



The International **LOGO** E X C H A N G E The Newsletter for Logo Users Around the World

Volume 1 Number 4

FORWARD 100!

July 1986 Page 1

BUTFIRST

The fourth issue of ILX is the first to emanate from my new home in Singapore. I have been "on the job" for three weeks now and have concentrated on a new introduction to computers in education course for preservice secondary teachers. Logo will be a major component of the course; many teachers here seem to be aware of Logo and would like to know more.

On my way to Singapore, I spent a week in Japan. As you have gathered from recent issues of ILX, there are some very enthusiastic Logo boosters in Japan. Unfortunately, most of this enthusiasm is not yet in the schools. The education ministry is thinking about eliminating the junior high school and combining it with the high school. If this happens, jr. high students may not have to spend their time studying to pass exams to get into the best high schools and can then spend some time exploring things like ... Logo!

We stayed at the children's castle in Tokyo, which contained about 50 computers where kids could use Logo. Setsuko Abe discussed the Logo - Logo workshops she was conducting (see Asia column). Visits with Hiro Yoshi Goto and Hillel Weintraub in Kyoto were very pleasant and informative. Although the U.S. dollar was at its all-time low against the yen, we were pleased to be in Kyoto during the beautiful cherry blossom season.

We are beginning to see indications that the ILX is achieving its goal of an international clearinghouse for information on Logo activity around the world. For example, a Liberian professor read about the Senegal Logo project in the ILX and is now in contact with the ILX African editor to begin a similar project. Having taught in Liberia for two years, I found this news to be quite exciting! Also, Japanese Logo users have connected with English users via the ILX to share expertise in conducting Logo - Logo workshops.

In addition to Logo news from all over the globe, this issue of the ILX contains an article about possible international Logo study tours to China, Japan, Fiji, Australia, Singapore, and Malaysia. Please indicate your interest.

I am receiving my correspondence here in Singapore much faster than I did in Santa Barbara, so do keep in touch.

FD 100!

Africa

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This month's column brings you Logo news from Liberia, Kuwait, and Senegal. Liberia may start a Logo project and could benefit from the Senegalese Logo experience. Kuwait attempts to fight the technological fear and make its citizens profit from the computer's capabilities. The international exhibit held in Dakar from February 26 to March 5 gave the Senegal Logo project widespread visibility and was perhaps the exhibit's most popular display.

Liberia: Through Computer Consultants, Inc., Liberia is getting interested in Logo. Mr Ounzuba Kemeh-Gama, senior consultant of Computer Consultants Inc. wrote this to me:

"...I got your thesis and have passed it over to some colleagues of mine at the University of Liberia (School of Education). Interest is very high on the Logo concept. At the moment, I am collaborating with a researcher in submitting a proposal for funding to UNESCO. One of the components of the proposal is for the researcher to visit Senegal and the first experience of the Logo project you are engaged with...."

We hope that Liberia will start a Logo project and profit from the Senegalese experience. What is lacking in Africa is not interest in Logo, but information and funds for Logo projects. Collaboration between countries should be easier and more profitable through information exchanges in publications such as the ILX.

Kuwait: Mr. Baha Yacoub, General Manager of Al Alamiah Arabic Software sent me a brochure in which you can read this:

"The technological gap between the industrial and developing countries has lasted many years. It has resulted in another gap called the 'computational gap.' As part of the

developing world, we felt the need for bridging this gap. It is hoped that we catch up with the speedy scientific development."

To enable this target, Al Alamiah established the Al Alamiah Software Division in 1982 to enable the Arab user to utilize the various capabilities of the personal computer. The functions of this division are:

1. System programming activities that are responsible for:
 - Arabization of operating systems
 - Arabization of peripherals such as printers and speech synthesizers
 - Developing Arabic programming languages such as BASIC and Logo
 - Development and production of software tools for developing Arabic programs such as word processing and data compression
2. Applications programming design that would produce:
 - Self-learning programs
 - Programs based on school curriculum
 - Entertainment and educational programs
3. Publishing devoted to:
 - Publishing and translating books that promote computer literacy
 - Issuing newsletters on new trends in computer technology
 - Preparation of publicity materials related to the in-house developed software such as catalogues, brochures, etc.

By introducing a series of educational software, Al Alamiah hopes to enable the Arab citizens to overcome the technological fear embodied in the personal computer and its limitless capabilities.

Al Alamiah Software is translating MSX Logo into Arabic and Urdu with the help of Logo Computer Systems, Inc. (LCSI). The General Manager promised to send a complete bilingual system to the Senegalese Logo project. He is also working hard to help us get funds from the Kuwait government. I would like to thank Effie Maniatis, Vice-President of Projects at LCSI for making the connection between Al Alamiah and the Senegalese Logo project.

To conclude, the goal of Al Alamiah is to fight "technological fear" and help people profit from the computer's capabilities. This is generally a problem in third world countries; both the Al Alamiah project in Kuwait and the Senegal Logo Project are attempting to use Logo to solve these problems.

Senegal: From February 26 to March 5, the first international exhibit in computers, electronic components, telematics, communication, and organization was organized in Dakar, Senegal. Several companies were represented, including Apple, IBM, Burroughs, Wang, and Thomson, as well as other hardware and software companies.

The Senegalese Logo project was present and was very successful. With Sprite Logo, we showed microworlds procedures representing Senegalese activities in the rainy season, for example. We exhibited Logo procedures for drawing a map of Senegal, and for drawing alphabetic letters. Also included was a beautiful series of Logo procedures made by Senegalese children.

The project display was such a successful attraction that the Senegalese television made a special presentation on the project, emphasizing our goals and results!

Since the exhibit, parents and other educators are more interested in the Logo activities of our group and this gives us more strength to go forward.

Australia

by Anne McDougall
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In this issue I shall describe two small research projects which focus on robot turtles.

Robot turtles have been associated with Logo work ever since the graphics part of the language was developed. Papert outlined the role of the robot as a transitional object, enabling children to relate the motion of the moving entity in turtle geometry to their own body movements. British Logo workers such as Beryl Maxwell and Richard Noss have regarded floor turtles as most important, particularly in introductory Logo work.

I have heard Hal Abelson say that, of all the floor turtles which have been developed, the best was the one used in the early work at MIT because it was big enough for a child to ride on. That makes a lot of sense in the light of the transitional object idea. However, I suspect that the cost of such big robots would deter schools from buying them. In fact, despite the availability and decreasing cost of robot turtles, many schools are using Logo quite extensively without them - even with the youngest children.

Is this important? Is Logo learning made less easy or less effective (for some children) if there is no robot? Adam Korab, a post-graduate student in Education at Monash University, is investigating some aspects of this question. He has devised various Logo activities for 5 and 6 year olds which might be done either with a robot turtle and large sheets of paper on the classroom floor or with screen turtles on the computer monitors. Each class involved in the study will use only the floor turtle or the screen. Comparisons between the two approaches will be made by observing the children as they work, and by measuring some learning outcomes, such as improvement in left-right discrimination, at the end of the term of Logo work.

This study is underway at present, so the full report will not be available until later in the year. However, people interested in further details about the project might contact Adam at the following address:

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The first time he saw a robot turtle, Fred Fung, who works with adult spastic students, was struck by the similarity of its movements to those of an electric wheelchair. He decided to investigate the potential of a Logo environment with the robot to assist spastic students in developing skills associated with movement and simple navigation. For spastic people who are wheelchair bound, the ability to maneuver a wheelchair and to travel to various places largely determines whether they can achieve independence. The identification of left and right is an important skill, so that the wheelchair can be turned correctly in corridors or streets. Another important skill is the ability to follow, understand and remember directions; for example, to find a room in a building or a building in a city.

Fung worked with young normal children, similar in reading age to his spastic students, to develop a series of activities introducing students to the computer and keyboard and to controlling the turtle with the Logo commands FORWARD, LEFT, and RIGHT. An assessment exercise, to be used as a pre- and post-test for the spastic students, was also developed. This involved tasks of increasing difficulty: showing the student's own left or right hand, turning a toy car left or right as directed with the student behind the car, turning the car to left or right as directed with the student elsewhere in relation to it, a variety of moving and turning tasks based on a map of the central city area of Melbourne (where the students live), and a task involving memorizing then executing a set of six navigational instructions.

Paper and pen work was kept to a minimum so that work with the turtle would not seem like "school work," as the students had expressed experiences of failure in school work, and earlier attempts to teach left and right using more traditional techniques had aroused little interest.

Five spastic students, mostly working individually, participated in the study. They were fascinated by using the computer and intrigued by the robot. They treated the turtle quite seriously as a piece of learning equipment, rather than as a toy, as younger children might.

Although the study was small - only a limited time was available and "field trials" of navigational skills outside the center where the students were could not be arranged - the results were encouraging. Some of the outcomes were improvement in performing left-right tasks, improved social skills, enjoyment of the work, and improved attitudes toward learning. At the pre-test, only two of the five students could show their left and right hands; at the post-test all could do this correctly. One student, who could not do this previously, gained the skill of turning a toy car to the left or right as directed, from behind the car, and two others developed the skill of turning the car appropriately wherever it was oriented relative to themselves. It was hoped that some students

might develop sufficient skills to be able to remember a sequence of instructions to follow a route on the map of the city; none achieved this goal, though the more successful ones were able to respond correctly to single instructions about turning right and left into streets marked on the map.

This work is reported more fully in a paper entitled "Use of Logo for Development of Some Spatial Skills in Spastic Students" in *Computing and Education - 1984 and Beyond* (A.D. Salvias, ed.), Proceedings of the Sixth Annual Conference of the Computer Education Group of Victoria, available from:

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Europe

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Logo España

The Atenea Project is a project funded by the Spanish Ministry of Education dealing with the introduction of computers into the state educational system. The idea is to promote the development of Logo in Spain and to develop a plan for teacher-education.

Louis Rodriguez-Rosello, the Head of the Institute for Technology in Education Research in Madrid, stated that the aims of the project are:

- To develop in teachers and students the abilities to create, select, and process information.
- To use the new technologies in order to improve the teaching process in all the curriculum areas in which computers can contribute, carrying out tasks that cannot be achieved through other media, or improving the traditional ways of carrying them out.
- To introduce new topics in accordance with the new needs which our information society has.
- To use computers to create new learning environments in order to develop creativity, self-esteem, autonomous learning, and thinking processes in the students."

After some preliminary pilot work, the team at the Institute for Technology in Education (ITE) felt the need to define a standard version of Logo in the Spanish language before beginning the work of the project itself. They organized an open meeting with experts working in Logo in Spain together with major software developers. Out of this meeting

came several implementations of the standardized Logo version for the computers in common use in schools.

The teacher-education project is divided into two phases. The first phase which was implemented last year, involved 56 teacher-trainers who were introduced to a range of computing applications, and the educational issues associated with them. The courses involved programming languages (especially Logo), data bases, word-processing, spreadsheet programs, as well as some CAI, games, etc.

In the second stage, the teacher-trainers will train groups of teachers in "Teachers' Centers" located in each region. These teachers will be responsible for using computers in their classrooms. Within this phase, there is scope for individual teachers to follow up on their areas of special curricular interest, or applications which are particularly relevant for them.

As far as the Logo work is concerned, the topics covered are divided up under the following headings: educational foundations, issues of classroom organization, teaching strategies, analysis of experiences, integration into the curriculum, and the classroom application of research findings. The following list of contents, reproduced from a project outline from the ITE, gives some idea of the depth covered:

"Educational philosophy, turtle graphics (including 3D designs), words and lists, modular and functional programming techniques, design of applications, microworlds, problem solving foundations, and artificial intelligence."

The approach employed involves teachers working in pairs at each computer. Small group sessions are held, and teaching applications are introduced, some of which are opened. In this way, discussion about the educational value of the ideas is provoked, prior to the problems being solved with the computer. Each small group has to propose to the class the goals it wants to achieve, and the ways it intends to carry them out. Finally, each group presents its solutions to the others. In this way, claims the ITE group, discussion of the educational possibilities of Logo arise in a natural way.

The work done in these sessions is used as a basis for experimental classroom activities with pupils. Sessions are held to discuss and analyze the experiences of teachers in trying out different approaches in their classrooms at a variety of educational levels. At the same time, ITE researchers are collecting data on the classroom and teacher-course work for further investigation.

While this report has focused on just one project, the ITE group points out that the Logo phenomenon has increased quickly in Spain in the last two years. There are two magazines devoted to Logo, an association of Logo users, and many Logo books and articles. Most of all, there is a "great amount of experience." Bearing in mind the official backing behind the Atenea Project, and the fact that some 3000 teachers will be "trained in Logo" in the next twelve months, the ITE group predicts a "qualitative leap" in the use of Logo in Spanish schools in the coming year.

Latin America

by Eduardo Cavallo & Patricia Dowling

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Gerard Bossuet Visited Argentina: Making a break in his stay in Uruguay, professor Gerard Bossuet crossed the Rio de la Plata to visit some institutes in Buenos Aires where Logo is used. At the Bayard Institute, he had an informal talk and shared his experiences with teachers from several schools. He answered questions on the use of computers in the French educational system, giving us an objective and precise view of the subject.

Meeting of Computers and Education: This event was organized by the Logo Friends' association in Mar del Plata, a seaside resort 400 km from Buenos Aires. A large number of people from various provinces, especially from the south of the country, gathered there, with the remarkably active participation from children.

A direct result of the exchange produced was the announcement of a new meeting in the province of Santa Cruz, the most southern in the country. The Logo Friends' Association of Santa Cruz is working on the final details for its outcome next June, when the attendance will have to face the bitter southern climate. As Joan Manuel Serrat sings, "The South also exists."

International Logo Congress in Montevideo: The Second International Congress of South America was held in late 1985 in Montevideo, the capital city of Uruguay.

The Uruguayan Logo Association was in charge of the difficult task of organizing this event and had to work hard to overcome the various problems as well as handling the large interest it brought up.

Various educational and research institutions from Uruguay, Brazil, Chile and Argentina presented their experiences and in many cases the capacity of the Congress Hall of the Central Bank of Uruguay, where most of the activities took place, was overfilled.

The subjects were numerous and varied and the papers presented by the Laboratory of Cognitive Studies of Porto Alegre (Brazil) were particularly poignant. We can also mention the plenary sessions by Lea Fagundes, Paulo Ferrari Mosca, Antonio Battro and Horacio Reggini, and the presentations by Miguel Rode and Gustavo Silva, the latter president of the organizing committee. Music and Art were not absent. Undoubtedly professor Gerard Bossuet's speech created much expectation. The people from Uruguay greatly profited from his presence, which culminated in an interview with the president of Uruguay, Dr. Julio Maria Sanguinetti.

New Logo publications in Spanish were presented during the Congress. *Inventar y Comprender con Logo* by Miguel Rode and Gustavo Silva, *Ideas y Formas*, in which professor Horacio Reggini develops the representation

of tridimensional objects in space, and a Spanish translation of *L'ordinateur a l'école* by professor Gerard Bossuet.

A new version of the Brazilian Logo for the TK 90, a computer made in Brazil, was presented in this congress. As many as twenty of these computers were used in workshops which could be freely attended.

The attendees of this Congress left satisfied and enriched by the experiences shared in those three packed days, nursing the secret hope of meeting in Porto Alegre in 1986.

(Ed. note: The ILX is grateful for the magnificent efforts of Horacio Reggini in establishing the Latin American column. We now look forward to working with Eduardo Cavallo and Patricia Dowling in providing ILX readers in 40 countries around the world with Logo news from Latin America.)

Asia

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This month's Asia column was submitted by Setsuko Abe, the editor of the Japanese publication, *Logo Some Z's News*. Her enthusiasm for Logo has persuaded many Japanese teachers to use and think about Logo in their teaching.

Lego & Logo Workshops

We have just finished a series of "Lego & Logo Workshops" in five different cities in Japan. The project has been started with the support of Kumon Publishing Co. and Lego International. We consider our project as formative research for opening a permanent workshop in Japan in the near future.

A hundred Japanese children have experienced the Lego & Logo microworld, and they seemed to have enjoyed it very much. We collected 20 children for each workshop by advertising widely in a children's science magazine. We got so many applicants that we had to select 20 by lottery. Some of the children traveled for 8 hours, all the way across Japan from Hiroshima to Tokyo, to attend the workshop!

Each workshop was equipped with three sets of MSX personal computers with MSX Logo and ten sets of Lego School Set 1032. Five or six instructors were available to help the 20 children who were divided into five groups of two pairs. Each pair shared one set because we wanted them to learn how to communicate their ideas in order to complete the project.

Each workshop was held for two days, four hours each day. On the first day, we taught basic construction using the Lego School Set (also known as Lego Technic) without the motor. The second day, each pair built a model using one motor, and then models with two motors were created by joining two pairs together. Most of the children had never

used Lego or Logo before, since neither of them are usually taught in Japanese schools.

As we didn't have enough time to teach Logo deeply, we taught the children some simple commands of Turtle Graphics, such as FD, BK, LT, and RT, that were necessary to control the model cars which the children constructed as their first projects. The application Logo procedures for controlling Logo had been made in advance by instructors.

The Lego-Logo interface (wired and infra-red wireless) needed for communication between the MSX computer, MSX Logo, and Lego models was developed by Geodesic, Inc.

You may have read the report of Gerry Eddy (ILX, March 1986, page 8) about the British activities using Logo and Lego. We contacted one of the teachers who has been involved with the project and she sent some pictures of her classroom. I showed the pictures to the Japanese children at our workshops. When they saw the British children working on their control Logo project with Lego, they seemed really surprised, asking, "Why can't we do that in Japan?"

Frankly speaking, it looks like most people have similar reactions to our project. "I understand the project is excellent and it must be good for children, but, on the contrary, it must be impossible to apply it in the classroom because it cannot be fit into the school curriculum." This is the reaction which many enthusiastic teachers hear when they try to persuade their colleagues to use Logo in the classrooms.

"Good High School, Better University, Best Company!" is the slogan of many parents, teachers, and children in Japan's competitive society.

Recently some schools have begun to use computers in the classroom, but most of them only use computers for drill and practice types of CAI. Right now, improving children's creative sense, we will continue to open these workshops.

It is our hope that children will find the joy of discovery through the Lego & Logo Microworld and will grow up to be good leaders who can discover good relationships between humans and computers in this hi-tech industrial country. Also, through these workshops, we really want them to learn how to cooperate and establish good relationships with others and not always "go crazy" in competition.

If you have an interest in our project or have something to share with us about Lego & Logo, please let us know and keep in touch.

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Lego and Logo at MIT

As part of the Logo 86 conference to be held at the Massachusetts Institute of Technology (MIT) in Cambridge, MA, July 8-11, Steve Ocko and Mitch Resnick will offer a workshop on Lego and Logo. Write to Logo 86, MIT, Special Events Office, Room 7-111, Cambridge, MA 02139.

North America
by Michael Freindly
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Logo Network Update: In the last issue, I discussed some ideas related to networking among people in the North American Logo community. Here are a few recent developments:

BYTE BIX: A new Logo forum has been started on the Byte Information Exchanged (BIX) by Mark Guzdial and Lary Alexander of Michigan State University. Mark has developed several versions of Object-Oriented Logo (see Logo 85 proceedings) and Lary is on the Faculty of Education at MSU. BIX provides a threaded or theme-based conferencing system (CoSy) where participants can discuss common interests, ask questions, and help solve each others problems. There are almost 200 conferences, including most computer languages (ADA, BASIC, C, LISP, Logo, etc.) and computer systems, a variety of conferences on AI, education, a listings conference for software, and even meta-conferences on "conferencing." Each conference usually has several "topics."

So far, there is a small group of active participants and they are looking for more to join. The Logo conference has these topics so far:

- **Digest:** Concerned with related happenings in other topics.
- **Books:** Reviews, questions, and approaches in Logo books.
- **Happenings:** Reports on conferences, workshops, and other Logo events.
- **Comments:** Questions, problems, and new directions for Logo in general.
- **Sources:** Sharing Logo programs.
- **Projects:** Group projects (see below).
- **Other:** A catch-all, including proposing other topics.

In the projects topic, they have started a fascinating experiment in group-authored public domain software development to construct a Logo compiler. They have been working out details of the representations of lists, graphics primitives, and dynamic scoping, and are now in the process of defining the primitives to implement.

Other contributors to the BIX Logo Forum have posted reviews of recent Logo publications, tool kits of Logo procedures, and sets of benchmark procedures for comparing Logo implementations. So far, the work of the group leans toward the technical side of Logo development, as you can see from these activities. There is also a conference on Computers in Education on BIX, dealing with issues of computers in the classroom more generally.

Mark and Lary welcome others to join them in the BIX Logo Forum. See any recent issue of *Byte* magazine

for details on how to join. In most places in the U.S. and Canada, you can access BIX with a local call to the Tymnet network. As with CompuServe, there is an hourly connect charge, with reduced rates after 6 pm and on weekends. Charges are billed to your credit card, so you don't feel the pinch until the end of the month. I like what I've seen so far.

CompuServe LogoForum: There have been some new additions to the data libraries of LogoForum. There was an interesting discussion of techniques for generating fractals, and I uploaded some workspaces I use for Logo demonstrations. One of these (FRACTILOG) in Data Library 4 shows the techniques used to generate fractal landscapes. By the time you read this, there should be a new version of Mark Guzdial's Object-Oriented Logo procedures. If you are using CompuServe, please join Logo Forum and share your work with the rest of us.

The Whole MicroWorld Catalog: I had lunch with Rina Cohen from the Ontario Institute for Studies in Education (OISE) last week. Rina's group has developed a whole series of mathematics microworlds. We talked about other people we knew who had developed Logo microworlds in various curriculum domains, and how hard it is to find out about their existence.

It occurred to us that it would be very useful to prepare a catalog of this work. What I am suggesting is this: I will serve as the coordinator of a project to prepare a catalog of Logo microworlds designed to be used to explore concepts and ideas in various curriculum areas. I am not certain what form this should take and how it should be distributed, but I will discuss this with other ILX and NLX editors. It might be sufficient to list brief abstracts and the availability of supplementary materials. Tom Lough is actively exploring a variety of dissemination options with a publisher.

If you have developed any Logo microworlds or know of others who have, would you kindly send me a brief description, so I can get an idea of what might be available?

Conference Watch

SigLogo Conference: Our local SigLogo Conference on March 22 was quite a success, though very hectic for me as an organizer and speaker! Paul Goldenberg's keynote address drew a crowd of over 250. Paul talked about programming metaphors and models which allow beginners to develop their own curriculum-based explorations of topics which might otherwise be considered "too hard."

The conference coincided with the Canadian unveiling of Logo-Writer from LCSl. Michael Tempel gave a lunch-time talk and demonstration which many people found exciting. LogoWriter adds powerful word processing capabilities to Logo, but not only in the traditional sense. Logo-Writer also allows the turtle to interact with text on the screen! The first release of LogoWriter is available for Apple II/c and IBM machines, under a site licensing arrangement which allows making duplicates for the site, and includes significant teaching materials. I'm itching to get my copy.

ECOO Conference: The annual conference of the Educational Computing Organization of Ontario (ECOO) was held at OISE April 30 - May 2. One of the main highlights was an address by Brian Harvey, dealing with the type of classroom culture and programming environment he would like to see for kids. Brian described his view of the three stages of learning programming (learning the rules, working on meaningful projects, learning advanced ideas), which are exemplified by the three volumes of his *Computer Science Logo Style* series. I managed to get my hands on an advance copy of *Volume 2: Projects, Styles and Techniques*, which should be available by the time of Logo 86. The subtitle for the volume is quite apt. Brian discusses significant aspects of Logo style and technique in the process of developing significant projects dealing with cryptography, games, mathematics, programming utilities, and pattern matching.

Another highlight of ECOO was Peter Skillen's talk on classroom activities to develop high-order thinking skills. Drawing on his teaching experience and the fruits of a sabbatical year spent at OISE studying cognitive science, creativity, and intrinsic motivation, Peter discussed the use of metaphors for learning Logo, helping students to follow the flow of their ideas, and searching out bugs in their work outside of Logo.

Logo 86: I've just received the preliminary program for Logo 86 and it looks quite impressive, and coherently organized. The main conference takes place July 9-11 and will be preceded by two days of tutorial workshops ranging from elementary to advanced topics. The program is thematically organized with less clash between parallel sessions than Logo 85, as far as I can tell. Altogether, the range of topics looks exciting, and I hope to see many of you there.

For registration, write to MIT Special Events Office, Room 7-111, Cambridge MA 02139, or call (617) 253-1700

Stay in touch: Send me your thoughts on this column, and news of Logo activities you think would be of interest to our international readership. If you have access to a computer network (e.g., ARPA, UUCP, CSNET, BITNET, MAILNET, etc.) you can send E-mail to FRIENDLY @ YORKVM1 on BITNET, or on CompuServe, [72777, 253]. Lets bridge the gap: GO LOGOFORUM & FD 1000!

International Logo Study Tour Information Needed

When the International Logo Exchange was originally conceived, it was felt that not only words in the form of a newsletter should be exchanged between the nations of the world. Inexpensive Logo study tours should also be organized so educators who use Logo could visit each other and share ideas face to face.

The first Logo study tour was to take place in Iceland and the Netherlands this coming August. Although the Logo conferences, school visitations, seminars, and sight-seeing planned were exceptional, the tour had to be cancelled for lack of participants willing to attend. The terrorist activities in Europe, the declining U.S. dollar, and numerous Logo and other educational computing summer programs were the most frequently given reasons for not attending. Still, there were a number of Logo teachers who did sign up and who remain ready to go on similarly planned tours.

With other nations eager to learn more about Logo by hosting Logo study tours, the ILX remains willing to arrange for low-cost, college credit courses for Logo oriented computer educators. Before proceeding with the planning of such tours, however, we will need to see an indication of interest from potential participants. Three possible Logo study tours are described on the next page. If you or any of your colleagues might be interested in becoming a participant, please fill in and mail the survey form on page 8. The purpose of the survey is to determine the general level of interest of the Logo community in establishing such a teacher-to-teacher global Logo exchange. In addition to yourself, please contact any friends or colleagues whom you feel may be interested and have them notify us as soon as possible.

The itinerary and prices for the three potential tours listed are estimates only, based on a departure from the USA west coast. Each of the tours would include visits to schools, teacher training institutes, and computer in education conferences or workshops. Tour participants receiving graduate credit would be expected to deliver a paper or workshop. Plenty of touring and shopping will also be included.

Please send in the survey form today. Thank you.

A Note from Tom Lough

Dear ILX Friends,

When Dennis Harper and I started the ILX in January 1986, we already had some indication of the level of international Logo interest. We are quite pleased to note that this interest has exceeded our expectations. The ILX is growing quickly into its projected role, so quickly that I am unable to operate "out of my basement" any longer.

In order to enable both the NLX and the ILX to reach a larger audience, I entered into negotiations with Meckler Publishing of Westport, Connecticut, and London, England, to acquire both publications. The final agreement has been reached. Mr. Alan Meckler is extremely excited about the potential of Logo worldwide, and is interested in bringing the news in the ILX to all corners of the globe. Dennis Harper and the field editors will continue to report to you regularly. I will be involved as the editor-in-chief, and look forward to serving you in my new role. FD 100!

Tom

Singapore / Malaysia

Summer 1987. As a current member of the Singapore Institute of Education and a past faculty member of the National University of Malaysia, ILX editor Dennis Harper can assure participants of a valuable educational computing experience. Both Malaysian and Singaporean teachers are extremely interested in exchanging Logo ideas and getting to know Logo teachers and trainers in other parts of the world. Besides the beautiful island nation of Singapore, the group would visit several additional sites such as Malacca, Kuala Lumpur, and the island resort of Penang in Malaysia. Approximate cost of two-week tour - \$1850.

Japan / China

Spring 1987 or Summer 1987. Logo educators from the United States are investigating the possibility of a study tour of Japan and China. Numerous Japanese educators would be excited to host such a study tour. Two major problems arise: the Japanese yen is very strong and the summers in China are very hot and full of tourists. We can't do much about the first problem, but we could schedule a tour during the spring to take care of the second. If there was a strong interest in visiting Japan and China in the summer, however, a tour could be set up during that time. Approximate cost of two-week tour - \$ 2600.

Fiji/Australia

Summer 1987 (Wintertime in Australia). Educators on the magnificent South Sea Islands of Fiji are very keen on hosting a Logo study tour. Teachers in Australia have been using Logo for ten years! During the study tour, we will meet with several veteran Logo teachers, and discover what they have been doing with Logo in their classrooms. Australian Logo teacher trainers will share their experiences and training methods. In addition, tour participants may elect to attend the National Australian Computers in Education Conference for a broader educational computing experience. Approximate cost of three-week tour - \$ 2600.

International Logo Exchange 1987 Tours Questionnaire

Please photocopy as necessary

Name:

Address:

Telephone Number:

I (we) would be interested in participating in the following ILX Logo study tours (if more than one please state order of preference). I (we) understand that this is not a commitment to participate, but merely a survey to determine the level of interest of such tours.

— Singapore / Malaysia

— Fiji / Australia

— Japan / China (Spring)

— Japan / China (Summer)

Please send questionnaire by September 10, 1986 to:

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