



Representative Steve Israel represents New York's 2nd Congressional District, serving on the House Appropriations Committee and the House Financial Services Committee. Representative Israel is chairman of the House Democratic Caucus Task Force on Defense and the Military, and co-chairman of the House Democratic Study Group on National Security Policy. He has devoted much of his legislative career to energy security, professional military education and global nuclear challenges.



Institute and heads the institute's national security program. He previously served as deputy director of Georgetown University's Security Studies Program, and taught military subjects in academia for twenty years. Dr. Thompson holds a Ph.D. from Georgetown University and frequently advises the government on security-related matters.

A CRISIS IN LANGUAGE PROFICIENCY

On February 26, 1993, terrorists exploded a bomb under New York's World Trade Center, killing six people and injuring a thousand. At the time, the Federal Bureau of Investigation (FBI) held tapes and documents containing clues about what the terrorists were planning. But the material was in Arabic, and translation did not take place until after the attacks occurred. Eight years later, history repeated itself: the day after a second terrorist attack brought down both towers of the trade center, translators found intercepts hinting that an attack would occur on 9-11.

Episodes such as these have led to a wholesale reorganization of the U.S. intelligence apparatus and congressional inquiries into the adequacy of military preparations for coping with unconventional threats. But despite expending billions of man-hours and trillions of dollars on national security since 9-11, some of the most basic deficiencies have not been fixed. One such deficiency is a shortage of foreign language skills in the federal government. There is growing evidence that poor language proficiency is impairing national security:

- The U.S. Army has so few Arabic speakers in its ranks that whole brigades, containing thousands
 of soldiers, deploy to Iraq with only a few fluent interpreters. That forces combat units to rely
 on locals of questionable loyalty and skill to understand what the Iraqis they meet are saying
 and doing.
- U.S. intelligence agencies have accumulated a backlog of millions of potentially important
 documents awaiting translation. Organizations such as the Central Intelligence Agency and the
 National Security Agency have encountered chronic problems in trying to recruit capable speakers
 of Arabic, Turkic, Indic and Iranian dialects.
- Three in ten State Department personnel serving overseas in language-sensitive positions lack
 adequate proficiency in local languages, and in places where Arabic or Chinese are spoken,
 the number rises to four in ten. Over half of the State Department personnel holding languagesensitive positions in Baghdad, Cairo, and Kabul do not have adequate proficiency.
- Although the FBI has quadrupled the number of Arabic translators on its staff since 9-11, only 33
 agents have even limited proficiency in the language, and a mere four (out of 12,000) have
 advanced proficiency. Terrorists in federal prison were able to send over 90 letters to sympathizers
 overseas, because none of the Justice Department personnel at the prison could understand what
 the letters said.

Perhaps such problems shouldn't come as a shock in a country where colleges and universities graduated a grand total of only nine Arabic majors in the year before 9-11. With less than ten percent of college students enrolling in any form of foreign language training, the federal government has always relied on its own language schools and recent immigrants to satisfy linguistic needs. But the problem of deficient language resources is so persistent — from Somali to Serbo-Croation to Farsi to Urdu — that policymakers have finally recognized the need for fundamental reform.



THE VITAL ROLE OF LANGUAGE SPECIALISTS

During most of U.S. history, the major threats to national security originated in a handful of western countries whose languages shared common roots with English. That pattern began to change in the mid-twentieth century, but even during the Cold War the language of greatest interest to linguists in the defense department and the intelligence community — Russian — had distinct similarities to other western tongues. Today, policymakers are concerned mainly with non-western threats, and therefore must have linguistic resources suitable for interpreting a diverse array of unfamiliar, sometimes obscure, languages. The demand for skill in specific languages waxes and wanes unpredictably, making it nearly impossible to sustain an adequate pool of language specialists within the federal government.

Linguistic facility is only one part in a broader portfolio of cultural-awareness skills that U.S. war-fighters and diplomats must possess to deal with today's threats, but it is the most important part. Before the government can seek to aid, persuade, deter or defeat other nations, it must first understand what they are saying and doing. It therefore dedicates considerable resources to training federal personnel in foreign languages at places such as the Defense Language Institute, and it pays contractors to recruit additional linguists from the private sector. One such contractor, L3, provides over 9,000 language specialists to various federal agencies at locations scattered across the globe.

The challenge of meeting security-related linguistic needs is far more complex than simply filling quotas for particular languages. First of all, the character of each language will tend to vary geographically and demographically, so it is important to recruit people who are skilled in the appropriate national or regional dialects. In fact, in most of the current contingency areas, the notion of a common national language is non-existent. The primary languages are at best regional if not tribal. National languages have about the same credibility as the national boundaries, drawn in the past by outsiders with little or no recognition of the included and excluded ethnicities. Second, the nature of tasks requiring language resources — interpreting conversations, translating documents, etc. — will have a bearing on the type of skills and proficiency levels required. Third, the level of trust vested in linguists will vary depending on their backgrounds and security clearances. Thus, the pool of specialists assembled to support understanding of any particular language will usually be a diverse group with variable talents.

In the field, even finer distinctions are likely to be made among various linguists. For example, language specialists employed by U.S. forces in the Balkans generally have three roles: interpreting in meetings, translating documents, and understanding electronic recordings such as radio intercepts. But within each of those areas, linguists will be better at grasping the meaning of some communications than others. An interpreter assigned to meetings might be far better at collecting intelligence or screening prospective employees than he is at supporting interrogations. There are so many cultural and emotional nuances to the process of communication that each interpreter will be unique, better suited to some tasks and settings than others.

Ideally, the federal government would like to maintain a cadre of language specialists with the full range of skills and competencies for each language of interest. But given the variability of human interactions and federal needs, that will not be feasible for many languages. The likelihood that federal language resources, by themselves, could cover a sudden surge in demand for Somali or Pashto — particularly if there was a need to focus on specific local dialects — is not high. The government therefore has little choice but to hire contract interpreters when the need arises. The most fluent such interpreters will typically be drawn from the population of the country in question, or from communities of recent immigrants in the United States.



TECHNOLOGY BY ITSELF IS NO SOLUTION

The use of non-western languages by America's enemies has been called "poor-man's encryption," because linguistic patterns favored by terrorists and insurgents are often difficult for outsiders to understand. For instance, some members of Al Qaeda are not native Arabic speakers, so their grammar and syntax when using that language may be hard even for fluent speakers of Modern Standard Arabic to grasp. The interpretive challenge is compounded by the use of local dialects, allusions to obscure religious beliefs, and heavy reliance on metaphor. As a result, translation of Al Qaeda communications can at times resemble the deciphering of coded messages.

Not surprisingly, the federal government has turned to technology as one way of easing the communications challenge for its operatives in places like Iraq. In the past, visionaries have proposed that powerful software exploiting commonalities in all communication might enable scientists to devise a "universal translator" with equal facility in any language. But that idea has a long way to go before it is reliable. The government currently favors more modest projects aimed at assisting interpreters rather than replacing them. Among the key efforts:

- A handheld "Phraselator" carried by U.S. troops in Iraq that converts spoken English into phrases
 that locals will understand. The current version of the Phraselator is programmed with several
 hundred such phrases, but troops report that Iraqis often do not grasp what the device is saying in
 Arabic (possibly due to variability in the local use of language).
- A Foreign Area Language Converter, dubbed FALCON, that enables forces in the field to translate
 documents written in foreign languages into English. A separate Document Exploitation (DOCEX)
 suite permits rapid processing of captured documents so that operatives can identify items of
 immediate value to military commanders.
- A translation system called Forum that allows military personnel to enter information in their own language which is then instantly transformed into various other languages. Forum is potentially useful in coordinating the actions of coalition forces where the component units do not share a common tongue.
- A linguistic aid designated the Language and Speech Exploitation Resources (LASER) that is being
 jointly developed by the Army, FBI and intelligence agencies to provide automated assistance to
 government language specialists. The project may also yield an improved field translation device
 for soldiers lacking foreign-language skills.

Information technology will play a growing role in meeting federal language needs. However, there is little chance that technology can take the place of interpreters, because the human brain is the most complex and powerful processing system in the known universe. Performing trillions of operations per second with energy equivalent to that consumed by a 75-watt light bulb, the brain is able to detect patterns and nuance no machine could find. Even if the processing and memory capacity of the brain could be replicated in a machine of similar volume, the challenge of programming that machine to interpret dozens of languages and hundreds of dialects will be daunting for decades to come. Thus, the core of the government's linguistic resources will continue to reside in the heads of its language specialists.







RECENT FEDERAL LANGUAGE INITIATIVES

The federal government did not require the atrocities of 9-11 to recognize its need for improved linguistic resources. Key agencies took steps well before 9-11 to bolster language skills as deployments in the Balkans, the Horn of Africa and elsewhere signaled a shift in U.S. strategic focus. For example, the Army — lead agent for defense translation and interpreter services — achieved a marked improvement in the linguistic proficiency of its military intelligence specialists through a combination of more rigorous training, increased financial incentives, and improved readiness standards.

However, the U.S. response to 9-11 created a surge in demand for non-western language skills as Washington sought to mount a global war on terror. Not only did U.S. military and intelligence personnel require better understanding of the non-western cultures in which they were operating, but there was heightened awareness of the need to engage non-western nations in a counter-terror coalition. This produced unprecedented federal demand for linguists proficient in Arabic, Indic languages such as Urdu and Punjabi, Iranian languages such as Farsi and Pashto, and Turkic tongues (Kazakh, Kyrgyz, Turkmen, Uzbek, etc.). Because many of those languages had not previously been of great interest to U.S. policymakers or commercial interests, new federal initiatives were required to meet the demand for arcane linguistic skills.

One of the earliest steps was taken in the Patriot Act of 2001, which established a National Virtual Translation Center to pursue development of technologies that could assist linguists. In 2002 and 2003, the defense department conducted a comprehensive assessment of its requirements for linguistic skills and reviewed the operations of the Defense Language Institute in light of emerging operational needs. The department subsequently issued Strategic Planning Guidance directing a "transformation" of defense language capabilities, and increased the amount of funding set aside for linguistic activities through 2010 by nearly \$400 million. Similar measures were taken at other federal agencies. For instance, the FBI increased the number of Arabic translators on its staff from 70 in 2001 to 270 in 2006.

In 2005, pursuant to the earlier planning guidance, the Pentagon released a "Defense Language Transformation Roadmap" stating four goals: to "create foundational language and regional area expertise;" to build a surge capacity in languages; to establish a cadre of language professionals with advanced proficiency; and to enhance the career incentives for department personnel interested in pursuing language skills. The roadmap identified dozens of steps needed to implement the four goals, such as developing a language readiness index, making language needs part of the contingency planning process, and using linguistic facility as a key discriminator in promotions. Many of the steps have been taken in the two years since the roadmap was released.

More recently, the Department of Defense has joined with the Department of State, Department of Education, and Director of National Intelligence to launch a National Security Language Initiative that would bolster foreign-language education in the United States. The initiative would increase the number of Americans mastering critical-need languages, raise the number of linguists possessing advanced proficiency, and expand the ranks of foreign-language teachers. Most of the \$114 million provided in fiscal 2007 would come from a revamped foreign-language program at the education department. So even though gaps in policy may still exist, the federal government has recognized the language challenge and responded forcefully.



IN SEARCH OF A PERMANENT SOLUTION

The reasons for the federal government's lack of adequate foreign-language resources are not hard to identify. First of all, the nation is geographically isolated from other countries by vast oceans, so there is relatively little domestic interaction with foreigners unless they come as immigrants. Second, foreign-language skills are not particularly well rewarded in the economy. Third, public schools place more emphasis on reading, writing and arithmetic than they do on foreign languages. Fourth, recent changes in the global landscape have shifted security-related language needs to obscure tongues not traditionally in demand. And finally, just about everybody in the national political system has some priority that they value more highly than foreign-language proficiency.

This is not a favorable setting in which to search for permanent solutions to the current language crisis. The pattern of past responses to surges in demand for particular language skills has been to improvise, scouring immigrant communities and countries of interest for linguists who are sufficiently skilled and trustworthy. Because demand often recedes as quickly as it has arisen, there is little incentive for federal employees to focus their careers in languages which lack broader applicability in the economy. The government was not oblivious to linguistic deficiencies in the past, it simply was forced by 9-11 to raise language higher on the policy agenda. But if policymakers succeed in preventing follow-on attacks to 9-11, that will lessen the pressure for some permanent improvement in linguistic resources and cultural awareness.

Fortunately, the cost of sustaining a vigorous foreign-language training program is not high by comparison with the other components of national-security spending, and few policymakers doubt the value of linguistic skills in meeting national goals. In that regard, three propositions should guide the search for a permanent solution to the language crisis:

- The marketplace will not spontaneously satisfy federal needs for linguistic facility in critical-need languages. If anything, it will tend to compete with the federal government for what scarce linguistic resources are available.
- The government will need to meet its requirements for an organic core of language specialists by
 continuing to fund organizations such as the Defense Language Institute and Foreign Service
 Institute. These operations are indispensable to national security, so failure to fund them adequately
 would cause profound damage to the government's broader interests.
- The demand for many languages is so episodic that it is pointless to even try maintaining
 comprehensive linguistic resources among the ranks of federal employees. Contract linguists will
 continue to provide the preponderance of surge capacity in the system, and are the only cost-effective
 response to variable demand.

As long as these basic principles are understood, the government's current efforts to bolster language proficiency should succeed. But attempting to save money either by relying solely on market forces, or creating an in-house solution by building bureaucratic empires, will eventually erode the quantity and quality of language resources available to the government. A balanced system of public and private solutions is required. The United States must identify this as a top priority, organize career incentives to reward language specialists, and be prepared to spend what it takes to ensure that our national security institutions are not caught off guard again.





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