

WHAT DID HE SAY?

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The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

The views and conclusions expressed in the Command College Futures Project and journal article are those of the author, and are not necessarily those of the CA Commission on Peace Officer Standards and Training (POST).

WHAT DID HE SAY?

On the bridge of the Starship Enterprise, Captain Kirk looked over at Mr. Spock and said, “Spock, as we travel to places where no man has gone before, how do we intend to communicate with alien life?” Spock looked back at Kirk and said, “Don’t worry, Captain. The USS Enterprise and all of the crew members are equipped with universal language translation devices.” While this conversation occurs in science fiction, the question remains. How did the crew of the Starship Enterprise plan to communicate with all those alien beings on other planets? As science fiction represents reality, the question is even more relevant today. How do we plan to communicate across the globe, or even across the counter, with someone whose language is foreign to our own? As we strike out into our own unknown territory, let’s examine what potential answers may exist to bridge language barriers with the use of language translation technology.

The complexity of communication

The problem of communication between persons who speak different languages is not a new one. Since humans first began speaking, they had difficulty communicating with the tribe just over the hill. Different dialects grew into different foreign languages. Across the world today, there are more than six thousand different languages spoken. According to the 2000 US Census, 60.5% of persons over the age of five in California speak English only. The remainder of the population in that age range speaks languages other than, or in addition to, English. While the problem of language and communication poses a problem for law enforcement, it is also a challenge for business, industry, health care, and the service industry. Unlike other industries, though, it is critical for law enforcement to be able to communicate, either with a suspect or a

victim of a crime. Commands given to a suspect being taken into custody can be as important as getting vital information from a victim, and split second hesitations in either party for any reason can have tragic consequences. Although there are numerous examples of this issue, one case in particular exemplifies the scope of the challenge for the police.

The City of Redding

The Redding Police Department serves a mid-size community of about 90,000 residents in Northern California. Around ninety percent of those are white, approximately three percent black, three percent Southeast Asian, and three percent Hispanic. Less than one per cent of the City's residents do not speak English. In 2006 the Redding Police Department responded to a domestic violence incident. Both the husband and wife were Hispanic: neither spoke English. Two police officers responded, both quickly discovering they had a language barrier with the involved parties. Neither officer spoke Spanish, nor were there bilingual officers available to assist with the translation. The officers recruited the services of a bilingual neighbor to help translate and find out what had occurred. Based on the neighbor's interpretation, the officers concluded that the wife was the primary aggressor and she was arrested for spousal abuse.

A few days later, a local Hispanic organization contacted the Department. Based on information they had obtained from witnesses and neighbors at the scene, they asserted the account of the incident may have gotten reversed. The Department assigned a bilingual officer to re-investigate the arrest. The net result of this work did, in fact, determine the husband was the primary aggressor. He was arrested and the wife was set free. While not "headline" news, and while the mistake was quickly corrected, it nonetheless is a compelling example of a breakdown in

communication due to the language barrier. Redding PD took the step of changing policy to prevent this from occurring again. The use of a professional translator is now required when a language barrier exists in a domestic violence investigation. Redding's dilemma prompts thought regarding two additional courses of action a police agency might consider. One is to increase the competency of staff. The other is to explore emerging technologies in language translation to allow officers to quickly "speak" to almost any person they encountered.

Language Competency Training for the Police

One common method used in the field by law enforcement to translate a foreign language, as seen in the Redding example, is to find a neighbor or family member who speaks English and the foreign language. In the example just discussed, we can see the problems associated with using neighbors or family members. While this does solve the problem of availability, it creates another problem of conflict of interest. Often family members are too close to the situation to be reliable translators. It has often been the experience of law enforcement that these translations are, in fact, slanted or misrepresented to benefit one half of the conflict or another.

In an effort to address the language translation issue in California, the California Commission on Police Officer Standards and Training (POST) has authorized a learning domain to be taught at Basic Police Academies. The intent is to teach police and law enforcement cadets basic Spanish in an effort to help them perform the basic field functions required of a police officer when in contact with a Spanish speaking individual. This training has been instituted at the California Highway Patrol's Academy. It has also been implemented by several major law enforcement agencies in Southern California including the Los Angeles Sheriffs Office. Many agencies

utilize Spanish translation handbooks and on call translators to improve communication with the non English speaking population. In another attempt to address the language barrier issue, many law enforcement dispatch centers have on call translation services.

The training of all law enforcement officers in a specific foreign language has some benefits. In California, the Spanish was chosen by POST as it is the most commonly spoken foreign language in the State. However, there are many foreign languages spoken in California; 224 in Los Angeles alone. Realistically, Law Enforcement may be limited by our ability to have bilingual officers the most prevalent languages. Without constant use, language skills also decline. One Redding Officer, who completed the California Highway Patrol language class in Spanish during his basic academy in 2002, reports limited recall of the language skills learned once assigned to an area where Spanish is not used daily. Due to the diversity of the California population and the limitations of language training, an alternative course of action is to examine the use of a language translation device each officer could carry and use daily in the field.

The Universal Translator

In a quote from the book “Make It So: Leadership Lessons from Star Trek – The Next Generation” the author states, “The universal translator is a complex, high speed computer that analyzes the patterns of unknown forms of communications and derives a translation matrix which permits comprehensible voice and data exchanges between Federation and alien life forms. Although the universal translator constantly updates its database, its effectiveness is sometimes limited by distortions that arise when the language concepts, vocabulary, or word usage being processed varies too far from the sample from which the translation matrix is based.

And so it is that despite the sophistication of the Federation technology, the fundamental challenge of effective communication in the 24th century remains as it was in all the preceding millennia. Messages given must not only be received, they must also be understood. To be sure, this challenge cannot be met by communication technology alone.”¹

As mentioned in our Star Trek example, the universal translation device is a fictional device common to many science fiction works, especially on television. Its purpose is to offer an instant translation of any language. Like traveling at the speed of light, the universal translator is an accepted device in science fiction stories and serves as a useful plot enhancement. It is used to remove the problem of communication between alien cultures unless that problem is essential to the plot. Real world technology is currently far from performing as well as its fictional counterpart. Researchers do, however, continue to seek advances in the area of language translation. That work has netted some impressive results.

Voice Translation Technologies

Technology has advanced to the point where voice recognition systems are commonplace. Credit card companies and banks use voice recognition commands to lead customers to a variety of telephone services. Voice recognition technology is recognized in many industries to increase efficiency. The development of language translation software is also advancing. With the Internet, the translation of the written word from one language to another is becoming more commonplace. Technology is emerging in the area of home translation systems for your personal computer found at www.systransoft.com to larger systems found at www.universal-translator.net to academic research at www.speech.cs.cmu.edu and even voice recognition

programs like “Dragonspeak” at www.nuance.com. As technology advances the science of language translation may become more reality than science fiction.

Available now from the Lingo Corporation, www.lingotranslators.com, are several models of a portable language translator. Since the 1990's, Lingo has been developing language translation devices for travelers and vacationers. The Ectaco Company, www.speechguard.com, offers several versions of a language translator including a law enforcement version, the Speechguard PD5. The Speechguard stores key words and phrases in 25 languages in its memory and can be accessed by manual or voice command.

In 2004, NEC, a Japanese corporation, has started work on a hand-held device which would enable users to chat with persons who speak different languages without having to learn the words and phrases for themselves². This system is about the size of a hand-held PDA and converts spoken Japanese to English and visa-versa. This device consists of three components; a speech recognition engine, translation software, and a voice generator. Spoken English or Japanese is recognized and converted into text by the speech recognition engine. The text is then converted from Japanese into English or the other way by translation software and resulting text is vocalized by the voice synthesizer. The company believes that it will be possible in the next few years to create a translator for mobile phones, providing they are powerful enough.

A similar device is being developed by the U.S. military.³ The U.S. Army is testing a portable translator device which would be used by U.S. soldiers in the field during war time as well as for peace-keeping duties. A system has been developed called “MASTOR” (Multilingual Automatic

Speech to Speech Translator). This is an IBM software driven device was deployed to military forces in Iraq in 2006. The purpose is for English to Arabic translation aimed at improving communication between military personnel and Iraqi forces and citizens. The British military is testing a device called “AHKY” which utilizes a different approach⁴. The device is currently programmed with ten key words and phrases. When the operator speaks the key word or phrase, the device recognizes the phrase and translates it immediately into Arabic. This is a primitive translation device currently being used with limited applications.

In the late 1990s, the National Institute of Justice became involved in the testing of voice response translator technology.⁵ They are currently sponsoring several law enforcement agencies in the United States, including the Oakland, California Police Department, the Nashville, Tennessee Police Department, and the West Palm Beach, Florida Police Department, who are testing prototypes of a voice response translator. These prototype devices would be used by first responders to get and give basic information to non-English speaking persons in a variety of situations.

In 2007, the Los Angeles Police Department implemented the utilization of translation devices in the field. As reported in the Los Angeles Times on January 16, 2008, LAPD has implemented a device called the “Phraselator”. The Phraselator utilizes MP3 technology to access pre recorded words and phrase the user can access from an English word screen or from a voice command. The Phraselator allows officers to communicate, by translating certain words and phrases, to all 224 languages spoken in the Los Angeles city limits. This device was developed by the Defense Advanced Research Projects Agency and has been utilized in Afghanistan and Iraq by American

soldiers. LAPD bought four of the \$2500 devices which look like heavy duty palm pilots.

While they have yet to reach every officer in the field, it is the start of implementation on a large scale. ⁶ LAPD Deputy Chief Mike Hillmann noted that the Phraselators have already demonstrated their value to the Department. “The ability for public safety agencies to communicate with various cultures is critical,” said Hillmann. “The Phraselator has been useful in assisting with crowd management operations.” While LAPD seems to be taking the lead, the widespread use of a translation device across California has yet to be seen especially in small to mid size agencies where funding is limited.

What it all means

While technology may make it easier to communicate in the future, it is still important for law enforcement executives to work closely with their communities to break down cultural barriers caused by language differences. In Redding, the Police Department’s relationship with three main groups representing their ethnic communities is the key to success in resolving concerns when they arise. Through monthly meetings and joint participation at community events, the Department maintains an open dialogue to minimize the negative impact of miscommunications and misunderstandings in such cases as the domestic violence case described earlier. It was as a result of this relationship which corrected the wrongful arrest. In a landscape that will include technological options for communication, it is critical for executives to remain aware that no technology can replace relationships, and that culture cannot be replaced with a device.

Conclusion

With technology advancing and the costs coming down, the development of a foreign language translator or a universal translator may be in foreseeable future. While word to word translation may be achieved through a technological translation device, the interpretation of the spoken word remains an important issue. It will be some time before a language translator is able to properly interpret the meanings of certain words. It is often times the meaning behind the spoken word which is as important for the message to come across.

The translation of one word to another word is not necessarily adequate to convey a thought. It is more important that the word be interpreted in the context of the conversation so the parties involved in the communication can clearly understand each other. Language translation technology is advancing and could be a valuable tool for law enforcement in the future. While a language translation device may be a part of the solution, there is much more to interpreting language than simply translating the written or spoken word. Language barriers are barriers to trust as well as communication. Relationships with community members, development of bilingual trained officers, and the future of language translation devices may help to break down those barriers and improve relationships between law enforcement and the community.

Endnotes

¹ Wess Roberts, Ph.D. and Bill Ross, “*Make It So: Leadership Lessons from Star Trek – The Next Generation*”, Simon and Schuster, Inc. Pocket Books (August 1996) <http://simonsays.com/>

² Will Knight, “Device Translates Spoken Japanese and English” *The New Scientist*, (October 2004) - <http://www.newscientist.com/article/dn6503-device-translates-spoken-japanese-and-english.html>

³ Andrew Charlesworth, “U.S. Military Fires Up Arabic Translation Device”, *ITWeek* (October 2006) - <http://www.itweek.co.uk/nmunet/news/2166399/arabic-mahcine-translation>

⁴ Article, The AHKY Wrist Worn Translation Device, (August 2007), <http://www.gizmag.com/go/7624/>

⁵ Mark P. Cohen, “The Voice Response Translator: A Valuable Police Tool”, *NIJ Journal* #252, (July 2005) http://www.ojp.usdoj.gov/nij/journals/252/voice_response.html

⁶ Winton, Richard, LAPD finds a way to connect”, *Los Angeles Times*, (January 16, 2008) <http://www.latimes.com/news/local/la-me-translate16jan16,1,1648880.story>