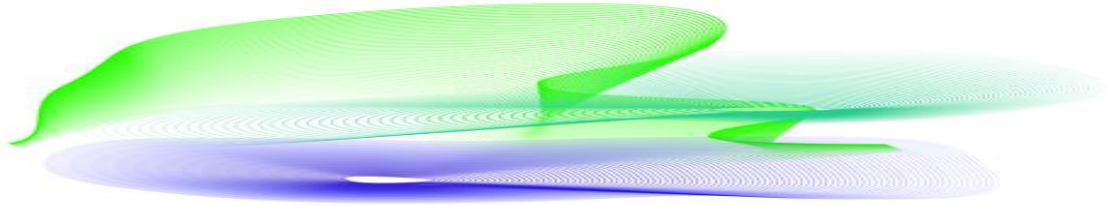


OSMOCOSM FOUNDATION



OLFACTION MOOT COURT SESSION
FRIDAY, OCTOBER 21, 2022
10:00 AM – 12:00 PM (EST)
THE MIT MEDIA LAB
In person and virtual
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**PICKING UP THE SCENT: DETECTING
THE MENTAL STATE OR THE INTENT OF PARTIES**

DIMITRIOS IOANNIDIS, ESQ.¹

TO: The Honorable Judges- BENCH MEMORANDUM
FROM: Theodore Brothers, Grayson Barlow
RE: MIT Olfaction Conference; Detecting the Mental State or the Intent of Parties
DATE: October 21, 2022

I. QUESTIONS PRESENTED

- a. Whether the scent data captured by “Weownyou” during (1) the time that Jonah Drepp (“Petitioner”) was plotting the attack on Camper Hurt (“Respondent”) and (2) during the time of the commission of the crime can be used to prove Petitioner’s intent even though there was no search warrant to obtain this data?
- b. Whether the Petitioner had the requisite intent to commit the alleged crime even though he changed his mind before Hurt was struck by the prosthetic arm?
- c. Whether the right to a jury trial of your peers includes the right to have a trial before avatar-based Artificial Intelligence (“AI”) jurors from the DABUS database given that the alleged crime committed was controlled by the same AI platform?
- d. Whether the scent data reproduced by the prosecution be used to refresh the memory of the Respondent in identifying the Petitioner as the perpetrator of the crime even though the lower Court excluded the manipulated data offered by the Petitioner’s expert?

¹ This is a moot court problem for the Olfaction Conference created and owned by Dimitrios Ioannidis, Esq. This is a work of fiction. Names, characters, places, and incidents either are products of the author’s imagination or are used fictitiously. Any resemblance to actual events, locales, or persons, living or dead, is entirely coincidental. The bench memorandum was prepared by Theodore Brothers and Grayson Barlow, students at Suffolk University Law School.

II. STATEMENT OF FACTS

The Petitioner and the Respondent are former lovers who were involved in a physical altercation following Petitioner's arrival to the city of Sinlesshab, located on Mars. Prior to arriving at Sinlesshab, the Petitioner was incarcerated for three years in a prison located on a space station about one hundred fifty miles off the surface of the planet, Moonless, in connection with a crime involving stolen Distributed Ledger Technologies ("DLT's"). While incarcerated on Moonless, the Petitioner was involved in an altercation with other inmates which resulted in the loss of his right dominant arm.

As a result, a team of robot doctors attached a prosthetic arm to Petitioner's right shoulder and directly connected it to his brain through his spinal cord using an AI algorithm with an accuracy rate of 99.9% with no significant lag time. The AI processes the Petitioner's brain signals and sends corresponding commands to his prosthetic arm. The AI also had capabilities of assessing the Petitioner's emotions through an emotional intelligence chip that was incorporated into the robotic infrastructure. All of the AI used to coordinate and control the Petitioner's movements are stored on the wireless network, Aggli, the same wireless network used by Weownyou².

Once released from prison, the Petitioner accessed the Respondent's personal information kept by Weownyou by impersonating the identity of the Respondent using a chatbot. At such point Petitioner learned that the Respondent had been giving interviews to online social media platforms regarding him. Specifically, the Respondent was chronicling the Petitioner's activities in the scheme to defraud DLT exchanges.

The Petitioner, angered by the Respondent's statements, met with the Respondent asking her to retract her statements, as he felt such statements were damaging for employment and his future career in the financial sector. The Respondent rejected such requests, and informed the Petitioner that she was planning to post further comments on her social media with more explicit detail about the Petitioner's financial networks, his identities used to hide the stolen DLT's, and the magnitude of his holdings.

Enraged, the Petitioner started plotting an attack on the Respondent. This involved moving around the city, mapping the points where he could attack her, which eventually alerted Weownyou's management team of the activity. Before Sinlesshab's police force could act on the alert, the Petitioner found the Respondent and once again requested that she stop posting any future stories and retract her statements.

² Weownyou is a highly agile omnipresence network of cameras and other devices installed in the city of Sinlesshab, where the alleged crime took place. This technology uses olfactory sensory parameters which allows enhanced versions of information to be collected with unique identifying markings. These sensors on the equipment are able to "fingerprint" the sweat of fear, the smell of trust, the traces of tears on the eye, along with tracking the scent of the individuals.

The Respondent condescendingly smiled at him, which only angered the Petitioner more. The Petitioner wanted to hit her hard, however, momentarily second-guessed his decision of physical violence. The Petitioner became even more enraged when the Respondent threatened that she would publish more stories unless the Petitioner turned over to her 50% of the stolen tokens. The Petitioner tried to turn to the left but his emotions ran wild.

The algorithm processed all the information, including the level of anger and thoughts of striking the Respondent, and signaled his arm the command to strike the Respondent, although the Petitioner had changed his mind about striking her. The bionic arm moved quickly, striking the Respondent in the head once, causing some injuries. The Respondent survived the attack but lost her memory, including knowing her identity.

During the criminal trial, prosecution used the scent picked up from the Respondent's ear through technology to refresh her memory of her identity. To prove the Petitioner's intent, the prosecutor used the data of the scent captured by Weownyou during both the premeditated planning stages of the attack, as well as during the time that the Petitioner struck the Respondent. The prosecutor was then able to present to the Respondent the recreated scent of the Petitioner at the moment of contact to help her identify him.

During cross-examination, the Petitioner's lawyer attempted to use manipulated olfactory data to challenge the credibility of the Respondent's memory of the Petitioner's scent. The prosecutor objected to the introduction of such data as the scent data had been imperceptibly changed at the input phase by the expert retained by the Petitioner's defense team. The judge upheld the motion to exclude all the manipulated olfactory data and subsequent opinions from the Petitioner's expert.

The Petitioner's argument at trial was that he could not be held liable for a crime that was not completely within his control as the AI in the prosthetic arm acted before the Petitioner could process the stop function in his brain. The Court denied the request of the defense and the judge ruled that ultimate control rested with the Petitioner.

The Petitioner also requested a trial by jury but demanded that the jury be avatar like jurors created by DABUS. The Petitioner claimed that the right to trial by jury of your peers should be comprised from such AI juror avatars in the DABUS database seeing that the part of his body that allegedly committed the crime was controlled by an AI platform. The Court denied the Petitioner's request, holding that the right to a jury trial means human jurors and not avatar like virtual jurors created by DABUS. The Court found the Petitioner guilty and sentenced him to 15 years in prison. The Petitioner now appeals that conviction.

III. DISCUSSION

A. AN ANALYSIS OF WHETHER SCENT DATA CAN BE USED TO PROVE INTENT WHERE THERE WAS NO WARRANT TO OBTAIN THE DATA

This Court is tasked with determining whether the scent captured by Weownyou during the time that the Petitioner was plotting the attack upon the Respondent can be used to prove “intent” when there was no warrant to search or capture this data.

The Fourth Amendment to the United States Constitution provides protections against unreasonable searches and seizures. *See* U.S. CONST. amend. IV. The Fourth Amendment states the following:

“The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.” *Id.*

This protection only extends to searches conducted by the government, and not private parties, who are attempting to use their findings for evidence in a criminal case. The leading case on the Fourth Amendment and its application is *Mapp v. Ohio*, 367 U.S. 643 (1961). Under *Mapp*, it was held that “all evidence obtained by searches and seizures in violation of the Constitution is ... inadmissible in a state court.” 367 U.S. at 655. The Fourth Amendment is specifically designed to protect people from the unreasonable search of their “person, houses, papers and effects”. U.S. CONST. amend. IV. An unreasonable search must intrude upon a person’s reasonable expectation of privacy. *See U.S. v. Jacobsen*, 466 U.S. 109, 120 (1984) (finding that a search was not violated under the Fourth Amendment since it “infringed no legitimate expectation of privacy”).

Additionally, the Warrant Clause of the Fourth Amendment provides that warrantless searches are automatically unreasonable, with limited exceptions. In general, when determining if a warrantless search and seizure is exempt from the Warrant Clause of the Fourth Amendment, courts will balance the intrusion on the privacy rights of the individual against the legitimate governmental interest in gathering the evidence. *See Riley v. California*, 573 U.S. 373, 385.

With the advancement of technology and cloud-based data, courts have had to grapple with applying the Fourth Amendment to protections for searches of electronic devices and data. Congress has previously attempted to rectify such challenge with the Stored Communications Act (“SCA”), however, this Act was passed prior to many internet-based cloud services became common. As such, it is not clear that this Act is sufficient to deal with the modern challenges of data storage.

The SCA prohibits entities, typically social media platforms like Meta or Twitter, from disclosing information without the prior consent of the account’s owner, and may impact the ability to obtain information from social networking sites to be used in litigation. 18 U.S.C. §§ 2701-2712; 2 Mass. Prac. § 39:5 (4th ed.). Additionally, the SCA “generally prevents providers of Electronic Communications Services and Remote Computing services from disclosing their users’ electronic communications to the government or a third party—either voluntarily or under compulsion—without a search warrant”. 2 Mass. Prac. § 39:5. Under 18 U.S.C. § 2702(a)(2), it is stated that:

“[A] person or entity providing remote computing service to the public shall not knowingly divulge to any person or entity the contents of any communication which is carried or maintained on that service—

- (A) On behalf of, and received by means of electronic transmission from (or created by means of computer processing of communications received by means of electronic transmission from), a subscriber or customer of such service;
- (B) Solely for the purpose of providing storage or computer processing services to such subscriber or customer, if the provider is not authorized to access the contents of any such communications for purposes of providing services other than storage or computer processing.” *Id.*

While some types of data stored in a cloud-based service—similar to the scent data captured by the Petitioner—can fall within the parameters set forth in the SCA, it is difficult to apply this statute because this type of data storage did not exist when such law was enacted. Additionally, data storage is not a necessarily a direct communication and the protections of this act apply to providers of electronic communications or remote computing services to the public.

In general, there is a reasonable expectation of privacy when it comes to the data collected and stored from individuals. While the SCA may not apply directly to private cloud-based data stored that was not intended for communication, the Fourth Amendment may fill in the gaps. For example, in *Kyllo v. United States*, 533 U.S. 27, 34 (2001), where government agents did not obtain a warrant before using a thermal imaging device that explored details of someone’s home that would have previously been unknowable without physical intrusion, this was held to be an unlawful search under the Fourth Amendment.

B. AN ANALYSIS OF WHETHER PETITIONER HAD THE REQUISITE INTENT TO COMMIT THE ALLEGED CRIME

This Court is tasked with determining whether Petitioner had the requisite intent to commit the alleged crime even though he changed his mind before Respondent was struck by the prosthetic arm?

Under the traditional Restatement, a person commits a battery if they intended to cause a harmful or offensive contact and the harmful or offensive contact occurs, or if the harmful or offensive contact that occurred was the result of their recklessness or criminal negligence. 92 Am. Jur. Trials 1; Restatement (Second) of Torts §13; *United States v. Faust*, 853 F. 3d 39 (1st Cir. 2017). Generally, “accidental or inadvertent contact does not amount to battery.” Am. Jur. 2d, Assault and Battery §3.

The intent to injure is a requirement to establish that a battery has been committed, however, to prove the intent the court must find that the person desires to cause the consequences of his act, or that the person was substantially certain that the consequences would occur or would cause injury. *See* 6 Am. Jur. 2d Assault and Battery § 4; *Macherey v. Home Ins. Co.*, 516 N.W. 2d 434 (Wis. App. 1994). A battery is a general intent crime, meaning that “there is no requirement that the defendant be subjectively aware of the risk that a battery might occur”. *People v. White*, 194 Cal. Rptr. 3d 323, 327 (Cal. App. 2d Dist. 2015). “[A] defendant who honestly believes that his act was not likely to result in a battery is still guilty of assault if a reasonable person, viewing the facts known to defendant, would find that the act would directly, naturally and probably result in a battery”. *Id.* at 326, quoting *People v. Williams*, 29 P.3d 197 (Cal. 2001). Furthermore, the “intent to commit a battery is determined by the circumstances surrounding the touching or the striking of the victim.” *Bonge v. State*, 53 So. 3d 1231, 1233 (Fla. 1st Dist. App. 2011).

There are several justifications that could negate the requisite intent needed to be convicted of an assault and/or battery. Some of the most common defenses would be self-defense, defense of property, or insanity. Under a theory of self-defense, a battery crime could be negated if the other party was the aggressor which would provoke a reasonable person to use physical force in fear or in anticipation of further injury from the aggressor. *Susananbadi v. Johnson*, 700 So. 2d 886 (La. Ct. App. 5th Cir. 1997).

Courts have not yet fully addressed the issue of accidentally committing an intentional tort or crime using artificial intelligence, but accidents have been previously addressed through both case law and restatements. The Restatement (Second) of Torts §8A defines “intent” as desiring to cause the consequences of an act, however, the consequences are not specifically limited to the ones that are desired. In *Wagner v. Utah Dept. of Human Servs.*, 122 P.3d 599 (Utah 2005), the court illustrates this Restatement definition using an example regarding a hunter and his gun. The Court says:

“A hunter, for example, may intentionally fire his gun in an attempt to shoot a bird, but may accidentally shoot a person whom he had no reason to know was in the vicinity. He intended his act, pulling the trigger, but not the contact between his bullet and the body of another that resulted from the act. Thus, he intended the act but not the consequence.” *Id.* at 604.

The Court states that the hunter in the above example is not liable for an intentional act resulting in unintended contact. However, the Court then says that an “actor *is liable* for an intentional tort if he pulled the trigger *intending* that the bullet released thereby would strike someone, or knowing that it was *substantially likely* to strike someone as a result of his act” *Id.* at 605, *emphasis added*. See also Restatement (Second) of Torts §13, cmt. a (“it is immaterial that the actor is not inspired by any personal hostility to the other, or a desire to injure him”). “The actor need not appreciate that his contact is forbidden; he need only intend the contact, and the contact must, in fact, be forbidden”. *Id.*

Some jurisdictions state that an intentional crime or tort can occur when a party engages in an overt act which is intended to inflict bodily harm upon an individual. For example, in *Clark v. Commonwealth*, 279 Va. 636, 642 (2010), the Court required “proof of an overt act accompanied with circumstances denoting an intention coupled with a present ability of using actual violence.” The Court went on to state that “words and prior conduct are highly relevant in shedding light on intent and the context within which certain actions transpired” and that “a perpetrator’s intent may be inferred from the nature of the overt act and the surrounding circumstances.” *Id.*

C. AN ANALYSIS OF THE RIGHT TO A JURY TRIAL OF YOUR PEERS.

This Court is tasked with determining whether the right to a jury trial of your peers includes the right to have a trial before avatar-based Artificial Intelligence (“AI”) jurors from the DABUS database since the alleged crime committed was controlled by the same AI platform.

The Sixth Amendment to the United States Constitution dictates that “trial by jury in a criminal case is ... a constitutionally protected right.” *Com v. Lebon*, 37 Mass. App. Ct. 705, 706 (1994); U.S. CONST. amend. VI. The Sixth Amendment is stated as follows:

“In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defense.” U.S. CONST. amend. VI.

The Supreme Court has grappled with many cases involving jury selection. For example, in *Taylor v. Louisiana*, 419 U.S. 522, 528 (1975), the Court noted that a jury pool selection that represents a “cross section of the community is an component of the Sixth Amendment right to a jury trial”. See also 6 A.L.R. Fed. 2d 213 (2005). Additionally, the jury pool should be impartial with respect to both parties. *Georgia v. McCollum*, 505 U.S. 42, 58 (1992).

The Sixth Amendment has frequently been applied in cases involving discrimination on the basis of race or gender, sometimes overlapping with the Equal Protection clause of the

Fourteenth amendment. For example, in *Batson v. Kentucky*, 476 U.S. 79 (1986), where the petitioner, a Black man, sought review of a Kentucky state court conviction due to the jury being intentionally comprised of all white jurors. During jury selection, the prosecution asserted a preemptory challenge and had all the Black jurors removed from the jury pool resulting in a jury comprised entirely of white jurors. *Id.* The Supreme Court held that the defendant “does not have the right to a petit jury composed in whole or in part of persons of his own race ... but the defendant does have the right to be tried by a jury whose members are selected pursuant to nondiscriminatory criteria”. *Id.* at 85 quoting *Strauder v. State of West Virginia*, 100 U.S. 303 (1879).

Similarly, in *Taylor*, 419 U.S. 522, where the defendant challenged a Louisiana statute that excluded women from being in the jury pool selection, the Supreme Court also held that this violated the Sixth and Fourteenth Amendments. The Court stated that “restricting jury service to only special groups or excluding identifiable segments playing major roles in the community cannot be squared with the constitutional concept of jury trial.” *Id.* at 530. However, just like the Court in *Batson*, this Court also stated that they “impose no requirement that petit juries actually chosen must mirror the community and reflect the various distinctive groups in the population” because “defendants are not entitled to a jury of any particular composition.” *Id.* 538.

D. AN ANALYSIS OF WHETHER SCENT DATA CAN BE USED TO REFRESH THE MEMORY OF A WITNESS

This Court is tasked with determining whether the scent data reproduced by the prosecution be used to refresh the memory of the Respondent in identifying the Petitioner as the perpetrator of the crime even though the lower Court excluded the manipulated data offered by the Petitioner’s expert?

Under the Federal Rules of Evidence, Rule 612 allows for any writing or objects to be used to refresh the memory of a witness while on the stand if the witness has no recollection about a matter which he or she once had knowledge. Rule 612 states:

“(a) Scope. This rule gives an adverse party certain options when uses a writing to refresh memory:

- (1) While testifying; or
- (2) Before testifying, if the court decides that justice requires the party to have those options.

(b) Adverse Party’s Options; Deleting Unrelated Matter. [Unless provided otherwise], an adverse party is entitled to have the writing produced at the hearing, to inspect it, to cross-examine the witness about it, and to introduce in evidence any portion that relates to the witness’s testimony. If the producing party claims that the writing includes unrelated matter, the court must examine the writing in camera, delete any unrelated portion, and order that the rest be delivered to the adverse party. Any portion deleted over objection must be preserved for the record.” Fed. R. Evid. 612.

There are very few limitations on the type of material that may be used to refresh the memory of a witness. It is generally within the discretion of the court to determine what constitutes proper materials for refreshing the witness's memory, and materials such as drawings, entries in books, letters, maps, reports, newspaper articles, reports and more have been found to be acceptable memorandum. *See* Writings usable as refreshing memoranda, 8 Cyc. of Federal Proc. § 26:187 (3d ed.), *citing* *U.S. v. Coronado Beach Co.*, 255 U.S. 472 (1921); *Grunberg v. U.S.*, 145 F. 81 (1st Cir. 1906); *Pittman v. Littlefield*, 438 F. 2d 659 (1st Cir. 1971); *Bragg Mfg. Co. v. City of New York*, 141 F. 118 (S.D.N.Y. 1905).

In general, the memoranda should be made by the witness, however, memoranda made by other persons can also be used to refresh the witness' memory under certain situations. The following are cases where the court found that memoranda created by another can be used to refresh a witness' memory:

- They were made under the direction or supervision of the witness. *See Putnam v. U.S.*, 162 U.S. 687 (1896).
- The witness saw them made or was familiar with them when they were made. *See Wm. N. Flynt Granite Co. v. Darling*, 178 F. 163 (8th Cir. 1910); *Chateaugay Ore & Iron Co. v. Blake*, 144 U.S. 476 (1892).
- The witness checked, examined, read, or verified them while the facts were fresh in mind. *See Delaney v. U.S.*, 77 F. 2d 916 (3rd Cir. 1935); *Hodson v. U.S.*, 250 F. 421 (8th Cir. 1918).
- The witness testified that their contents refresh his or her memory as to an event or series of events to which they relate. *Briggs Mfg. Co. v. U.S.*, 30 F.2d 962 (D. Conn. 1929), *rev'd on other grounds*, 40 F.2d 425 (2nd Cir. 1930).

8 Cyc. of Federal Proc. § 26:187 (3d ed.).

The key factors with materials produced to refresh a witness's memory are the adverse party must have a chance to inspect the material, may cross-examine the witness about the material, and may even introduce it into evidence, if desired. 20A Mass. Prac. Annotated Guide to Mass. Evid. § 612 (2022-2023 ed.). Additionally, the "use of memoranda is confined to aiding the memory of the witness, concerning matters as to which it lacks clarity or completeness, as distinguished from supplying the witness with 'memory' in respect of matters of which the witness had no previous knowledge." 8 Cyc. of Federal Proc. § 26:185 (3d ed.); *see also Putnam v. U.S.*, 162 U.S. 687 (1896).

Rule 703 of the Federal Rules of Evidence governs the data used by an expert that they base their opinion testimony on. Specifically, Rule 703 states the following:

“An expert may base an opinion on facts or data in the case that the expert has been made aware of or personally observed. If experts in the particular field would reasonably rely on those kinds of facts or data in forming an opinion on the subject, they need not be admissible for the opinion to be admitted. But if the facts or data would otherwise be inadmissible, the proponent of the opinion may disclose them to the jury only if their probative value in helping the jury evaluate the opinion substantially outweighs their prejudicial effect”. Fed. R. Evid. 703.

The rules of evidence are designed to prevent the risk of inaccurate data being admitted into evidence. In *Commonwealth v. Barbosa*, 457 Mass. 773, 790 (2010), the Supreme Judicial Court held that “where there is reason to believe that evidence has been mislabeled or mishandled or that data have been fabricated or manipulated, a defendant may challenge the admissibility of an expert opinion relying on such evidence or data ... because an opinion must rest on evidence or data that provide ‘a permissible bases’ for an expert to formulate an opinion”.

“An expert may testify as to his or her opinion if that opinion is based on facts the expert personally observed, facts admitted in evidence, or facts that would be independently admissible”. *Commonwealth v. Holbrook*, 482 Mass. 596, 602 (2019). To determine if something is independently admissible, courts take into consideration underlying facts or data that would be admissible through an appropriate witness, and as long as it is independently admissible, the expert opinion may be based on facts or data not actually admitted into evidence. 43A Mass. Prac., Trial Practice § 13:46 (3d ed.).

Experts may not present information on direct examination that they relied on even if those facts and data formed the basis of their opinion testimony because “expert testimony to the facts of the test results obtained by someone else is hearsay.” *Id.*; see also *Commonwealth v. Piantedosi*, 478 Mass. 536, 543 (2017) (stating that the “purpose of this limitation on expert testimony is to prevent the proponent of the opinion from import[ing] inadmissible hearsay into the trial.”).