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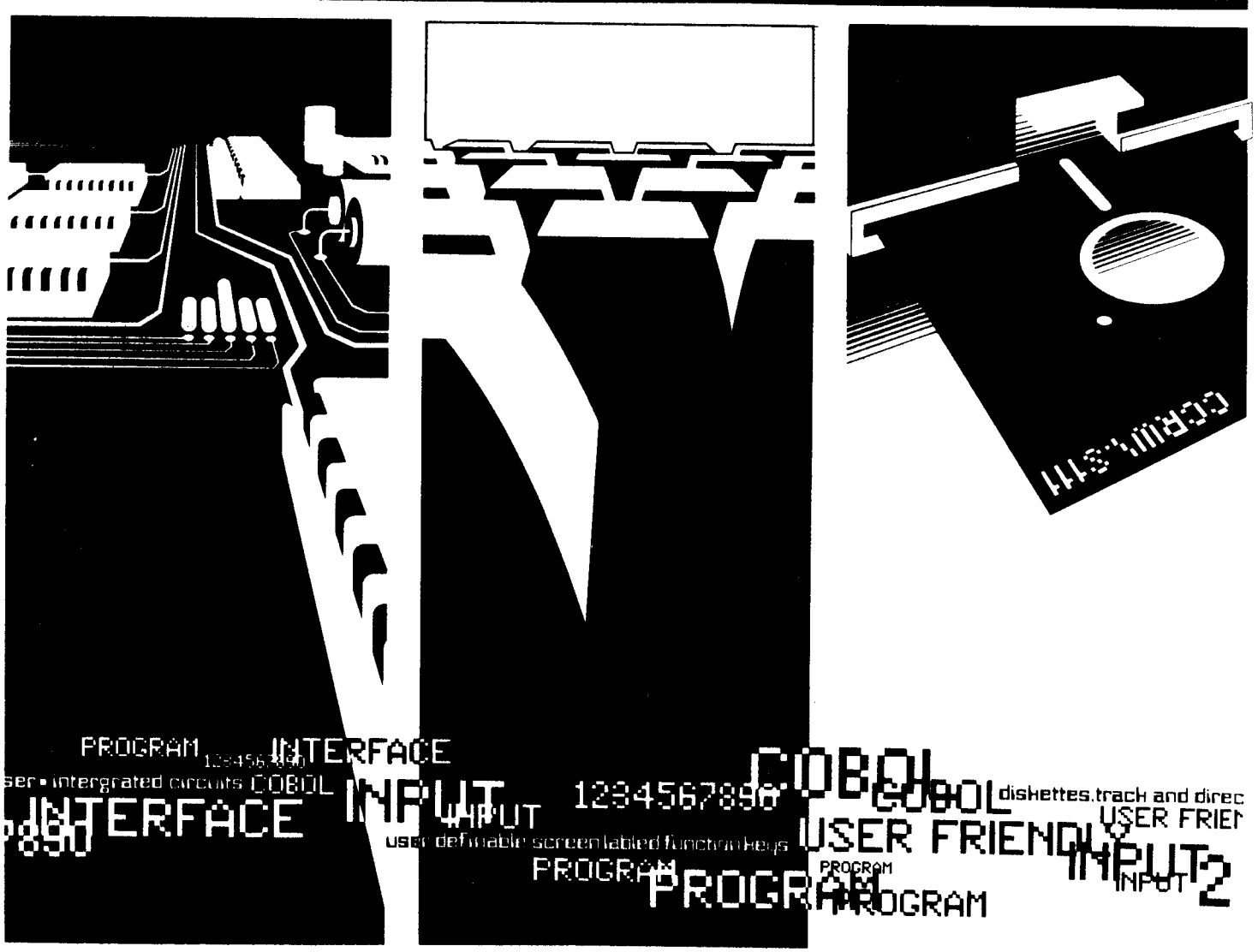

RESEARCH IN
WORD PROCESSING
NEWSLETTER

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"Desktop Publishing": Some Semantic Quibblings

Goran "George" Moberg

Desktop publishing is producing people with money in their hands, waiting to buy. But desktop publishing is also an application that pushes the technology of micros to the outer edge in terms of power, graphics, screen quality, systems integration, networking, you name it. Desktop publishing is where it all comes together.

Is this gushy slice of prose lifted from a freshman English composition? No, it's a piece by famous and respected author Jonathan Seyboldt in *Communications Concepts*, a prize-winning newsletter [No. 34, Feb. 1987]. As always, when a word or phrase begins to mean almost everything, it ends up meaning nothing. In struggling to invent their "normal discourse," the emerging knowledge community of computer-using people would do well not to borrow vocabulary from that other discourse community, the ad-making copywriters.

"Desktop publishing" has become the latest fad phrase, as ubiquitous a term as "information revolution," and as ambiguously vague. Yet people use it in their writing as if it had a strong, clear definition. DTP, as the expression is known for short, has no such general meaning, however, as I will show.

Let's have a quick look at the background of some related computer words. The first type of computers (1940s), is now referred to as "mainframe"—***machina ratiocinatrix*** ("thinking machine"). The smaller ones that then came out in 1963 were called **mini**computers, though there's nothing mini about their power, at least when compared to the third rank of computers that appeared in 1974, causing the hyperbolically named "computer revolution." These tiny machines got the name "micros." But then after Big Blue named its first model a "personal computer," **PC** became a generic term synonymous with a micro, whether IBM or clone, outflanking the now moribund term, "home computer." Although the Mac is distinctive enough so it's usually called a Mac rather than a PC, the Mac obviously is a personal computer too. Whatever "desktop publishing" might mean, it has something to do with the personal computers, the PC.

After an informal examination of the contexts of the words "desktop" combined with "publishing" in a few hundred text appearances during the last year or so, I found the following eight categories of usage the most obvious:

1. Often it means simply "desk," that's all. I don't know any publishers who use their computers **under** their desks, so this "top" stuff is simply redundant. Bill Gates, chairman of Microsoft (MS-DOS, Word, etc.) in an interview at the 1986 Comdex uses the word "desktop" to mean simply "desk." Later in the same interview when asked a direct question about "desktop publishing," he avoids repeating the term and translates it into "document processing," as if he's uncomfortable with this awkward term.

2. At other times DTP has the implied meaning of "small," as opposed to traditional publishing by the big houses. I can then understand the trend to find a euphemism for "small," since some of us want to stay away from its negative meaning. While the Publishers Marketing Association [PMA] and other groups have promoted the term "independent press" as a substitute for "small press," DTP could be another variant for "small publishing."

3. In a quite related sense, DTP apparently often means "in-house," as in this sentence: "More and more offices now save time through desktop publishing and no more have to send their manuscripts out to typesetters and layout artists."

4. In a more narrow sense DTP sometimes obviously means "typesetting," as in this quote from Bill Sander [the *PMA Newsletter*, Jan. '87, p. 4]: "You need to get your typesetting costs down using desktop publishing." Bill is saying that creating the mechanical with a linotype machine is far more expensive than using a PC-cum-printer.

5. DTP can also mean ***interfacing with phototypesetting***; in other words, the text is produced on paper not by a printer hooked-up to the computer, but by a distant machine, like a Compugraphic, the code carried there either on diskette or over the phone lines via modem.

6. In one of the less exact meanings, yet one of the most popularly held by people who are not familiar with the uses of micros in creating documents and mechanicals for printers, DTP is thought of as the use of ***laser printers***. This is understandable since the new technology is one of the chief tools in inexpensive typesetting.

7. In most cases the context shows clearly that all that's meant by DTP is ***computerized***, as in "computerized publishing." The January '87 Fair of the Publishers Marketing Association was entitled:

DESKTOP PUBLISHING FOR BOOK PUBLISHERS

Now I ask how that phrase differs in precision and informative value from this one:

PC TECHNOLOGY FOR BOOK PUBLISHERS

Or, let's look at another headline in the same PMA Newsletter:

COMPUTER AIDED DESKTOP PUBLISHING

If we now take out that middle word, "desktop," what do we get and what was the advantage of the longer original?

COMPUTER-AIDED PUBLISHING

It's not clear to me what is gained by the word "desktop" in that context. It's usually redundant and at any rate lacks linguistic muscle, a coinage without weight. DTP here seems to mean simply "electronic publishing" or "computer-publishing."

8. But now we come to what I think is the most sensible interpretation of this small, in-house, on-the-top-of-the-desk activity: **Page-making.** This seems to be the most commonly intended meaning as far as I can see from the context. If that is so, however, why not call it "page-making" and what do we need "desktop publishing" for?

* * * * * *

The technological innovations that spawned both the increased activity in offices, as well as the silly coinage of DTP, are the increased A) graphics capability of soft- and hardware and B) the laser printers. As a result, with the help of ordinary word processing and graphics programs, ordinary office personnel can be trained to prepare—in-house—typeset and "pasted-up" camera-ready copy with simple graphics for the offset presses. This is cheaper and sometimes faster. The basic equipment can be had for not much more than $10,000, as contrasted with from $50,000 to $100,000 for phototypesetting equipment like the Linotronic series of machines.

This view is held also by Jim Seymour, a featured columnist in *PC Magazine*, who complains in a recent issue [Jan. 13, 1987] that he's becoming "cranky about the desktop hooey that's getting passed off these days. . . .Can we find a better name? PC-based DP isn't publishing, it's just page makeup. . .if we could just recognize that today's PC DP for what it is—replacing razor blades, waxers, and pastepots with electronic page-assembly—there'd be a lot less noise. . . ." Jim is right on the money.

Some people who don't like the term DTP, prefer CAP—"computer-aided publishing," formed by analogy with CAI, computer-aided instruction, and a whole slew of similar acronyms. But I have the same objection to CAP as to "desktop publishing:" at best these terms are not needed and at worst they're faddish and obnoxiously vague, just like the non-existent "computer revolution." Let me explain what I mean. In talking about cars today, nobody makes a big deal of how the car was manufactured on an assembly line. It's unnecessary because it's obvious and uninteresting. Publishing today—big or small—is done with computers, either partially or largely. Obviously desks are used—what else is new?

Still, one of the chief ingredients of DTP, the much-heralded Mac and PC capability of blending graphics

with text, is an exciting innovation for some of us who need it and learn how to use it. Yet, while desirable in some specialized tasks, the general value of this improvement is much overrated. In many cases it takes ***longer*** to create a computerized box or pie chart on the screen than having the office artist do it with a mechanical pen. And many of us have seen some awfully unesthetic "designs" emanating from the blameless new machines.

John Gantz, who writes a weekly column, "Tech Street," in *Info World*, ironically suggests that the desktop market is a goner, predicting that "the desktop publishing market will implode. Graphics software has always been a hard sell to the business user, and composition and layout software is a mystery to all but the most abstruse of power computer types" [Jan. 26, 1987]. He implies here, consistent with my preferred meaning of DTP, that it means page-layout with a mix of text and graphics.

If you think John Gantz is looney or was writing tongue-in-cheek, we should note that many others think along similar paths. Our own contributing editor Tom Carney, while he loves the term and concept of DTP, warns that it's "oversold" [*RWPN*,Jan. '87, p. 4]. And editor Robert Sawyer of *Profiles* writes in the January '87 issue, "I think page composition programs are a stop-gap solution. They will slowly disappear as their features are incorporated into standard word processing software." I agree. I believe page-making will be standard in the future on the leading programs like *XyWrite* and *WordPerfect*; Microsoft's *Word* already has a fair amount of document design capacity.

How did we get saddled with the redundant verbiage? The term was coined in 1984 by Paul Brainerd, who helped create Aldus and its star product, *PageMaker*. Obviously what Paul had in mind, then, was ***page-making***. I personally would like to restrict the meaning of "desktop publishing," then, to "page-making." But why call something as simple as "page-making" anything else? You tell me. Why call New York "the Big Apple?" The answer to that one is simple: it was part of an advertising campaign to sell tourists. Is Aldus selling more *PageMaker* programs because of the aura surrounding the mythical concept of "desktop publishing?" I don't know, but I doubt it. It has become generic already, like xeroxing—apologies to Xerox Corporation: it's a linguistic fact that millions of people today say "xerox" when they mean "photocopy." I believe some thousands of people say "desktop publishing" when they mean "page-making."

I called "desktop publishing" silly earlier in this piece, but I suppose I can also think of it as charming. It's a young term, behaving like an adolescent, with annoying imprecision and an ungainly voice. In 10 years we'll know if the term DTP was put on the ash heap of lost fad-phrases (where I think it belongs) or not. The word "automobile" was a clumsy nomer for the newfangled horseless carriage, yet in Swedish the last part, "bil," is established. The French chose the first part, and the word is "auto." In English we have both the Greek "auto" and the homegrown shortening of carriage to car. I like car better than automobile. Just as we do not need "horseless carriage" today, quite soon we won't need DTP.

Is there then nothing authentic or useful about poor DTP? Are we all going to end up holding an empty term? Well, in truth, there ***is*** some affective information appended to DTP: it expresses the enthusiasm for the new labor-saving machinery in the office, especially beneficial for small-time entrepreneurs like self-publishers and kitchen-table mail-order people. Now why didn't I think of that: "kitchen-table publishing." Actually, when I do my own mundane publishing tasks, I often put my printer on my bed, naturally enough, since my office is in my bedroom.

Bedroom publishing, anybody?

Dr. George Moberg, who teaches writing at Borough of Manhattan Community College of the City University of New York, has self-published several books, most recently *Writing on Computers in English Composition*.

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Computers in Teaching Writing Conference

May 27-29, 1987, has been set aside for the "Computers in Teaching Writing" conference, to be held at Oakland University in Rochester, Michigan. Speakers will review current evaluations of the impact of word processing on writing, demonstrate and discuss developments in software and hardware, and review options for supporting computer labs, software development, and purchase. Lillian Bridwell Bowles, Hugh L. Burns, Dawn D. Rodrigues, Chris Neuwirth, and Cynthia Selfe will be there. Contact Joan G. Rosen or Helen J. Schwartz, Department of English, Oakland University, Rochester, MI 48063.

Scholarly Publishing Conference

The 9th Annual Meeting of the Society for Scholarly Publishing will be held May 26-29, 1987, in New Orleans, Louisiana. Besides concurrent sessions and roundtable discussions on the various legal, economic, and technological developments in the field of scholarly publishing, there will be an assessment of desktop publishing's impact on traditional publishing procedures. Contact the Society for Scholarly Publishing, 2000 Florida Avenue NW, Suite 305, Washington, DC 20009, or call (202) 328-3555.

Word Processing and CD ROM

With new CD ROM hardware and software quickly becoming available for the PC market, there is little doubt that the mass-storage wonders of this emerging technology are being welcomed by writers and researchers. In addition to the far-flung vistas being opened to home-based researchers by information utilities, it is apparent that writers are looking favorably at new CD ROM packages which provide a variety of reference and text-analysis tools. Microsoft's "Bookshelf" CD ROM Reference Library, for example, consists of ten reference works stored on a single CD ROM disk, including four of Houghton Mifflin's major programs: ■ *The American Heritage Dictionary* (over 200,000 entries) ■ *Roget's II: Electronic Thesaurus* (also orders synonyms according to their frequency of use) ■ *English Spelling Corrector* (including capitalization and hyphenation, suggesting a single correct alternative, and the ■ *Right Word Usage Alert* (which also helps the writer move toward correct usage). The *Bookshelf* package is designed to be used as part of a word processing system or as a standalone reference to aid in text preparation.

Society for Technical Communication Conference

"Comunication Summit" is the theme of the 34th International Technical Communication Conference taking place in Denver, Colorado, on May 10-13, 1987. Over 80 panels and 50 workshops will cover a broad range of topics related to computer-based technical communications, including ■ writing and editing ■ visual communications ■ research, education, and training ■ management and professional development and ■ advanced technology applications. Unlike familiar academic conventions, this conference draws writers from the corporate and government sectors. Contact the Society for Technical Communication, 815 Fifteenth Street NW, Washington, DC 20005, or call (202) 737-0035.

The Impact of Word Processing on Authors and Their Books

The Alienation of Writers from their Writings

The advent of the printing press, c. 1450 A. D., fundamentally altered the relationship between the author and his book. Printing brought with it numbered pages, page headers and footnotes, indices and contents pages. With it, too, came the woodcut and, for the first time in history, the ability to mass produce drawings accurately copied in fine detail. With the press also came the publisher-printer's team of master craftsmen, organized in guilds. This was a far cry from the cleric copying a manuscript by hand in his cell (for details, see the box opposite).[1]

Clearly, this was a great step forward for the reader; but the author became alienated from his product: see box. The clerical copyist's vellum and parchment codex was merely a copy of the writer's manuscript, with some decorative graphics added. The printed book went far beyond anything that that a writer could produce on his own. Years of apprenticed work in a guild set an impassable barrier between the writer and the typesetter, for instance.

This sundering of the writer and his or her (MS or TS) work was to grow more marked as the technology of printing became more elaborate.

Writers recover Control over their Writings

It took the advent of desktop publishing in 1986 to give the writer back control of his or her work, from MS or TS right through to camera-ready form —that is, to its final, print form. Major changes in publishing technology and personnel have always been accompanied by changes in the ways books have been laid out. Let's see what's happening this time.

In what follows I assume that a writer who has to do a lot of writing for publication has to be familiar at least with word processing, because a micro-computer and its application programs is a virtual co-worker which equips a writer with the equivalent of a printer's team:

1. A word processing program provides a wide range of typefaces, sizes and styles; automatic hyphenation, justification & kerning, along with contents, footnote and index generation, plus capacity for rapid revision and reformatting.
2. Editing programs check spelling, clichés, readability and sometimes even punctuation and provide automatic search and replace facilities.

A fundamental change in the relationship of the writer to his text resulted: he lost control of how that text would be presented. In the first place, it was now an editor who established the text:

> The books of the high culture of the time —written by the great authors of Greece and Rome, and by the Fathers of the Church— had been progressively corrupted as result of copying by generations of monks. Few of these men were scholars; many knew little Latin and less Greek. Besides, so slow was the copying process, that, by the time a codex came to be copied, it was usually in the last stages of disrepair. Reconstruction of passages of text missing from the tattered pages of such books was beyond the resources of such copyists.
>
> The publisher's editor, a scholar and an expert on the author whose book was to be re-printed, would collate *many* manuscripts from different monasteries to establish the text, recording different readings and their dates and provenance. So the corruption of texts came to an end and their slow amelioration began. But what also began was the convention that the editor controlled the writer's text.

Then the maker of woodcuts accurately portrayed a master craftsman's drawing, or any other illustration, in a woodcut.

> The artistic licence of the clerical copyist ended, along with his beautiful and colourful 'illuminations' of text. Machinery came out of the world of magic and sorcery, and the ideas of its master craftsmen were broadcast, instead of dying with them. The scientific study of anatomy and of plants became possible. Both of these developments were possible because of the accuracy of the diagrams and the cross-referencing and classification systems made possible by the press and the publisher's team.

Next a typesetter set up the text and made up the pages. Then the typesetter and the editor did the proofing. Then the text was printed and the bookbinder made the result up into a book, with paper (not parchment) pages.

In the course of this process, many craftsmen interposed themselves between the writer and his text. It was to be over five centuries before the writer would recover control over presentation of his or her text.

3. 'Paint' programs and scanners, backed by click art libraries, provide pictures; 'draw' programs and their click art provide line drawings and diagrams, and business graphics programs provide charts and graphics.
4. WYSIWYG page makeup programs, often coming with page layout templates, provide the capacity to do page layout, running text around graphics.
5. The results can be sent via modem to be run off, as camera-ready copy, on a phototypesetter.

At the same time, thanks to journals on desktop publishing, the writer has recently inherited, from the centuries-old apprenticeship system now falling increasingly into decline, a rich lore of expertise related to the presentation of text in book form. Also inherited, from proprietary newspaper research, are concepts such as gridding, font and heading 'families', findings on typographic legibility and principles for directing 'traffic flow' and eye movement on the page.[2]

A writer who has such a co-worker and access to this literature can now produce a better end product than anyone but a high-end typesetter —indeed that writer can sometimes match the latter's work. Writers are thus empowered by the desktop publishing technology, rather than weakened by it as has been the case with past print technologies. With printing costs for graphics-intensive text at their present high level, a publisher needs such a writer as part of his or her team. Such writers can't be treated as cavalierly as they were treated in the past.

There are signs that writers are thinking of their end product in ways that are rather different than heretofore. In particular, they've become very aware of formatting issues (inevitably, where word processing is involved) and of interactivity (again, inevitably, when flowing multiple programs or technologies into one another). Here are some of the consequences of this new attitude, which is becoming increasingly evident among writers.

Visually Informative Text

The first big change has to do with 'visually informative text': the table sets out what's involved.[3] Think back to the textbook you read at school. Compare it with a modern, expensively-produced textbook, and the changes will become clearly evident. What's happened?

The textbook with its pages set out in monolithic text blocks is laid out for the printer's convenience, in spite of the fact that this form of presentation makes for difficult reading. It's the equivalent of speech without any non-verbal cues —difficult to follow. The printer has chosen this type of page set up because he uses a batch processing program. This requires him to embed formatting codes in plain text —'blind' (that is, without being able to see the results until print out).

With such batch processing programs setting complicated page layouts is a nightmare. Mathematical formulae are "penalty matter", so difficult to set that the charge for setting them is prohibitively high. The same goes for diagrams and pictures. Why? Because changes in the text (these are common, brought about by changing formatting codes or by inserting, changing or deleting text) can cause diagrams to be split between pages and the appearance of 'widows' and 'orphans' (single lines of text stranded at the foot or top of a page) or other such undesirable consequences. And these consequences don't become apparent till the text has been printed.

There's another reason, too. When a team (often working in different locales) is in charge of the printing process, no one person is responsible for the whole process. Each technical expert does his best, generally under severe time constraints and pressure to keep costs to a minimum. The end result is rarely what the writer would have preferred for his or her readers.

To achieve this preference what's needed is constant interaction among the members of the team as they monitor the appearance of the text. For books this has recently become possible, thanks to the desktop publishing technology. Only still more recently, and again thanks to this self-same technology, have writers gained the expertise to participate fully in, and even direct, this interactive process.

> Indeed, because of the growing sophistication (and expense) of the desktop publishing technology, the new rôle for the writer may well turn out to be as a key member of the publisher's team. Certainly, with the increasing use of CD ROM, features of the director's and producer's rôles will become common to the rôle of the author also.

Macro-punctuation: Semantics of Page Layout

As result a major, and largely unremarked development in writing is occurring all around us. Formatting, at the level of the page, is becoming analogous to punctuation at the level of the sentence. As "macro-punctuation", such formatting guides understanding of the text via conventions of meaning attached to its different forms.[4]

How Formatting Affects A Text's Intelligibility

Visually Informative Text	Details of Format	Undifferentiated Text Block
Shape of text modules indicates the meaning of their content, acting as an advance organizer: it's punctuation at the level of the page. A planned framework is involved: relationships between text blocks are thought out in advance.	**Overall Page Layout**	A solid block of text provides no facilitation of readability; it's the equivalent of speech without non-verbal messages. The reader must work out the plan that's in the writer's —but not the typesetter's— head.
Chunking: partitions & divisions are immediately evident; different kinds of divisions are visually distinct at a glance. The whole is easy to skim-read. Sequential reading of entire text not required.	**Content Units or Subdivisions of the Text**	Continuous flow of text: there are only paragraphs to indicate divisions in the text. The whole text must be read in detail, with reviews to keep the reader on track (this presupposes a reading style that's no longer common).
Done typographically, by larger fonts &/or bolded or italicized fonts, or by informational graphics (boxes, rules or screening). White space is used to make headings stand out, bolding to identify key terms within text blocks, & outquotes to indicate special emphasis. Policy for whole document must be developed prior to writing.	**Highlighting of Main Points**	Managed by semantics: choice diction and intensifiers indicate emphasis. Topic sentences may be employed to signal in advance what a paragraph is going to be about. The entire burden of indicating emphasis must be borne by the words alone.
Done by indentation, using outlining conventions, or by a 'headings family' of graduated sizes, to indicate degrees of importance in headings.	**Hierarchical Relationships**	Managed by syntax: much use of subordinate clauses; complex & lengthy sentence structures result. Readability suffers: too much work has to be done by the words; graphics & positioning are underemployed
Done by bullets & point-form statements, or hanging indents, parallel to one another, inset under the themal statement to which they refer. Long sentences result; but their structure and expression is simple.	**Co-ordinate Relationships**	Parallel sentence structure, often employing literary figures such as anaphora. Much use of co-ordinating language gadgets. Long and complex sentences, and some repetition of phrases, necessarily result.
May be done by sequentially numbered hanging indents or by informational graphics: arrows, pointers or even, when necessary, algorithms.	**Sequential Relationships**	Has to be managed solely by words, so there's much use of connectives and parallelism of phraseology. This tends to result in lengthy, complex sentences
K.I.S.S. English, readability formatted. Much use of sentence fragments: 'power speech'.	**Sentence Forms & Patterns Overall**	Formal, correct syntax is essential, as the text, without the help of layout clues, must convey all the meaning on its own. Diction (qualifiers etc.) and sentence forms tend to be bookish: 'powerless speech'.
Text arranged for reader's convenience: skimming and selective reading facilitated. Meta-message:'gets to straight to the point'; 'lucid and organized'.	**'Between the Lines' Impressions Generated**	Close reading essential; assumes captive readership. Much use of language gadgets. Meta-message: 'wordy'; 'not business-like'. Risks being perceived as 'trying to impress'.

Follows S.A. Bernhardt, "Seeing the Text", *College Composition and Communication*, 37 (1), 1986, 66—78.

Punctuation started off as a convention to help a person read text aloud. It was gradually refined, and its syntactic significance was developed into its present form. As it developed, the sentences whose meaning it enhanced grew shorter and less complex in form. So now, under the influence partly of studies of the readability of newsprint and increasingly of studies by instructional design experts, the impact of different types of structuring on ease of access, comprehension and retention is being discovered.

> A semantics of textual and typographical structuring and display is emerging and being developed into guidelines. Books, textbooks in particular, are in process of making the escape from the monolithic text block format that magazines have already made.

Power Writing

Evidence from study of speech patterns in court rooms indicates that the mode (rather than the content) of a speech determines the authoritativeness attributed to the speaker. A 'powerless' speech mode has been identified. It involves use of intensifiers ('very'), empty adjectives ('attractive'), hyper-correct grammar (bookish forms such as 'whom'), polite expressions ('well'), a wide range of intonational patterns, and a rising intonation at the end of the sentence. This is the 'female' speech pattern. It's not perceived as authoritative. Police, parole officers and professionals (of either sex) exhibit few of these features in their speech patterns: they're terse, with a laconic intonational pattern. This is the 'male' speech pattern. It's perceived as authoritative: expert and knowledgeable, these people do not mince words.[5]

There is some indication that there's a similar phenomenon in written expression. The phraseology, sentence structure and slowly developing presentation associated with the undifferentiated text block of the above table —an essayist's approach to presentation— is usually perceived as 'too long-winded'. The more succinct, easy-to-make-out presentation of visually informative text is perceived as 'businesslike'. It gets read: the writer is perceived as knowing what he or she is doing. Visually informative text is the written equivalent of power speech: it's power writing, at least where business and organizations are concerned.

Sensitivity to Cognitive Processes in Writing

When you write your MS with a pencil for someone else to type and someone else again to print, you tend to concentrate on content. Process is of small concern to you: once in typescript your MS is as good as carved in stone. But word processing requires you to plan for the complex formatting that it facilitates. When you word process your own MS knowing that it will likely go through several major revisions and/or that its 'final' version may be 'massaged' into several different formats for several different publications outlets, you have to think about process as well as about content.

Once you start thinking about process, you become aware of how the way you tackle the process of writing affects the end result —the content. Getting your basic ideas out on paper —exteriorizing your insights— is a very different process from writing those ideas up. There are brain compatible techniques (such as 'mind mapping'/'spoke diagrams') which enable you to capture ideas during brainstorms without cutting those ideas off. Effective writers are flexible planners, and tend to use such techniques.[6]

Generating ideas, organizing those ideas into text and editing that text are three different processes. It's not possible to keep these processes wholly separate while writing (you keep looping back from the later stages to the earlier ones, then working through from the beginning again). But it does help to proceed sequentially through these processes, as far as possible: you'll overload if you try to do everything at once.[7]

Organizing, for instance, generally involves turning your basic ideas into an outline, then fleshing that outline out into a full-scale exposition. (This is why many writers want outlining programs included in their word processing programs.) But, while developing your outline, you've got to consider how your reader is going to interpret what you're writing; otherwise you'll produce writer-based (rather than reader-oriented) prose. If you try to edit this text as you develop it —by running a readability check as you go, for instance— you're likely to succumb to writer's block, in the form of cognitive overload.

> Metacognitive strategies in accessing and presenting information are likely to become increasingly important for authors: the microcomputer is by now as much a processor of text as it is a cruncher of numbers.
>
> Strategies for interactive co-construction of meaning with the reader will also become far more important, as writing will become more provisional and group-produced (electronic journals, databases and LANs are increasingly moving writers in this direction).

Composing Plans: the 'Deep Structure' of Writing

Without a repertoire of composing plans you're likely to become a captive of your text as it grows. In fact, the ability to monitor and direct your own process of composition becomes increasingly important when you have to to compose text provisionally via elaborate computer technologies. Hence writers who use word processing programs tend to become increasingly aware of process issues as well as of content issues in writing. It's a question of "What planning frames for composition are most likely to facilitate this type of reader's co-construction of the meaning of this text?"

'Composing plans' —another type of format, only cognitive this time instead of positional— come in a variety of forms. Some provide as it were templates of the deep structure of a particular kind of material. For instance, there's a method of writing a personality profile, so as to maximize its reader-orientation. Developed by Robert Ruark, this 'story architecture' produces stories that make engrossing reading.[8] There are many such templates. They've also been developed for human interest stories, for trend studies, and so on. There are even templates for different kinds of leads into stories.[9]

There are templates for other kinds of material, too. For instance, there are guidelines for writing brief case studies. These enable you to compress all your material into a page and still retain readability and impact.[10]

The Need for An On-going Debate on the Impact of Computer-Assisted Writing on Writers and Writing

Assessing the impact of this technology on writers and writing at the present juncture is like assessing the impact of the auto on transportation as the first Model T Fords came rolling off the assembly line. But the impact of desktop publishing technology is going to be major, not trivial; so writers as a group need to become aware of likely developments. This attempt at identifying emergent trends is put forward in the hope that it will encourage other attempts to sense what's coming our way . It's provisional writing, a first step towards a larger understanding that we'll interactively create.

Tom Carney

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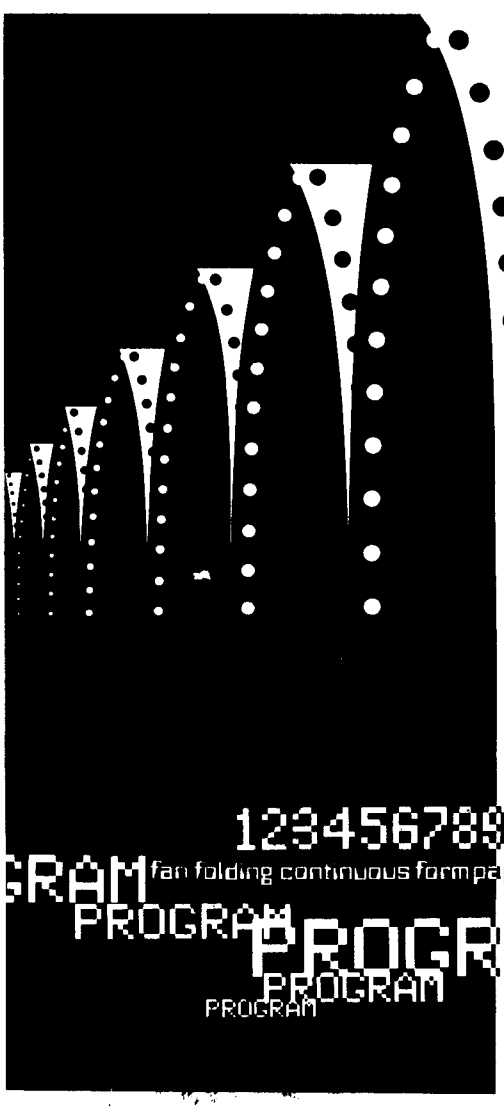

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