

**digital**

INTEROFFICE MEMORANDUM

TO: Rich Grove  
cc: Roger Gourd  
Trevor Porter  
Michael Schwartzman

DATE: 16-Nov-76  
FROM: Dave Cutler *D.C.*  
DEPT: Advanced 11 Softw. Eng.  
EXT: 5670  
LOC/MAIL STOP: ML3-5/E88

SUBJ: LINK-TIME ARGUMENT VALIDATION

Ref: Your Specification of 15-Nov-76

I suppose I should congratulate you on a well written specification and then go on to point out the flaws. However, I cannot do this in light of my utter disappointment. You have turned a proposal that was implementable, albeit imperfect, into a proposal that may be perfect, but is unimplementable in light of project constraints.

We have already spent too much time on the issue and I expect that you have also. One might ask himself if your time could have been better spent. Why didn't you invent another slick optimization that would have improved the performance of FORTRAN or find a way to deliver your compiler early? These things are worth real money. As it is, you have one plused a proposal to the point it is absurd. It would cost us at least one man month to implement this proposal and would result in a bastardized object language. We don't have one man month to spend and either do you. Your proposal changes the object language from a simple byte stream model to a context sensitive bit diddling model, which by the way, must be interpreted everytime such a field is encountered whether being processed or ignored since we can't tell its length without looking at it. Would you invent a programming language like that?

There is a message in what has transpired and I hope you have learned something. You have tried to satisfy everyone without regard to the cost in terms of complexity, time to implement, time to document, size, and performance. You have one plused the specification to the point that it is unimplementable. You are not here to produce elegant things. That is a secondary consideration. You are here to make money for the corporation and that means doing everything in your power to make sure projects get implemented on time and within performance, support cost, constraints, etc.

DC:dl