
Subject: Re: Passing optional parameters through a wrapper routine
Posted by [Mark Hadfield](#) on Thu, 10 Feb 2000 08:00:00 GMT
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David Fanning <davidf@dfanning.com> wrote in message
news:MPG.130b2251759d7b27989a22@news.frii.com...

> Mark Hadfield (m.hadfield@niwa.cri.nz) writes:
>
> ...
>
> There is nothing wrong with "wrapper" routines passing
> undefined variables. I often do this too, especially
> when I write a wrapper function for an object. But there
> is a difference between the wrapper and the wrappee,
> as it were. :-)

OK, that's been clarified.

> It just better be the case that when the undefined
> variables get to the end of the line that the
> program there knows what to do with them. Mine
> do, because that is how I choose to write them.
> Many of the built-in IDL routines do not. That's
> why they issue "undefined variable" errors.

That's an interesting point David. The first few lines of my routines tend to look something like this:

```
if n_elements(arg1) then message, 'You haven't defined arg1'
```

```
if size(arg2, /TNAME) ne 'STRING' then message, 'Arg2 must be string  
specifying the file name'
```

OK, I do supply values for undefined arguments when there are sensible defaults, but my fallback approach to handling bad arguments and other errors is, if in doubt, stop and call for help. The reasons for this approach are:

1. Laziness
2. The principle that in scientific programming (as opposed, say, to Web page programming) it is much better for programs to crash than to continue and return bad data.
3. The expectation that the person running the routine (usually me) will be able to work out what to do.
4. It is always possible for the calling routine to CATCH errors and handle

them itself if it thinks it knows better.

I have often thought that I SHOULD put more effort into recovering from errors gracefully but I have never been sure how to go about this. Perhaps I should read your book?

Mark Hadfield
m.hadfield@niwa.cri.nz <http://katipo.niwa.cri.nz/~hadfield/>
National Institute for Water and Atmospheric Research
PO Box 14-901, Wellington, New Zealand
