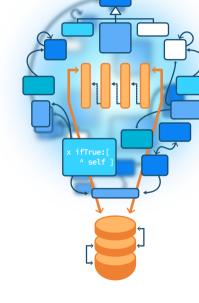
Customization degree of hooks

Class vs. instance hooks

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Goals

- Thinking about hooks
- Granularity of hooks: class vs instance creation
- Do we customize instance creation or not?
- Customisation of instance creation

Example: Introducing a hook

```
CHInterpreter >> visit...: arg

scope := CHClassScope new xxx
...
scope
```

Extract a class

```
CHInterpreter >> visit...: arg

scope := self classScopeClass new xxx
...
scope
```

CHInterpreter >> classScopeClass ^ CHClassScope



A subclass can push a different class

CHInterpreter2 >> classScopeClass
^ MyClassScope

Ok, it works!



Black box parametrization

```
Object << CHInterpreter slots: {#classScopeClass};
```

With an instance variable and a setter we can also get black box pametrization

```
CHInterpreter new classScopeClass: myClassScope; yourself
```

Analysis

- What if we have a more complex instantiation?
- And we want to encapsulate it and let the extender change it?
- self classScopeClass new xxx is not at a good granularity

```
CHInterpreter >> visit...

scope := self classScopeClass new xxx
...
scope
```

Instance creation

```
CHInterpreter >> visit...: arg

scope := self newClassScope.
...
scope
```

CHInterpreter >> newClassScope

^ self newClassScope xxx

Imagine

If you can only pass a class

- you cannot customize and access extra protocols
- you will have to do circumvoluted tricks (wrapping)

Passing object as context

```
CHInterpreter >> visit...: arg

scope := self newClassScopeNewFor: arg
...
scope
```

CHInterpreter >> newClassScopeNewFor: arg

^ self newClassScope doSomethingWith: arg

- When we pass arg, we give the class the possibility to customise instantiation.
- Subclasses can customize/extend doSomethingWith:

Conclusion

- Class hooks are nice
- But think also about others hooks

Produced as part of the course on http://www.fun-mooc.fr

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