

## **1. Language and Cognition: Insights from the study of sign language iconicity**

One of the central assumptions in language research has been that the relationship between a wordform and its referent is arbitrary. However, languages do exhibit iconicity, non-arbitrary linkings between meaning and form, in which the phonetic resources of a language are built up into an analogue of a mental image. For spoken languages, constraints of an acoustic modality result in non-arbitrary linkings that are largely limited to onomatopoeic words. Sign languages, on the other hand, are able to exploit the potential for iconic expression for a wide range of basic conceptual structures because a visual/gestural modality is better suited to such representations.

That sign languages take full advantage of iconicity suggests that the largely arbitrary relation between form and meaning may not be a characteristic intrinsic to language, but rather a consequence of using the acoustic modality. Thus, investigations on the processing consequences of iconic relationships in sign languages can provide us with insight into how language can be influenced by the specific medium (i.e. speech vs sign) that is used. Moreover, investigating the processing consequences of iconic relationships in sign language can provide us with insight into the more general issue of the relationship between language and imagery.

Because iconicity creates a more direct link between linguistic and imagistic information, this in principle should facilitate processing, and should be used whenever possible by sign language users. However, acquisition studies suggest that iconicity does not affect language development for early native signers (although there is some evidence that iconicity plays a role in learning a sign language as L2). Very little is known about language processing by adult signers, although studies of aphasic signers clearly argue against equating iconic signs with pantomimes.

In this talk, we will describe a number of experiments that investigate the processing consequences of iconicity for native and L2 signers. Our results indicate that iconicity does play a role in language processing for both groups of signers. Importantly, however, such a role does not extend beyond language use and therefore our studies suggest that the engagement of imagery via an iconic link requires the phonological form of the sign in order to be triggered.