
Subject: Re: keyword inheritance and object inheritance
Posted by [David Fanning](#) on Sat, 23 Mar 2002 20:45:05 GMT
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Ben Tupper (btupper@bigelow.org) writes:

> I really don't understand how to retrieve object properties when it
> comes to multiple object inheritance.

I'm pretty sure you are not alone, Ben. I **thought**
I understood it, but I spent two hours getting your
example to work. Although, as it happened, I had
the problem solved in five minutes, but I was mistyping
"grandma" as "gra*m*dma". No wonder it was always
undefined. Typical, I'm afraid. :-)

Anyway, after the jolt of Starbuck's put me onto
the right track, I think I really do understand
it now. At least I tried every single one of the
perturbations at least 5 times. :-)

Here is the rule of thumb I would use. On every
GetProperty method, I would **define** a `_Ref_Extra`
keyword. But on every **call** to a GetProperty method
I would use an `_Extra` keyword to pass the extra
structure.

For example, here is how you wrote the GetProperty
methods for your "mine" example:

```
;-----  
; Getproperty  
;-----  
PRO grandmother::GetProperty, grandma = grandma  
  grandma = self.grandma  
END  
  
;-----  
; GetProperty  
;-----  
PRO mother::GetProperty, mom = mom, _Ref_Extra = Extra  
  mom = Self.mom  
  Self->grandmother::GetProperty, _Extra = extra  
END  
  
;-----  
; GetProperty  
;-----
```

```

PRO myobj::GetProperty, me=me, _Extra = Extra
me = Self.me
Self->mother::GetProperty, _Extra = extra
END

```

And here is how I changed them to get them to work as you expected them to:

```

;-----
; Getproperty
;-----
PRO grandmother::GetProperty, grandma = grandma, _Ref_Extra=extra
grandma = self.grandma
END

```

```

;-----
; GetProperty
;-----
PRO mother::GetProperty, mom = mom, _Ref_Extra = Extra
mom = Self.mom
Self->grandmother::GetProperty, _Extra = extra
END

```

```

;-----
; GetProperty
;-----
PRO myobj::GetProperty, me=me, _Ref_Extra = Extra
me = Self.me
Self->mother::GetProperty, _Extra = extra
END

```

Here is the result of my changes:

```

IDL> mine = Obj_new('MyObj', 'Mudd', 'Mom', 'Granny')
IDL> mine->SetProperty, Grandma = 'Nana', Mom = 'Mum', Me = 'Pooh'
IDL> mine->GetProperty, Grandma = Grandma, Mom = Mom, Me = Me
IDL> help, grandma, mom, me
GRANDMA      STRING  = 'Nana'
MOM          STRING  = 'Mum'
ME           STRING  = 'Pooh'

```

Cheers,

David

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