

to produce a similar formulation (Pickering and Ferreira 2008), even though it may not be the default, or most natural, within the language. More importantly, much of the juicy semantic detail of the language cannot be elucidated this way. Another method is to mine ‘naturalistic’ data, i.e. elicited narratives, myths, etc. This is an important source of evidence, but when consulting these sources a term of interest may occur infrequently, or not at all, making it difficult to generalize or extrapolate further about meaning or grammar (Hellwig 2006). Elicitation using questions and acceptability judgements go a step further, but there are notorious difficulties in obtaining and interpreting such judgements. If asked to make grammaticality judgements, for example, speakers may reject sentences that are actually grammatical because they violate some prescriptive norm (Greenbaum and Quirk 1970), or because they are difficult to process (Bever 1970). Repeated questioning can lead to an increase in acceptability judgements for sentences previously thought to be ungrammatical (Dale 1978) as can embedding a sentence in the ‘right context’ (Bolinger 1968). These same issues plague semantic judgements too. Instead of asking for grammaticality judgements, the field linguist may want to establish whether an interpretation is semantically entailed or only pragmatically implied, whether two forms are synonymous, or whether they are taxonomically or partonomically related, and so on. To disentangle these issues, semantic judgements can be elicited (e.g. Cruse 1986; Lyons 1968). As with grammaticality judgements, these tests rely on native-speaker intuition and are therefore subject to the same sorts of problems. Does the speaker accept a sentence because it is semantically acceptable or because of context and repeated questioning, for example?

Non-linguistic stimuli can avoid these pitfalls. We need not presume meaning equivalence where there is translation equivalence, we no longer wait for a form simply to turn-up in a text, and we can avoid conflating linguistic data with metalinguistic judgements. And there are other advantages. Speaker descriptions of non-linguistic stimuli do not require special training of consultants or specialized knowledge, so data can be collected easily. Knowing precisely what the speaker saw when they produced the description minimizes erroneous interpretations on the part of the analyst, as the exact stimulus can be referred to later in the analysis stage, long after the utterance was produced. And the constant platform of the stimulus enables cross-speaker and cross-language comparison (cf. Berlin and Kay 1969; Levinson, Meira, and The Language and Cognition Group 2003; Majid, Boster, and Bowerman 2008). In the classical study of colour by Berlin and Kay (1969), a palette of Munsell colour-chips was used to establish the boundaries and foci of colour categories across languages. The standardized colour-space provides an objective space where indigenous categories can be mapped, and cross-linguistic equivalence measured (e.g. Kay and Regier 2003; Regier, Kay, and Khetarpal 2007). Of course, non-linguistic stimuli are not without flaws (see §2.7), but used in concert with traditional methods, the linguist has a much richer, more nuanced and firmly grounded dataset to inform his or her analyses.

A stimulus-based approach, as laid out in this chapter, will enable the researcher to access one aspect of meaning, namely the extension. What things in the world are denoted by which forms in the language? This can feed into an analysis of intension or sense, the abstract linguistic meaning. Intension is often equated with the sets of relations which hold between linguistic forms (Cruse 1986: 15–20; Lyons 1968: 427–8), such as semantic relations of synonymy, antonymy, taxonomic inclusion, contrast, etc. A word's extension is a function of its intension, thus a study of extension informs our analyses of intension. The extensional array in a stimulus set serves as an etic metalanguage sometimes referred to as an etic grid (Levinson and Wilkins 2006:8; Levinson, Meira, and The Language and Cognition Group 2003: 487; Pike 1967). This is an objective array that makes a criterial number of discriminations, so that language-specific groupings—the emic concepts—can be identified. The rest of this chapter provides a guide to creating such a stimulus-set.