

passing a tuple as an argument to a MEL proc from Python

This came out of a discussion on [Ask Autodesk](#) where at first I didn't quite explain is sufficient detail that `mel.eval` requires a string as an argument. In simple cases, you can do something like this

```
mel.eval('myMelProc ("%s")' % (myString))
```

but if you're not using a string but a tuple instead, it will fail.

Suppose I have a MEL proc that takes an array, a string and an int as arguments, how would I pass a tuple?

Here's what I would do in MEL

```
global proc foo (string $arr[], string $str, int $int) {  
  
    print $arr;  
  
    print ($str + "\n");  
  
    print $int;  
  
}
```

```
string $arr[] = {"a", "b", "c"};
```

```
string $str = "foobar";
```

```
int $int = 12345;
```

```
foo ($arr, $str, $int);
```

In python, I'd like to be able to do

```
mel.eval('foo (%(a)s, "%(s)s", %(i)d)' % vars())
```

but that gives me

```
mel.eval('foo (%(a)s, "%(s)s", %(i)d)' % vars())

foo (('a', 'b', 'c', 'd'), "foobar", 123456);

// Error: foo (('a', 'b', 'c', 'd'), "foobar", 123456); //

// Error: Line 1.7: Syntax error //

# Error: Error occurred during execution of MEL script

# Traceback (most recent call last):

#   File "<maya console>", line 1, in <module>

# RuntimeError: Error occurred during execution of MEL script #
```

Which makes sense, since I need

```
foo ({ "a", "b", "c", "d"}, "foobar", 123456);
```

not

```
foo (('a', 'b', 'c', 'd'), "foobar", 123456);
```

The solution is to convert the tuple into a string that MEL sees as an array:

```
myString = str(a)

myString = myString.replace('(', '{')

myString = myString.replace(')', '}')
```

```
myString = myString.replace('\'', '')
```

```
mel.eval('foo (%(myString)s, "%(s)s", %(i)d)' % vars())
```