

## 2.3 Creating an Etic Grid

In some domains—such as colour—there is a well-worked-out psychophysical space that can help determine the selection of a stimulus set. But even with an informed array, there are still problems in how exactly to select stimuli. Take colour, for example—the actual number of colours discriminable to the human eye is in the millions, but obviously no study has used all of these in a naming task. Instead, a sub-selection is made of the colour space. In the World Colour Survey (Kay et al. 2009; Berlin and Kay 1969), 330 colour chips were selected that were equally spaced for hue and brightness, while holding saturation constant. Further work has separately examined the role of saturation variation (e.g. Boynton 1997). And, as we saw above, a stimulus space that also included variations in luminance, texture, and reflectance might be better to study how colour is categorized in language (Lucy 1997). Nevertheless, it is impossible to explore all possible dimensions or contrasts at once in a systematic fashion. Thus, it is important to set the priorities and scope of the investigation before constructing your stimuli.

### 2.3.1 Aren't the domains you can study restricted to concrete ones?

In principle there is no restriction on what domains can be handled using a stimulus-based approach. Recently, within the Language and Cognition group at the Max Planck Institute for Psycholinguistics, we have begun to investigate smells, tastes, and tactile texture using a non-linguistic stimulus-based approach (Majid 2007). There is also no restriction on lexical categories. The same logic and motivation could be used to investigate constructional resources as exemplified by the work of Bohnemeyer and Caelen (1999), Bohnemeyer et al. (2007) on event complexity, and by Evans et al. (2004), and Evans et al. (forthcoming) on reciprocals.

p. 63 Wierzbicka (2009: 165) critiques the stimulus methodology on the ground that ‘the most important things are invisible’. She argues that video clips and other such depictions cannot capture ‘human values, moral categories, emotions, intentions, relationships or understandings’, that what really matters for some sorts of concepts are motivations and projected outcomes rather than the physical acts ↪ themselves. No doubt there are serious challenges in depicting complex psychosocial states, but nevertheless there is reason to be optimistic about using a stimulus-based approach. When it comes to the interpretation of even the simplest of depictions, people go beyond the physical and interpret intentions, motivations and projected outcomes. Heider and Simmel (1944), for example, showed American undergraduates very simple cartoons featuring geometrical shapes, such as triangles and circles (see Fig. 2.1). These shapes were depicted as moving using a trick-film method, where the shapes are actually paper cutouts and are placed on a transparent plate. For the illusion of movement the shapes are moved small distances and then snapped at a location. The resulting snapshots are then played as one movie. When participants are shown these simple movies, they describe the movements depicted, not in terms of physical motion, but instead ascribing psychological intentions to the shapes. Most participants describe the video as a love triangle with two of the geometric shapes in an antagonistic relationship to the third, and provide elaborate stories accompanying each of the movement shifts. People also attribute personality traits to the individuals: aggressive, villainous, heroic, defiant, etc.

This type of inferencing is not limited to the American undergraduate. Social psychologists have been using this type of material to study cross-cultural differences in the attribution of causes (e.g. Morris and Peng 1994). Although these studies typically resort to urbanized populations in East Asia who may have familiarity with these sorts of materials anyway, we know from work in our own group that simple animations can also yield rich data from peoples not familiar with video technologies. The Heider and Simmel studies demonstrate that even from the simplest of cues people infer complex social and