I have custom renderer for vector layers, and can save project including information about this custom renderer. But when I try to open saved project QGIS crashes. Here is backtrace

```
#0  0x0000000000000000 in ?? ()
#1  0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgssymbolv2.cpp:274
#2  0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgssymbolv2.cpp:1251
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:283
#3  0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
#4  0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
#5  0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
#6  0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
#7  0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
#8  0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
#9  0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
#10 0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
#11 0x0000000000000000 in ?? ()
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
```

Description

I have custom renderer for vector layers, and can save project including information about this custom renderer. But when I try to open saved project QGIS crashes. Here is backtrace
Test plugin with custom renderer for point layers attached.

Seems there are some issues with interaction between Python bindings and C++ core code.

### Related issues:

| Related to QGIS Application - Bug report # 13973: Crash when switching from c... | Closed | 2015-12-10 |
---|---|---|

### Associated revisions

**Revision 03eed110 - 2016-01-25 06:16 PM - Martin Dobias**

Improve renderer class documentation (refs #14025)

### History

**#1 - 2015-12-22 07:03 AM - Alessandro Pasotti**

- Assignee set to Martin Dobias

Not sure, but this could be the problem:

```cpp
QgsSymbolV2List symbols = const_cast<QgsFeatureRendererV2 *>( renderer )->symbols( context );
```

the about to be cloned object is a sip object.

**#2 - 2016-01-25 08:28 AM - Martin Dobias**

- Resolution set to invalid
- Status changed from Open to Closed
- File mytestrenderer.py added

The real issue was that symbols returned by the test renderer have not been initialized before being used in symbolForFeature().

Attached (fixed and simplified) version works fine for me - closing as invalid. I have some ideas how the situation could be improved in QGIS 3 so that custom renderer implementations are less crash-prone...

### Files

<table>
<thead>
<tr>
<th>File</th>
<th>Size</th>
<th>Date</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>renderertest.tar.bz2</td>
<td>4.12 KB</td>
<td>2015-12-22</td>
<td>Alexander Bruy</td>
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<tr>
<td>mytestrenderer.py</td>
<td>3.22 KB</td>
<td>2016-01-25</td>
<td>Martin Dobias</td>
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