A multidimensional approach to typesetting

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December 10, 2002

Abstract   We propose to create a new model for multilingual computerized typesetting, in which each of language, script, font and character is treated as a multidimensional entity, and all combine to form a multidimensional context. Typesetting then becomes a four-stage process of preparing the input stream for typesetting, segmenting the stream into clusters or words, typesetting these clusters, and then recombining them. Each of the stages, including their respective algorithms, is dependent on the multidimensional context. This approach will support quality typesetting for a number of modern and ancient scripts. The paper and talk will show how these will have been implemented in Omega.