#### December 9, 2019

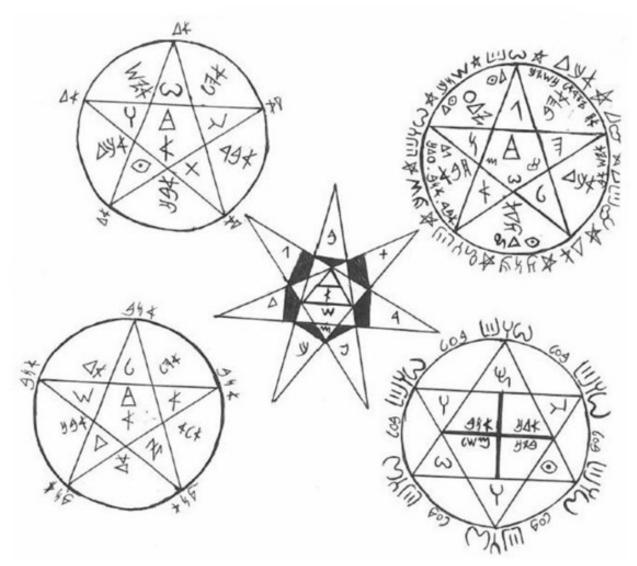
Twitter (https://twitter.com/intent/tweet?

text=Focus%20on%20Forensics:%20Tattoo%20and%20Symbol%20Analysis%20in%20the%20FBI&url=https://leb.fbi.gov/ar on-forensics-tattoo-and-symbol-analysis-in-the-fbi) Facebook (https://www.facebook.com/sharer/sharer.php? u=https://leb.fbi.gov/articles/focus/focus-on-forensics-tattoo-and-symbol-analysis-in-thefbi&t=Focus%20on%20Forensics:%20Tattoo%20and%20Symbol%20Analysis%20in%20the%20FBI) Email (mailto:? Subject=%22Focus%20on%20Forensics:%20Tattoo%20and%20Symbol%20Analysis%20in%20the%20FBI%22&body=https on-forensics-tattoo-and-symbol-analysis-in-the-fbi) **Print** 

## **Focus on Forensics**

# Tattoo and Symbol Analysis in the FBI

By Jared Hirschfield and Nick D. Foundos



Cryptic drawings confiscated from a Florida inmate, identified by the FBI TAG program as Thelemic protection amulets (Source: Florida Department of Corrections)

Because crime constantly evolves, law enforcement agencies must remain informed of all investigative tools at their disposal. For cases involving unrecognized or cryptic images, items, or markings, one unique FBI team is equipped to help.

The Tattoo and Graffiti (TAG) team operates within the Cryptanalysis and Racketeering Records Unit of the FBI's laboratory in Quantico, Virginia. This team of FBI cryptanalysts—the only one of its kind in the United States—exists to assist law enforcement agencies of all types and jurisdictions in the pursuit of justice.

### Operation and Services

A team of experienced researchers with access to a robust library of resources, home to thousands of distinct symbols and photographs of tattoos and graffiti, is the key component of the TAG operation. TAG's results can prove valuable for generating investigative leads and providing operational intelligence to law enforcement personnel.

In addition to noninvestigative reference submissions, TAG accepts research requests from domestic law enforcement agencies and correctional facilities at all levels—local, state, federal, and tribal. With prior authorization, it also can assist international law enforcement partners. Trained cryptanalysts thoroughly research all cases by comparing the submitted images to others existing both in internal TAG resources and across open-source online resources. After completing a comprehensive evaluation, team members return a detailed report with relevant analytical findings and similar images, if located.

### Scope

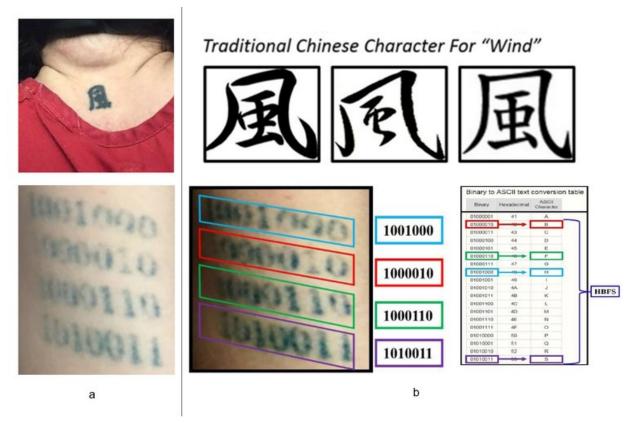
The TAG program supports law enforcement investigations into a wide range of nefarious activities. Intelligence and similar images provided by TAG evaluations have aided contributors in the investigation of gang-related crimes, human trafficking, human and drug smuggling, vandalism, and missing persons cases. Organized crime entities involved in such activities frequently use characteristic tattoos and symbols. Often, these are identifiable through open-source research and similar image analysis, helping contributors generate leads and allowing for more focused and efficient investigations.

#### **Noteworthy Investigations**

In May 2017, a contributor from U.S. Immigration and Customs Enforcement submitted the images in figure 1a for TAG evaluation. Police had arrested the photographed individual several times for minor offenses throughout Virginia, Tennessee, and Maryland, and they were concerned that the person was a victim of sex trafficking. Gangs and other criminal groups involved in illicit trafficking often brand or tattoo their victims with distinguishable text or symbols to demonstrate ownership of their "property." TAG analysis of the submitted tattoos, a traditional Chinese character and binary text (figure 1b), validated their concerns. In this case, TAG-generated leads not only helped identify a victim but also served to connect several involved law enforcement agencies and facilitate interagency collaboration.

#### Figure 1

"TAG's results can prove valuable for generating investigative leads and providing operational intelligence to law enforcement personnel.'



Source: U.S. Immigration and Customs Enforcement

A contributor from U.S. Customs and Border Protection submitted a photo in January 2017 depicting tattoos on the body of an unidentified deceased male recovered near the U.S.-Mexico border (figure 2a). TAG analysis located strikingly similar images of a scorpion and of prominent Mexican Revolution general Francisco "Pancho" Villa (figure 2b). Because they are fairly nondescript, the subjects of these tattoos may have been overlooked or misidentified without the help of the FBI's TAG team. Using the intelligence provided by TAG, the Missing Migrants Initiative Office of the U.S. Border Patrol distributed flyers with detailed information surrounding the tattoos and their significance. Soon after, a relative of the deceased migrant came forward and identified his body, providing the family with closure.

Figure 2



Source: U.S. Customs and Border Protection

An intriguing case submitted by a contributor from the FBI-led National Joint Terrorism Task Force demonstrated TAG's extensive open-source investigative capabilities. In early 2015, railroad operators reported several similar instances of freight train vandalism in locations across the United States. Images of the graffiti, all containing the marker "EVADE," were submitted for TAG evaluation (figure 3). TAG cryptanalysts located an online blog interview with a well-known graffiti artist in which he described his close friendship with a fellow artist known by the moniker EVADE. The TAG team determined that EVADE likely represented the perpetrator's first name, Dave, spelled backward (with an extra e). Armed with this information, the investigators were able to narrow the investigation and explore related leads.

Figure 3







Source: National Joint Terrorism Task Force

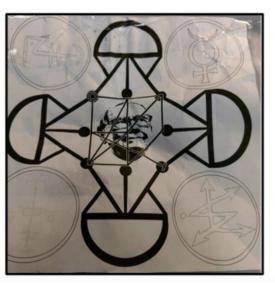
### **Use of TAG Analysis Services**

At any time, individuals can submit a request for services (along with attached images) to TAG@fbi.gov. Submissions accompanied by detailed case information—including any distinguishing information about the subject, date and location from which the image(s) originated, and any suspected gang or criminal group affiliations—tend to yield the most robust assessments. In addition to standard photos of tattoos or graffiti, the FBI TAG team is equipped to evaluate many other graphics. This includes pictures of clothing (e.g., security camera footage of criminal activity), drawings (e.g., prison art), hand signs, bumper stickers, cryptic religious rituals, and the like. The team typically returns a comprehensive report of TAG findings to the contributor within 30 days but will consider requests for expedited responses, especially if human safety is at risk.









Top Left: A ritual offering of Santeria, an Afro-Cuban religion, left in a Pittsburgh public park (Source: The FBI's Pittsburgh, Pennsylvania, office); Top Right: Tattoos suggestive of MS-13 affiliation (Source: Texas Department of Criminal Justice); Bottom Left: Graffiti suggestive of Tree Top Piru Bloods gang affiliation (Source: Texas Department of Public Safety); Bottom Right: A cryptic drawing left at a women's health clinic identified as a cult abduction sigil (Source: The FBI's Omaha, Nebraska, office)

While TAG accepts submissions from all law enforcement agencies and correctional facilities, investigation results are intended solely for intelligence and informational lead purposes. TAG cryptanalysts do not provide testimony support, and evaluations are not meant for use in criminal prosecution. The FBI TAG team encourages all U.S. law enforcement personnel to submit images for investigative analysis or informational purposes.

#### Conclusion

Tattoos, symbols, and other images can reveal significant details about a crime, victim, or perpetrator, but they are easy to overlook if not immediately identifiable. Thus, investigators must research and understand this evidence to uncover the clearest picture of the situation. To accomplish its goals, the law enforcement community must work together, foster partnerships between agencies, and take advantage of all resources available. The TAG team exists to serve as experts on and to share information about tattoos, graffiti, and myriad other graphics in the pursuit of justice.

Mr. Hirschfield was an honors intern in the Cryptanalysis and Racketeering Records Unit of the FBI Laboratory. He is currently studying biology and political science at Northeastern University.

Mr. Foundos is an FBI cryptanalyst and TAG case manager in the Cryptanalysis and Racketeering Records Unit of the FBI Laboratory. He can be contacted at ndfoundos@fbi.gov.

"The FBI TAG team encourages all U.S. law enforcement personnel to submit images for investigative analysis or informational purposes."