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Editor:
Hans Springer
Bergstraße 56
D 91443 Scheinfeld, Germany
+49 (0)9162 92 38 00 (voice)
+49 (0)69 79 12 33 115 (fax)
editor@tc-forum.org and
Springer.H@geod.geonet.de

Publisher:
Brigitte Beuttenmueller,
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Language & Style:
Ron Blicq, Winnipeg, Canada,
Lisa Moretto, Rochester, NY, USA

Graphics & Illustrations:
Nils P. Smeby, Oslo, Norway
Johan Näsström, Enskededalen,
Sweden

Production:
Wolfgang Buchholz, Stuttgart,
Germany

Layout:
Birgit Klink, Matthias Scheurle,
ViV Werbeagentur, Stuttgart,
Germany

Address administration:
Ami Wright, Cambridge, MA USA
subs_tc-forum@tc-forum.org.

Webmaster www.tc-forum.org:
Alexander von Obert, Nürnberg,
Germany; avo@twh.nbg.de

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* Each Topic has a two-letter abbreviation, for example
• RU for Readability / Quality / Usability
• TR for Translation Issues
• SA for Special Aspects

The contributions (articles or comments) are numbered consecutively through the different issues of TC-Forum. When commenting to any of the contributions, please refer to these "codes" for ease of understanding.



Dear colleagues,

With the last issue of 1999 we regrettably experienced some problems:

- The invitation to "Join Forum 2000" (on page 14) was inadvertently misprinted, with half of the original text being lost. So in this issue we are printing an amended article by Gerry Gentle.
- On the second page of Udith Chaudhuri's article (on page 19) we unwittingly committed a serious mistake: we used an incorrect map of the Indian subcontinent as background. We deeply regret this error and extend our apologies to Udith Chaudhuri.

At the same time we have to thank all those who kindly helped us overcome the lost part of the Forum 2000 invitation, by adding correct versions of the text to many copies of TC-FORUM during the distribution process.

Now we have arrived in a New Century. Looking into the near future, many of our views and expectations are focussed on Forum 2000 - the most important event of the current year for technical communicators and their societies within INTECOM.

Knowing we will have over 90 activators from 10 countries leads us to expect it to be a very stimulating conference. There are also other highlights being offered in other parts of the conference programme.

In the long term it is interesting and stimulating to discuss the further development of technical communication from different viewpoints: an examination of the status of TC in society; the design and development processes of hardware, software, and user interface; job descriptions of different branches or levels of technical communicators; and, of course, the availability of education for technical communicators and international acknowledgement of its certificates, diplomas, and degrees. Therefore we will give these aspects special weight in TC-FORUM.

In this issue two papers - by Julie Fisher (Australia) and Peter Ring (Denmark) - deal with this subject. Wouldn't it be great to have your opinions, remarks, expectations and proposals for the further development of technical communication published in our mailing list and/or in the next issues of TC-FORUM?

Incidentally, the June issue of TC-FORUM will be distributed to all participants attending Forum 2000, which will provide additional opportunities to discuss your views face-to-face with your colleagues from around the world.

Many thanks to the sponsors who have enabled us during the past year to continue publishing and distributing TC-FORUM free of charge. Many thanks, too, to all those who tackled the distribution (and paid for the postage) in their respective countries: Canada, Denmark, Great Britain, India, Israel and USA. Can you help us find sponsors for the distribution of copies in the other countries, where currently we have to mail them individually?

With best wishes

Hans Trünger

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Do Not Forget Bibliographical Data in Technical

by Åke Rullgård, Sweden

Information products, e.g. manuals, drawings etc, must, besides the technical message, contain certain formal data, which too often is left out. Proper formal data contributes to good order and favours the producer as well as the user of information products.

This article wants to stress the need for bibliographical data, i.e. data on document identification, revisions and origin. Lack of such data may cause problems and degrade the quality of the documentation. First, here is an example that shows the need for bibliographical data in a particular case: plant documentation.

Plant documentation contains manuals on installation and maintenance of valves, instruments etc, bought by the main contractor from various subcontractors. Too often these manuals are supplied out of a non-current storage while the components are supplied directly from the production line. Bibliographical data in the manuals are often poor, which results in errors when specifying spare parts, maintenance procedures, etc, because clear specification of valid documentation is impossible. This becomes a great nuisance to the plant owner.

Each page of a document must be uniquely identifiable.

The manuals have been created by technical communicators. My point is that it is the communicator's responsibility to make sure that the manuals are furnished with proper formal data. The communicators must claim, as part of their profession, that their employers supply a proper system for the formal data.

The following rules apply to the preparation of bibliographical and other formal data in all forms of technical documentation.

Basic Rule

Each part of a document, e.g. each page of a paper, must contain all data needed for unique specification of the context where the paper belongs. Therefore, each page in an operator's manual and in maintenance manuals, etc, must be provided with

- a **unique** identification, e.g. a document number, set by the original supplier.
- date of issue
- revision code
- origin
- in applicable cases, name of the author
- in case of translation: bibliographical data describing the original document.

It is of the utmost importance that these particulars are found on each page in case of a paper document. The user's knowledge of the formal data and its meaning can greatly facilitate communication between the user and the supplier. Therefore, the meaning of the formal data should be declared, possibly in a footnote. All this data needs to be inserted by the person responsible for the contents of the paper, and must not be confused with data often attached by the printing company. For electronically stored documents, the data also should include the file name.

Page Numbering

Pages need to be numbered so that each page shows the total number of pages that comprise the document, so the user can verify whether the document is complete.

Supplier Responsibility

The supplier of components, valves, meters, etc, must be held responsible for supplying a fully documented manual for each component. By providing proper bibliographical data, the supplier facilitates correct specification of all documentation for the final product.

Documentation! • RU 20

Closing Remarks

It should be part of the professionalism and ethics for all technical communicators to ensure that the above rules are followed in the development of all information products for which they are responsible. The rules can easily be applied and are needed regardless of medium, e.g. in paper-based and paperless documentation. I believe that a standard for formal data should be developed; maybe this could be a task for INTECOM.

Amendment of INTECOM's Code of Good Practice suggested.

I consider the ideas presented above so important that they deserve another item in the *INTECOM's code of good practice*:

"11. All communicators shall ensure that their information products are provided with proper bibliographical and other formal data."

I welcome your comments!



ÅKE RULLGÅRD

Pidoc-System
PO Box 355
Vesterås, Sweden
pidoc@swipnet.se

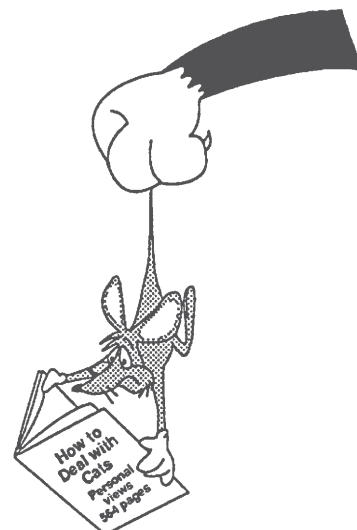
INTECOM Code of Good Practice

Åke Rullgård's article mentions the Code of Good Practice. Assuming that not everybody knows this Code, we use this opportunity to publish it in this and following issues of TC-FORUM.

1. Do not burden the reader with information he does not need - he has more than enough difficulties in handling the information he does need.

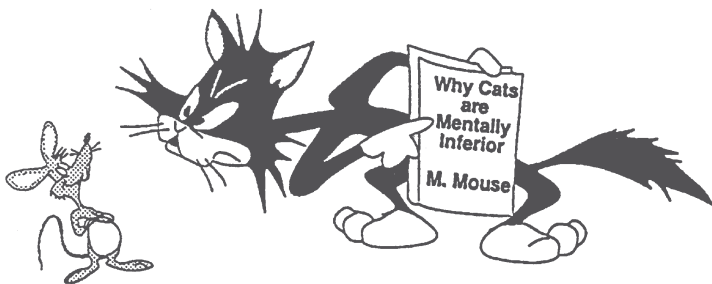


2. It is the reader's need for information that shall be fulfilled – not the communicator's store of information that shall be emptied.



INTECOM's Code (cont.)

3. The communicator must not surrender to irrelevant, subjective demands for changes of information.



4. The communicator should make changes in information products only when the alterations increase the effectiveness of the information.



A User Instruction Missing • RU 21

by Hans Springer, Germany

I received an email quoting an American article in German language. I found it very nice indeed. Here is the result of a translation back from German into English, showing the effect of inadequate user instruction:

In the American "Meat & Poultry" magazine an editor quoted the following history from "Feathers", the publication organ of the California Poultry Industrial Company:

The American FAA (Federal Aviation Administration) possesses equipment unique in the world for testing the stability of airplane windshields. Like a catapult this equipment shoots a dead chicken at a speed similar to that of a flying airplane to the windshield to be examined. The theory behind is that the airplane windshield, if it withstands the impact of this chicken also withstands a collision with a bird during flight.

Railway engineers were highly interested in this procedure and wanted to test the windshield of a newly developed high-speed locomotive. They borrowed the FAA catapult, loaded it with a chicken and fired. The ballistic chicken smashed wind-shield, pierced the driver's seat, and one instrument panel and finally the rear wall of the operator's cabin.



The railway-people were shocked and asked the FAA to examine the test arrangement whether everything had been implemented correctly. FAA engineers examined everything carefully and recommended: "use a thawed chicken!"



Welcome to FORUM 2000

We currently have some **90 activators** from 10 countries whose abstracts have been approved by the Programme Committee. The programme will thus be varied and truly international; a programme not to be missed. All attendees will take away added value for our profession.

We have now secured our **keynote address speaker**; he is Graham Whitehead (British Telecommunications plc, Communications Consultants Group - Advanced Communications Engineering Division). He will enlighten us on the future of communications from the Telecommunications and IT industry viewpoint and what we as communicators of knowledge should be aware.

Evening/Partner Programmes: The Millennium Dome in London was officially opened by the Queen on New Years eve. For note you may wish to know that she traveled to the Dome, from central London, on the Boat that we have secured for our Dinner/Dance cruise on Tuesday 13th June; nothing but the best for Forum 2000 delegates! Also, the London Eye commissioning is to schedule, where those who do not mind heights can ride the largest ferries wheel in the world to view London and the surrounding countryside, up to 50 miles radius!"

Exhibitors are showing enthusiasm for Forum 2000. If you or your company want to present yourself in a highly international environment, please contact the organizing committee.

Conference fees (including taxes) and registration:

- Members of INTECOM Societies:
£ 355 (early registration before 1st March 2000),
and £ 470 thereafter.
- Non-members:
£ 470 for early registration,
£ 530 thereafter.
- Registrations are being taken by the ISTC office. Payments can be made by cheque/bankers draft or by Mastercard or Visa card.

Further Information

Our website at <http://www.istc.org.uk/forum.htm> gives you details on registration and the latest news. You are able to see the Preliminary Programme, print a copy of the Registration Form and link to our hotel booking agent EXPOTEL Hotel Reservations.

Members of ISTC and IEEE/PCS who wish to receive a hard copy of the preliminary programme, should send a request to the ISTC office at istc@istc.org.uk, or mail to the ISTC office with their full postal address.

All others may request it from

tekom e.V.
Eberhardstraße 69-71
D-70173 Stuttgart, Germany
+49 (0)711 / 65704-0 (voice)
+49 (0)711 / 65704-99 (fax)
info@tekom.de

Some hints for activators

Please, remember to complete your **registration and make your hotel reservations**. Details can be found at
<<http://www.istc.org.uk/forum.htm>>.

Also, please remember to have your papers for the PreSeedings mailed to Thomas Warren twarren@okstate.edu, or to twarren_osu@osu.net

See you at Forum 2000!

Gerry Gentle
Chair-Forum 2000 Organising
Committee
ISTC
Blackhorse Road
UK - Letchworth Herts. SG6 1YY



Authoring and Documentation Workflow Tools for

By Marilyn Mason, USA

Although research has been conducted by several institutes on how to process written text for minority and vernacular languages, no academic research project thus far seems to have produced a usable, functional, authoring or translation tool for end-user native speakers of these types of languages. On the other hand, a set of software programs has been in the making for twenty years outside of academia. After having worked in Haitian Creole (HC) documentation contexts, Marilyn Mason began the development of a software tool that could convert texts written in earlier HC orthographies to conform to the Institut Pédagogique National (IPN) orthography

(i.e., the legal standard established by the Orthography Law of 1979). The system she developed works in conjunction with this 1979 Law that had established a core of fixed phonemic-to-graphemic rules along with a set of other writing rules for the use of apostrophes, hyphens, contractions, punctuation, capitalization, proper names, and nasalization in HC.

*New software
tool processes
minority
languages.*

A benchmark test for this orthography conversion process was conducted back in 1991 with the HC Bible, which is one of the largest texts in existence for this language (Allen & Hogan, 1998; Mason, 2000 forthcoming), in order to validate the prototype system. Other reasons for the choice of the Bible as training text are explained in Mason (2000, forthcoming). Using the digitized HC Bible texts that took several person years of work to create by manual data entry, the initial orthography conversion experimentation process was developed within standard "over-the-counter" word processing software editing applications.

After several years of development and testing, starting with the prototype model and arriving at the current fully-functional system called CreoleConvert™, the process has matured from a semi-automated process taking 2 hours to convert a 250-page book to a fully-automated process requiring less than 2 1/2 minutes to convert that same 250-page book -- without loss of formatting. This process has been reduced to a single mouse click on a menu item in order to make it truly user-friendly for computer novices (Mason, 1999) who need to easily convert texts from one orthography to another (ie, Pressoir-Faublas text to IPN text, IPN text to McConnell text, etc). Numerous examples of text conversion for HC using CreoleConvert™ can be found at the following Web site:

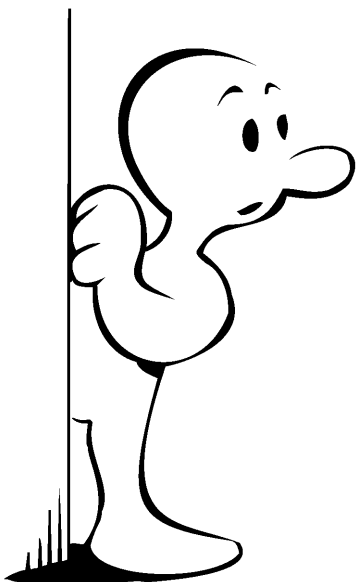
<http://hometown.aol.com/mit2haiti/Index4.html>

Another necessary step for the documentation workflow process was expanding the testing of CreoleConvert™ to new HC texts that had not been used to train the system. Also in 1991, research in optical character recognition (OCR) resulted in another prototype system that has also been improved over the years and has resulted in the current tool called CreoleScan™. This tool can be used to scan and computerize printed HC texts of varying age and print quality that are produced by various writers and authoring teams.

Both CreoleConvert™ and CreoleScan™ work within standard software applications in the Macintosh, DOS and Microsoft Windows environments and have been demonstrated and test-marketed in Haiti, in Florida, in Seychelles, and elsewhere by Mason Integrated Technologies Ltd (MIT2). MIT2, based in Boston (Massachusetts, USA), is a start-up company formed to enable publishers, writers, educators, and governmental and non-governmental agencies within developing nations to quickly and efficiently standardize and computerize printed materials. This company fosters further research and development for broad-based delivery of such tools in Haiti, the Haitian Diaspora, and other French Creole speaking nations and languages for which this methodology has shown to be applicable.

Haitian Creole - a Minority Language • TR 17

Orthography conversion tools are not just necessary for minority languages. Even beyond vernacular languages, we know that some international languages -- notably German, Dutch, Norwegian, Swedish, Greenlandic, Spanish -- have recently undergone orthography modifications. However, the majority of the world's languages, being minority and vernacular languages, have not been able to benefit from the advantages of the modern technological and computerized world. This is why Mason Integrated Technologies Ltd has been developing innovative technologies for minority languages, with plans to develop still more multilingual documentation technologies for HC and other French Creole languages. Without such modern computerized techniques and tools (e.g., spellchecker), the minority languages of today and tomorrow will suffer greatly and will be unable to meet the needs of the authoring and translation sectors that are so critical in a modern globalizing world.



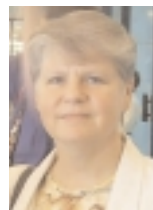
References

ALLEN, Jeffrey and Christopher HOGAN. 1998. *Evaluating Haitian Creole orthographies from a non-literacy-based perspective. Paper presented at the annual meeting of the Society for Pidgin and Creole Linguistics, New York City, 9-10 January 1998.*

MASON, Marilyn. 1999. *Orthographic Conversion and Lexical Standardization for Vernacular Languages. In ELRA Newsletter, Volume 4, Number 4, October-December 1999, pp. 5-7. Paris: European Language Resources Association (ELRA).*

MASON, Marilyn. 2000, forthcoming. *Automated creole orthography conversion. In Journal for Pidgin and Creole Languages, 15:1, April 2000.*

Minority languages have problems in the computerized world.



MARILY MASON

Mason Integrated Technologies Ltd (MIT2)
P.O. Box 181015
Boston, MA 02118 USA
+1 617 247-8885 (voice, office & answering machine)
+1 617 262-8923 (fax)
MIT2USA@aol.com
<http://hometown.aol.com/mit2usa/Index2.html>

Cross-cultural Transformation of Technical Documentation for the Chinese Market • TR 18

by Stefan Just, Germany

During the last ten years I was responsible for compiling technical documentation for the German, Russian and French markets, as well as for the Peoples Republic of China.

The latter experience particularly drew our attention to the importance of cross-cultural management when designing technical documentation. Here are just one or two factors of the many I encountered.

Technical authors can compile technical documentation of high quality for a foreign market only if they are able to respect and understand the foreign culture. The following cultural aspects are especially important:

- The language.
- The legal background, and especially product liability laws.
- The educational system.
- The educational level of the user group.
- The special culture-based rules in illustrating objects and procedures.

Transformation rather than translation.

We have not only to translate, but also to transform the documentation so that it will "fit" the culture where it will be used. Translation is only one step in this transformation. If a writer pays attention only to the pure translation aspects, many components that are important for the acceptance and understanding of the information will be neglected. I will make this clear with an example.

A technical author in Europe knows that, before starting to write, it's necessary to analyze the user group with regard to the following aspects:

- The users' technical knowledge and experience.
- Any risks that may be incurred when using the product.
- Who can or is likely to use the product.

(There are other factors that must be considered, but these are the primary ones.)

Generally, in Europe it's not necessary to analyze the situation to master the native language. In

China, however, it's very important to know the differences that affect how one masters the native language.

Why?

The Chinese language covers 53 768 characters. Depending on the educational level of the individual, there are great differences in how each person comprehends the language. For example:

- A worker masters about 2000 characters
- An engineer masters about 6000 characters
- A highly-qualified engineer masters more than 10 000 characters

If technical authors do not know this fact, and are unaware of its implications, they may be in danger of causing unintelligibility and misunderstanding among their readers. Years ago, we wrote a service manual for a Chinese truck. Our highly-qualified and ambitious Chinese authors used about 8000 characters. The result was that the average drivers of the trucks could not understand the manual because they had only mastered about 2000 characters. The result: we had to compile a new, simpler version of the service manual.

Many companies in Europe and America are unaware of problems such as these. Therefore many are producing documentation that the average customer in China cannot understand. This results not only in customers losing confidence in the documentation being supplied to them, but also in creating situations that damage the equipment or technical systems, or even cause injury to the user. We have a long way to go when considering these and other factors affecting documentation written for use in China.

I would be interested in hearing of similar experiences faced by other technical communicators.



DR. STEFAN JUST

Interactive Electronic Technical Documentation (IETD)
IImDat GmbH
+49 3677 8782-0 (voice)
+49 3677 8782-20 (fax)
ilmdat@ilmdat.de
www.ilmdat.de

What Millennium?? • SA 9

Technical Communicators vs. Developers Through the Ages

By Henrik Wigestrang, Norway

As the most observant ones among you may have noticed, we have just embarked on a new millennium. Newspapers and other media have used this numeric occasion to name the greatest artist, man, author, book, etc, of the previous millennium - based on the last two decades.

For technical communicators, usually busy looking ahead, this is an occasion to review our history and achievements so far, and the development of our slightly strained relationship with those who tend to emphasize the T and disregard the C in TC: the developers.

The First Developer

The first developer worked for six days and rested on the seventh. Since any successful development project is a solo effort, we know little of the preparations. But as far as we know, there were no specifications or documentation at that time. This may be why we turned out the way we did. If you look at Leonardo da Vinci's famous drawing of a man with 4 arms and 4 legs, this may well have been a specification for humans, but the developer considered it too user-friendly.

WYSIWYG or DOS?

Most of what we consider modern in the computer business is in fact old news. Acronyms like HEAD (High-End Analytical Device) have been accepted as ordinary words. And in the Garden of Eden, you found both Apple and a sly consultant.

And, in fact, there is both a WYSIWYG and a DOS version of Creation. The WYSIWYG (Eden) version started with a completed user interface, and productive user interaction, and has changed little since then. The developer has not been directly involved, but has Call Centres all around the world for FAQ and maintenance.

The DOS version of Creation started out with a big bang, and has developed slo-

wly into today's whimpering user interface. Due to the constant development, without any major releases, there was no need for documentation. Charles Darwin retro-documented this evolution a little late for any real use.

Take Two Stone Tablets and Call Me in the Morning

After a few million years, the Developer decided that a Quick Lookup Guide would be useful for the Creation to be used appropriately, so he published ten commandments. If the Developer had been familiar with Information Mapping, the number of commandments would have been reduced to seven plus/minus two.

The first attempt at establishing a Microsoft-like construction took place in Babel, but the localization centre in Galway wasn't quite ready yet.

Little has changed. Stone tablets from 3000 BC indicate an advanced TC culture, featuring symbols, frames, 3D, and Wingdings. Almost three thousand years later, a unique multinational documentation was produced on the Rosetta Stone, with the same text in Egyptian (hieroglyphs), Demotic, and Greek.



Ancient Egypt probably also had a large TC community. After all, pyramids are hardly built by accident. There are well-preserved remains of cartoon-like instructions for the production of vases and the dressing of cats.

But when developers set fire to the library in Alexandria, all the technical documentation and other books were lost. Recent excavations, however, have uncovered a library loan card for *Pyramids for Dummies*, *The Little Pyramid on the Prairie* and *Not Without My Mummy*.

You see the difference between a callcentre and Charles Darwin?



What Millennium?? (cont).

Creation/NT

When a new version of the Creation documentation set was published about two thousand years ago, one writer claimed that "In the beginning was the Word". Technical communicators evidently appreciated this tribute. But when the writer goes on to say that "the Word was God", that is, the Documentation was the Developer, one suspects a certain pressure from the R&D department.

One interesting aspect of the new documentation set, aka NT, is the use of hypertext links and workflow. There are a number of references to features and promises in the old documentation set, which have been fulfilled in the NT. They also used four writers to cover the same development – in order to increase reliability. Or to allow for multiple interpretations.

Images – Documentation or Specification?

Even as the Roman alphabet developed into our current version, illustrations continued to play an important part. For instance, in the brothel in Pompeii, Italy, illustrations above the doors to the rooms explain what kinds of services are provided. No words are needed – not even four-letter ones. Pixel-based mosaic became old-fashioned after a while, as image resolution improved.

Images have traditionally been interpreted as invaluable historical documentation of, for instance, clothing, tools, etc. We should, however, be open to the possibility that for contemporaries, some of the ancient illustrations are in fact specifications and drafts – such as Da Vinci's four-armed man, just like his airplanes and machine gun. The Bayeux tapestry *may* have been the science fiction movie of their time. Can you prove it wasn't?

The Threat of Technical Documentation

When Gutenberg printed the first book, it didn't take long before developers were burning books – and threw the odd communicator on the fire as well.

The technical communicators have improved through the ages, but you can't avoid blunders. We all know that a developer's last minute discovery need not be reflected as the communicator's last page note. Unfortunately, this was the case with *Getting Started with the Titanic*. The captain never got as far as the page where it says that icebergs should be avoided.

Technical communication is a relatively peaceful vocation, and documentation is usually considered boring. Military documentation, however, has always been attractive. In certain African countries, there's a death penalty for owning a user's manual to guns. The gun itself is not dangerous; it's the knowledge that kills. And computer documentation has never been more popular than behind the Iron Curtain in the 1970s and 80s.

If you have wondered why Saddam Hussein hasn't used his weapons of mass destruction more effectively, the most probable reason is that he's still waiting for the Getting Started manual. Or maybe the developers never bothered to explain the trigger function, since it was so intuitive.

We're now into the new millennium with more media than ever to use for technical communication. But given the challenges and possibilities of palmtops and WAPs and all, it's uncertain whether we will return to the primitive art of Stone Age cavemen, or to a technological Garden of Eden. Knowledge never tasted this sweet.



HENRIK WIGSTRAND

Kreativ konsulent / Webmaster
Software Innovation
Postboks 390 Skøyen
0212 Oslo, Norway
+47 22 51 85 00 (voice)
+47 934 055 10 (mobile)
+47 22 73 07 14 (fax)
henrikw@softinn.no
www.softinn.no

The Future of Technical Documentation

2000-2010 • SA 10

By Peter Ring, Denmark

It's difficult to make predictions, particularly about the future!

*Robert Storm Petersen(?),
Danish poet and philosopher 1882-1949*

Hans Springer has asked me to forecast the future of technical communication for the next 5 to 10 years. I'm flattered, but I also know that even making a two-year forecast for the development of the Internet is pure guesswork!

The Future of some Technologies Related to Technical Writing

It's January 2005, and most families have at least one PC. A standard household PC costs approx. Euro 100 = US\$ 100. The PC-tower and the screen are now one flat unit. Black/white laser printers are museum pieces – all printing is in colour. Windows 2005 has just been introduced, but it is still too bug-ridden to be used for serious purposes.

In 2005 the DVD technologies have completely taken over from the CDs and CD-ROMs, which are a dying technology. This means that there is space for ~ 5 GB data on a cheap CD-like item.

The flat screen display technologies had their final breakthrough around year 2000/02. In 2005, even large flat screens are cheap and they have a higher resolution than in January 2000. The era of the CRT tube is finally over!

The Internet has become as common as the telephone was in 1999. In the next five years (2005-2010) the telephone will become a part of the Internet based wide band network covering everybody, also including digital cable TV. It is paid for (and this includes international calls) by subscription plus maybe a small charge per gigabyte transferred. (As a price indicator, 1 movie ~ 5 GB).

Another technology that will have exploded is the use of local radio links. In the year 2000 we see this technology in cordless telephones, alarm systems, hobby equipment, cordless mouse/keyboard and remote control of equipment (e.g. the lights in a room). Undoubtedly there will be a lot more hard-to-forecast applications in the future.



The e-book (electronic book) exists already; for example, the US\$199 NuvoMedia Rocket eBook (see <http://www.nuvo-media.com>). It is the size of a PC-notebook with XML (SGML/HTML family) programming and 24 lines of text and/or graphics when the screen is portrait

formatted. But what could the future 2005 or 2010 models look like? My prediction is based on the weaknesses of the current models: too large, too heavy, and inadequate performance – and what will be technically possible:



The Future of Technical Documentation 2000-2010... (cont.)

In 2005, the e-book will use a DVD (or its predecessor) drive containing the book and live illustrations from the movie. It could be a folded device like half a notebook-PC of year 2000. The folded-out size could be 230 x 300 mm (~ total 14" screen), foldable to 230 x 150 x 15 mm (6.7" x 9" x .6"). If desirable for technical documentation, the right display could be used for the text and the left display for illustrations/tables relevant to the current text.

The text/illustrations will be scrollable in variable steps (no fixed pages) and page numbers will be paragraph numbers. The pages may be switched to be readable in landscape. The software needed will be placed on the DVD. There is a small permanent memory for bookmarks, etc., but no hard disk. It will have buttons to control what is to be shown on the foldable 14" (~A4/letter) 2 x 800 x 1200 pixels display, and will display the content of a page in 9 point Helvetica font very nicely. It will have a cellular phone/IR/local radio link connection to the Internet. It will probably have a touch screen keyboard on one of the displays for Internet communication. It will include speech software and a flat speaker, so that you can ask it to speak the text, and a start/stop/rewind remote controller. It may have – at least limited – speech recognition facilities. It will also be able to work as a TV and for e-newspaper reading. Using the built-in browser, you will be able to access your diary and bank account via a cellular phone link to the Internet.

*Touch screen
keyboard,
speech software ...
What else
will be new
for TC's?*

What are the Implications for Technical Communication?

This will have some serious implications for technical writing, although some companies will be more conservative than other companies in implementing the new methodologies. The same will apply to people: ten years ago, most people said: "I'll never work with a PC." Today even my 84 year-old mother has one. Today most people say: "I'll never leave the printed book!" Believe me, they will!

In general, the entire product-handling instructions and all technical details will be on computerised media (you can see this trend happening already, from companies such as Microsoft), and when everybody has a PC/e-book with immediate Internet access, most often there will be no need for a big printed manual. The bulk of information will be available only on electronic media. Ten years from now paper manuals will be used for 1- to 4-page instructions covering

- very simple and cheap products,
- warning sheets for products where important warnings are a legal must, and
- unpacking and other fast and important instructions.

We will see a lot more animated instructions with/without speech. The transfer media will be DVD or the Internet. They will be readable by a PC or an e-book. Take, for example, knockdown furniture. Instead of/in addition to the paper sheet with almost un-understandable text-free cartoon strips, you will insert a DVD in your PC/e-book, or you will connect to the IKEA website and enter the product code. You will then see a video or 3D animation of how to assemble your knockdown bookshelf, showing how to place which part first, which taps and nails to use and where to insert them, etc. It will also include spoken instructions in the language of your choice, selectable from 50+ languages. You will be able to start/stop/rewind the progress of the instructions by means of your e-book remote control.

The e-book will also solve the problem of your need to see the Help file while working with software. You will simply display it on your e-book placed next to and linked to your PC. No more help-file page printouts!

Workshop instructions will increasingly be made by computer-controlled speech transmitted by local radio links to the individual worker's earphone in his or her preferred language.

The manuals will increasingly be seen as a part of the product GUI (Graphical User Interface). GUI design, built-in wizards and usability testing of the total product concept (including product handling) will become increasingly important competitive parameters.

Implications to the Skills of – and Need for – Technical Communicators (TCs)

Well, in short: In addition to your current skills, the technical communicator will need to learn

- how to make 2D/3D animated instructions based on (for example) AutoCAD drawings of the product,
- how to make live software models of a product,
- how to make instructional videos,
- how to work with standard sentences and controlled language where the words can be used for computer-controlled multi-language spoken instructions, and
- an in-depth understanding of the principles for good GUI design and usability testing.

Furthermore, the increasing legal product safety demands will mean that TCs will need some schooling in how to handle product safety legally.

This means that the need for TCs with traditional writing skills will remain fairly stable, but the need for TCs in total will grow. The new technical communicators will come from the world of game design, where they know all about 3D-vector animation, and they will come from the world of TV and video production.

The technical writing people will need to learn

- to think in user needs, because communication skills will become more important than academic linguistic skills,
- GUI-design in order to be (internal/external) consultants to the product designers, and
- what is possible within animated illustrations and when to use speech.

The increased variety of skills needed means there will be

- more need for teamwork (few persons will be able to cover the full range of skills needed),
- more use of freelancers, especially within the animation/video field (small companies won't be able to afford to have such persons employed either full time or part time), and
- more outsourcing of the complete documentation of products from small and medium sized companies (leaving the documentation to the engineers plus a secretary will become an even worse solution than it was in the 90's).

It is now up to the TC societies (STC, ISTC, tekomp, etc.) to find out how to handle this challenge. Should they start new SIGs? Should they start education programmes? Should they develop education programmes in collaboration with universities – or together with private companies/organisations?

*A Fascinating
New World
for Technical
Communication.*



PETER RING

M.Sc. (Electronics) and B.Com
(Business Strategic Planning)
PRC (Peter Ring Consultants)
Ærenprisvej 27,
DK-2920 Gentofte, Denmark
+45-39 652 632 (voice)
+45-39 654 632 (fax)
prc@prc.dk
<http://www.prc.dk/user-friendly-manuals>

From Technical Writing to Technical Communicati

by Julie Fisher, Australia

Editor's Note:

This article summarizes the closing remarks made by its author (who is Vice President of INTECOM) at the end of the Australian Society for Technical Communication conference held in Melbourne, Australia, 12-13 November 1999. Eight members of European and North American INTECOM technical communication societies also made presentations at the conference.

Introduction

It is appropriate at the end of this conference to reflect on where our profession has come from and where it is heading in the next century. The origins of the profession go back to the 1950's in



Happy after a successful conference: Susan Toal, President ASTC, Julie Fisher, program chair and secretary ASTC and Session 3 chair Sonia McShane.

the United States and Great Britain, and the 1960's in Australia, where the manufacturing and electronics industries employed technical writers. Their principal role was to write manuals and instructions for the use of complex mechanical equipment (Brockmann 1989; Brady 1996). Today the term technical communicator is a more appropriate descriptor as the role has changed to encompass more than just writing.

A number of papers in these proceedings have looked at the history of technical communication. Ron Blicq, arguably the most experienced technical communicator to record his thoughts in these proceedings, reviewed a number of books publis-

hed long before the profession achieved the recognition it has today. These early books he told us, some of which were published before the first professional body was established, were about technical writing, i.e. writing technical material for a range of industries. His contribution is important for understanding where the profession came from as it helps us to frame our thoughts of where it is going.

Margaret Mitchell and Greg Baker discussed how information is disseminated in our Federal Parliament and the changes that are taking place as a result of new technology. They suggest that the role of the technical communicator of the future will involve the dissemination of information via the internet.

Tom Warren in his paper described the development of education courses in technical communication. He reflects that the early programs expected the student to have a technical background with the main educational emphasis on teaching technical writing. Today however students are taught to design documents using a variety of mediums and in many cases their education also includes how to design web pages.

What are the future roles for technical communicators? The focus of the following section is on the technical communicator's role as it relates to computer technology. This is not to deny that technical communicators also work in other areas, but this is the field I am most familiar with.

Future Roles

In 1988 Henrietta Nickels Shirk wrote:

"It is now appropriate for technical writers to join force with their colleagues in Computer Science on software development teams and in academia for the purpose of creating new visual and conceptual metaphors for communicating effectively. Technical writers will then become creators of the future rather than reinterpreters of the past." (Shirk 1988, 322)

Much of what Nickels Shirk said eleven years ago we can see happening today. There are, however, other roles that have also developed that she could not have predicted, as described below.

on: Looking to the Future • SA 11

Members of Development Teams

Little work has been done in the past to determine the extent to which technical communicators have participated in the systems development process. Bresko claims that the reason why so many information systems fail is because: "Systems analysts and software designers with little technical communication orientation remain responsible for activities in which technical communication professionals could successfully participate" (Bresko 1995).

Bresko reported that most development teams do not include a technical communicator until the end of the process (Bresko 1995). She concluded that developers would be more willing to include technical communicators if they could be confident of their skills and background in technology. This research was conducted over ten years ago. Today, as the skills of the technical communicator are becoming more widely known and appreciated, we are seeing technical communicators included as part of development teams. My own research found that, of the twenty developers interviewed, 19 would use a technical communicator again and most could see value in having them involved earlier in the process.

Online Help and Other User Information

The days of the paper manual are numbered, with few systems providing users with hard-copy documentation. It would be reasonable to argue that the writing of all forms of user information, including online help and system and error messages, should be performed by technical communicators. Unfortunately, this is not always the case.

Research conducted over the last two years suggests that between 30% and 40% of all information systems developed have online help written by a non-trained writer (Fisher 1999). Some systems still do not have online help, which partly explains the lower level of involvement of technical communicators. Of greater concern, however, is that the online help for many systems is written by programmers (Fisher 1999).

System and error messages are also an important communication medium for users. Although technical communicators are not commonly used for writing system error messages, it is a role that primarily requires communication skills and a well-developed understanding of the user. Again, the research I conducted suggests few developers use technical communicators to write these important messages. This is, however, slowly changing with more developers recognizing that this is a role for the technical communicator (even if it is only an editing role).

April Weiss in her paper pointed out that hypermedia, multimedia and other media are increasingly being used for delivery of user information online. With these new media come a new set of skills and technical communicators are ideally placed to become leaders in the area.

*TC's become
leaders in
MultiMedia.*

Interface and Web Design

Technical communicators have for some time contributed to the design of the user interface and the skills they have such as layout of information, and the placement and design of graphics and illustrations, is important in this area. The literature provides some evidence of the technical communicators' contribution, however this contribution is quite subtle, with the role tending to be an advisory one (Pieratti 1995). Authors such as Velte (Velte 1990) claim technical communicators are interface designers on the basis that they are responsible for aspects of the interface such as online help. While we cannot argue that technical communicators are interface designers there is some evidence that technical communicators are moving into the field and making a valuable contribution (Roberts 1995).

There is a growing number of articles in technical communication journals relating to Web site design which is evidence of the growing involvement and interest of technical communicators in this area. Reporting on research they had undertaken, Silker and Gurak (1996) concluded that:

"Technical communicators trained in audience analysis, readability, indexing, and visual commu-



From Technical Writing to... (cont.)

nication are naturals to lead the way in any corporate Web page development and in any new, post-Web interfaces and applications." (Silker and Gurak 1996, 367)

Four of the systems I investigated were Web based and all used a technical communicator. This is a growing and important area for technical communicators, as more businesses choose to go online.

It could be argued that any element of an interface, whether it be for a computer system or a web site, that seeks to communicate information to users is an area where technical communicators should be involved. There is, I believe, a significant role for technical communicators in this area in the future.

Concluding thoughts

The technical communicator of the future will need a range of skills, yet they will be skills that are not dissimilar to those they already have. Whilst the skill of writing will continue to be important so will the skills related to communicating information to users via other means. There is an ever growing need for system development teams to include a wide range of experts including technical communicators in the development process and this is starting to be more widely recognised. Technical communicators have the necessary skills to contribute particularly to the usability aspects of information systems. There is little doubt that the future is bright for technical communicators as they embrace the new and emerging communication media of the future.

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DR. JULIE FISCHER

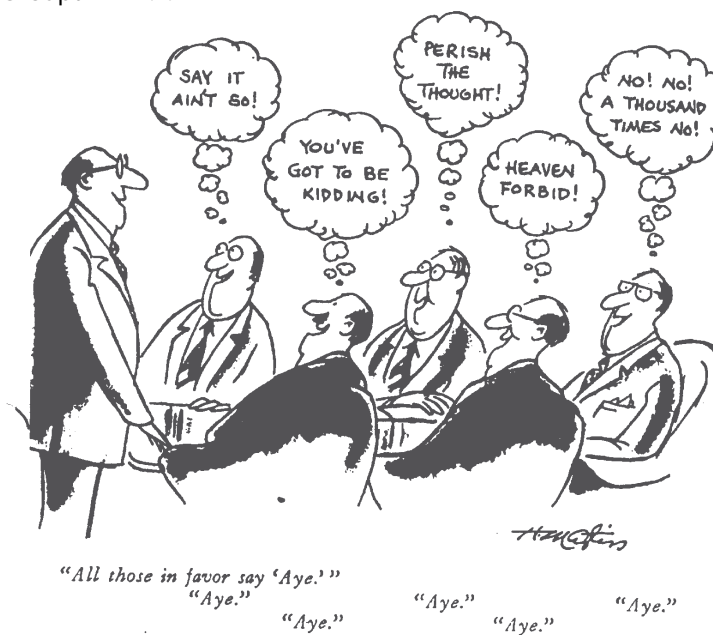
Senior Lecturer
 Dpt. of Information Systems
 Victoria University of Technology,
 Australia
 68 Holmes Rd.
 Moonee Ponds Victoria
 Australia 3039
 +61-3365-2592 (fax)
 strype@onaustralia.com.au
 Julie.Fisher@vu.edu.au

How to Explain "Groupthink"

by Hans Springer,
Germany

Many years ago a good friend of mine sent me some pages from a psychological book describing "Groupthink". "Groupthink" is a phenomenon you can often observe while watching the behaviour of group members in a situation when they need to make a decision (after a long debate) or when they feel "under pressure from outside the group". In such situations decisions often are taken unanimously. The explanation and the listing of some criteria to strengthen the cognition of Groupthink in real situations needed some serious study of 10 or so pages. At the end the author showed the following cartoon, illustrating a "Groupthink" situation.

Would you agree that this is an excellent visualisation of "Groupthink"?!



From: Myers, David.G. (1996, 5th edition);
Social Psychology, NY, Mc Graw-Hill, S. 339 ff

A great forum!

Dear TC-FORUM folks, I am an MT developer on academic leave from SYSTRAN Software, and I happened onto your site. From inside (linguistic development of MT) my perspective had been that few people were well informed about MT - but I had few opportunities to make contact with technical translators etc. who make use of MT/CAT tools.

I am so impressed with the level of discussion in your forum. It is realistic and practical and accurate, and I found nothing to raise my blood-pressure (as I used to in a Foreign Language Forum elsewhere. The contributors were often uninformed and paranoid about MT.) Your contributors really raise the level of discussion on the topic.

I found it all really encouraging, and I admire the high quality of contributions. What a great forum!

Laurie Gerber
+1 619-200-8344 (voice)
+1 619-226-6472 (fax)
lgerber@usc.edu

National Contact Persons (NCPs)

Austria:
Victoria Koster-Lenhardt
vkosterlenhardt@eur.ko.com

Australia:
Julie Fisher • +61 3365 2592 (fax)
strype@onastralia.com.au

Belgium:
Patrick Goyvaerts • +32 3 240 3759 (fax)
goyvaerp@bec.bel.alcatel.be

Brazil:
Delio Destro • +55-16-236-4955 (fax)
ddestro@flexwrite.com

Canada:
Ron Blicq • +1 204 488 7294 (fax)
rgi_ron@compuserve.com

Denmark:
Thomas O'Connor • +45 4226 9322 (fax)
toc@foss-electric.dk

England:
Gerry D. Gentle • +44 1462 483 480 (fax)
gerryg@dial.pipex.com

Finland:
Maria Lahti • +358 2040 2610 (fax)
maria.lahti@sonera.fi

France:
Philippe Uziel • +3 1 43 45 18 46 (fax)
phil@citi2.fr
Jeff Allen • +33 1 483 133330 (fax)
jeff@elda.fr

Germany:
Brigitte Beuttenmueller
+49 711 657 40 13 (fax)
Beuttenmueller.B@t-online.de

India:
Vishadkhadutt D. Patil • vdp@t@yahoo.com

Israel:
Julian Zelenko • +972 9771 8189 (fax)
techstyl@netvision.net.il

Italy:
Riccardo Renna • +39 59 898305 (fax)
riccardo.renna@tetrapak.com

Netherlands:
Rob Punselie • +31 4027 57710 (fax)
pres@stic.nl

Norway:
Tove Østberg • +47 2202 6050 (fax)
tove.ostberg@comtext.no

Spain:
J. Antonio Bardera Pinuela
+34 945 185 099 (fax)
Dr. Rodolfo Beceiro Mangold
+34 925 22 89 18 (fax)
rbbm@intercom.es

Sweden:
Johan Naestroem • +46 08 648 00 37 (voice/fax)
johan.nasstrom@odata.se

Switzerland:
Reto Schilliger • +41 1 767 18 66 (voice/fax)
rschilliger@access.ch

USA:
Jeffrey L. Hibbard • +1 9149 452 018 (fax)
jeffx@us.ibm.com
Thomas L. Warren • +1 4057 446 326 (fax)
twarren@okway.okstate.edu

Please feel free to contact either the Editor or your NCP for any questions concerning TC-Forum.

For further details contact our Web-site www.tc-forum.org/ Professional Events and the addresses given below

27 - 28 March 2000
Hurdal Konferansesenter, Norway

YGGDRASIL '00 "Tomorrow's users"

Annual Norwegian conference for Technical communicators and interface designers

Details see TC-FORUM 4/99.

12 - 14 April, 2000,
College de France, Paris, France

RIAO2000

(Recherche d'Informations Assistée par Ordinateur / Computer Assisted Information Retrieval):

Details see in TC-FORUM 4/99.

29 - 30 April 2000
Seattle, Washington, USA

CLAW 2000:

3rd International Workshop on Controlled Language Applications

Details see in TC-FORUM 4/99.

For information on the past two CLAWs see: <http://www.ccl.kuleuven.ac.be/CLAW/programme.html> (CLAW96)

<http://www.lti.cs.cmu.edu/CLAW98/> (CLAW98)

For general Inquiries please contact Jeff Allen:
postediting@hotmail.com

31 May - 2 June 2000
Athens, Greece

The 2nd International Conference on Language Resources and Evaluation (LREC2000)

Details see in TC-FORUM 4/99.

Please consult the conference Web site (<http://www.icp.grenet.fr/ELRA/lrec2000.html>) for complete information about submission guidelines, contact people, submission dates, various conference committees and members, and other general information.

10 - 11 June 2000
University of Delaware London Centre
Bloomsbury, London, England

LONDON 2000: Roundtable Discussion

of European and North American Programs in Technical and Scientific Communication

Call for Proposals
Sponsored by The Council for Programs in Technical and Scientific Communication (CPTSC) and the Association for Teachers of Technical Writing (ATTW).

The roundtable's purpose is to exchange ideas about methods for teaching and perspectives on constructing academic degree programs in technical and scientific communication. The roundtable will feature a series of sessions. The sessions will address programs that prepare either professional technical writers or of technical professionals who write as a major part of their job.

This event is scheduled for the weekend before FORUM 2000 (details at www.istc.org.uk). We thus encourage attendees at FORUM 2000 to arrive in London early and join us for a discussion devoted specifically to academic programs.

The University of Delaware's London Centre is conveniently located in Bloomsbury, near the Russell Square tube stop.

Proposal deadline: 15 March 2000

Send your proposal via e-mail to: Debby Andrews

For the London2000 Planning Committee, CPTSC

University of Delaware, USA

dandrews@udel.edu

Further Information from¹⁾:

12 - 14 June 2000
London, England

Forum 2000

Technical Communicators Leading the way.

Details on Forum 2000 have been printed in previous issues of TC-Forum already and in this issue as well.

Actual information is available from
<http://www.istc.org.uk/forum.htm>

The preliminary programme has been dispatched to all society members of INTECOM. Please order additional copies from:

Call for papers:
20-22 November 2000
Exeter, United Kingdom

MT 2000 - Machine Translation and Multilingual Applications in the New Millennium

Details see in TC-Forum 4/99.

<http://www.bcs.org.uk/siggroup/sg37.htm>

Further information:

MT 2000 web-site at Exeter University:

<http://www.exeter.ac.uk/flc/MT2000>

tekcom Conferences in 2000:

April, 6-7
Spring Conference, Dresden,
Kulturpalast:

Erfolgreich dokumentieren und Informationen managen

November, 23-24
Rhein-Main-Hallen Wiesbaden

Annual Conference

Further details from
info@tekcom.de or the Website
www.tekcom.de

1) Bruce Maylath
Director, Program in Technical Communication
Department of English & Philosophy
P.O. Box 790
University of Wisconsin-Stout
Menomonie, WI 54751-0790 USA
+1 715 232-1358 (voice)
+1 715 232-2093 (fax)
maylathb@uwstout.edu
www.uwstout.edu/english/maylath/index.htm

2) tekcom e.V.
Eberhardstraße 69-71
70173 Stuttgart
Germany
Tel.: +49 (0)711 / 65704-0
Fax: +49 (0)711 / 65704-99
<mailto:info@tekcom.de>