

Parameter passing mechanisms and aliasing: example

Consider the following Java method

```
class aClass {
    private int n;

    public aClass(int i) {
        n = i;
    } //constructor

    public void confusing (aClass another) {
        n = n * 2;
        another.n = another.n +1;
    } // confusing

} // aClass
```

and code in which this method is called:

```
aClass obj1 = new aClass(42);
obj1.confusing(obj1);
```

Trace through the execution of the call to the method `confusing`, showing the values of `obj1.n` before the call, through the execution of the method, and on exit from the method, explaining why aliasing occurs here.

What if we add the following method to `aClass`?

```
public int tricky(int i) {
    n = n * 2;
    i = i +1;
    return i;
} // tricky
```

and call with

```
int i = obj1.tricky(obj1.n);
```

What's the value of `obj1.n` after this call? What about after this call (assuming we made `n` public)?

```
obj1.n = obj1.tricky(obj1.n);
```