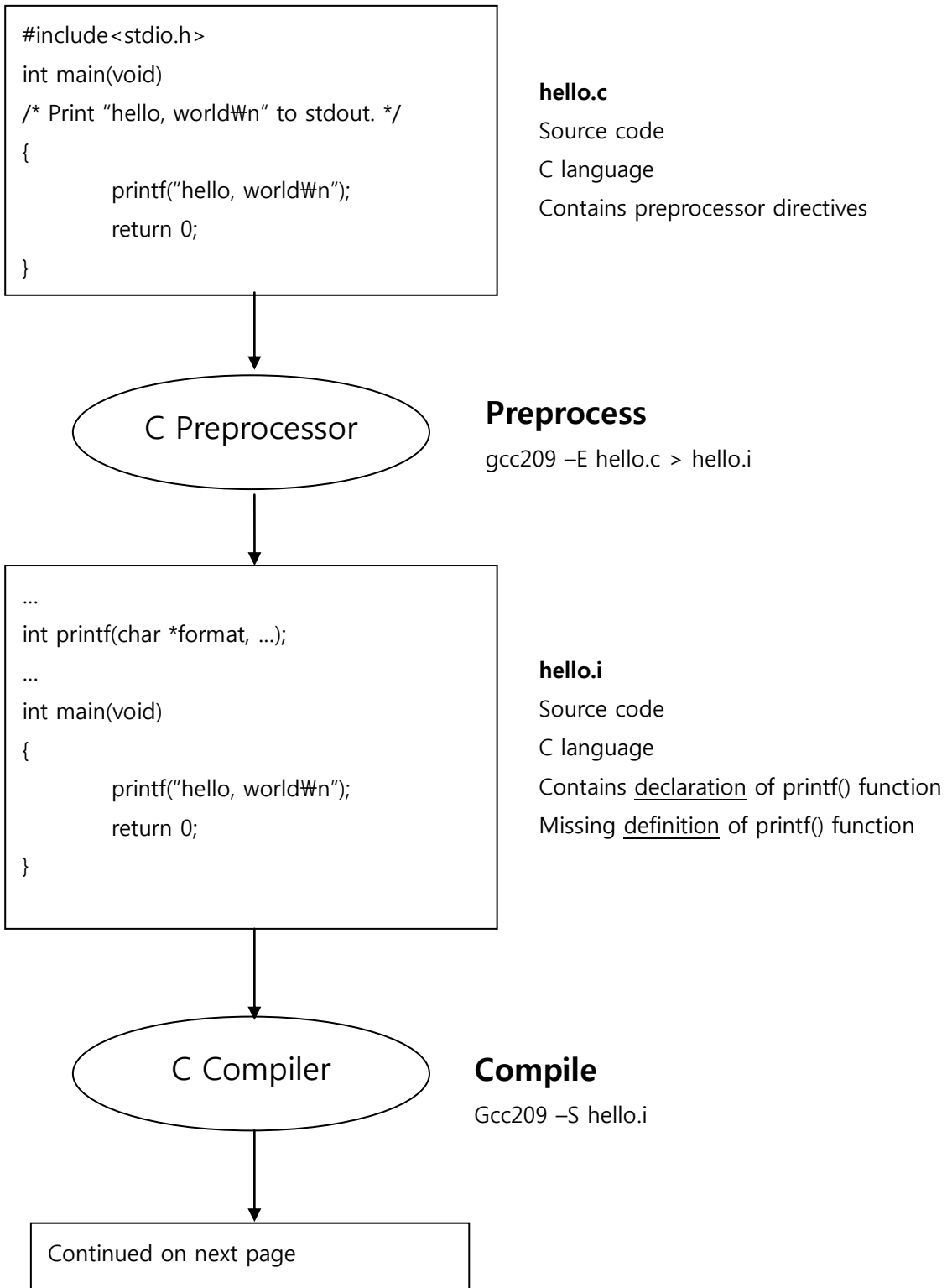


KAIST

## EE209: Programming Structures for EE

### Building C Programs

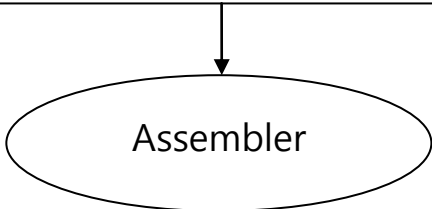


```

.section .rodata
cGreeting:
.asciz "hello, world\n"
.section .text
.global main
.type main, @function
main:
    pushl %ebp
    movl %esp, %ebp
    pushl %cGreeting
    call printf
    addl $4, %esp
    movl $0, %eax
    movl %ebp, %esp
    popl %ebp
    ret

```

**hello.s**  
Source code  
Assembly language  
Missing definition of printf() function



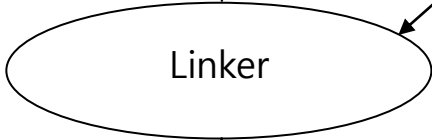
**Assemble**  
gcc209 -c hello.s

```
.100101000110100100100...
```

**hello.o**  
Object code  
Machine language  
Missing definition of printf() function

```
11110010000010100100110...
```

**libc.a**  
Library containing machine language definition of printf() and many others)



**Link**  
Gcc209 hello.o -lc -o hello

```
001010000101000000111110...
```

**hello**  
Exchange code  
Machine language

**Shortcut:**  
gcc209 hello.c -o hello

gcc209 is an abbreviation for gcc -Wall -ansi -pedantic -m32 -march=i386