

Subject

ODR [One Definition Rule]

Other wise
Compiler error

Every Translation Unit shall have
only one definition (function/var...)

Usually
Programmer
have
temptation
to guard
against this

• C++
and all
its header

#include >
TU

TU

TU

Compiler

• obj

• obj

obj

Linker

Never put function
Definition in header
file

• exe

→ Standard does not guarantee error if
multiple definition across TU, but most
Linker do error out.

Idempotency guard

```
#ifndef MYheader
#define MYheader
header stuff goes
here
#endif
```

Now think what will happen for inline functions.

↳ Since compiler have to read the definition of inline functions, shared inline func. ^{must} be in header files.

↳ Exemption to ODR.

↳ Same for templates
or function templates

↳ In practice linker won't, compile it
Undefined behaviour. Can pick
any Random definition