruited (in conjunction with the public relations officer) and that existing members are retained.
3. The membership officer is responsible for determining what the membership wants from the organisation, and then feeding this information back to the EC.

Education Officer

1. The education officer is responsible for developing, co-ordinating, and administering educational programmes. The education officer assists the Vice President in co-ordinating workshops for the annual conference.
2. The education officer is the principal spokesperson for EMWA educational activities. In this capacity, the education officer establishes contact with selected educational bodies, co-ordinates efforts to obtain educational recognition for EMWA educational goals, and, together with the EMWA Professional Development Committee (EPDC), sets the educational standards for workshops, seminars, and other educational initiatives and appoints workshop leaders.
3. Decisions made by the EPDC are to be presented to the EC for approval.

Public Relations Officer

1. The public relations (PR) officer plans the public relations strategy for the organisation in association with members of the EC
2. Where appropriate, the PR officer may liaise with the education officer for PR purposes within training organisations (both graduate and undergraduate).
3. The PR officer is responsible for checking all promotional literature relating to EMWA and informing the EC.

University Liaison Officer

1. The university liaison (UL) officer develops and implements a strategy for promoting medical writing as a career option to university graduates.
2. The UL officer cultivates interactions with university career counselling departments and other groups that provide career advice.
3. The UL officer may work together with other EC officers to create and develop programmes for increasing awareness of medical writing. This may include attending career fairs or other similar events.

Postscript

It is comforting to learn that at least one person, Adam, reads From the editor's desk. No doubt many readers would have preferred a 'Message from the President'. Had I not been idly chatting on the phone with the text open on the screen in front of me this is what all TWS readers might have received. Thwarting Adam's generous offer no doubt has lost me friends but will have saved Adam some energy for the Malta conference.

EMWA Executive Committee

President:

Adam Jacobs
Dianthus Medical Ltd
Lombard Business Park
8 Lombard Road
London, SW19 3TZ, UK
Tel: (+44) 20 8543 9229
Fax: (+44) 20 8543 9885
ajacobs@dianthus.co.uk

Vice-President & Programme Manager:

Michelle Derbyshire
Safety and Quality of Food Unit
Institute for Reference Materials
and Measurements
Joint Research Centre,
European Commission
Retieseweg, 2440 Geel, Belgium
Tel: (+32) 14 571827
Fax: (+32) 14 571343
michelle.derbyshire@cec.eu.int

Immediate Past President & Secretary:

Julia Cooper
Parexel International Ltd
River Court, 50 Oxford Road
Denham, Uxbridge, UB9 4DN, UK
Tel: (+44) 1895 614 403
Fax: (+44) 1895 614 323
julia.cooper@parexel.com

Treasurer:

Barbara Grossman
Covance
7 Roxborough Way
Maidenhead
Berks, SL6 3UD, UK
Tel: (+44) 1628 548 182
Fax: (+44) 1628 547 333
barbara.grossman@covance.com

University Liaison Officer:

John Carpenter
John Carpenter Medical Comm.
18 Nightingale Shott
Egham, Surrey, TW20 9SX, UK
Tel: (+44) 1784 470 203
Mobile: (+44) 7764 183 314
johncarpenter21@aol.com

Membership Officer:

Judi Proctor
Freelance Medical Writer
144 Sheldon Rd, Chippenham
Wiltshire, SN14 0BZ, UK
Tel/Fax: (+44) 1249 461174
Mobile: (+44) 7890 350908
judi@jinx66.fsnet.co.uk

Public Relations Officer:

Ian C. Metcalfe
Berna Biotech Ltd.
79 Rehaggstrasse
CH-3013 Berne, Switzerland
Tel.: (+41) 31 980 63 59
Fax.: (+41) 31 980 67 85

Website Manager:

Marian Hodges
Nat. Institute for Clinical Excellence
Address for correspondence:
6 Highfields, Ashted
Surrey, KT21 2NL, UK
Tel: (+44) 1372 279036
Fax: (+44) 1372 275272
marian@medwrite.co.uk

Education Officer:

Wendy Kingdom
1 Red House Road
East Brent, Highbridge
Somerset, TA9 4RX, UK
Tel: (+44) 1278 769 214
Fax: (+44) 1278 769 214
info@wendykingdom.com

Journal Editor:

Elise Langdon-Neuner
Baxter BioScience
Wagramer Strasse 17-19
A-1220 Vienna, Austria
Tel.: (+43) 1 20100 2067
Fax.: (+43) 1 20100 525
langdoe@baxter.com

EMWA Head Office

Baarerstrasse 112, P.O. Box 2246, 6302 Zug Switzerland
Tel: (+41) 41 766 05 81 Fax: (+41) 41 766 05 86
info@emwa.org

EMWA website: www.emwa.org