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that process spoken languages
are different from the parts of the brain
that process signed languages.



Brain and Language Laboratory for Neuroimaging

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- ▶ The parts of the brain that process spoken languages and signed languages are largely the same. The brain does not discriminate against modality. Neuroimaging studies of deaf adults who sign and hearing adults who speak have shown that signed and spoken languages are processed in largely the same brain tissue.
- ▶ This even involves brain tissue and neural systems that were thought to be uniquely evolved for speech because these brain systems were located near the human ear. For example, studies have shown that sign-phonetic units in signed languages are processed in the same tissue as sound-phonetic units in spoken languages. This is also true of other levels of language organization, such as syntax, morphology, and semantics.

Implications: All human language is built from the brain's sensitivity to specific patterns at the heart of language. Language patterns are key to the brain — not sound. This is universal. The biological equivalence of signed and spoken languages compels society and educational policy to give ASL the identical rights and legal protections as all spoken languages.