Unrelated sign languages have more overlap in their form and structures than unrelated spoken languages, and this overlap has often been attributed to properties of the visual-manual modality that enable or even encourage iconic forms (see Perniss, Thompson, & Vigliocco, 2010, for discussion). Clearly, iconicity plays an important role in the development and evolution of signed languages. However, iconicity is a much more complex phenomenon than seems to be generally assumed. In particular, there is no single ‘iconicity’, there are many (Tolar, Ledeberg, Gokhale, & Tomasello, 2008). Signs can be based on culturally-specific (i.e., learned) relationships: for instance, EAT utilizes a grasping gesture in many Western sign languages and a V-handshape for chopsticks in many East Asian sign languages. Signs can also differ in which features of a referent are iconically represented. For example, a cat is referred to by whiskers in American Sign Language, by licking paws in Al-Sayyid Sign Language and by petting in Swedish Sign Language. However, note that even in the differences there are similarities: the signs for eat represent the action involved in prototypical eating events in the culture, including the tool(s) used, whereas the signs for cat more frequently represent some feature of the animal itself.

Our study investigates factors that might lead to favoring some features of referents over others in iconic representations. We investigate this by having hearing, sign-naive adult participants invent gestured names for easily recognizable objects. The items participants were asked to create signs for differed along a number of dimensions that we hypothesize might influence the nature of the iconic representation, as shown in Figure 1. For instance, some of the items were man-made while others were part of the natural world, as it has been claimed that man-made objects are represented with handling (grasping) handshapes (Padden et al., 2013). We also investigated the effect of movement and size, for both man-made and natural categories. We anticipated that these
categories would have impact on the choice of representational features; for example, the size and shape of natural objects would be encoded in the gestures, and the man-made objects would be represented by the prototypical interaction of humans with those objects.

Figure 1. Elicitation item types with examples.

50 native speakers of English with no knowledge of sign languages, ages 18-72, participated in the study. They saw 110 pictures of familiar objects and were asked to ‘name’ them with their hands. Responses were videotaped. Each response is currently being coded for the type of iconic information encoded, specifically, whether the invented sign encodes referent shape, characteristic movement, or human handling of the object.

This study helps us better understand the roots of iconic representations and the forces that might shape the specific information encoded in iconic signs.

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