

## Ruby trunk - Bug #15608

### What should be the correct output for Method#inspect with singleton methods?

02/15/2019 04:42 PM - Eregon (Benoit Daloz)

<b>Status:</b> Open	
<b>Priority:</b> Normal	
<b>Assignee:</b>	
<b>Target version:</b>	
<b>ruby -v:</b> ruby 2.6.1p33 (2019-01-30 revision 66950) [x86_64-linux]	<b>Backport:</b> 2.4: UNKNOWN, 2.5: UNKNOWN, 2.6: UNKNOWN
<b>Description</b>	
<p>bug.rb:</p> <pre>class C   def foo   end end  obj = C.new  class &lt;&lt; obj   alias bar foo end  p obj.method(:foo).owner p obj.method(:foo) raise unless obj.method(:foo).owner == C  p obj.method(:bar).owner p obj.method(:bar) raise unless obj.method(:bar).owner == obj.singleton_class  \$ chruby 2.0.0 \$ ruby -v bug.rb ruby 2.0.0p648 (2015-12-16) [x86_64-linux] C #&lt;Method: C#foo&gt; #&lt;Class:#&lt;C:0x0055b39fcd2c30&gt;&gt; #&lt;Method: C(C)#foo&gt;  \$ chruby 2.3.8 \$ ruby -v bug.rb ruby 2.3.8p459 (2018-10-18 revision 65136) [x86_64-linux] C #&lt;Method: C#foo&gt; #&lt;Class:#&lt;C:0x000055668ebef268&gt;&gt; #&lt;Method: #&lt;C:0x000055668ebef268&gt;.bar(foo)&gt;  \$ chruby 2.4.5 \$ ruby -v bug.rb ruby 2.4.5p335 (2018-10-18 revision 65137) [x86_64-linux] C #&lt;Method: #&lt;C:0x000055fdc99dc908&gt;.foo&gt; #&lt;Class:#&lt;C:0x000055fdc99dc908&gt;&gt; #&lt;Method: #&lt;C:0x000055fdc99dc908&gt;.bar(foo)&gt;  Same for 2.5.3 and 2.6.1  I think Method#inspect should show on which Module the method is defined (Method#owner), and only singleton methods should be shown as receiver.method, so:<pre>C</pre></pre>	

```
#<Method: C#foo>
#<Class: #<C:0x000055668ebef268>>
#<Method: #<C:0x000055668ebef268>.bar (foo)>
```

Which only Ruby 2.3 does interestingly.

---

What's the meaning of the C1(C2) notation?

It seems to show "#{receiver.class}#{owner}" or "#{receiver.singleton\_class if receiver has a class}" depending on the version:

```
class D < C
end
d = D.new
p d.method(:foo)
d.singleton_class
p d.method(:foo)
```

2.0-2.3:

```
#<Method: D(C)#foo>
#<Method: D(C)#foo>
```

2.4-2.6:

```
#<Method: D(C)#foo>
#<Method: #<D:0x000055c12b45e218>.foo>
```

I think the Ruby 2.4+ behavior is confusing and incorrect here, the object shouldn't be shown if it's not a singleton method, and Method#inspect shouldn't change for a given method.

Do you agree what I describe should be the correct behavior?  
Can we fix it then?

---

## History

### #1 - 02/15/2019 04:43 PM - Eregon (Benoit Daloze)

- Description updated

### #2 - 02/15/2019 04:44 PM - Eregon (Benoit Daloze)

- Description updated

### #3 - 02/15/2019 04:46 PM - Eregon (Benoit Daloze)

- Description updated

### #4 - 02/15/2019 04:50 PM - Eregon (Benoit Daloze)

It would be great to have specs under spec/ruby for this, and that could explain the rationale behind each decision for each case. Unit tests do not achieve that.

### #5 - 02/28/2019 11:49 PM - wanabe (\_ wanabe)

Current behavior is from r60127.

I guess it will come to the same to replace data->klass of method\_inspect() to data->iclass.