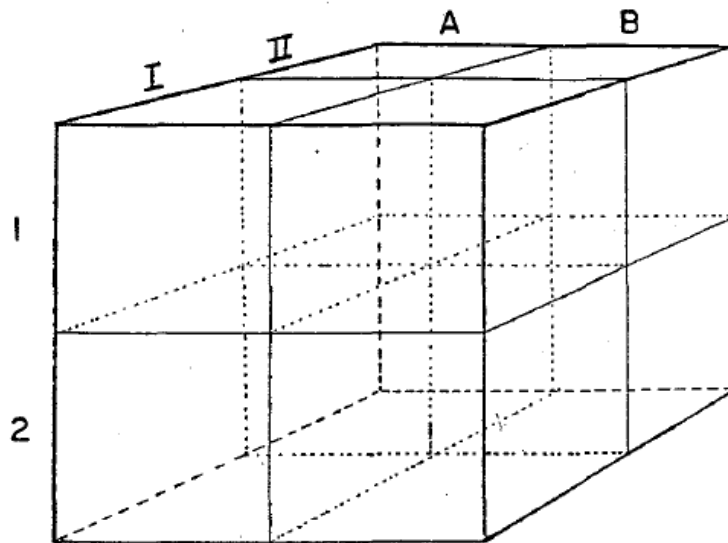## Paradigmatic Classification

Paradigmatic classification creates categories through multidimensional class intersection. Classes are constructed by permutation of dimensionally organized attribute classes and constitute an exhaustive set of equivalent "kinds" or categories suitable for counting. The meaning of the class, the class significatum or definition, consists of an unordered set of attribute classes, one drawn from each of the dimensions of the classification. The members of such a class must thus display each and all of the elements of the significatum.

The classification depicted above is a three dimensional paradigm, each dimension represented by one axis of the cube. Each dimension has been divided into two "states", modes or attribute classes. Thus the classification contains 8 classes: AlII, A2II, AlI, A2I, BlII, B2II, BlII, and B2I. The number of classes is a direct product of the number of attribute classes by dimension (2 x 2 x 2 = 8). As the diagram makes clear, permutation of unordered criteria produces the maximum possible number of classes, all of which are equivalent (have the same volume in the cube) and it is this property that makes counts acquired from such classifications mathematically useful (cf. a taxonomy). Further, paradigms makes only the three elemental assumptions required by all classifications; thus they possess a high degree of parsimony.