Translingual Grammar Induction

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We propose an induction algorithm to semi-automate grammar authoring in an interlingua-based machine translation framework. This algorithm uses a pre-existing one-way translation system from some other language to the target language as prior information to infer a grammar for the target language. We demonstrate the system's effectiveness by automatically inducing a Chinese grammar for a weather domain from its English counterpart, and showing that it can produce high-quality translation from Chinese back to English.

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