

of conceptual consistency and comparable data [that] limit the inferences that can be drawn from empirical analyses of ethnobotanical knowledge' (p. 182). They recommend: 'Future research should 1) validate the consistency of measures of individual ethnobotanical knowledge; 2) analyse the reliability of data generated by the different methods developed so far; and 3) address the relationship between the various dimensions of ethnobotanical knowledge' (p. 182). Their recommendations clearly point to our need to be better aware of methods used by other researchers, and to adopt these when possible in order to generate comparable data sets.

12.1.1 Cognitive research

One of the core areas of research within ethnobiology is the study of human cognition (alternative areas of emphasis include economic, social, legal, and nutritional aspects). While there are many interesting areas within this core, the study of folk or ethnobiological classifications is most germane to this chapter. Berlin (1992) has outlined the essential characteristics of ethnobiological classification systems that most ethnobiological researchers agree are universals. The heart of Berlin's classification consists of nine major 'principles' (Berlin, Breedlove, and Raven 1973) that are cross-cultural and for the most-part comparable (see Dwyer 2005 for an alternative perspective). These are:

1. Nomenclature: In all languages it is possible to isolate linguistically recognized groupings of organisms (taxa) of varying degrees of inclusiveness that have names.
 - Examples at different taxonomic levels are: *animal*, *bird*, *raptor*, *owl*, *barn owl*.
2. Taxa are further grouped into a small number of classes referred to as taxonomic ethnobiological categories similar in many respects to the taxonomic ranks of globalized science.
 - These categories number no more than six: *unique beginner*, *life form*, *intermediate*, *generic*, *specific*, and *varietal*.
3. The six ethnobiological categories are arranged hierarchically (as ranks) and taxa assigned to each rank are mutually exclusive.
 - Consider what example we might choose as the archetype for 'plants' or 'animals'? Although we can all identify these, there is not a 'unique' type that is *the* plant or *the* animal that is the 'unique beginner'.
4. Taxa of the same ethnobiological rank usually are at the same taxonomic level in any particular cultural (linguistic) taxonomy.
5. In any system of ethnobotanical or ethnozoological classification, the taxon that occurs as a member of the rank 'unique beginner' (*plant* or *animal*) is not (normally) named with a single, habitual label. This means that people speaking ↪ a particular language often recognize inclusive ranks such as *animals* and can sort a group of things into the that rank, but won't necessarily have a name for the grouping that they have made.
6. There are usually but a handful of taxa that occur as members of the category 'life form', ranging from five to ten, and they include the majority of all named taxa of lesser rank.
 - These life-form taxa are named by linguistic expressions that are lexically analysed as primary lexemes, e.g. *bush*, *liana*, *palm*, *reptile*, *fern*, and *bird*.
7. The number of generic taxa ranges around 500 in typical folk taxonomies, and most are usually included in one of the life-form taxa.