WG14: N2001

Title: STC for DR481: Controlling expression of `_Generic` primary expression
Authors: Jens Gustedt, Douglas Walls, Blaine Garst
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Summary

As noted in the Compendium DR Document N1986 there was much progress made during discussions in Kona as to the original design goals of the _Generic primary expression and the various compiler implementations. The discussion did not conclude with a Suggested Technical Corrigendum, but in a short email conversation on the reflector, namely, messages 13956, 14085, 14086 led to 14105 from which the following STC has been derived.

The key issue is that the controlling expression for _Generic is not evaluated but should be treated in some respects *as if* it had in that we should use the lvalue conversion rules to determine its type.

The following Suggested Technical Corrigendum reflects the exact proposal.

Suggested Technical Corrigendum

In 6.5.1p2 change

> The controlling expression of a generic selection shall have type compatible with at most one of the types named in its generic association list.

to

The type of the controlling expression is the type of the expression as if it had undergone an lvalue, array to pointer or function to pointer conversion and such that type qualifiers are dropped. That type shall be compatible with at most one of the types named in the generic association list.