

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

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EnthusiastiCon 2020
May 27, 2020

“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

`+/ι15` A add, reducing over the numbers to 15

`∘.,~ι10` A outer product of the numbers to 15 to themselves

So what?

Conclusion?

This is neat, but what is the appeal, really?
What do we gain?

Basing all of your thinking on one axiom answers a lot of questions.

It also asks a lot of questions.

Beyond pure novelty, there is a liberating quality to seeing the world through a particular lens.

Constraints can be liberating!

Thank you!