# PSYCHOLOGICAL NARRATIVE ANALYSIS

# PSYCHOLOGICAL NARRATIVE ANALYSIS

# A Professional Method to Detect Deception in Written and Oral Communications

By

JOHN R. SCHAFER, Ph.D.

FBI Special Agent (Ret.) National Security Division Behavioral Analysis Program



CHARLES C THOMAS • PUBLISHER, LTD. Springfield • Illinois • U.S.A.

#### Published and Distributed Throughout the World by

#### CHARLES C THOMAS • PUBLISHER, LTD. 2600 South First Street Springfield, Illinois 62704

This book is protected by copyright. No part of it may be reproduced in any manner without written permission from the publisher. All rights reserved.

#### ©2010 by CHARLES C THOMAS • PUBLISHER, LTD.

ISBN 978-0-398-07927-7 (hard) ISBN 978-0-398-07928-4 (paper)

Library of Congress Catalog Card Number: 2009051484

With THOMAS BOOKS careful attention is given to all details of manufacturing and design. It is the Publisher's desire to present books that are satisfactory as to their physical qualities and artistic possibilities and appropriate for their particular use. THOMAS BOOKS will be true to those laws of quality that assure a good name and good will.

> Printed in the United States of America CR-R-3

#### Library of Congress Cataloging-in-Publication Data

Schafer, John R., 1954-

Psychological narrative analysis : a professional method to detect deception in written and oral communications / by John R. Schafer. p. cm.

Includes index.

ISBN 978-0-398-07927-7 (hard) -- ISBN 978-0-398-07928-4 (pbk.) 1. Deception. 2. Truthfulness and falsehood. 3. Content analysis (Communication) I. Title.

BF637.D42.S33 2010 153.6--dc22

2009051484

### PREFACE

Imagine you suspect your spouse is having an affair. Imagine your child comes home late and you suspect shenanigans. Imagine your clients or employees mislead you. If you're like most people, you ask yourself two questions: "How do I know the person talking to me is telling the truth?" and "What do I do if I think he's lying?" I ask myself these two questions every day when I speak with friends, colleagues, supervisors, used car salesmen, and the clerk in the grocery store who tells me that spaghetti is in aisle three. The list is long and continues to grow. When our three children became teenagers, they, too, were added to the list.

Most people lie to gain an advantage or to protect themselves from embarrassment, social reprimands, or even prison. During my 25 years as a police officer and Special Agent for the Federal Bureau of Investigation (FBI), I witnessed countless lies told for a variety of reasons in every imaginable circumstance from petty criminals to sophisticated international spies, each with differing levels of ability to lie convincingly.

Early in my law enforcement career, I catalogued how people told lies. Over time, patterns emerged. I found that liars typically use two methods to deceive: obfuscation and omission. Obfuscation creates verbal confusion to disguise the truth. With omission, liars tell the truth up to the point where they want to conceal information, skip over the information they want to conceal, and continue telling the truth. Generally speaking, liars prefer omission to obfuscation because it is easier to keep track of withheld information than to remember partially or entirely fabricated details.

I found that even though some people seem to be better liars than others, there were still significant similarities in the way in which they lied. As Yogi Berra once said, "You can observe a lot by watching." I tried to watch everything-closely. The more I watched, the more rigor I attached to the process. This led directly to my doctoral studies at Fielding Graduate University in Santa Barbara, California, where I studied psychology.

My studies at Fielding culminated with my dissertation, which examined the grammatical differences between truthful and deceptive narratives. This book contains much of that ground-breaking research. I organized the words and grammar patterns into a system that is easy to remember and easy to use. Since most of the material in this book is not found in other commercially available sources, I decided to label this system Psychological Narrative Analysis (PNA). PNA is a robust system that tests truthfulness in both written and oral communications and provides clues to the communication styles and behavioral characteristics of others. PNA techniques allow people to peer into the hearts and minds of others to discover what they are thinking and evaluate the veracity of what they say.

J.R.S.

### INTRODUCTION

#### FIVE LESSONS IN BEHAVIORAL ANALYSIS

I was 14 years old, too old to ride a bicycle and too young to drive. The Chicago Transit Authority (CTA) extended my reach to every point in the city, but at a price. In 1968, a quarter for bus fare was hard to come by, especially for someone who was too young to work. Each school day, I rode three buses to and from Mount Carmel High School. I caught the bus at 115th Street and Vincennes Avenue, transferred at 87th Street, transferred at Stony Island, got off at 63rd Street and walked three blocks to Mount Carmel.

One day on my way to school, I looked at the transfer I was holding and noticed that the date and month were printed on the transfer but not the year. The driver hand-punched a clock printed at one end of the transfer. Transfers cost an extra quarter and could be used to ride buses on connecting routes within one-hour of the time punched by the driver. Without the year being stamped on the transfer, it meant that I could use the transfer on the same date and time the following year. I found a vulnerability in the system. As long as I got on the bus at a corner where two bus routes intersected, I could use a transfer and ride the bus for free, saving my money for more important things like nickel candy bars and 12 cent comic books.

The downside to my plan was I did not have a steady source of used transfers and even if I could secure used transfers, I could not start riding the bus for free until the same date and time the following year. I watched how bus drivers handled transfers. The first thing I noticed was that the drivers were too busy minding traffic, keeping schedules, and collecting cash fares to look at the printed date on the transfer, much less the hand-punched time stamp. They simply took the transfer, crumpled it, and put it into a canvas bag hanging from the fare box. This was my *first lesson* in behavioral analysis. *People prioritize their activities and pay more attention to the activities that they consider most important.* For bus drivers, checking the date and time stamp on transfers had low priority.

One afternoon, I got off the bus at 115th Street, the turn-around point, and noticed that the driver emptied the contents of the canvas bag into a nearby

trash barrel. That trash barrel represented the pot of gold at the end of the rainbow. I watched the trash barrel for several days and noticed that only a few drivers emptied the canvas bags into the trash barrel. I later learned that drivers were supposed to take the used transfers back to the main depot to be shredded. I learned my *second lesson* in behavioral analysis. *Some people think that rules do not apply to them.* 

Day after day, I collected transfers from that trash barrel. I ironed the transfers to eliminate wrinkles and indexed them according to bus route, date, and time in a wooden index box my grandfather had given me. I saved those transfers for use on the corresponding date and time one year hence.

Two weeks passed. I could not wait until next year. I wanted my freedom now. I needed an immediate solution. I took action. I began passing outdated transfers taking a chance I would not get caught. I handed the bus driver the outdated transfer with the same confidence I would a valid transfer. The probability of getting caught was low because I knew the driver was attending to more important tasks. On several occasions, when the driver questioned the validity of my transfers, I quickly pushed a quarter into the fare box and sat down. I learned my *third lesson* in behavioral analysis. *People tend to believe others if they act and speak with confidence*.

The first few times I passed outdated transfers, I felt as though the bus driver knew I was handing him a bogus transfer when, in fact, he was oblivious. I later labeled this feeling the Spotlight Effect. I learned my *fourth lesson* in behavioral analysis. *People think others readily recognize lies when, in reality, this is not the case.* As a law enforcement officer, I used the Spotlight Effect to my advantage by telling suspects that their lies were so transparent, it was like having a neon light on their forehead blinking "Liar" every time they opened their mouth.

During that first year, I also learned that distracting the driver with a friendly greeting further increased the probability of successfully passing outdated transfers. Since I took the same bus routes at the same time each day, I saw the same drivers. I made a point of developing a personal relationship with the drivers. I learned that the bus driver on the Vincennes Route was an avid Chicago White Sox fan. When I handed him my transfer, I made a slightly negative or slightly positive comment about the White Sox. In either case, the driver felt obligated to agree or disagree with the comment, which kept his attention away from the outdated transfer I handed him. The bus driver on the 87th Street Route was a proud grandmother. When I handed her my transfer, I asked her about her grandchildren. The Stony Island route rotated drivers, so I commented about general topics when I gave them the outdated transfer. I learned my *fifth lesson* in behavioral analysis. *The more people talk about themselves, the less time they have to observe the behavior of others.* 

I rode the bus for free until I bought my first car two days after my 18th birthday. Free transportation was possible because I observed and cata-

logued human behavior. Thus began my life-long quest to understand human behavior. In retrospect, I realize that what I did was wrong, but I learned very valuable lessons from the experience.

I joined the Hinsdale, Illinois Police Department in 1980. For five years, I observed and catalogued human behaviors. In many instances, I instinctively knew what to say and do when I interviewed suspects, but I did not have a specific name for the techniques I used. In 1985, I became an FBI Special Agent. As an FBI Special Agent, I continued to hone my interviewing skills.

My interest in human behavior increased in 1998 when I was selected to be a behavioral analyst for the FBI's National Security Behavioral Analysis Program (BAP). The BAP differs from the more familiar Behavioral Sciences Unit (BSU). BSU investigators analyze crime scenes and, based on the artifacts at the crime scenes, develop hypotheses as to who may have committed the crime. The focus of the BAP is on national security investigations such as espionage, counterintelligence, and preventing the transfer of cutting edge technology to foreign governments. Unlike the BSU, the BAP typically has a known target. BAP team members assess the target's behavioral weaknesses and use those weaknesses to prevent the target from further damaging national security.

When I joined the BAP team, I decided to formalize my education in behavioral analysis. In 2000, I enrolled in a Ph.D. program at Fielding Graduate University. For my dissertation, I chose to examine the grammatical differences between truthful and deceptive narratives.

I chose to examine the grammatical differences between truthful and deceptive narratives because research has shown that nonverbal cues to detect deception are not consistently reliable. Researchers theorized that physiological changes occur when people lie because they fear getting caught. These changes, however, are not consistent from one person to the next, making lie detection difficult. A liar who does not fear getting caught or controls his reaction to fear will appear truthful. Conversely, a truthful person who is nervous often experiences the same physiological changes as does a liar and consequently displays the same nonverbal cues as a deceptive person.

Based on my research, I developed Psychological Narrative Analysis (PNA). PNA is the study of word choices and grammar structures people choose when they speak or write. PNA techniques identify specific words, speech patterns, and grammar structures that reveal a person's truthfulness and provide clues to a person's personality and behavioral characteristics.

Words represent thoughts and grammar formats those thoughts. Both truthful and deceptive people use the same grammar rules to construct sentences. When people obfuscate or omit the truth, they must use accepted grammar structures or their sentences would make no sense. The only difference between truthful statements and deceptive statements is the omission or obfuscation of the truth. PNA techniques identify and exploit those differences.

Although words can represent several meanings depending on context, writers and speakers intend one meaning when they write or speak with the exceptions of double entendre, puns, and sarcasm. For example, the word *hot* describes temperature, spiciness, or passion depending on the context of the sentence. In the sentence "The weather is hot," temperature is the intended meaning for the word *hot*. PNA analyzes words within the context of the writer or speaker's intended meaning. If the meaning of a word remains unclear within the context of one sentence, then the ambiguous word should be analyzed within the global context of the communication. With few exceptions, word definitions remain consistent throughout a single communication.

The first part of this book presents a full range of PNA techniques in concise, everyday language. Examples accompany each technique where applicable. The second part of this book offers examples of PNA using oral and written communications. Where possible, the examples I used were taken from actual cases or from real-life situations I experienced. The last part of this book contains examples of oral and written communications that have been analyzed using PNA techniques.

The words *interviewer* and *interviewee* are used throughout this book for convenience and do not exclusively refer to the police investigator-suspect relationship. The interviewer-interviewee paradigm also includes relationships such as parent (interviewer) and child (interviewee); lawyer (intervieweer) and client (interviewee); superior (interviewer) and subordinate (interviewee); friend (interviewee) and friend (interviewee); and wife (interviewer) and husband (interviewee). Similarly, the pronoun "he" will be used to avoid the awkward use of the combined pronouns he/she.

## CONTENTS

Page
Preface v   Introduction vii
Chapter
1. WORD CLUES
2. HUMAN COMMUNICATION AND DECEPTION9
3. LYING BY OBFUSCATION
4. LYING BY OMISSION
5. THE MICRO-ACTION INTERVIEW
6. TESTING FOR DECEPTION 104
7. WRITTEN COMMUNICATIONS
8. ORAL COMMUNICATIONS 114
Appendices
A. PNA OF WRITTEN COMMUNICATIONS 141
B. PNA OF ORAL COMMUNICATIONS 167
C. PRACTICE STATEMENT 197
D. PNA OF PRACTICE STATEMENT 199
<i>Index</i>

# PSYCHOLOGICAL NARRATIVE ANALYSIS

### Chapter 1

### WORD CLUES

In 1997, I fell off my horse and suffered a severe brain injury. I lost parts of my memory. I could not remember words, but I knew the meanings of words. I often gave my wife and children a definition and asked them to tell me the word that associated with the definition. Once I reconnected the definition with the correct word, I retained the word and its meaning. Over the next year, I did crossword puzzles to recover my vocabulary. I spent endless hours hunting for words that matched the clues in crossword puzzles. After an extensive rehabilitation, I resumed my career as a FBI Special Agent.

My rehabilitation taught me a valuable lesson. Words have meaning. They don't just plop out of a person's mouth. Once a thought is created, it moves to the part of the brain that contains the meanings of the words. The thought and the corresponding meaning then go to the part of the brain that stores vocabulary. Therein the meaning is associated with the correct word. The combined signal then goes to yet another part of the brain that directs our tongues, larynx, and lips how to move to formulate the word. When we write words, our brains go through a similar process. Speaking and writing words are deliberate processes, albeit complex. My injury severed the pathways between the part of my brain that contains the meanings of words and the part of my brain that contains my vocabulary. Doing crossword puzzles established new pathways between the two parts of my brain.

Words represent thoughts. The closest one person can get to understanding another person's thoughts is to listen to the words that he speaks or writes. Certain words reflect the behavioral characteristics of the person who spoke or wrote the words. I labeled these words, Word Clues. Word Clues increase the probability of predicting the behavioral characteristics of people by analyzing the words they choose when they speak or write. Word Clues alone cannot determine a person's personality traits, but they do provide insights into a person's thought process and behavioral characteristics. Interviewers can develop hypotheses based on Word Clues and test those hypotheses with subsequent information elicited from interviewees and third-party corroboration.

The human brain is incredibly efficient. When we think, we use only verbs and nouns. Adjectives, adverbs, and other parts of speech are added during the transformation of thoughts into spoken or written language. The words we add reflect who we are and what we are thinking.

The basic sentence consists of a subject and a verb. For example, the simple sentence "I walked" consists of the pronoun "I," which is the subject and the word "walked," which is the verb. Any words added to this basic sentence modify the meaning of the noun or verb. These deliberate modifications provide clues to the personality and behavioral characteristics of the speaker or writer.

Word Clues allow interviewers to develop hypotheses or make educated guesses regarding the behavioral characteristics of interviewees. For example, in the sentence "I quickly walked," the Word Clue "quickly" infused a sense of urgency, but it did not provide the reason for the urgency. A person might "quickly walk" because he is late for an appointment or anticipates being late for an appointment. Conscientious people see themselves as reliable and do not want to be late for appointments. People who want to be on time tend to respect social norms and want to live up to the expectations of others. People with this behavioral characteristic make good employees because they do not want to disappoint their employers. People "quickly walk" when they encounter general threats. A general threat might occur while walking through a bad neighborhood. Approaching bad weather could also present a threat. Walking quickly to avoid a thunderstorm reduces the threat of a lightning strike or getting wet. People might add the word "quickly" for a variety of reasons, but there is a specific reason for their choice.

The following examples demonstrate how Word Clues provide interviewers with simple insights into the behavioral characteristics of interviewees.

**INTERVIEWEE:** I won another award.

The interviewee used the Word Clue "another" for a reason. The word "another" conveys the notion that the interviewee won one or more previous awards. The interviewee wanted to ensure that other people knew that he won at least one other award, thus bolstering his self-image. The interviewee may need the adulation of others to reinforce his self-esteem. The interviewer could exploit this vulnerability by using flattery and other egoenhancing comments.

**INTERVIEWEE:** I worked hard to achieve my goal.

#### Word Clues

The interviewee selected the Word Clue "hard" for a reason. Perhaps the interviewee values goals that are difficult to achieve. Perhaps the goal the interviewee achieved is more difficult than the goals that he usually attempts. The Word Clue "hard" also suggests that the interviewee can defer gratification or holds the belief that hard work and dedication produce good results. A job applicant with these characteristics would likely make a good employee because he would likely accept challenges and have the determination to complete those tasks.

#### **INTERVIEWEE:** I patiently sat through the lecture.

The interviewee added the Word Clue "patiently" for a reason. Perhaps the interviewee was bored with the lecture. Perhaps the interviewee had to return an important telephone call. Perhaps the interviewee had to use the restroom. Regardless of the reason, the interviewee was preoccupied with something other than the content of the lecture. A person who waits patiently for a break before he leaves the room is probably a person who adheres to social norms and etiquette. A person who receives a telephone call, immediately gets up, and leaves the lecture is a person who probably does not have rigid social boundaries. People with social boundaries make good employees because they follow the rules and respect authority. Conversely, a person who does not follow social conventions would probably be suited for a job that requires novel thinking. A person with the predisposition to act outside social norms would make a better spy than a person who is predisposed to follow social conventions because spies are routinely asked to violate social norms.

#### **INTERVIEWEE:** I decided to buy that model.

The interviewee chose the Word Clue "decided" for a reason. The word "decided" indicates that the interviewee weighed various options prior to the purchase. Perhaps the interviewee struggled to some degree before making the decision to purchase. This behavior trait suggests that the interviewee thinks things through, especially if the purchase was a minor one. The word "decided" also indicates that the interviewee is not likely to be impulsive. An impulsive person would likely say or write, "I just bought that model." The Word Clue "just" suggests that the interviewee bought the item without giving the purchase much thought.

Based on the Word Clue "decided," the reader can develop a hypothesis that the speaker or writer is an introvert. Introverts think before they act. They carefully weigh each option before rendering a decision. Extroverts tend to be more impulsive. The use of the verb "decided" does not positive-