

Deception Detection

Facilitator:

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NOTE: This presentation contains a substantial amount of text in this font size.
If you can't read this text easily, I strongly suggest you move forward in the room.

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A Note To Clarify Who's Guilty



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A Bit About Me

1. Ph.D. in Cognitive Social Psychology, Criminal Justice, and Evaluation Research.
2. Served on faculty at three universities, taught undergrad and grad classes in Criminal Justice, Corrections, Social Psych, and Statistics.
3. 39 years experience in criminal justice.
4. Previously worked with NSA – hacking Soviet cryptosystems in Berlin, Germany 1967 through 1970
5. Sworn staff in Colorado - Cyber Crime Analyst – provide service to Probation/Parole in Colorado – examined over 1,300 sex offenders' computers.
6. Instructor on field computer forensics for APPA, NLECTC, HTCIA, USDOJ, DOD, ICAC and other “alphabet” agencies.
7. Master Trainer for Field Search Instructors.



The Truth Continuum

TRUTH	Statement Type	Purpose	Example
	Truthful	To tell the truth.	“I pushed my spouse off the cliff.” “The painting is horrible.”
	Misleading - Lexical	Misleading meaning	“I didn't see my spouse fall.” “The painting is unique.”
	Omission	Leave out part of the event.	“Eventually, I saw my spouse at the bottom of the cliff.” “I've always loved your work.”
	Avoidance/Qualification	Qualified meaning	“I think my spouse slipped.” “I'm not an art critic.”
	Exaggeration	Distort the truth	“My spouse is extremely clumsy.” “The use of color is brilliant.”
FABRICATION	Fabrication	Made up story	“My spouse jumped off the cliff.” “I love the painting.”

Influences on Deception

1. Consequences of being caught in lie.
2. Factual probability of being caught in lie.
3. Respondent's experience in deception.
4. Respondent's perception of interviewer's ability to detect deception.
5. Amount of time respondent had to prepare for interview or statement.
6. Structure and nature of question(s).

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The General Rule

Whenever possible, people will go to great lengths to avoid deception, especially when it involves creating falsified information.

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Three Simple Rules To Get Us Started

1. Establish the baseline of “normal” behavior for the respondent.
2. Look for changes in response sets.
3. Probe changes, especially when they appear in “clusters”.

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Myths

- Speech hesitations increase with deception.
 - False – no change
- Speech errors increase with deception.
 - False – no change
- Speech pitch goes up when lying.
 - This tends to be true – due to stress involved.
- Speech rate slows down when lying.
 - Only when the lie is difficult to construct.

Source: Table 5.2; Detecting Lies and Deceit: Aldert Vrij, 2008

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Myths

- Increase in speech latency when lying.
 - This tends to be true.
- Longer pauses in speech when lying.
 - This tends to be true.
- Gaze shifts during lie (up & left, away from interviewer, etc.)
 - False – there is generally no change in pattern.
- People smile more/less when lying.
 - False – there is generally no change in pattern.

Source: Table 5.2; Detecting Lies and Deceit: Aldert Vrij, 2008

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Myths

- Blinking increases when lying.
 - False – there is generally no change in pattern.
- Self manipulation (scratching, rubbing, etc.) increases when lying.
 - False – there is generally no change in pattern.
- Illustrators (accentuating gestures) decrease during lying.
 - True – liars tend to illustrate less because they are focusing on the words.

Source: Table 5.2; Detecting Lies and Deceit: Aldert Vrij, 2008

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Myths

- Emblems (gestures with intrinsic meaning) increases when lying.
 - False – there is generally no change in pattern.
- Leg and foot movement increased during lies.
 - False – it actually decreases when lying.
- Head movement increases during lying.
 - False – there is generally no change in pattern.

Source: Table 5.2; Detecting Lies and Deceit: Aldert Vrij, 2008

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Myths

- Trunk movement increases during lies.
 - False – there is generally no change in pattern.
- Shifting position increases during lies.
 - False – there is generally no change in pattern.

Source: Table 5.2; Detecting Lies and Deceit: Aldert Vrij, 2008

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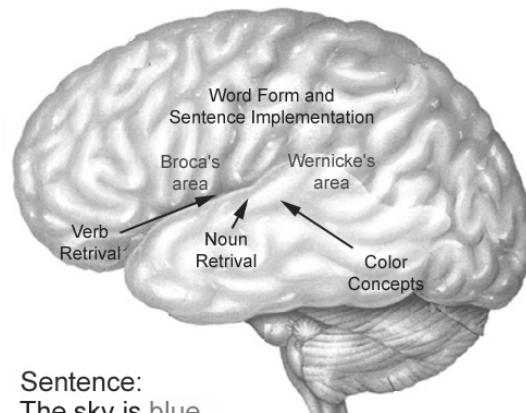
Summed results from 79 studies assessing people's ability to detect lies:

**On average they were right
54.27% of the time.**

Source: Appendix 6.1; Detecting Lies and Deceit: Aldert Vrij, 2008

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Language involves retrieval of information from many brain areas.



Sentence:
The sky is blue.

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What You Do To Speak A Sentence.

1. Normal conversation is about 120 words per minute, that's about two words a second.
2. Each word must be drawn from a mental lexicon of about 80,000 words (20,000 to 150,000 depending on education).
3. Each word is selected to express an exact intention.
4. Each word must appear in the right syntactical position, in the proper tense, and with correct inflection.
5. Two words a second means about 14-20 phonemes (speech sounds) each of which requires 100 muscles to be properly toned (relaxed or tensed).

Speech requires extraordinary decision-making, rule monitoring, and motor control. In short, it is a LOT of work!

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There is some good news.

Using Discourse Analysis (examining the word usage of a respondent), we **CAN** find points in a statement that need to be probed.

Follow-up on these points can lead us to discover:

1. Omitted information.
2. Falsified information.

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Understanding Language Use

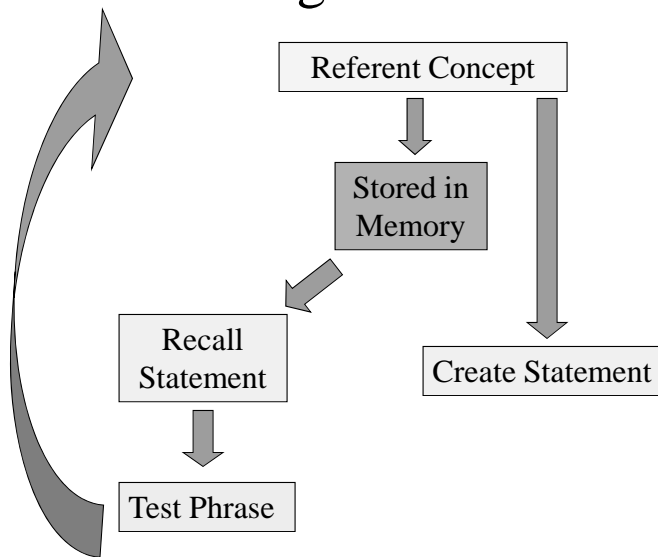
The remainder of this class teaches you simple rules for analyzing a statement. These rules are based on a combination of linguistic approaches to language.

To understand how and why these rules work, we first must understand how spoken and written utterances are generated.

Hang in there – it WILL make sense later ☺

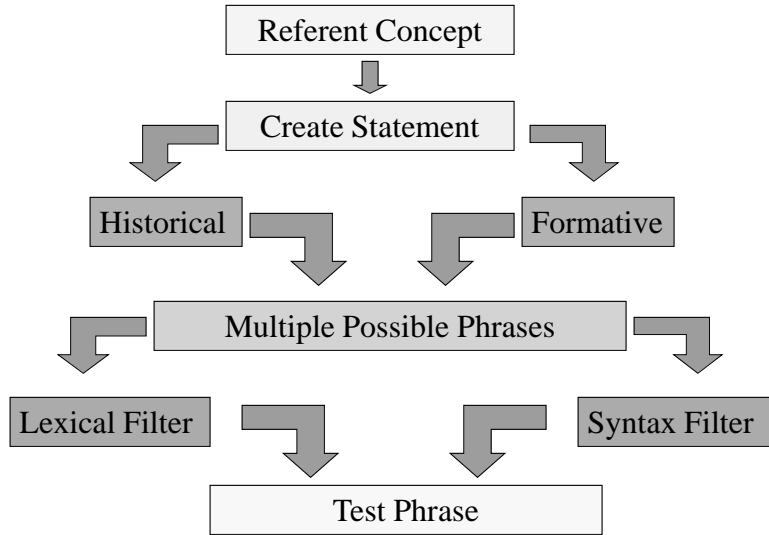
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Cognition and Language



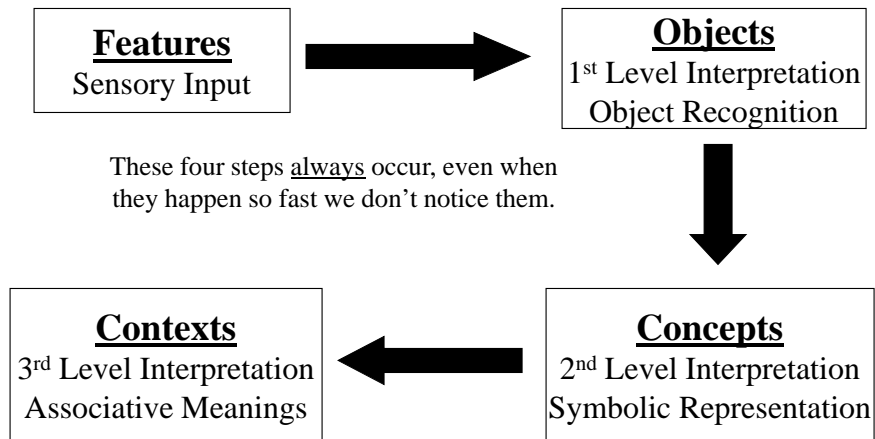
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Cognition and Language



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Cognition Simplified



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The Rules

There is NO reliable way to determine if someone is being deceptive in a statement based on a single or multiple indicator discussed next.

What you can do, however, is use this information to determine **WHERE** and **HOW** to probe the statement.

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Statement Structure

The three parts of a statement should be roughly balanced.
25-50-25 is common.

“Several of my friends and I were going to Trino’s Bar. We walked down Euclid and then turned on Walton. As we approached the bar, we saw two guys standing in front of the door. The tall guy reached into his pocket and pulled out a knife. He pointed the knife at us and said ‘give me your money’. I thought about running, but he was too close and I was afraid he would cut me. I reached into my pocket and pulled out \$45 I had there. He waived the knife at me and then took the money from my hand. He and his friend then ran down the street and turned South onto Park St. We rushed inside and told the bar tender we had been robbed. The bar tender called the police for us.”

3 sentences in ‘prologue’

5 sentences in ‘event’

3 sentences in ‘epilogue’

The statement is probably complete.

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My friend, Tommy, and I were hanging out in front of Trino's bar. We had been standing there shooting the breeze. Then we saw a group of guys coming down the street. They were weaving all over the side walk, talking loud, and really making a lot of noise. Tommy commented that they had already had enough to drink and I laughed. As they went into the bar, one guy pulled a wad of money out of his pocket to pay the cover charge. I saw some bills drop on the sidewalk. After he was inside, I picked up the bills and put them in my pocket. Tommy never spoke to the guys and they never spoke to us. We never touched them. Tommy and I went off to shoot some pool at Wilsons. I paid for the pool with the money I got from the drunks.

5 sentences in 'prologue'
2 sentences in 'event'.
5 sentences in 'epilogue'

Probe the statement,
its probably missing
something.

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There should be roughly 2-4 sentences of text for every hour in the 'prologue' and 'epilogue'. A statement covering an entire day (roughly 15 hours) should be about 30-60 sentences long.

Significant deviations from this rule are reason to probe the statement. Shorter statements are heavily edited while longer statements are meant to be 'distracting'.

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Pronouns

Pronouns are the most important part of any statement. They show three major things which relate to anxiety in statements:

1. Presence
 - a. "I drove my car to the station."
 - b. "Drove my car to the station."
2. Responsibility
 - a. "I drove my car into the building."
 - b. "The car hit the building."
3. Affiliation
 - a. "My daughter was late again"
 - b. "The kid was late again."

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A Special Case Of Responsibility.

Took

Versus

Gave

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I
She
He

Versus

We

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Missing Time

Look for words which indicate periods of time are missing (temporal lacunae). Probe what happened during these time periods – the respondent edited them out for a reason.

Later	Afterwards	Finally
From there	Next thing I knew	Now
Then	Got there	Eventually

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Reactive Phrases

There are certain words which should always draw your attention. These words generally indicate a reaction to something edited out of the statement by the respondent. You should probe as to what happened surrounding the reactive word.

Left	Departed	Because
That is why	Since	So as

Anytime a respondent feels they have to explain their statement, PROBE.

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Generalized Phrases

Probe generalized phrases, they often are designed to hide activity the respondent doesn't want to discuss.

“Messed around”
“Talked a while”
“Got ready to leave”
“Argued some”

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Open Ended Statements

Look for incomplete actions or actions noted as ongoing or ending without a start. Probe to see if the action was achieved or when it was begun and what interrupted it.

Started	Began	Tried to
Continued	Resumed	Finished

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Noun Changes

Due to lexical filtering, people use nouns in a specific way. Notice any changes in nouns, where they occur, and probe as to the meaning of the change.

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“I began counting the **money**. I had placed the **money** in the bank bag when I heard a knock at the door. It was John, my friend. We talked a while and then he left. I put the **bag** in the safe and went home.

The next morning the police came to my house and told me the **money** was missing from the store.”

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“I was walking through the park on Sunday when I saw a **girl** sunbathing on a blanket near the pond. I began to talk to her. The **girl's** name was Harriet. She lived in an apartment nearby with her family and said she came to the park regularly. We talked for about an hour and I left.

The next day I heard some **woman** had been raped in the park. I was surprised when I found out it was her. I haven't seen her in the park since the day I talked to her.”

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“My wife was very drunk. She picked up the **pistol** from the dresser and began to wave it around. She pointed the **pistol** at me and then at her as she said she wished she could die. Suddenly she pointed the **pistol** at her head and said ‘screw you’. The **gun** went off. She fell to the floor and blood was everywhere. I kicked the **pistol** out of her hand and called 911. I tried to stop the bleeding, but couldn’t.”

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Final Rule !

LOOK and **LISTEN** to the words the respondent uses. Don’t interpret them, take them to mean exactly what is written or said. If the words don’t make sense, probe the meaning with the respondent.

When probing, use the same words the respondent used, don’t translate them in any way.

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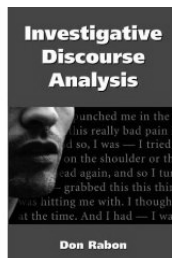
**Let's look at your statement
(Now it starts to get interesting)**

1. Do pronouns change?
 1. Presence (Are you there? Do you disappear?)
 2. Affiliation (“my” “we” “our”)
 3. Responsibility (disappearing self)
2. Do nouns change?
3. Any missing or compressed time?
4. Any reactive phrases? (left, that’s why, because, so)
5. Any open ended phrases? (started, tried, began)
6. Any generalized phrases (talked a while, argued some)

Note when any of the above occur in your statement.
If you were interviewing you, where should you probe?

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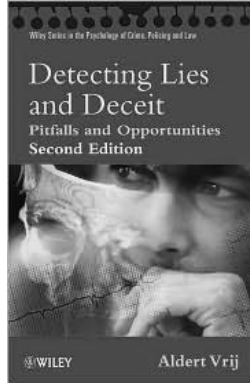
Other Resources For Further Information.



Either of these books by
Don Rabon are well worth
your time.

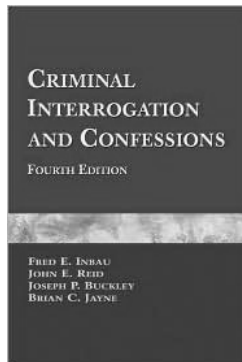
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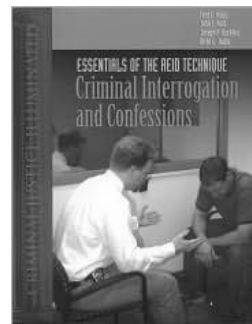
Heavily research based, but an excellent resource.

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Two classic books on interrogation.

I don't agree with some of what they say, but they are a good resource regardless.



By: Joseph P. Buckley

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