



IBM Research

MT for Social Impact AMTA 2006

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Language Analysis and Translation

August 9, 2006

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Overview

- Two social impact projects, sponsored by IBM Corporate Community Relations (CCR) and IBM Research
 - ¡Tradúcelo Ahora! (Translate it Now): English↔Spanish MT for Latinos
 - Cooperation with Meadan on English↔Arabic chat/blog system
- My answers to general questions for the panel

¡Tradúcelo Ahora! (TA) – Technical Side

- Server-based. Users need not install anything.
- Web page translation. Uses enhancement of IBM product WebSphere Translation Server (WTS). My group developed the WTS European language pairs, and we are specially enhancing the En↔Es for TA.
- Email translation. Using any email client, and without installing any software, a user simply writes an email to anyone and copies a certain email account on our server. The email gets translated and sent to the user's recipients and the user. Handles either Es or En source, and these can be mixed (does language ID).
- Smart cross-lingual web search.
- Work done by **Nelson Correa**, **Esmé Manandise**, M. McCord

TA – Social Impact

- In order to address the lack of Spanish language Web sites, and to help close one important aspect of the Hispanic Digital Divide, CCR has been working in partnership with nearly three dozen major agencies serving the Latino community since 2004.
- These agencies receive grants from CCR, use the TA software, and give us feedback for improving the En↔Es MT.
- This year we are continuing that work, and also working with K-12 schools – doing web page translation, and translation for email between (mainly) Spanish-speaking parents and English-speaking school staff.

TA – Social Impact

- A study by the Tomás Rivera Policy Institute concluded that the TA project has benefited the participant organizations and their constituents in significant ways:
 - It simplified community outreach specialists' efforts to conduct educational sessions on medical disorders for Spanish-speaking clients;
 - It enabled staff to more easily research online information about public services, jobs, clinical and legal issues, and translate the web pages for their clients;
 - It enriched English as a Second Language (ESL) program educational resources;
 - It augmented and improved Spanish literacy courses;
 - It made it easier for clients to find employment at popular job search web sites, helped them apply for jobs online, and write resumes and cover letters;
 - It provided GED and ESL students a significant new tool for conducting research, reading the news, viewing transcripts, etc.; and
 - It provided an additional teaching resource to enhance basic computer-training courses.

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Welcome to ¡TradúceloAhora! ————— **Participate** —————



¡TradúceloAhora!
(Translate Now!) is IBM's grant program designed to open up a world of services and information on the Internet for Spanish speakers, using automatic English to Spanish translation.

This translation software is helping thousands of Latinos

If you would like to take advantage of the translation services available, you must be affiliated with one of the ¡TradúceloAhora! organizations that are participating in this grant program. Click here for [Participating Organizations](#).

Already participating? Sign in here to access the free translation service!

If you are a nonprofit organization or school serving Spanish-speaking individuals, apply for a grant of IBM ¡TradúceloAhora!

Done

CCR-Meadan Project

- Chat/blog system to foster Western-Islamic dialog
- CCR and other parts of IBM are cooperating with the Meadan organization (Ed Bice et al.) to build this system
- IBM is contributing mainly certain technical pieces:
 - Arabic↔English MT. Salim Roukos' group.
 - Arabic Slot Grammar parser. McCord, Cavalli-Sforza. Uses Buckwalter's BAMA for morphology. Will be used to:
 - improve Ar→En MT
 - analyze Arabic text entries directly to make them into a searchable database (also ESG used for English entries).
 - Parts of networking platform (IBM group in England)

Questions for Panel

- Is MT becoming a tool for creating better understanding among nations of the world or is it becoming a facilitator for political, economic, and cultural invasion?
Bidirectional MT can increase communication, and the “invasion” then goes in both directions. It goes along with globalization, with all that is good and bad about that.
- Is MT a necessity for social justice in a multi-ethnic society? Certainly translation is. MT should help when there aren't enough human translators, and the MT is good enough.

Questions for Panel

- Is MT becoming a tool for learning languages or is it becoming a tool for learning English more than other languages? **It definitely helps in language learning. An $X \rightarrow Y$ system is good for learning both X and Y , even with some MT mistakes. And we have as much $X \rightarrow \text{En}$ as $\text{En} \rightarrow X$.**
- Is MT providing better job opportunities for non-English-speaking people or to English-speaking people? **It can go both ways with $X \rightarrow Y$ MT, but probably it helps speakers of X most, because of translating product materials from the X area. But again, we have both $X \rightarrow \text{En}$ and $\text{En} \rightarrow X$.**
- Has MT contributed significantly to language mixing phenomenon (for example, the creation of a new language for e-mail and SMS) and is MT community ready to cater to these needs? **We have to deal with it in our email translation.**