

## Slay Some Earthly Demons II

Document: n3340

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This remaining issues from n3244 were split up into the following series:

### **n3340 - Slay Some Earthly Demons II**

n3341 - Slay Some Earthly Demons III

n3342 - Slay Some Earthly Demons IV

n3343 - Slay Some Earthly Demons V

n3344 - Slay Some Earthly Demons VI

n3345 - Slay Some Earthly Demons VII

n3346 - Slay Some Earthly Demons VIII

n3347 - Slay Some Earthly Demons IX

Meeting meeting notes about previous discussion can be found in n3281. The following numbers correspond to N3220 and the ones with (→) to N3301.

J.2.19 needs more work, cf. SC22WG14.25600 (**note to editor:** parts applied by mistake)

J.2.21 done (incl. additional change), (**note to editor:** there is a “not“ missing in 6.3.2.1)

### **n3340 J.2.40 (→ J.2.38) withdrawn in June, now revised (cf. SC22WG14.25600)**

J.2.56 done

J.2.57 done (option 1)

n3341 J.2.58 (→ J.2.54) not discussed in June

J.2.60 (→ J.2.56) direction to editor (**note to editor:** not yet done)

n3342 J.2.63 (→ J.2.59) no consensus in June, now revised to make implementation-defined

n3343 wording change not related to an entry in Annex J

J.2.67 done

J.2.69 done (alternative wording for semantic section)

n3344 J.2.75 (→ J.2.70) now revised (cf. SC22WG14.25600)

J.2.77 (→ J.3.13. 2) not discussed in June, but fixed editorially

J.2.78 (→ J.3.13. 3) not discussed in June, but fixed editorially

n3345 J.2.79 (→ J.2.72) not discussed in June

n3346 J.2.80-J.2.82 (→ J.2.73-J.2.75) not discussed in June (cf. SC22WG14.25600)

n3347 J.2.87 (→ J.2.80) not discussed in June

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Annex J (J.2.38 N3301, J.2.40 N3220)

(38) A pointer is converted to other than an integer or pointer type (6.5.5).

Example

<https://godbolt.org/z/d4xdqGEPK>

```
struct f { struct f *x; } *p;
```

```
void g(void)
{
    (struct f)p;
}
```

Analysis

Clang/GCC/MSVC reject such casts. This seems to be an unused extension point.

Proposed Change (**update:** Allow conversion to void and add constraint for reverse direction)

6.5.5

### Constraints

4 A pointer type shall **not** be converted **only** to **any floating void or to an integer or pointer** type. **A floating** **Only a pointer, integer, or nullptr\_t** type shall **not** be converted to **any a** pointer type. The type `nullptr_t` shall not be converted to any type other than void, bool or a pointer type. If the target type is `nullptr_t`, the cast expression shall be a null pointer constant or have type `nullptr_t`