

All I have is a hammer, now give me your nails!

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“If all you have is a hammer, everything looks like a nail.” – Every programmer ever

But: is it always bad to see the world through a particular lens?

“It is better to have 100 functions operate on one data structure than 10 functions on 10 data structures.” – Alan Perlis

What do you get if you try to make everything one data structure?

Lisp

```
(defmacro and [:rest args]  
  (list 'if (first args) (list 'and (rest args)) false))
```

Listing 1: A definition of and.

SmallTalk


```
True >> ifTrue: trueBlock ifFalse: falseBlock [  
    ^ trueBlock value  
]
```

```
False >> ifTrue: trueBlock ifFalse: falseBlock [  
    ^ falseBlock value  
]
```

Listing 2: Booleans as objects.

Forth

```
: ( 41 WORD DROP ; IMMEDIATE
```

Listing 3: Comments on the stack.

APL

`+/15` ⍝ add, reducing over the numbers to 15

`∘.,10` ⍝ outer product of the numbers to 15 to themselves

Listing 4: Comments on the stack.