

Date: Mon, 11 Mar 91 10:10 GMT  
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To: SC22WG11@AWITUW01  
Subject: levels of abstraction

I've given things a bit (sorry!) more thought over the weekend; I suspect that I have been causing some of the problem by talking about a concept of a 'computational' level of abstraction, between 'mathematical' (i.e. really 'abstract') and 'representational' without realising that even it consists of (at least) two levels. If you regard 'representational' as a (static?) implementation level for values then there is a 'computational' aspect at that level, which does the operations, but a 'computational' level above that at the language level. It is this latter that distinguishes Boolean from Bit and List from Array etc.

So maybe there are (at least?) FOUR levels:

representational  
operational  
linguistic  
mathematical

and it's the linguistic one that CLID (and CLIP) are at (whereas RPC is at operational).

How does that grab people?

Brian