Cross-Language Transcription of Proper Names

EDWARD KLYSHINSKY
VADIM MAXIMOV
SERGEY YOLKEEN
M. V. Keldysh Institute of Applied Mathematics,
Russian Academy of Sciences, Moscow, Russia

ABSTRACT

The paper is dedicated to the problem of automatic cross-language transcription of proper names. The correct written transcription of foreign proper names is a serious communication problem. It is especially important for legal translation of documents, data retrieval, postal processing and, in general, in all fields, where the accurate identification of places, persons and organizations is required. In order to formalize the process of transcription and reduce the number of errors, the automatic rule-based system of transcription has been developed. The system transcribes proper names between more than 20 languages, including non-European ones. The phonetic approach provides the easy integration of new languages in the system. The results of long-term collaboration of linguists and programmers had been generalized in the monograph.

1. INTRODUCTION

The accurate transfer of foreign proper names pronunciation by means of written transcription is an actual communicational problem, as it provides for the proper identification of places, people and organizations. The automatic solution of this problem will help to avoid certain mistakes in data retrieval in multi-language environment; then, it will facilitate the work of those specialists whose activity is connected with the transcription of foreign proper names: translators, postal operators and others who must process the foreign names in written form. The formalization of transcription rules will make it possible to enter the new quality level of cross-language transcription.