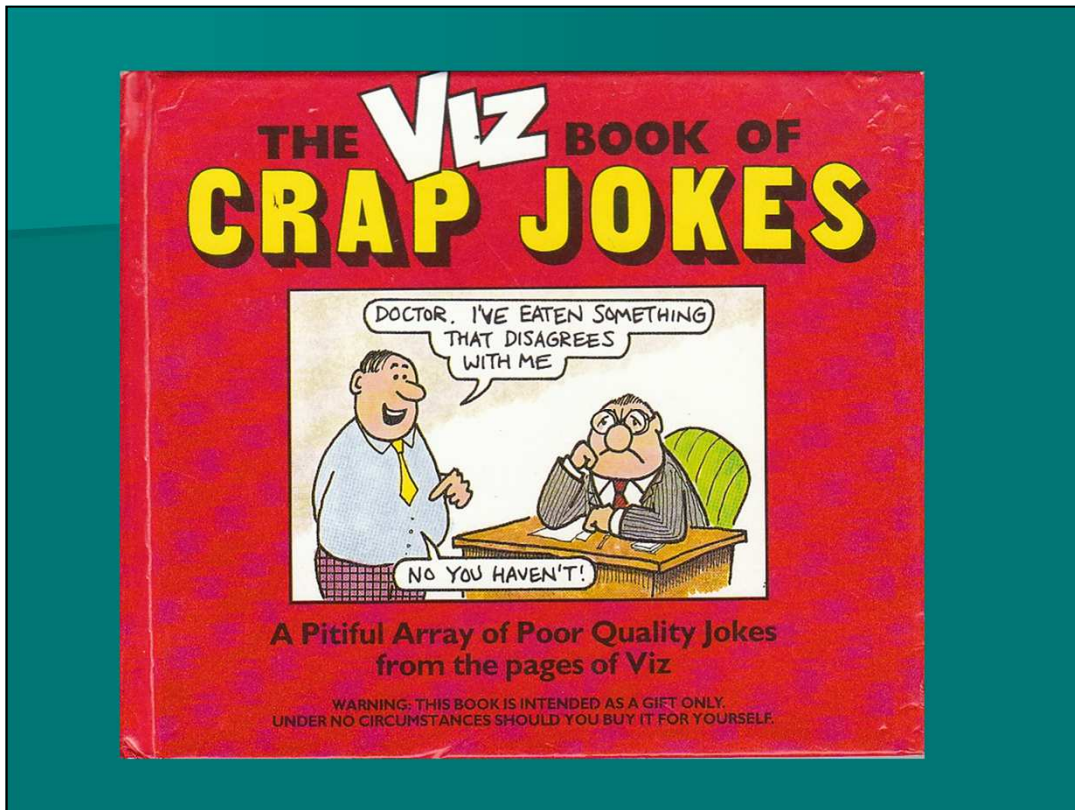# The Art of Code

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ACCU Conference 2014

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One of only two books I carry about – the other is the O-Reilly regular expressions pocket reference.

Used to lighten the mood after ploughing through incomprehensible code.

"Hmm! I'm not quite sure what the artist is trying to say here"

Substitute "programmer" for "artist".

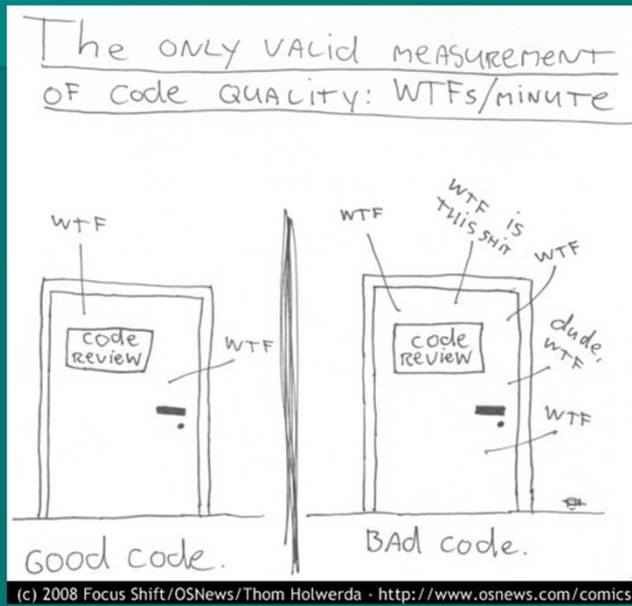Beautiful code is normally about beauty in its structure.

This talk (attempts) to fuse the pun-style titles of modern art with anti-pattern code snippets.

"Programs must be written for people to read, and only incidentally for machines to execute"

-- Hal Abelson

Being able to reason about code is key to making changes safely.

# Code Quality: WTF's / Minute

WTF's per minute

Chopin's Waterloo

Modern art example

# No Comment

```
// Increment value.
value++;
```

Is there any problem domain where a comment might be necessary?

# Brace Yourself

```
if (x == 1)   {
 if (y == 2)
 {
   if (z == 3)
     {
     do_something(x, y, z);
     }
 }
}
```

Train and maintain a consistent style.

Aim for low cyclomatic complexity.

# Inversion of Control

```
// Automatically generated
// code.
//
// DO NOT EDIT!
```

Don't let your tools own you.

# Cast Away

```
Man survivor("Tom Hanks");

Island& desertIsland =
     reinterpret_cast<Island&>
     (survivor);
```

Programming in isolation often leads to unreadable code as there is only one viewpoint.

## Pure Garbage

```
public sealed class Litter
{
  public bool IsRecyclable
  {
    get { return true; }
  }
}
```

Don't do at runtime what you can do at compile time.

# The Missing Linq

```
var names = new List<string>();

for (int i=0; i!=length; i+=1)
{
  string name = customers[i];
  names.Add(name);
}
```
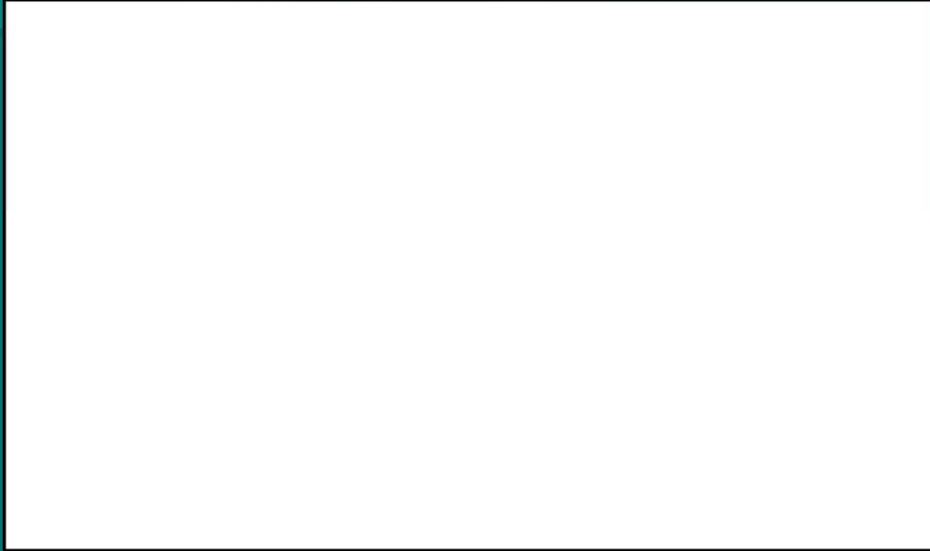
Multi-paradigm languages and solutions (i.e. both the OO and Functional styles) are the modern way of programming.

# On Reflection

```
using DependencyInjection;

DI.Container
  .RegisterType<Mirror>()
  .As
  .InstanceOf<IMirror>()
  .SingleInstance;
```

Why not just use new?

# Tabs or Spaces?

Herb Sutter Exceptional C++ item 1 – Don't Sweat the Small Stuff.

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No books, just a blog