

**Proposal for C2x
WG14 N3143**

Title: _Generic in external declarations
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Proposal category: Issue
Abstract: The suggested wording for US-077 and US-078 needed some repairs, which this document covers.

Generic in external declarations

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Summary of Changes

N3143

- Original proposal

Introduction and Rationale

Discussion during the Jun 2023 WG14 meeting resulted in a suggestion that we change the suggested wording for US-077 and US-078. The suggested wording focuses on the result of the selection expression and not on the obviously unevaluated components of the expression.

Proposed Straw Poll

Does WG14 want to adopt the proposed wording from N3143?

Proposed Wording

All proposed wording in this document is a diff from WG14 N3096. **Green** text is new text, while **red** text is deleted text.

Modify 6.9p3:

There shall be no more than one external definition for each identifier declared with internal linkage in a translation unit. Moreover, if an identifier declared with internal linkage is used in an expression there shall be exactly one external definition for the identifier in the translation unit, unless it is:

- part of the operand of a sizeof operator whose result is an integer constant;
- part of the operand of an alignof operator whose result is an integer constant;
- part of the controlling expression of a generic selection;
- part of the expression in a generic association that is not the result expression of its generic selection;
- or, part of the operand of any typeof operator whose result is not a variably modified type.

Modify 6.9p5:

An *external definition* is an external declaration that is also a definition of a function (other than an inline definition) or an object. If an identifier declared with external linkage is used in an expression (other than as part of the operand of a typeof operator whose result is not a variably modified type, **part of the controlling expression of a generic selection, part of the expression in a generic association that is not the result expression of its generic selection,** or a sizeof or alignof operator whose result is an integer constant expression), somewhere in the entire program there shall be exactly one external definition for the identifier; otherwise, there shall be no more than one.

Acknowledgements

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