

What is the output of the syntactically correct C++ program below?

```
#include <iostream>
#include <memory>

class Parent {
public:
    Parent() {
        std::cout << "Parent constructor" << std::endl;
    }
    virtual ~Parent() {
        std::cout << "Parent destructor" << std::endl;
    }
    virtual void foo() {
        std::cout << "Parent foo" << std::endl;
    }
};

class Child : public Parent {
public:
    Child() {
        std::cout << "Child constructor" << std::endl;
    }
    ~Child() {
        std::cout << "Child destructor" << std::endl;
    }
};
```

```
void foo() override {
    std::cout << "Child foo" << std::endl;
}

int main() {
    std::shared_ptr<Parent> p =
        std::make_shared<Child>();
    p->foo();
    return 0;
}
```

Output:

```
Parent constructor
Child constructor
Child foo
Child destructor
Parent destructor
```