

CSCSI/SCEIO

CM-CCS

CIPPRS

Vol. 1, Number 2

December 1980

Editorial

Here we go again, finally. Sorry for the slow pace, but other delays, procrastination and other demands have resulted in this newsletter being about two months late. One problem was the lack of material, and we would like to encourage everyone to send in their research reports to their respective editors. We will attempt to get the next edition out early in 1981, and therefore would like to adhere to a deadline of 28 February 1981 for the receipt of material.

As evidenced by the following comment on Telidon we would like to encourage discussion on issues which may be important to our readers. All too often, in Canada, we tend to discuss these things verbally amongst our colleagues and other associates and rarely do they reach a wider circulation among those who care or know. So let's hear any ideas you may have.

This newsletter is published by CSCSI/SCEIO, CMCCS, and CIPPRS at the University of Alberta, Department of Computing Science, Edmonton, Alberta, T6G 2H1.

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THE GREAT TELIDON MASSACRE

W. A. Davis

Telidon has been touted, in the press and by the Federal government as the greatest thing since sliced bread. In fact, if you take some of the ruminations seriously you might be lead to believe that it is the most significant thing to happen in Canada since standard time was invented by Sandford Fleming. Well, I would like to disagree.

Now, don't get me wrong. The fundamental ideas and the aims of Telidon are good. Specifically, the aim of getting an up to date information system available to the general public is great. Unfortunately, that is just about where the good parts end. My first complaint has to do with the availability of information about the details of Telidon in the early stages of its development. More involvement by the Canadian scientific community might have had some very beneficial effects. Secondly, and I think more significantly, is the marketing approach taken.

Field trials in restricted localities don't really prove very much, particularly when only a restricted data base is available. Remember the "Picture Phone"! If the initial strategy was to aim at making the data base available to small computer users, of which there are considerable numbers, not only would more progress be made, but also a more meaningful result produced. Currently, there are at least two similar(?) facilities available in the U. S.: the Source and MicroNet. The Source terms itself an "Information Utility" while MicroNet is a time sharing service allowing access by personal computers. In both cases access is provided by telephone, and to a very broadly based audience.

Now compare a Telidon terminal with a TRS-80 or an Apple II, or even Intellivision. A Telidon terminal, as I understand it (forgive me, Herb, for my ignorance), is merely a device for displaying Telidon information. On the other hand, any of the other devices are general purpose, in the sense that they can be reprogrammed, and devices added to do whatever application is needed. Including, probably, access to the Telidon data base if it ever becomes available. Which, of course, means that "why would anyone ever consider buying a Telidon Terminal".

Undoubtably, I have missed a number of issues, and probably misunderstood the ones that I have mentioned; however, it still sounds like a classic Canadian situation. Like the FP 6000 or the Avro Arrow, or maybe even the DATARS project. I just hope that I am wrong, and would appreciate any comments that anyone would like to make to set the record straight.

THIRD CSCSI/SCEIO NATIONAL CONFERENCE

Nick Cercone
Simon Fraser University
Burnaby, British Columbia V5A 1S6

The Canadian Society for Computational Studies of Intelligence/Societe Canadienne des Etudes d'Intelligence par Ordinateur held its third national conference in Victoria at the University of Victoria on May 14-16, 1980.

The conference attracted 142 registrants from across North America. There were 44 papers, including 6 invited lectures, presented in the AI portion of the conference. In addition, 6 papers were presented in the Canadian Man-Computer Communications Society (CM-CCS)/Canadian Image Processing and Pattern Recognition Society (CIPPRS) portion. The conference included a report on Graphics Standards Activities, computer graphics tutorials, a computer film festival, and an assortment of formal and informal meetings.

The Third CSCSI/SCEIO conference was by far the most successful to date, owing an extraordinary debt of gratitude to Wayne Davis, the general chairman of the conference, for his tireless effort and fine organisation. Wayne also served as the program chairman for the Man-Computer portion of the program. Len Schubert, the program chairman for the AI program, put together a wonderfully well-balanced series of AI talks which included invited speakers Edward Shortliffe, Ray Reiter, Jerry Hobbs, Steve Zucker, Hans Berliner, and Robert Wilensky. Tom DeFanti was invited to address the audience at the computer film festival and Tom showed an assortment of the latest computer animations. Film contributions were made by Bary Pollack and Tom Calvert, whose movie on computer assisted dance notation included an original first performance electronic music composition by Jean Piche. The well designed proceedings are due largely to the labour of Jeff Sampson, the proceedings editor.

The contents of the 352 page proceedings are listed below. Copies are available for \$22.00 to members of CSCSI/SCEIO, CIPPRS, and CM-CCS and for \$25.00 to anyone else (including postage; U.S. funds accepted at par) by prepaid order to:

CSCSI/SCEIO Proceedings
CIPS National Office
5th Floor
243 College Street
Toronto, Ontario, Canada M5T 2Y1

At the annual business meeting, elections were held and the new officers for the two year term commencing in 1980 were as follows:

President

Alan Mackworth
Dept. of Computer Science
Univ. of British Columbia
Vancouver, British Columbia

Vice-President

Steve Zucker
Dept. of Computer Science
McGill University
Montreal, Quebec

Treasurer

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Dept. of Computing Science
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Dept. of Computer Science
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Wayne Davis (MCCS)
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Johan de Kleer (Xerox PARC)
Alan Mackworth (UBC)
Tony Marsland (Alberta)
Ray Perrault (Toronto)
Jeff Sampson (Alberta)

Proceeding Contents

EXPERT SYSTEMS I

Consultation Systems for Physicians: The Role of Artificial Intelligence Techniques ... Edward Shortliffe

Finding Common Paths as a Learning Mechanism ... Pat Langley

BACON.4: The Discovery of Intrinsic Properties ... Gary Bradshaw, Pat Langley, and Herbert Simon

Incremental Deduction in a Real-Time Environment ... Robert Bechtel, Paul Morris, and Dennis Kibler

An Intelligent Support System for Energy Resources in the United States ... S. Rosenberg

Qualitative Reasoning about Time Series ... James Stansfield

An Adaptive Sorting Program ... Oliver Selfridge, Valerie Congdon, and Stephanie Davis

DEDUCTION AND SYNTHESIS

Default Reasoning ... Ray Reiter

Theorem Proving by Reducing Connection Graphs ... Donald Keuhner

Towards an Iterative Approach to Program Synthesis ... Michael Bauer

SEMANTIC NETS

Handling Exceptional Conditions in PSN ... Yves Lesperance

Contexts in PSN ... Peter Schneider

Representing Programs in PSN ... Bryan Kramer

Organization of Modally Embedded Propositions and of Dependent Concepts ... Alan Covington and Len Schubert

Use of an Attribute Grammar in Network-Based Representation Schemes ... Cliff Hollander

NATURAL LANGUAGE PROCESSING I

Selective Inferencing ... Jerry Hobbs

Interpreting Verb Phrase References in Dialogs ... Ann Robinson

Correcting Misconceptions About Data Base Structure ... Eric Mays

Semantics and Parts of Speech ... Abe Lockman

PSI-KLONE: Parsing and Semantic Interpretation in the BBN Natural Language Understanding System ... Robert Bobrow and Bonnie Lynn Webber

The Role of Discourse Structure in Language Production ... David McDonald

Natural Language Queries for a Linguistic Data Base Using PROLOG ... Richard Kittredge

COMPUTER VISION

Computer Vision ... Steve Zucker

Towards Synthetic Images in Scene Analysis ... Brian Funt

Mediation Between Central and Peripheral Processing: Useful Knowledge Structures ... Roger Browse

Schemata-Based Understanding of Hand-Drawn Sketch Maps ... Bill Havens and Alan Mackworth

Push and Pop on Pictures: Generalizing the Augmented Transition Network Formalism to Capture the Structure and Meaning of Images ... Heinz Breu and Alan Mackworth

Automatic Registration of Landsat Images Using Features Selected from Digital Terrain Models ... Jim Little

Quantification and Characterization of the Shape of a Moving Cell ... Martin Levine and Y.M. Youssef

Spatial Experience and Spatial Problems in a Simulated Robot-Environment System ... Peter Rowat and Rich Rosenberg

GAMES, PROBLEMS, AND SEARCH

Some Observations on Problem Solving ... Hans Berliner

Causality Analysis in Chess ... David Wilkins

Pattern-Based Representations of Knowledge: In Search of the "Human Window" ... M. A. Bramer

Searching Game Trees in Parallel ... Selim Akl, David Barnard, and Ralph Doran

Applications of the Contract Net Framework: Search ... Reid Smith

A Geometric Model Approach to Representing Graph-Search Problems: First Results ... John Gaschnig

Planning in a Dynamic Microworld ... Gordon McCalla and Peter Schneider

NATURAL LANGUAGE PROCESSING II

What's the Point? ... Robert Wilensky

Speech Acts and the Recognition of Shared Plans ... Philip Cohen and Hector Levesque

Understanding Arguments ... Robin Cohen

EXPERT SYSTEMS II

Example Generation ... Edwina Rissland

A Domain-Independent System for Developing Knowledge Bases ... James Reggia

Knowledge Acquisition and Representation Using Logic, Set Theory and Natural Language Structures ... Stewart Bainbridge and Doug Skuce

The Representation of an Evolving System of Legal Concepts ... L.T. McCarty and N.S. Sridharan

MAN-COMPUTER COMMUNICATIONS

Providing Automatic Graphic Displays Through Defaults ...
Sakunthala Gnanamgari, Norm Badler, H.L. Morgan, and Bonnie
Lynn Webber

Using Computer Perception for Graphical Type Checking ... Nadia
Magnenat-Thalman and Daniel Thalman

On the Design of an Intelligent Terminal for Voice Output in
Programming ... T. Radhakrishnan and C. Labrador

Financial Statement

CSCSI Conference 1980

Victoria, B.C.

Income		
Grants		
NSERC	2500.00	
B.C. Gov't	550.00	
Registration	5566.41	
Proceedings Sales	75.00	
Total	8691.41	
Expenses		
Speakers' Expenses	3450.00	
Refunds	209.75	
Entertainment		
BBQ	1320.00	
Reception	260.00	
Coffee	246.00	
Equipment rental	438.47	
Proceedings	2370.04	
Misc.	17.17	
Total	8311.43	
Balance		\$379.98

W. A. Davis, Conference Chairman

Minutes of the Third CSCSI/SCEIO Annual Meeting
held at the University of Victoria, B.C.

The meeting was called to order at 5:13 p.m. on May 14, 1980 by John Mylopoulos. Ten items were then discussed.

(1) Constitution (discussion led by John Mylopoulos)

The history of the Society was reviewed. As a result of a questionnaire, it was determined to establish an affiliation with the Canadian Information Processing Society (CIPS), with the CSCSI/SCEIO essentially functioning as a special interest subgroup (or SIG). A Letters Patent is currently being put together by the executive officer, and it should be ready by June 1, 1980. The CSCSI/SCEIO will become an autonomous corporation in Ontario. Further status as a CIPS SIG is still under negotiation.

(2) CIPS Affiliation (discussion led by Alan Mackworth)

The advantages of affiliation are that CIPS could administer a mailing list and a bank account, and could collect fees and process sales of Proceedings. The disadvantage is cost (roughly \$5 per non-CIPS member).

Further suggestions or opinions regarding CIPS are sought.

(3) Financial Summary

Wayne Davis reported that the Society is financially healthy, with approximately a \$3,000, surplus plus or minus the outcome of the Third Conference.

(4) Dues Increase

Wayne Davis proposed the following dues schedule:

\$3 for CIPS student members
\$5 for non-CIPS student members
\$5 for CIPS regular members
\$8 for non-CIPS regular members

The motion was seconded by Nick Cercone, and was PASSED unanimously.

(5) Newsletter

Gordon McCalla is currently in charge of the CSCSI/SCEIO newsletter. Wayne Davis suggested having only one newsletter for our Society and for related CIPS SIGs. The issue was not decided.

(6) Future Conferences (discussion led by Alan Mackworth)

Since the next IJCAI is in Vancouver in August 1981, Graham Hirst moved that there be no CSCSI/SCEIO Conference in 1981. The motion was seconded by Ray Perrault, and was PASSED unanimously.

Wayne Davis moved that there be a Conference in Saskatoon in conjunction with CIPS in 1982. The motion was seconded by Alan Mackworth, and was PASSED.

(7) New Executive

The nominating committee (R. Rosenberg and T. Elcock) presented the following slate:

Alan Mackworth for president
 Steven Zucker for vice-president
 Wayne Davis for treasurer
 Ray Perrault for secretary

The nominees were approved by acclamation. Their term begins June 1, 1980.

(8) AAAI and CSCSI/SCEIO (Discussion led by Alan Mackworth)

The creation of the new American Association for Artificial Intelligence prompted a re-evaluation of the need for the CSCSI/SCEIO. It was decided that a wait and see strategy was best, so that the direction of the AAAI could be determined more exactly before any action was taken.

(9) CSCSI/SCEIO, CIPPRS, CMCCS

CIPS now has three (potential) SIGs with possibly overlapping interests; in addition to the CSCSI/SCEIO, the Canadian Image Processing and Pattern Recognition Society and the Canadian Man Machine Communication Society exist. Alan Mackworth raised the question of how do they relate to one another, and Wayne Davis replied that it is too early to tell.

(10) Other Business

Wayne Davis raised the need for a logo for the Society. Alan Mackworth suggested that the Newsletter be used to run a contest. Please send all submissions to Gordon McCalla.

(11) Meeting adjourned at 6:09 p.m.

SEVENTH INTERNATIONAL JOINT CONFERENCE ON ARTIFICIAL INTELLIGENCE
VANCOUVER, B.C., CANADA. AUGUST 24-28, 1981

CALL FOR PAPERS

Papers concerning all aspects of Artificial Intelligence will be considered including (but not limited to) the topics listed. Complete drafts in English should be submitted to the Program Committee by March 1, 1981. Final versions of accepted papers will appear in the Conference Proceedings.

Authors are encouraged to submit in one of the following categories:

Papers (6000 words maximum, no more than 20-25 typed, double spaced pages)-for discussions of well developed ideas and systems with substantial contributions to AI. (30 minute presentation) No paper over 25 pages will be reviewed.

Communications (1200 words maximum, no more than 2-5 typed, double spaced pages)-for discussion of emerging ideas and systems, (15 minute presentation). Only papers submitted in this category will be considered in this category.

Programs (500 words maximum, no more than 2 typed, double spaced pages)-for describing systems to be demonstrated during the conference in real-time (subject to availability of computer and transmission resources) or video tape, film or posters. Programs will be presented during scheduled demonstration periods and program descriptions will be included in the conference proceedings.

Submission in all categories will be refereed. All submissions should emphasize novel contributions to AI and their relations to the current state of the art. It is expected that at least one author of every accepted paper will attend the conference.

TOPICS OF INTEREST INCLUDE:

APPLICATIONS OF AI

Medical Diagnosis
Computer Aided Design
Person/Machine Interaction
Computer Aided Instruction

COGNITIVE SCIENCE

Psychological Modelling
Linguistic Modelling
Philosophical Implications

NATURAL LANGUAGE

Speech Understanding-Dialog

EXPERT SYSTEMS

Domain Models-Program
Synthesis

Text Analysis Generation

Knowledge-based Systems
Representation of Expertise

VISION

Interpretation Segmentation
 3D Representation and Processing
 Extraction of Surface Information

THEORETICAL FOUNDATIONS

Search Theory
 Logical Foundations of
 Knowledge Representation

PROBLEM SOLVING

Planning Theorem Proving
 Plan Execution and Correction
 Automatic Programming

ORGANIZATION AND ACQUISITION
OF KNOWLEDGE

Learning-Memory models
 Inference-Knowledge
 Representation

DETAILS OF SUBMISSION

Include: (a) 3 copies of typed or printed paper, in English
 (b) Topics under which the submission should be reviewed
 (c) an abstract of 100-250 words for papers
 (d) author's name and address

Submission date: March 1, 1981

Notification of Acceptance: May 15, 1981

Camera-ready Copy Due: June 15, 1981

Send to:

Roger C. Schank
 Program Chairman, IJCAI-81
 Yale University
 Computer Science Dept.
 P.O. Box 2158 YS
 New Haven, CT 06520, U.S.A.
 (203) 436-0606

Questions about the technical program should be addressed to Roger Schank at the above address or telephone number.

General questions about the conference may be addressed to:

Pat Hayes
 General Chairman, IJCAI-81
 University of Rochester
 Dept. of Computer Science
 Mathematical Sciences Building
 Rochester, N.Y. 14627 U.S.A.

ASSOCIATION FOR COMPUTATIONAL LINGUISTICS

CALL FOR PAPERS

The 19th annual meeting of the Association for Computational Linguistics will be held from 29 June to 1 July 1981, on the campus of Stanford University, Stanford, California.

Papers for the annual meeting are solicited for linguistically and computationally significant topics, including the following:

Syntax, parsing, and sentence generation.

Computational Semantics (including reference, anaphora, metaphor)

Representation of knowledge, deduction, planning, and plan recognition.

Speech analysis and synthesis.

Machine translation and machine-aided translation.

Mathematical foundations of Computational Linguistics.

Linguistic theories and their computational applications.

Authors wishing to present a paper should submit six copies of an extended abstract (not to exceed 1000 words) by 2 February 1981 to the Program Chairman: C. Raymond Perrault, Bolt Beranek and Newman, 50 Moulton Street, Cambridge, Massachusetts 02138, U.S.A. [Phone: (617) 491-1850; ARPAnet: RPerrault@bbnd]

Authors will be notified of the acceptance of their papers by 16 March 1981. Full-length versions of accepted papers submitted by 27 April 1981 will be included in the Proceedings of the Conference.

Local arrangements: Jerry Kaplan, Computer Science Department, Stanford University, Stanford, CA 94305, U.S.A. [Phone: (415)497-1442; ARPAnet Kaplan@sri]

For further information on conference arrangements and the ACL more generally, contact: Don Walker, Artificial Intelligence Center, SRI International, Menlo Park, California 94025, U.S.A. [Phone: (415)326-6200x3071; ARPAnet: Walker@sri].

CMCCS '81

The Seventh Man-Computer Communication Conference will occur at the University of Waterloo, during the 8th thru the 12th of June 1981. The preliminary program is in the process of being assembled and the details will be available soon.

One day tutorials have been organized on: Raster Graphics, Digital Image Processing, Remote Sensing, and Computer Aided Design.

The 14 conference sessions are entitled: Videotext, Image Processing, Office of the Future, Psychology of Vision, Interaction, Data Structures, Speech, Standards, Animation, Image Processing meets Computer Graphics, Image Processing Applications, Hardware, and Techniques.

Speakers presenting papers include:

S.W. Zucker, McGill University
E. Catmull, Lucasfilm
C. Csuri, Ohio State
T. Pavlidis, Bell Labs
M. Kunt, Swiss F.I.T.
T. Whitted, Bell Labs
R. Baecker, University of Toronto
M. Wein, National Research Council
S.E. Levinson, Bell Labs
M.D. Levine, McGill University
T. Kasvand, National Research Council
R. Bajcsy, University of Pennsylvania

For further information or registration forms contact:

Ms. Yvonne Fink
Conference Secretary
Department of Computer Science
University of Waterloo
Waterloo, Ontario N2L 3G1

Telephone: (519) 885-1211 ext. 2191

IMAGE ANALYSIS SYSTEM

DIPIX Systems Limited recently announced the LCT-11, a powerful image analysis system with a full repertoire of application tasks specifically developed for the interactive analysis of remotely sensed imagery from satellites. The basic system, which sells for less than 50,000 dollars, uses the powerful new LSI 11/23 microcomputer from Digital Equipment Corporation, with 64 kilowords of memory, a 90 megabyte disc, a 1/4 inch tape cartridge with 30 megabyte capacity per cartridge, a 256 x 256 pixel colour monitor with 1 megabit image memory and a graphics tablet to control the display, an operators CRT terminal and keyboard and a matrix printer/plotter. Many options allow the system to be expanded easily in many ways.

The display is particularly flexible. The image memory may be assigned to one image with each pixel having 1, 2, 4, 8, 16, or 32 bits of depth, or divided among several images. The display screen may be viewed as a window linked to any of the images in memory, or it may be divided into several windows, each linked to a separate image. Windows may be independently or collectively zoomed and panned continuously about random points in their images.

The software uses the DEC RSX-11M operating system. Applications software is based on the ARIES system, which has been well proven in operational use, and is very extensive. Pre-processing operations permit destripping, dropped line replacement, contrast stretching, band ratioing, sums and differences, edge sharpening, etc. Images may be registered to other images or to UTM map grids. Colour enhancement using a principal components transformation, with mapping into an optimized colour space is a powerful system capability. The set of classification oriented functions is very extensive. The set of applications programs is constantly being added to.

Interested readers may obtain further information by calling DIPIX Systems Limited at (613) 224-5175.

NEW JOURNAL RELATED TO IMAGE PROCESSING & PATTERN RECOGNITION

Signal Processing, a European journal devoted to the methods and applications of signal processing, published papers in Pattern Recognition and Image processing among other subjects. Free specimen copies and subscription information can be obtained from North-Holland Publishing Co., 52 Vanderbilt Ave., New York, NY 10017, U.S.A. Information for authors may be obtained from the overseas Associate Editor of the journal, Dr. C.Y. Suen of Concordia University, Montreal, Canada.

NEW BOOKS PUBLISHED

- Bruderer, H.E., Non-Numerical Information Processing.
Computational Linguistics, Artificial Intelligence,
Computer Chess, Computer Graphics and Art, Automatic
Documentation, Library Automation, Computer Law. Verlag
Linguistik, P.O. Box 409, CH-9400 Rorschach, Switzerland,
1979, 202 pages, (in German).
- Suen, Ching Y., Computational Analysis of Mandarin, 1979, 160
pages, Birkhauser Boston, 380 Green Street, Cambridge, MA
02139, U.S.A.

REMINDER RE: SPEECH PROCESSING

Copies of David Hill's presentation at the CSCSI Conference in Victoria are available directly from Dr. Hill, Department of Computer Science, University of Calgary, Calgary, Alberta, T2N 1N4

CSCSI/SCEIO CONSTITUTION

Alan Mackworth suggests that the proposed constitution be further modified by adding under Article VIII "Dissolution shall be by constitutional amendment." He also points out that Article VIII makes no mention of potential debts (Are they negative assets? Are members individually liable? Should CIPS be made liable? Do we need legal advice on this? Etc.), and that no mention of CIPS is made in the constitution at all. Finally Alan, as the former SIG rep for CSCSI/SCEIO on the CIPS National Board, is interested in what issues CSCSI/SCEIO want discussed (e.g., Should we work at "encouraging CIPS to move in a computer science direction"? What about INFOR? Do we want a Canadian Journal of Computer Science? What about publicity for CSCSI/SCEIO in CIPS brochures? Etc.) Send any suggestions to Alan Mackworth, Dept. of Computer Science, University of British Columbia, Vancouver, B.C. or Gord McCalla, Dept. of Computational Science, University of Saskatchewan, Saskatoon, Saskatchewan.

REPORT ON ACTIVITIES IN STANDARDS FOR GRAPHICS

M. Wein
National Research Council

National Activities

USA

The Graphics Standards Planning Committee of SIGGRAPH (A Special Interest Group of ACM) has been at work on proposed standards since 1976. Since the formative meeting in Philadelphia work has progressed with wide participation leading to the final report produced in the summer of 1979 (1), documenting the proposed CORE package.

The work in SIGGRAPH was spearheaded mainly by university and research lab activities and did not have any formal or legal standing, but it laid the foundations for drafting of a standard. Subsequently, in 1979 the formal process of preparing a U.S. standard started with the formation of the X3H3, a committee of ANSI (American National Standards Institute).

Germany

A strong activity in computer aided design has led to the evolution of graphics packages in support of CAD. This activity has led to a proposed German standard, the Graphics Kernel System (GKS). In essence the GKS system is a support package, which is device independent, intended to run on a large host, capable of driving multiple stations and limited to two dimensions (2D).

International Formal Standards

The international body which establishes computer related standards is the International Standards Organization (ISO) within its Technical Committee TC97. Within ISO, graphics have been assigned to the subcommittee on programming languages SC5, which in turn has formed Working Group 2, to work in the area of graphics (TC97/SC5/WG2). To complicate matters further, with the emergence of computer communications, graphics in videotext services are also being standardized within the International telecommunications standardization body CCITT as an "end-to-end service".

Although the "Mosaics" approach to videotext, used in Great Britain and France, is being studied within ISO in TC97/SC2 (character codes and extensions), the geometric approach used in Canada has been assigned to TC97/SC5/WG2 - graphics. Thus the committee on programming languages (SC5), whose territory has been stretched to include graphics, now finds itself being

assigned the responsibility for the geometric coding in videotext services.

Until the present, the Working Group 2 of TC97/SC5 has been working on reconciling the differences between the German GKS proposal and the US drafts emerging from SIGGRAPH. As a result of this process the GKS proposal already incorporates many ideas and concepts from the SIGGRAPH CORE package.

This work has been somewhat on an information basis because as yet, neither proposal has been approved by TC97 as a formal work item for WG2. Early in 1980, following the last WG2 meeting in Budapest, Germany has submitted GKS to TC97 to have the GKS approved as a formal work item. However, the ballot by full members of TC97 has not raised sufficient approval for considering GKS within WG2.

Canada

Several Canadians have participated in the SIGGRAPH Graphics Standards Planning Committee, and have contributed to the Status report(1). Also, an implementation of the CORE package exists at Bell Northern Research for internal projects.

A separate development is the work on videotext information services around the world, as well as in Canada, and known here as TELIDON. As part of the work on Telidon the Department of Communications has spear-headed the drafting of proposed standards for specifying the transmission formats of the graphical information. These standards are being used for implementing Telidon field trials.

The Canadian Advisory Committee on programming languages advises the Standards Council of Canada (SCC) on the position Canada takes at ISO in TC97/SC5. In order for SCC to take a meaningful position on graphics at ISO, it is necessary that the previously informal activity be organized into a Working Group on graphics within the Advisory Committee on programming languages. Formation of this group will give us early access to information on the developments in graphics standards at ISO and at ANSI, which may ultimately affect both manufacturers and users of graphics.

An exploratory meeting was held in Ottawa in December 1979, with eleven attendees, which indicated that sufficient interest exists.

Two general areas have been identified as being of immediate concern. First, we should follow the international development, disseminate the information to interested parties on proposals as they are received, and where appropriate, to comment on those proposals.

Secondly, provide a formal structure for sponsoring the geometrical coding for videotext services within TC97/SC5/WG2,

as long as this item remains within the jurisdiction of the international SC5/WG2.

A Canadian Working Group has been formed, comprising first of all those who have either attended the first formative meeting in December of 1979, or have responded indicating interest. Also, I am soliciting the assistance of those concerned.

The following work program was established at the meeting of the Canadian Working Group on 17 September 1980:

1. The German proposal GKS (Graphics Kernel System) has been submitted to TC97 by an ISO resolution for a second vote for GKS to become a work item. Canada has voted to support and commit on this item. The latest document GKS 6.2 will be studied in some detail by M. Wein, G. Williams, O. Lapczak and H. Newman. Issues raised by ANSI X3H3 on this document are being distributed with the document.
2. H. Newman has rewritten the PDI document on geometric coding for Videotex submitted by Canada (ISO/97/5/2 Doc N53) in a form which presents a top-down view of the subject, consistent with SC5 format. This draft document will be distributed at ANSI X3H3 meeting in October as document X3H3-80-80.
3. M. Wein has participated in X3H33 in preparation of two project documents to develop standards for virtual device interface and for device independent metafiles.
4. Commented on a ISO 97/5/2 (Graphics) proposed revisions to Chapter 13 of a document on terminology prepared by 97/1. Copy sent to the chairman of CAC/97/1.
5. Approaches were made to Canadian members of ISO Working Group 2 to explore the possibility of Canada sponsoring a work item in ISO on graphics metafiles. The tentative decision is that such a move would likely exceed our resources, but Mr. O'Brien of DOC would investigate whether there is Departmental support for this work.

(1) Status Report of the Graphics Standards Planning Committee, SIGGRAPH-ACM, Vol. 13, No. 3, August 1979.