ML/1 MACROGENERATOR

The ML/I macrogenerator was invented by Peter Brown while he was at Cambridge in 1966 and subsequently developed by him and ported to a wide range of computers.

Bob Eager maintains a web site with information about historical and current implementations of ML/I at http://www.ml1.org.uk that should be consulted for documentation of how to write ML/I macros.

An Elliott 905 version was written by Harold Thimbleby in 1976 when at the Queen Elizabeth College and presented it at a meeting of the Elliott Computer User's Association that year. (Thimbleby developed the system on Queen Elizabeth College’s 8K 903 and then extended it to run on a 905 at The Royal College of Art which ran the RADOS disc operating system).

The MASIR code is a mapping of the LOWL version of ML/I from Peter Brown. It is written to be used from RADOS, a disc operating system for the 905, but can be made to run standalone with a minimal paper tape "executive", as in the demonstrations. Thimbleby ported the LOWL by first translating it to GPM macros then expanding these to MASIR, linking with the required support routines and finally hand optimizing the generated code sequences. In the paper tapes section of my archive there is a reconstruction of this process. A scan of Thimbleby’s these describing it is in the documents section of the archive.

The implementation corresponds to release AIG of ML/I, described in the Issue 4 version of the ML/I User Manual, a copy of which is in the document section of my archive.

ML/I is loaded under initial instructions and entered at 16.

Input is terminated by a right round bracket ‘)’ on a line by itself. Diagnostics are sent to the teleprinter.

DEMO1.DAT: This script builds ML/1 and runs a series of examples taken from a tutorial written by Bob Eager and available from his web site.

SYSTEM FILES

EXEC.900: A simple paper tape "executive" written by the author to enable standalone running of ML/1.

MLI.900: The source for MLI, as written by Harold Thimbleby with more changes by the author to work with paper tape rather than RADOS.

MLI.BIN: The result of assembling MLI.900 and EXEC.900.