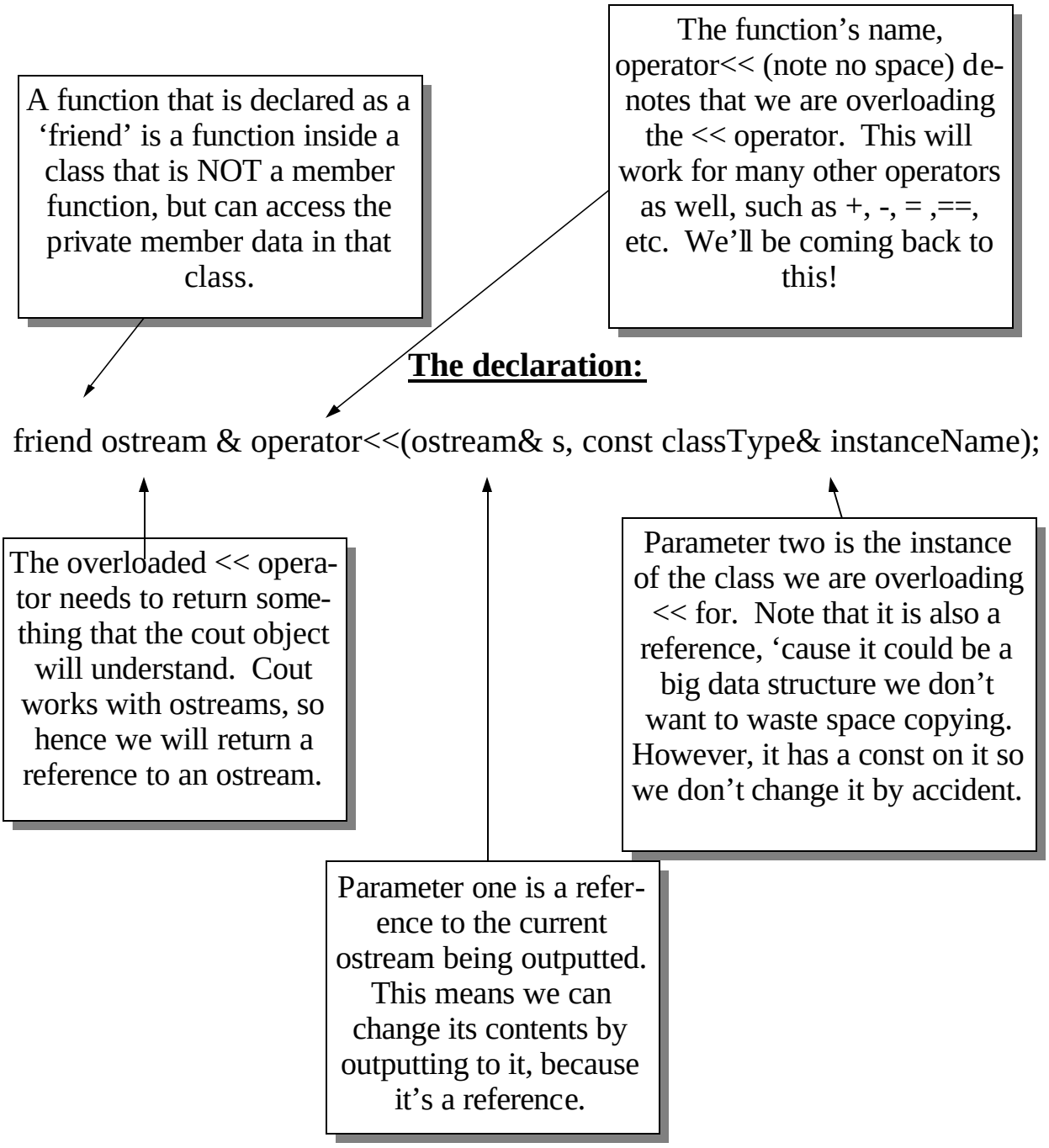
A CLOSE Look at the Anatomy of User-defined Stream IO



The Implementation

```
friend ostream & operator<<(ostream& s, const classType& instanceName){
        // output the class data to ostream s in any way we need to
    s << "Data Field 1 is: " << instanceName.data1 << " , and Data Field
        2 is: " << instanceName.data2;
    return s; // important!
}
```

The Different Flavors of Memory in a Program

A short test:

Which of the three ways of using memory we discussed in class (Static, Automatic, and Dynamic) are each of the marked lines in the following code?

```
// Main.cpp
// Another useless program by Steve Martin
// 7-9-01

int evilGlobal = 1;  // — 1 — //

void foo (int a, int b) { // — 2 — //
        a = b;
}

int main ( ) {

        int *pointer = new int; // — 3 — //

        int steve = 99; // — 4 — //

        foo(*pointer, steve);

        return 0;
{
```

Answers:

1. Static
2. Automatic
3. Dynamic
4. Automatic