## Subject: Re: Pass by value and performance Posted by Paul Van Delst[1] on Wed, 14 Dec 2005 17:02:14 GMT

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```
David Fanning wrote:
```

- > Kenneth P. Bowman writes:
- >> True, and I considered that possibility. It would work fine for passing
- >> the arrays amongst my own routines, but I have to dereference the
- >> pointer to pass the array itself into system routines. Dereferencing a
- >> pointer is an expression, is it not?, and expressions are passed by
- >> value.

>

- > Ah, you would be interested to read the new pointer
- > section of my book that I just completely yesterday!
- > (Well, actually, you could read the damn pointer tutorial
- > where I learned about this, too.) Here is the news that
- > even I didn't fully appreciate until I put it down in my
- > own words. Pointers are just regular IDL variables!!

In the context of this thread (and your example below), shouldn't one say that /dereferenced/ pointers are just regular IDL variables (i.e. they're not expressions) ??

I don't think I'm splitting hairs here (or am I?)

```
> Consider this function:
>
   PRO JUNK, var
    var = var * 5
>
   END
>
> And do this:
>
   IDL> a = Ptr_New(5)
>
   IDL> junk, *a
>
 Here is the guestion. What is the result of this command?
>
>
    IDL> Print, *a
>
> The answer might surprise you! :-)
```

After my recent grokking of objects (thanks to that "object for dummies" website posted earlier this month), the answer didn't surprise me as much it would of, but it's still a good reinforcement.

It makes me wonder though - have IDL pointers always behaved that way, or is it a moving target (ala relaxed structure definitions post IDL 5.3 talked about in another thread) ?

paulv

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