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**Peter LeFanu Lumsdaine\*** (p.l.lumsdaine@math.su.se). *A general definition of dependent type theories*. Preliminary report.

(Includes joint work with A. Bauer, P. Haselwarter, and T. Winterhalter)

We propose a general definition of syntactic type theories which yields as instances Martin-Löf's intensional and extensional type theories, and their various later extensions by further logical constructs — inductive families, inductive-recursive types à la Dybjer/Setzer, coinductive types, higher inductive types, and so on.

The novelty compared to established approaches (logical frameworks, pure type systems, etc.) is that it yields not some embedded counterpart of a theory, whose equivalence with the original might be non-trivial, but literally the original type theory itself as it might typically be presented.

The need for such a framework has been sorely felt recently, since without one, important meta-theorems and constructions can be given only for specific type theories, even when believed to hold in more generality.

Complete definitions of type theories are so large and intricate as to be almost impossible to get right without extensive debugging. To this end, we are formalising the present definition in Coq, to give confidence in its correctness and fitness-for-purpose. (Received August 30, 2017)