Katz, Eli; Laifman, Lev J.; Marty, Roger H.; Robinson, Stewart M.
A mathematical model for translation of natural languages. (English) Zbl 0671.68035

The authors devise a topological model for languages and their translations. A concept of closeness on the set M (of “meanings”) is introduced and topology (which is compatible with this closeness concept) is defined; next, a continuity condition is imposed. Finally, an existence theorem (providing a best approximation of translating a text from one language to another (the latter being “adequate” with respect to the former) is proved. This implies the theoretical possibility of automatic translations.

Reviewer: S. Luchian

MSC:
68T50 Natural language processing
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References:

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