although they are all adjectives they do not form a homogeneous class. For example, we can *blacken (the chimney with soot)* and *whiten (your shirt with detergent)*, but we cannot **yellowen, *greenen*, or **blueen*. Why should the difference in grammatical encoding of colour categories matter? Because differences in grammatical encoding are associated with differences in meaning components. Nouns, for example, refer to more stable entities than verbs (e.g. Gentner 1982; Hopper and Thompson 1984; Sapir 1921), leading to the proposal that colour terms encoded in verbs encode the notion of change, or 'becoming', whereas colour terms encoded in nouns and particles refer to an intrinsic, unchanging property (Hickerson 1975). On the other hand, although there are associations between form class and meaning entailments, not every form difference results in a meaning difference[3] (Kay 2006). Thus, restrictions in morphosyntactic distributions can be due to grammatical arbitrariness, rather than meaning difference. The larger point made by Lucy nevertheless remains: by ignoring differences in grammatical encoding the analyst can mistakenly conclude that there is a unified construct (of colour, space, parts of the body, etc.), where in fact there is no such coherent category for the native speaker.

p. 61 While it is clear that one piece of evidence for a unified construct would be a unified encoding in the grammar of a language, other sorts of evidence can demonstrate that a set of terms together form a coherent construct. In Arrernte (a Pama-Nyungan language spoken in Australia), colour terms do not constitute a separate form class, but are part of a much larger set of terms to do with surface properties of objects (e.g. reflectance). Yet in a free word association test (where the consultant is given a word and they have to produce the first word that comes to mind in response), colour terms overwhelmingly elicit other colour terms, and are rarely elicited in response to non-colour terms (data from Wilkins, reported in Kay 2006). This data suggests that this 'close-knit semantic set' forms a coherent construct for speakers of Arrernte, even though they are not formally a class. Similarly, the body can be considered a coherent construct to the extent that speakers conceptually group terminology for the body together, regardless of the formal category the term falls into.

But how small or big can the semantic domain be? Wierzbicka and colleagues have argued that rather than looking for universals of colour, we should look for universals of the higher order concept of 'seeing' (because all languages have a word for seeing). But why stop there? If there is a named higher-order superordinate to 'seeing' (such as 'perceiving'), should we take perception as our domain instead? And if there is another collapsing (e.g. between perception and emotion), then a bigger domain again? On this, I advocate a pragmatic approach of 'fractal domain'. Investigations of subsets of semantic domains, if that is what they are, can nevertheless lead to real insights. For example, some languages include in their basic colour words information about texture or succulence (Conklin 1955; Lucy 1997), thus going beyond the psychophysically defined colour space. But these terms still display comparable restrictions in range over hue and lightness as dedicated colour terms (Kay and Regier 2003). That is, the extension of colour terms in psychophysically defined colour space is similar regardless of whether the term also has a meaning in terms of texture or succulence. Thus constraints on semantic range within a narrowly defined domain (i.e., colour as hue and lightness) have an identifiable structure not predictable from the wider uses and broader senses beyond it.

## 2.2.4 Summary

There are two different potential starting points for constructing your stimulus set. In one approach, you begin with form and trace possible functions. In the other, you delineate your conceptual domain and examine how it is populated by different forms. Both approaches have problematic aspects. No one study will be able to address all weaknesses. But care can be taken in minimizing these as much as possible. The
p. 62 point is to be conscious of these weaknesses and consider how ↳ they may affect your stimulus design and, more importantly, the interpretation of your findings.