I HAVE BEEN GRANTED THE PLEASURE OF SPEAKING TO YOU THIS EVENING ON THE LAST EVENING OF A VERY HAPPY YEAR WHICH I HAVE SPENT IN AUSTIN. THIS GIVES ME THE CHANCE TO EXPRESS MY THANKS TO MANY FRIENDS HERE WHO HAVE HELPED BOTH PROFESSIONALLY AND PERSONALLY. AMONG THEM I INCLUDE MANY VISITORS, THE SPEAKERS AND PARTICIPANTS AND ORGANISERS OF THE INSTITUTES OF WHICH HAVE MADE UP THE YEAR OF PROGRAMMING.

I HAVE BEEN PARTICULARLY HAPPY AT THIS PRESENT INSTITUTE, BECAUSE IT HAS DEVELOPED AN EFFICIENT AND PRACTICAL APPROACH TO PROGRAMMING WHICH IS FIRMLY BASED ON THE ETERNAL VERITIES OF MATHEMATICS. ON THIS BASIS HAS BEEN DEVELOPED A MATHEMATICAL NOTATION OF GREAT EXPRESSIVE POWER AND WITH
A highly regular structure, making it pleasant both to learn and to use. Furthermore, it is possible by pure reason to explore consequences of our design decisions and deduce the logically deduced consequences of our design decisions.

It was many years ago that I took up a brilliant idea of Floyd and Naur that the same kind of mathematical approach should be taken to the design of conventional procedural programs. More recently, following the inspired lead of Robin Milner, I have looked into the hat a particular mathematical theory of concurrency.
AND COMMUNICATION. THESE HAVE BEEN THE TOPICS OF PREVIOUS INSTITUTES IN THE YEAR OF PROGRAMMING. SO THERE IS NO NEED TO HERE TO DISCUSS THE OVERENTHUSIAST'S CLAIM OF SOME EARLY ENTHUSIASTS OF FUNCTIONAL PROGRAMMING THAT OTHER STYLES OF PROGRAMMING HAVE NO MATHEMATICAL BASIS. NOR DO WE NEED TO BELIEVE THAT ALL KINDS OF PROGRAMMING CAN BE DONE IN A PURELY FUNCTIONAL STYLE — THOUGH IT IS MOST IMPORTANT TO CONDUCT THE BEST POSSIBLE EXPERIMENTS AT THE VERY BOUNDARIES OF ITS RECOGNISED AREAS OF APPLICABILITY. FINALLY, WE MUST BEWARE OF THE ENTHUSIASM OF THOSE WHO CLAIM OR HOPE THAT THE WHOLE OF MATHEMATICS RELEVANT TO COMPUTING SCIENCE CAN BE EXPRESSED IN FUNCTIONAL NOTATION.
AND INPUT TO THE COMPUTER FOR
EXECUTION, OR AT LEAST PERHAPS
FOR AUTOMATIC PROOF GENERATION.
WHILE MECHANISATION OF LOGIC IS A VALUABLE AND
SUCH CLAIMS ARE AS FRUSTRATING AS
ANY OTHER CLAIMS THAT THE
FASCINATING RESEARCH AREA TO CONFIN
ONE'S MATHEMATICAL HORIZONS TO WHAT IS
COMPUTABLE — EVEN HOWEVER ELEGANTLY
EXPRESSED — IS AS EnR WILL BE AS
TEDIOUS AND FRUSTRATING AS IMPRISONMENT
IN ANY OTHER BRANCH OF MATHEMATICS —
SAY GRAPH THEORY.

NONE OF THE SPEAKERS AT THIS
EXCELLENT INSTITUTE ARE GUILTY
OF SUCH NAIVE ENTHUSIASM
BUT THEIR ENTHUSIASM IS STILL REAL
AND LIVE AND INFECTIONOUS. THEY HAVE
GIVEN US A FASCINATING AND PRAC TO
INSIGHT INTO A WIDE RANGE OR
APPLICATIONS WHERE THE ELEGANT
USR OF MATHEMATICS PROVIDES EFFECTIVE SOLUTIONS. I LOOK FORWARD TO THE DAY WHEN THE SAME KIND OF MATHEMATICAL PRINCIPLES ARE APPLIED NOT ONLY TO THE DESIGN OF PROGRAMS AND PROGRAMMING NOTATIONS BUT ALSO TO OPERATING SYSTEMS, Interfaces, COMMUNICATIONS, AND EVEN TEXT EDITORS.

BANG—CAR—BANG—SLASH—VI EN APSABL—JOY—PRACT— ESCAPE DD I. So sorry
trying to read...
And talking of practical matters, I don't know if you have not (may not) expected you have noticed how smoothly (with or without the use of mathematics) this Institute has been organised and run. For that our gratitude must go to the sponsors of the year of programming, the office of naval research, the Lockheed company and the university of Texas at Austin. But even more, it must go to the people who have done all the work, Ham Richards, Suzanne Rhoads, and their many assistants and helpers from the University and the Hotel. Please join me in giving expression of our thanks.

Anna Mota
Renee Lawless