

Intending to Err: The Ethics of Probability

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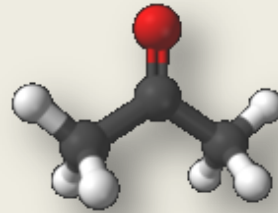
Department of Philosophy

USAFA

Tactical, Non-Cooperative Biometrics



DNA



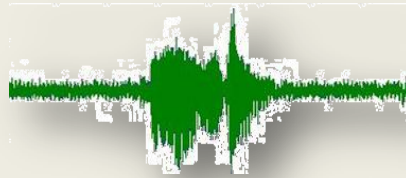
Emissions / Surface
Chemicals



Face



Skin



Voice



Heartbeat / Pulse



Body Image / Gait



IRIS / Pupil



Hair

Tactical, Non-Cooperative Biometrics

TNCB – Obtaining biometric data, covertly, from stand-off distances

1. Many promising technologies
2. Future operations using autonomous systems
3. Replaces human for identification and discrimination

Future...

Faster

Lethal autonomy

ICRC: “major qualitative change in the conduct of hostilities”

Policy lag

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A future for drones: Automated killing

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By Peter Finn, Published: September 19

One afternoon last fall at Fort Benning, Ga., two model-size planes took off, climbed to 800 and 1,000 feet, and began criss-crossing the military base in search of an orange, green and blue tarp.

The automated, unpowered planes worked on their own, with no human guidance, no hand on any control.

726 Comments Weigh In Corrections?

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Graphic

Launch and landing
Takeoff of drones is controlled in a command center. Once the drones are in the air, they start operating autonomously.

Surveillance
Several drones with different sensors and weapons could operate together to locate potential targets.

Action
The drones could engage the target themselves immediately or could call in autonomous land units to confirm the identification before an attack.

Command center Target Autonomous land vehicle

After 20 minutes, one of the aircraft, carrying a computer that processed images from an onboard camera, zeroed in on the tarp and contacted the second plane, which flew nearby and used its own sensors to examine the colorful object. Then one of the aircraft signaled to an unmanned car on the ground so it could take a final, close-up look.

Target confirmed.

This successful exercise in autonomous

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Intent in the Just War Tradition

Jus in Bello – law of war; how the military should conduct itself in combat

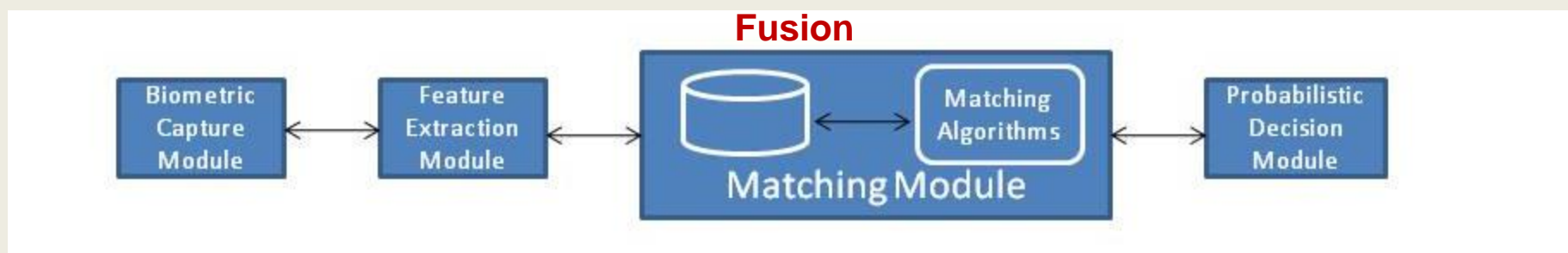
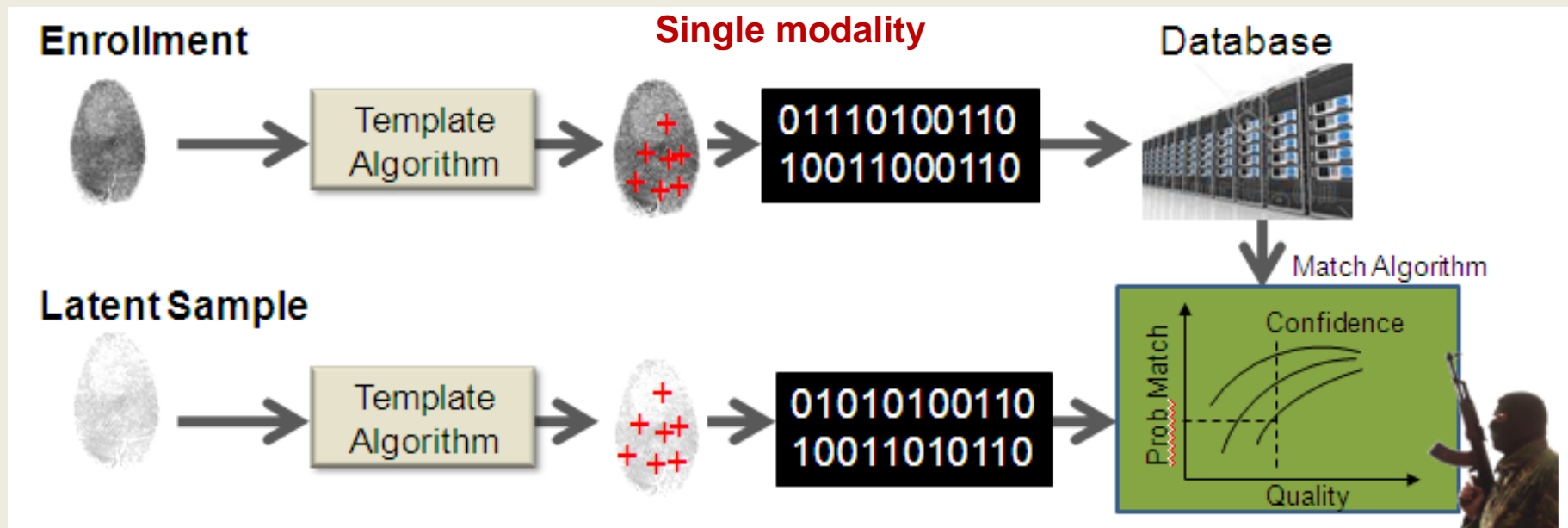
Right intention – A traditional principle where combatants should have an interior disposition such that they avoid returning evil for evil, show benevolence where appropriate, and are “upright” in character; over time, evolved into:

Noncombatant immunity – unjust to attack indiscriminately; non-combatants or innocents are deemed to stand outside the field of war proper

Proportionality – offensive action should not be excessively injurious to reach the desired military objective

Intent in Biometrics/TNCB

Can we still claim proper intention?



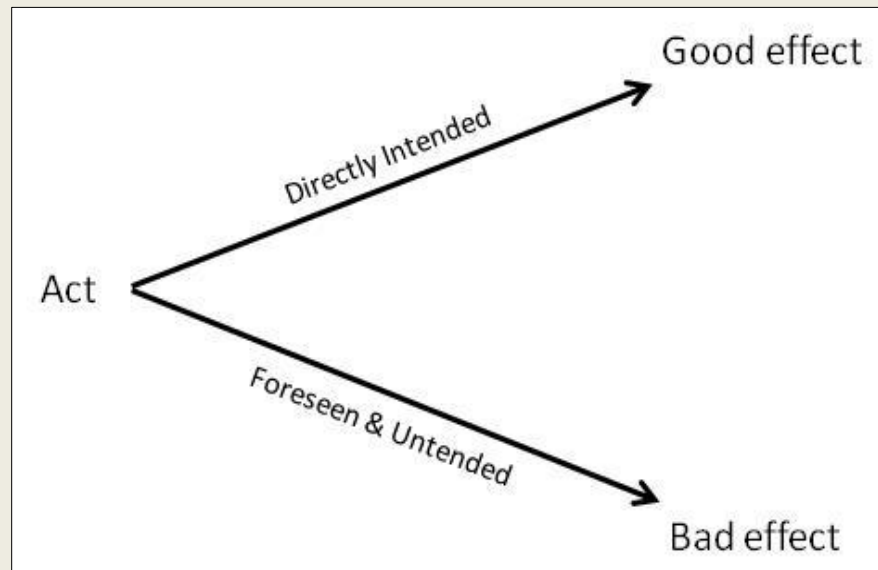
Improving Confidence



Fusing data from several modalities, instruments & sensors

The Case for TNCB/Lethal Autonomy

1. It's a probabilistic world, to include human behavior/intent



2. Outcomes are better

- Kant: possessing good intent is the only condition of moral activity, regardless of the consequences

Contact

QUESTIONS...

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