



Computer generation of conference presentations

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ABSTRACT

There are various subjective factors which interfere with the usefulness of the typical conference presentation to the individual listener. This satire does not attempt to name and categorize these factors; this would in itself interfere with understanding. Instead, a hypothetical processing system for creating conference presentations is described, supposedly by the system itself. The system has a number of interfering factors as well as positive factors built into it. Areas of study are the use of acronyms; methods of developing the introduction, main topic, and conclusion; graphs and tables; and small details which tend to distract. Contributing to the satirical purpose, the system is an example of computer overkill—an entire system is developed to create one conference presentation. A gentle plea is made to future writers to view the listener as the most important consideration when editing their product.

INTRODUCTION

Computers and speed have been allies since the turn of the century. Ever since Herman Hollerith devised a tabulation system for the United States census of 1890, it has been recognized that, while computers may not always be the cheapest way of doing things, they are certainly the fastest. Through the years, the speed of the computer has increased to the point where millions of calculations can be performed every second. Even the common hand-held calculator can give answers to problems essentially the instant that the equals key is pressed. This great speed advantage, combined with a potential savings in labor costs, has permitted the computer to be utilized as a jack-of-all-trades, in manufacturing, finance, education, communications, and just about any other application imaginable. Therefore, it should come as no surprise that this author should turn to the computer not merely as a subject, but indeed as a source for a live conference presentation.

A DEADLINE TO BE MET

On November first, 1976, this author was informed that the American Federation of Information Processing Socie-

ties was seeking papers for presentation at its 1977 National Computer Conference. At the same time, we found that Aetna Life and Casualty, the company at which this author is employed, was encouraging its data processing employees to submit papers. We were interested in presenting a paper in the primary area, "The Individual and Computing," but were awed by the deadline date of December first.

We have become acutely aware that we as individual programmers must view the computer from both ends, as one who both causes actions and feels the effects of one's programming. Our programming experience thus could be used to devise a system which would generate a presentation. Our consumer selves would then be able to take advantage of a system which would supply us with a paper prior to the December first deadline.

This seemed to be the only reasonable step. The alternative would be to rely on creative juices to come up with a presentable paper in the short span of one month's time. The choice was clear. Time was of the essence, and that very factor pointed to the computer as the only feasible means to meet the deadline which had been set.

BASIS FOR A SYSTEM

Before designing the system, it was necessary to determine the characteristics of a typical conference presentation. Reference for this study was the AFIPS Conference Proceedings, 1975 National Computer Conference. The typical paper had certain readily identifiable characteristics. We shall study the abilities of the system with regard to each of these characteristics as we identify each one.

ACRONAMING THE SYSTEM

Characteristic one: When a system is involved in the presentation, it has an acronym for a name

When a new system is presented, it is customary that the system be named with an acronym. As most of us know, an acronym is a word made up of the first letter or letters of other words which actually describe the system or other entity which is assigned the acronym. Our presentation

generator had to be capable of making key words entered by the author into acronyms. The author would have to specify the amount of contrivedness used in creating the acronym. With **Low Acronym Contrivedness Keying (LACK)**, the acronym is sought to fit the description. A good example of LACK specification is COBOL, or **COmmon Business Oriented Language**. This author, however, chose **High Acronym Contrivedness Keying (HACK)** in which a description is sought to fit the acronym. Entering the key words Presentation, NCC, and Computerized, we were supplied with the acronym PROCEEDINGS, for **Presentation Rigmarole Optimized Computerized Elaboration Editor (Developed and Intended for the NCC) Generating System**. This acronym is displayed in Table I. Thus, our system for presentation generation was given the name PROCEEDINGS.

BEGINNING WITH AN INTRODUCTION

Characteristic two: The presentation begins with an introduction

An introduction usually serves two purposes. One is to summarize what has gone on in the past. The other is to lead into the topic to be presented.

The presentation author can specify as to how much past information he wishes to present. He can limit it to a sentence or two, this being known as giving history the short shrift. Conversely, he can spend the first half of his talk in this area, and this is called dwelling in the past. PROCEEDINGS permits the author to choose either of these extremes or anywhere in between.

Leading from the past into the topic to be presented is a rather simple process for PROCEEDINGS. In the typical human-composed introduction, sentences are ordered logi-

cally to lead into the main topic. Since computers and logic go together like bread and peanut butter, this portion of the presentation is a piece of cake for the PROCEEDINGS system.

However, the introduction is sometimes used to summarize the entire presentation. This is not recommended in the PROCEEDINGS system, because this involves the use of a pre-post-processor. This method of processing the data before it is available has not yet been proven accurate in our generator.

PRESENTING THE PERTINENT FACTS

Characteristic three: The presentation involves the presenting of pertinent facts

A number of options are available in the PROCEEDINGS system by which the author can present his main body of material. He or she can specify to PROCEEDINGS that the length of sentences, that is, the basic group of words which are strung together, at least in our English language, word after word until a basic thought or thoughts is or are completed and possibly reiterated until the listener is totally unsure of the overall meaning despite understanding perfectly the meaning of individual phrases within such a sentence, shall be long. PROCEEDINGS sentences can also be short. Sentences will be understandable if a low fog index is requested. Conversely, and in fashion detrimental to the cognizance of the conferees, it can be specified that the fog index shall be high. Buzz words, idioms, and both formal and informal language can be mixed in proportions to suit the author.

The facts themselves are another matter. The author may, if so desired, enter the facts concerning the subject to be reported upon. The computer will rearrange and augment these facts so that they comprise a presentation. However, recall that at the start of this talk it was said that the major advantage of computers is their great speed. It is much faster to let the computer write its own presentation using the facts it already has. The author would simply make his specifications of sentence length, buzz word content, and other criteria which would alter the computer output to his style of writing. Such an approach was used for the writing of this presentation. The facts which the PROCEEDINGS system had, and could therefore use, were facts concerning the PROCEEDINGS system itself. The result, logically, was this presentation on the PROCEEDINGS system. Admittedly, such a technique limits the scope of future presentations. On the other hand, we must expect to make such minor sacrifices for the sake of speed and accuracy.

To permit some variety in the presentation, yet observe a logical progression of ideas, a new method of file organization had to be developed. Using random access storage devices, we created the Random Sequential method of file organization. We won't go into the technical aspects of Random Sequential access, but it is rather like dropping the tone arm of your phonograph onto a long-playing record

TABLE I—Words Represented by the PROCEEDINGS Acronym

Letter in the PROCEEDINGS acronym	Word(s) represented by the initial letter
P	Presentation
R	Rigmarole
O	Optimized
C	Computerized
E	Elaboration
E	Editor
D	(Developed and
I	Intended for the
N	NCC)
G	Generating
S	System

and letting the record continue to play. Diversity, yet continuity.

HEADING THE SUBTOPICS

Characteristic four: The publication copy of the presentation has headings for each subtopic covered

When a presentation is published it is customary to provide subject headings throughout the work. This is to enable a reader to skip sections which the reader thinks will not be interesting, and to aid in locating items of special interest. The PROCEEDINGS system can produce short headings, long headings, descriptive headings, humorous headings, and more. In this paper, for instance, the headings of all sections relating to the abilities of the PROCEEDINGS system have the letters "ing" completing the first word of the heading. This can be seen better by studying the printed version of this report.

LISTING WITH TABLES

Characteristic five: The presentation utilizes one or more tables for listing data

Few presentations are complete without a table of facts which would be boring or confusing if read aloud during the presentation. PROCEEDINGS can compile lots of facts for any length desired, complete with footnotes. This can be seen in Table II. The tables can even be informative, as can be seen by referring once again to Table I.

SHOWING WITH DIAGRAMS

Characteristic six: The presentation has one or more impressive looking graphs and/or drawings

Just as tables are an essential part of the well-dressed presentation, so are diagrams, graphs, and pictures. PRO-

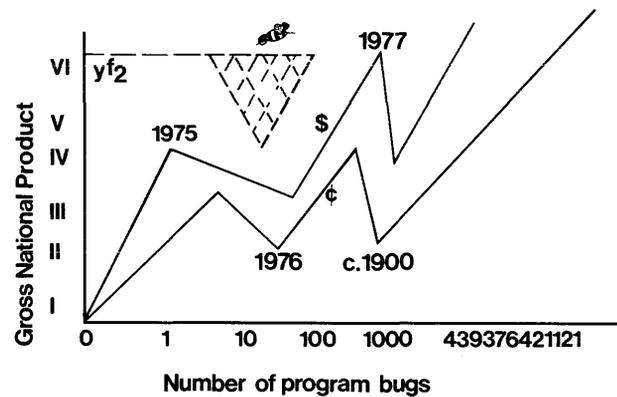


Figure 1—A meaningless yet impressive graph

CEEDINGS diagrams can be simple or complex, well documented with explanatory captions or cryptic and ambiguous. They are all impressive, however, which is the reason for using a diagram in the first place. In this particular presentation, the author specified that he wanted two graphs. This was an unwise choice at the time, simply because we don't have all the bugs worked out of the graphing subsystem; the graph output is egotistical and certain of its creative abilities. This can be seen by referring to Figures 1 and 2.

SUMMING UP*

Characteristic seven: The presentation has a summary or conclusion

Almost as important as the introduction is the summary or conclusion. While the introduction sets the stage, so to speak, the summary reviews that which was too complicated to understand the first time around. This is also true of a conclusion, but a conclusion usually also encourages a course of action or serves to say "I told you so." The PROCEEDINGS system can produce on command a con-

TABLE II—Abilities of PROCEEDINGS to Produce Tables of Desired Lengths

Desired length of table	Within ability of PROCEEDINGS
1 entry	Yes@
10 entries	Yes
100 "	Yes
1,000 "	Yes
10,000 "	Yes
439,376,421,121 "	Yes*

@ Rather silly, but easy to produce.

* Not recommended, as printing takes a while.

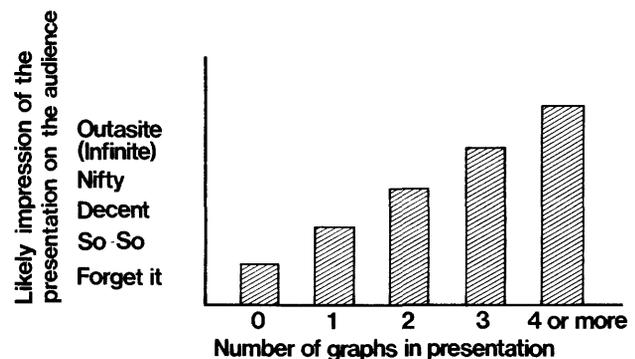


Figure 2—Impressiveness of presentations

* Note: The presentation is not over. We are merely describing the conclusion.

clusion or summary that is a brilliant review of the points which were covered in the equally brilliant presentation. Conversely, it can cut a report short with a "Let's get the heck out of here" attitude. The choice of degree is up to the individual author, just as it is with almost every other aspect of a PROCEEDINGS-produced conference presentation.

PROVIDING REFERENCES

Characteristic eight: The presentation has a list of references

It is common, following the conclusion of an article, to provide a list of references used in the production of a presentation. If the entire report was fabricated by the PROCEEDINGS system, as this one was, this could conceivably pose a problem. But, PROCEEDINGS makes it surprisingly easy. Depending upon user specifications, PROCEEDINGS can provide legitimate references which were actually used to supply PROCEEDINGS with data; it can provide real references which have nothing to do with the presentation; and it can provide fictitious references, which are useful because they are difficult to check on. For illustrative purposes, we have included all three types in the list of references for this presentation.

EXHIBITING IDIOSYNCRACIES

Characteristic nine: Except during acknowledgments, use of personal pronouns in the first person singular is avoided

The PROCEEDINGS presentation can be extremely personalized. While most prefer to do their own "uh" 's, "ah" 's, hand wavings, nervous tics, and "ahem" 's, these are not beyond the capabilities of PROCEEDINGS. However, speech conventions such as avoidance of personal pronouns in the first person singular can easily be worked in by our system. This very presentation utilized "this author," "we," and circumlocutions such as "it was necessary to determine." PROCEEDINGS can be invaluable by providing variety in this awkward situation.

CONCLUSION**

There are many "ingredients" which go into a talk on computers, or, indeed, a talk on any subject. All of these so-called ingredients have a potential of being useful to the listener. The PROCEEDINGS system can provide all of the ingredients, but it is still up to the individual author to set the generator specifications so that an understandable report is presented. This system was designed to run only once, to produce a presentation for the 1977 National Computer Conference. However, I hope that I have programmed it well enough that the principles behind it are clear, and that these principles will be used in the future by more people than use them today. A poorly programmed machine can make a talk such as this totally useless, regardless of whatever vital facts the talk may contain.

If we may leave this fantasy which I have presented to you and return to reality, I could not have had the time or resources to plan and implement an actual PROCEEDINGS system in one month. Therefore, I was totally unprepared to write on it. The only thing I could do was to resort to the use of a computer to prepare my entire presentation instead of writing it myself as I probably should have done. My apologies to you all.

REFERENCES

1. *AFIPS Conference Proceedings, 1975 National Computer Conference*, AFIPS Press, Montvale, New Jersey.
2. Belov, Charles A., "Computer Generation of Conference Presentations," *AFIPS Conference Proceedings, 1977 National Computer Conference*, AFIPS Press, Montvale, New Jersey.
3. Goldstine, Herman H., "Billings, Hollerith, and the Census," *The Computer from Pascal to von Neumann, 1972*, Princeton University Press, Princeton, N. J.
4. Raskin, Jef, "Errata," *Journal of Irreproducible Results*, 20, 2, December 1973, pg. 30.
5. Wrentchler, Polly and Nicholas Teck, "A General Reference for Conference Presentations," *Journal of Reference Citations*, May 1975, pp. 376-427.

ERRATUM

(Added by the author—not computer generated)

As mentioned before by the PROCEEDINGS, there are still a few bugs in the system. In the original computer-produced manuscript, page five follows page three. It is not known whether there was any loss in text because our control counters all contained a value of pi. Apparently, the computer was hungry and had stepped out for a byte to eat.

** Note: The real ending, this time.