Facet Analysis using Grammar

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Basic grammar can achieve most/all of the goals of facet analysis without requiring the use of facet indicators. Facet analysis is thus rendered far simpler for classificationist, classifier, and user. Each can simply employ basic grammatical rules. We compare facet analysis and grammar, and show how various facets can be represented grammatically. Thus, we can achieve synthetic faceted subject classifications that combine nouns, verbs, and adjectives/adverbs in the order these generally appear in sentences. We then address potential challenges in employing grammar as subject classification. A detailed review of basic grammar supports the hypothesis that it is feasible to usefully employ grammatical construction in subject classification. A manageable – and programmable – set of adjustments is required as classifiers move fairly directly from sentences in a document (or object or idea) description to formulating a subject classification. The user likewise can move fairly quickly from a query to the identification of relevant works.

A review of theories in linguistics indicates that a grammatical approach should reduce ambiguity while encouraging ease of use. Since we are all familiar with basic grammar, and since sentences are likely less ambiguous than isolated concepts, the recommended approach acts to reduce ambiguity in subject classification. Since the ideas that documents contain are expressed in sentences, the grammatical approach also best captures the essence of works. And the grammatical approach is particularly well-suited to visualization techniques that can guide users to relevant and related works or objects or ideas. Such links can be drawn across disciplinary or social boundaries.