

6. New Book on Computer Translation

Three Committee members provide a new venture for the group.

Sigma Press are now in the process of printing a book called "Computer translation of Natural Language". It will be a paperback, costing £12.95. It is by Walter Goshawke, Ian Kelly, and David Wigg, who are respectively Assistant Secretary, Chairman and Treasurer of the group, and have all been on the committee since the formation of the group over ten years ago.

The book is in three distinct parts. The first part by Ian Kelly deals with computer translation generally both past and present. The final two parts belong definitely to the present and to the future. Part 2 by Walter Goshawke, the writer of the present article, gives a thorough description of the SLUNT Number Language System, and is intended as a guide for anybody in any country wishing to take up computer translation. Any programmer in any country will now be able to write useful computer translation programs on the computer

he or she normally uses. No special hardware is necessary. Part 3 of the book, by David Wigg, gives practical demonstrations of using Number Language for translating English into French and vice versa on a BBC micro (and indicates how to transport these programs to PC/DOS or MS/DOS).

The book is intended for researchers, amateur or professional, who wish to participate in setting up a world-wide system of computer translation through the medium of Number Language. All that is required is programming ability on any computer and thorough knowledge of the grammar of the programmer's own mother tongue. All the programming is simple, and although satisfactory results can easily be obtained at an early stage, there are decades of work ahead before the system can become a commercial proposition.

When the system eventually becomes technically mature in a number of countries, it will become standard practice for every book to be translated into Number Language before publication, so that it can quickly be translated into the Local language of any country where it is required, thus enabling simultaneous world-wide publication of important books to be achieved. When this utopian era has been reached, it will no longer be necessary for people in the developing countries to learn English before they can enter any profession.

Much needs to be done before this can happen, and this is where our group can play a vital part, making use of the book. As already mentioned, David's Part 3 shows how to write programs in SLUNT on a BBC micro (or IBM PC). Readers can apply to David through the publisher for copies of the programs on disk, and can immediately use them for translation or as a basis for themselves writing more advanced programs. There are many micro owners about who would welcome a new challenge and I personally expect quite a steady flow of enquiries for David's programs which, beside having been thoroughly tested by David, have also been tested by the publisher.

Of those programmers who try using David's programs, there will undoubtedly be many who will lose interest in the subject after a while. The remaining few, who want to go further, will need to read Walter's Part 2 of the book and study the rules for more complex sentences. If they are very keen they will also want to write to Walter (through the BCS) and join the group to find out what other people are doing. How many people will do this is anybody's guess. I do not expect to be overwhelmed by enquiries, but I feel confident that there will be a trickle of interested programmers wishing to join in. There is much to do. Besides writing programs for all the world's languages we need dictionaries for all the world's languages. We also need to translate lots and lots of texts into Number Language, and so on and so on. There's never a dull moment.

Confidence in the Future

I have just mentioned that I feel confident. What is the basis of my confidence? I invented SLUNT about twenty years ago and soon tried to interest other programmers in it world wide. I found that very few programmers are interested in computer translation but I managed to form a small SLUNT group.

Eventually I got together enough members (I think it was 15) to apply to the BCS to become a BCS Specialist Group. At this stage Ian Kelly and David Wigg appeared from nowhere and offered to make up the three members of the BCS necessary to form the new Group Committee. This was a great piece of luck for me. I have been trying to interest BCS members in joining the committee ever since, but with very little success. When the BCS Group was formed there was so little support for SLUNT that the interests of the new group were widened to include all methods of computer translation.

However, for the first few years I was Editor of the Newsletter and as is now the case very little material was submitted for publication. I was thus able to fill the Newsletter with SLUNT material and gain some interest. This was a very valuable time because I was also lecturing and programming on SLUNT. Most of my part of the new book was written at that time and I had many valuable discussions with sceptics. In fact I now feel that I have already encountered all the possible objections to SLUNT that can arise. I find that when sceptics thoroughly examine my programs they usually become convinced and remain so. Few, however, have so far found it possible to research SLUNT actively.

I am now researching Computer Translation at Thames Polytechnic, and this gives me wonderful opportunities of meeting lecturers and students who may be interested. In particular, one lecturer wrote to me about SLUNT without realising that we were both working at the same college! This gentleman is a tower of strength. In recent years he has introduced SLUNT as a project option in the final year of his degree course and last year one student took it up. The fact that the book was available only in manuscript form was a disadvantage, but we managed and SLUNT has become an accepted project option.

The College has many overseas students, especially from the many countries of Asia. I find that these students show a very great interest in SLUNT and are very anxious to read the book when it appears. The countries they come from are most in need of computer translation, but the use of computers is much less widespread than in England. There is also the need for the book to be translated into the local languages. Thus although I anticipate very considerable and growing interest in the book, it will be some time before its affect will be very noticeable. I also expect great interest among schoolchildren who have a flair for programming. One's schooldays are the best time to master programming and skills learnt in those days can form the basis of very valuable programming efforts later. Here again it may be some time before much activity is heard of, but later on when the young people are a little older, they will want to use their computer translation skills in whatever industries they are employed in. That, at least, is what I hope.

Most of all, however, it is to the hobbyists that I look for the most immediate results. As mentioned above, they can get a flying start using David's programs and it should not be long before SLUNT becomes a familiar topic in the computer hobbyist magazines.

The Immediate Future

I do not expect the sales of the book to be spectacular. I hope it is sufficiently readable to be intelligible to the educated reader, and I am deeply grateful to Sigma Press for having had the courage to publish it.

As soon as the book is available I hope there will be enquiries. The aim will be to call a meeting as soon as numbers appear to justify it and to invite all those interested to cooperate in SLUNT research projects. One very urgent area is the SLUNT dictionary. Those with dictionary skills will be specially welcome, but all areas of SLUNT activity urgently need help. I look forward to the next few months with the greatest of interest. If there is no response I shall not be surprised. If there is a moderate response I shall not be surprised. If there is an overwhelming response I shall not be surprised. Whatever happens I shall be interested.

Walter Goshawke.