Subject: Re: What about real polymorphism ??
Posted by JD Smith on Fri, 10 Dec 2004 16:21:54 GMT

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On Thu, 2004-12-09 at 18:32 +0100, Antonio Santiago wrote:
>> Do you want:
>>
>> c2->c1::datos
>>
>> ???
>>
>> This will invoke the datos method defined in c1.
>>
>> Karl
>>
>
> Not exactly.
>
> I want to view C2 as a C1 class object but when i invoque "datos" it
> will be execuete the method defined in C2.
> The problem is the point of view. I want to view like in java or other
> OO language but IDL cant accept this point of view :(
>
> With PERSON, MAN and WOMAN is more clear. I want to view a MAN or a
> WOMAN only as a PERSON, something like a cast. Later when i execute
> methods over this PERSON it will execute the "datos" method of WOMEN or
> MAN depending of its subtype (that's polymorphism).
> But i supossed this point of view is not possible in IDL.

It's very possible:

```
============================================================

pro Man::AboutMe
  print,FORMAT='(%"Dude, I am a %d yr old man, and I like %s.")',self.age, $
      self.activity
end

function Man::Init,age
  if ~self->Person::Init(age) then return,0
  self.activity='watching football'
  return,1
end

pro man__define
  m={MAN, $
    INHERITS PERSON, $
    BELT_SIZE: 0.0, $
```

```
      ACTIVITY: ''}
end


pro Woman::AboutMe
  print,FORMAT= $
      '(%"Pleased to meet you.  I am a %d yr old woman, and I enjoy %s.")', $
      self.age, self.activity
end

function Woman::Init,age
  if ~self->Person::Init(age) then return,0
  self.activity='gardening'
  return,1
end

pro woman__define
  m={WOMAN, $
    INHERITS PERSON, $
    SHOE_SIZE: 0.0, $
    ACTIVITY: ''}
end

function Person::Init,age
  self.age=age
  return,1
end

pro person__define
  p={PERSON, $
    AGE: 0}
end


==========================================================

Compile, and then try:

IDL> people=[obj_new('man',22),obj_new('woman',31)]
IDL> for i=0,1 do people[i]->AboutMe
Dude, I am a 22 yr old man, and I like watching football.
Pleased to meet you.  I am a 31 yr old woman, and I enjoy gardening.

Sorry for the flagrant stereo-typing.

JD
```