Ruby trunk - Bug #7475

Unexpected behavior of Module#append_features on singleton class

11/30/2012 10:56 AM - ernie (Ernie Miller)

Status:	Open		
Priority:	Normal		
Assignee:	matz (Yukihiro Matsumoto)		
Target version:			
ruby -v:	ruby 1.9.3p327 (2012-11-10 revision 37606) [x86_64-darwin12.2.0]	**Backport:**	2.3: UNKNOWN, 2.4: UNKNOWN, 2.5: UNKNOWN

Description

=begin
A more involved explanation is available at ((
URL:http://erniemiller.org/2012/11/29/ruby-tidbit-include-vs-extend-with-module-class-variables/))

In short, the handling of class variables (and constants) when a module is extended vs included is not as expected.

Example:

```
module Foo
  @@foo = 'foo'
end

class Bar
  include Foo
end

class Baz
  extend Foo
end

Bar.class_variable_get :@@foo # => "foo"
Baz.singleton_class.class_variable_get :@@foo # => NameError: uninitialized class variable @@foo in Class
```

We would expect constant and class variable lookup on the singleton class to work, but it doesn't. Both Rubinius and JRuby seem to behave as expected in this case.

Thanks!
=end

History

#1 - 11/30/2012 10:51 PM - ernie (Ernie Miller)

Another quick set of observations from this morning:

```
class Baz
  class << self
    Const = 'Const'
    @@foo = 'foo'
  end
end

Baz.class_variables.inspect # => [:@@foo]
Baz.singleton_class.class_variables.inspect # => []
Baz.singleton_class.class_variable_get :@@foo # => 'foo' ???
Baz.const_get(:Const, false) rescue "Nope." # => 'Nope.'
Baz.singleton_class.const_get(:Const, false) rescue "Nope." # => Const

# Let's try setting it explicitly.
Baz.singleton_class.class_variable_set :@@foo, 'foo'
Baz.singleton_class.class_variables.inspect # => [] -- still "empty"
```

However, if we extend Foo on Baz, vs opening the singleton class with "class << self", we can class_variable_set on the singleton and see it show up

in the list of class variables, vs being empty.

All of this is to say that I think some unexpected weirdness is going on in rb_include_module and/or include_class_new.

#2 - 02/18/2013 08:48 AM - ko1 (Koichi Sasada)

- Assignee set to matz (Yukihiro Matsumoto)

- Target version changed from 1.9.3 to 2.6

Matz, could you check it?

#3 - 02/18/2013 10:47 AM - nobu (Nobuyoshi Nakada)

- Description updated

#4 - 12/25/2017 06:15 PM - naruse (Yui NARUSE)

- Target version deleted (2.6)