(U) Public Enemy No. 1 Speaks!

FROM: Adolf Cusmariu
Technical Director, Operational Technologies (S202B11)
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(S//REL) An analysis of a recent UBL tape shows it to be authentic. Also, steps are being taken to incorporate voice-matching software into Agency systems.

(S//REL) Mathematical comparison of Usama Bin Laden's voice broadcast by Al-Jazeera last Sunday (23 April) with several previously confirmed messages produced excellent correlation. The Al-Qa'ida leader was not shown in video, but his knowledge of current events affecting the Middle East suggests the tape is very recent.

(S//REL) Using MIT's tools for voice matching has become simplicity itself. In audiofile mode, the Speaker Comparison Algorithm (SCA) interface needs only acoustical input...

...in this case, comparison of the 23 April 2006 voice with a previous message from 19 January 2005. Upon running the program, the score is displayed as:

...showing a perfect match - 99% confidence. The algorithm may also be run to compare an audiofile with a mathematical model built from several different intercepts, this to potentially enhance the chances of a match. After training (see interface below)...

...based on three distinct messages, comparison through the Speaker Watchlist Tool (SWT) again produced a perfect voice match of the latest UBL message:

(S//REL) A practical tutorial on MIT's tools is available.

(S//REL) For broader use by Agency language analysts, integration into the HOTZONE application is in progress.

(S//REL) Finally, one particular UBL audiofile from the recent past - on 18 October 2003 - proved to be of too low quality to yield credible results. However, enhancement software acquired from a local vendor - Intelligent Devices - produced dramatic improvements in audio quality (at least in this case) to yield a perfect match. The well-designed interface offers an automated mode (see below)

...and a simplified version is being prepared for NSA. The new InnoVisions Program has tentatively agreed to purchase a dozen licenses for distribution and testing at NSAW and selected field facilities.

(S//REL) See the earlier article Technology that Identifies People by the Sound of Their Voices

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