

How to use Liquid

## **- Development environment**

see ./readme.txt

## **- Build**

see ./readme.txt

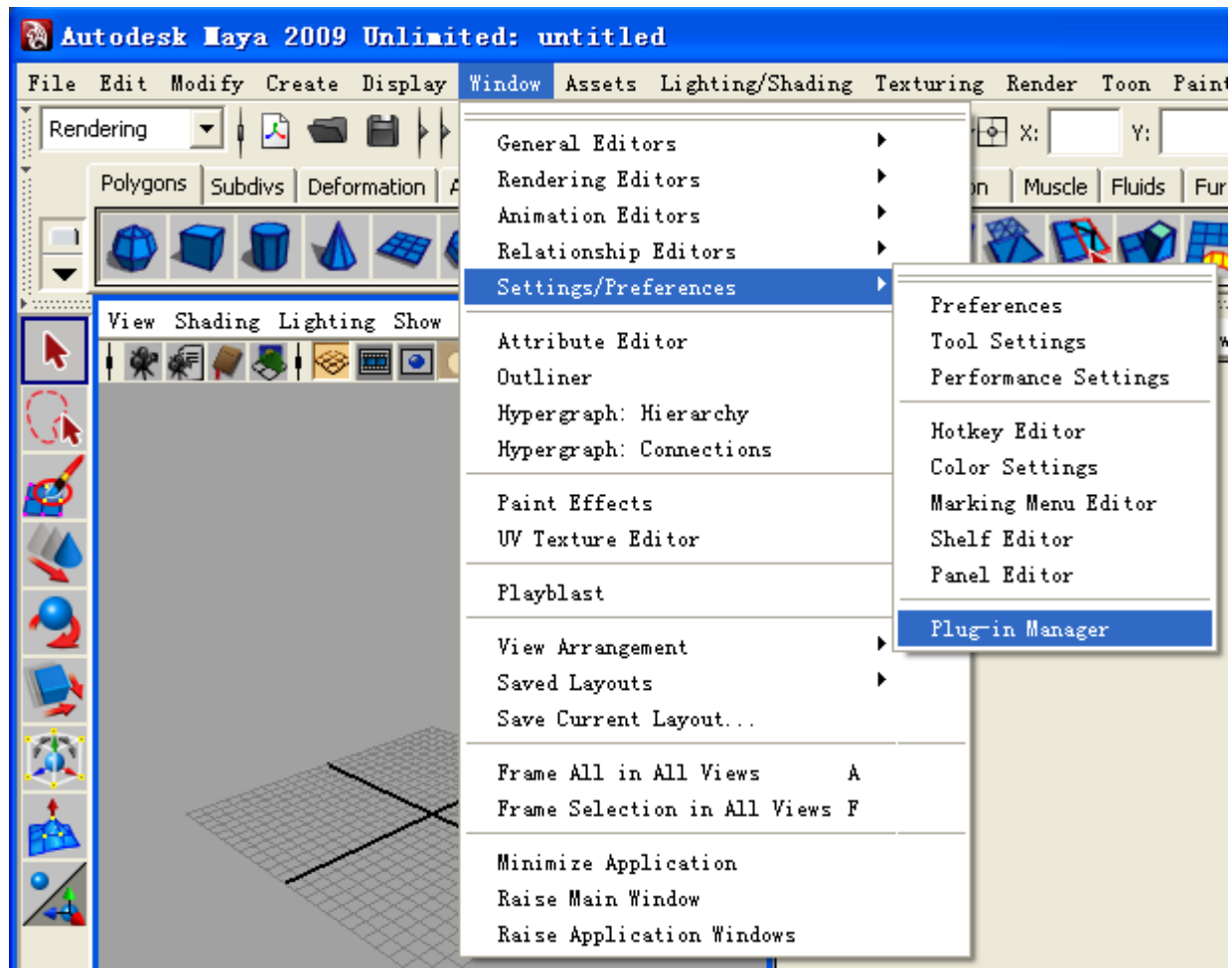
## **- Install**

see ./readme.txt

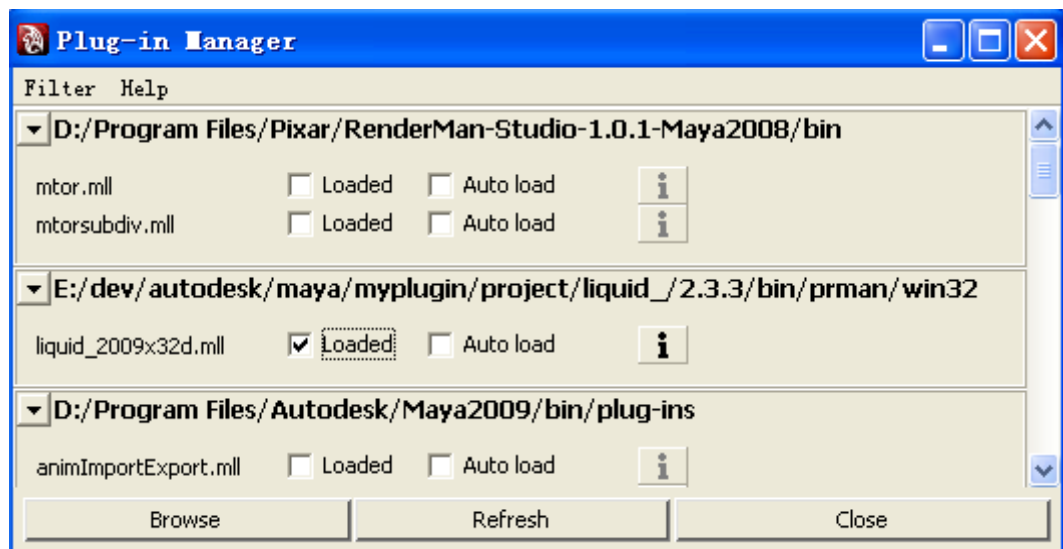
## **-load liquid plugin**

Demo scene is (\$liquid\_root)/2.3.3/doc/HowToUseLiquidmaya.ma

1)

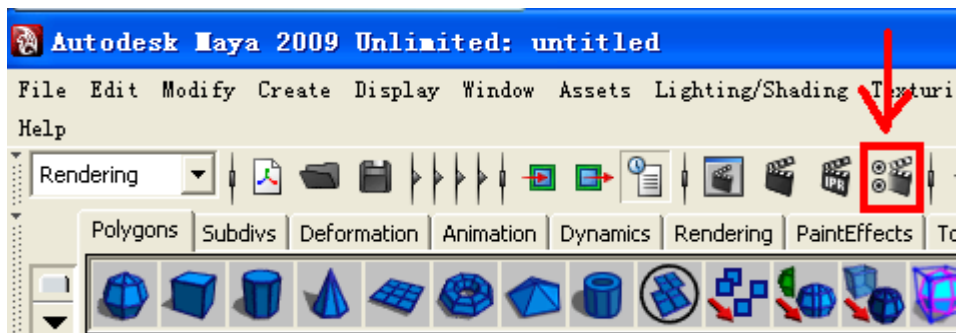


2) select *liquid\_2009x32d.mll*

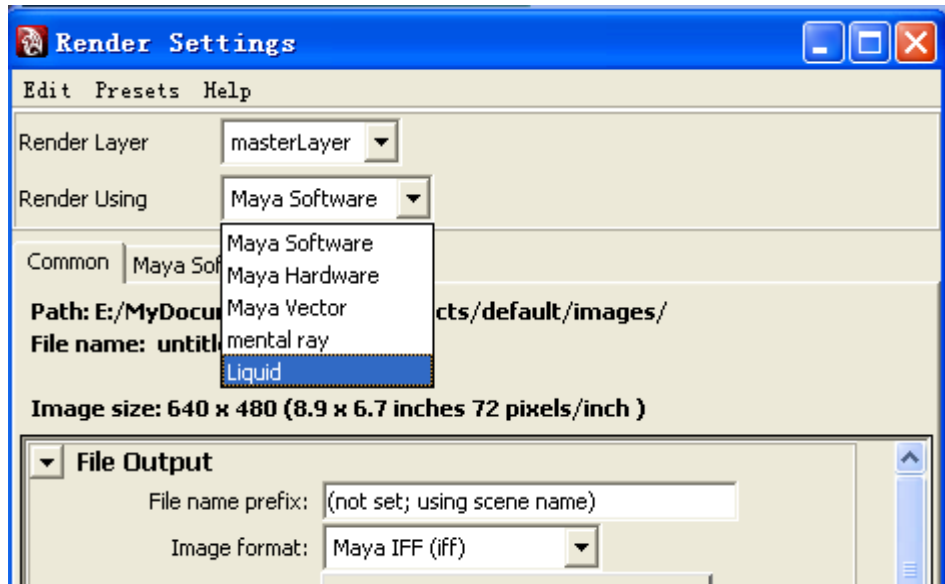


-select liquid renderer

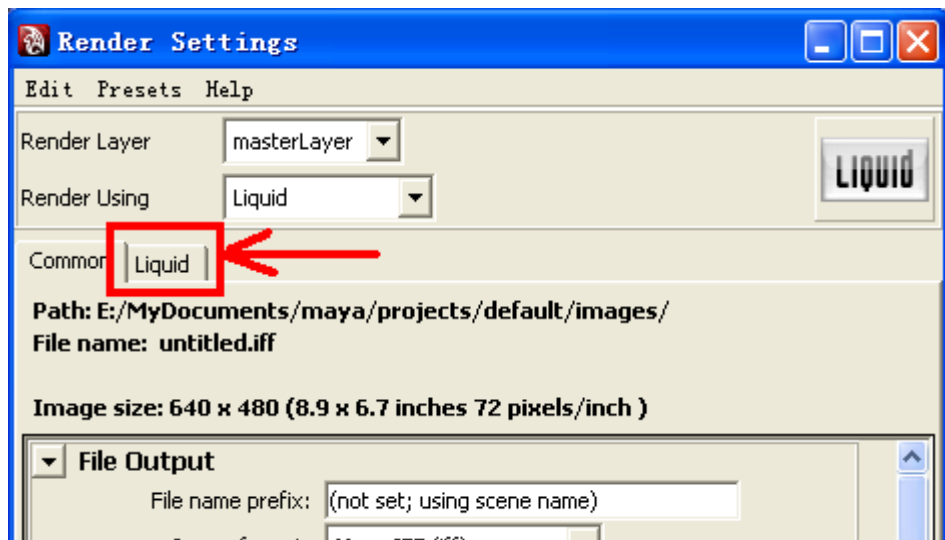
1)



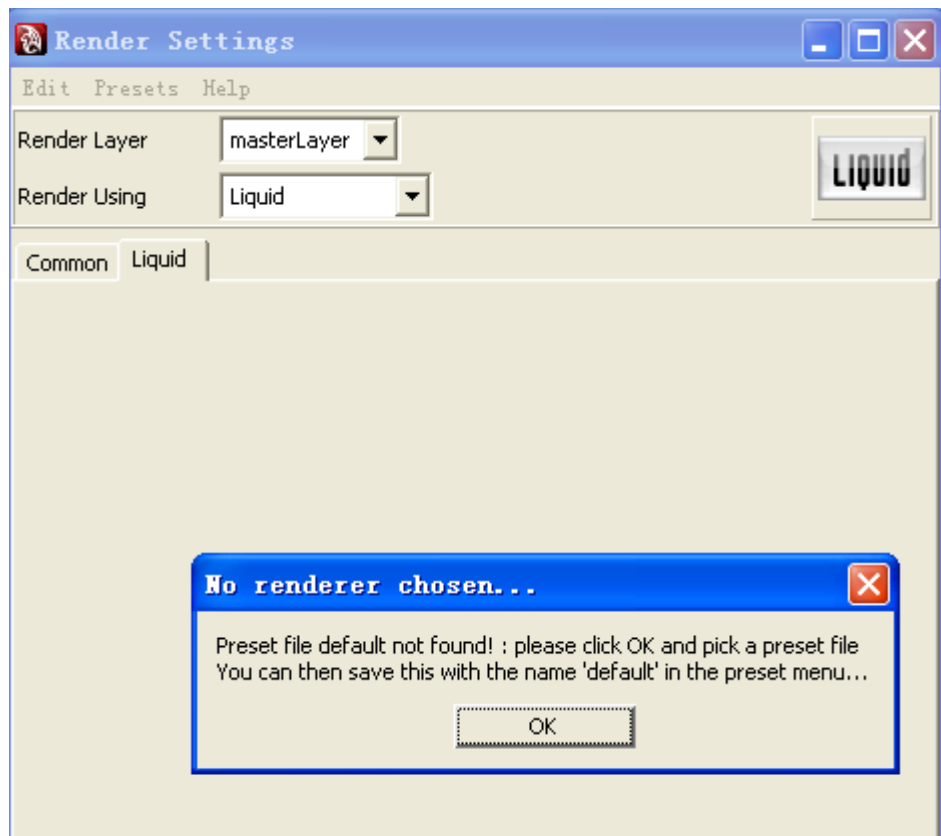
2)



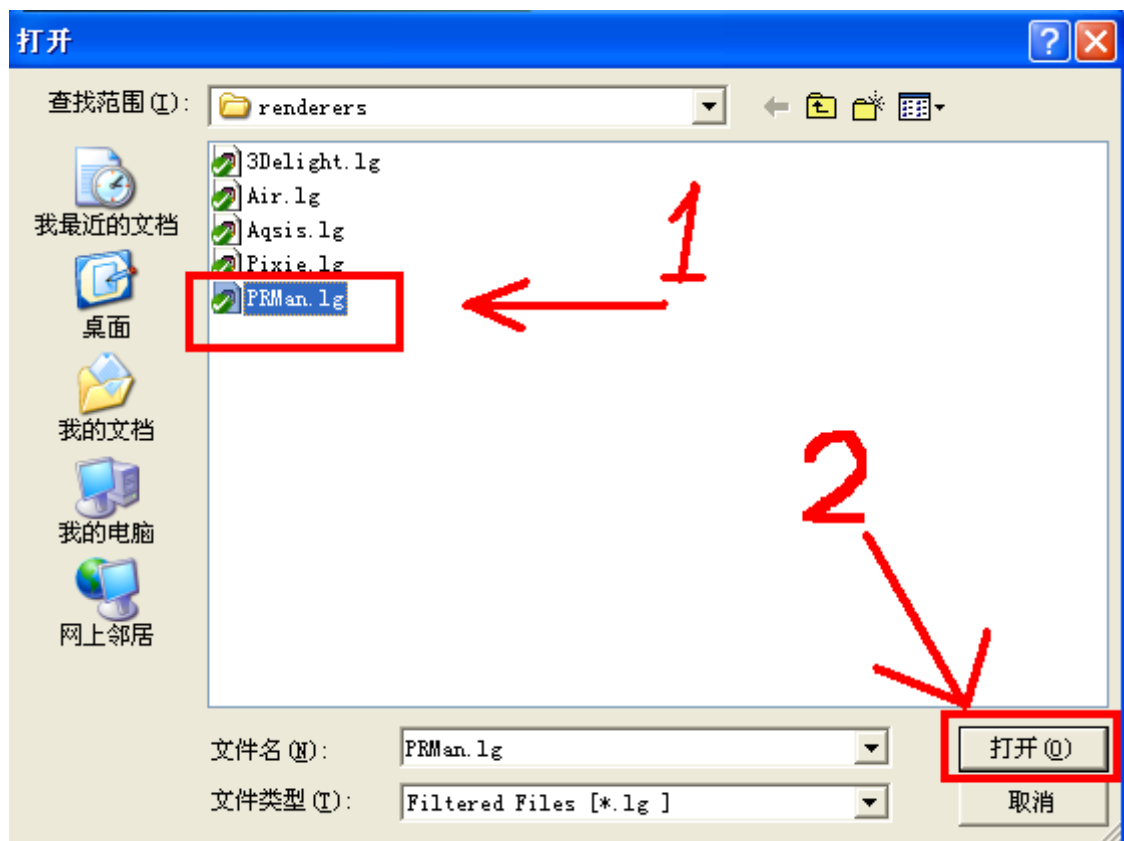
3)



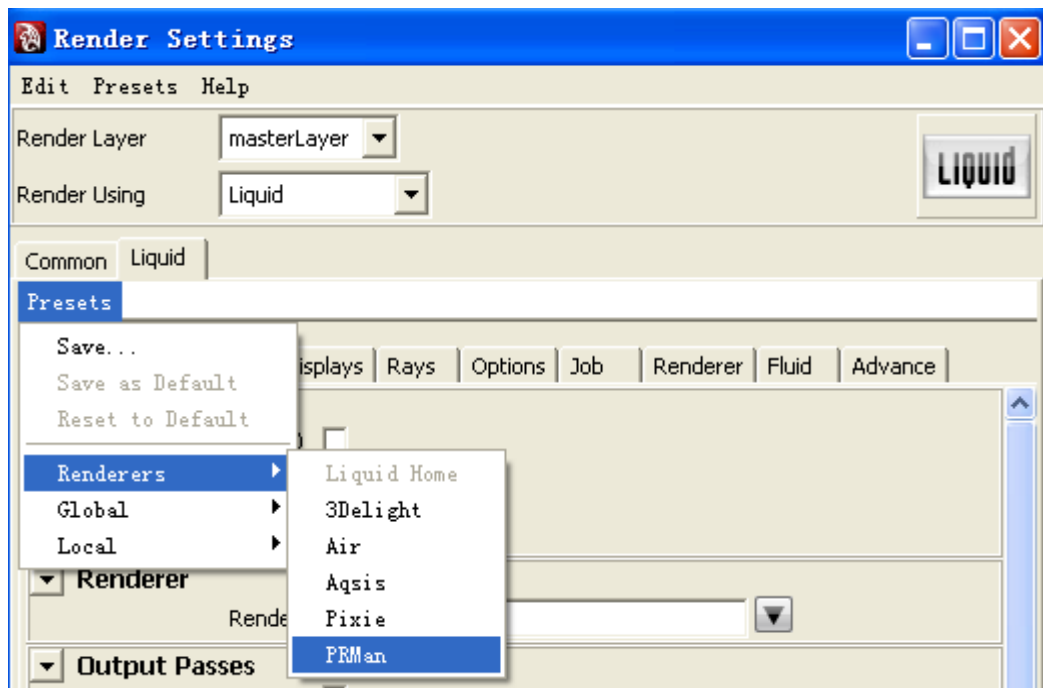
4)



5)



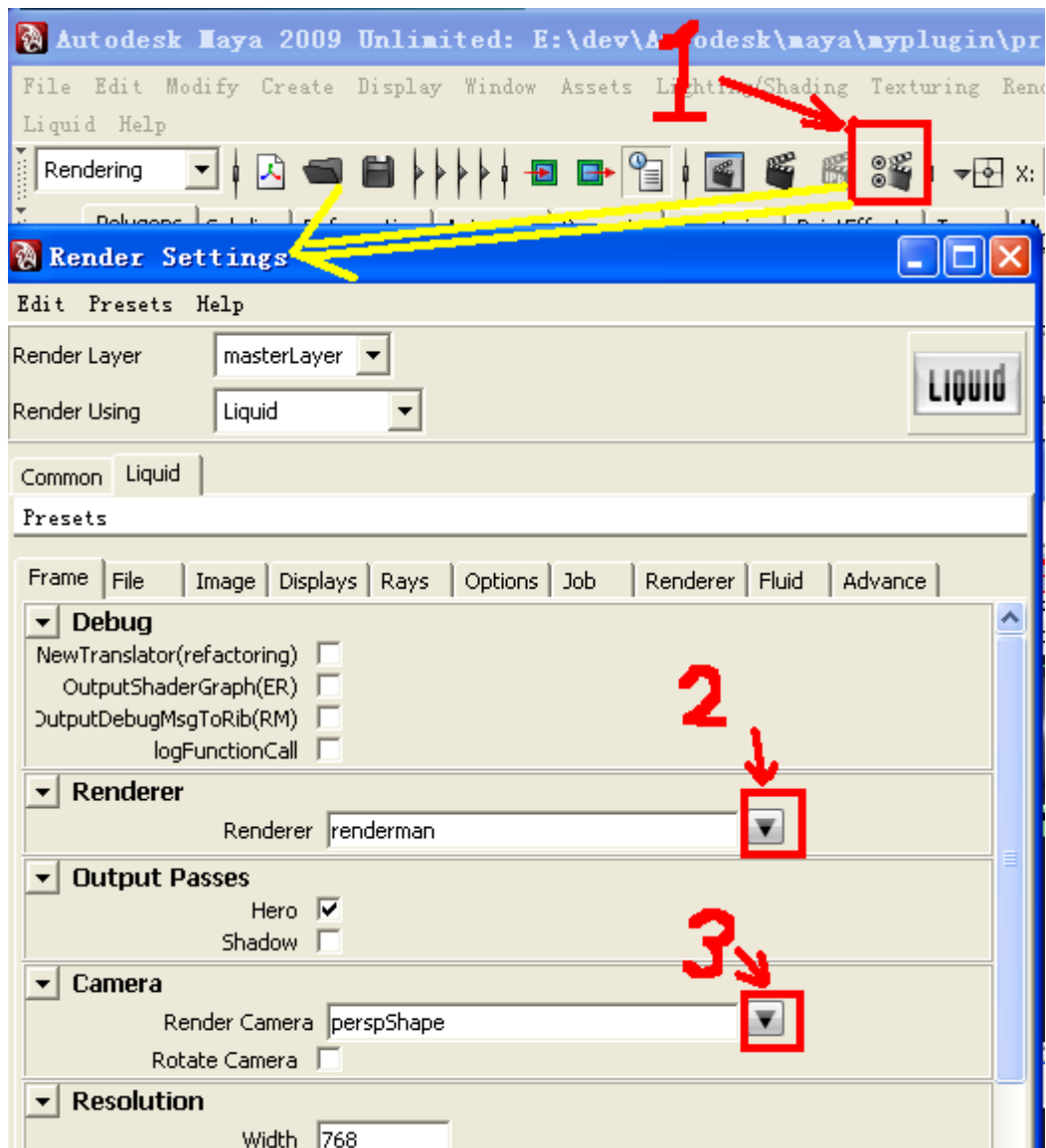
(you can select \*.lg in this way:



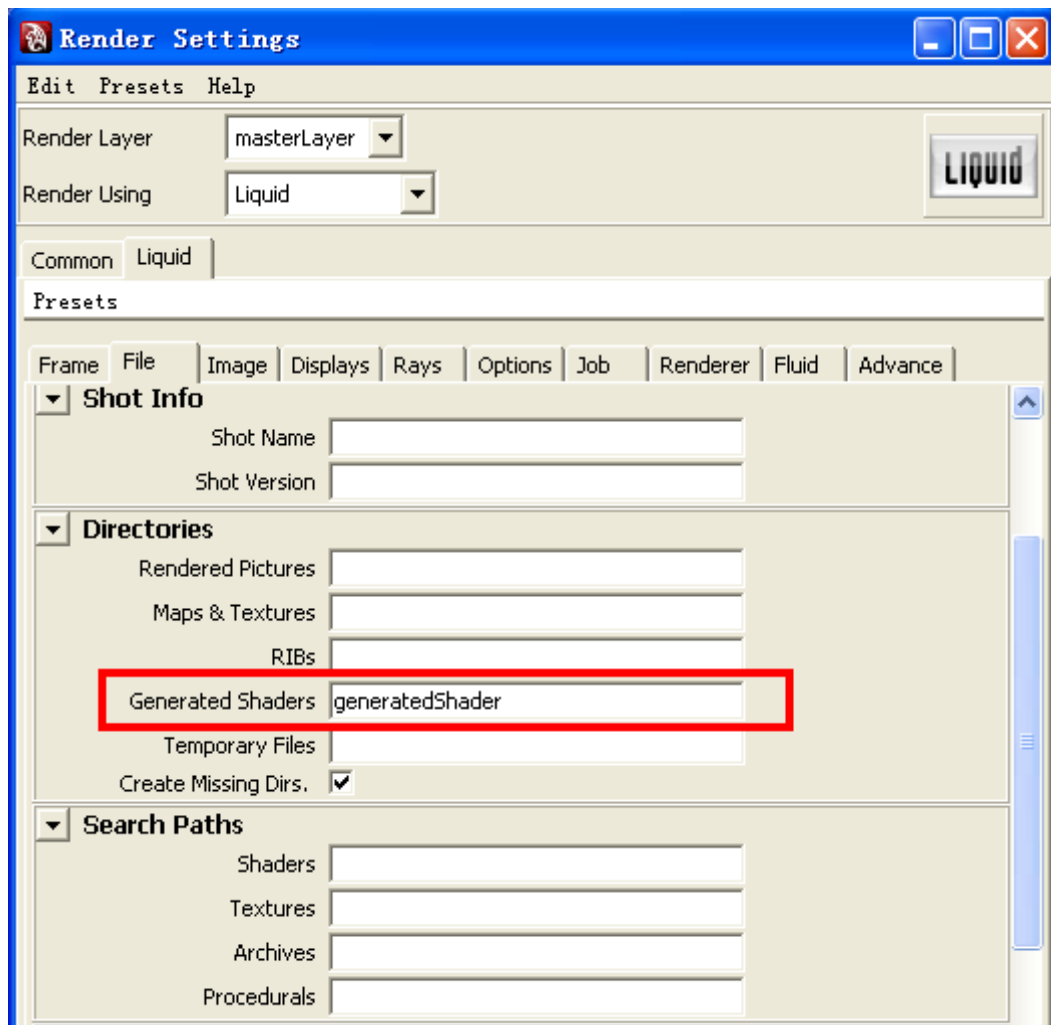
)

6) select "Renderer" and "Camera" in "Render Settings"

"Renderer" MUST be setted to "renderman" in liquidMaya,(in maya2renderer, you can set the "Renderer" to another renderer, e.g. elvishray)

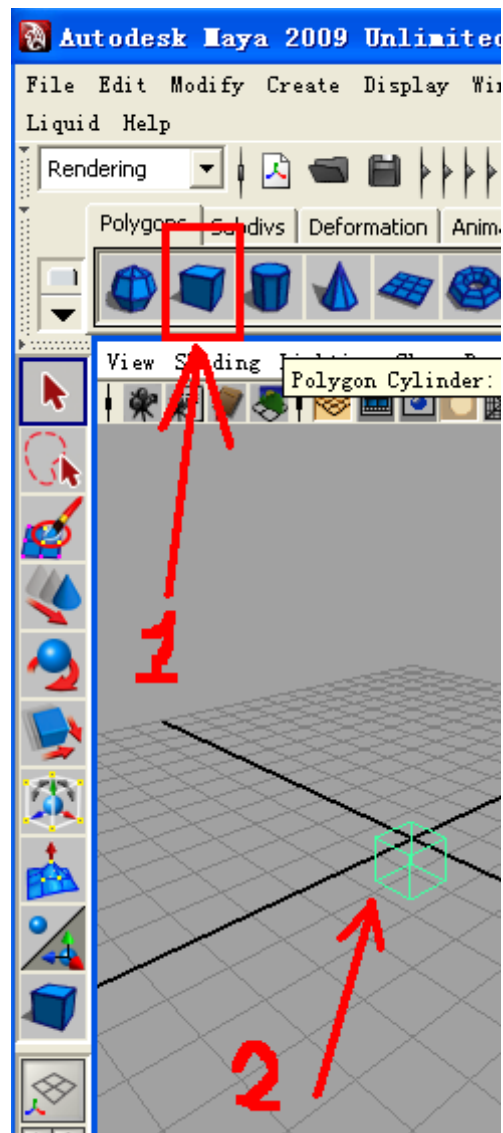


7)set GeneratedShaders directory



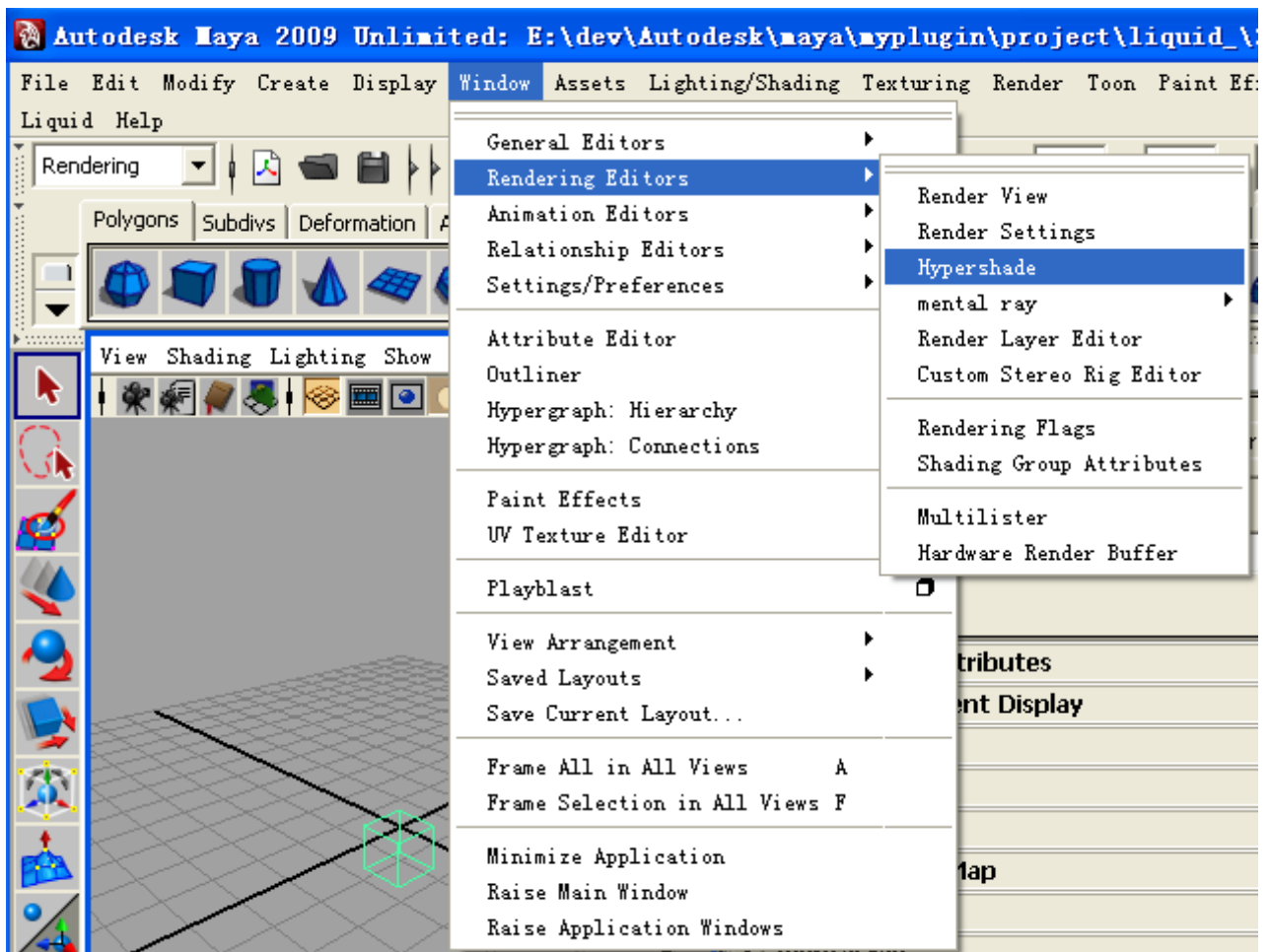
## Create the scene

1.create a box

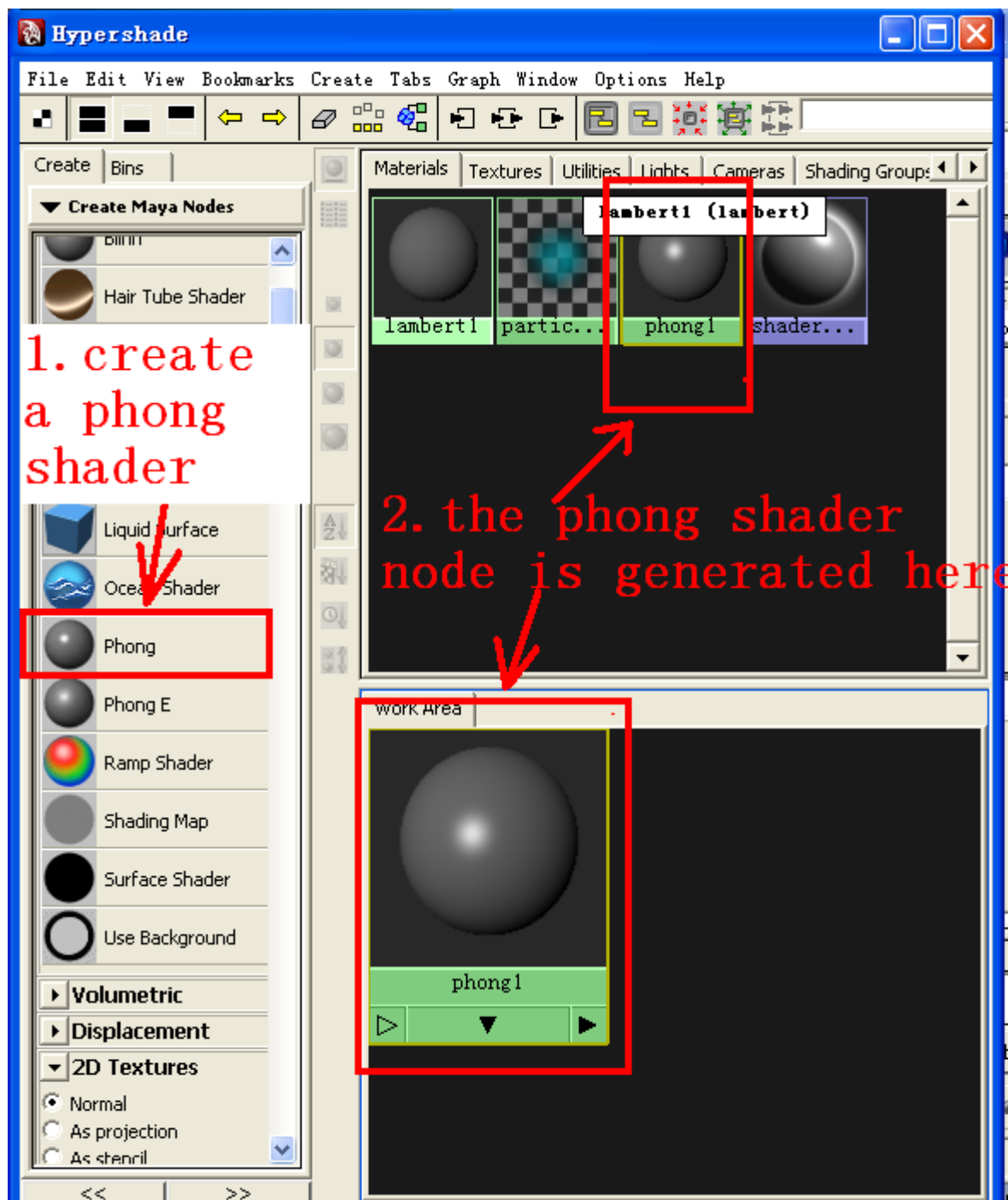


3. assigned a material to this box



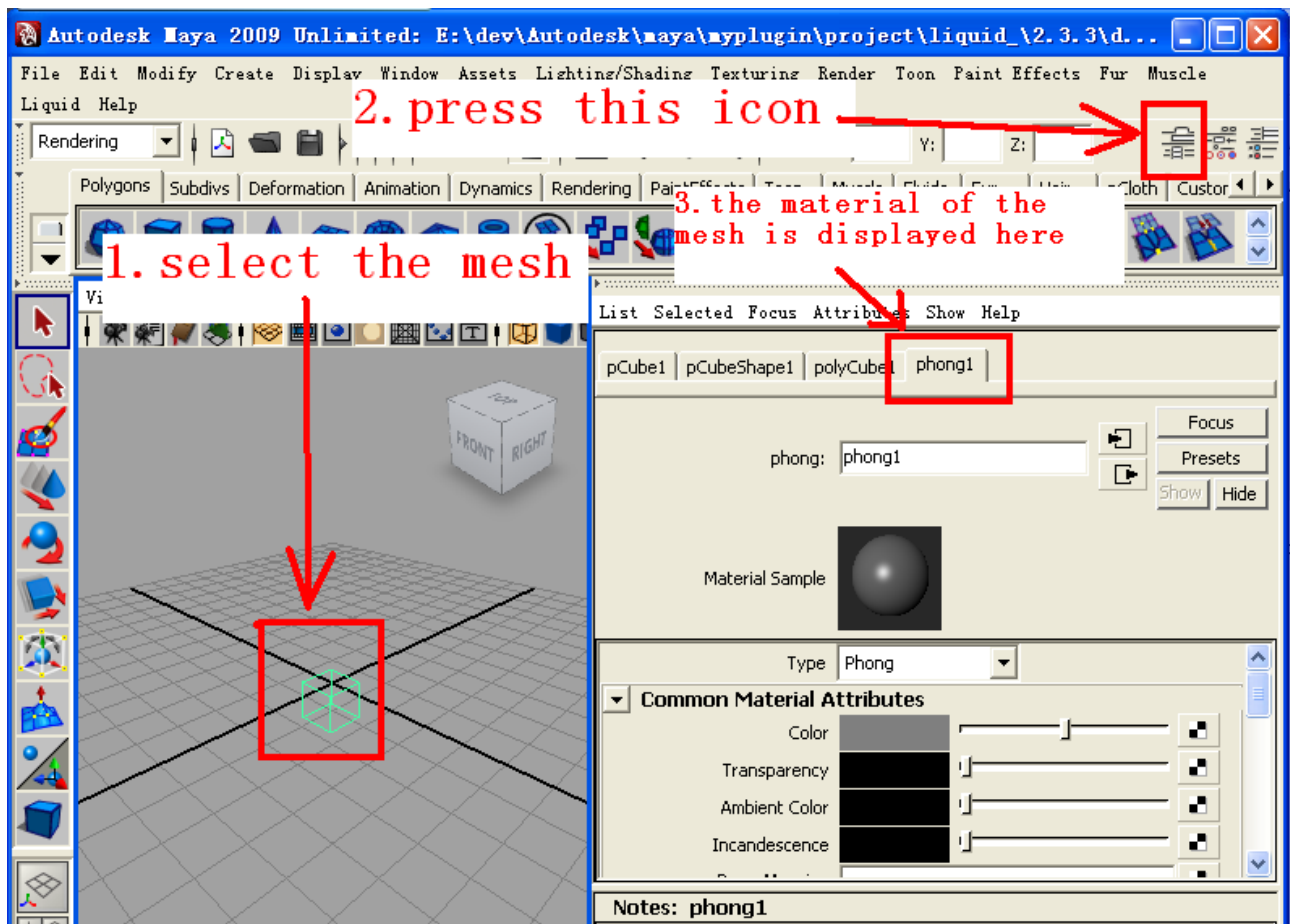


4. let's create a phong shader



5. select the mesh, then press(not click) the right mouse button on the phong1 node, and select "Assign Material To Selectedion."

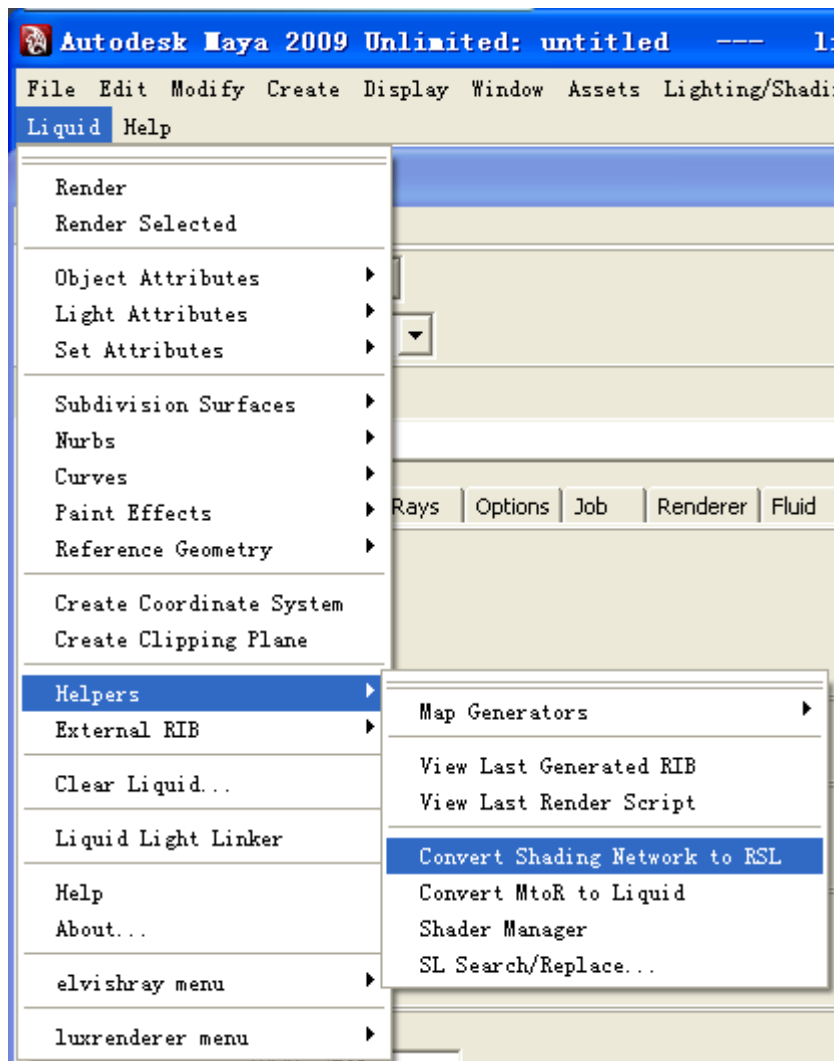
6. you can see the phong1 is assigned to the mesh.



## export the material of the mesh

In liquidMaya you MUST export the material of the mesh before you render that mesh. This is the steps:

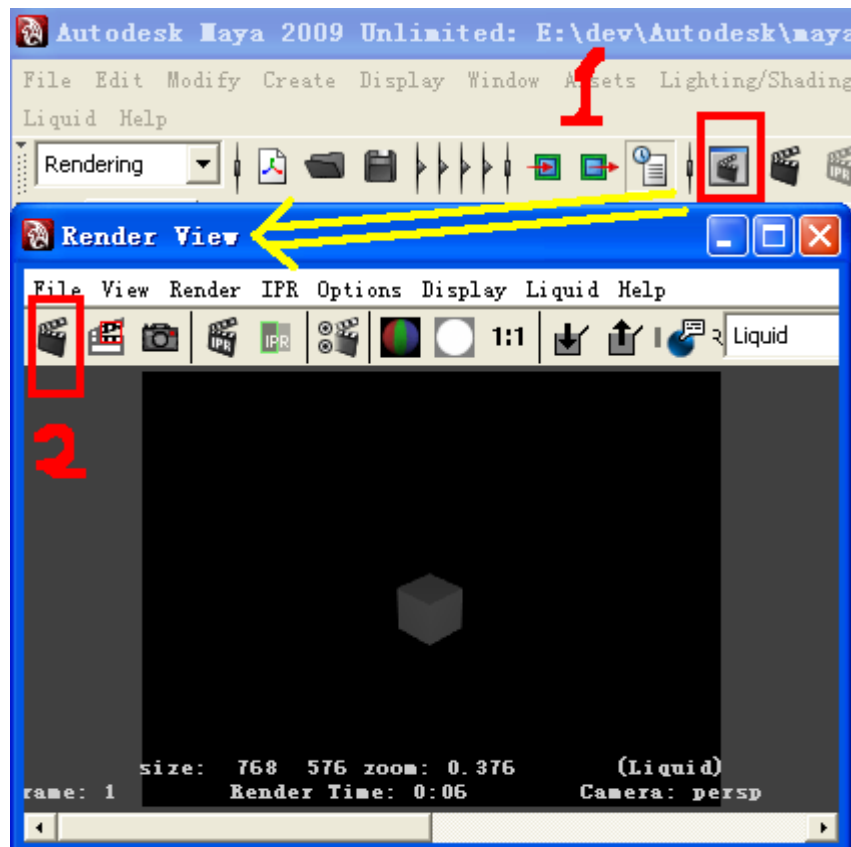
- make sure "GeneratedShaders" directory is set.
- select the mesh which you want to render
- Menu --> liquid --> Helpers --> Convert shading network to RSL:



phong1.sl and phong1.slo will be generated at  
 E:\MyDocuments\maya\projects\default\generatedShader\

## Render

Press the "RenderView" button, and press "Render" button:

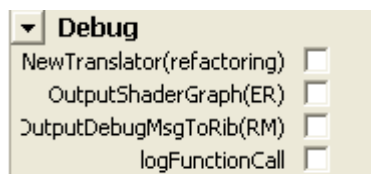


The rib file will be generated at E:\MyDocuments\maya\projects\default\rib, (e.g. E:\MyDocuments\maya\projects\default\rib\\_perspShape.0001.rib)

## -RenderSettings of maya2renderer

Demo scene is (\$liquid\_root)/2.3.3/doc/HowToUseMaya2Renderer.ma

### -Debug



### - NewTranslator(refactoring)

This is a new feature of maya2renderer.

I'm refactoring liquidMaya, and put the new export process into liqRibTranslator::\_doItNew();

The original export process is put into liqRibTranslator::\_doIt();

If NewTranslator(refactoring) is checked, liqRibTranslator::\_doItNew() is executed, otherwise liqRibTranslator::\_doIt() is executed.

**If you set NewTranslator(refactoring) to true, you are using maya2renderer,**

**If you set NewTranslator(refactoring) to false, you are using liquidMaya,**

## - OutputShaderGraph(ER)

This is a new feature of maya2renderer.

In liquidMaya you MUST export the material of the mesh before you render that mesh.

In maya2Renderer, if you set OutputShaderGraph(ER) to true, you don't have to convert the material manually. The materials will be converted automatically.

## - OutputDebugMsgToRib(RM)

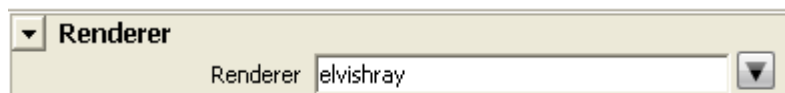
This is a new feature of maya2renderer. `_liqRIBMsg(const char* msg)` will output the msg to rib file.

## - logFunctionCall

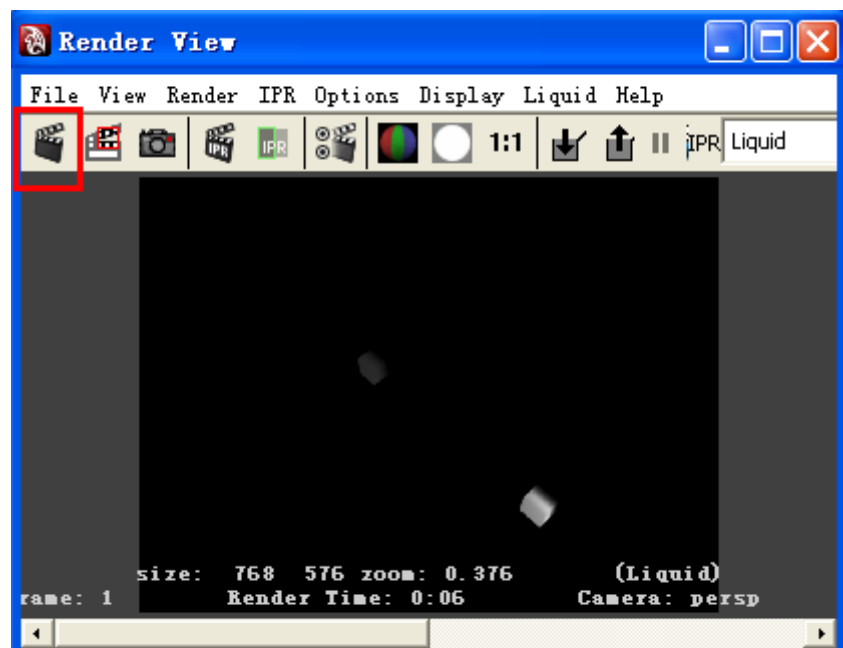
This is a new feature of maya2renderer. `_logFunctionCall(const char* msg)` will output the msg. It is useful to trace the call stack in batchrender mode.

## **-Renderer**

You can select other renderers in maya2renderer, e.g. elvisray.



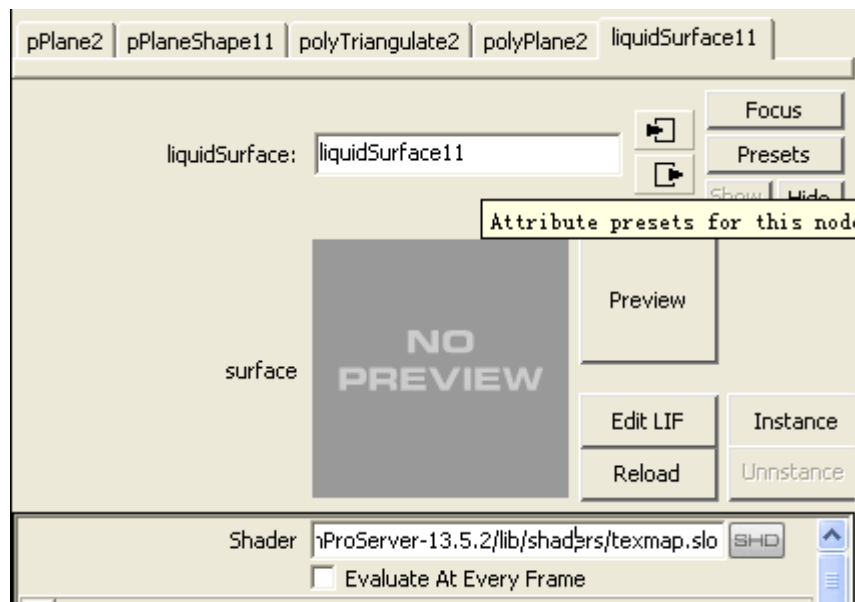
## **Render**



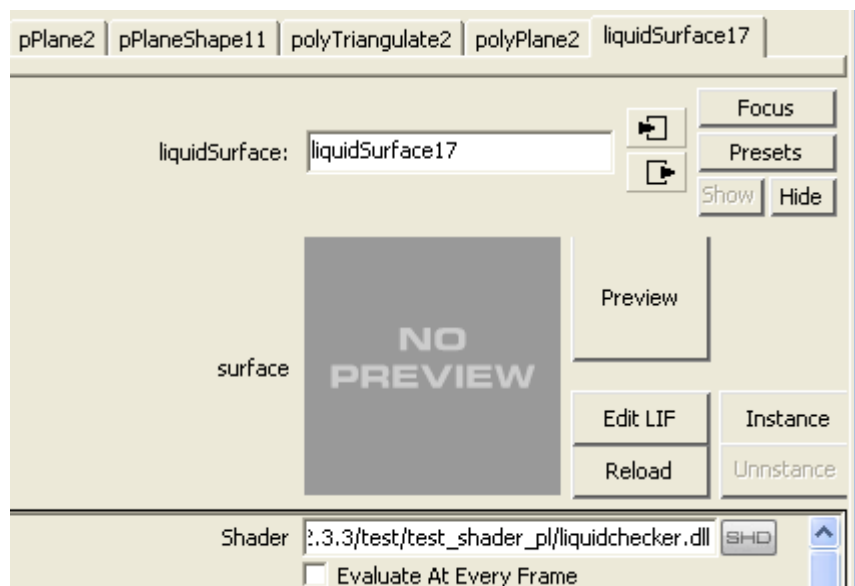
It will generate \*.erapi at `E:\MyDocuments\maya\projects\default\generatedShader\` and [d:/script.er](http://d:/script.er) which trace the invoking of ERAPI

## - liquidSurfaceShader

- LiquidMaya 里 liquidSurfaceShader 是用 ☐ 自定 ☐ 的 surface shader (\*.slo 文件)



Maya2render 里借助 liquidSurfaceShader, ☐ 用 ☐ 提供 ☐ ☐ 个接口可以使用其他渲染器的自定 ☐ 的 surface shader。比如可以使用 Elvishray 的自定 ☐ 的 surface shader。



### NOTE:

如果不是 renderman shader (\*.slo), ☐ 需要在 shader 同一 ☐ 目 ☐ 下建立 ☐ 个 pl 文件, pl 文件里指定 shader ☐ 型、shader 参数列表。比如, 我有一个 er 的自定 ☐ shader :

E:\dev\Autodesk\maya\myplugin\project\liquid\_2.3.3\test\test\_shader\_pl\liquidchecker.dll

那 ☐ ☐ 需要手工建立 ☐

E:\dev\Autodesk\maya\myplugin\project\liquid\_2.3.3\test\test\_shader\_pl\liquidchecker.pl

liquidchecker.pl 的内容和注 ☐ 如下 ☐

#shaderType // shaderType: surface, volume, displacement, light, shaderType ☐ 放在 shadername 前面

surface

#shaderName //shadername ☐ 放在 shaderType 后面

liquidchecker

//shader 参数列表, 每一行是一个参数,

```
#Name:Details:Type:IsOutput:Defaults:ArraySizes//每一个参数的属性
frequency:uniform:float:0:8.5:-1
mode:uniform:float:0:0.0:-1
mode2:uniform:float:0:0.5:-1
```