Enabling Arabic Search
Helping analysts search digital resources more effectively

Objective
To provide tools that help analysts create more effective search queries in Iraqi, Yemeni, Modern Standard, and other varieties of Arabic.

Relevance
Working with Arabic dialects and Arabic language resources is challenging for numerous reasons, including variations in spelling, script, pronunciation, and cultural context. CASL researchers are working closely with language analysts to improve dictionary support, further develop and test CASL’s dialect-based Arabic query analysis tool, and build a catalog of cultural knowledge to provide analysts with a better understanding of Arabic and an effective way to quickly find relevant material.

Products
CASL researchers are developing and improving resources to help analysts deal with the challenges of working with Arabic dialects. Some of the products include:

■ **Improved Arabic dialect dictionaries**—Different dictionaries use different representations (e.g., scripts) of Arabic words, forcing an analyst to master multiple spelling systems. The *CASL Georgetown Iraqi Arabic–English Dictionary* and the *NTC Yemeni Arabic–English Electronic Dictionary* provide expanded and corrected entries in the forms needed for search of both text and speech, including multiple phonetic representations, native orthography, and the Standard Arabic Technical Transliteration System (SATTS).

■ **An improved Modern Standard Arabic dictionary**—For an electronic dictionary to be maximally usable, it must be organized differently than a print dictionary. CASL researchers are revising and updating an electronic version of a dictionary of Modern Standard Arabic to make its structure match the needs of electronic access.

■ **Did You Mean…? (DYM) spell correction tool**—Certain Arabic sounds are difficult for nonnative speakers to distinguish, particularly in noisy environments, making it hard to know how to spell an Arabic word for dictionary lookup. With this tool, when users hear or see an Arabic word in context but are unsure of its proper spelling, meaning, or connotation, DYM returns the closest match and provides additional contextual information from the *CASL Georgetown Iraqi Arabic–English Dictionary*.

■ **A catalog of Arabic cultural knowledge**—Nonnative speakers have difficulty understanding Arabic religious phrases, historical references, and figurative or literary language, so CASL researchers are developing a searchable guide of resources for this content.

For More Information

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