

Forensic Science: Crime Scene

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What is Forensics Again?

- Again, Forensic Science is the application of Science to Both Criminal and Civil Law!
- Investigators establish or exclude association between a suspect and a victim or a crime How? • We search for trace material
- But, what is trace material?

Examples of Trace Evidence

- Blood
- Saliva
- Semen
- Body fluids
- Paints
- Glass
- Footprints
- Tire impressions
- Flammable material
- Hair
- Fibers and drugs

Basic Crime Scene Procedures

- Physical Evidence recognition
- Documentation
- **PROPER COLLECTION AND CHAIN OF POSSESSION**
- **Remember-** this is where OJ's team tore the case apart- they could not beat the evidence, so they showed how the collection of the evidence was compromised

- Packaging
- Preservation
- Scene reconstruction
- Once this is done, a written report is made of the investigators initial conclusions_ yes, the scientific method strikes again!

Classification

1. According to location- primary or secondary

2. Size

- For example: **Macroscopic**- GSW victim dumped in a field- where are the crime scenes?
- The body, the body's wounds, the ground around the body

- **Microscopic-** trace evidence on the body
- **GS residue** around the wound, tire tread marks

3. Type of Crime committed

- **Homicide, robbery, sexual assault, shooting, stabbing, hit and run, arson-**
- **Gives us an idea of what to expect, but does not allow us to expect the unexpected**

4. Crime Scene Condition- organized or not
5. Physical location- inside or outside
6. Type of crime associated with the scene - do they match?
7. Composition of material
8. General nature of evidence- physical, biological, chemical
9. Physical nature of physical evidence- solid, liquid, gas
10. Type of question to be resolved

11. How was the evidence produced

- Position/ geometric
- Imprint/ indentations
- Striations
- Tears_ breaks_ cuts
- Mutual transfer of material_ Locard
- Deposits, dispersals, residues
- Cannot determine

What Does The Information Obtained From The Physical Evidence Tell Us?

I. **Corpus Delicti**

determination of the essential facts- is the blood in the middle of the road human or animal

II. **Modus Operandi**

mode of operation- their signature- criminals repeat their behavior

III. Linkage of persons, scenes and objects

- **Locard's Exchange Principle-**
- Whenever two objects come into contact with each other, a mutual exchange of materials will take place between them

IV. Proving or disproving a witness statement

V. Identification of suspects-
recognition

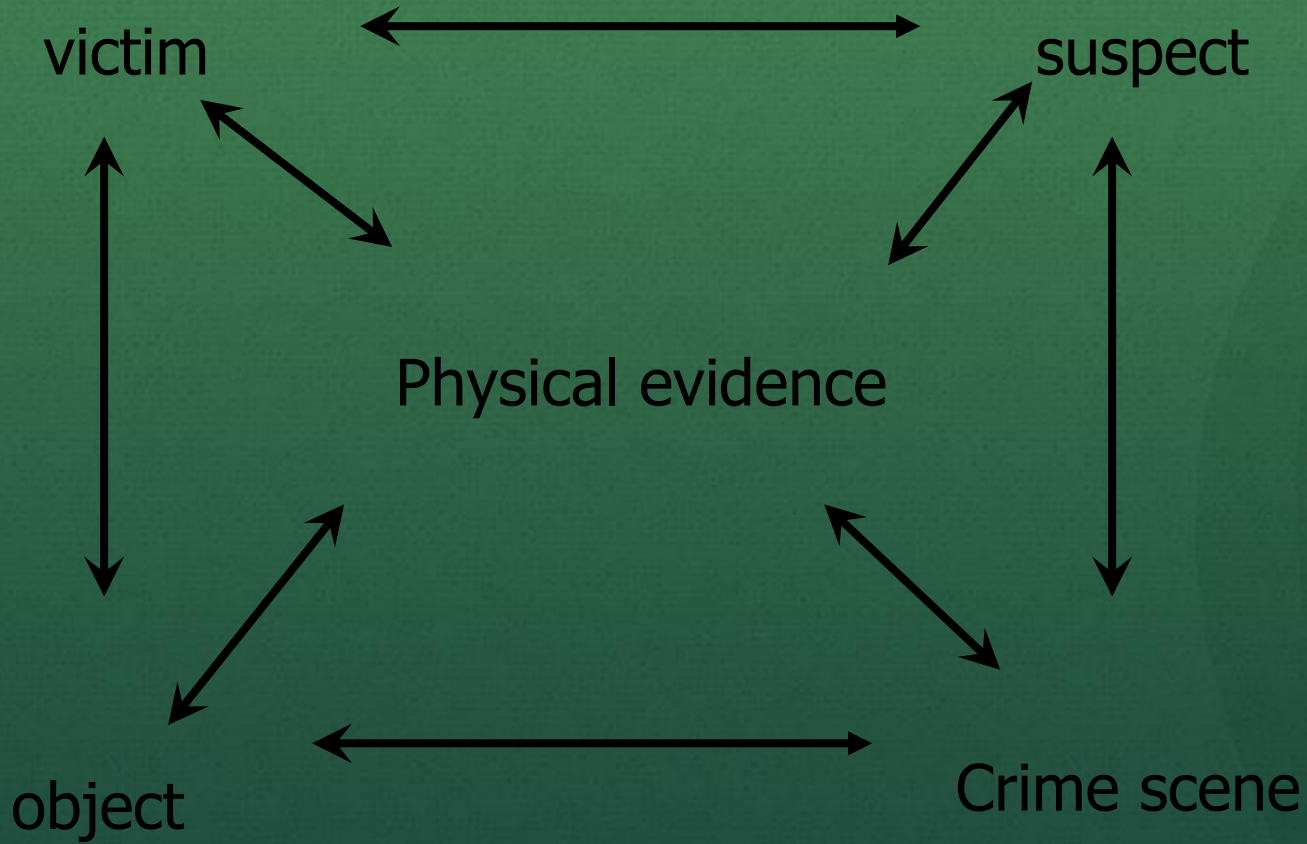
Identification

individualization AFIS

VI. Identification of unknown substances

VII. Reconstruction of the crime - the How is more
important than the Who!

VIII. Providing investigative leads



Why Do We Process The Crime Scene?

- What is the purpose?
- Who are the people involved?
- What is the role of:
 - Investigator
 - Lawyer
 - Juror
 - Judge

Michigan v. Tyler

Michigan v. Tyler

- In summation, we hold that an entry to fight a fire requires no warrant, and that once in the building, officials may remain there for a reasonable time to investigate the cause of the blaze.
- Thereafter, additional entries to investigate the cause of the fire must be made pursuant to the warrant procedures governing administrative searches.

- Evidence of arson discovered in the course of such investigations is admissible at trial, but if the investigating officials find probable cause to believe that arson has occurred and require further access to gather evidence for a possible prosecution, they may obtain a warrant.
- Only upon a traditional showing of probable cause applicable to searches for evidence of crime. *United States v. Ventresca*, **380 U.S. 102**

- Once fire is out, you can search, but if you leave, you need a warrant
- May seize evidence in plain view
- Imminent destruction

Mincey v. Arizona

- All unreasonable search and seizures
- Murder scene exception
- Ripping the place up
- Kept going back to the scene

Okay, So.....

- What if a fire breaks out in my classroom?
- Can the arson investigator search my room?
- Can he/she come back tomorrow to search my room?
- What can the investigator do while they are for the warrant?

5th Amendment

- **Miranda Rights**

- 1. You have the right to remain silent and refuse to answer questions.
- 2. Anything you do say may be used against you in a court of law.
- 3. You have the right to consult an attorney before speaking to the police and to have an attorney present during questioning now or in the future.

- 4. If you cannot afford an attorney, one will be appointed for you before any questioning if you wish.
- 5. If you decide to answer questions now without an attorney present you will still have the right to stop answering at any time until you talk to an attorney
- 6. Knowing and understanding your rights as I have explained them to you

Rules of Evidence

- Best Evidence Rule
- Tests are NOT the means to the end, original writing must be made to support what the evidence says?
- Is the evidence relevant and reliable?
- What is its probative value?

Daubert Decision-

- Can say characteristics are the same, but NOT that they came from them.
- Has the scientific theory been tested?
- Has it been peer reviewed?
- What is the rate of error?
- Are controls in existence and maintained?
- Is the theory generally accepted in the scientific. Community?

4 Distinctive Components of Crime Scene Management

- 1. Information Management
- 2. Manpower Management
- 3. Technology Management
- 4. Logistics Management

First Responders- Police / Fire / EMT

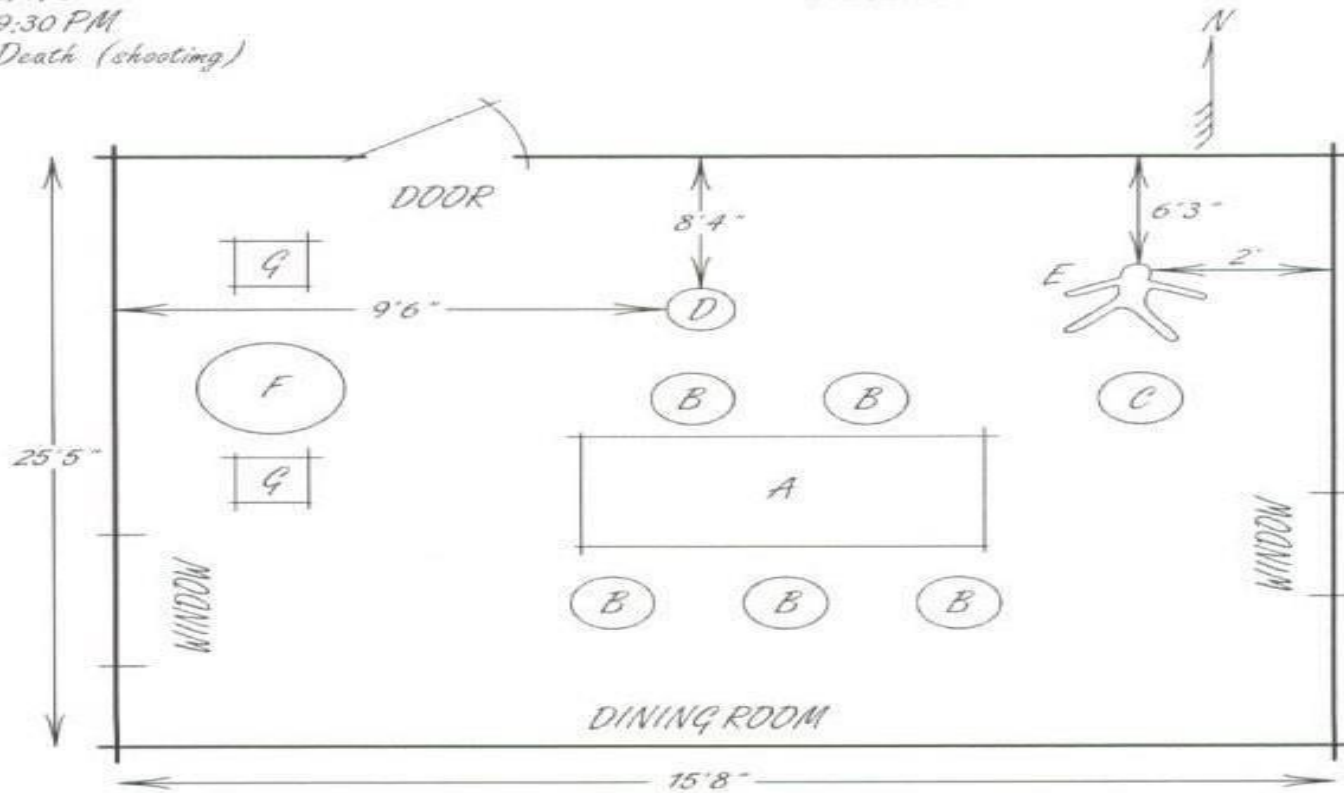
- 1. Assist victims
- 2. Search for/ arrest suspect
- 3. Detain witnesses- keep them separate- Why?
 - Preserve objectivity
- 4. Protect crime scene- record names of all who enter/leave
- 5. Record ALL movements and alterations to the crime scene

Crime Scene Survey

- 1. Preliminary walk through
 - Helps mental reconstruction
 - Any condition requiring immediate attention
 - Weather conditions- So what?
- 2. Document
 - Note taking
 - Video
 - Photo
 - Sketch

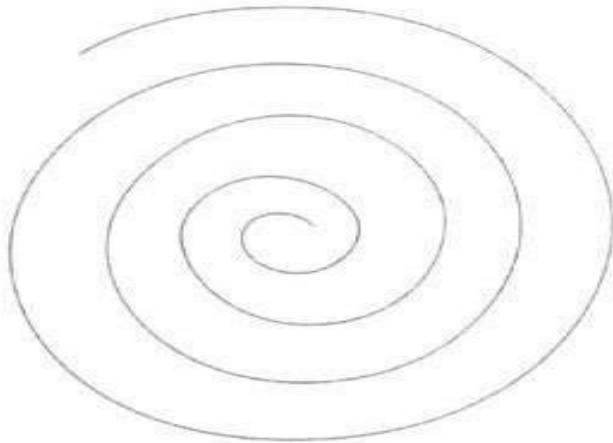
2747 Aragon St.
6/7/81
9:30 PM
Death (shooting)

Sketch by Officer
John Smith

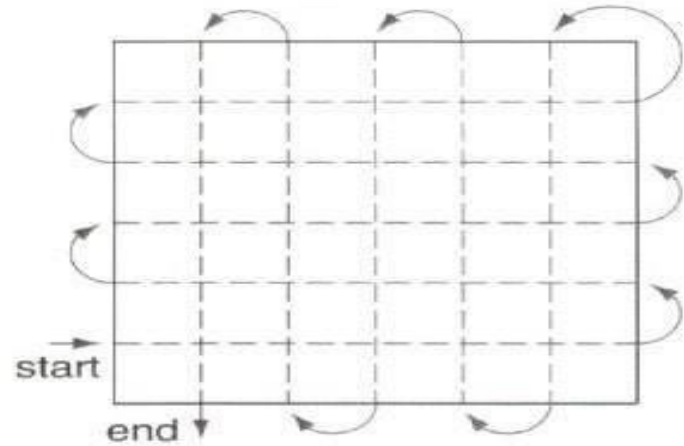


- A - Dining room table
- B - Chair
- C - Overturned chair
- D - 0.38 Revolver
- E - Male body
- F - Table
- G - Chair

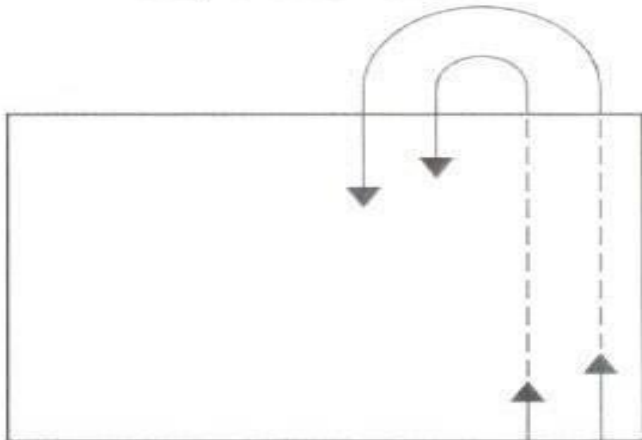
Spiral search method



Grid method



Strip or line search



Quadrant or zone search



Chain of Possession

- ALL evidence packed in a primary container, seal, then place in secondary container
- Seal with tamper resistant tape
- Mark items collected, who collected them, where they were collected, date, time, description
- IF given to anyone else, they write down who they received it from and the date, time again.
- Okay.....

The Simpson Matter

- Why did he win?
- No, he was not innocent
- Tactile and procedural issues
- Like what?
- They protested how things were collected
- Newbie was helping them collect
- Some evidence was over 3 weeks old when they collected it
- They claimed negligence in collection and handling

- They claimed testing and contamination problems
- They made big deals out of small issues
- The race card
- The rhyme- it stuck

111

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O SIMPSON

111 111 111 111

#13 SOCK



(LARGE)
EYE

111 111 111 111 111 111 111

N BROWN

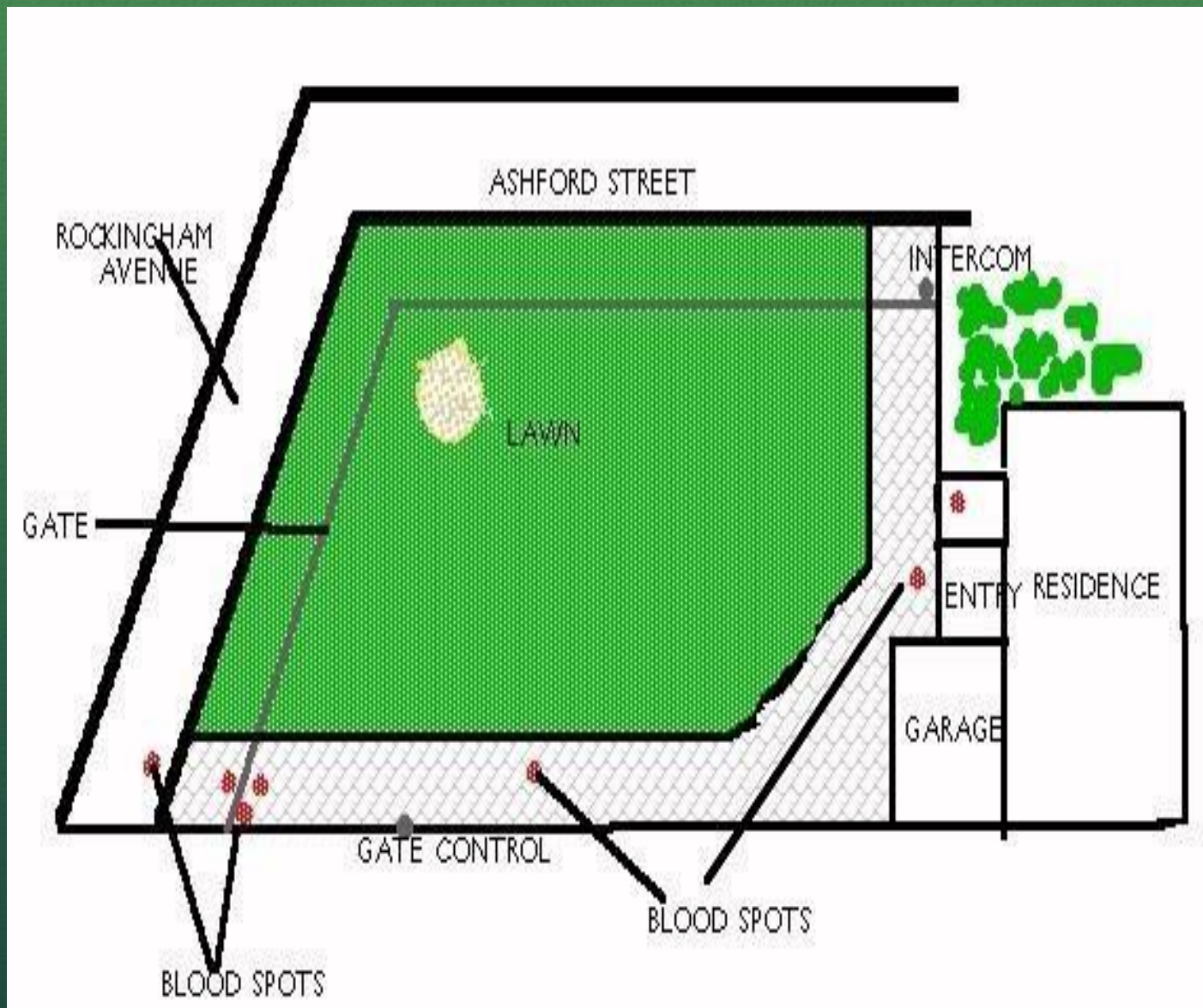


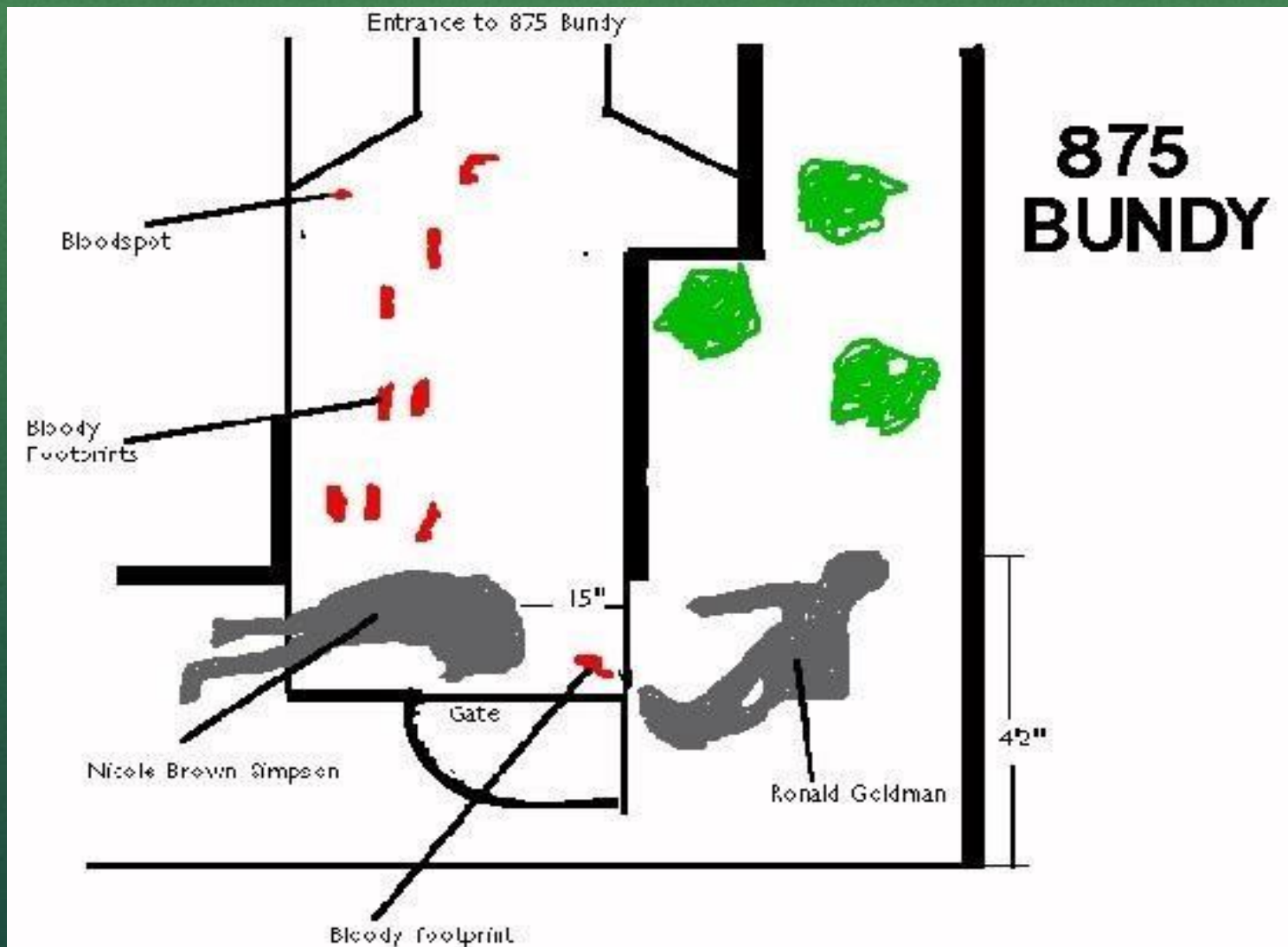
R GOLDMAN

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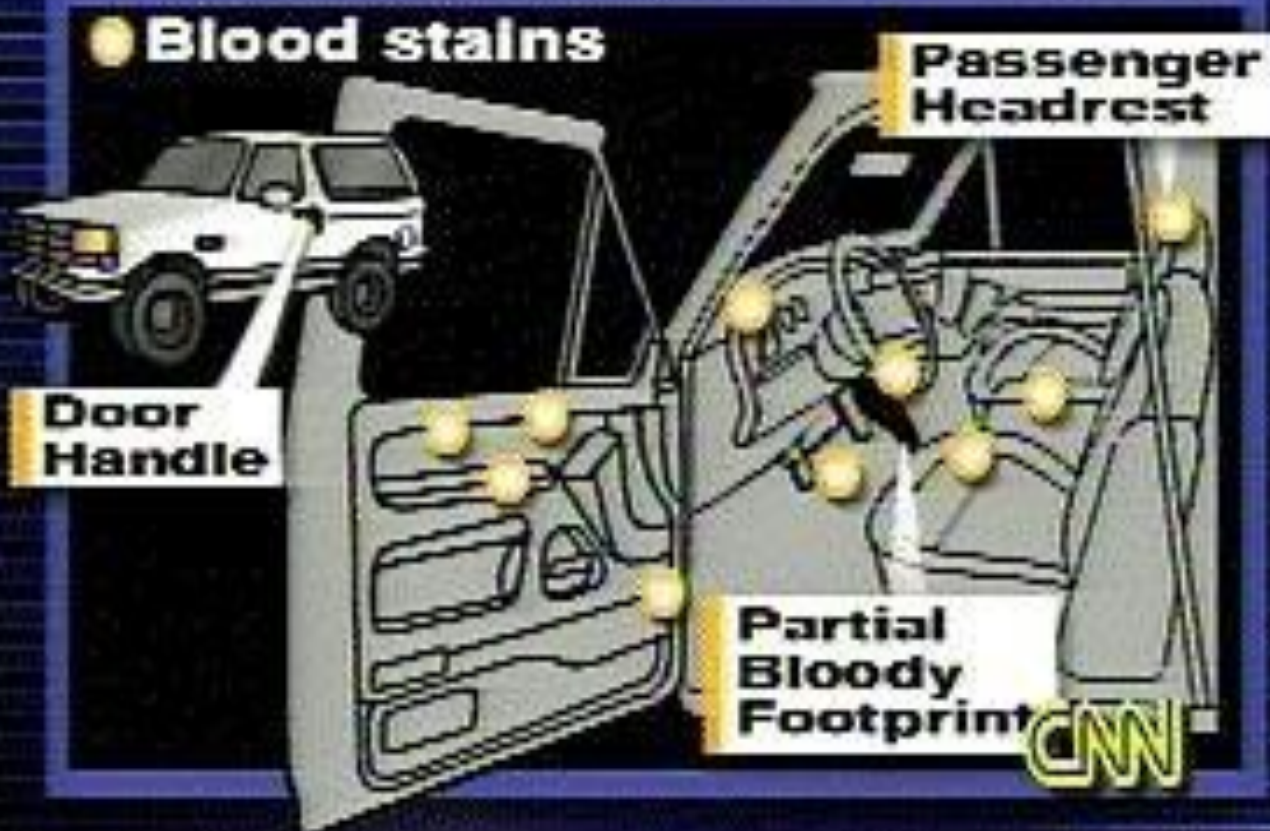
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(LARGE)
EYE





Inside Simpson's Vehicle





AP

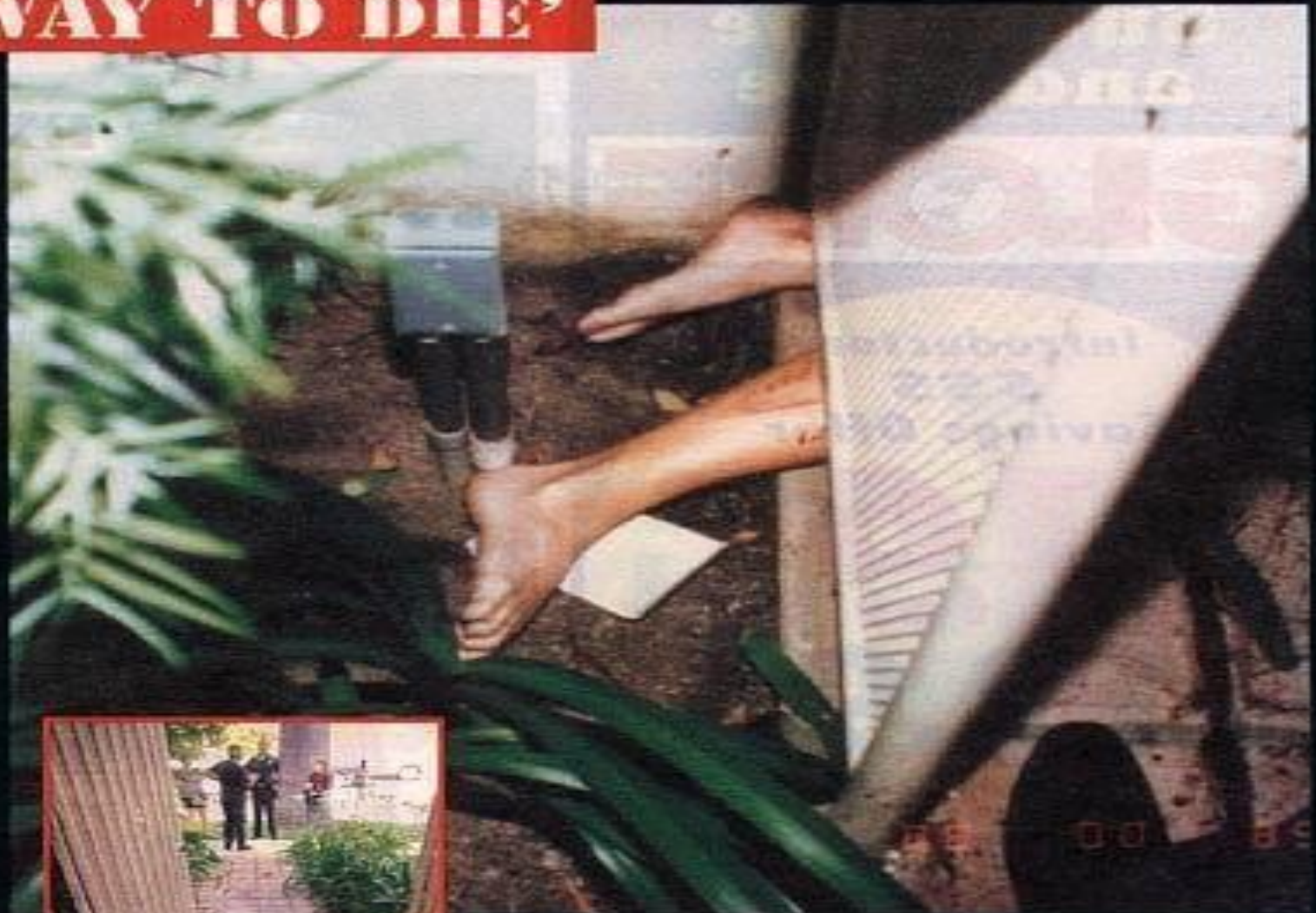






Ron Goldman's butchered corpse sprawls against the fence of Nicole's condo, his tattered shirt covering wounds to his upper torso and blue jeans stained crimson with

WAY TO DIE?



Nicole's legs protrude under the gate leading to her front door, a restaurant take-out menu under her right foot. At left, police survey the bloody path leading to her condo

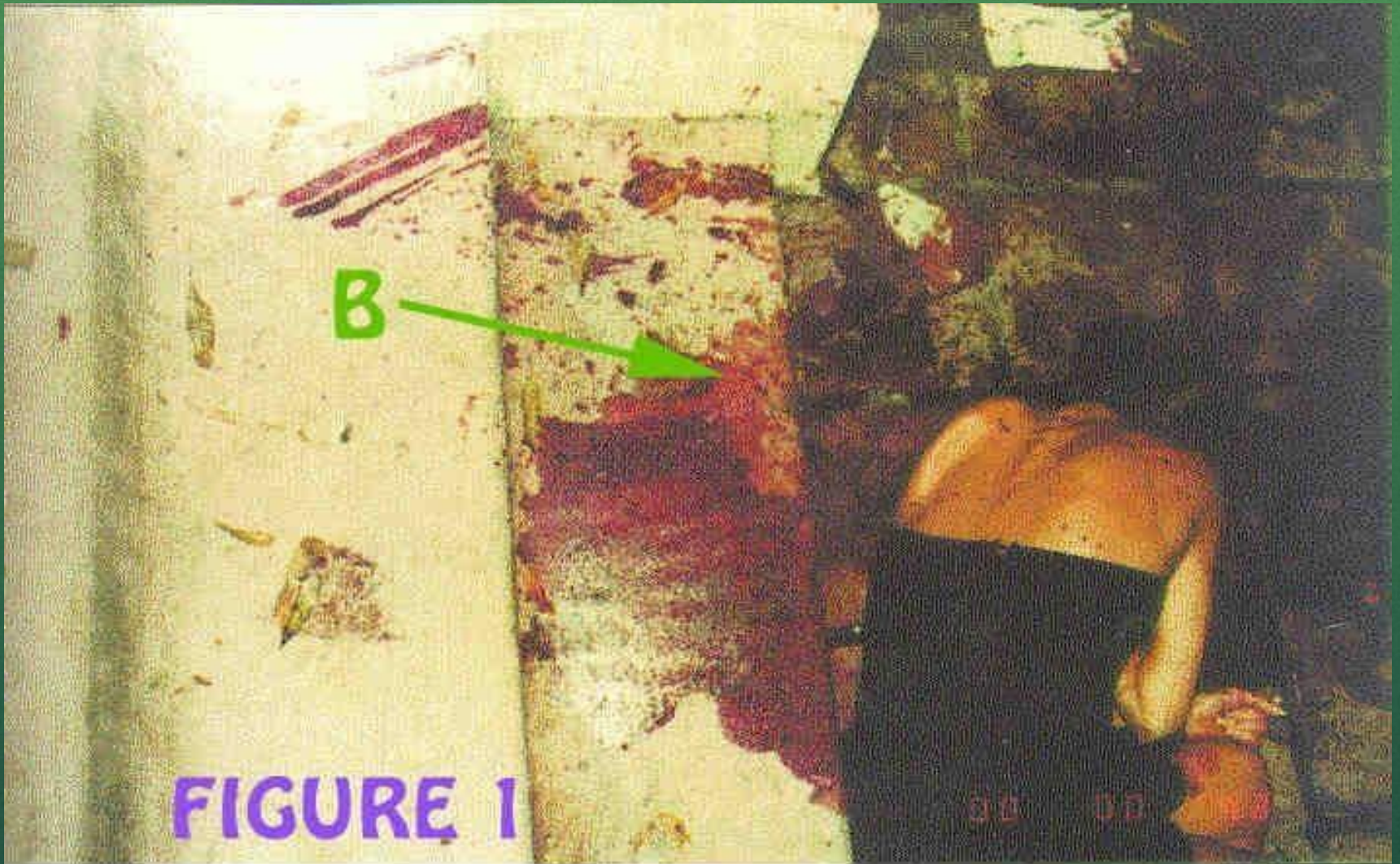


FIGURE 1



FIGURE 2

Questions or Comments

