n2280 - Proposal to limit optimization to C semantics

Rationale:

It is specified in the Standard that "optimization" in a conforming implementation must produce behavior that conforms to the semantics of the language. Advances in optimization technology in translators have lead to the development of multi-pass translators in which semantics of programs can be modified - possibly unintentionally - without some care to preserve semantics over optimization passes. This change calls for conforming implementations to take that care.

Proposed change

5.1.2.3 Program execution

1 The semantic descriptions in this International Standard describe the behavior of an abstract machine in which issues of optimization are irrelevant. A conforming implementation may not change semantics of a program as an "optimization" except as described in 5.1.2.3.4.