

#### AB41.4.1 The Algollers

by R. de Morgan. (Reprinted from the Newsletter of the BCS ALGOL Group).

A long, long time ago (about eighteen years, give or take a furlong), several wise men sat down and designed a programming language. Being of a somewhat adventurous nature, they produced a somewhat adventurous language; indeed, so adventurous was this language that people debate to this day the properties of this wondrous language and others that owe some of their origins to it. It was called "Algol 60", but didn't seem to have any features of specific use to astronomers. They revised it a bit in 1962, but unlike later languages, did not update its number; indeed, most people were quite content to call it simply "Algol", and some of them spelt it with capital letters.

Algol had a wealth of features. Some indeed were quite extraordinary and could be used to perform wonderful feats of computation in mystical ways (the way it could find prime numbers with a single statement seemed to smack of witchcraft). Some of the features were left to the imagination and ingenuity of the implementers, resulting in a wealth of dialects of the language. Machine dependent features such as input-output were skilfully avoided so as to avoid contamination of programs. Nevertheless, implementers seemed to think that this was a desirable addition, and added input-output systems of every conceivable shape and size. While the outside world were marvelling at the wonders of Algol 60, the wise men were busily at work designing its successor. They spoke of it as "Algol X", and there was even talk of an "Algol Y", but when it saw the light of day, it was called Algol 68. Here indeed was a magnificent language - it had a bigger, better Report, parts of which were written in a curious form called a W-grammar, and seemed to require many type fonts, not to mention italic full stops. "Why didn't they use BNF?" was the cry. Fortunately, someone pointed out that if one read the examples at the back of the report, it all became clear.

Meanwhile, halfway up a hill in darkest Worcestershire, at a Very Secret Place, Scientific Civil Servants were labouring night and day to produce the very first Algol 68 implementation. This was known as Algol 68R and became very famous. Following this, many other implementation sprang up, but implementers had great difficulties with some of the features, and various subsets were born.

But the Algol 60 devotees had not been idle. Meeting at secret locations in the English countryside, they set out to eliminate the dreaded Remaining Trouble Spots. They called their Algol 60 "Modified" (they did not like to call it Algol 76 for fear that the Algol 68 authors would become angry with them for having a higher number), and they even included a simple input-output system. They produced a Report, as was the custom, and published it in a Learned Journal.

Both the Algol 60 and Algol 68 devotees were members of a Secret Society, which was called the Algol Association. They would come from far and wide to listen to the wisdom and lore imparted by famous Algol mystics. They also communicated with each other by means of a Bulletin, speaking both in words and algorithms. Although there was some amount of rivalry between the Algol 60 and Algol 68 factions, they were united in their scorn of other societies such as the Cobolers and the Fortranners. These societies spoke strange tongues which were most un-Algol-like.

There had grown up a movement called Structured Programming, and the Algol devotees found that they could write structured programs without much difficulty. Indeed, by using Algol 68 they found that they could do away altogether with the hateful labels that many said spoiled the beauty of their languages. The Cobollers and Fortranners were very jealous of this, and tried to write structured programs of their own. The Algollers saw that this was futile and laughed them to scorn saying "How can they expect to write structured programs with such foolish languages?". But the people of the world were much confused by all this talk, and did not know which way to turn. Most of them were very conservative by nature and said "Why should we use these new languages that these mystics invent? Let us instead use the languages that our forefathers have always used." And so they went their way, and performed their Sorts and Merges, and entered Subroutines, and did other mundane things; for such was the way of the world.