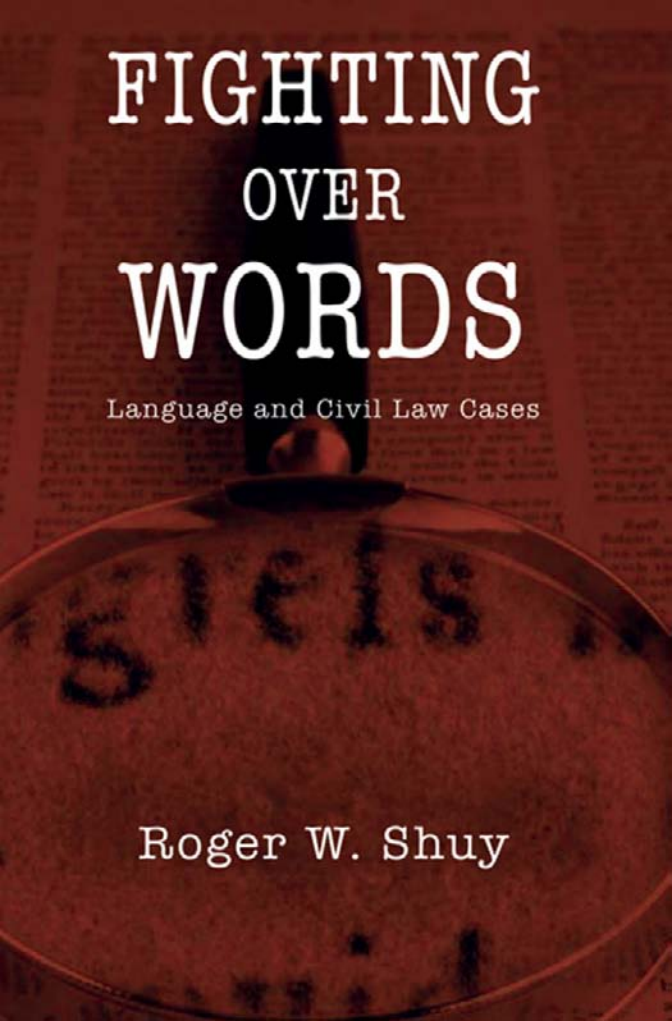
FIGHTING OVER WORDS

Language and Civil Law Cases



Roger W. Shuy

FIGHTING OVER WORDS

This page intentionally left blank

FIGHTING OVER WORDS

Language and Civil Law Cases

ROGER W. SHUY

OXFORD
UNIVERSITY PRESS
2008

OXFORD
UNIVERSITY PRESS

Oxford University Press, Inc., publishes works that further
Oxford University's objective of excellence
in research, scholarship, and education.

Oxford New York
Auckland Cape Town Dar es Salaam Hong Kong Karachi
Kuala Lumpur Madrid Melbourne Mexico City Nairobi
New Delhi Shanghai Taipei Toronto

With offices in
Argentina Austria Brazil Chile Czech Republic France Greece
Guatemala Hungary Italy Japan Poland Portugal Singapore
South Korea Switzerland Thailand Turkey Ukraine Vietnam

Copyright © 2008 by Oxford University Press, Inc.

Published by Oxford University Press, Inc.
198 Madison Avenue, New York, New York 10016

www.oup.com

Oxford is a registered trademark of Oxford University Press

All rights reserved. No part of this publication may be reproduced,
stored in a retrieval system, or transmitted, in any form or by any means,
electronic, mechanical, photocopying, recording, or otherwise,
without the prior permission of Oxford University Press.

Library of Congress Cataloging-in-Publication Data
Shuy, Roger W.
Fighting over words : language and civil law cases / Roger W. Shuy.
p. cm.
Includes bibliographical references.
ISBN 978-0-19-532883-7
1. Law—Language. 2. Law—Interpretation and construction.
3. Civil law—Cases. I. Title.
K213.S58 2007
340'. 14—dc22 2007016428

1 3 5 7 9 8 6 4 2

Printed in the United States of America
on acid-free paper

CONTENTS

This page intentionally left blank

FIGHTING OVER WORDS

This page intentionally left blank

INTRODUCTION

Commerce is conducted largely through language. This is so obvious that those who use language for business transactions seldom think about it; most people become so accustomed to using language that it's practically invisible to them. Yet language is our major tool for dealing with most things in life. We are taught with it; we fall in love with it; we buy and sell with it; we even do mathematics with it. There is no area of human life that does not depend heavily on language. The world of commerce is no exception.

CONSCIOUSNESS ABOUT LANGUAGE

It is useful to think of three levels of language consciousness. The first level parallels other life tasks that become automatic, such as riding a bicycle or walking up the stairs. These seldom rise to our level of consciousness at all. In fact, if we were to think about these tasks as we do them, we would run a serious risk of having an accident. The more technology makes tasks easier to do, the more automatic and unconscious they can become, which is why we are now allegedly able to drive a car while at the same time drinking our coffee, listening to the radio or CD, or talking on our cell phones. In the same way, we usually don't think about our native language as we converse in it. For most adults conversation is relatively automatic and unconscious. Otherwise our talk could be slowed down to a crawl.

The second level of language consciousness is exemplified by those who write or speak publicly, such as poets, politicians, novelists, clerics, statesmen, or journalists. To an extent, language is also used more consciously in the world of business, where it is often necessary for people to be more aware and careful about how they phrase their ideas. Among other things, they are more conscious

about words and phrases when they write and sign contracts, hire and fire employees, produce advertisements, buy and sell products and services, create written instructions and warnings, characterize other people and products, and invent trade names. This heightened consciousness of how to use language can be functional and important, but even this level of awareness is sometimes not quite good enough. So corporations usually hire attorneys to watch over and help them make sure that they don't get in trouble in many of their language events.

The third level, the highest consciousness about language, is evidenced by the fact that, in spite of the careful protection provided by executives and attorneys, corporations sometimes use language in ways that lead to business disputes, even to lawsuits. For example, the wording of a contract may be argued to be ambiguous or otherwise disputable. An employer may hire or fire employees with language that can be considered discriminatory. Promotions and advertisements may be challenged as misleading or deceptive. Sales and commission agreements, among other things, may be worded in such a way that parties fall into bitter disagreements about what they really mean. Warning labels on merchandise may be judged inadequate to protect consumers. Even a company's name may be challenged by competitors who claim infringement on their own copyrighted name. Public statements that are considered disputable often rise to the level of a court battle. At this third level, participants become highly conscious about how language is used, which often becomes the basis of litigation. It is this third level that frames this book, because the highest level of consciousness about language is the area where linguistic analysis can be helpful.

THE INTERACTION OF LAWYERS AND LINGUISTS

Most attorneys are very good with language, but the plethora of lawsuits in the corporate world suggests that they must not be quite good enough, or their clients would not have been sued in the first place. Lawyers' expertise is primarily the law, not linguistics. They cannot be expected to understand all the phonological, morphological, syntactic, semantic, pragmatic, discourse, and lexicographic principles that lead to court battles over language. Nor are they usually trained in these critical tool areas of linguistics.

Even though they are not linguists, most lawyers are quick learners, and most appear to do an amazingly good job of getting up to speed on basic areas

of science that are new to them, such as economics, agriculture, medicine, or whatever fields their individual cases may involve. But even if they manage to master the relevant aspects of these areas, they still usually need agronomists, economists, and physicians to use their authority and credibility as experts when they present that information at trial.

Linguistics is somewhat similar to these other scientific specializations where experts are used, but it also appears to be quite different. Two major differences are (1) the general invisibility of linguistics, mentioned earlier, and (2) the complexities of language that are noticed, analyzed, and dealt with best by linguistic specialists. Most attorneys and judges are not fully aware of linguistics and how it can help them resolve their legal disputes.

Linguists, likewise, are not experts on law. Most are academics, busy teaching the theory and tools of linguistics to their students. Few linguists realize the intellectual feast provided to them by the data found in actual court disputes. Law cases contain real language used by real people who present real language problems to solve. Legal battles over language almost beg for a linguistic analysis that bridges the sometimes abstract world of the classroom to the everyday reality of life.

THE AUDIENCES OF THIS BOOK

This book has three obvious audiences: lawyers, linguists, and students. Clearly it is difficult to write for three different readerships at the same time, since all three will undoubtedly wish that more is said to adequately represent their different perspectives. But when books deal with interrelationships across fields, as this one attempts to do, certain foreshortenings and compromises are practical and necessary. Lawyers may find that the book does not fully, or adequately, represent everything that they find important. They are asked to consider that this book is not a text about law. Its point is to show attorneys how another field, in this case linguistics, can be used to help them with complex issues involving written and sometimes even spoken language.

At the same time, this book is also addressed to linguists as a way to encourage them to get involved in an area in which they can use their knowledge of linguistics in real language settings that serve the goals of law. The point is not to teach them linguistics, which they already know. It is rather to show them how the practice of law is a veritable gold mine of instances and data for linguists to analyze, even to use as examples in their classrooms. The cross-fertilization of linguistics and law is a growing field these days, one that can become a profitable

sideline, in addition to providing intellectual stimulation from applying linguistic research and theory to this important area of life (Shuy 2006).

For students, this book not only offers over a quarter century of my own experience of assisting lawyers with their cases but also provides most of the actual data from which I derived my analyses. The book thus offers students the opportunity to challenge, agree, or interact with data that otherwise might be difficult for them to obtain. All readers should bear in mind that the analyses offered here took place in the past, and that even this writer might have approached things differently if he were asked to do the same tasks today.

THE ADVERSARIAL NATURE OF LAW CASES

It should also be noted that the linguistic analyses in this book sometimes take the perspective of the plaintiff and sometimes that of the defendant. In most law cases, good arguments can be made for either side, and it is quite possible that student readers may wish to take positions contrary to those argued in this book. As I have pointed out (Shuy 2006), the role of the expert witness is to provide an analysis that does its best to help the attorney for whom the work is being done. Analyses should never distort the evidence or overlook contradictory conclusions, if such exist. At the same time, the expert witness or consultant should always be prepared to address possible contradictory positions and analyses. Experts in any field collaborate and cooperate with the attorneys to the extent honestly possible, but final decisions about what will be presented in court are always made by the attorneys. Expert findings that do not support the attorney's case are often simply not used at trial. It is also the case that the analyses made by experts on opposing sides of a case may contradict each other, since a certain amount of legitimate interpretation frequently exists. As linguists have often discovered, there is usually more than one good way to address disputed questions.

STRUCTURE AND ORGANIZATION OF THE BOOK

The following chapters show how linguistic analysis can aid attorneys for corporations as they represent their clients in lawsuits. They illustrate how different linguistic tools and analytical routines were used in the fairly recent past,

sometimes through expert witness at trial, sometimes through expert reports and deposition testimony, and sometimes simply through consultation with litigating parties.

It would be presumptuous to claim that all of the types of civil cases faced by corporations are represented here. On the other hand, contract disputes, deceptive trade practices, product liability, copyright infringement, discrimination, trademark conflicts, and procurement fraud represent a large portion of such cases. It should be noted that the book does not include the analysis of linguists when they help corporations determine the authorship of threat messages or hate mail that they sometimes receive. The reason for this omission here is simply that such analysis is investigative in nature, and often works with such a limited amount and type of language data that it would be difficult, if not foolish, to try to testify about such tentative or incomplete findings at trial. Such analysis can certainly aid in investigations, but it is often better suited to helping investigators narrow down their suspect lists or provide a profile of the alleged author. In any case there already exists a growing literature about authorship and voice identification where these techniques of forensic linguistics can be found (McMenamin 1993, 2002; Olsson 2004; Chaski 2001). Nor does this book deal with speaker identification, which has a rich recent literature that is discussed elsewhere (Baldwin and French 1990; Hollien 1990, 2001).

The cases described here give examples of virtually all of the important tools of linguistics. Phonetic tools are used in cases that have tape-recorded language as evidence as well as in helping describe similarities and differences in trademark names. The tools of morphology are called on in cases involving product liability, copyright infringement, and trademark differences. Syntax is used in the analysis of cases involving contract disputes, product liability, and procurement fraud. Semantic analysis is found in contract disputes, deceptive trade practice, product liability, procurement fraud, and trademark cases. Speech acts and pragmatic analysis often point out conveyed meanings, helpful in trademark, procurement fraud, and product liability cases that contain warning messages. Discourse analysis is commonly used in product liability, deceptive trade practice, and trademark cases. Analysis of the processes of language change assists attorneys in deceptive trade practices as well as trademark cases. In many types of cases the comprehensibility of spoken or written language depends not only on the way language is used but also on the quality of the document design, including the type of print, prominence of the text, legibility, and the grammatical form of sentences used. Technically, document design may not be considered to fall within the four corners of linguistics proper but its contribution to the overall psycholinguistic (perhaps even semiotic) understanding of written text cannot be overlooked (Tinker 1965, 1969; Felker et al. 1980).

Each case described in this book is divided into three sections. The first is a brief background summary of the litigated issues, followed by the relevant language data used as evidence in the cases, and finally, the linguistic analyses that were carried out in each specific case.

The language data presented for each case are represented as closely as possible in the print form and document design of its original, except for pictorial illustrations. Readers should be aware, however, that not all of the data that the lawyers sent to me are included here. It is common that attorneys, who don't always know exactly what the linguist can do for them, will send many documents that are not relevant for linguistic analysis. Mercifully, perhaps, all of these are not included here, even though the arduous task of sifting through and deciding what is relevant and what is not is one of the common preliminary tasks that forensic linguists have to carry out. It also goes without saying that sometimes lawyers do not provide experts with documents that linguists might actually find useful to examine. If linguistic experts are not made aware of such documents, they are left with the task of analyzing only what they have been given. If the opposing attorney should happen to introduce data that expert witnesses have never seen and were not even aware of, the only safe harbor is to testify that such data were never shown to them.

Readers are advised that most of the cases described in this book contain large amounts of other evidence and arguments that are outside the scope of linguistic analysis. It is also the case that the data presented here are often culled from much larger texts, such as depositions, trial testimony, or the products of huge electronic searches. It is impractical to include complete versions of these in this book. References to the original and complete text sources are given, however. Since only the linguistic issues of the cases are discussed here, the question of which side eventually prevailed in each case is not always relevant and readers are reminded that the task of the linguistic expert witness does not concern the lawyer-advocates' responsibility of winning or losing for their clients.

Although this book makes no claim to cover all the aspects of linguistic battles in the corporate world, it tries to represent examples of disputes that occur during different sequences of the business process, such as naming a product, promoting it, protecting against liability, marketing products or services, entering into contracts, and communicating about employees, including hiring and dismissing them. From the perspective of readers who are attorneys, the book's seven separate sections are organized the way that lawyers are accustomed to seeing their categories of civil law cases: contract disputes, deceptive trade practices, product liability, copyright infringement, workplace discrimination, trademark disputes, and procurement fraud. One reason for this organization is to help linguist-readers understand that they need to begin where the

attorneys are, to try to learn something about the way lawyers think, and then to apply linguistic knowledge to the specific parts of their cases where it is relevant to law. Another reason is to make it convenient for lawyers who may have professional interest in only one or more of these types of cases.

It should also be noted that the number of cases described in the various sections of this book is not the same. One reason for this is that the book is limited to describing cases in which the author has been an active participant. For example, although linguists have been very active in issues of plagiarism, which, in the United States at least, is a moral issue rather than a legal one, reports of linguistic analysis have been largely absent in cases involving the somewhat similar area of copyright infringement. Since I have worked on only one copyright case, it is presented here as a lone example, in the hopes that other linguists who have been involved in such cases will come forward and describe them, as well. Only one procurement fraud case is described here, as well, mostly because it is long and complex. However, the majority of the types of cases presented in this book consist of at least two case examples and others have more. Another reason for the uneven number of cases on each type of civil case stems from the fact that certain cases involve large quantities of data, unwieldy for a book of this kind.

Finally, it should be noted that I worked on all of the cases described in this book and I was paid for my efforts.

This page intentionally left blank

PART I

Business Contract Disputes

Once humans began to discover ways of writing down spoken language, one of the hallmarks of modern civilization evolved. Stories could now be read rather than passed along orally, religious ideas could be encoded and more easily preserved, and legal affairs and actions could be made more consistent and permanent. At first, after written language came into legal practice, the function of writing in matters such as contracts existed mainly to record what previously had been agreed upon orally. Later focus came to be placed on the written document itself, the parol evidence rule (circa 1604), which, as Tiersma (1999, 37) points out, prohibited any reference or evidence about oral discussions leading up to the written contract. Solan (2001, 89) observes that reliance on written documents had some very positive effects, such as reducing the opportunity to commit perjury about how one understood a contract, relying on faulty memory, and improving the speed of trials. Contracts were no longer just summary statements about what previously had been agreed upon orally. Instead, they became the actual agreement, effectively banning parol evidence. But even written language is not always easy to understand, calling into question some aspects of the parol evidence rule. Solan (2001, 94) argues that in some cases "it might be necessary to examine context in order to interpret sensibly language that seemed clear at first glance." Today the debate about parol evidence continues. In cases where a contract is judged ambiguous, or where it appears to be incomplete, or where the terms seem to be contradictory, the need for extrinsic contextual evidence, the linguistic analysis of contracts, can be helpful and appropriate.

Written business contracts provide a fruitful area for linguistic analysis. To the average reader, contract wordings are complex, and they often seem needlessly convoluted and full of jargon. From a lawyer's perspective, there is usually a good reason for such language. Basically, contracts are made up of promises conditioned on a return promise of performance or actions. Mutual assent must occur before the contract is complete. Contracts also often contain

considerations about doing or not doing something that was not previously bound by that contract. But the people who write contracts don't always use language that suits their actual intentions, and the people who sign them may not always understand what they are binding themselves to.

When disagreement or conflict occurs, linguists are sometimes called upon to help untangle the language confusion. Obviously, linguists cannot (and should not even try to) get into the minds of those who are contracted in the effort to learn exactly what the contract signers meant or understood. Nobody can do this. But analysis of the text of a message enables linguists to determine the range of possibilities that the text actually could mean and the range of possibilities the signers actually could understand by that language, no matter what they thought or believed when they signed it.

Tiersma (1999) describes some of the major areas in which writers of contracts may need to make improvements. These include shortening words and sentences, using active verbs, avoiding the overuse of technical legal terms, avoiding Latin and foreign words when their use depends on obsolete meanings, defining contractual terms with commonly understood words, making clearer references to parties in the contract, avoiding sentences with more than one conditional clause, avoiding overuse of cross-references, and dropping grammatically acceptable double negatives (such as "it is not unlikely") and expressions that cite exceptions to exceptions.

Following are examples of how linguistic analysis addressed issues of contract disputes in four cases. The first case deals with an insurance company's claim that when it used "or" in its policy, this conjunction actually meant "and." The second case centers on differing interpretations of the meaning of the verb phase "to contract." The third case deals with the grammatical scope, intonation, and semantic meaning that defines the phrases "in competition" and "or an ownership, directorship or other policy making executive position in the competing enterprise." In the fourth case, the contract uses the subjective adverb "effectively," which implies an undescribed and unspecified underlying basis of measurement of the quality being discussed. It also uses the verb "limits" without an indication of the boundaries or tolerance range of the meaning of this word. The contract also uses the nouns "customer" and "trip" in ways that are not totally consistent with the commonplace understanding of these nouns, leading to multiple understandings of what was apparently intended and understood.

References related to contract disputes that linguists can find helpful include the following:

Blum, Brian A. 2001. *Contracts*, 2nd ed. New York: Aspen.
Garner, Bryan. 2001. *Legal Writing in Plain English*. Chicago: University of Chicago Press.

Kimble, Joseph. 1992. Plain English: A charter for clear writing. *Thomas M. Cooley Law Review* 9.1: 1–58.

Solan, Lawrence. 2001. The written contract as a safe harbor for dishonest conduct. *Chicago-Kent Law Review* 77.1: 87–120.

Tiersma, Peter. 1999. *Legal Language*. Chicago: University of Chicago Press.

This page intentionally left blank

CHAPTER 1

"Or" in a Group Insurance Policy

Peter Koehn v. Continental Casualty Company

Sometimes rather normal surgery ends up in ways that were never anticipated. Peter Koehn, a university professor, discovered that he had developed blurring in one of his eyes, which his physician diagnosed as a macular pucker that would require surgery. He then consulted a surgeon who explained that cells were building up on his retina and recommended a routine procedure to scrape them off. Before the surgery took place, Professor Koehn was advised of research studies showing that there was only a .07 percent chance that the procedure might fail or that it might produce consequences such as an infection, impaired vision, or blindness. He had the surgery in November 2003 and found himself among the unfortunate .07 percent for whom the surgery did not go as expected. Within twelve hours of the surgery he became blind in one eye as the result of a pyogenic infection that took place either during or after the surgery.

Professor Koehn's university group insurance contract with The Hartford was underwritten by Continental Casualty Company. This policy contained all the provisions under which policyholders were covered, including a brief section called "Exclusions." When Professor Koehn submitted his claim that he thought was covered by this policy, Continental turned him down, claiming that the surgical event and its unfortunate result fell under one of the exclusions noted in his policy. Professor Koehn then sought the aid of an attorney, and together they brought a lawsuit against Continental, asking for the benefits that they believed were due to the professor.

Civil Action No. CV05–113–M–LBE

U.S. District Court, Missoula Division, District of Montana

DATA

The policy contains a section called "Definitions," in which the following relevant sentence appears: "'Injury' means bodily injury caused by an accident which occurs while the insured Person is covered under this policy and that results, directly and independently of all other causes, in loss covered by this policy." The entire "Exclusions" section of this policy is as follows:

EXCLUSIONS

This policy does not cover any loss covered by or resulting from:

1. Riding in any vehicle or device for aerial navigation, except as provided under "Air Travel Coverage";
2. Declared or undeclared war or an act of either;
3. Service in the armed forces of any country. However, order to active military service for 2 months or less shall not constitute service in the armed forces;
4. Suicide or suicide attempt while sane or self-destruction or an attempt to self-destroy while insane; or
5. Sickness or disease, except pyogenic infections which occur through an accidental cut or wound.

LINGUISTIC ANALYSIS

Prior to involving me in this case, Mr. Koehn's lawyer had sought and received a syntactic analysis of exclusion 5 above from another linguist, which showed that there are two possible ways to parse that sentence. Although a plaintiff in a contract dispute often prevails when the contract's text can be shown to be ambiguous, the attorney was not totally satisfied. Therefore, he called me to add semantic and discourse analyses to support his case. The focus of my analysis was on exclusion 5. Two analytical linguistic procedures can be used to analyze this sentence:

1. semantic analysis—the analysis of word meaning (lexical semantics) and pragmatic meaning (meaning conveyed through implicatures, as opposed to literal meaning); and
2. discourse analysis—the analysis of words and sentences in the context of the larger utterances in which they occur.

Semantic analysis

The following analyses show that the dependent clause "which occur through an accidental cut or wound" indicates that there are two separate, different objects of that dependent clause: (1) an accidental cut and (2) a wound.

"or"

The separate and different primary roles of the three major conjunctions in English, "and," "but," "or," are:

- "and" marks the writer's attempt to continue an idea;
- "but" marks the writer's attempt to return to a point made earlier;
- "or" marks a two-way choice between accepting only one member of a disjoint or both members of that disjoint.

The conjunction "or" has three major meanings in English:

1. alternatives with different elements (example: You can have soup or salad; meaning you can have soup **or** you can have salad)
2. synonyms of the same elements: (example: Wild animals are free **or** unfettered; meaning free and unfettered are suggested synonyms)
3. indefinites with separate, different elements (example: He exercises two **or** three times a week; meaning that it is indefinite exactly how often he exercises)

In the exclusion section of this policy the disjunct "or" occurs nine times to indicate alternatives and one time to convey an indefinite:

Introduction	"caused by **or** resulting from" (alternatives)
Exclusion 1	"vehicle **or** device for aerial navigation" (alternatives)
Exclusion 2	"war **or** undeclared war" (alternatives) "declared or undeclared war **or** an act of either" (alternatives)
Exclusion 3	"two months **or** less" (indefinite)
Exclusion 4	"suicide **or** suicide attempt while sane" (alternatives) "suicide **or** suicide attempt while sane **or** self-destruction **or** attempt to self-destroy while insane" (alternatives) "self-destruction **or** an attempt to self-destroy" (alternatives)

Exclusion 5 "sickness **or** disease" (alternatives)
"cut **or** wound" (alternatives)

In addition, an eleventh use of the conjunction "or" appears once at the end of exclusion 4 to indicate that the above four exclusions contain still one more exclusion, number 5. This "or" does not relate to the substantive content meaning found in the exclusions but, rather, says that the above four exclusions have one more to follow. As such, the meaning of this "or" conveys the additive meaning "and."

When a writer intends to indicate the continuation of an idea, the proper choice of conjunction to use between the two separate and different elements is "and." When a writer intends to return to a point made earlier, the proper choice of conjunction to use between the two separate, different elements is "but." When a writer intends to indicate a choice between the two separate and different substantive paired elements, the proper choice of conjunction is "or." As the wording of the exclusion section of this policy indicates, all but one of the above uses of "or" indicate alternatives between two separate and different elements.

"cut" and "wound"

Although common dictionary definitions (including the one in *Merriam-Webster's Collegiate Dictionary*) of "cut" and "wound" make few if any distinctions between these two nouns, it is instructive to analyze the contextual usage of these two terms for breaking either the skin or other external organic surfaces. In most general contexts, except for the surgical and military fields, a cut is the result of an accidental event or action received by a person. The following sentences illustrate this (sentences marked with * are unlikely to occur):

The cut on John's face was caused by shaving.
I got a cut on my finger from a sheet of paper.
Her arm received a nasty cut from the broken glass.
* The wound on John's face was caused by shaving.
* I got a wound on my finger from a sheet of paper.
* Her arm received a nasty wound from the broken glass.

In the military context, the injuries inflicted by enemies are most commonly referred to as wounds. In the military a wound is the result of a deliberate, intentional action inflicted by enemies. The following sentences are illustrative (sentences marked with * are highly unlikely to occur):

The soldier received his wounds in Iraq.
The soldier's wounds healed in two months.
* The soldier received his cuts in Iraq.
* The soldier's cuts healed in two months.

In the surgical context, a cut is the first step in a deliberate and intentional surgical procedure while a wound is the deliberate and intentional result of that cutting action. The surgeon deliberately makes an incision, cutting the surface of the skin to get at the affected area. After the cut is made, the result is commonly referred to as a wound. In this case, both the cut and the wound are the result of a deliberate and intentional act. The following sentences illustrate (sentences marked with * are unlikely to occur):

The surgeon made a vertical cut into the patient's chest.
The patient's surgical wound healed properly.
* The surgeon made a vertical wound into the patient's chest.
* The patient's surgical cut healed properly.

From the usage of "cut" and "wound" noted above, it is clear that the context in which these words are employed plays an important role in how these words are used and understood. Outside of the military or surgical contexts, people receive cuts (not wounds) accidentally. In the military context, wounds (not cuts) are deliberately inflicted upon the enemy. In the medical context the surgeon makes a cut deliberately and intentionally on a patient but after the cut has been made, it is referred to as a wound. When exclusion number 5 of this policy says, "through an accidental cut or wound," it reflects two separate and different types of events. One is an accidental cut and the other is a deliberate and intentional wound of the type that a surgeon would make.

Discourse analysis

Analysis of the discourse in which exclusion 5 occurs reveals that "or" is used as a disjunct on every occasion in which the substantive meaning of the exclusion was described. The lone exception, when "or" was used additively, describes the addition of exclusion 5 to the previously described exclusions 1 through 4. The context of the consistent, continuous uses of "or" as a disjunctive in all of the substantive exclusions preceding it has the effect of encouraging the reader to understand the "or" in exclusion 5 to be disjunctive as well. Finally, the scope of the negativizer, "except," in the clause containing "or" in exclusion 5, reveals

that in the following prepositional phrase the scope of "accidental" is over only "cut" and not over "wound."

Uses of "or" to contrast different substantive meaning

The writers of the exclusion section of this policy use "or" eleven times in this ninety-six-word section (11.5 percent of all the words). The clear and unambiguous meaning of these uses of the disjunct "or" is apparent, as the following demonstrates:

Introduction: "This policy does not cover any loss caused by **or** resulting from"

Two separate and different provisions:
1. "caused by"
2. "resulting from"

Therefore, "or" is used properly as a disjunct.

Exclusion 1. "Riding in any vehicle **or** device for aerial navigation, except as provided under 'Air Travel Coverage'"

Two separate and different devices:
1. "vehicle"
2. "device for aerial navigation"

Therefore, "or" is used properly as a disjunct.

Exclusion 2. "Declared **or** undeclared war **or** an act of either"

Two separate and different types of war:
1. "declared"
2. "undeclared"

Therefore, "or" is used properly as a disjunct.

Two separate and different acts:
1. "war"
2. "undeclared war"

Therefore, "or" is used properly as a disjunct.

Exclusion 3. "Service in the armed forces of any country. However, orders to active military service for 2 months **or** less shall not constitute service in the armed forces"

Two separate and different lengths of time:
1. "2 months"
2. "less"

Therefore, "or" is used properly as a disjunct.

Exclusion 4. "Suicide **or** a suicide attempt while sane **or** self-destruction **or** an attempt to self-destroy while insane; **or"**

Two separate and different acts while sane:
1. "suicide . . . while sane"
2. "suicide attempt while sane"

Therefore, "or" is used properly as a disjunct.

Two separate and different mental conditions:
1. "while sane"
2. "while insane"

Therefore, "or" is used properly as a disjunct.

Two separate and different acts while insane:
1. "self-destruction"
2. "attempt to self-destroy"

Therefore, "or" is used properly as a disjunct.

(exclusions 1 through 4) **or** (exclusion 5) = the four prior exclusions plus the exclusion in item 5:

Therefore, "or" is used additionally, meaning "and."

Exclusion 5. "Sickness **or** disease, except pyogenic infections which occur through an accidental cut **or** wound"

Two separate and different types of physical problems:
1. "sickness"
2. "disease"

Therefore, "or" is used properly as a disjunct.

Two separate and different types of puncture:
1. "accidental cut"
2. "wound"

Therefore "or" is used properly as a disjunct.

From this it is clear that the policy consistently and properly uses "or" to indicate two separate and different substantive elements of a disjunct.

The single use of the additive "or" is contextually different

The writer of this exclusion section uses "or" to indicate disjuncts of the items mentioned in all five of the substantive content areas of this section. The single time that "or" is used to indicate "and" occurs when exclusion 5 is added to exclusions 1 through 4. This "or" does not describe or relate to the substantive

content of the exclusions. This is a very different type of use, indicating only that all of the five exclusions obtain.

The reader is encouraged to continue understanding "or" as a disjunct

The writer's systematic and consistent use of "or" in all of the substantive content disjuncts enables and encourages the reader to predict and understand that the last disjunct, "or," in "through an accidental cut or wound" (in exclusion 5) is also a disjunct of two separate and different elements. Readers so easily can become accustomed to the policy's use of "or" to mean the disjunct "or" in all of its preceding substantive exclusion items that they are encouraged to read "accidental cut or wound" as disjunct here.

The scope indicates that "accidental cut or wound" refer to different things

The scope of a negativized construction in exclusion 5 directly relates to that part of the construction that is made negative, in this case by the negativizing word, "except." In English constructions containing two scope-bearing elements, the one that comes first has scope over the one that comes later (Huddleson and Pullum 2002, 794). The negativized prepositional phrase in exclusion 5 contains two scope-bearing elements, "through" and "accidental." The phrase begins with the preposition "through," which has scope over the following noun phrase, "accidental cut or wound." That is, it conveys the meaning of both "through an accidental cut" and "through a wound." Following the rule of negative scope, the adjective modifier "accidental" has scope only over the noun it immediately modifies, "cut." This encourages the reader to understand that the modifier "accidental" does not have scope over "wound." Thus the meaning is: through an accidental cut or through a wound that is not under the scope of the modifier "accidental." To summarize, the first scope-bearing element, "through," has scope over both following elements, whereas the second scope-bearing element, "accidental," has scope over only the noun that it immediately modifies, "cut," but not over the noun "wound," which follows.

Sometimes it's the little words, the ones we take for granted, that create legal disputes. Linguists know this, of course, and they can be very helpful to attorneys in sorting matters out. Based on the semantic and discourse analyses outlined above, the most likely meaning derived from the prepositional phrase in

exclusion 5 is that "cut" and "wound" are two separate and different nouns having two separate and different references.

The dispute raised in this case is like an accident waiting to happen. The ambiguous and confusing use of "or" and "and" is far too common in legal drafting and commercial contracts, such as insurance policies. Documents upon which important decisions are made need to be precise and explicit about what they mean. Whereas in everyday conversation or informal writing such requirements may not seem crucial, the writers of documents such as laws, business contracts, and insurance policies can be expected to be aware of the variant meanings of the conjunction "or." In his book *The Language of Judges*, Solan cites McKinney's Consolidated Laws of N.Y. Statutes 365: "A common mistake made by the drafters of statutes is the use of the word 'and' when 'or' is intended and vice versa. The popular use of 'or' and 'and' is notoriously loose and inaccurate, and this use is reflected in the wording of statutes" (Solan 1993, 45). Solan goes on to observe: "When it comes to the interpretation of legal documents, 'and' generally means 'and' and 'or' generally is construed disjunctively, as meaning 'either/or'" (1993, 45). It would behoove writers of insurance policies to be more aware of the likely confusion that stems from trying to use "or" to mean "and."

One obvious way to ensure that "or" is used as a disjunct indicating two separate and different elements is to precede the first element with the word "either" and the second element with the word "or." If the intent is for the second element to be added to the first element, the word "and" is readily available. In exclusion 5, if the policy had intended "or" to be understood as relating to both "accidental cut" and to "wound," the wording could have been "through an accidental cut and through a wound." The writers of this policy did not choose to do this.

This page intentionally left blank

CHAPTER 2

Exclusive Marketing Services

Matrixx Marketing v. New Strategies Productions

In 1994 a Nebraska company, Matrixx Marketing, Inc., entered into a contract with an Arizona company called New Strategies Productions to sell New Strategies' infomercial products to suitable markets. The contract was for one year, during which period Matrixx agreed that it would be the exclusive marketer for New Strategies' infomercials. But later during this one-year period New Strategies also signed a contract with another marketing company. Matrixx reviewed its contract with New Strategies and claimed that New Strategies had violated this contract in terms of the exclusivity rights clause. New Strategies admitted that it signed a contract with a competitor marketing company prior to the end of the one year that was specified in its contract with Matrixx, but claimed that this new contract was to start the day following the end of the one-year exclusive contract with Matrixx. The legal, and ultimately linguistic, issue was to determine the meaning of paragraph 15 of the contract, which laid out what the two parties had interpreted very differently.

New Strategies claimed that it was honoring its contract with Matrixx, since even though it had signed a contract with a new company, no new work would be done with this newly contracted party until after the one-year contract with Matrixx had expired. Matrixx viewed its contract with New Strategies differently, claiming that it barred New Strategies from even entering into an agreement or signing a contract for future services with another company during this one-year period of exclusive contracted work with Matrixx.

DOC. 942 NO. 470

District Court of Douglas County, Omaha, Nebraska

DATA

This entire lawsuit centered on paragraph 15 of the nine-page contract. For clarity here, "Client" refers to New Strategies and "Exhibit A" refers to the entire contract.

> *15. EXCLUSIVITY* It is expressly understood and agreed upon that this agreement grants to MATRIXX the sole and exclusive right to provide to Client any or all Services of the type described in Exhibit A hereto. Accordingly, Client agrees that it will not contract with any other contractors or telemarketing service providers for the procurement of comparable services during the term of this Agreement.

LINGUISTIC ANALYSIS

When the attorney for Matrixx asked me to analyze paragraph 15 of this contract, I suspected that the major dispute was going to be over the use of the verb "contract" in the second sentence. I also thought that the expression "comparable services" might be another contentious issue, but it was not raised in this case. So everything in dispute hinged on the verb "contract" and its semantic meaning here.

Although it is often the case that contract disputes center on unclear or confusing syntax, this was not one of them. The syntax of the second sentence is straightforward and clear. After the initial adverbial, it contains one main clause, beginning "Client agrees," followed by a dependent clause, "that it will not contract," followed by two prepositional phrases and one adverbial. As contract language goes, it is not a particularly difficult sentence to process even though it contains some syntactic complexity.

The focus of the analysis, then, was only on the semantic meaning of the verb "to contract." Common dictionary definitions of the verb "to contract" (including *Merriam-Webster's Collegiate Dictionary* and *The American Heritage Dictionary*) make it clear that this verb indicates the onset of some future action: "to enter into," "to establish," "to undertake." It signifies a promise or agreement about beginning a future activity. In this context it is clear that the negative restriction "will not contract" is used to refer to *not* entering into a new contract with someone else during the one-year period specified, a meaning that clearly supported the position that Matrixx took in this case.

One way to think about contract language is to consider things that it does not say. For example, this wording does not prohibit New Strategies from maintaining any existing contract entered into prior to the one it signed with Matrixx. If Matrixx had wanted New Strategies to discontinue any ongoing contracts that it may have had, the contract could have been worded to say this. One way to say this might be:

> "The Client agrees that it will not *hold or continue* contracts with any other service providers during the term of this Agreement."

But preexisting contracts were not at issue here, and the wording of this contract simply prohibits New Strategies from entering into a new contract with another company until after the termination date of the Matrixx contract, even if the work on the newly signed contract would not take place until the one with Matrixx has ended. Using the same rewrite technique to understand what the contract could have said but did not say, wording that would have favored New Strategies might have been as follows:

> "Client agrees that it will not begin work with any other contractors or telemarketing service providers for the procurement of comparable services until the completion of its one-year contract with Matrixx."

It is sometimes hard to understand why a linguist is called in what appears to be a simple case like this one. It may be that lawyers simply need the authority of experts to support their cases. Or it may be that they are insecure about how even dictionary entries can be cited effectively. From my past experience, the technique of rewriting the sentences in question to make them say what the writer could have but did not say, as I did here, makes clearer to judges and juries what they actually did not say. I have used this technique in many other cases.

This page intentionally left blank

CHAPTER 3

Conditions of a Key Employee Agreement

EMC Corporation v. Jeffrey E. Allen

Key employees in corporations, such as executives, commonly enter into agreements with their employers on matters related to their real or potential relationships with other competing companies while they are still in the service of their main employer. Such agreements often include restrictions that cover specified periods of time after those employees have left the company's employ. A section of the key employee agreement signed by one of EMC's vice presidents, Jeffrey Allen, was the point of dispute in a 1997 lawsuit brought by EMC against Mr. Allen, who contended that the wording in the limited non-competition restriction of his contract agreement was at best ambiguous and that it allowed him to accept a new executive position that did not involve policy-making functions. EMC did not agree with this interpretation, contending that the wording was perfectly clear.

DATA

EMC's two-page key employee agreement included such topics as recruitment, return of company materials, confidentiality, patents, training, and other matters. The first item on the agreement that Mr. Allen signed, called the limited non-competition agreement, was the bone of contention here. It is reproduced as Example 3.1.

Civil Action No. 97–5972

Superior Court, Middlesex SS, Commonwealth of Massachusetts

EXAMPLE 3.1

KEY EMPLOYEE AGREEMENT

RE: Confidentiality, Training and Limited Non-Competition Agreement

In consideration of your employment by EMC Corporation (the "Company") and in recognition of the fact that as an employee of EMC you have access to confidential Information, I ask that you review and sign this letter. It is an agreement that protects not only the company but also its employees from unfair competition and from former employees. This letter, when signed by you, is a binding legal agreement and you may wish to review the terms of this letter with your legal advisor before signing it.

1. *Limited Non-Competition.*

As long as you are employed by the Company, you shall devote your full time and efforts to the Company and shall not participate, directly or indirectly, in any capacity, in any business or activity that is in competition with the Company. During your employment with the Company and for the twelve month period following the effective date of your termination or resignation from the Company, you agree not to directly or indirectly develop, produce, market, solicit or sell products or services competitive with products or services being offered by the Company.

For purposes of this paragraph you shall not be considered in competition unless you have an ownership interest amounting to at least 1% in the competing enterprise (whether direct or indirect by way of option or otherwise) or an officership, directorship or other policy-making executive position with the competing enterprise.

LINGUISTIC ANALYSIS

The focus of this dispute was the meaning of the last sentence above, particularly on the conditions that define "in competition," and how the grammatical structure and word choice of the expression "or an officership, directorship or other policy-making executive position with the competing enterprise" could be understood. There are three ways that linguistic analysis addresses this issue: grammatical scope, intonation, and semantic meaning.

Grammatical scope

Scope is a semantic concept that, in some cases, is reflected in a straightforward manner in the syntactic structure. The last sentence above posits conditions that define the intention of the words "in competition." At issue, based on the grammatical structure of this sentence, is how to understand the meaning of the four conditions that were prohibited by the agreement:

1. he could own at least 1 percent
2. he could hold an officership
3. he could hold a directorship
4. he could hold some other policy-making executive position

Mr. Allen's new position did not involve ownership, eliminating condition number one. His new executive position did not involve policy making. Therefore, the last thirteen words of the agreement were the locus of the dispute: "or an officership, directorship or other policy-making executive position with the competing enterprise." More specifically, the controversy was over whether the adjectival phrase "other policy-making" has grammatical scope over all four conditions (ownership, officership, directorship, and executive position) or whether it relates only to the last member (executive position).

As in other cases cited in this book, it would be useful to consider what the writers of this key employee agreement *could have* said, had they been so inclined. For example, if the writers had intended this condition to include officers and directors who *do not* make policy in a competing enterprise, a clear and direct way to have expressed this condition would have been to place the controlling adjective phrase, "non-policy-making," before all three members, as follows:

> "a non-policy-making officership, directorship or executive position with the competing enterprise."

In the hypothetical example above, by inserting the adjectival modifying phrase before all three conditions the writers specify that non-policy-making is central to the definition and is presupposed as a defining characteristic of all three conditions: "officership" and "directorship" and "executive position."

Moving beyond the hypothetical example above, if the writers intended "policy-making" to cover all three positions, a clearer and more direct way to express this condition would have been the following:

> "a policy-making officership, directorship or executive position."

But when the writers of this key employee agreement inserted the word "other" before the third possible position that a former employee might hold, they invited the understanding that policy-making is central only to the position that immediately follows it, "executive position":

> "an officership, directorship or other policy-making executive position."

This wording does not make it completely clear whether the scope of "other" here reaches all the way back to "officership" and "directorship." Essentially this is a list of three job titles, the last of which is modified while the first two are not.

Adjective constructions are well recognized as relating and referring to the nouns they modify. Conventionally in English, adjectives are placed immediately in front of such nouns. For example, in the expression "brown horses, cows, and dogs," one can be reasonably sure that all three nouns in that series are affected by the adjective "brown." Although in some complex sentences the scope of such modification can be extended, the general principle is that the farther from the noun modified, the more ambiguous that modification becomes. Thus, it is doubtful whether the expression "horses, cows, and brown dogs" actually includes horses and cows that are brown. In an expression such as "horses, cows, and other brown animals," the word "other" might presuppose that all members on that list are, indeed, brown in color. Then again, it might not.

In the disputed sentence, "policy-making" most clearly modifies the third member of the series, "executive position," the noun phrase that immediately follows "policy-making." The insertion of the word "other" before "policy-making executive position" may or may not have been intended to make it clear that "policy-making" also defines "officership" and "directorship." At best, this is ambiguous. If this was the writers' intention, it could have been done much more clearly.

Intonation

Written language does not convey all the information that spoken language provides. Other than the use of all capitals or underling, there are few ways that one can be certain how readers might attribute spoken language intonation to the words they read. If the reader were to attribute intonation stress to the word

"policy" in the sentence in question, the meaning would indicate that the last member of the series is set off from the others, as follows:

"or other *policy*-making executive position."

On the other hand, a more predictable spoken intonation of this expression would be:

"or *other* policy-making executive position."

This rendition would indicate an understanding that the first two members of the series, "officership" and "directorship," also involve policy making. Clear and direct writing anticipates such potential ambiguity by constructing sentences that avoid more than one possible understanding.

Semantic meaning

The word "other" is conventionally understood in various ways. Dictionary definitions (including *Merriam-Webster's Collegiate Dictionary* and *The American Heritage Dictionary*) of "other" include:

- the one remaining in a series, as in "John, Sam and the other man"
- an alternative one, as in "fruit other than oranges"
- not the same one, as in "the other boy I saw"
- an additional one, as in "sold in other places"

In the case of the sentence at issue here, "other policy-making executive position" has the potential of being understood as:

- the one member remaining in the series
- an alternative member in the series
- a different member from others in the series
- an additional member in this series

The three linguistic tools that might be used to address clues to the meaning of this sentence, grammatical scope, possible spoken intonation, and the semantics of "other," lead to the conclusion of ambiguity and do not provide a solid resolution of the issue. But even ambiguity is meaningful in a law dispute, since the obligation to be unambiguous rests on the writer or sender of messages.

The opposing attorney's response to this analysis

I don't always have the opportunity to learn what attorneys on the other side have to say about my written reports. In this case, however, the attorney's brief objection to my possible testimony was revealing. Its relevant parts are as shown in Example 3.2.

EXAMPLE 3.2

Mr. Allen's contention that the Limited Non-Competition covenant's restrictions are ambiguous hinges on transforming "or" into "and." In relevant part, the covenant reads:

> . . . at least 1% in the competing enterprise (whether direct or indirect by way of option or otherwise) OR an officership, directorship OR other policy-making executive position . . . (emphasis added)

There are four ways in which the covenant could apply to Mr. Allen:

1. he could own 1%, OR
2. he could hold an officership, OR
3. he could hold some other policy-making executive position.

Mr. Allen's argument seeks to collapse the covenant's application to only two potential solutions:

1. 1% ownership, OR
2. he could be an officer or director AND that officer/director would have to be a policy-maker for the covenant to apply.

Simply put, the plain language prohibits Mr. Allen's desired contortion, and Massachusetts law prohibits exactly the "assiduous search for ambiguity" that led Mr. Allen to Dr. Shuy. See *Interex Corp. v. Atlantic Mutual Ins. Co*., 874 F. Supp. 1406, 1412 (D. Mass 1995) (the rule which resolves contract ambiguity against the drafter will not serve to provide an interpretation that could not "reasonably be advanced by a reader who is trying to understand the manifested meaning"). Rather, the "plain meaning" of clear and unambiguous contract language is to be upheld and enforced as written.

Later in this same brief opposing my potential testimony, the opposing lawyer opined: "Dr. Shuy's purported testimony as to the 'intent' of the drafter is entirely without basis. Moreover, his own interpretation would render the words meaningless." But strangely enough, in the opposing attorney's final attack on my report he noted: "In the Key Employment Agreement, EMC made a careful distinction between four separate types of person covered under the agreement: 1% owners, officers, directors, and other policy-making executive positions. If EMC had intended to have only one group of persons covered, i.e., policy-making individuals, EMC could have done so."

Ambiguity is a common theme in the linguistic analysis of contract disputes, and in this case it was central. Semantics, syntax, and to a lesser extent phonology were the tools most helpful in trying to address the possible meanings in the key employee agreement. Despite the opposing lawyer's complaint that there was no possible ambiguity from his own "plain language" reading of the agreement, he distorted that very same plain language in his own rendition of its meaning, something that did not go unnoticed by others in the case.

Sometimes even the way opposing parties refer to things is of interest in such cases. Notice how the opposing lawyer referred to the key employee agreement as a "covenant," subtly endowing the document with a semi-religious aura perhaps equivalent to a timeless scripture that should bring down the wrath of God to change or even interpret. It behooves the linguist to stick with the actual terms and to refer to them consistently.

It is also necessary to analyze only the actual wording of the documents in dispute. I leave it to the reader to decide whose approach to this issue is better, but two things beg to be pointed out: in his restatement of the sentence in question, the opposing attorney added "or" where it did not appear in the contract agreement, a change that clearly aided his own interpretation greatly. Likewise, in his final attack, he uses "and" instead of "or" at a place that also changes the meaning. A linguist couldn't have such license.

This page intentionally left blank

CHAPTER 4

Interpreting State Code

State of Nevada v. Preferred Equities Corporation

Like most states, Nevada has a code regulating the delivery of transportation services, including those offered by bus, taxi, and limo companies. Another type of transportation service is that of the free shuttle bus used by businesses to take clients or customers from one or more designated locations to other designated spots. Such service is normally not permitted to compete with common carrier transportation. In Las Vegas, certain time-share condominiums contracted with transportation services to provide free shuttle service for people who owned or otherwise used their condominiums. This service provided pick-up at the condominium site and drop-off at either the Venetian or the Frontier casinos. It also provided service back to the condominium from either of these two casinos. State inspectors investigated the service and charged that the transportation service provider violated the code by:

1. picking up non-authorized "customers" at the casinos and/or at the condominium;
2. delivering "customers" from one of the designated casinos to the other one.

The transportation service provider reviewed the code and argued that the wording was such that its service was not in violation.

Case No. 10699

State of Nevada Department of Business and Industry Transportation Authority Services, Las Vegas, Nevada

DATA

The relevant paragraphs of the Nevada Administrative Code, Section 706.147, are shown in Example 4.1.

EXAMPLE 4.1

1. The transportation services authority will consider a provider of free shuttle service to passengers who may or may not have baggage to be a common motor carrier unless all of the following conditions are met:

(a) The provider's business is not the transportation of property or passengers and any transportation furnished is incidental to its business.

(b) The provider indicates in any advertisement including information on free transportation that the transportation will only be furnished to its customers. Such information must be incidental to an advertisement of the business.

(c) The provider effectively limits the provision of transportation to its customers.

(d) Except as otherwise provided in this paragraph, transportation is furnished only if the provider's place of business is the point of origin or the point of destination of the customer's trip. If the provider is a health insurer licensed to transact insurance in this state, the provider may provide transportation, other than emergency transportation, to an insured between a medical facility where medical services covered by the health insurer have been or will be rendered and another facility or the residence of the insured.

(e) Except as otherwise provided in this paragraph, each trip is between a place of business owned by the provider and one other point. If the provider is a health insurer licensed to transact insurance in this state, the provider may provide transportation, other than emergency transportation, to an insured between a medical facility where medical services covered by the health insurer have been or will be rendered and another medical facility or the residence of the insured.

The attorney for Preferred Equities, the transportation provider, asked me to pay specific attention to subsections (c), (d), and (e) above. He was concerned about what his client must do in order to "effectively limit" the provision of transportation to customers (subsection c). He was also concerned about whether the "trip" referred to in section (e) is different from the "customer's trip" referred to in subsection (d).

LINGUISTIC ANALYSIS

In subsection (c) the word "effectively" is an evaluative adverb that semantically implies some kind of underlying basis or measurement of the quality being discussed. Without such objective indicators it is not possible to determine the extent to which something can be considered "effective." And is it effective all of the time? Most of the time? Some of the time? Some percentage of the time? By itself, the adverb "effectively" is subjective and unmeasured. The exact words used in the code are significant.

Effectively

This paragraph does not indicate a measure of how "effectively" can or will be defined, rendering it an unmeasured, subjective, vague statement as to its intended or actual meaning. It is therefore subject to multiple understandings.

Limits

In subsection (c) and elsewhere in this code, the verb "limits" does not prescribe the actual restraints to the provision of transportation. Nor does it specify any absolute boundary for what is to be limited. The *Merriam-Webster's Collegiate Dictionary* definition provides the common meanings understood by this verb as follows:

1. To assign certain limits to: prescribe
2. a. To restrict the bounds or limits of
2. b. To curtail or reduce in quantity or extent

Synonyms: restrict, circumscribe, confine

"Limit" implies setting a point or line beyond which something cannot or is not permitted to go.
"Restrict" suggests a narrowing or tightening or restraining within or as if within an encircling boundary.
"Circumscribe" stresses restriction on all sides by clearly defined boundaries.
"Confine" suggests severe restraint.

The verb "limits" suggests only that a boundary is out there somewhere and that it should not be exceeded, but it does not tell us the extent to which any breech, or even limit, can be made. If an absolute boundary was intended, a definition of that boundary, in conjunction with a more precise expression of the extent to which tolerance or intolerance of its application is applied, using expressions such as "is confined to" or "is circumscribed by," would better describe the absolute extent to which the provision of transportation could not be breached. By selecting "limits" however, we learn only that some unknown restriction on the extent of provision of transportation is vaguely to be applied, without knowing what such limitations are. Likewise, the boundaries are not indicated. "Restricts," as the dictionary indicates, would be an equally poor choice since it indicates only "the narrowing or tightening or restraining within or as if within an encircling boundary."

The use of the verb "limits," therefore, is semantically vague in subsection (c) and is subject to multiple interpretations or understandings. Therefore, the entire verbal expression "effectively limits" is semantically vague and is subject to multiple interpretations and understandings.

Customer

Since the state claimed that people using the transportation service were not customers, it is useful to define what a "customer" means. The plural form of the noun "customer" in subsection (c) is commonly defined by *Merriam-Webster's Collegiate Dictionary* and *The American Heritage Dictionary* as "one that purchases a commodity or service" and as "a person with whom one must deal." Those who use the service provider in this case can be expected to be either those who purchase the service or, by extension, those who might be expected to purchase it. The noun "customers" in subsection (c) does not specify whether those being transported by the service must be actual purchasers alone, whether they can be friends of the actual purchasers, or are other types of people, including potential customers.

Trip

Also at issue in this case was what the code meant by a "trip," as that word was used in subsection (e). The State's investigators alleged that Preferred Equities' buses were found to have included allegedly unqualified riders, violating subsection (e) by transporting customers from one casino to the other, rather than going from the place of business (a condominium) to only one other casino. The State also believed that the service provider was aware of this violation. The relevant common meaning of "trip" found in *Merriam-Webster's Collegiate Dictionary* is: "voyage or journey; a single round or tour on a business errand." The issue of Preferred Equities' alleged awareness of this alleged violation centers on the definition of the noun "trip." There is no indication in this definition that a "trip" is defined from the perspective of the one who provides the trip. It is rather from the perspective of the customer. If the writers of subsection (e) intended to specify the meaning of "trip" to be a trip made by the provider rather than by the traveler, they could have done so clearly in the same way that they indicated "trip" to be that of the customer in subsection (d), as "the customer's trip." To make this clear an unambiguous in subsection (e), the code could have said: "Except as otherwise provided in this paragraph, *each trip made by the provider* is to be between a place of business owned by the provider and only one other point." But having previously identified "trip" as "customer's trip" in subsection (d), the reader, unless given other marked clues, is encouraged to keep on using "trip" to refer to a trip made by a customer in subsection (e).

Specific to this case, a more explicit wording would have insured that customers would not be picked up at the Venetian and driven to the Frontier, for example, since such practice would violate the requirement for one of the stops to be at the place of business (the condominium). A more explicit wording would also indicate that the provider could not make any "trip" from the place of business which makes two stops, one at the Venetian and the other at the Frontier, even if individual customers boarded or debarked at only one of each of the stops.

The problem in this case is unfortunately common. Laws, codes, and statutes are not usually written or reviewed by specialists who might be able to point out instances where they are not clear and unambiguous. Therefore, when disputes over meaning arise, it can be helpful to lawyers if specialists such as linguists are called in to point out where things have gotten murky. This case is a classic example of how semantic analysis can assist the defendant. But one wonders why things had to get this far in the first place. It would not be a totally outrageous idea to have laws, codes, and statutes reviewed and analyzed before litigation has to make the dirty linen public.

This page intentionally left blank

PART II

Deceptive Trade Practices

When a business creates advertisements that are alleged to be false, misleading, disparaging, or deceptive, various law jurisdictions can charge that business with engaging in deceptive trade practice. In the United States, states apply their own laws in such matters. For example, the state of Minnesota applies its Uniform Deceptive Trade Practices Act, its Prevention of Consumer Fraud Act, and its False Statement in Advertising Act, all adopted in 1994. Other statutes allow allegedly offended companies to bring private lawsuits against the companies that they believe violated such acts, asking for remedies, including injunctive relief, attorney's fees, costs, and disbursements.

Robinson (1996) points out, "Deceit in the marketplace is probably as old as the cracked flints and molting fur wraps that changed hands in the Stone Age" (219). Somewhere along the line, informal norms about deceptive practices began to be supplemented by legislation, and both buyers and sellers were put on notice that there were laws, not just taboos, about it. But deciding about whether or not an action is deceptive has never been easy. Researchers who study spoken deception while it occurs have concluded that people are not very good at it (Ekman 1986; Miller and Stiff 1993; Shuy 1998; Galasinski 2000).

When deception occurs on written forms, as in advertising and contracts, however, the task of determining deception is made only slightly easier. It is clear to all that merchandise is supposed to serve the purposes that it is claimed to serve. To ensure that all is aboveboard, some industries have created their own regulatory bodies to monitor both overt and implied deceptive trade practices. And this opens the door for linguistic analysis. For decades now, linguists have been dealing with the implicatures of language, how something that was implied or suggested differs from what was said (Grice 1967). McCawley (1978) points out that what is conversationally implicated by an utterance "depends not only on the utterance but on what other utterances the speaker could have produced but did not" (245). It is possible for sellers to avoid outright lying but still manage to deceive, usually by the way that they use language.

Curiously perhaps, although criminal law stresses intention when it deals with deception and lying, civil law does not appear to do so, even though fraud is an intentional tort. But we don't often find the accusation of "lying" in civil cases; only "knowingly making false statements," which may be the reason that some advertisers appear to think they are not misleading buyers when they offer questionable claims that are not easy to either verify or discredit. Obviously, the more blatant the claim, the more likely it is to be disbelieved, but even blatant claims do not often raise customers' suspicions. Most civil lawsuits arise when there are thought to be pretty clear discrepancies between the advertisement and what is believed (or found) to be true. The science fields attempt to maintain rigorous policing of scientific discoveries, requiring peer reviews and testing through replication of experiments. Nothing like this seems to be common in most other fields, including commerce. Most Americans are not aware, for instance, that the Federal Trade Commission, which tries to regulate the flow of pharmaceutical products to the marketplace, insists only on "trials" of new drugs that pit their effects against placebos, not against the comparative effectiveness of other similar products that address the same medical issues.

To linguists, at least, the fine-line difference between "intentionally making false statements," the expression commonly used in criminal cases, and "knowingly making false claims," the expression commonly used in civil cases, does not seem very clear or apparent. Until 1986, "knowingly" meant "actual knowledge of falsity." Since that time many U.S. courts say that "knowingly" also encompasses "reckless disregard for the truth."

The issue of lying and deception gets further complicated by cases such as that of the ousted chief executive of PeopleSoft, who claimed that he did not lie to analysts in 2003 but rather had simply "not been clear" (*New York Times*, October 7, 2004). He testified at trial that his comments to analysts in the unsolicited takeover bid by software manufacturer Oracle were accurate except when he "misspoke" and said that "all" of PeopleSoft's orders had been completed when, in truth, only "most" of them had been. Lawyers for Oracle claimed that this statement about completed orders was "a deliberate lie" and constituted securities fraud. If it was a "deliberate" lie, someone would need to find ways to get into that executive's mind to discover it. And if it was "deliberate," how is a "deliberate" lie different from an "intentional" one?

Following are three cases involving alleged deceptive trade practice stemming from advertisements. One case was brought by a company making industrial conveyor equipment against a competing company. The second case was brought by eleven state attorneys general against the manufacturer of a nicotine patch that was claimed to help smokers "stop" their habit. The third case was brought by a disgruntled purchaser of certificates of deposit against the

bank from which these CDs had been purchased some years earlier. In all three cases, language was at the center of the controversy.

References related to language and deception that linguists can find helpful include the following:

Ekman, Paul. 1986. *Telling Lies*. New York: Norton.
Galasinski, Dariusz. 2000. *The Language of Deception*. Thousand Oaks, Calif.: Sage.
Miller, Gerald R., and James B. Stiff. 1993. *Deceptive Communication*. Thousand Oaks, Calif.: Sage.
Robinson, W. Peter. 1996. *Deceit, Delusion and Detection*. Thousand Oaks, Calif.: Sage.
Shuy, Roger W. 1998. *The Language of Confession, Interrogation and Deception*. Thousand Oaks, Calif.: Sage.
Tiersma, Peter. 1999. *Legal Language*. Chicago: University of Chicago Press.

This page intentionally left blank

CHAPTER 5

Competing Conveying System Advertisements

Dynamic Air v. Flexicon Corporation

Conveyor systems are used by manufacturers to transport, process, and package bulk materials. Dynamic Air and Flexicon are two competing manufacturers of these industrial systems. Dynamic Air uses a pneumatic process, while Flexicon uses a screw process. Dynamic Air objected to Flexicon's advertisements in national trade journals, comparing its flexible screw conveyors with other systems for handling bulk materials, including pneumatic conveyor systems.

Dynamic Air charged that Flexicon's advertisements contained a variety of false and misleading representations that disparage competitors, including those who use pneumatic systems. Among other things, these advertisements were alleged claim that Flexicon conveyors are "best" and that pneumatic conveying systems are "worst" on issues of cost to purchase, cost to install, prevention of product contamination, use of moving parts, gentleness of product handling, ability to convey most products that pack, the time it takes to clean thoroughly, prevention of separation of blends, maintenance costs, and handling of bulk solids that contain moisture, oil, fat, and other additives.

Dynamic Air also alleged that Flexicon had in its files but did not reveal industry data, studies, statistics, and/or other information that might substantiate or support the representations made in Flexicon's advertisements. If, as Dynamic Air charged, such data indeed existed, Dynamic Air wanted access in order to refute or impeach Flexicon's advertisements. Dynamic Air claimed that Flexicon's "false, misleading, and disparaging advertisements" were causing irreparable harm to Dynamic Air's business and the reputation of its pneumatic conveying systems. It also requested a permanent restraining order that would enjoin Flexicon from publishing any false or misleading statements concerning pneumatic conveying systems. In its complaint, Dynamic Air cited three of Flexicon's advertisements that had appeared in trade journals.

Court File No. CO–95–6512

U.S. District Court, Second Judicial District, Minnesota

DATA

The following advertisement for Flexicon (Example 5.1), which appeared in one trade journal, contains the written text reproduced as nearly as possible to the original in type size and layout, but there is no attempt made here to reproduce the pictures or colors in that advertisement.

EXAMPLE 5.1

See how Flexicon outperforms more costly conveyors 11 ways

YOUR NEEDS:

	FLEXICON FLEXIBLE	RIGID SCREW	BUCKET ELEVATOR	PNEUMATIC	DRAG CHAIN
LOWER COST	BEST	FAIR	POOR	WORST	WORST
PREVENTING CONTAMINATION OF PROJECT	BEST	WORST	WORST	FAIR	FAIR
PREVENTING CONTAMINATION OF PLANT	BEST	FAIR	WORST	FAIR	GOOD
FEWEST MOVING PARTS	BEST	GOOD	WORST	FAIR	POOR
MOST GENTLE PRODUCT HANDLING	GOOD	POOR	BEST	WORST	BEST
ABILITY TO CONVEY MOST PRODUCTS THAT PACK	BEST	POOR	POOR	WORST	POOR
TIME TO CLEAN THOROUGHLY	BEST	FAIR	WORST	FAIR	WORST
ABILITY TO CONVEY IN ANY DIRECTION	BEST	WORST	POOR	BEST	BEST

PREVENTS SEPARATION OF BLENDS	BEST	FAIR	BEST	WORST	FAIR
LOWEST MAINTENANCE	BEST	FAIR	WORST	POOR	POOR

ABOVE RATINGS ARE COMPARISONS BASED ON MOST COMMON APPLICATIONS

A Flexicon conveys all powder and bulk solids, from large pellets to submicron powders, including hard-to-move moist products, without packing, caking, or smearing. Six models, each available in carbon, stainless, and sanitary stainless steel, range in output from 1 to 1800 cu. ft./hr and convey up to 35 ft. vertically, 80 ft. horizontally or at any angle in between—around, under and over obstructions. Only one moving part makes Flexicon inexpensive, maintenance-free, and easy to keep spotlessly clean. Stationary and portable models maximize your flexibility. For your free literature kit, call Flexicon today.

Another Flexicon advertisement in a different trade journal contained the text in Example 5.2 (again without the visual illustrations).

EXAMPLE 5.2

Cut Material Handling Costs

1 **LOWEST PURCHASE COST**
—far lower than bucket elevators, pneumatic conveyors or drag chains.

2 **LOWEST INSTALLATION COST**
—light flexible polyethylene tube makes routing and alignment quick and easy.

3 **LOWEST MAINTENANCE COST**
—inner spiral is only moving part. Highest reliability and virtually no maintenance.

4 **LOWEST CLEAN-UP COST**
—Reversing action empties system of bulk material allowing fast and thorough cleaning.

(continued)

Conveys all powder and bulk solids—large particles to compressible powders. Six models with max. outputs of up to 1800 cu. ft./hr., in carbon, stainless steel, and sanitary construction including portables. Conveys up to 35 ft. vertically, or any angle in between—around, under, or over obstructions.
CALL TODAY FOR DETAILED LITERATURE

The text of a third allegedly fraudulent advertisement, again in a trade journal, is as shown in Example 5.3.

EXAMPLE 5.3

Convey hard-to-move bulk products

A BEV-CON spiral conveyer gently handles powder and bulk solids containing moisture, oil, fat, and other additives that tend to pack, cake, smear or break-apart in general purpose spiral, screw, bucket, or pneumatic conveyors.

Four BEV-CON models in carbon, stainless, and sanitary stainless steel convey from 10 to 1000 cu.ft./hr, up to 18 ft. in height.

- Low purchase cost
- Low installation cost
- Enclosed tube prevents contamination
- One moving part
- Fast, thorough cleaning
- Prevents separation of blends
- Gentle product handling
- Low maintenance
- Stationary or portable configurations

Flexicon

[address]

LINGUISTIC ANALYSIS

The attorney for defendant Flexicon called me to analyze the language of the above advertisements that framed the basis of Dynamic Air's charges of deceptive trade practice. The first advertisement in Example 5.1 makes no mention of any specific competitor's name, but by indicating the type of conveyor process that Dynamic used, Dynamic Air believed it had been singled out and was offended to the extent of bringing a law suit against Flexicon.

Verb tense in relation to previous testing

Among other charges, Dynamic Air challenged Flexicon on the basis of the comparisons it made in Example 5.1. It believed that Flexicon could not make such a comparison without first carrying out scientific tests and that such tests were being withheld. Neither in this nor any other advertisement could I find any language indicating that Flexicon claimed that such tests or studies were ever made. If such tests had been made, expressions such as "tests showed" or "laboratory evidence made it clear that" could have been used. If previous testing or studies had served as the basis for Flexicon's advertising claims and an explicit claim based on those studies had been made, such tests or studies most likely would be referred to with past-tense verbs. In contrast, the verb tense found in these and other Flexicon advertisements is consistently present tense: "eliminates," "cleans," "moves," "features," " filters," "returns," " elongates," "attaches," "retracts," "connects," "performs," "lets," "is designed," "contains," "can be controlled," "allowing," "eliminating," "can be integrated," "combines," "discharges," "is ideal," "expands," "fits," "can be curved . . . and routed," "mounts," "stretches," "handles," "makes," "empties." The language found in the advertisements does not implicitly claim that the comparisons with other makers of conveyors are based on tests or studies.

In addition to the comparison chart in Example 5.1 above, Flexicon's language is consistent with the proposition that no previous testing had been done or studies made upon which the chart comparisons had been based. The text introducing the comparison chart says, "See how Flexicon outperforms more costly conveyors 11 ways." If previous testing or studies were the basis for this chart, the verb, "performs," would be "performed," since the claim would have been based on past experiments or tests. Likewise, in the text immediately following the chart (but still within the area of the chart), the verbs are consistently present tense: "Flexicon conveys," "six models . . . range," "one moving part makes," "models maximize."

The meaning of "ratings"

A second issue concerned the use of the word "ratings" in Flexicon's sentence, "Above ratings are comparisons based on most common applications," which appears immediately under the comparison chart in Example 5.1. Dynamic Air claimed that when Flexicon used this word, it indicated that the ratings were based on a test or study that had been made.

Merriam-Webster's Collegiate Dictionary lists the following definitions of "rating":

1. a classification according to grade
2. a naval enlisted man (chiefly British)
3. a relative estimate or evaluation
4. a stated operating limit of a machine expressible in power units (as kilowatts of a direct current generator) or in characteristics (as in voltage).

The American Heritage Dictionary and *The Random House Webster's Collegiate Dictionary* offer very similar definitions.

From these relevant, common dictionary definitions it is clear that "ratings" can be commonly understood to be subjective, relative estimates, comparisons, or evaluations. It is equally clear that the word "ratings" does not require the existence of experimentally based research or tests. There is nothing in the use of "ratings" or in the context of the sentence in which it is used to give readers a definite impression that testing or studies support the chart comparisons.

The language of the comparison categories

One major principle of effective communication is that writers adjust their writing to the audience, a technique called "audience design" (Bell 1991, 105). The more sophisticated the audience, the more specific or technical the writing can be, since such specificity addresses audience knowledge and needs. The categories of Flexicon's comparison chart are broad, relatively unspecific, and evaluative: Best, Good, Fair, Poor, Worst. Such categories are commonly used in subjective reaction instruments as an indicator of a subject's beliefs, values, attitudes, likes, or dislikes (Fasold 1984). In contrast, scientific comparisons of measurable products normally present numerical, statistical measures of the quantities or performances of that which is being tested. If actual tests or studies had preceded the publication of Flexicon's comparison advertisement,

specific numbers could have easily replaced these broad, evaluative category names. Specialized readers, such as those of a trade journal, would be likely to fully understand the use of quantitative comparisons. The fact that there were none of these in the advertisement suggests that there were none to begin with.

Although the linguistic analysis in this case did not have to be technical or detailed, it was enough to help achieve settlement before trial. Oddly enough, Flexicon's consistent use of the present tense rather than past tense in its advertising claims had gone unnoticed by both sides until it was pointed out to them. Linguists are trained to find little things like this in their analyses. Flexicon's lawyers had used dictionaries in the past, especially to find the conventional meanings of technical terms, but until they were used here, it hadn't occurred to them that the semantics of common words, such as "ratings," might aid their case. Nor did they have the background in language research to understand that the nontechnical simplicity of terminology used by Flexicon in its comparison chart gave evidence that it was not based on prior tests or research.

This page intentionally left blank

CHAPTER 6

Nicotine Patch Advertisements

The States of Arizona, California, Illinois, Iowa, Massachusetts, Minnesota, Missouri, New Mexico, New York, North Carolina, and Texas v. CIBA-Geigy Corporation

Sometimes attorneys general of several states will join to bring a class action suit against a manufacturer whose products they feel have been deceptively advertised and promoted. This happened in 1992, when eleven states, led by Minnesota's attorney general, Hubert Humphrey III, brought a suit against CIBA-Geigy and Basel Pharmaceuticals, the producer of a skin patch called Habitrol, a device used to help smokers give up the habit. The focus of this litigation centered on one widely appearing advertisement. Among other things, the states' objections to the advertisement were that its claims of success were based only on ten-week studies. Long-term effect studies had not been conducted, and there was no evidence about how the patch would work with persons under eighteen.

The allegedly offending advertisement appeared in popular magazines throughout the United States. Since Habitrol was sold only with a doctor's prescription, the ad included on the following full page a detailed description of indications, contra-indications, precautions, dosage, reactions, storage advice, and the reports of research and testing carried out on the product, which appeared in the usual fine print that met the requirements of law.

The attorneys general objected to some of the text in the introduction to this advertisement, which contained a half-page picture of a man holding up his shirt sleeve so that the round patch was visible. The major objection concerned the words "quitter" and "quit." The suit also claimed that the advertisement failed to clearly and conspicuously disclose material facts concerning the effectiveness of nicotine patches, significant precautions relating to their use, and potential adverse health risks that may be associated with their use.

Although a class action was planned, this issue never reached the status of an actual lawsuit. Settlement was mutually negotiated before this happened.

The advertisement contained a picture of a man wearing a patch and was captioned PORTRAIT OF A QUITTER, accompanied by the partly narrative text in Example 6.1.

EXAMPLE 6.1

About six years ago, I decided to stop smoking. So I tried cold turkey.

But soon, my wife caught me sneaking cigarettes out the bathroom window.

QUITE FRANKLY, I NEVER THOUGHT I COULD REALLY QUIT SMOKING.

Then my doctor suggested Habitrol.™ Habitrol is a skin patch, available only by prescription to help relieve nicotine cravings. When used as part of a comprehensive behavioral smoking cessation program, it's been clinically proven to increase the chances of quitting in the critical first three months. That's when nicotine withdrawal symptoms force many people back to smoking.

As part of my smoking cessation program, I attended a support group my doctor recommended. He also gave me a great support kit with tips on getting through the rough times. And an audio tape for relaxation and motivation.

Since Habitrol contains nicotine, do NOT smoke or use other nicotine containing products while receiving Habitrol treatment. If you're pregnant or nursing, or have heart disease, be sure to first find out from your doctor all the ways you can stop smoking. If you're taking a prescription medicine or are under a doctor's care, talk with your doctor about the potential risks of Habitrol. Habitrol shouldn't be used for more than three months.

If you're really determined to quit, **ask your doctor** if Habitrol as part of a comprehensive smoking cessation program is right for you. **Or call 1-800-YES-U-CAN,** for a brochure today.

If you're tired of quitting and failing, Habitrol can help you with the nicotine craving and this can help you in your program to quit smoking. After that, it's up to you.

IF YOU'VE GOT THE WILL, NOW YOU CAN HAVE THE POWER.

LINGUISTIC ANALYSIS

After notification of the lawsuit was delivered to the manufacturer, its attorney called me to carry out an analysis of the advertisement. The complaint's major claim concerned the words "quit" and "quitter," which the attorneys general considered deceptive, since it meant to them that users of Habitrol would believe that this meant that purchasers would be able to quit forever. They argued that the wording would be more appropriate and honest if it were "Portrait of an ex-smoker."

My analysis had two components: the structure and meaning found in the narrative part of the "portrait" ad, and the meanings of "quitter" and "quit."

MEANING IN THE NARRATIVE

Applying Labov's (1972, 363–370) analysis of narrative structure to the narrative part of the advertisement (the first half) showed the structure of the "portrait" to be as follows:

1. Abstract: What this is about (the title) Portrait of a quitter	(this is a story about a quitter)
2. Orientation: Who, what, when, where?	(the first two paragraphs)
About six years ago, I decided to stop smoking.	(decided six years ago)
So I tried cold turkey.	(first try: cold turkey)
But soon, my wife caught me sneaking cigarettes out the bathroom window.	(I was unsuccessful)
Quite frankly, I never thought I could really quit smoking.	(never thought I could)
3. Complicating action: Then what happened? (next two paragraphs) Then my doctor suggested Habitrol.	(doctor suggested it)
4. Evaluation	(none)
5. Resolution	(none)
6. Coda	(none)

Unlike the structure of a narrative, the first half of the advertisement does not include the conventional sections of evaluation, resolution, or coda. That is, there is no section in which the man describes his experience using Habitrol. Instead, the narrative ends, and the product is described and explained in the second half of the advertisement. The "quitter" does not explicitly evaluate his personal experience using Habitrol, and no there are no resolution or coda sections.

The only way in which the quitter even suggests a resolution or coda is through the implication generated by the sentence: "Quite frankly, I never thought I could really quit smoking," which occurs in the orientation section of the narrative and generates the implication, "Now I think I can really quit smoking." The closest to a resolution, therefore, is that as a result of trying Habitrol, the man now believes that he is capable of really quitting smoking. Nowhere in this narrative do we directly or indirectly find the man saying, "By using Habitrol, I successfully quit smoking."

The meaning of "quitter" and "quit"

The suffix, "-er," derives a noun from a verb, as in:

VERB >	NOUN
boil	boiler
feed	feeder
see	seer
write	writer
quit	quitter

The implication of these and other possible examples is that the noun form denotes an individual or thing that does the action of the verb more than one time. It is odd to say that a person who boiled something one time is forever a boiler or that a person who wrote one time is forever a writer. It follows that it is possible that in order to be described as a quitter a person would need to have tried to do this more than once.

Dictionary definitions of "quit" are not always helpful or complete. *Merriam-Webster's Collegiate Dictionary* defines it as "give up; to cease normal, expected or necessary action." *The American Heritage Dictionary* says: "give up, relinquish, quit a job; abandon or put aside; forsake." *Random House Webster's College Dictionary* adds: "to stop struggling . . . accept or acknowledge defeat." As useful as dictionary definitions can be, they do not always tell the whole semantic story. For example, when one quits, does this always mean forever? One

can quit a job, which is probably permanent, but at the end of a workday one can also say "it's time to quit," or "it's quitting time," and in this case one can easily assume that it does not mean that the speaker will never work again or, in fact, never resume the same task at that job.

Since in the context of working "quit" means either to stop working forever or to stop for some period of time, it would seem reasonable that "quit" in the context of smoking can also have either meaning. To decide on which meaning to accept, it is often useful to try to determine how real people have used the words in question. The Lexis/Nexis search engine was commonly used at the time of this case. A Lexis/Nexis search of the terms found in magazines yielded hundreds of examples such as the following, indicating that "quit" means *to attempt* to achieve permanent cessation.

"Why quitters feel better during the winter. Here's another reason to try to quit smoking this winter."

"These ads heighten awareness of the smoking problem, stimulate new quit attempts, and help counter the enormous message still coming from . . ."

"Page, who admitted several attempts to quit smoking, attributed his longevity to favorable genetics."

"Seventeen million Americans try to quit smoking every year, but only 1.3 million succeed, according to the Surgeon General."

". . . a 10 year, pack-a-day smoking habit in 1984 after a dozen stabs at quitting using various stop-smoking schemes."

"Quitting smoking is as hard as relapsing is easy. Even smokers who succeed sometimes have intense cravings for nicotine for months."

"Most smokers have to make at least two or three serious quit attempts before they actually succeed . . . each relapse, the experts tell me, is part of the quitting process."

"Even if the person has relapsed completely, try to persuade him/her to set another quit date and start again."

(re: drinking) "Dennis had tried to quit, going as many as 40 days without a drink. But the struggle took its toll: '86 was one of the worst seasons of his career.

(re: hunting season) "We quit in September and then we start up again on weekends in January."

(continued)

(re: scanner settings) "After the driver has been set, you can't change scanner settings. This means you must remember to set the number of greyscales before starting PhotoFinish, and have to quit and restart if you want to change them."

That quitting does not always mean permanent cessation is illustrated by hundreds of magazine citations where it means *stopping for some period of time,* including the following:

"She recently quit smoking after hypnosis therapy, but then returned to her two-pack-a-day habit."

"Securities analyst Barbara Ryan: 'This could be like dieting—you could get a lot of people who get on a patch, quit, start smoking again, then get on the patch again.' "

"Still falling off the wagon and back onto the patch support is a better alternative . . ."

"Lacking any kind of willpower, such a device may be necessary. In fact, given my track record (I've quit smoking three times now), I'll probably have to use it myself sometime."

"George Peppard, who quit smoking seven years ago but resumed a two-pack-a-day habit last year, is out of the hospital . . ."

"Quit smoking a year ago but recently restarted, though I'm not smoking nearly as much as I was."

Since "quit" is used to convey a number of meanings, including trying to do so, doing so for an indefinite period of time, or doing so permanently, it can be useful to examine the ways that language offers to clarify that permanence is what is intended. The following examples are taken from the same Lexis/Nexis corpus:

"some people *quit for good.*"

"But quitting for a while and *quitting for good* are two different things."

"The most effective method of quitting smoking is a heart attack," he says. "Of those who survive, 50 percent *quit smoking over the long term.*"

> "The question is, what good will it do for *permanent cessation*?"
>
> "A Vancouver writer tells of three old chums from university days who arrange a weekend reunion with a view to *quit smoking once and for all.*"

It is reasonable, therefore, that if the Habitrol patch advertisement intended to suggest permanent cessation, it could easily have done so using "for good," "over the long run," "permanent," or "once and for all."

Is the effort to quit smoking anything like a promise to do so? When speakers quit or promise to quit, they commit themselves to do something in the future. For the speech act of promising, one of the conditions that Searle (1969) notes is: "S intends that the utterance of T will place him under the obligation to do A" (60). This condition does not seem to apply to the act of quitting smoking. When people say that they will quit, they are not promising to never smoke again. Smoking involves a physical addiction, and it is recognized that individuals often need external help to break that addiction. Unlike normal promises, it is not merely up to the speaker to do the act. Rather, quitting seems to indicate: "S intends that the utterance of T will place him/her under an obligation to try to do A."

This assessment is supported by the fact that quitting smoking is often included in lists of behavioral or lifestyle changes, such as dieting and exercising, all of which people attempt to do permanently with varying degrees of consistency or success. People may stick to a low-fat diet for a while but may or may not succeed forever. By including "quitting smoking" in lists that include lifestyle changes, the implication is that quitting smoking is the same type of behavior.

The Lexis/Nexis search of articles about lifestyle changes used at the time of this case included the following number of examples:

quitting smoking	64
eating right/dieting	58
exercising	24
reducing drinking	7
buckling seatbelts	6
managing stress	4
coping with ailments	4
time with children	2
using child seat	2
13 others	1 each

The major issue in this case concerned the meaning of "quit." From the way language is used, it can be argued that to quit something is to stop a behavior for a

period of time. Much the same argument can be made for "stop" here, since even traffic stop signs do not mean that cars should remain permanently inactive. Thus, in ceasing the behavior for any amount of time, one has quit or stopped. The attorney generals' implied meaning of "quit," that of cessation forever, is much less clear.

The advertisement claims to present a portrait of a quitter. This suggests that it describes a person who has tried to quit smoking at least once before. If the manufacturer wanted to express clearly that this is a portrait of person who smoked, used Habitrol, then never smoked again, they could have used the label, "Portrait of an Ex-smoker" on a scale of "informativeness or semantic strength" (Levinson 1983, 132–136). But the complaint's suggestion that "ex-smoker" would be better here fails, since it implies that someone permanently quit smoking. Although "ex-smoker" does not specify that only one attempt was made, it does suggest that one successful attempt was made and that no future attempts are necessary.

This case offered the opportunity to make use of linguistic research on narrative structure, morphology, and semantics. It also illustrated how dictionary definitions are not always completely reliable and how electronic searches of language use can be helpful in comparisons with language found in the evidence of legal disputes. Like many civil cases, this one never reached trial. The eleven attorneys general had asked $50,000 for each of their states, coming to a total of $550,000 overall. The manufacturer decided to pay that amount to make the potential case go away without the expense of litigation. In its voluntary compliance brief, CIBA-Geigy agreed to disclose:

1. that the claim of effectiveness was based on ten-week studies
2. that Habitrol will not work for everyone
3. that Habitrol should not be used for more than three months
4. that the effects of Habitrol on pregnant women had not been studied
5. that people with certain health conditions should seek doctors' advice before using Habitrol
6. that persons should not use other nicotine products while using Habitrol
7. that the use of Habitrol has not been studied in persons under eighteen
8. that Habitrol is a drug and is available only by prescription

It should be noted that half of the items on this list had already appeared in the Portrait of a Quitter advertisement. Since in advertising disputes, as in smoking, it is sometimes more politic simply to start all over again, CIBA-Geigy also agreed to discontinue this ad.

CHAPTER 7

Certificates of Deposit Advertisements

Harold Ackerman v. Royal Bank of Pennsylvania

The way banks represent percentage yields for their certificates of deposit (CDs) has varied over the years, largely because of changing practices of computing interest in banking. The concepts and terms of "interest," "simple interest," and "compound interest" were at the heart of a ten-million-dollar case brought by Harold Ackerman against the Royal Bank of Pennsylvania. Mr. Ackerman and his wife purchased one hundred CDs from the bank in 1983. In 1990 they brought a suit charging deceptive trade practices against that bank, based on the wording of the advertisements that led them to make the purchase. Years later, when they went to cash in their CDs, they were told that the yield was based on simple interest. They were disappointed, because they had assumed that they would be getting annually compounded interest, which would have meant a much larger yield for them.

In 1983, the year of their purchase, the Federal Deposit Insurance Corporation (FDIC) had no requirement that the difference between simple and compound interest be specified to the purchaser. It was not until much later that this requirement was made. The case did not come to trial until 1998, at which time I gave expert witness testimony at it.

DATA

The evidence used by the Ackermans in their case consisted of the following two documents. Example 7.1 is a Royal Bank advertisement that appeared in the *Philadelphia Inquirer*, dated Monday, June 22, 1985, and Example 7.2 is the wording on the CD itself.

EXAMPLE 7.1

"Buy a $10,000 CD and you receive a FREE 19" color TV or a Free weekend for two at my Five-Star Tabas Hotel."

[Photo of Mickey Rooney here]

6 year CD	8 year CD	10 year CD
11%	12%	13%

*Simple interest payable at maturity. Early withdrawal on deposit not allowed.

Call John Work, Executive V.P. [phone number deleted]

ROYAL BANK OF PENNSYLVANIA

OPEN SATURDAYS

732 Montgomery Ave. Narberth, PA 19072 • FDIC insured up to $100,000

7 Offices in Philadelphia, King of Prussia, Narberth, Phoenixville, Trooper, Bridgeport

EXAMPLE 7.2

CERTIFICATE OF DEPOSIT

ROYAL BANK OF PENNSYLVANIA

King of Prussia, Penna. 19406

CERTIFIES THAT THERE HAS BEEN DEPOSITED WITH IT THE SUM OF

ROYAL BANK OF

PENNSYLVANIA **5,000 DOLS 00 CTS**

_____DOLLARS

WHICH WILL PAY TO REGISTERED DEPOSIT ON April 15, 1985 UPON RETURN OF THIS CERTIFICATE PROPERLY ENDORSED WITH INTEREST AT THE RATE OF 10.50 PER CENTUM PER ANNUM SIMPLE INTEREST FROM DATE OF ISSUE. IN CASE OF LOSS OR DESTRUCTION HEREOF PAYMENT OR THE MATURITY, THIS CERTIFICATE, INCLUDING INTEREST, WILL BE AUTOMATICALLY RENEWED AT MATURITY FOR LIKE PERIOD OF TIME AT THE THEN CURRENT RATE. UNLESS BEFORE THE MATURITY DATE WE RECEIVE IN WRITING INSTRUCTIONS TO THE CONTRARY, THIS CERTIFICATE IS SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE HEREOF.

REGISTERED
DEPOSITOR T.I.N.

Narberth office 180 days
250-004

[signature here]
REGISTER

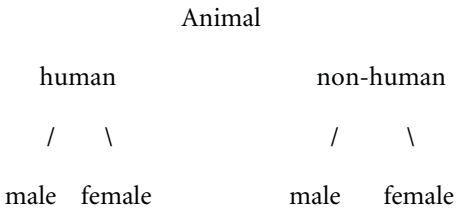
NON-NEGOTIABLE—NOT TRANSFERABLE

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

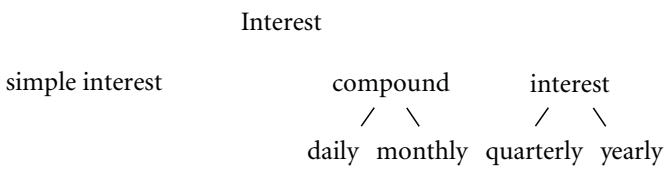
LINGUISTIC ANALYSIS

The clear and simple dispute in this case was over the meaning of the word "interest" in the advertisement and on the CDs themselves. I pointed out that there were three ways to answer the question. One could ask the sender of the message, Royal Bank of Pennsylvania, what it meant when it used the term. Or, one could ask the plaintiff/purchaser, Harold Ackerman, what he understood by the word. Obviously neither approach was satisfactory since the parties said they meant and understood different meanings. The third way to answer the question is to examine the text in its historical context, the task of linguistics.

One principle of lexical semantics is that category words can be described in relationship to each other (Cruse 1986). That is, a taxonomic hierarchy of inherently differentiated relations can be constructed. Such taxonomic hierarchies are commonly used in biology, botany, anthropology, linguistics, and various other fields of study. Often there are as many as five levels in each taxonomy, something like family trees. For example, note below a brief version of the taxonomy of "animals." The main, general meaning is at the top. The dominant (topmost) nodes of such taxonomies are the broadest and least differentiated nodes of the relationship. Terms used to represent these nodes are morphologically simple, original words, not borrowed from other semantic areas. All nodes beneath them are semantically related to them. The lower, derivative nodes are made up of more morphologically complex terms. Items at the lower level nodes are differentiated from each other but similar (related) enough to fall under the category name of their head node. The following is an illustrative, brief example:



Following the principle of lexical semantics, a taxonomic hierarchy of inherently differentiated relationships can be constructed for the term "interest" as follows:



Lower nodes fall under the dominance of the highest node, "interest." They are more morphologically complex and are differentiatable from each other while maintaining their relationship to the higher node.

Another principle of lexical semantics is that words or forms that are dominant at the higher nodes are unmarked. Lower node terms can be unmarked until such time that a need arises to differentiate or indicate a difference. At such times this newly recognized need to differentiate causes language users to create more morphologically complex expressions with which the differentiation can be conveyed (Cruse 1986, 146). In this case "interest" is the unmarked form. As long as "interest" denoted only the computation now known as "simple interest," there was no need for a taxonomic hierarchy, since "interest" meant the same thing as "simple interest." But when the concept of "compound interest" was developed, the term "interest" now required differentiated lower nodes, and a term had to be developed that contrasted with the new "compound interest."

The linguistic principles of language change also come to bear in this case. Usage varies according to the needs of the community that uses it. As long as a word is used widely in its unmarked, higher-node meaning, there is no need to differentiate it by a lower-node distinction. Much of what is considered ambiguous language derives from the fact that language changes, in this case changes or develops its meaning. When a community perceives a need to differentiate words at a lower, derivative node, there are two ways to do this:

1. add modifiers (for example, chair > lounge chair > cushioned lounge chair)
2. increase specificity (for example, animal > cow > Holstein cow > Holstein)

In this case, lexical semantic analysis shows that it is likely that at some point in time the modifiers "simple" and "compound" were added to "interest" to form the differentiated, lower nodes, largely because English had no individual, available, or suitable words to embody these newly differentiated meanings. Thus, historical derivation and common usage join in determining how long a term such as "interest" continued to be used to designate "simple interest" even after the newer and less commonly used concept of "compound interest" had developed.

The logical next step is to try to determine, from historical records and citations, whether the term "interest" was first used by itself to represent such a phenomenon and then, after the concept of "compound interest" was created, when the need for its parallel-node counterpart, "simple interest," came into being. One obvious place to look for such evidence is in the lexicographic records.

The earliest citation of "interest" is found in the *Oxford English Dictionary* (OED), which cites a document written in 1545. The earliest citations of "compound interest" and "simple interest," also in the OED, are located in a manuscript dated 1660. Despite OED and encyclopedia citations between 1545 and 1660, none of these differentiate simple from compound interest, indicating strongly that this differentiation had not yet gained common usage or practice. Cockeram's *The New English Dictionary* of 1626 contains a typical seventeenth-century definition of "interest" as a "profit made by usury," with no mention of either "simple" or "compound."

In the eighteenth century, dictionary entries changed somewhat. Evidence that "simple interest" was used synonymously with "interest" and that "compound interest" was the marked, or differentiated, form is found as early as 1720 in Phillips's *The World of English Words*, where the entry "compound interest" contrasts with "interest," but Phillips included no entry at all for "simple interest." Other dictionaries of that period differentiated simple and compound interest under the entry "interest" but included no separate entries under "simple interest" or "compound interest." The 1771 edition of the *Encyclopedia Britannica*, under the entry "interest," differentiated "simple" from "compound" but included no separate entries for the two concepts at that time. Clearly, both types of interest were available and differentiated, but lexicographic records give strong clues that "interest" and "simple interest" meant the same thing, with "compound" being the marked form.

In the nineteenth century, the synonymy of "interest" and "simple interest" is even clearer. Worcester's 1848 *A Universal and Critical Dictionary of the English Language* contains separate entries for "interest" and "compound interest" but no entry at all for "simple interest." Ogilvie's 1850 *The Imperial Dictionary*, Worcester's 1888 *Academic Dictionary*, and Murray's *Oxford English Dictionary* (1888–1893) did the same. The fact that dictionaries of this period saw fit to define "compound interest" separately from "interest" and that they defined "simple interest" identically with "interest" indicates that "compound interest" was the differentiated, marked form. In America, Noah Webster's 1828 *An American Dictionary of the English Language* followed the same practice.

Twentieth-century dictionary definitions of the words "interest," "simple interest," and "compound interest," as represented in *Merriam-Webster's New Collegiate Dictionary* (1983), are as follows:

interest: A charge for borrowed money generally a percentage of the amount borrowed.

simple interest: Interest paid or computed on the original principal only of a loan or on the amount of an account.

compound interest: Interest computed on the sum of an original principal and accrued interest.

These entries contain the following marked and unmarked elements:

	interest	*simple interest*	*compound interest*
unmarked:	of the amount borrowed	on the original principal	of an original principal
marked:	(none)	(none)	on accrued interest

"Interest" and "simple interest," in these entries, deal only with the unmarked meaning, while "compound interest" differentiates its meaning from the other two by marking the added "on accrued interest." This represented the usage of these words in 1983, when this edition of that dictionary was published, and continued to represent this meaning in the 1993 edition of that same dictionary.

In my trial testimony, the following questions were asked in my direct examination:

Q: Did the advertisement indicate whether the interest to be paid was simple or compound?

A: It stated clearly, "simple interest payable only at maturity."

Q: What did the 1983 CDs say in this regard?

A: It said, "interest at the rate of 12.00 per centum per annum from date."

Q: Was there any mention of compound interest on these CDs?

A: No there was not.

Q: Is there any mention of the marked form mentioned in your dictionary citation, "on accrued interest?"

A: None.

Q: Is there anything in "interest at the rate of 12 per centum per annum from that date" that is not a measurement?

A: No. These words indicate dimensions of measurement rate of interest, "12 per centum per annum and time from date." These are dimensions of measurement.

Q: In light of your research findings and linguistic analysis, is it reasonable for the purchasers of these CDs to assume that the interest was to be compounded?

A: No. Throughout history, "compound" interest is the marked form and must be explicitly stated as such if the intention is to be compound. Otherwise the unmarked form, "simple interest," must be understood.

Q: If what you said is true, how is it that the 1990 CD says "interest at the rate of 8.50 percent, simple interest from date of issue; payable at maturity"?

A: It is my understanding that sometime before this CD was prepared, the law changed and required such language.

Q: Does the fact that the law changed alter in any way your opinion that "interest" and "simple interest" are synonyms and that it is unnecessary to use the words, "simple interest," to contrast it with "compound interest?"

A: No. What the law requires does not change the language usage. I am not familiar with the reasons for adding this requirement but I do know that law does not dictate common usage; people do.

Q: Assume, in this case, other than media advertisements, that it was the policy of Royal Bank not to have any brochures discussing the purchase of CDs. Assume further that the only way to buy CDs was to sit face-to-face with a bank representative, discuss orally the various aspects of the CD, including the matter of interest type, such as "simple interest." Assume that the customer had the opportunity to ask questions, request clarifications, and get answers from the bank. In terms of your experience and knowledge in the field of linguistics, is this a reasonably effective method of exchanging information?

A: Face-to-face communication is always the most effective kind. It offers more channels of information than either written or even telephonic communication. It includes the possibility of two-way interaction: clarification of points, requests for repetitions or clarifications as well as questions. Written communication of an advertisement or on the CD itself has none of these. In addition, face-to-face settings open the door to additional nonverbal communication and understandings.

The cross-examination was brief and harmless. The direct examination above had represented the common meanings of these three terms, historically and contemporaneously to the time of the purchase, and had indicated that the only type of interest commonly differentiated and marked was "compound interest." The lack of such differentiation and marking meant that "simple interest" was used equivalently and synonymously with "interest" at the time the CDs were sold and when the dictionary entries were written, for there are no substantive representations of difference between "interest" and "simple interest." If "compound interest" had been intended, it should have been specified with those words.

This case provided the opportunity to combine the linguistic principles of lexical semantics and language change, neither of which would have been likely without the contributions of a forensic linguist as expert witness. It also offered the chance to restate what the documents could have said if the writers' intentions were to say what the plaintiff thought they said. After my expert witness testimony, the judge ruled in favor of the bank, concluding that the Royal Bank of Pennsylvania did not mislead its purchasers of certificates of deposit, and advertisements that contained the word "interest" referred to "simple interest," and ruled that plaintiff Ackerman's complaint had no merit.

PART III

Product Liability

A relatively recent development in law is referred to as product liability. Product liability cases are ones in which a plaintiff alleges injury caused by a product that had been used, holding the manufacturer and/or distributor of that product liable for such damage. This may seem straightforward and simple, but it is not altogether easy. For one thing, the plaintiff may have misused the product, may not have followed usage instructions properly, or may have ignored printed warnings on the label or elsewhere. Or the product's potential dangers may be so widely understood that expressing a warning might seem unnecessary, if not ludicrous. On the other hand, the manufacturer may have failed to foresee possible misuses of the product, possible misunderstandings created by the instructions or warning messages, or otherwise failed to meet accepted and conventional standards set for the product itself or for the written materials concerning it.

In product liability cases, as in other areas such as contract disputes, the standard involves an enigmatic "ordinary person." When the product is to be made available to a consumer, that consumer is to be considered an "ordinary consumer." Since standards of what constitutes "ordinary" have not been clear, sometimes courts refer to dictionaries to try to sort this out. But the fact remains that we don't really know how ordinary an ordinary person has to be, nor have we determined the characteristics and qualities that underlie such a designation very clearly.

The major task of linguistics in product liability cases has to do with the text of warning messages (Tiersma 2002; Dumas 1992; Shuy 1990). It is not likely that a linguist can determine the foreseeability of any misuses of the product, which is more the territory of specialists such as engineers, physicians, and pharmacists. But when a foreseeable misuse is recognized by the manufacturer and steps are taken to warn about it, the linguist's job becomes apparent. In the same way, linguists can be of assistance in efforts to analyze written instructions

on how the product should be used as well any other ways the manufacturer uses language, including advertisements (see chapters 5, 6, and 7).

Warnings related to products require the manufacturer to do a number of things. First they should identify and describe the nature and danger of the risk. Then they should tell the reader how to avoid it. Finally they should communicate these things in clear and understandable language. To accomplish the latter, the following principles should be followed:

1. The warning must capture the attention of the readers. If they don't see it, they won't attend to it and they obviously won't read it.
2. The warning must be written in such a way that it is understandable to the "ordinary person." But the fact that the intended audience of some warnings, such as those for prescription medicines, is the professional medical community, suggests that no single "ordinary reader" is always the goal.
3. The warning should be as direct and explicit as possible. Expressions such as "Do not use in large amounts" are imprecise and therefore easily subject to misinterpretation, if not lawsuits. Explicitness and directness of the warning suggest that it should not simply describe the possibly dangerous ingredients in a product and then expect the reader to infer the association of those ingredients with that product.
4. The warnings should be visibly readable and comprehensible. This includes appropriate and readable print size, page arrangement, text sequencing, and document design as well as effectively written, understandable prose.
5. The warnings must not be written in such highly complex syntax and vocabulary that they will discourage "ordinary persons" from persevering through the warning's text. Document design plays an important role here also. The use of print size, type, color, orthography, and allowance for "white space" may contribute greatly to the warning's language clarity or obfuscation.
6. The warning should alert the reader to a specific hazard, the degree of seriousness of the hazard, the consequences of the hazard, and how to avoid the hazard.

These principles are guides for appropriate linguistic analysis. In addition, linguists can compare the standards about warnings required by various government regulatory agencies (when such exist) with the actual language used on the product warning statements. Sometimes the manufacturer includes all of

the necessary information, but in ways that serious hazards appear to be minimized. If the appropriate regulatory standards say that certain words *must* be present, the manufacturer may make an effort to comply but, at the same time, try to state these dangers in a less alarming and, therefore, less helpful way. In extreme cases, the manufacturer may omit parts of the regulatory requirements or sequence them in such a way that the dangers are less apparent.

One growing issue in the United States and other countries is that "ordinary persons" may not speak the language of the warnings at all or, if they do, they may not be proficient enough to understand them. Some American manufacturers now include warnings in more than one language, usually Spanish, but there are no U.S. federal or state laws requiring this. Tiersma (2002) points out that some cases have followed the principle that when a warning is given only in English, it may be less than sufficient when the manufacturer promotes its products bilingually, especially in cases when the manufacturer could have foreseen that non-English-speaking users would not understand the warning made only in English.

The linguists' task is to reach into their kit of linguistic tools and use the ones that make the best case they can for either the plaintiff or the defendant. As in all other forms of consulting, one cannot do this in a biased fashion, selecting only the tools that make the case for one side or the other. The linguist analyzes the language and should be able to perform the same linguistic analysis for either side (Shuy 2006). Bear in mind, however, that a linguist is not able to get into the mind of either the sender of the message or the receiver of it. Defendant manufacturers are required to write messages in such a way that will ensure that it is possible for consumers to interpret these messages adequately to be warned about the potential dangers involved. Communication involves a sender, a message, and a receiver. The linguist's job is to analyze the message for whatever range of meanings it could hold for both the sender and the receiver. What the individual sender actually intended is not within the domain of linguistics. Neither is it what the individual receiver actually understood.

Following are four product liability cases in which linguistics was used. Three deal with the language of the hazard warnings. One problematic hazard statement was printed on the can of a product that was used to clean the hulls of commercial ships. The second concerned the hazard statements contained in the owner's and operator's manuals of generators used in recreational vehicles. The third product liability case involved warnings about toxic shock syndrome (TSS) dangers in a feminine hygiene product. Although the major use of linguistics in product liability cases to date has been centered on warning labels, this is not the only type of case in which linguistics can be helpful, as the fourth case illustrates. It concerns the communication between a pilot and various

ground control centers throughout the flight, showing that oral language can also be the evidence in product liability cases.

References related to language and product liability that linguists can find helpful include the following:

Cushing, Steven. 1994. *Fatal Words: Communication Clashes and Aircraft Crashes*. Chicago: University of Chicago Press.

Dumas, Bethany. 1992. Adequacy of cigarette package warnings: An analysis of the adequacy of federally mandated cigarette package warnings. *Tennessee Law Review* 59: 261–265.

Grice, H. Paul. 1975. Logic and Conversation. In Peter Cole and Jerry L. Morgan, eds., *Speech Acts*, vol. 3 of *Syntax and Semantics*, 41–58. New York: Academic.

Guidelines for Document Designers. 1981. Washington, D.C.: American Institute for Research.

Searle, John R. 1969. *Speech Acts: An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Shuy, Roger W. 1990. Warning labels: Language, law, and comprehensibility. *American Speech* 65.4: 291–303.

——. 1993. Language evidence in distinguishing pilot error from product liability. *International Journal of the Sociology of Language* 100/101: 101–114.

Tiersma, Peter. 2002. The language of law of product liability warnings. In Janet Cotterill, ed., *Language in the Legal Process*, 54–71. Houndmills: Palgrave Macmillan.

CHAPTER 8

Brain Damage from a Cleaning Product

Pedro Lassera v. Magnaflux Corporation

At an eastern U.S. port city where oceangoing ships come for service, vessels periodically dock for cleaning and repair. The cleaning task is usually assigned to low-skilled laborers who often have minimal ability in English. These workers usually have to work in tightly enclosed areas, sometimes with very poor lighting and limited ventilation.

As a result of one of these cleaning operations, a worker named Pedro Lassera suffered severe brain damage that was alleged to have been caused by the chemicals in the commercial cleaner he used. His family then brought a product liability tort against the manufacturer of the product, Magnaflux, claiming that the warning label on the can was inadequate and that this led to his injury. Investigations revealed that Mr. Lassera never claimed to have read the warning on the can. The plaintiff believed, however, that his supervisor, who worked outside the enclosed work area, should have read the warning and taken appropriate steps to protect Mr. Lassera from suffering the injury. Thus the warning label became a major focus in the case.

DATA

The data to be analyzed consisted of the regulatory standards and the writing on the Magnaflux can.

Civil Action No. 85–19736 (20)

U.S. District Court, Miami, Florida, Florida Bar Number 253952

The Regulatory Standards

In this case industry safety standards played an important role. In 1982 the American National Standards Institute produced a forty-page document on standards for industrial chemicals, including precautionary labeling (ANSI Z 129.1). It was the most recent and relevant version at the time of Mr. Lassera's accident. Among other standards for hazard labels are the following:

- statements should be expressed as simply and briefly as possible on labels affixed to containers
- the language shall be practical—not based alone upon the inherent properties of a product, but directed toward the avoidance of hazards resulting from the occupational use, handling and storage that may be reasonably foreseeable.
- The Signal Word shall indicate the relative degree of severity of a hazard in the diminishing order of DANGER!, WARNING!, and CAUTION! When a product has more than one hazard, only the signal word corresponding to the class of greatest hazard shall be used.
- The following subject matter shall be considered for inclusion on precautionary labels: (1) Identity of product or hazardous components, (2) signal word, (3) statement of hazards, (4) precautionary measures, (5) instructions in case of contact or exposure, (6) antidotes, (7) notes to physicians, (8) instructions in case of fire and spill or leak, and (9) instructions for container handling and storage.

Immediately following the above standards, this same ANSI document provides thirty pages of examples about how manufacturers should produce precautionary texts for many different types of hazards.

In addition to the above requirements, the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA), requires companies producing relevant products to fill out a form called the Material Safety Data Sheet. Magnaflux filled it out, noting that its product contained 97 percent trichloroethane and 3 percent carbon dioxide. On the "Fire and Explosion Hazard Data" section of this material safety data sheet, Magnaflux explained that aerosol cans should be cooled with water, that they may burst if heated above 130 degrees Fahrenheit, and that vapors can decompose to toxic gases when exposed to flame, arc, or red-hot surfaces. Effects of overexposure include initial

dizziness, followed by eventual loss of consciousness. If exposed, the user should be "removed to fresh air," and if the material gets in the eyes, they should be "rinsed copiously with water." Magnaflux also reported, "the Cleaner exerts drying action on skin, leading to irritation and should be wiped off immediately." The manufacturer also noted that the hazardous decomposition products of the product included "phosgene, hydrochloric acid if vapors are exposed to flame, arcs, or red hot surfaces." Under OSHA's request for special protection information, Magnaflux advised that the user should be masked with a separate air supply if the product is used in confined areas.

The Container

The container for the cleaner was a cylindrically shaped metal can. The front side of the can contained the text in Example 8.1 (type size is reproduced as nearly as possible to that of the original container).

EXAMPLE 8.1

Magnaflux

Cleaner/Remover

SKC_NF/ZC-7B

Non-Flammable

Formulated to meet sulfur and halogen requirements
for NAVSHIPS 250-1500-1, MIL-1-25135. ASTM E165.

Contains No Fluorocarbon Propellants

Net Weight: 13 ounces

MAGNAFLUX Corporation
Chicago, Illinois 60656 USA

® Trade Mark Reg U S Pat Off. Marca Registrada en Mexico

The back side of the can contained the information as shown in Example 8.2.

EXAMPLE 8.2

Warning: **Material can be hazardous to health if not used according to instructions. Contents under pressure.**

Contains: Methyl Chloroform.
Use only in well ventilated area.
Avoid contact with eyes or skin and breathing of vapor or spray mist.
In case of contact with eyes flood repeatedly with water.
If swallowed, do not induce vomiting.
If overcome by vapors, remove to fresh air.

In above cases call a physician immediately. Wash skin with soap and water.
Do not puncture, incinerate or or store above 120° F (48° C).
For industrial use by qualified personnel only
Not for household use.
Keep out of reach of children.

Directions: **Cleaner/Remover**

MAGNAFLUX Corporation Cleaner/Remover is intended remover.
for use with Spotcheck and Zyglo penetrant systems, and other penetrant systems, and other MAGNAFLUX Corporation test methods and materials.

Use As A Precleaner:
To be used as a precleaner to remove oily residues. Apply directly to test area, wipe clean with cloth. Repeat until clean Allow test area to dry before further processing.

Use As A Penetrant Remover
To be used as a penetrant

apply Cleaner/Remover to clean cloth and wipe excess penetrant from surface. Repeat until surface is free of penetrant.

Do Not Flush Surface With Remover As Sensitivity May Be Impaired.

Label No 4-3571-00

LINGUISTIC ANALYSIS

When the lawyer for Mr. Lassera called me, he asked that I try to determine the clarity, or lack thereof, of the warning label on the product's container. After I discovered a number of problems and discussed them with him, he represented to the court that I would be called as an expert witness in the case. This, of course, led to my deposition, which took place in March of 1988. There I pointed out that the wording was not prominent in terms of relationship to the potential danger of the ingredients, that the communication of the hazards that users might encounter was not clear, and that the advice given about what to do if users got into trouble using the product was not explicit or clear. I stressed the indirectness of the warning language, which could cause readers to have to infer the danger. I called attention to the discourse sequencing of points within the warning statements, which often placed the least crucial information ahead of the most crucial. I pointed out that the more specific the warning, the more likely it is to be heeded. I stressed the usefulness of being personal rather than general, and that the warning could be more salient if it were placed on the front of the can, not on the back. The label contained no information at all about how a user could avoid the dangers of the product. The gist of my testimony was that the label was not consumer-friendly and that it was couched in words that made the product look less dangerous that it really was.

Since Mr. Lassera was a monolingual Spanish speaker, the issue of whether or not he could even read the warning label was discussed. I opined that in such events there is likely to be a chain of responsibility from Mr. Lassera's supervisor to Mr. Lassera. The opposing lawyer did not disagree.

Throughout the deposition, the opposing lawyer kept asking me how I would have written the warning label to make it better. Up to that point I had not tried to revise it, but the more he asked me, the more I thought it might be a good idea to do so, even though it is not the responsibility of the expert to create such work for either the plaintiff or the defendant. After the deposition, the attorney I was working with and I decided that I should take a crack at redesigning the entire can so that we could use it at trial. The following is what I came up with. Revision for the front of the can appears as Example 8.3.

EXAMPLE 8.3

MAGNAFLUX

Cleaner/Remover

SKC-NF/ZC-7B

DANGER/CAUTION

This product contains methyl chloroform which causes dizziness, loss of consciousness or even death.

TO PREVENT DANGER:

- **Use only in ventilated areas**
- **If you use in confined areas, mask with air supply**
- **Follow all directions carefully**

DO NOT-breathe vapor spray or mist

DO NOT-allow contact with eyes or skin

DO NOT-use near flames or heat

DO NOT-puncture, incinerate or store above 129 F (48.8 C)

Non-Flammable

Meets sulfur and halogen requirements for NAVSHIPS 250-1500-1, MIL-1-25135, ASME-V, RDT 3-6T.

Contains NO Fluorocarbon Propellants

Net Weight 13 Ounces

MAGNAFLUX Corporation
Chicago, Illinois 50656 USA

*** trademark Reg. U.S. Pat. Off. Marca Registrado en Mexico**

Revision for the back of the can appears as Example 8.4.

EXAMPLE 8.4

First Aid: **If user becomes dizzy or unconscious:**

- **provide fresh air immediately**
- **call physician**

If user swallows the product:

- **do not induce vomiting**

If product touches your eyes or skin:

- **flood eyes immediately**
- **wash skin with soap and water**

	• call physician immediately	• call physician immediately
Directions:	**MAGNAFLUX Corporation Cleaner/ Remover is intended for use with Spotcheck and Zyglo penetrant systems and other MAGNAFLUX Corporation test methods and materials. For industrial use by qualified personnel only. Not for household use. Keep out of reach of children. Use as a pre-cleaner to remove only residues. Apply to test area, wipe clean.**	**with cloth. Repeat until clean. Allow test area to dry before further processing. Use as a penetrant remover. Apply Cleaner/Remover on clean cloth and wipe excess penetrant from surface. Repeat until surface is free of penetrant Do not flush surface with remover or sensitivity may be impaired.** **Label No. 4-3571-00**

The major differences between my revised can label and the one produced by Magnaflux were:
On the front of the can:

1. placing the Danger sign right after the product's name
2. following this with how to prevent risks

On the back of the can:

1. showing specific signals of danger
2. providing specific instructions about what to do in case of dangerous contact with the body

Certain aspects of the original label were kept, including such things as the directions for using the product.

This case was fertile for applying principles of effective discourse structure, the value of directness over indirectness, and the pragmatics of warning and advising combined with the essentials of effective document design. As it turned out, the case was settled before trial and my revised label for the Magnaflux can was never tested in court.

This page intentionally left blank

CHAPTER 9

Carbon Monoxide Poisoning

Eva Andrews et al. v. Adobe Trailer Sales, Fleetwood Enterprises, and Generac Corporation

Some people take vacations in recreational camping trailers pulled by pickup trucks. Others make the trailer their home. The Andrews family worked for a traveling carnival and lived in its trailer year round. One night, shortly after they had purchased a new trailer, Mr. Andrews woke up dizzy and vomiting. He had a hard time awakening his wife, who was also quite ill. They suspected something bad, especially when they couldn't awaken their young son at all. He was rushed to a nearby hospital, where all three were diagnosed with carbon monoxide poisoning.

The parents lost valuable work time but their son fared much worse, apparently suffering from permanent brain damage. They sought and found a lawyer, who helped them bring a product liability suit against Generac, the manufacturer of the generator; Fleetwood, the manufacturer of the trailer; and the dealer in Phoenix who sold it to them. At first it was difficult to determine exactly who was responsible for their medical problems. The manufacturer gives buyers the option of having an Onan generator installed at the factory or letting the customer have either an Onan or another brand installed by the dealer at the time of purchase. In this case, Mr. Andrews opted to have the dealer install a Generac generator instead of the factory-installed Onan, obviously placing some responsibility on Generac.

This case called for two areas of expertise: an engineer, who could examine the method of installation, and a linguist, who could examine the warning messages in the owner's manuals of the Generac generator and Fleetwood, the manufacturer of the Adobe model RV. The relevant parts of the owner's manuals are

---

Cause No. CV 99-112-M-DWM

U.S. District Court, Missoula Division, Montana

excerpted below, along with relevant quotes from the regulations of the American National Standards Institute. As the litigation progressed, the focus came to be entirely on Generac.

DATA

The data in this case included the ANSI standards, the relevant hazard statements written by Generac, the maker of the generator used by the buyers, the hazard statements written by Onan, maker of the generator not selected by the buyers, and the hazard statements written by Fleetwood, the manufacturer of the RV. By using the comparative method, the differences and similarities between the ANSI standards and these three contributing companies could be discovered.

The American National Institute of Standards (ANSI) standard on recreational vehicles

The standard covering recreational vehicles is also acted upon by the National Fire Protection Association, Inc. (NFPA). This case was covered by ANSI A119.2/NFPA 501C, 1993 edition. The relevant portions of this standard, reproduced as closely as possible to the original format, are as shown in Example 9.1.

EXAMPLE 9.1

2–6.3.2 Location of Flue Gas Outlets of Fuel-Burning Heating Appliances. . . . Flue gas outlets shall not terminate underneath a recreational vehicle.

Sample Warnings

2–9.1.2.2 cooking area
WARNING: IT IS NOT SAFE TO USE COOKING
APPLIANCES FOR COMFORT HEATING
Cooking appliances need fresh air for safe operation.
Before operation:
1. Open overhead vent or turn on exhaust fan, and
2. Open window.

2–9.1.2.3 LP-Gas container
DO NOT FILL CONTAINER(S) TO MORE THAN
80 PERCENT OF CAPACITY

2–9.1.2.6
The following label has been placed in the vehicle near the range area:

IF YOU SMELL GAS:

1. Extinguish any open flames, pilot lights, and all smoking materials.
2. Do not touch electrical switches.
3. Shut off the gas supply at the tank(s) valve(s) or gas supply connection.
4. Open doors and other ventilating openings.
5. Leave the area until odor clears.
6. Have the gas system checked and leakage source corrected before using again.

2–9.2.3 gas odors [repeats 2–9.1.2.6. above]

2–9.2.4 Warning Label for Cooking Appliances:
A permanent warning label with the word "WARNING" with 3/8-in. (9.5-mm) high letters and body text with 1/8-in. (3.2-mm) high letters shall be affixed in a conspicuous manner adjacent to fuel-burning ranges and shall read:

WARNING: IT IS NOT SAFE TO USE COOKING
APPLIANCES FOR COMFORT HEATING

Cooking appliances need fresh air for safe operation.
Before operation:

1. Open overhead vent or turn on exhaust fan, and
2. Open window.

2–10.2.2 label near fuel filter cap of generator

CAUTION: DO NOT PUT FUEL IN TANK
UNLESS GENERATOR IS INSTALLED AND FUEL LINES
ARE CONNECTED. CHECK ALL CONNECTIONS FOR LEAKAGE.

3–3.4 Operational Check Warning Label.
A permanent label shall be installed in a visible location on or within 24 in. (610 mm) of the smoke detector with the following text in contrasting letters at least 1/8 in. (3.2 mm) high:

WARNING
TEST SMOKE DETECTOR OPERATION AFTER
VEHICLE HAS BEEN IN STORAGE,
BEFORE EACH TRIP, AND
AT LEAST ONCE PER WEEK DURING USE.

(continued)

3–4.3 Internal Combustion Exhausts.
Exhausts from internal combustion engines shall not terminate under the vehicle. Exhausts shall extend beyond the periphery of the vehicle so that exhaust gases discharge away from the vehicle. . . . Internal combustion engine exhaust shall not terminate so that a communicable air passage exists into the living area within an area defined as a distance of 6 inches (152.4 mm) as measured from the tailpipe termination perimeter as projected onto the vehicle side. Regardless of the location of vehicle exhaust, vents or windows that can be opened shall not be installed in the rear of motor homes and truck campers.

3–4.6 Carbon Monoxide (DO) Detectors.
All RVs equipped with an internal combustion engine or designed with features to accommodate future installation of an internal combustion engine shall be equipped with a listed CO detector installed in accordance with its listing.

3–4.7 Internal Combustion Vehicles.
RVs designed for the storage of internal combustion engine type vehicles shall have ventilation, vaportight separation from the living area, and consumer information to provide guidance relating to fire and life safety.

4–6.5.3 Labeling of Potable Water Tank Inlets.
Each inlet to a potable water tank shall have an affixed label that shall read:
WARNING: POTABLE WATER ONLY.
SANITIZE, FLUSH, AND DRAIN BEFORE
USING.
SEE INSTRUCTION MANUAL.

The Generac generator owner's manual

The thirty-page Generac owner's manual begins with general safety rules for safe operation, starting with this disclaimer:

Generac cannot possibly anticipate every possible circumstance that might involve a hazard. The warnings in the Manual and on tags and decals affixed to the unit are, therefore, not all-inclusive. If you use a procedure, work method or operating technique Generac does not specifically recommend, you must satisfy yourself that it is safe for you and others.

About the hazard of carbon monoxide gas, this section of the owner's manual says the following on page 1:

> The generator engine gives off DEADLY carbon monoxide gas through its exhaust system. This dangerous gas, if breathed in sufficient concentrations, can cause unconsciousness or even death. Have the exhaust properly installed, in strict compliance with applicable codes and standards. Following installation, you must do nothing that might render the system unsafe or in non-compliance with such codes and standards. The generator compartment must be completely vapor sealed from the vehicle interior. There must be no possibility of exhaust fumes entering vehicle interior.

Page 6 further warns as follows:

> - Engine Exhaust Gases: Before starting the generator engine, you should make sure there is no way for exhaust gases to enter the vehicle interior and endangering people or animals. Close windows, doors and other openings in the vehicle that, if open, might permit exhaust gases to enter the vehicle.
>
> **DANGER! THE GENERATOR ENGINE GIVES OFF DEADLY CARBON MONOXIDE GAS THROUGH ITS EXHAUST SYSTEM. THIS DANGEROUS GAS, IF BREATHED IN SUFFICIENT CONCENTRATIONS, CAN CAUSE UNCONSCIOUSNESS OR EVEN DEATH. DO NOT OPERATE THE GENERATOR IF ITS EXHAUST SYSTEM IS LEAKING OR HAS BEEN DAMAGED. SYMPTOMS OF CARBON MONOXIDE POISONING ARE (A) INCAPABILITY TO THINK COHERENTLY, (B) VOMITING, (C) TWITCHING MUSCLES, (D) THROBBING TEMPLES, (E) DIZZINESS, (F) HEADACHE, (G) WEAKNESS AND SLEEPINESS. IF YOU FEEL ANY OF THESE SYMPTOMS, MOVE INTO FRESH AIR IMMEDIATELY. IF SYMPTOMS PERSIST, GET MEDICAL HELP.**

Page 9 contained another warning:

Never operate the generator while the vehicle is parked in high grass, weeds, brush, or leaves. Such materials can ignite and burn from the heat of the exhaust system. The generator exhaust system becomes extremely hot curing operation and remains hot for a long time after it has shut down.

Warnings about the hazards of batteries (not carbon monoxide) are found on page 14:

DANGER! STORAGE BATTERIES GIVE OFF EXPLOSIVE HYDROGEN GAS. THIS GAS CAN FORM AN EXPLOSIVE MIXTURE AROUND THE BATTERY FOR SEVERAL HOURS AFTER CHARGING. THE SLIGHTEST SPARK CAN IGNITE THE GAS AND CAUSE AN EXPLOSION. SUCH AN EXPLOSION CAN SHATTER THE BATTERY AND CAUSE BLINDNESS OR OTHER INJURY. ANY AREA THAT HOUSES A STORAGE BATTERY MUST BE PROPERLY VENTILATED. DO NOT ALLOW SMOKING, OPEN FLAME, SPARKS OR ANY SPARK PRODUCING TOOLS OR EQUIPMENT NEAR THE BATTERY.

DANGER! BATTERY ELECTROLYTE FLUID IS AN EXTREMELY CAUSTIC SULFURIC ACID SOLUTION THAT CAN CAUSE SEVERE BURNS. DO NOT PERMIT FLUID TO CONTACT EYES, SKIN, CLOTHING, PAINTED SURFACES, ETC. WEAR PROTECTIVE GOGGLES, PROTECTIVE CLOTHING AND GLOVES WHEN HANDLING A BATTERY. IF SPILLAGE OF FLUID OCCURS, FLUSH THE AFFECTED AREA WITH CLEAR WATER IMMEDIATELY.

DANGER! DO NOT USE ANY JUMPER CABLES OR ANY BOOSTER BATTERY TO CRANK AND START THE GENERATOR ENGINE. IF ANY BATTERY HAS DISCHARGED, REMOVE IT FROM THE VEHICLE FOR RECHARGING.

The next fifteen pages of the Generac owner's manual contain information about troubleshooting, along with schematic drawings of the generator.

The Onan generator operator's manual

Note that the Onan generator is the one that the manufacturer would have installed at the factory if the buyer so wished. The buyer chose instead to have the dealer install a Generac generator. Relevant excerpts from the fifteen-page Onan manual are included here for comparison purposes. The manual begins with a page of "Safety Precautions," which includes the following paragraph:

> • **Exhaust Gases Are Toxic**
>
> Never sleep in the vehicle with the generator set running unless the vehicle is equipped with an operating carbon monoxide detector.

On page 5, in a section called "Operation," the following warnings are given:

> **WARNING**
>
> **EXHAUST GAS IS DEADLY!**
>
> **Exhaust gases contain carbon monoxide, an odorless and colorless gas. Carbon monoxide is poisonous and can cause unconsciousness and death. Symptoms of carbon monoxide poisoning can include:**
>
> - **Dizziness**
> - **Nausea**
> - **Headache**
> - **Weakness and Sleepiness**
> - **Throbbing in Temples**
> - **Muscular Twitching**
> - **Vomiting**
> - **Inability to Think Coherently**
>
> **IF YOU OR ANYONE ELSE EXPERIENCES ANY OF THESE SYMPTOMS, GET OUT INTO THE FRESH AIR IMMEDIATELY.** If symptoms persist, seek medical attention. Shut down the unit and do not operate until it has been inspected and repaired.
>
> **Never sleep in vehicle with the generator set running unless the vehicle interior is equipped with an operating carbon monoxide detector. Protection against carbon monoxide inhalation also includes proper exhaust system installation and visual and audible inspection of the complete exhaust system at the start of each generator set operation.**

(continued)

BEFORE STARTING

WARNING Exhaust gas presents the hazard of severe personal injury or death. Make sure all the exhaust components are operation-worthy and secure.

Confirm that vehicle is not parked in high grass or brush.

WARNING Fire can cause severe personal injury or death. Do not operate the generator set when the vehicle is parked in high grass or brush.

Do not operate the generator set if exhaust gases will not effectively expel away from vehicle.

WARNING Exhaust gases can cause severe personal injury or death. Never operate the generator set unless the exhaust system is clear of walls, snow banks, or any obstruction that can prevent exhaust gases from dissipating. Never operate any exhaust fan in the recreational vehicle when the generator set is running. It can draw exhaust gas into the vehicle interior.

On page 9, under the heading of Maintenance, is the following:

EXHAUST

Examine the exhaust system for leaks. If you have a conventional compartment mount generator set, inspect the compartment for holes which might allow exhaust gas to enter the recreational vehicle. Do NOT operate the generator set if it runs louder than usual, the compartment has holes to the interior, or the exhaust system has leaks.

WARNING Exhaust gas presents the hazard of severe personal injury or death. If you find any exhaust leaks, do not operate the generator set and have the exhaust system repaired as soon as possible.

On the last page of the Onan operator's manual, page 15, the following appears:

WARNING Exhaust gas presents the hazard of severe personal injury or death. Make sure all components are reinstalled in their original places and the exhaust system is operation-worthy to prevent any exhaust leaks.

The Fleetwood (Avion Model RV) owner's manual

After a one-page warranty statement, this sixty-one-page manual begins with a one-page "Important Notice," which includes three warnings about resins used in manufacture that might cause allergic reactions. It is followed by a page called "Safety Regulations" that contains four warnings about storage, the need for ventilation while cooking, the need to avoid using charcoal grills inside the vehicle, and the flammability of LP gas containers. The following pages warn about using a towing hitch, the braking system, battery-operated components, overloading, storage, safe driving, tire pressure, and finally, on page 15, a warning about carbon monoxide, as follows:

WARNING

EXHAUST GASES ARE DEADLY. DO NOT BLOCK THE TAILPIPES OR SITUATE THE VEHICLE IN A PLACE WHERE THE EXHAUST GASES HAVE ANY POSSIBILITY OF ACCUMULATING EITHER OUTSIDE, UNDERNEATH, OR INSIDE YOUR VEHICLE OR ANY NEARBY VEHICLES. OUTSIDE AIR MOVEMENTS CAN CARRY EXHAUST GASES INSIDE THE VEHICLE THROUGH WINDOWS OR OTHER OPENINGS REMOTE FROM THE EXHAUST OUTLET. OPERATE THE ENGINE(S) ONLY WHEN SAFE DISPERSION OF EXHAUST GASES CAN BE ASSURED, AND MONITOR OUTSIDE CONDITIONS TO BE SURE THAT EXHAUST CONTINUES TO BE DISPERSED SAFELY.

Beware of exhaust gas (carbon monoxide) poisoning symptoms:

Dizziness
Headache
Weakness and sleepiness
Nausea
Vomiting
Muscular twitching
Throbbing in temples
Inability to think coherently

If symptoms indicate the possibility of carbon monoxide poisoning, turn off the engine(s) immediately, get out into fresh air at once, and summon medical assistance.

WARNING
DO NOT UNDER ANY CIRCUMSTANCES OPERATE ANY ENGINE WHILE SLEEPING.

The following sections are called "Living With Your Trailer," "Plumbing," "Electrical Systems," "LP Gas System," "Appliances," and "Equipment." The latter section contains advice to install a smoke detector (page 44) and finally notes:

> Your trailer may be equipped with an optional carbon monoxide (CO) detector. Usually located in the main sleeping area, it is designed to alert you to the presence of dangerous levels of carbon monoxide in the air.

The section on the generator (pages 48–49) includes the following:

> **WARNING**
>
> **EXHAUST GAS IS DEADLY! EXHAUST GASES CONTAIN CARBON MONOXIDE, AN ODORLESS AND COLORLESS GAS. CARBON MONOXIDE IS POISONOUS AND CAN CAUSE UNCONSCIOUSNESS AND DEATH.**
>
> **PROTECTION AGAINST CARBON MONOXIDE INHALATION ALSO INCLUDES PROPER EXHAUST SYSTEM INSTALLATION AND VISUAL AND AUDIBLE INSPECTION OF THE COMPLETE EXHAUST SYSTEM AT THE START OF EACH GENERATOR SET OPERATION.**
>
> **DO NOT BLOCK THE TAIL PIPE OR SITUATE THE TRAILER IN A PLACE WHERE THE EXHAUST GASES HAVE ANY POSSIBILITY OF ACCUMULATING EITHER OUTSIDE, UNDERNEATH, OR INSIDE YOUR VEHICLE OR ANY NEARBY VEHICLES. OUTSIDE AIR MOVEMENTS CAN CARRY EXHAUST GASES INSIDE THE VEHICLE THROUGH WINDOWS OR OTHER OPENINGS REMOTE FROM THE GENERATOR EXHAUST. OPERATE THE GENERATOR ONLY WHEN SAFE DISPERSION OF EXHAUST GASES CAN BE ASSURED. MONITOR OUTSIDE CONDITIONS TO BE SURE THAT EXHAUST GASES CONTINUE TO BE DISPERSED SAFELY.**
>
> **DO NOT UNDER ANY CIRCUMSTANCES OPERATE THE GENERATOR WHILE SLEEPING. YOU WOULD NOT BE ABLE TO MONITOR OUTSIDE CONDITIONS TO ASSURE THAT GENERATOR EXHAUST DOES NOT ENTER THE INTERIOR, AND**

YOU WOULD NOT BE ALERT TO EXHAUST ODORS OR SYMPTOMS OF CARBON MONOXIDE POISONING.

Check the generator exhaust system after every 8 hours of operation and whenever the system or trailer structure may have been damaged, and repair any leaks or obstructions before further operation.

WARNING
DO NOT OPERATE THE GENERATOR WHEN PARKED IN OR NEAR HIGH GRASS OR BRUSH. EXHAUST HEAT MAY CAUSE FIRE.

LINGUISTIC ANALYSIS

In written texts, discourse structure is marked by patterns of organization (such as the introduction and recycling of topics), the logic of sequencing of topics, the use of speech acts such as warnings, the semantic differences between the speech acts of warning and advising, and the way certain communicative devices, such as the use of repetition, discourse markers, specificity, and orthographic features, are employed.

Topic introductions

For conversation data, it is usually helpful to do a topic analysis of the entire conversation, then cull out the significant topics for more detailed analysis. However, in long written documents, such as the evidence in this case, such a procedure can be time-consuming and not entirely helpful. There are, of course, many topics, but the nature of the complaint guides the decision about which ones to examine. The topics I chose to focus on were selected to compare the ANSI standards with the same treatment in the owner's and operator's manuals. I also compared the treatments of these topics by Generac, the defendant, and Onan, the manufacturer of the generator not used. Therefore, only certain salient topics were selected for detailed analysis, as follows:

Topic: Sleeping in the vehicle while the generator is operating

The Generac generator's owner's manual provides no topic warning about operating the generator while occupants are sleeping inside the vehicle. The Onan

generator's operator's manual, used for comparison here, makes this warning very specifically in its first captioned warning about exhaust gas, on page 5.

> Never sleep in vehicle with the generator set running unless the vehicle interior is equipped with an operating carbon monoxide detector.

Likewise, the Fleetwood owner's manual says on page 16:

> **DO NOT UNDER ANY CIRCUMSTANCES OPERATE ANY ENGINE WHILE SLEEPING.**
> You would not be able to monitor outside conditions to assure that engine exhaust does not enter the interior, and you would not be alert to exhaust odors or the symptoms of carbon monoxide poisoning.

Fleetwood's lack of explicitness is apparent here. It fails to specify the reference to "engine," which has important comprehension consequences. By not explicitly referring to the generator's engine, this warning runs the risk of allowing the reader to interpret "engine" as a reference to the engine of the towing vehicle or any other engine associated with the RV. By generalizing "engine" in this way, Fleetwood's warning permits the possibility of misunderstanding and confusion by the reader.

Topic: The need for a carbon monoxide (CO) detector

Generac presents no topic concerning the need for a carbon monoxide detector and therefore makes no mention of the danger of sleeping while the generator is operating. The Onan generator's operator's manual makes this warning explicit on page 5:

> Never sleep in vehicle with the generator running unless the vehicle interior is equipped with an operating carbon monoxide detector.

The Fleetwood owner's manual contains a section captioned "Carbon Monoxide Detectors (if equipped)," indicating that a CO detector can alert the user "to the presence of dangerous levels of carbon monoxide in the air." This section describes a CO detector but is not captioned as a warning and does not contain one. Nor does it advise that a carbon monoxide detector must (or even should) be installed. Instead, it uses only expressions such as "if equipped" and "your trailer may be equipped with an optional carbon monoxide (CO) detector."

Despite Fleetwood's apparent belief that CO detectors are optional, the ANSI regulation for recreational vehicles clearly disagrees:

> ANSI A119.2 NFPA 501C Recreational Vehicles, 1993 edition, at 3–4.6:
>
> Carbon Monoxide (CO) Detectors. All RVs equipped with an internal combustion engine or designed with features to accommodate future installation of an internal combustion engine *shall be equipped with a listed CO detector* installed in accordance with its listing.

The Fleetwood owner's manual describes the importance and use of such a detector but does not warn (or even advise) that one should be installed. In contrast, this ANSI regulation makes it clear that a CO detector is required.

The Generac owner's manual makes no representation of the importance of a carbon monoxide detector despite the fact that Generac was aware of the known hazard of CO and that installing a CO detector would assist in avoiding the hazard. Even if Generac and Fleetwood did not believe that a CO detector was required, the admitted serious danger of exhaust gases and the availability of such detectors at that time could have motivated Generac and Fleetwood to advise vehicle owners to install one for their own future safety.

Topic: Operating an exhaust fan while the generator is running

In their owner's manuals, Generac and Fleetwood do not include the topic of the danger of operating an exhaust fan in the vehicle while the generator is running. In contrast, the Onan generator operator's manual says the following:

> Never operate any exhaust fan in the recreational vehicle when the generator set is running. It can draw exhaust gas into the vehicle interior.

Topic sequencing

Within a given topic, the sequence in which points are made about that topic can provide important information to readers, who normally expect the most important points of a discourse to be made first and the less important ones to follow. Consistent with this expectation, if the most important points about that warning topic are delayed until later in the topic, the discourse impact of that warning can be diminished or diluted. This is particularly important when the topics are warnings about serious hazards. Therefore, even though a topic related to a hazard may have been introduced, the reader's understanding of the significance of that hazard can be rendered unclear by the order in which information in that topic is sequenced.

Topic: The danger of obstructions to generator exhaust

The initial focus of Generac's references to potential obstructions to the generator's exhaust associates them with possible damage to the generator rather than physical danger to the users, if or when there is an obstruction:

> Cooling and Ventilating Air: Air inlet and outlet openings in the generator compartment must be open and unobstructed for continued proper operation. Without sufficient cooling and ventilating air flow, *the engine-generator quickly overheats which causes it to shut down or damages the generator or vehicle*.

It is not until two paragraphs after the mention of possible damage to the generator that Generac includes a "Danger" caption indicating that the generator engine gives off deadly carbon monoxide gas that can cause unconsciousness or even death. This sequencing within the topic sends a message that the danger to human life is not as serious as the danger to the generator itself. In contrast, Generac's competitor, Onan, in its operator's manual primarily associates generator exhaust obstructions with a warning about such dangers to persons inside the vehicle, gives examples of potential obstructions, and explains why this is dangerous, making no mention at all about potential damage to the generator:

WARNING: Exhaust gases can cause severe personal injury or death. Never operate the generator set unless the exhaust system is clear of walls, snow banks, or any obstruction that can prevent exhaust gases from dissipating. Never operate any exhaust fan in the recreational vehicle when the generator set is running. It can draw gas into the vehicle interior.

Although the Fleetwood owner's manual includes a warning about the danger to people that is caused by obstructions to the exhaust system, it does so in an ineffective print form of all capitalized letters:

WARNING

EXHAUST GASES ARE DEADLY. DO NOT BLOCK THE TAILPIPES OR SITUATE THE VEHICLE IN A PLACE WHERE THE EXHAUST GASES HAVE ANY POSSIBILITY OF ACCUMULATING EITHER OUTSIDE, UNDERNEATH, OR INSIDE YOUR VEHICLE OR ANY NEARBY VEHICLES. OUTSIDE AIR MOVEMENTS CAN CARRY EXHAUST GASES INSIDE THE VEHICLE THROUGH WINDOWS OR OTHER OPENINGS REMOTE FROM THE EXHAUST OUTLET. OPERATE THE ENGINE(S) ONLY WHEN SAFE DISPERSION OF EXHAUST GASES CAN BE ASSURED, AND MONITOR OUTSIDE CONDITIONS TO BE SURE THAT EXHAUST CONTINUES TO BE DISPERSED SAFELY.

It is well recognized by document design specialists and technical writers that when multiple lines of all capitalized text are used (usually an attempt at emphasis), it reduces the chance that such text will be processed effectively and understood (Tinker 1969; Salcedo, Reed, Evans, and Kong 1972). In fact, as readers may notice, this style discourages any reading at all.

SPECIFICITY OF THE WARNING TOPIC

Specificity is one of the most important keys to effective communication. In the case of warnings about potential hazards, specificity is vitally important.

Specificity, or lack of it, is achieved through examples of how the concept applies in this case.

Topic: Generator exhaust obstruction

The topic of obstruction to the generator's exhaust system is illustrative of the Generac's lack of specificity, where being specific could have been more informative. Its owner's manual, under the caption of "General Safety Rules," says the following:

> Adequate ventilation is required to expel toxic fumes and gasoline vapors from the generator compartment. Do not alter the installation of this equipment in any manner that might obstruct air and ventilation openings. Such openings must be kept clear and unobstructed.

We do not learn of any specific types or origins of obstructions from this general advice. Whatever meanings are intended by the expressions, "adequate ventilation" and "in any manner that might obstruct air," are inexplicit and not illustrated. In fairness, later, on page 6 under a different caption, this same manual becomes slightly more specific:

> Engine Exhaust Gases: Before starting the generator engine, you should make sure that there is no way for exhaust gases to enter the vehicle interior and endangering people or animals. Close windows, doors and other openings in the vehicle that, if open, might permit gases to enter the vehicle.

Although here the reader is advised to avoid the danger by closing the interior of the vehicle, there is still no mention of any exterior obstructions that might present a danger. The reader is given information about what to do if gases escape (to close the vehicle openings) but is not counseled about how to prevent specific external obstructions from occurring in the first place.

It is not until page 9, in a paragraph captioned "OPERATION IN HIGH GRASS OR BRUSH" (note that this is not captioned "Danger"), that Generac mentions some of the specific external obstructions that might present a hazard:

> Never operate the generator while the vehicle is parked in high grass, weeds, brush or leaves. Such materials can ignite and burn from the heat of the exhaust system. The generator exhaust becomes extremely hot during operation and remains hot for a long time after it was shut down.

While potential obstructions are named here, Generac represents this danger as the possibility of fire and implies that the generator could be damaged. Conspicuously absent is an explicit mention of potential harm to humans from fire. Nor is there any warning about exposure to the potential danger of carbon monoxide exhaust gas resulting from operating the generator in high grass, weeds, brush, or leaves.

The Fleetwood owner's manual does associate exhaust obstructions with the danger of exposure to carbon monoxide gas, but is unspecific about the types and origins of obstructions to the exhaust system and, as noted earlier, ineffectively conveys this information in ten consecutive lines of all capitalized words:

> **WARNING**
>
> **EXHAUST GASES ARE DEADLY. DO NOT BLOCK THE TAILPIPES OR SITUATE THE VEHICLE IN A PLACE WHERE THE EXHAUST GASES HAVE ANY POSSIBILITY OF ACCUMULATING EITHER OUTSIDE YOUR VEHICLE OR ANY NEARBY VEHICLES. OUTSIDE AIR MOVEMENTS CAN CARRY EXHAUST GASES INSIDE THE VEHICLE THROUGH WINDOWS OR OTHER OPENINGS REMOTE FROM THE EXHAUST OUTLET. OPERATE ENGINE(S) ONLY WHEN SAFE DISPERSION OF EXHAUST GASES CAN BE ASSURED, AND MONITOR OUTSIDE CONDITIONS TO BE SURE THAT EXHAUST CONTINUES TO BE DISPERSED SAFELY.**

Once again, the operator's manual of the Onan generator is used here for comparison. Unlike Generac, Onan is very specific about the risk of personal injury or death to humans as well as how to avoid specific external obstructions to the exhaust system. On the same page of its manual, Onan offers two separate captioned warnings about human safety from such obstructions, one about fire danger and one about the inhalation of gases:

> **WARNING**: Fire can cause severe personal injury or death. Do not operate the generator set when the vehicle is parked in high grass or brush. Do not operate the generator set if exhaust gases will not effectively expel away from vehicle.
>
> **WARNING**: Exhaust gases can cause severe personal injury or death. Never operate the generator set unless the exhaust system is clear of walls, snow banks, or any obstruction that can prevent exhaust gases from dissipating.

Topic: Visual and/or auditory inspection of generator

Under the caption "General Safety Rules" at the beginning of its manual, Generac recommends the following:

> Inspect the generator periodically. Repair or replace all damaged or defective parts immediately. . . . You must satisfy yourself that it is safe for you and others.

From this we learn that Generac recommends "periodic" inspections but we are not told specifically what "periodic" means. Nor are we told what to look for during such an inspection or how to look for it.

Fleetwood's owner's manual is more specific about when to inspect and what kinds of things to look for in its two captioned warnings about the danger of exhaust gas:

> Inspect the exhaust system for road damage before starting the engine. Monitor outside conditions to be sure that exhaust gases continue to be dispersed safely. . . . Check the generator exhaust system after every 8 hours of operation and whenever the system or trailer structure may have been damaged, and repair any leaks or obstructions before another operation.

Once again, it is the competitor Onan generator operator's manual that provides more adequate advice, including an audible inspection:

GENERAL INSPECTION

Perform a general inspection every eight operating hours. Start the generator set. Visually and audibly check for abnormalities.

EXHAUST

Examine the exhaust system for leaks. If you have a conventional compartment mount generator set, inspect the compartment for holes which might allow exhaust gas to enter the recreational vehicle. Do NOT operate the generator set if it runs louder than usual, the compartment has holes to the interior, or the exhaust system has leaks.

SEMANTICS OF DANGER, WARNING, CAUTION, AND HAZARD

What are the most appropriate terms to describe comparative seriousness of dangers, hazards, cautions, or warnings? Standard desk dictionaries are of little help, since they often use one term to define another. Illustrative of this problem is the use of the Miranda "warnings" in the United States, when in Great Britain the same thing is called "cautions." The manufacturing industry needed some regulations to create differences between hazard statements that were apparently not distinguished in everyday language. So the American National Standards Institute (ANSI) adopted a three-level hazard alert lexicon, defining the words "danger," "warning," and "caution," with "hazard" serving as a general cover term for the other three, as follows:

DANGER indicates an imminently hazardous situation which, if not avoided, *will* result in death or serious injury.

WARNING indicates a potentially hazardous situation which, if not avoided, *could* result in death or serious injury.

CAUTION indicates a hazardous situation which, if not avoided, may result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices.

Since the manufacturers of generators and recreational vehicles are subject to ANSI regulations, one might expect these descriptive terms to be applied to their products, particularly in their owner's and operator's manuals.

Again, it is instructive to compare the ways that Generac, Fleetwood, and Onan used these definitions. The Generac owner's manual contains five captioned "Danger" hazards representing the nature and gravity of the risk. One of these is about fire, three about batteries, and one about exhaust gas. Under one of its five "Danger" captions, Generac explains that the reader should not use jumper cables to start the engine and contains no mention of any potential personal injury that could result from doing so. "Danger" is clearly not the appropriate ANSI term for this caption.

The Fleetwood owner's manual contains fifty-six captions marked "Warning." Thirty-four of these relate to potential damage to parts and equipment, and of the remaining twenty-two, only two relate to the hazard of carbon monoxide exhaust gas. By using the caption "Warning" to associate both risk of death or serious injury and possible damage to equipment as well as tips for operation, Fleetwood dilutes "Warning" by ANSI definitions, thus reducing the effectiveness of its ability to warn about serious injury or death.

In contrast, the Onan operator's manual contains eighteen marked "Warning" captions, all but one of which are appropriate to the potential risk of personal injury or death. Five relate to exhaust gas, three to fire and burns, five to explosions, four to being injured by dropping the engine, and one to starting the engine accidentally. Onan's manual contains seven "Caution" captions, six of which appropriately relate to potential engine damage or to operation tips. With two exceptions, Onan effectively used "Warning" to relate to the risk of possible serious injury or death and "Caution" to relate to possible equipment damage and tips on operation.

In all, Onan reports the hazard of exhaust gas five times more frequently than does Generac and two and a half times more often than Fleetwood. Onan uses its "Warning" caption labels almost four times more frequently than Generac uses its "Danger" caption.

There are only three captioned references to human risk of serious injury or death throughout the Generac manual. One of these "Danger" captions is about the risk of carbon monoxide gas, one is about the risk of explosive hydrogen gas from batteries, and one is about the risk of battery electrolyte fluid. Of Generac's two remaining captions called "Danger," one possibly implies but does not make explicit a human safety issue related to fire, and the other involves no human safety issue at all, stressing instead the need to avoid using jumper cables to start the generator.

According to accepted practice in the industry, "Danger" indicates an imminently hazardous situation which, if not avoided, *will* result in death or serious injury. By sometimes associating "Danger" with human safety and sometimes with equipment damage or operation tips, Generac mixes the gravity and

nature of the risk in its hazard captions, creating the possibility of confusion the minds of its readers about the gravity and nature of the hazard. Generac clearly failed to provide important and necessary information about the nature and gravity of the risk of exhaust gases.

According to accepted practice in the industry, the "Warning" caption indicates a potentially hazardous situation which, if not avoided, *could* result in death or serious injury. By sometimes associating "Warning" with human safety and sometimes with equipment damage or operation tips, Fleetwood mixes the gravity and nature of the risk in its hazard captions, creating the possibility of confusion in the minds of its readers about the gravity and nature of the hazard. Fleetwood also fails to provide important and necessary information about the nature and gravity of the risk of exhaust gases.

ADVISING ABOUT HOW TO AVOID RISKS

One of the regulations set by ANSI is that the manufacturer should advise the consumer how to avoid whatever risks are involved with the use of the product. The illocutionary act of advising is simply described by Searle (1969) as "telling you what is best for you." The writer has reason to believe that the reader will benefit, and it's not obvious that the reader will act properly in the absence of such advice.

The advice about how to avoid risk is infrequent in the Generac manual. Its two "Danger" captions about battery electrolyte fluid do mention a way to avoid the problem. One says, "Wear protective goggles, protective clothing and gloves when handling a battery." The other says, "Do not allow smoking, open flame, sparks or any spark producing tools or equipment near the battery." From these examples, it is clear that Generac is capable of giving specific advice about how to avoid risk. In contrast, in its only "Danger" caption relating to carbon monoxide gases, Generac says, "Do not operate the generator if its exhaust system is leaking or has been damaged." This advice presupposes that the reader is able to determine or identify the flaws of leaking or other risks before any potential problem occurs. In short, even though it can be counted as advice that warns the reader, it, unlike the advice about battery fluid, does not advise about readers about how they might determine the flaws that will help them avoid the potential risks.

In contrast, the warning captions in the Onan generator's manual provide many specific examples of how to avoid risks. The following are only a few examples:

- Do not operate the generator when the vehicle is parked in high grass or brush
- Never operate any exhaust fan in the recreational vehicle when the generator set is running
- Do not smoke or allow any ignition sources around fuel or fuel components. Keep a type ABC fire extinguisher nearby.
- Disconnect both generator set starting battery cables before performing maintenance
- Do not check the oil level with the generator set running. Oil can blow out the oil fill.
- Eliminate all sources of ignition such as pilot lights and sparking electrical equipment before purging the fuel system. Provide adequate ventilation to dissipate LP gas as it is released.
- After assembly of the filter assembly and turning on the fuel shutoff valve, check to make sure the filter does not leak, using a soap and water solution. If it leaks, turn off the shutoff valve immediately.

CLARITY OF DISCOURSE STYLE AND FORMAT

Generac begins its thirty-page manual with a densely written section containing seventy-one sentences called "General Safety Rules," which does not contain any marked hazard captions despite its content which, on one occasion, includes the words, "can cause unconsciousness or even death." In the rest of the manual, the five times that it marks a paragraph with "Danger" (on pages 3, 6, and 14) are boxed and printed in all capital letters of from six to fifteen consecutive lines. As noted earlier, the use of multiple lines of all capitalized words makes it difficult for readers to process and understand the text. Although all caps may give the impression of providing emphasis, such practice actually works against the goal of achieving reader comprehension, since all capital letters provide visual interference to predictable print type and discourage the reader from attempting to read the text (Tinker 1969). The Fleetwood manual's frequent use of multiple, all-capitalized lines of text is even more problematic, especially in its "Warning" sections, the very place where one would most want the reader to understand the message.

In terms of document design, Generac's "General Safety Rules" page contains little or no "white space" and is organized around fourteen different bulleted sections with no organizational headings, subtitles, or captions, making it difficult for readers to determine the rationale for, the topic of, or the relationship between the various bulleted sentences (Smith and McCombs 1971).

In comparison, the opening page of Onan generator's manual, called "Safety Precautions," first clearly defines the meaning of the hazard symbols and captions it uses. Onan's opening page contains fifty-five sentences with seven bulleted organizational subtitles that contain relevant points made under each bullet, with considerable "white space" in between. Following acceptable readability practice, Onan's manual has no multiple lines of capitalized text. This makes it easy to read and to understand that the subpoints all relate to the bold-type and bulleted headings and are separated from each other.

My findings, presented in the form of a written report, are summarized as follows:

The Generac owner's manual failed

- to recycle important warnings about exhaust gases
- to give any warning about the danger of sleeping in the vehicle while the generator is running
- to give any warning about the need for a carbon monoxide detector
- to give any warning about operating an exhaust fan while the generator is running
- to effectively sequence important warnings in a way that stressed human danger over generator damage
- to effectively warn how to avoid the risk of exhaust gases
- to use required regulatory caption titles accurately and consistently
- to follow effective communication principles about how to avoid multiple lines of all capitalized words
- to follow acceptable principles of effective document design

The Fleetwood owner's manual failed

- to adequately recycle important warnings about exhaust gases
- to give any warning about the need for a carbon monoxide detector
- to give any warning about operating an exhaust fan while the generator is running
- to effectively warn about the specific dangers of obstructions to the generator exhaust system
- to use required regulatory hazard caution titles accurately and consistently
- to follow effective communication principles about how to avoid multiple lines of all capitalized words
- to follow accepted principles of effective document design

The linguistic tools of discourse analysis (topics and topic sequencing in particular), speech acts, and semantics were relevant to this case. The issue of effective and ineffective document structure and design also played a role. Comparison of the Generac manual's handling of hazard statements with that of the Onan generator manufacturer's manuals showed that it is entirely possible to follow the ANSI standards and to write effective warnings if the manufacturer is inclined to do so. Onan did a much better job of warning about potential risks. Using this analysis, attorneys for the plaintiff were able to obtain an acceptable settlement a week before the trial was scheduled to begin.

CHAPTER 10

Toxic Shock Syndrome from Tampons

Krystal H. Rinehart v. International Playtex

Women who use tampons during their menstrual period are said to be at risk of contracting toxic shock syndrome (TSS). And this is exactly what happened to twenty-year-old Krystal Rinehart. Her resulting physical condition was serious enough for her family to bring a product liability case against Playtex, the manufacturer of the tampon she used.

DATA

In addition to the testimony offered by medical experts, the major evidence in the case of *Rinehart v. Playtex* was found in the warning labels placed on the tampon box as well as the more detailed printed insert within the package. Did they adequately warn Ms. Rinehart about how to avoid getting TSS? If not, was Playtex subject to financial penalties?

The tightly folded package insert within the tampon box was printed on two sides. One side was called "Important Information About Toxic Shock Syndrome (TSS)." The other side was called "Tampons Usage Instructions." Examples 10.1 and 10.2 reproduce this insert as closely as possible to the original type size and format but do not include the illustrative art.

Cause No. IP 87–169C

U.S. District Court, Southern District of Indiana, Indianapolis, Indiana

A less detailed version of this case appeared as "Warning labels: Language, law, and comprehensibility" in *American Speech* 64.4 (1990): pp. 291–303.

EXAMPLE 10.1

Important Information About Toxic Shock Syndrome (TSS)

READ AND SAVE THIS INFORMATION ABOUT THESE TAMPONS:
WARNING SIGNS
WARNING SIGNS OF TSS FOR EXAMPLE ARE: SUDDEN FEVER (USUALLY 102°. OR MORE)AND VOMITING, DIARRHEA, FAINTING OR NEAR FAINTING WHEN STANDING UP. DIZZINESS OR A RASH THAT LOOKS LIKE A SUNBURN.

IF THESE OR OTHER SIGNS OF TSS APPEAR. YOU SHOULD REMOVE THE TAMPON AT ONCE, DISCONTINUE USE, AND SEE YOUR DOCTOR IMMEDIATELY.
There is risk of TSS to all women using tampons during their menstrual period. TSS is a rare but serious disease that may cause death. The reported risks are higher to women under 30 years of age and teenage girls. The incidence of TSS is estimated to be between 6 and 17 cases of TSS per 100,000 menstruating women and girls per year. You can avoid any possible risk of getting tampon-associated TSS by not using tampons. You can possibly reduce the risk of getting TSS during your menstrual period by alternating tampon use with sanitary napkin use and by using tampons with the minimum absorbency. Playtex makes regular absorbency tampons for lighter flows and Super and Super Plus absorbencies for heavier flows.

If you have had warning signs of TSS in the past, you should check with your doctor before using tampons again.

Information about TSS on the package and in this insert are provided by Playtex in the public interest and in accordance with the Food and Drug Administration (FDA) tampon labeling requirements. TSS is believed to be a recently identified condition caused by a bacteria called staphylococcus cureus. The FDA does not maintain that tampons are the cause of TSS. The FDA recognizes that TSS also occurs among nonusers of tampons. If you have any questions about TSS or tampon use, you should check with your doctor.

EXAMPLE 10.2

Tampons
Usage Instructions

- Tampons are not recommended for use between periods.

Before Using Tampon

- Examine the barrel of the applicator for imperfections Make sure the petals at the lip are closed and rounded. If you note any flow, DO NOT USE.

[drawings here]

right way to use wrong way to use

- For ease of later removal, pull on the strings to make sure they are firmly attached.

To Insert

- Relax–either stand (legs apart and knees slightly bent or one foot on the toilet) or sit (knees apart).
- Hold applicator with thumb and middle finger at rings only. DO NOT PUSH PLUNGER YET.
- Insert applicator into vagina and slant toward lower back until fingers touch your body.
- Use forefinger to GENTLY push plunger until flush with outer tube. KEEP BARREL AS STATIONARY AS POSSIBLE.
- Withdraw applicator.
- GENTLY tug on removal strings until you feel slight resistance. Tampon is now properly positioned for maximum leakage protection.

Changing and Removal

- Change tampon at least two to three times a day.
- To remove, take same position used during insertion and pull down GENTLY on strings. Flush away used tampon.
- Remove last tampon at the end of your period.

Disposal

- Do not flush applicator in toilet.

Federal Drug Administration guidelines for wording on tampon packages or inserts

The relevant wording of the federal regulations, found in Part 801.430, is as follows:

(b). Available data show that toxic shock syndrome (TSS), a rare but serious and sometimes fatal disease, is associated with the use of menstrual tampons. To protect the public and to minimize the serious adverse effects of TSS, menstrual tampons shall be labeled as set forth in paragraphs (c) and (d) in this section.

(c). If the information specified in paragraph (d) of this section is to be included as a package insert, the following alert statement shall appear prominently and legibly on the package label. ATTENTION: Tampons are associated with Toxic Shock Syndrome (TSS). TSS is a rare but serious disease that may cause death. Read and save the enclosed information.

(d). The consumer information required by this section shall appear prominently and legibly, in a package insert or on the package, in terms understandable by the layperson and shall include statements concerning:

(1) (i). warning signs of TSS, e.g., sudden fever (usually 102° or more) and vomiting, diarrhea, fainting or near fainting when standing up, dizziness, or a rash that looks like a sunburn;
(ii). what to do if these or other signs of TSS appear, including the need to remove the tampon at once and seek medical attention immediately;
(2). the risk of TSS to all women using tampons . . . especially the higher reported risks to women under 30 and teenage girls . . . and the risk of death from contracting TSS.
(3). the advisability of using tampons with the minimum absorbency needed. . . .
(4). avoiding the risk of getting . . . TSS by not using tampons and . . . by alternating tampon use with sanitary napkin use . . .
(5). the need to seek medical attention before again using tampons if TSS warning signs have occurred . . . or if women have any questions about TSS or tampon use.

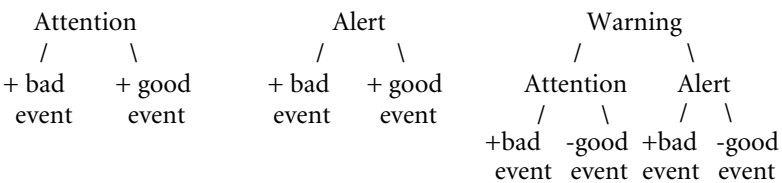
LINGUISTIC ANALYSIS

The analysis compared the FDA guidelines with the manufacturer's warning statements and focused on two areas of linguistics: the speech act of warning and on the discourse requirements of prominence and legibility.

The speech act of warning

It is unquestioned that the intent of FDA regulation 801.430 is to instruct manufacturers to inform their customers that there is an association between tampon use and TSS and that a risk is involved when women use tampons (see section b). The FDA does not specify the exact wording to be used on most of this warning label but it is explicit about the information it requires: prominence and legibility of certain expressions and the comprehensibility of the wording to average consumers. Nor does the FDA specify that any caption be labeled "warning." The two sentences that the FDA does require (see section c) are referred to as an "alert" statement that is to use the word "attention" rather than "warning." The regulations sidestep the manufacturer's need to warn users about the product but, in sections (d) (1) and (2), the FDA makes it clear that manufacturers of tampon products must warn about the signs and dangers of toxic shock syndrome.

FDA's uses of the words "alert" and "attention" are noteworthy in themselves, for both words can be found within the semantic network of the word "warning" but not at the nodes where potentially bad or harmful events may occur:



This semantic network shows that one does not warn about a potentially good eventuality, whereas one can alert a person or request that a person's attention can be directed to either a good or bad event. It should also be noted that most dictionaries define "warning" with words like "attention" and "alert," and they define "alert" with the word "warning," since the speaker who warns has reason to believe that the event warned about is NOT in the hearer's best interest (Searle 1969, 66).

An issue in some civil lawsuits brought by women who have contracted TSS as a result of using tampons centers on whether or not the warning labels or package inserts required by the FDA actually fulfill the requirements noted above in the regulations. I was called by an attorney in this case to address this issue.

The manufacturer argued that it had followed the FDA requirements with the information it put on the package insert, a tightly folded message placed inside the wrapped box of tampons. This insert contains printed information on both sides. One side contains instructions about how to use the product. The other side is labeled "Important Information About Toxic Shock Syndrome (TSS)." It should be noted that the two specific sentences required by paragraph (c) of the FDA regulations do indeed appear in this insert. For convenience here, side one of the package insert will be referred to as "the warning statement" and side two as "the usage statement."

The warning statement is divisible into nine sequenced information chunks (Halliday 1967, 200). These chunks are physically separated in the text by boxes and by spaced paragraphs. These nine information chunks are the following:

Information chunk	*Location, print size*	*Association made with TSS*
1. Information about TSS	title, large print in box	none
2. Read and save this info.	sub-title, all caps	none
3. Warning signs of TSS	title, para. 1, all caps	none
4. If warning signs, remove	para. 2, all caps	implied
5. Risk of tampons for TSS	para. 2, lower case	yes
6. Avoid risk by . . .	para. 4, lower case	yes
7. Past warning signs, see doctor	para. 5, lower case	yes
8. a. This info. in public interest	para. 6, lower case	none
b. Tampons not cause of TSS	para. 7, lower case	disassociation
9. Any questions, see doctor	para. 8, lower case	implied

Bear in mind that the dispute in this case was whether or not an *association* was made between tampon use and TSS and whether or not this was made understandable to the average consumer. Even though the purpose of this insert is allegedly to inform, any hazard association is delayed until the fifth chunk of information. Not all chunks might be expected to include this association, but the sequential pattern gives a clue about the manufacturer's apparent reluctance to express this requirement. Up to the fifth chunk, the reader has been

given information *about* TSS, is told to save this insert, and to remove the tampon if any warning signs occur, but to this point no information has explicitly associated TSS with tampon use.

A cardinal principle of comprehension is that the writer should not cause the reader to have to infer the intended meaning (Green 1988, 11). To be sure, this association was made much more clearly on the outer box of the product itself, but not in the package insert. One can question the relative values of information presented on the outer package versus the lengthier and apparently more serious and detailed information found in the usage/warning insert. If the association is clear on the box but unclear in the insert, which is the reader to understand? For that matter, which will be taken more seriously, assuming that either of them is actually read?

The wording and design of the warning section of the insert also fares poorly when viewed in relation to three of Grice's four maxims of his Cooperative Principle (1975): quantity, relation, and manner. The maxim of quantity requires one to make one's contribution as informative as is required. To be informative, the main idea or gist of the message should be made early and well. Simply including all the proper individual pieces of information at some place is not enough. In this case, even though the manufacturers could honestly say that their package insert contained all of the pieces of information required by the FDA regulations, the result they produced overlooked informativeness. Information can be presented in such a way that comprehension is not achieved, and the reader's endurance to persevere until informed can be seriously impeded. For this reason, at least in Western societies, good communicators try to get the gist of their information on the table early on, telling readers what they are going to tell them, establishing the main point at the outset. They do not save it for the fifth information chunk.

The maxim of relation requires that the information be relevant. Relevance can be seen in two ways. Relevance to the writer, for example, may be quite different from relevance to the reader. Each participant has different world knowledge, experience, intentions, and goals. If writers want their readers to be informed, they try to write from the perspective of those readers (Bell 1991). To be effective and cooperative, writers make their points clear throughout the text and do not fade in and out or expect their readers to make the needed connections between the widely separated bits of information they are given.

The maxim of relation also involves what is called the principle of the given-new contract (Clark and Haviland 1977). This principle states that there are two kinds of information: given (already known) and new (not known). Good writers try to make statements congruent with their own knowledge of the readers' mental perspectives and knowledge of the world. When writers know that the readers' knowledge is not the same as their own, they avoid giving information

that contains presuppositions that require readers to infer their meaning. They start with given information, not new information. The nine chunks of information here are all new, with the possible exception of chunk 7. The insert begins with the effects of something unknown, not something known. The cause of danger may attract the readers' attention, but the effects of that cause are out of sequence and do not consist of familiar, given information.

The maxim of manner requires the information to be unambiguous. To avoid ambiguity, the writer does not leave it to chance for the reader to make the connections. Associations of one thing to another are made explicitly, not by implication. Ambiguity is not limited to the word level of language. It also can occur in the way the ideas are arranged, in this case the paragraphs. If writers say X, then say Y, and expect the reader to connect X with Y, it is appropriate for writers to make that connection for the readers and not to expect them to infer such an association.

An explicit connection between tampon use and TSS was made in chunk 5, but up to that point some readers could be discouraged from reading and might see little point in continuing to read more about an illness that hasn't been connected to their lives. But even those readers who do manage to persevere may begin to feel safe when they get to chunk 8b, which actually functions as a disclaimer as it points out that the FDA has not been able to establish the single causal connection of TSS with tampon use. This may seem odd to the reader, since they have been told in chunk 5 that there is indeed such an association. Even if the information on 8b is true, this disclaimer does a good job of diffusing any warning effect issuing from chunk 5.

Even though the FDA regulation does not insist on the word "warning," the gist of the phrase in 801.430 comes close to carrying that meaning. FDA uses the word "alert," meaning watchful, on guard, or ready. A warning tells readers that something bad could happen if a certain course of action is followed. "Alert" weakly tells the reader that this bad event, which is not in their best interest, could or will occur.

Urgency about a pending disaster strongly suggests that directness is more felicitous than indirectness. It also suggests that it would be most helpful to warn about the disaster rather than about its component parts. I illustrated the importance of directness and specificity at trial with the example of how a railroad crossing sign might have been written if it were to follow the example used by the tampon manufacturer in this case:

1. Important information about accidents.
2. Read this sign.
3. People can get hit by trains. If you are on the tracks and see a train coming, drive faster to get away.

4. Or avoid the train by stopping first.
5. Danger!
6. Avoid danger by stopping, looking, and listening.
7. If you have been hit by a train, call for medical assistance.
8. Trains are not the only causes of accidents.
9. If you have any questions, call Amtrak.

Such a warning sign would be ludicrous at best. Chunks 5 and 6, the most important part of the warning, are embedded within the text. Yes, since they are present, Amtrak could say that drivers and pedestrians had been duly warned and advised. But the problem here is not whether they were warned, but where and how this warning was given. In one way, this fictitious Amtrak warning is actually an improvement over the one used for tampons because it uses the word "danger," which is more performative as a warning than is the tampon manufacturer's, "there is a risk to all women using tampons during the menstrual period. TSS is a rare but serious disease that may cause death." These two sentences require the reader to infer an intersentential relationship that the text does not make explicit.

The tampons package insert certainly contained warnings, but many of these warnings were about TSS rather than about the association of TSS with tampon use. It contained five clear warnings about TSS and one implied one. There are three clear statements about the association of TSS with tampon use and two implied ones. The fact that the three clearest statements about the association of tampons with TSS are simultaneously alleged warnings about TSS dilutes the effect of their association.

Prominence and legibility

Prominence is a notable aspect of document design. Document design is predicated on the principle that the purpose of the document dictates the design (Felker 1980). The sequencing of information flows from the purpose. The language used and the design of the document (white space, bullets, etc.) serve the sequencing and purpose (Felker et al. 1981).

At trial, to demonstrate how the tampon insert was designed, I compared the warning portion (side 1) with the usage portion (side 2) with respect to their use of comprehensibility, discourse sequencing, and visible document design.

The field of literacy has long been concerned about comprehensibility. Over the years various tests of readability have been created as rather simple measures of a text's comprehensibility. Many such formulas, such as the Flesch Test of Readability, place a high value on short words and sentences over long ones, largely overlooking other salient aspects of readability, such as syntactic depth,

intersentential relationships, and the abstractness or concreteness of nouns. But even using the simpler, conventional readability measures, the language of the usage section of the insert wins hands down over that of the warning section:

	Usage	*Warning*
Number of words	180	286
Number of sentences	19	15
Average words per sentence	9.4	19.0
Syntax:		
dependent clauses	3	5
verbal compounds	1	5

It is generally thought in the field of reading comprehension that some half of American readers cannot effectively process sentences over thirteen words long. Assuming this is accurate, it follows that a manufacturer concerned about communicating a danger message would make sentences shorter than thirteen words in order to make the warning section as readable as possible. The fact that the usage section fell well within that limit indicates that the manufacturer's text writers were quite capable of recognizing and adhering to such a limit. But they did not do so in the warning section.

Comparison of the way information was sequenced in the warning and usage sections of the package insert is equally instructive. The usage section is logically sequenced on the basis of time. The headings in this section move from prior experience ("Before Using Tampon") to present experience ("To Insert") to after experience ("Changing and Removal") and finally ("Disposal"). These instructions follow exactly the sequence in which a user will come in contact with the product, a prescribed recipient design format.

In contrast, the warning section is quite disorganized in terms of temporal sequence, as follows:

time	*text*
existential	warning signs of TSS
future	if you see warning signs, remove tampon
future	the risk of tampons for TSS
past/future	if warning signs in past, see doctor
present	this information is in the public interest
existential	tampons are not the proven cause of TSS
future	any questions? see doctor

In terms of document design, the two sides of the package insert show considerable differences in effectiveness. The warning section is crowded with words, in sharp contrast with the usage section, where bullets are used to highlight equivalent points. There are no bullets in the warning section. The usage page contains three simple, but effective, illustrative line drawings. The warning section has none. The usage section contains subheadings to mark the organization for the reader's ease in processing. There is only one subheading in the warning section, and it comes at the very beginning of the text, where it is least needed. One subheading, by its very existence, calls for additional subheadings, but none follow. Finally, the warning section contains twelve consecutive lines of all capitalized letters, producing a readability problem of its own, since readers are not accustomed to seeing texts in all capital letters and find such text difficult to process:

	Usage	*Warning*
lines of text	47	58
full lines (margin to margin)	22	50
% of full lines	47%	86%
bullets	13	0
illustrations	3	0
subheadings	4	1
consecutive lines, all caps	1.5	12

One might consider the document design weakness in the warning section to be an oversight if that same oversight had also occurred in the usage section. But it did not.

This case offered the opportunity to highlight the speech act of warning and to show how the discourse of the product's warning section compared unfavorably with the instructions for use of the product. The comparative method is one of the oldest and most useful tools of science.

Several times during my cross-examination at trial, the defendant's attorney returned to his point that the warning had used the exact words that the regulations required. Each time in my response I was able to recycle the main points of my testimony. At the end he asked me how I might have rewritten this warning to make it acceptable. Again I pointed out that although the insert had used the words of the FDA regulations, it had done so in such a way that the average consumer could have a hard time understanding them. I also pointed out that

the task of rewriting this warning statement clearly and effectively is not one that could be easily accomplished in the time allotted me on the witness stand and so I politely declined his invitation. In any case it is not incumbent on experts to do this, so I used this question as an opportunity to review what I had testified about and to offer a brief outline of what could be done next to remedy the situation.

Using only the manufacturer's information chunks, I suggested reordering them as a first step. The title, for example, should contain words that warn about the *association* of tampon use with TSS, as the FDA required. I suggested that chunk 5, the risk of tampon use, should be fronted to the first paragraph, which would be followed by chunk 6, how to avoid that risk. Following this could be chunk 3, the warning signs of TSS, and then by chunks 4 and 7, that explain what to do if the user observes these warning signs. The rest of the current warning section is less necessary and is, in some ways, actually counterproductive to the basic concept of a warning. In terms of document discourse structure, I suggested replacing the twelve consecutive lines of text in all capitalized letters with conventional, more readable type, and that more white space and bullets could be added and sentence length and complexity could be reduced. This was as far as I was willing to go in my suggestions for revision.

CHAPTER 11

Toxic Gas in the Cockpit

Pro Form and National Insurance Company v. The Garrett Corporation

In 1980 a small Lear jet crashed while attempting to land during a heavy thunderstorm in Louisiana, killing the pilot and all four passengers. Shortly thereafter, the insurer settled the claims made by the families of the deceased but remained dissatisfied with the U.S. Federal Aviation Agency's report that the accident was the result of pilot error, even though the examination of the wreckage revealed no other possible cause. The insurance company developed a theory that since the plane had crashed while seriously off course, something inside the engine must have malfunctioned, causing a substance called trimethylol propane phosphate (TMPP), a toxic gas, to infiltrate the plane's cabin. As a result, they theorized, the actions and judgment of the pilot were impaired, causing him to go off course and crash. Their theory apparently was based on the fact that TMPP is in a class of bicyclophosphates that are GABA (mesolimbic gamma-aminobutyric acid) inhibitors. Since GABA inhibition affects speech rather severely in diseases like Huntington's Disease, the plaintiffs theorized that it had the same effect on the pilot's behavior. One problem, however, was that no physical evidence from the wreckage gave any indication that TMPP had penetrated the cabin of the plane. In short, the insurance company argued that the crash was not induced by human error after all, and was therefore more properly a case of product liability.

Since no evidence of a malfunction in the engine or in the structure of the plane itself could be discovered in the wreckage, attorneys for the Garrett

---

No. 81L4156, No. 81L4209, Consolidated

Circuit Court of Cook County, Chicago, Illinois

A less detailed version of this case was published as "Language evidence in distinguishing pilot error from product liability" in the *International Journal of the Sociology of Language* 100/101 (1993): 101–114.

Corporation, builder of the engine, were left with the unusual task of defending against a theory rather than physical evidence. They concluded that the only remaining evidence of whether or not there was TMPP in the cockpit might be found in the pilot's speech that was recorded on the air-to-ground communication tape recovered from that fatal flight from Milwaukee to New Orleans. The voice of the pilot sounded normal enough to them, suggesting that he was not impaired by any external substance such as TMPP. To verify or refute their suspicions, they called on me to analyze the intermittent tape-recorded messages that spanned a period of some four hours, starting when the pilot was on the ground in Milwaukee and as he passed over various parts of the country, contacting various local control towers near Chicago, Kansas City, and Memphis, and finally as he approached his New Orleans destination and then crashed.

A serious problem for my linguistic analysis of the air-to-ground conversations was that relatively little is known about the effects of TMPP on any large, living being, much less on humans. I searched Medline and Toxline and found that documented research had not been carried out on the effects of TMPP on animals with a brain stem. These studies showed only that massive doses of TMPP had caused mice and rabbits to have erratic behaviors. Proof that would satisfy the claim made by the insurance company would have to show that ingestion of TMPP affects the cerebellum, the motor pathways in the brain stem, the basal ganglia, or the descending pyramid of the cerebral cortex. If any effects of TMPP were on other parts of the cerebral cortex, there would be no language effect or disarthria, where language impairment would be more like that of aphasia. The issue of possible impairment of the pilot's language use during the flight was simply not answerable from current knowledge and research. It was, indeed, only a theory.

To this point we had no evidence that TMPP was ingested by the pilot or that it even existed. If it had been ingested, we cannot know whether his language would have been affected because it is not known whether judgment can be affected independently of language production. Those who believe that language is the first thing to be affected base their belief on theory alone. On the other hand, those who hold the modularity belief, that judgment is independent of language, also have no research to support that position. I discussed the question with several neurolinguists, who expressed the belief that the modularity theory was wrong and the ingestion of drugs, alcohol, and foreign toxic or semitoxic substances does indeed affect language first, independently of other effects on judgment.

So the trial boiled down to the plaintiff having no physical evidence that TMPP caused the accident and the defense having no research evidence to show what possible effect of TMPP might have on humans. Defense counsel and

I decided that if the plaintiff could argue from theory, so could the defense. The legal test would be which theory would be more convincing to a jury.

DATA

In the analysis section following, much of the actual language is reported, but it is impractical here to reproduce all of the air-to-ground conversations of the flight. The first eighteen-minute segment began on the ground in Milwaukee and continued through takeoff. The radio channel was then silent until the flight began to be monitored by the Chicago, Kansas City, and Memphis towers. This segment took some eighty minutes but contained very little communication. The third segment began as the flight neared its destination and was monitored by the New Orleans towers, some twenty-seven minutes altogether.

I considered it reasonable to assume that if there were any substantive changes in the language used by the pilot, comparisons of it at the beginning, middle, and end of the flight could offer some proof of such change. In any case, the plaintiff's theory was that TMPP began to leak into the cabin air at some time during the flight, which would provide the language of the initial segment as the baseline for which later changes, if any, could be compared.

LINGUISTIC ANALYSIS

Using the three time frames noted above, I analyzed the pilot's syntax and word frequency, his use of speech acts, his use of pause fillers, his pronunciation, and his engagement in cooperative conversation.

Syntax

If a person's language were to be affected by an external substance such as gases or alcohol, some aberration in syntax might be predicted. Syntax is affected by ritualized language expectations (Brown and Yule 1983). Thus certain topics, participants, and settings influence language structure through acceptable norms of practice. Medical, legal, and other contexts create acceptable norms in those contexts. Airplane air-to-ground communication has its own conventions of speech, as well.

The first step, therefore, was to analyze a number of other air-to-ground communications in order to determine what was normal in that context from what might not be normal. It turns out that such communications are not particularly complex. There are obligatory segments and optional ones, much like normal English syntax. The optional segments depend on conditions dictated by conventional air-to-ground practice. To communicate this clearly to jurors, I decided to use the rather outmoded slot-and-filler approach to syntax, which is visually easy for jurors to follow.

In air-to-ground communication this slot-and-filler structure consists of an optional acknowledgment of what the tower has communicated, followed by an optional self-identification, after which the pilot may optionally close or continue with obligatory subjects and predicates that can grow into multiple compound sentences, and finally end with an optional closing.

It might appear that all these slots could be considered obligatory, but study of actual air-to-ground communication tells us that they are quite variable. Visually, the system looks like the following five examples:

+/− Ack'mnt	*+/− Identify*	*+/−Closing*	*+ Subject*	*+Predicate (repeatable)*	*+/−Closing*
1. Okay	Mitsubishi 727		we	are refueled and ready to go	
2. Roger	Mitsubishi 727	out			
3.			5000	(feet understood)	out
4. Roger	Mitsubishi 727		we'll	go to 5000	out
5. Got it			5000	(feet understood)	

Using this linear syntactic formula, I examined all utterances made by the pilot at the beginning of the flight in Milwaukee, during the long middle of the flight over Chicago, Kansas City, and Memphis, and at the end of the flight in New Orleans. Comparing the syntax structure in each of these three segments of the flight, I found no difference in syntactic structure, no aberrations and, therefore, no indication of any possible external effect that might have been produced by substances such a toxic fumes, gas, or particulates. There were no instances of ungrammatical structures, no unusual slot reversals. Even sentences with non-uttered but "understood" subjects were relatively similar at the beginning (3 of 9

sentences), at the middle (10 of 13 sentences), and the end (2 of 9 sentences) of the flight.

It might be hypothesized that a pilot's ability to produce more complex sentence structures would decrease under the influence of external substances such as fumes, gas, or particulates. Again the pilot's speech shows no sign of such influence.

Pilot's compound sentences

Beginning	*Middle*	*End*
16%	6%	13%

Perhaps the simplest measure of syntax is the number of words used per sentence, or word frequency. It could be supposed that a pilot suffering from the influence of an external substance such as toxic fumes, gas, or particulates might produce significantly fewer words per sentence, reflecting possible cognitive impairment. But the three segments of the flight show no significant diminution of word frequency per sentence:

	Utterances	*Words*	*Words per sentence*
Beginning	18	162	9.00
Middle	19	157	8.27
End	16	124	7.75

The major reason for the higher ratio of words per sentence at the beginning of the flight was one thirty-six-word sentence spoken by the pilot to the tower before he began his taxi to the runway.

Speech acts

Some linguists believe that the basic unit of human communication is not the sound, the word, or the sentence, but rather the production of the utterance in the performance of illocutionary acts (Searle 1969). The analysis of language using the speech act as a unit of measurement provides a profile of language not observable in more traditional analyses of the forms of the structures of words, clauses, or sentences. Although it is never possible to

determine the exact intention of a speaker, speech acts reveal strong clues to such intentions.

The pilot used nine different speech acts, including some that can be considered more formulaic, such as greetings and closings. Others give more evidence of cognitive rather than social engagement. Reporting facts, such as the location of altitude or flight course, are fairly ritualized. Failure to report facts, when asked by the ground control, could give evidence of possible lack of cognitive engagement and might even be interpreted to be the result of some external substance oozing into the cockpit. In the nine speech acts used by the pilot, there is no substantive change from the beginning to the end of the flight:

Speech act	*Beginning*	*Middle*	*End*
Reports fact	4	9	7
Acknowledges call	1	1	1
Replies to questions	1	0	1
Repeats information	1	0	0
Acknowledges instructions	12	4	7
Requests information	1	2	1
Thanks	1	0	0
Closes	3	4	2
Corrects other person	0	0	1
Totals	24	20	20

The pilot's ability to correct ground control's mistaken assumption about his location appears to be a strong indication that the pilot was not cognitively disengaged, even a few seconds before his plane crashed at the end of his flight.

Pause fillers

Pause fillers, such as "-uh," "-er," and "-um," are used by virtually everyone in speech. They have no lexical meaning but are used to fill silences, to preserve one's turn of speech, or to allow time to think of a word or idea that is still being formed. As such, they convey social or interactional meaning. One important thing about them is that they must be used at the proper point in one's speech, such as at the beginning of an utterance before the first semantic word is spoken, between clauses or phrases, or before a word that is for some reason difficult to

remember or produce. They are more commonly used in longer utterances such as complex sentences than in short or formulaic utterances.

I examined this aspect of the pilot's speech to answer two questions. First, did he use more pause fillers in one segment of the flight than in others? Second, if he did so, might this indicate his difficulty in thinking about what he wanted to say, a possible clue to increasing cognitive dissonance? Any such conclusion, however, should be seen in relationship to the activity in which he was engaged. Pilots are likely to use more pause fillers when their attention is engaged on internal matters such as problems of controlling the equipment or with external matters such as weather disturbances. The following charts the pilot's use of pause fillers in the three segments of the flight:

Segment	*Total words*	*Total pause fillers*	*Ratio*
Beginning	162	7	1 to 27.0
Middle	157	5	1 to 31.4
End	124	3	1 to 41.3

The similarity of these ratios is clearly noticeable, even though at the end of the flight the pilot had to deal with problems of increasingly bad weather conditions and ground control's confusion in identifying him.

I also wanted to determine the pilot's different use of two types of pause fillers: those that try to get attention and those that indicate uncertainty about what to say next. If there were increased uncertainties as revealed by pause fillers, this might suggest some indication of gradual cognitive impairment. The results did not give such an indication:

Segment	*Get attention type*	*Uncertainty type*
Beginning	2	5
Middle	3	0
End	5	0

All of the pause fillers indicating uncertainty came at the beginning segment of the flight, primarily before the plane even started its taxi to the runway. The pilot was not certain about which New Orleans airport was to be his final destination. He also began his repetition of the tower's instructions with "-uh"

responses. It is equally interesting that the pilot's "Hey, listen to me" type of pause fillers all came during the end of the flight, which will be discussed later. If the pilot were gradually being influenced by an external substance such as toxic fumes, gas, or particulates entering the cockpit, one might expect him to increase his use of pause fillers of the uncertainty type especially, a possible indicator of cognitive disorientation or diminution of essential thought processes. The pilot's language gives no evidence of this.

Pronunciation

Even though the effect of toxic materials on the production of speech sounds in humans is unknown, we can hypothesize that they might have some effect, possibly similar to the effect of alcohol on speech. Extensive alcohol use increases certain fricative speech sounds, particularly the sounds of "s" and "z," which involve minute tongue muscle movement toward the front of the mouth. The same effect might be found in the effort to produce the "sh," "ks," "ts" and "th" sounds. When significant amounts of alcohol are consumed, the tongue becomes less able to produce these minute sound differences, giving the effect of slurred speech. I examined these sounds:

s	*z*	*sh*	*vd. th*	*vl. th*	*ks*	*ts*
Houston	zero	Mitsubishi	the	three	taxi	Mitsubishi
six	Kansas		that's	think	expect	its
Moisant	is		they	thousand	six	
see			that			
Kansas						
seventy						
that's						
frequency						
Memphis						
city						
Mitsubishi						

I then categorized each of these sounds by the three segments of the flight:

	s	*z*	*sh*	*vd. th*	*vl. th*	*ks*	*ts*
Beginning:	17	9	3	3	2	14	3
Middle:	20	6	6	3	2	13	7
End:	11	9	9	0	1	18	8
Total:	48	24	18	6	5	45	18

The pilot produced 100 percent of these sounds in the standard, nonslurred way. There was no diminution of his ability to produce them from the start to the end of the flight. Therefore, there is no phonetic support for the hypothesis that an external substance had any effect on his speech.

Conversational cooperation

Conversation does not normally consist of a succession of disconnected remarks. Talk is a characteristically cooperative effort and each participant recognizes, to some extent, a common purpose or set of purposes. Otherwise we could have no meaningful conversation at all.

The "cooperative principle" (Grice 1975) contains four maxims, summarized here:

1. Quantity: Make your conversation as informative as required; no more, no less.
2. Relevance: Make your information relate directly to the topic. Be relevant.
3. Sincerity: Do not say what you believe to be false.
4. Manner: Avoid obscurity and ambiguity. Be orderly.

It is possible to use these maxims as a touchstone for the exchanges between the pilot and the various control towers. If the pilot had suffered exposure to an external substance, such as toxic fumes, gas, particulates, or alcohol, we might expect that such an effect might diminish his ability to engage in a cooperative conversation. We could expect him to lack informativeness, relevance, sincerity, or clarity.

There is no obvious evidence of the pilot's diminished ability to carry on a cooperative conversation. Perhaps only an air-traffic specialist could testify whether or not all communications from the pilot were less informative than the should have been, but the tape recordings reveal no evidence of any complaints

from the ground personnel about the degree of informativeness provided by the pilot. There was no hint of discomfort from the various control towers that the pilot was irrelevant, insincere, or ambiguous. Good tests of the maxims of cooperative language are the responses of the listeners. Throughout the flight, ground personnel treated the pilot's reports of his readiness, destination, movement, and flight level as though they were relevant, informative, sincere, and clear.

Near the very end of the flight the pilot radioed to the local control tower in New Orleans, "We're in the approach." The transmission picked up an aircraft slightly ahead of our pilot, Six Golf Hotel, whose pilot had just requested permission to abort his landing because of the torrential rainstorm. It is likely that ground control confused our pilot's plane, referred to as Mike Alfa, with the other plane, Golf Six. Ground control responded to our pilot's "We're on the approach" asking, "Six Golf Hotel, you're on the approach now?" Mike Alfa responded, "No. Mitsubishi nine six two Mike Alfa, we're on the approach." Ground control then gave Mike Alfa a weather report and asked him, after he had already reported to be on the approach, to report Alger when he passed it. Alger is a specified checkpoint in the landing approach. It is difficult to know exactly what happened next. Mike Alfa's response to the tower is, "Okay, Mike Alfa," and he is never heard from again. Having first been confused and misidentified by the ground control that was to guide him to a safe landing and after being told to report the checkpoint that he had already passed, the pilot may have sensed some futility in getting any help at all. He may have taken things in his own hands or he may have been too busy fighting the elements to try to make sense out of all this. One thing is certain. He was far off course when he crashed into the shore of Lake Ponchartrain, killing everyone aboard. And one linguistic point was made clear. If the pilot was confused and disoriented, ground control appeared to be even more confused. In fact, it was the pilot who corrected the control tower's misidentification, hardly evidence of his cognitive impairment.

Cognitive impairment such as confusion and disorientation is normally first recognized in one's speech. Most psychologists use a person's speech as evidence of almost any characteristic. Likewise, virtually all assessments of cognition used by educators are discovered through language, and neuroscientists use the language of patients in their diagnoses and research experiments. This case also shows how information from Medline and Toxline as well as interview data from neuroscientists can be useful to linguistic analysis.

If there was any sign of diminution of the thought processes of the pilot of Mitsubishi 962 Mike Alfa, it should have been evident in his use of language. Analysis of his syntax, speech acts, pause fillers, pronunciation, and conversa-

tional cooperativeness reveals no meaningful change from the beginning to the end of his flight. I concluded, then, that there was no evidence that his language had been affected by external substances such as gas, toxic fumes, or particulates. The plaintiff's theory of ingested TMPP that leaked from a faulty engine simply did not work. The unanswered question that remained, however, is whether pilot error was really the cause of the crash. All that this case decided was that the engine did not appear to be emitting toxic material or, even if it was, the pilot showed no evidence of it in the way he used language.

This page intentionally left blank

PART IV

Copyright Infringement

The U.S. Constitution clearly recognizes the rights of inventors and authors, and there have been only two major efforts to revise copyright laws in the twentieth century: the first in 1909 and the second in 1976. Although copyright law in the United States is not simple, complete, or precise, one thing is clear: a copyright does not always include protection of an idea, concept, principle, discovery, procedure, process, system, or method of operation, even though some of these may be eligible for patent protection. Excluded from protection are the news and facts, the latter causing great difficulty, since a compilation of facts can be made creative and considered original by the way the facts are arranged and how they are selected. In some cases, people can use the ideas of others without permission, which falls under the heading of fair use. Fair use is a somewhat vague and unspecified rule of reason that considers the extent of the use, the purpose and character of the use, the nature of the copyrighted work, and the effect of the use on the potential market of the copyrighted work. Lesseg (2004) argues that the confusing state of current copyright practice favors the interests of corporate giants against innovation. Most copyright cases involve the legal concepts of proportion, substantiality, originality, and substantial similarity.

Disputes over the use of previously written material involve the amount as well as the proportion of the borrowed work in relationship to the original source. Amount and proportion are not the same things. For example, even though the borrowed work may be much shorter than the original, amounting to as little as 5 percent of the original in terms of words or sentences, this 5 percent can amount to 50 percent of the ideas or other measures of the original work. Although there is a certain logic in this type of quantitative measurement, there are no fixed rules specifying exactly how much is enough to constitute the proportion that supports infringement.

Claims about infringement also rest on more subjective judgments relating to the substantiality of the borrowings. The question becomes how important

or substantial the amount borrowed really is and whether the borrower added substantial original material not found in the original. These are indeed difficult issues for the courts to consider.

The concept of originality carries an equally vague definition: some degree of creativity, even a minimal amount. Then, of course, we need to learn how to assess "creativity" and what "minimal" actually means. Most short phrases generally have not been included under copyright protection.

Many copyright infringement cases are based on substantial similarity of the junior (borrower) and senior (original) documents. Substantial similarity is present in two works when compared in their entirety, including both protectable and unprotectable material, especially when the junior user copies not merely the idea but the "expression of the idea" contained in the senior's work.

The major areas in which linguistic analysis can be helpful in copyright infringement disputes are in what constitutes "substantial similarity" and how "expression of the idea" is defined.

References about copyright that linguists may find useful follow:

Gorman, Robert A. 1963. Copyright protection for the collection and representation of facts, *Harvard Law Review* 76: 1569–1605.

Johnston, Donald F. 1978. *Copyright Handbook*. New York: R. R. Bowker.

Lesseg, Lawrence. 2004. *Free Culture: How Big Media Uses Technology and the Law to Lock down Culture and Control Creativity*. New York: Penguin.

Nimmer, Melville B., and D. Nimmer. 2000. *Nimmer on Copyright*. New York: Matthew Bender.

Strong, William S. 1999. *The Copyright Book: A Practical Guide*. 5th ed. Cambridge: MIT Press.

CHAPTER 12

A Book Is Turned into a Pamphlet

St. Martin's Press and Robert Sikorsky v. Vickers Petroleum Corporation

In 1978, St. Martin's Press published a book authored by Robert Sikorsky called *How to Get More Miles per Gallon*. America had just gone through a severe shortage of gasoline, and it was a time for prudent drivers to learn to save on gas mileage. This 111-page paperback book contained 282 paragraphs, virtually each one containing a tip about how readers could consume less gas and save more money. Shortly after this, Vickers Oil produced and distributed widely a one-page foldover pamphlet called "Savin' Gas Is Easy" as part of a new promotional and advertising campaign. The pamphlet contained fifty-five tips for "easy ways to squeeze some cents out of a gallon of gas." The attorneys for Sikorsky and St. Martin's Press believed that Vickers's pamphlet had borrowed from the book and infringed their copyright. Therefore, they prepared to bring a copyright infringement suit against Vickers Oil.

Two of the required conditions for such action appeared to be in place. Sikorsky held a copyright on his book, and its wide distribution made it reasonable that Vickers could have easily had the opportunity to get access it. In fact, in an affidavit, the writer of the pamphlet admitted that he had relied on the book but claimed fair use. The question centered on whether there was substantial similarity of expression between the pamphlet and Sikorsky's book. In their complaint, attorneys for Sikorsky claimed that there was blatant copying of the book, citing a number of specific passages as evidence. Then they called on me to see if my analysis might help them establish that claim, asking me to use whatever linguistic tools might be available for that task.

No. Civ-80-1198-BT

U.S. District Court, Western District of Oklahoma, Oklahoma City

DATA

The sheer size of a 111-page book makes it impossible for the full text to be included here. Instead, the following analysis cites the passages from both the book and the pamphlet that are candidates for a claim of copyright infringement. As noted above, ideas and facts cannot be the issue, since they fall outside the realm of copyright infringement. In order to refute Vickers's claim of fair use, Sikorsky would have to be able to cite the way that Vickers failed to arrange the facts to make its pamphlet creative enough to avoid charges of copyright infringement. The book was obviously much longer than the pamphlet, so the issue concerned the proportionality of any alleged borrowings, along with issues relating to the degree of expressiveness that might favor the pamphlet over the previously published book.

LINGUISTIC ANALYSIS

One way to assess the issue of infringement is to examine three areas of similarity or difference between the documents: amount of similar material used by the junior document that exists in the senior document's work, the quantitative proportion of material in each, and the similarity of expression in what is found in both.

Dissimilar material

Vickers's pamphlet is obviously much shorter than Sikorsky's book. The latter contains illustrations, elaborations, analogies, technical information, charts, and graphs not found in the brief pamphlet. Taken by itself, this might appear to suggest that there may be little or no copyright infringement.

Quantitative proportion of material

The measure of proportionality demonstrates that of the fifty-five tips listed in the pamphlet, all are found in the book. This would appear to indicate that there could be a strong claim for copyright infringement.

Similarity of the manner of expressing ideas

In order to examine expressive elements of the language of both texts for their similarity or difference, it is first necessary to describe the units of analysis that might be helpful. Linguistic analysis consists primarily of sounds, affixes and suffixes, words, phrases, clauses, sentences, speech acts, and discourse structure. It is clear that it is difficult to prove infringement at the level of commonly used speech sounds (or the letters representing sounds in orthography), since the inventory of such features is very small and the sounds or letters recur very frequently in both texts. The same can be said for affixes and suffixes. Words and morphemes, by themselves, are usually not the most useful indicator of infringement, except as they are seen in larger contexts, such as phrases, clauses, or sentences, or when it becomes otherwise apparent that lexical and morpheme substitution is diagnostic. Even more potentially useful units of analysis can be found at the levels of syntax, speech acts, and discourse structure.

To compare the expressiveness of the texts with each other, therefore, it can be useful to examine the way Vickers used minor variations from Sikorsky's book (punctuation, synonyms, deletions, shortened words) within otherwise identical syntactic constructions, and also how it used small variations or copied in toto Sikorsky's topic sequences and speech acts:

Device	*Example*
1. lexical substitution/deletion	("harm" for "damage")
2. grammatical variation	(singular for plural noun)
3. topic sequencing	(same or different topic sequence)
4. speech acts	(same or different speech acts)

Suspected lexical borrowing

It is useful to categorize the lexical borrowing into longer suspected borrowings and shorter suspected borrowings.

Longer suspected borrowings

Some exact words and sequences of the exact words used by the book can be found in the pamphlet. Excluding some with only minor substitutions of vocabulary, there are eighteen such apparent longer borrowings:

Tip#	*Pamphlet*	*Book*
5	Use the lowest octane that provides good performance	Use the lowest octane that provides good performance
7	from 45–55 mph	from 45 to 55 mph
10	takes less gas to travel at 30–40 mph than it does to travel at 20	takes less gas to travel at 30–40 mph than it does to travel at 20 mph
17	burn over 50% more gasoline than normal acceleration	burn over 50% more gasoline than normal acceleration
19	First gear uses 30–50% more	First gear uses 30–50 percent more
27	Don't ride the clutch to keep your car standing still on an incline	Don't ride the clutch to keep your car at a standstill on hills
27	save wear and tear on the clutch or transmission and save fuel	saves wear and tear on the clutch and transmission and conserves fuel
34	for maximum gas mileage	for maximum gas mileage
35	to keep the battery charged	to keep the battery charged
36	all engine drive belts adjusted to proper tension	all engine drive belts should be adjusted to proper tension
36	Belts that are too tight will damage bearings	Belts that are too tight will harm bearings
36	and make the engine work harder to overcome the extra friction	The engine will have to work harder to overcome the extra belt and bearing friction
37	check tire pressure often	check tire pressure often
38	advance the ignition timing 3–5 degrees over factory specification	advance the ignition 3–5 degrees over factory specs
40	can cost you an extra 1–2 gallons of gasoline per tankful	can cost you an extra 1–2 gallons of gas per tankful
43	you must carry extra weight, distribute it evenly throughout the car	you must carry extra weight, try to distribute it evenly throughout the car
50	at speeds of 20–40 mph	at speeds of 20–40 mph
50	use the vent position	use the vent position

There is a striking similarity in the above eighteen comparisons of longer suspected borrowings. The types of minor differences noted above include:

changed punctuation (tip 19)
synonym differences (tip 27 twice, tip 36)
deleted words (tips 36, 38, 43)
replaced shortened word with full word (tips 38 and 40)

Shorter lexical borrowings

Many candidates for borrowing, though not extensive in length, contain the wordings in the pamphlet that represent four types of changes: synonym substitutions, deletions, grammatical variations, and estimate or ratio modifications.

Suspected synonym substitutions

Tip#	*Pamphlet*	*Book*
a. Verbs		
33	can rob 10%	can cut 10%
34	sends a hotter spark	delivers a hotter spark
b. Adjectives		
33	one bad plug	one malfunctioning plug
c. Adverbs		
19	get into high gear as soon as possible	get into high gear as quickly as possible
d. Prepositional phrases		
50	up to 4 mpg	as high as 4 mpg
52	up to a quart can be lost	lose as much as a quart
54	reduce your top speed in winter	reduce your top speed during the winter
e. Change of article to pronoun		
35	Your alternator has to work overtime	The alternator works overtime

Suspected deletions
Often the pamphlet appears to borrow directly from the book while deleting small bits of the book's sentences. The following are illustrative of this practice:

Tip#	*Pamphlet*	*Book*
a. Noun deletion		
32	change your oil at regular intervals	change the oil and *filter* at prescribed intervals
b. Phrase deletion		
7	10–15% more gas at 45 mph than at 35 mph	10–15% more gas *to travel* at 45 mph than at 35 mph
10	maintain speed in the 30–40 mph range	maintain speeds *as close as possible to the economical* 30–40 mph range
33	off your gas mileage	off *the top of* your gas mileage
c. Pronoun deletion		
2	buy gas	buy *your* gas
d. Adjective deletion		
34	to the ignition system	to the *entire* ignition system
e. Set phrase change		
37	in the heat of the sun	in the heat of the *day*

Grammatical changes

Borrowing can also take place through changes in grammatical structures, in this case through small modifications in noun phrases, modifier sequences, noun number, verb tense, and estimates or ratios:

Tip#	*Pamphlet*	*Book*
a. Noun phrase modification		
35	if terminals are loose or corroded …	if corroded or loose terminals make . . .

b. Modifier sequence		
34	battery fully charged	fully charged battery
c. Noun number		
27	use the emergency brakes	using the emergency brake
d. Verb tense		
27	use the emergency brakes	using the emergency brake
32	lubricates vital engine parts	lubricate vital engine parts
e. Estimates or ratios		
19	at 20 mph second gear uses about 20% more gas than high	at 20 mph second gear uses as much as 15–20 percent more gas than high
43	for every 50 lbs. of added weight you use 1% more gas	for every 100 pounds of added weight mileage decreases from 1–6 percent

Suspected borrowing of topic sequence

The topics used by writers are the main ideas of their text units. In discourse analysis, topic refers, simply, to what the following text is all about. After a topic is introduced, the remainder of the text up to the next topic develops or illustrates that topic. The sequence of topics in copyright disputes provides a way to determine whether or not one text appears to have borrowed its organizational structure from another text. Twenty of the pamphlet's tips present and develop the book's topic sequence exactly, with the exception of some minor deletions of words and, in one case, a reversal:

Tip#	*Match of topic sequence of the pamphlet to the book*
2	match + deletion of word + reversal of two words
5	match
7	match
10	match + deletion of a word
17	match + deletion of a word
19	match + deletion of a word

(continued)

27	match
32	match
33	match + deletion of a word
34	match + deletion of a word
35	match
36	match
37	match
38	match + deletion of a word
40	match
43	match
50	match + deletion of a word
52	match
54	match

The extent to which topic sequencing can be used as an indicator of copyright infringement has not, to my knowledge, been presented or tested in court. However discourse organization appears to be one way to point out how the expression of one text is similar to or different from another.

Suspected speech act borrowing

Speech acts are the way a writer uses language to get things done. Among other things, people can, for example, report facts, predict, complain, give directives, apologize, thank, evaluate, offer, promise, request, warn, threaten, deny, and congratulate. Since these categories are common in spoken and written language, speakers and writers might be expected to use them over and over again. In cases of copyright infringement, analysis of the way different texts use and sequence these speech acts can help to define "expression" in a way that is different from merely comparing word choices or phrasing. "Expression" here is used to include the choices of speech acts used and the way they are sequenced in texts.

In three of the pamphlet's tips, all the speech acts in those tips are identical to and are presented in exactly the same sequence as in the book. In seven other tips, the pamphlet uses the book's exact sequence of speech acts while deleting one of those speech acts in the sequence. One of the pamphlet's tips deletes two of the book's speech acts but otherwise keeps the sequence the same. The pamphlet consistently changes the most common speech act in the book, offering advice, to giving a directive and, in the case of one tip, a warning.

Since this dispute was settled through negotiation before a trial took place, it is not possible to tell how effective this analysis might have been in the courtroom. It was used, however, in the negotiation process, and may have been partially responsible for the terms of the settlement. It seems clear that Sikorsky's case was solid on the issue of proportionality, since 100 percent of Vickers's tips could be located in Sikorsky's book. In the past, the expression value of copyright law has tended to focus primarily on comparing similar vocabulary and expressions. The above effort to recognize and use additional levels of language, judgment about the acceptability of the sequence of discourse topics, and speech acts, will need to be tested in court at some other time.

This page intentionally left blank

PART V

Discrimination

The conventional dictionary definition of the verb "to discriminate" is: "to make a difference in treatment or favor on a basis other than individual merit" (*Merriam-Webster's Collegiate Dictionary*). Some dictionaries also add, "to act on the basis of prejudice," and "to make a distinction unjustly and on the basis of race, color, or sex." To this list, modern developments include unfair or biased discrimination on the basis of family connections, friendships, and age. Accusations of discriminatory practice have emerged in areas of corporate and business behavior as well as in certain law-enforcement practices in which officers of the law or entire police departments have been accused of discriminatory racial profiling.

In the United States, Title VII of the Civil Rights Act (1964), the Americans with Disabilities Act (1990), and the Age Discrimination in Employment Act (1967) prohibit discrimination in any aspect of employment, age, race, national origin, language, religion, or sex. All of these acts are enforced by the U.S. Equal Employment Opportunity Commission. Discriminatory practices prohibited under these laws include harassment, retaliation for filing charges of discrimination, employment decisions based on stereotypes about abilities, traits, performance, and other matters.

The three kinds of discriminatory practice illustrated in this section do not cover all types of discrimination cases. The discussion here is limited to discrimination in housing, age, and employment. Obviously there are others as well, including gender and ethnic discrimination. That these are not included here says only that I have not had the opportunity to provide case-based examples of them, since I have not worked on cases in which they were central.

When written or spoken language is used as evidence in accusations of discrimination, linguists have been called upon to analyze the language used to see whether or not it confirms alleged discriminatory practices. The following cases are examples of how linguistic analysis has been used in such cases. A realtor's racial steering case centered on an issue about which past linguistic research helped

to provide an answer to the question of the ability of listeners to identify a speaker's race based on relatively brief telephone conversations. A case involving written evidence of discriminatory practice by an employer's messages to an older worker relates to prior research on language stereotypes of older people. The vocabulary used in public speeches, memos, and media articles provided evidence that the employer's use of certain terms gave strong clues about that employer's bias against that older employee. Finally, the semantics of "dismissed" and "non-renewed" framed the case of a school teacher involved in a retaliatory discrimination case against the school system that first hired him, then dismissed him immediately after he filed an accusation against a fellow teacher for making improper sexual advances to him.

Law references about discrimination that linguists might find useful include the following:

Eglit, Howard. 1994. *Age Discrimination*. 2nd ed. New York: McGraw-Hill.

Larsen, Lex K. 1994–. *Employment Discrimination*. 11 vol. New York: Matthew Bender.

Lewis, Harold S., Jr., and Elizabeth J. Norman. 2001. *Employment Discrimination Law and Practice*. St. Paul, Minn.: West Group.

Nelson, Robert L., and William P. Bridges. 1999. *Legalizing Gender Equality*. New York: Cambridge University Press.

Player, Mack A. 1999. *Federal Law of Employment Discrimination in a Nutshell*. St. Paul, Minn.: West Group.

CHAPTER 13

Racial Steering in Real Estate

HOME v. Havens Realty Corporation

Housing Opportunities Made Equal (HOME) is a Virginia nonprofit organization created for the purpose of eliminating unlawful, discriminatory housing practices in the Richmond area. It assists people of all races to obtain housing through its housing counseling service, by investigating allegations of discrimination, and by referring discrimination complaints to appropriate federal and state authorities. One of its tasks is also to carry out independent investigations of real estate brokers to determine whether housing is being made available without regard to the applicant's race. As it does this, HOME commonly makes use of both white and African American "testers" who call real estate companies in the guise of hunting for an apartment or house.

In March 1978, a local black man, Paul Allen Coles, believed that Havens Realtors had steered him away from renting an apartment in a predominantly white complex. He took his complaint to HOME, which subsequently used two testers, one black and one white, to investigate the situation. Two days later HOME'S black tester called Havens asking if they had available apartments that he could rent. He was told that nothing was available. That same day, a white tester from HOME inquired about an apartment and was told that some were available in two different apartment complexes, one integrated and the other occupied predominantly by whites. Over the next four months, the same testing was carried out several times on Havens Realty with the same results. In July, Mr. Coles visited Havens Realty in person and was told that there were apartments available in the integrated complex but not in the predominantly white one. A white tester then visited the Realtor and was told that there were apartments available to him in the predominantly white complex that were not revealed to the black tester.

No. 79–1199

U.S. District Court, Richmond, Virginia

HOME filed a class action suit against Havens Realty in January 1979, claiming that Havens treated white and nonwhite prospective renters differently, based on their race or color; that Havens engaged in practices to the detriment and injury of others; and that Havens refused to show black customers rental units in buildings occupied primarily by white tenants.

Subsequently there was a trial in which Havens claimed that the city and county of the dispute was too large to comprise a target area of housing discrimination and that the statute of limitations (180 days) had expired before the complaint of discriminatory housing practice was brought. Havens also objected to the use of testers, especially since the testing "occurrence" took place after the statute of limitations had expired. Plaintiff HOME contended that the "occurrence" was the defendant's continuing practice of racial steering and that covered the time of the testing. The District Court agreed with Havens that the statute of limitations had expired and dismissed the case.

Undaunted by this decision, HOME appealed the case, and in January 1980 it was reversed and remanded by the Fourth Circuit, which argued that the testing fell within the statute of limitations and concluded that Havens's discriminatory practice was a pervasive, ongoing event rather than the single instance that occurred when Mr. Coles was denied the opportunity to rent in the white-occupied apartment complex.

Attorneys for HOME called me early in this process and asked me to address their claim that the races of speakers could be identified in phone calls such as the ones used by the plaintiff and two testers. I was never called to testify in this matter, however, possibly because the issue of the allegedly expired statute of limitations and HOME's use of testers took the forefront in the dispute. The following analysis represents what I was prepared to testify about had I been called. Its focus was on the ability of people to recognize the race of people who make telephone calls to real estate companies.

DATA

HOME gave me two tape recordings of eight different voices speaking extemporaneously in a simulated telephone conversation. They asked me to identify the race of eight voices. I also received a live telephone call from a man named Arthur Wright, whose race was not identified to me. I then compared all nine voices for language clues to their race, using nine common linguistic characteristics of Vernacular Black English (VBE), summarized in nontechnical terms as follows:

1. In words beginning with a voiced "th," this sound is pronounced with a "d."
2. In words ending with an "r," this "r" sound does not occur.
3. In words with an "l" after a vowel, this "l" sound does not occur.
4. In verbs ending with "-ing," this sound is pronounced "-in."
5. In words with an "eh" sound followed by nasal consonants "m," "n," and "ng," the vowel is pronounced "ih."
6. In words pronounced with an "ay" sound, this sound is pronounced "ah."
7. In words ending with a voiceless consonant cluster, the last consonant is not pronounced.
8. In third person singular verbs, the "s" sound is not pronounced.
9. In the expression, "I'm going to . . ." the expression is pronounced "ahma."

It is true that some of the above list includes features commonly shared by white speakers in many Southern areas. It is the combination of these and others more diagnostic of VBE speech that framed this analysis. Some, but not all, of the eight tape-recorded voices used these features with varying frequencies. I made a chart of each time one of the characteristics of VBE occurred and noted the frequency of occurrence of these features for each voice, as follows:

	VBE voices					*White voices*			
Known AAE features	*1*	*3*	*5*	*6*	*9*	*2*	*4*	*7*	*8*
1. this > dis	0	1/1	1/1	2/2	5/5	0	0	0	0
2. four > foe	4/4	5/5	1/1	1/2	5/5	0	0	0	0
3. help > hep	0	1/2	0	3/3	0	0	0	0	0
4. eating > eatin'	2/2	4/4	2/3	0	5/5	0	0	1/3	0
5. pen > pin	1/1	1/1	1/2	0	4/4	0	0	0	0
6. child > chald	2/2	3/3	2/2	0	5/5	0	0	1/6	1/6
7. west > wes	2/3	1/1	1/2	0	4/4	0	0	1/2	0
8. goes > go	1/1	0	1/1	0	1/1	0	0	0	0
9. I'm gonna > ahma	1/1	0	0	0	1/1	0	0	0	0

Since the decades of the 1960s and 1970s, research in language variation has clearly shown that individual features, even those commonly shared by groups of speakers, occur variably (Labov 1966; 1972). That is, not every time a person deletes the "l" in *help* can this "l" be expected to be deleted. Likewise, some features of vernacular English are shared by other groups, as in the production

of *eatin'* for *eating* (in speaker 7) and in instances of the lack of vowel gliding typical of white Southern speech (in speakers 7 and 9). It should also be noted that the speech samples given me were from naturally occurring speech, not from word lists or reading passages. Therefore the opportunities for some features to occur were not the same across all speakers, explaining why speakers 1, 5, and 9, for example, did not delete the "l" in *help*. Words that contained this phonological opportunity were not spoken by them on these tapes.

Using these features as my guide, I was able to correctly identify the race of all nine speakers in the blind test given me. The question then became, can such accurate racial identification be made by people who are not linguists? For this I was prepared to call on the findings that my research team and I had done in Detroit over a decade earlier (Shuy, Wolfram, and Riley 1968; Shuy and Williams 1973). The Detroit Dialect Study was a research project in which twelve field researchers went to the homes of a stratified random sample of Detroiters and tape recorded their conversations for about an hour. The study recorded a population of informants that very closely represented the race, age, and socioeconomic level of Detroiters at that time. From this body of hour-long tape recordings of 714 Detroiters, short samples of the speech of white and black speakers were selected for a follow-up study to determine how successful adult Detroiters of the same races and socioeconomic level were in identifying the speakers on these short tape samples. The samples were each twenty seconds in duration and contained three male speaker representatives of each group of four socioeconomic classes, as identified by a Hollingshead scale. These samples from the hour-long tape were then copied onto a new tape that included:

3 upper-middle-class black
3 upper-middle-class white
3 lower-middle-class black
3 lower-middle-class white
3 upper-working-class black
3 upper-working-class white
3 lower-working-class black
3 lower-working-class white

In addition, we made another new tape of even shorter passages consisting of three to five seconds of speech, again taken from the hour-long interviews, and again representing male Detroiters from the four socioeconomic groups and both races, as noted above.

The next task was to find Detroiters of the same socioeconomic groups and races who would listen to these two recordings and make subjective judgments

about the race and socioeconomic status of the speakers they heard. We located 620 Detroiters of the same four socioeconomic groups, three age groups, and two races who listened to the two tapes and made judgments about the race and social status of the speakers. This group was made up of 60 percent white listeners and 40 percent black listeners, closely representing the Detroit city population at that time.

From this research we found that Detroiters of all races and socioeconomic classes have an amazingly good ability to judge the race and socioeconomic status of male Detroiters based only on the twenty-second samples of speech, as follows:

Black listeners identified black speakers accurately 82.2 percent of the time.
White listeners identified black speakers accurately 76.9 percent of the time.
Black listeners identified white speakers accurately 78.4 percent of the time.
White listeners identified white speakers accurately 84.1 percent of the time.

When we examined the responses of only the adult listeners, we found that black adult listeners correctly identified the speakers' race 79 percent of the time, and white adult listeners correctly identified the speakers' race 85.6 percent of the time.

For the shorter speech samples, those of only three to five seconds in duration, the Detroit listeners gave accurate race identifications approximately 10 percent less often than they did for the twenty-second samples.

The major inaccuracies for both white and black speakers was found in the category of upper-middle-class black speakers, whose speech appeared to be so similar to those of whites that even black listeners usually identified their fellow black speakers as whites. When the category of upper-middle-class black voices is removed from the comparison, the percentage of accuracy in identifying the race of the speakers was 90 percent for both white and black listeners.

From both my own linguistic ability to judge accurately the race of short samples of speech and from the past research showing that nonlinguists could do this with virtually the same results, I was prepared to give testimony at trial that it was indeed very likely that real estate employees could accurately identify black callers looking for housing. As noted above, however, the issues for trial turned to the legal matters of whether or not the statute of limitations had

passed and whether or not testers could be used in such cases. For this reason my testimony was not given in this case.

This case provided the opportunity to call upon past sociolinguistic research concerning what would have been central to linguistic expert witness testimony had the case not taken a different turn at the end. It emphasizes the need for forensic linguists to be well trained in the sounds and grammar of various dialects of English and to be knowledgeable about available research in language variation.

CHAPTER 14

Age Discrimination

Richard Hannye v. General Electric Company

The purposes of the Age Discrimination Act of 1967 were to promote employment of older workers based on their ability rather than their age, to prohibit arbitrary age discrimination in employment, and to assist workers and their employers in matters related to the impact of age on their jobs.

In 1990, a long-time, mid-level manager in his fifties, Richard Hannye, was abruptly dismissed by his employer, General Electric (GE), which provided no reasons that Hannye considered relevant to his performance or attitude. He then brought an age discrimination suit against General Electric, based on the 1967 Age Discrimination Act.

It is often extremely difficult to discover substantive evidence of discrimination in cases such as this one. In the discovery process, Hannye's attorney requested access to all relevant GE-held documents, such as media clipping files, memos, letters, and employee evaluations. GE was at first forthcoming, then decided to defy the court's order, objecting that Hannye's attorney was copying documents that GE did not consider to be relevant to this case. The court sustained GE's objection and Hannye's only resort was to try to find evidence of GE's "corporate culture" on its own. Making matters more difficult, GE's chairman and chief executive officer, Jack Welch, made it a practice to never write memos or long prose pieces of any kind, and he seldom gave interviews to the media. Sometimes, however, transcripts of his speeches were available.

Docket No. 90–4757 (AET)

U.S. District Court, Philadelphia, Pennsylvania

DATA

Rebuffed in their discovery efforts, Hannye's attorneys then made electronic searches for media articles about the company, hoping to find evidence of age discrimination practice found in quotations of Mr. Welch or other high-level GE executives. This search produced a large number of articles, only a few of which were even remotely related to the plaintiff's goal. These few articles intrigued the attorneys, but they couldn't quite put their finger on evidence of age discrimination. Realizing that this was a language issue, they called me to see what I could find in them.

After sifting through over a hundred media articles, I found fourteen that contained potentially useful quotations attributed to Mr. Welch and other high-level executives at GE. In addition, we were able to locate transcripts of four of Mr. Welch's public speeches. I then used the following eighteen documents in my written report, by way of trying to determine what could be reported about the corporate culture of GE, specifically as it related to possible age discrimination:

1. GE Internal memo, October 27, 1987, from Donna Magee, Corporate Financial Management, to Dennis Dammerman, senior vice president of finance, regarding her selection of an open executive-level position.
2. *Wall Street Journal*, August 14, 1987, "Combative Chief: Although Still Widely Praised, GE Chairman Welch Is Facing Growing Criticism."
3. *Fortune*, August 3, 1987, "The World's 50 Biggest Industrial CEOs."
4. *Fortune*, January 5, 1987, "Jack Welch: The Man Who Brought GE to Life."
5. *Monogram* (undated and untitled article).
6. *Fortune*, July 7, 1986, "What Welch Has Wrought at GE."
7. *Harbus News*, November 2, 1987, "HBS Focuses Microscope on General Electric CEO."
8. *Executive Excellence*, November 1984, "A General Electric Case Study: Four Critical Steps to Cultural Change."
9. *Fortune*, January 25, 1982, "Trying to Bring GE to Life."
10. Transcript of a speech by Jack Welch at the Hatfield Fellow Lecture, Cornell University, April 26, 1984.
11. *Financier*, July 1984, "Shun the Incremental; Go for the Quantum Leap," an article written by Jack Welch.

12. *Washington Post*, September 23, 1984, "GE's Welch Powering Firm into Global Competitor: Changing a Corporate Culture."
13. *USA Today,* December 11, 1986, "John F. Welch, Jr.: The Driven, Energetic Chairman Who Brought GE to Life."
14. *Business Week*, December 14, 1987, "GE's Jack Welch: How Good a Manager Is He?"
15. *Fortune*, March 27, 1989, "Inside the Mind of Jack Welch."
16. Transcript of a speech by Jack Welch at the GE Annual Meeting of Shareholders, Greenville South Carolina, April 26, 1989, "Speed, Simplicity, Self-Confidence: Keys to Leading in the 90s."
17. Transcript of a speech given by Jack Welch at GE Annual Meeting of Shareholders, Decatur, Alabama, April 24, 1991, "In Pursuit of Speed."
18. Transcript of a speech by Jack Welch at Harvard University, October 17, 1990, "Mentors, Tutors, Friends: Employee Volunteers in America's Schools."

LINGUISTIC ANALYSIS

Stereotypes of youth versus age

Research on age-related language stereotypes (Coupland, Coupland, and Giles 1991) points out a number of terms, both positive and negative, that are associated with aging and the elderly. This work was supplemented by an article by Kinsbourne (1980) and in a book by Palmore (1990). These resources led me to the following list of stereotypes related to aging, with which I began my analysis:

"old"	*Negative stereotype*	*Positive stereotype*
	non-adaptable	experienced
	out of date	knowledgeable
	physically decrepit	wise
	slow	mature
	dull/repetitious	seasoned
	frail	
	cognitively declining	
	selfish	

"young"	*Negative stereotype*	*Positive stereotype*
	lacking experience	strength
		speed
		aggression
		fresh
		good looking
		cheerful
		sense of humor
		concern for the present
		social issues

The question put to me by Mr. Hannye's attorney was whether or not the language used by Mr. Welch and other senior-level GE management in these interviews, speeches, and memoranda reveals age-based bias against older persons in the selection, retention, and promotion of GE managers. The following five excerpts from these documents, stressing youth over age, framed a starting point:

1. Document 1, written by a GE finance executive, says: "The following candidates have Corporate Audit Staff experience, are clearly promotable, and would fit nicely in a *young*, *aggressive* environment."
2. Document 2 quotes the head of GE's aircraft-engine group: "Some people *past a certain age aren't trainable*, and they do better to leave GE."
3. Document 3 quotes Jack Welch saying: "The *old close-to-the-vest* corporate bureaucrat is not the abnormal guy at GE."
4. Document 4 quotes Jack Welch saying: "The people who get in trouble in our company are those who carry around *the anchor of the past*."
5. Document 5 quotes Mr. Welch: "The mindset of *yesterday's* manager was to *accept compromise* and keep things neat which tended to breed *complacency*."

In the above five quotations of GE executives, we learn that GE favors a "young aggressive environment," that managers "past a certain age aren't trainable," that the "old close-to-the-vest bureaucrat" is abnormal, that it is bad to "carry around the anchor of the past," and that "yesterday's manager" accepted compromise and bred complacency. The list of age stereotypes noted from the

research is well represented here. These quotations also provide clues about the corporate culture of GE at that time.

Characteristics of a desirable manager

I next decided to chart all of the characteristics of a desirable manager found in the eighteen articles that quote Mr. Welch and other GE high-level executives on this topic, and to see how they compare with the stereotypes of age shown by previous research, as follows:

Comparison of GE's words with stereotyped positive terms for younger managers

Document	*Attribute*	*Potent*	*Strong*	*Fresh*	*Speedy*	*Good-looking*
2	gut person	X	X			
5	adapts to change	X		X		
5	tomorrow's leader	X		X		
7	lean	X			X	X
7	agile	X			X	
8	agile	X			X	
9	fast		X	X	X	
9	grow		X			
9	creative	X		X		
9	driven	X	X			
9	tries the new	X		X		
10	fresh	X	X	X	X	X
10	fast	X	X		X	
10	lean	X			X	X
10	agile	X			X	
10	impatient			X		
10	irreverent			X		
10	bucks the system	X	X	X		
10	challenges/questions	X	X	X		
10	energized	X	X	X		
11	fresh	X	X	X	X	X
11	impatient			X		
11	irreverent			X		

(continued)

11	bucks the system	X	X	X		
12	high speed	X	X		X	
14	grow	X				
14	hits home runs		X			
14	tomorrow's person	X		X		
16	speedy	X	X		X	
16	fast	X	X		X	
16	bold	X	X	X		
16	aggressive	X				
17	speedy	X	X		X	
18	eager			X		
18	fresh	X	X	X	X	X
18	creative	X		X		

One striking aspect of the language used by senior-level GE management in these documents is the devaluation of experience and cognitive ability as a valid basis for the selection, retention, and promotion of GE managers. As shown in the earlier chart of age stereotypes, being experienced and knowledgeable are two of the primary positive attributes of older persons. Conversely, lack of experience is one of the primary negative attributes of younger people. Jack Welch clearly rejects experience and knowledgeability as positive attributes in the selection, promotion, and retention of managers in the following quotes from his statements:

1. Document 6: "We are out to get a feeling and a spirit of total openness. That's alien to a manager of 25 to 30 years who got ahead by knowing a little bit more than the employee who works for him."
2. Document 7: "The days when someone was a manager because he had one more fact, one more bit of knowledge, than the other guy are gone."
3. Document 5: "The idea of a manager knowing a little bit more than his or her subordinates is over. The manager who does that, thinking it's a sign of strength, is a weak, yesterday's manager."
4. Document 5: "The idea of a foreman, the manager, knowing a few more facts and then using those facts to become 'the boss' that's 1950s, 1960s stuff."
5. Document 8: "Even our candidate selection practices have changed. Whereas we used to give heavy weighting to an individual having 'sat in all the right chairs,' we now look for an individual's unique ability to do a job regardless of the 'normality' of his background."

6. Document 14: "Yesterday's idea of the boss, who became the boss because he or she knew one more fact than the person working for them, is yesterday's manager."

The GE executive directly responsible for the selection of candidates for open positions in management, Donna Magee, supplements Mr. Welch's view in document 1: "Selection was weighted toward talent and promotability rather than experience in a Government business." Here she not only rejects experience as a positive attribute but also implies that experience is mutually exclusive with talent and promotability.

In that experience is a primary positive attribute of older persons and lack of experience is a primary negative attribute of younger persons, the language used by Mr. Welch and Ms. Magee provide clues to a corporate age bias against older workers.

Next, I compared GE's words attributed to undesirable managers with the stereotyped terms for older persons, as follows:

Comparison of GE's words with stereotyped negative terms for older managers

Document	*Undesirable manager*	*Out of date*	*Non-adaptive*	*Inactive*	*Frail*	*Slow*	*Dull*
2	loyal			X			
3	old	X	X	X	X	X	X
3	close to vest		X	X		X	X
4	anchor of past	X	X	X			X
5	yesterday's manager	X	X				X
5	weak			X	X		X
5	long yrs of service			X			
6	plateaued out	X	X				
6	long yrs of service			X			
8	sat in right chairs					X	
9	ruled by tradition	X	X				X
10	cautious		X	X			X
10	slow			X		X	X
10	incremental			X		X	X
10	conformist		X				X
10	organization man		X	X			X
13	rooted in yesterday	X	X	X			X

(continued)

14	tied to the past	X	X	X			X
14	yesterday's manager	X	X				X
14	loyal			X			
15	bureaucratic	X	X			X	X
16	faint of heart		X	X	X		X

The above two charts comparing the terms used for GE executives that support positive stereotypes of younger workers and terms that support negative stereotypes of older workers show that GE views good managers as those with youthful potency, strength, speed, good looks, and freshness. In contrast, GE views undesirable managers in terms that correlate with stereotypes of older workers—slow, nonadaptive, decrepit, frail, dull, repetitious, out of date, and inactive.

Finally, Mr. Welch uses the word "bureaucracy" in document 15: "Our system allows the talented young engineers in our company to move up fast. If we put bureaucracy and rigidness into our system, we play into our competitors' hands in global markets." For Mr. Welch, "bureaucratic" is a negative attribute of managers, and it also associates closely with what he considers undesirable managers. And if undesirable managers are equated with older workers, then reference to them as part of the bureaucracy does the same.

Comparison of GE's negative attributes of a bureaucracy with stereotyped characteristics of older workers

Document	*Negative attributes of bureaucracy*	*Out of date*	*Non-adaptive*	*Inactive*	*Frail*	*Slow*	*Dull*
2	not where to flourish		X	X		X	
12	by the numbers	X	X	X		X	X
15	slow			X		X	
15	rigidness		X	X		X	
15	wastes energy		X	X		X	
15	frustrates us		X	X			
15	makes us mad		X				
16	terrified by speed		X	X		X	
16	hates simplicity	X				X	
16	defensive		X	X		X	

16	fosters intrigue		X				
16	self-absorbed		X	X		X	
16	a handicap				X	X	
16	ticket to the boneyard	X	X	X	X	X	X

I concluded my report by saying that the language used by senior-level GE management in reported interviews, speeches, and internal memos gives strong evidence of age-based bias against older workers in the selection, retention, and promotion of GE managers. The report was used during negotiation with GE and was said to be helpful in reaching a confidential settlement with Mr. Hannye. I was not told what this settlement was, but his lawyers indicated that they were pleased with it.

Language attitudes and stereotypes are an important part of linguistics and can prove useful to forensic linguists. Since research that has been done in this area is available to use in cases such as this one, I called on it here.

Some useful references on language and aging are noted below:

Barbato, C. A., and J. C. Feezel. 1987. The language of aging in different age groups. *Gerontologist* 27: 527–531.

Covey, H. C. 1988. Historical terminology used to represent older people. *Gerontologist* 28: 291–297.

Coupland, Nikolas, Justine Coupland, and Howard Giles. 1991. *Language, Society and the Elderly*. Oxford: Blackwell.

Coupland, Nikolas, and Jon F. Nussbaum. 1993. *Discourse and Lifespan Identity*. Newbury Park, Calif.: Sage.

Hummert, Mary Lee, Teri A. Garstka, and Jaye L. Shaner. 1995. Beliefs about language performance: Adults' perceptions about self and elderly targets. *Journal of Language and Social Psychology* 14.3: 235–259.

Hummert, Mary Lee, John M. Wiemann, and Jon F. Nussbaum. 1994. *Inter-personal Communication in Older Adulthood*. Thousand Oaks, Calif.: Sage.

Maddox, George L., ed. 1987. *The Encyclopedia of Aging*. 2nd ed. New York: Springer.

Nuessel, Frank H. 1982. The language of ageism. *Gerontologist* 22: 273–276.

——. 1992. *The Image of Older Adults in the Media: An Annotated Bibliography*. Westport, Conn.: Greenwood.

Obler, Loraine K. and Martin L. Albert. 1980. *Language and Communication in the Elderly*. Lexington, Mass.: Lexington Books.

Palmore, Erdman B. 1990. *Ageism: Negative and Positive*. New York: Springer.

This page intentionally left blank

CHAPTER 15

Retaliatory Termination Discrimination

David E. Benekritis v. Renny Earl Johnson and the Darlington County School District

A high school math teacher, David Benekritis, was terminated for the 1992–1993 school year by the Darlington County School District of South Carolina. After he had received his bachelor's degree in education in 1977, he taught for brief periods in Saskatchewan, Florida, Georgia, Michigan, and Texas. In 1991 he applied for a position in the Darlington, South Carolina, school system as a math teacher. There he was assigned a "mentor/supervisor," R. Earl Johnson, to learn the policies and procedures of the school, although Mr. Johnson subsequently denied that he held any official supervisory role.

One day after school Mr. Johnson asked Mr. Benekritis to join him in a pick-up basketball game at a nearby church gymnasium where he often exercised. Mr. Benekritis did so and claimed that during the game he was sexually assaulted by Mr. Johnson, who grabbed his penis and fondled him. Mr. Benekritis reported this both to the school and the police, whose investigation led to a dismissal of all charges filed against Mr. Johnson.

After dismissal of the charges, the director of personnel for the school system investigated Mr. Benekritis's employment background for the first time, even though Mr. Benekritis had made this record available to him at the time he applied for the position. When contacted by phone, his Florida reference, who had previously given Mr. Benekritis a positive written evaluation, now reported that he had experienced some unidentified "problems" with Mr. Benekritis and that his teaching contract had "not been renewed" for the succeeding year. Interestingly, Mr. Benekritis had resigned this position well in advance of his request for a reference for his new job at Darlington and there was nothing

---

Civil Action No. 2:93-3136-18

U.S. District Court, Charleston Division, South Carolina

on this reference to indicate anything amiss with his previous employment at that Florida school.

This new and recently received information about Mr. Benekritis's service at the Florida school was contrary to the information that he had provided on his application form for Darlington, where he indicated that his reason for leaving his position in Florida was "to accept another position," which turned out to be in Georgia. Based on this new and conflicting information, Mr. Benekritis was now dismissed for lying on his application form. Mr. Benekritis then sued the Darlington School System for, among other things, retaliatory discrimination in violation of Title VII of the Civil Rights Act of 1964, violation of the South Carolina Whistle Blowers Act, and wrongful discharge from employment.

DATA

Lawyers for Mr. Benekritis contacted me to examine the wording of their client's employment application form that he submitted to the Darlington County Schools. Mr. Benekritis had listed every past employer's name, address, phone number, and reason for leaving. For the Florida position in the "reason for leaving" slot he wrote, "to accept a position in Albany, Georgia." On the page requesting personal information, one question was "Have you ever been dismissed/nonrenewed from any employment?" to which he checked the box indicating "no." The final paragraph of the application states:

> By filing application for employment with the Darlington County School District, I understand that any misrepresentation or omission of facts on the application or during the employment process is cause for forfeiture of employment consideration or termination, if employed.

Noting these two answers, the Darlington County Schools claimed that Mr. Benekritis had misrepresented the truth, based on their long-after-the-fact telephone check on his references, while Mr. Benekritis believed that he had been the victim of retaliatory discrimination for reporting the sexual advances by the teacher who the principal assigned to him as his "mentor/supervisor," Mr. Johnson.

After a plaintiff charges discriminatory retaliation, one of the legal requirements is that the burden is on the defendant to establish that the employer's

stated reason is pretextual. Mr. Benekritis's lawyers maintained that prima facie evidence was actually Mr. Benekritis's allegation of sexual assault, the reporting of it, and his subsequent termination. They further claimed that the only reasonable inference to be drawn from the evidence was that Darlington's basis for terminating Mr. Benekritis was retaliatory.

LINGUISTIC ANALYSIS

My analysis of Mr. Benekritis's answers to the questions about his past employment history focused on the questions on the application forms themselves. When the form asked "Have you ever been dismissed/nonrenewed from any employment?" it used the virgule, commonly called the slash, between "dismissed" and "nonrenewed." The virgule is a punctuation mark that has at least three major uses in American English: to separate alternatives, to separate successive and equal divisions, and to indicate *per* in abbreviations. *Webster's New Collegiate Dictionary* lists and illustrates these uses as follows:

Use of the virgule

Definitions	*Examples*
1. To separate alternatives	. . . designs intended for high-heat and/or high-speed application
2. To separate successive and equal divisions	. . . the fiscal year 1983/1984
3. To represent *per* in abbreviations	. . . 9 ft/sec . . . 20 km/hr

At issue in this case was whether the virgule indicates the equal divisions of the pair (as in "the fiscal year 1983/1984" above), in which case "dismissed/nonrenewed" can be considered equal and synonymous members of the same unit, or whether the virgule indicates separation of the two members (as in "high heat and/or high speed" above), in which case "dismissed" and "nonrenewed" represent separate and different alternatives to be considered by the respondent.

If the contract had said "dismissed and/or nonrenewed," the intended meaning would have been clear, since this has become a common and presumably acceptable way to indicate the salience of the two alternatives. The absence of

"and/or" here leaves it ambiguous whether the writer considers the words in the expression "dismissed/nonrenewed" to be understood as alternatives or as equal synonyms.

The semantics of "dismissed" and "nonrenewed"

In the context of employment, "dismissed" commonly means to cause to leave employment, to discharge or fire an employee with cause. "Nonrenewed" does not make explicit the reason for separation from employment. A nonrenewal could be caused by budget cutbacks or other benign reasons. When "dismissed" is linked by virgule with "nonrenewed," the combined form suggests that the two components are intended to be synonymous. If instead the conventional indicator (and/or) had been used, the reader would be led to understand that these two words signify different conditions and that "nonrenewed" is not intended to be synonymous with "dismissed." That is, it would not be interpreted as nonrenewed with cause.

A further problem with the writer's use of "dismissed/nonrenewed" can be found in the syntax of the sentence in question. It is conventional to say "dismissed from" but "nonrenewed for." The choice of the preposition used by the writers of this form is the one commonly used with "dismissed" but not for the word "nonrenewed." If the writers had intended "dismissed" and "nonrenewed" to be responded to separately, they would have needed to include both of these two different prepositions.

If the writers of the employment application form had intended to ask whether or not respondents had been either dismissed for cause or nonrenewed for any other reason, such as a drop in student enrollment, a surplus of teachers, or the closing of a school, it would have been relatively easy to have accomplished this in at least three ways:

a. By asking separate questions:

Have you even been dismissed? _____ yes _____ no
Have you ever been nonrenewed? _____ yes _____ no

b. By being explicit about cause:

Have you ever been dismissed for cause? _____ yes _____ no
Have you ever been nonrenewed for cause? _____ yes _____ no

c. By using the conventionally accepted "and/or":

Have you ever been dismissed and/or nonrenewed? _____ yes _____ no

My written report in this case outlined the above analysis and concluded that the question on the application, "Have you ever been dismissed/nonrenewed from any employment?" is ambiguous in its interpretation and, for the reasons outlined above, a reasonable reader of this question could understand it to mean dismissed and/or nonrenewed with cause. This is how Mr. Benekritis understood it.

This case was appropriate for linguistic analysis using lexicography and semantics. Just as Solan (1993, 46) warned about the potential ambiguity of and/or constructions, so the Darlington School District might have been prudent to avoid expressions containing a virgule, as in "dismissed/nonrenewed." Those entrusted with the task of writing contracts might do the same.

This page intentionally left blank

PART VI

Trademarks

PROTECTING A PRODUCT'S NAME

It is often the case that a corporation will decide on a name or slogan for its product, register it with the patent office, and begin using it in commerce. No matter how careful the company is in this process, it sometimes happens that another company with a similar name or slogan will object to its use and threaten a lawsuit claiming infringement of its rights of trademark.

The legal issues relevant to linguistics in such cases can be summarized as follows. Are the marks generic? Descriptive? Suggestive? Fanciful? Arbitrary? Generic and descriptive marks are difficult to protect. Fanciful and arbitrary marks seldom get challenged. The way to prove that a name is suggestive gets very complicated. Most trademark battles are about whether a mark is either descriptive or suggestive, but sometimes even a generic word will spark a conflict. Trademarks involve linguistic questions as well. Do the competing trademarks sound the same? Do they look the same? Do they mean the same thing? Based on the language alone, is the average consumer likely to be confused about whether the competing products were the same thing or were produced by the same manufacturer? Has the junior user of the mark diluted its meaning in ways that will cause the senior user to suffer harm? Can linguistics help resolve the question of whether or not an existing trade name has been diluted by a junior user?

These issues suggest areas in which the expertise of linguists can be used. Linguists study the sounds of language, addressing the issue of whether or not the competing trademark names sound the same or different and the extent to which such sameness or difference can be measured. Linguists also study semantics, addressing the issue of whether the names or some parts of the names mean the same or different things. Some linguists study the clues language offers about the possible intention of the message as well its comprehensibility to the reader

or listener. Linguists also study the way language is represented in written form, its graphemic structure, and how the style, shape, and size of the lettering, in the context of the overall document design, contribute to the message.

DO THE NAMES SOUND THE SAME?

The human ear is a marvelous organ. Our hearing can enable us to distinguish between minute phonetic differences such as those found in minimal pairs of "pig" and "big," "since" and "sense," or "cod" and "cot." But we usually do not get the chance to hear words spoken in isolation, where the minimal differences are made more obvious. Thus the linguist examines the phonetic context in which the sounds are used, not just their isolated performances.

In addition, some phonetic differences appear to be more complex than others. When showing how trademarks differ, for example, linguists sometimes use an analytical procedure called distinctive feature analysis, which describes all of the acoustic characteristics of sounds, such as the contrasts between voicing and voicelessness, whether the air used to produce the sounds passes through the nasal or oral cavities, the degree of harshness of the sounds, whether the sounds have the capability of being continued (like the sounds represented by vowels and by consonants such as "m" or "n") or stop suddenly (like the sounds represented by the letters "t" or "b").

As detailed as this discussion of phonetic differences may seem, it is at the heart of any trademark question about whether the marks sound alike. Laymen can opine that they sound alike to them, but the linguistic science underlying such an opinion can tell a judge or jury exactly how much alike or different the sounds really are.

DO THE NAMES MEAN THE SAME?

Meaning is another area of linguistic expertise that is not generally understood by the public. In fact, people sometimes use the term, "semantics," derisively to indicate unnecessary quibbling or evasiveness. This is not what linguists mean by semantics. The linguistic study of meaning is a serious and scientific endeavor. If meaning refers to anything, it signifies that words and expressions mean something as they are used in a certain way in a particular context. Dictionaries can be helpful, but they admittedly cannot represent all of the poten-

tial contexts in which a word can be used and all of its possible meanings. Issues of synonyms, hyponyms, and antonyms also come into play, to say nothing of polysemy (where the word has more than one meaning) and homonymy (where a word has two or more different written representations). Semantic change can also be an important issue in trademark disputes, since the meaning of a word at one point in time may change over time.

The search for meaning also involves pragmatic meaning, that is, meaning that goes beyond dictionary definitions. It relates to conveyed meaning, often indirectly revealed by the context. Norms of formality, intimacy, and politeness also can have an effect on readers and listeners.

In recent years more and more trademark lawyers have begun to seek the assistance of linguists in trademark dispute cases. The book *Linguistic Battles in Trademark Disputes* (Shuy 2002) describes how the fields of law and linguistics have joined forces in many such cases. The following chapters describe cases already discussed in that book, but in a different and more detailed way.

WHAT DOES LANGUAGE HAVE TO SAY ABOUT DILUTION OF A TRADEMARK'S NAME?

In 1995 a new section of the Lanham Act, called the Federal Trademark Dilution Act, was passed, setting forth a new cause of litigation called dilution. The definition of dilution found in the act is:

> The lessening of the capacity of a famous mark to identify and distinguish goods or services, regardless of the presence or absence of—(1) competition between the owner of a famous mark and other parties, or (2) likelihood of confusion, mistake or deception. (15 U.S.C. 1127)

Besides famousness, the act went on to use words such as "blurring," "tarnishment," and "disparagement," without explicitly defining them. Although dilution is not commonly charged in trademark cases, when it does occur the role of linguistic analysis appears to be promising. For example, changes in meaning over time (specialization, amelioration, pejoration, and generalization), studied by linguists for decades, bears some relevance. Another linguistic role is in determining who started the dilution process in the first place, because it could turn out that the plaintiff actually got the dilution underway, as was pointed out in the battle over the meaning of the prefix, "Mc-" in the case of *McDonalds v. Quality Inns International* (Shuy 2002). Context is commonly studied by sociolinguists in

determining meaning. Words in isolation seldom occur in life, except, for example, in spelling bees, grocery lists, and the analysis of trademark names. Linguists study meaning in context. Polysemy is another area where linguistics can help determine dilution. In English, as well as in other languages, the same word can have more than one accepted referent. The presence of two identical marks does not in itself guarantee that one is diluting the other in the perception of consumers.

References about trademarks and language that may be useful to linguists:

Beebe, Barton. 2004. A semiotic analysis of trademark law. *U.C.L.A. Law Review* 51: 621.

Blackett, Tom. 1998. *Trademarks*. Houndmills: Macmillan.

Gilson, Jerome, and Anne Gilson Lalonde. 1999. *Trademark Protection and Practice*. Cumulative Supplement. Vols. 1 and 3. New York: Matthew Bender.

Ladas, Stephen P. 1975. *Patents, Trademarks and Related Rights: National and International Protection*. Vol. 2. Cambridge: Harvard University Press.

McCarthy, Thomas. 1997. *McCarthy on Trademarks and Unfair Competition*. 4th ed. Vols. 3 and 4. St. Paul, Minn.: West Group.

Shuy, Roger W. 2002. *Linguistic Battles in Trademark Disputes*. Houndmills: Palgrave Macmillan.

Swann, Jerre B. Dilution redefined for the year 2000. *Trademark Reporter* 92: 585–625.

CHAPTER 16

Ownership of the Words "Wood Roasted"

Woodroast Systems v. Restaurants Unlimited

In January 1992, plaintiff Shelly's Woodroast (Woodroast Systems) filed a complaint against Restaurants Unlimited, Inc., which had been providing restaurant services in Minnesota, claiming service mark infringement, federal unfair competition, and deceptive trade practices. Shelly's Woodroast asserted that it had been using the marks "Woodroast," "The Original Shelly's Woodroast and Design," and "Original Woodroast Cooking and Design" in its restaurants, claiming strong secondary meaning among the public. It complained that the Palomino Euro-Metro Bistro restaurant was using "wood roasted" on its menu and advertising and that this practice intentionally infringed Woodroast's mark. It further claimed that it had no knowledge of other restaurants that use the expression "wood roasted" on their menus. After Palomino filed for a summary judgment, the judge ruled that there were unresolved material fact issues about whether "Woodroast" was generic and about possible confusion by customers. The case then slowly progressed toward trial, and the attorney for the defendant called on me to help him.

DATA

To determine how a word is used, what it means, and how it varies, one can try to find a large database upon which to ground one's conclusions. I sought out a list of restaurant names and menus containing the expressions "wood roasted," "wood roasting," and "woodroast." I also examined the uses of the expressions in

---

Civil Action No. 4–92–65

U.S. District Court, Fourth District of Minnesota, Minneapolis, Minnesota

A less detailed version of this case is described in Shuy (2002), 81–94.

the media, in the depositions of various people who represented Woodroast's side of the case, and in dictionary entries of the various permutations of "woodroast" and "wood roasted."

Restaurant names

In addition to Shelly's Woodroast, we located five other restaurants in the United States that included the phrase "wood roasted" in their titles:

Cluckers Wood Roasted Chicken
Henpecker's Wood Roasted Chicken
Rollo Pollo Wood Roasted Chicken
Kenny Rogers' Roasters Wood Roasted Chicken
Red Hot Hen's Wood Roasted Chicken

The only restaurant that used the variant "woodroast" in its title was Shelly's Woodroast.

Restaurant menu items

Shelly's menu begins with a historical description of Shelly's restaurant and its style of cooking (shown as Example 16.1 here).

EXAMPLE 16.1

What is Original Woodroast Cooking?

Simply put, Original Woodroast Cooking is a distinctive new style of cooking with origins in America's Northwoods country—where Canada meets the United States, where game, fish and fowl are abundant, and hearty, natural cooking is both a tradition and a highly regarded art.

As the name Woodroast suggests, it's a cooking method for meats, fish and fowl slowly roasted in wood burning ovens. Developed specifically for Woodroast cooking, our unique, patented ovens release the aromatic components of a carefully selected combination of woods while surrounding each dish with mellow, even heat. The result is food that's incomparably lean and succulent.

But Woodroast cooking is more than slow roasting. Each offering is also marinated in a special blend of herbs and spices for 48 hours in some five days before the cooking begins. Then, during the cooking, the food is continually basted with more marinade and spices, keeping the food moist while imparting subtle, distinctive flavor throughout.

In the end, this unique combination of meticulously selected herbs and spices, marinade, wood flavors, slow roasting, and a commitment to *natural* goodness produce Woodroast, an extraordinary new style of American cuisine that is at once tender, flavorful and filled with the goodness of the Northwoods.

Shelly Jacobs [written signature]
Proprietor

After this historical introduction, Shelly's Menu appears (see Example 16.2), including the following items containing the word "Woodroast." There were seventy-two food items on this all-day menu. The type size and format are reproduced as closely as possible to the original.

EXAMPLE 16.2

Sunday Brunch at the Lodge

Woodroast Salmon, Scrambled Eggs & Onions

Brunch Just for Kids
Fresh toast from the griddle with REAL maple syrup, a strip of Woodroast bacon, lodge potatoes and fresh fruit

Dinners
Woodroast Salmon Fillet with Herbs
Served with our fresh country sauce

Brunch Extras
Woodroast thick sliced Bacon (4 slabs)

Starters
Take the edge off your hunger and enjoy one of our northwoods appetizers. Each is freshly prepared and uniquely Woodroast.

Basket of Mint Salmon Patties
Woodroast Salmon

(continued)

Combination Lunch
Sandwich choices
Woodroast Chicken Breast

Sandwiches
Bacon and Cheeseburger
. . . thick heaps of Woodroast bacon . . .

Dinners
Woodroast Salmon Fillet with Herbs
Salmon Patties
Woodroast salmon, green onions, herbs and spices, pan fried to a crispy golden brown with Lodge potatoes

This menu shows that nine of the seventy-two items on the Shelly's Woodroast menu used the word "Woodroast." In comparison, the nineteen-item dinner menu of the defendant's Palomino Euro-Metro Bistro restaurant contained the word "roast," in various permutations:

SIDE PLATES
WOOD ROASTED VEGETABLES

OAK FIRED PIZZA
SPIT ROASTED CHICKEN PIZZA

WOOD ROASTED SEAFOOD
WOOD OVEN ROASTED PRAWNS

This menu shows that two of the nineteen dinner items on Palomino's restaurant menu contained permutations of "wood" and "roasted" while one used "spit" and "roasted."

Since plaintiffs expressed no knowledge of any other restaurant by the defendant that was using the term that they believed was protected, I also searched for the menus of other U.S. restaurants to determine how widely the expression was used. I found the following:

The Rollo Pollo restaurant describes its entire chicken offerings as being "WOOD ROASTED CHICKEN."
Kenny Rogers' Roasters' menu begins with "WOOD•ROASTED• CHICKEN."

The Gira Polli restaurant starts its menu with a claim: "Gira Polli is proud to introduce for the first time in America the best wood-fired 'rotisserie' roasted chicken ever!" On its menu is the "Gira Polli Special: Half of our Delicious wood-fired roasted chicken with Palermo potatoes, garden fresh salad, fresh vegetable and roll." This menu also listed "WOOD ROASTED ROTISSERIE CHICKEN" and "WOOD ROASTED ROTISSERIE TURKEY DINNERS," including "Sliced Wood Roasted Turkey," and "Whole Wood Roasted Turkey" dinners. Also available were "Wood roasted turkey," "Wood Roasted Turkey Bratwurst" sandwiches, "wood roasted chicken" beach boxes, and a salad containing "chunks of wood roasted chicken." The kids' menu also contained "wood roasted turkey."

Another restaurant, Three Red Roosters, claims to feature "wood rotiserrie [*sic*] chicken and turkey . . . flamed on our wood flamed rotiserrie [*sic*]."

The Tuttaposto restaurant menu featured "Woodroasted crispy fish sandwich," "Woodroasted Sicilian seafood sausage," "Woodroasted grouper with potatoes," "Spit roasted half chicken," "Woodroasted grouper," and "Spit roasted half chicken."

Boston's Biba Food Hall restaurant lists "Planked salmon . . . wood roasted in pepper."

Cluckers restaurant features "Our Famous Wood Roasted Chicken."

The menu of the Hotel Forum in Santa Barbara lists "Roast loin of veal: wood-roasted pimentos . . ."

Jaxx restaurant's menu in Chicago lists "Wood Roasted Sturgeon" and "Wood-Roasted Prime Rib of Beef."

The Zoe restaurant in New York City offers "Wood-Roasted Vegetables."

Media usage

The information that I had been finding concerning restaurant names and menus led me to conduct an electronic search in which I found thirty-seven articles from national and local newspapers and business magazines that used common noun variations of "wood roast." Many of these articles were restaurant reviews:

Los Angeles Times, 8/2/90: "Belmonte's six page menu lists . . . wood-roasted leg of lamb."

Nation's Restaurant News, 8/7/89: "Biba's (Boston) menu . . . features wood-roasted aromatic chicken, prepared in a wood-burning hearth."

Boston Globe, 9/14/89: "The marvelous wood roasted swordfish is prepared for two."
Boston Globe, 6/29/00: "I also fondly recall a marvelous wood-roasted swordfish prepared for two."
Los Angeles Times, 5/24/90: ". . . a jar of wood-roasted artichoke hearts from France."
San Francisco Chronicle, 9/2/90 (re: menu for a benefit): ". . . olive wood-roasted almond . . ."
Miami Herald, 1/31/90: "Cluckers restaurant . . . serving up wood-roasted chicken . . ."
San Francisco Chronicle, 2/22/89: Girapoli . . . serves takeout chickens (quarters, halves or whole) wood-roasted in a special rotisserie oven."
Restaurant Business, 5/20/88: "'Oak-wood-roasted chicken is our best seller,' says David Schy, the chef at Hat Dance . . . in Chicago."
Restaurant Business, 6/10/88: "The most popular entree, wood-roasted chicken."
Restaurant Business, 11/20/89: "While Schy slips in wood-roasted tongue with Veracruz sauce as a special occasionally . . ."
Chicago Tribune, 12/29/89: "Upscale Mexican . . . with wood-roasted chicken and other items."
MplsStPaul, February 1992: "From the wood-roasted-seafood category, we ordered rainbow trout . . ."
Business Journal Milwaukee, 12/3–9/90: "Among the lunch menu offerings are . . . wood-roasted chicken."
Miami Herald, 8/12/91: "Featuring wood roasted chicken dishes priced at . . ."
Miami Herald, 11/14/91: "The wood-roasted chicken business has given a boost to the moist towelette industry . . ."
Chicago Tribune, 8/17/90: "Most of Peterson's entrees are wood-roasted or wood-grilled."
Chicago Tribune, 10/4/00: ". . . but overall it's American regional, with particular emphasis in wood-grilled and wood-roasted meats . . ."
St. Louis Post-Dispatch, 6/13/91: "Said 1971 Miss America Phyllis George, Roasters will offer wood-roasted chicken with up to five vegetables."
Miami Herald, 9/1/91, "The eat-in or take-out restaurants, specializing in wood-roasted rotisserie chicken marinated in citrus juices . . ."
Los Angeles Times, 11/13/88: "We'll do lots of wood-roasted fish and fowl."

Chicago Tribune, 11/16/90: "A hefty fillet of wood-roasted salmon emerges, perfectly smooth and moist . . ."
Seattle Times, 11/22/91: "Wood-roasting ovens, Pike Place Ale, under $10 menu."
Washington Post, 10/11/89: ". . . the evocative smokiness of wood-roasted peppers and meats, but in elegant guises."
Chicago Tribune, 2/5/88: "Popular sellers have been . . . wood-roasted chicken and pork chops adobado."
Seattle Times, 1/7/91: "Wood roasting was the beginning of all cooking, the message at Sharp's Fresh Roasting in SeaTac . . ."
Nation's Restaurant News, 5/2/88: "Woodroasting is a method of slowly roasting meats, poultry and fish in wood burning ovens."
New York Times, 11/16/88 (re: Shelly's Woodroast): "Fish dishes (about $8) include wood-roasted trout and salmon."
Nation's Restaurant News, 5/13/91: "When the fuel is hardwood instead of gas or electricity, the diner is informed that the item has been wood-roasted. And if the customer has not gotten the point, some foods are listed as oven-roasted."
Chicago Tribune, 2/8/91: ". . . menu that includes . . . oven-roasted snapper . . . and wood-roasted snapper."
Nation's Restaurant News, 3/4/91: "It introduced customers to the woodburning pizza oven . . . menu includes . . . wood-roasted pheasant."
Entrepreneur, August 1989: "You spend the next four years perfecting a form of cooking called woodroasting."
Chicago Tribune, 12/6–12/91: "The same chips serve as a crust for a wood-roasted snapper . . . the seafood sausage here is wood-roasted in a cast-iron pan."
Seattle Times, 12/12/90: "If price is no object, put together an hors d'oeuvre basket including . . . wood-roasted wild mushrooms."
Midwest Living, June 1989: "A type of wood roasting food preparation is woodroasting a la Shelly."
Skyway News, February 1988 (article about Shelly's Woodroast): "a distinctive style of cooking . . . it was time to test woodroast cooking on the public . . . Fillings include . . . woodroast sausage . . . woodroast trout."
Restaurateur, Spring 1988 (article about Shelly's Woodroast): "The brewmaster there produces Woodroast's private labels."
St. Paul Pioneer Press Dispatch, 1/14/89 (article about Shelly's Woodroast): "The herb blends used in the Woodroast's marinades . . ."
Twin Cities Reader, 12/16/87 (article about Shelly's Woodroast): ". . . and serve his woodroasted victuals in a north woods log cabin setting."

Dictionary entries

A survey of the published major dictionaries, from the *Oxford English Dictionary* to all current dictionaries, showed that "woodroast," "wood-roasted," and "woodroasting" do not appear as entries. The second element in the compound, "-roasted," is recorded in the second edition of *Webster's International Dictionary* with examples such as "dry-roasted," "twice-roasted," "sweet-roasted," and "well-roasted." The third edition of *Webster's International Dictionary* omitted all of these except "sweet-roasted."

Affidavit testimony

In April 1992 Shelley Jacobs was deposed and asked:

Q: Is there any use of the term "wood roasted," in connection with a restaurant's preparation of food, that you can think of that you wouldn't object to?

A: Yes.

Q: What is that?

A: If it's an adjective, uh, if the food is described as "wood-roasted to perfection" rather than the actual style of food. So if it's used as a descriptive rather than a noun.

Later in that same deposition, the following exchange took place:

Q: So your claim in this case does not extend to the process of preparing food over a wood fire?

A: I have no objection to that.

———

Q: Is the choice of wood important to the concept that you described as Original Woodroast Cooking?

A: It's not a major factor.

Q: Okay. What do you think are the major factors?

A: . . . we're cooking at low temperatures. We have this oven naturally convected so whereby the air is moving around. We're

introducing moisture and wood. Those are the important factors of what we do.

Q: Is there any other way you would describe the food that was prepared and the method used by the Minneapolis Palomino besides roasted?

A: Yes.

Q: What terms would you use?

A: I would more specifically classify that type of cooking as rotisserie cooking.

Q: Did you also, in the past, object to any restaurants that you found out about that were using the phrase "wood roasted?"

A: If they used it incorrectly, I objected to it. . . . If they used it as a noun, I objected to it. If they used it as an adjective, I didn't object to it.

Q: So if somebody said "wood-roasted chicken," as an adjective, would you object to it?

A: Wood-roasted chicken to me is not an adjective. If they said, "chicken wood roasted," that would be an adjective to me. If they were describing a cooking process, then I would not object to that. If they used it as a title and they capitalized it, it was objected to.

Q: . . . What do you mean, as an adjective?

A: If they used it as a descriptive after the name of the food, if they said "chicken wood-roasted to perfection," I had no objection to that. . . . If they called their item and they used it as a capital "W," they called it "Wood Roasted" or "Woodroast Chicken," I objected to that.

Q: If the word "woodroast" or the phrase "wood roasted" was used as part of the name of an item, would that be something that you would object to?

A: If the name "Woodroast" was used as the name, I would definitely object to that for sure. "Wood Roasted" as well. I would definitely

object to that for sure, especially when they capitalized before the food product itself.

———

Q: Do you object to any other use of that phrase besides capital "W," capital "R" preceding the name of a food item?

A: I do not object.

———

Q: Where did the phrase "woodroast" come from?

A: I invented it. . . . It was something that I had thought was very descriptive of my particular style of cooking.

Q: Is it based on the words, "wood" and "roast?"

A: Yes.

Q: Why do you think that was very descriptive of your style of cooking?

A: We roast wood in wood-burning ovens.

Q: Had you ever seen the words "wood roasted" used to describe a food product?

A: Never. I invented it.

In Shelly Jacobs's second deposition in October 1993, he was asked to define wood-roasted food, in the following exchange:

Q: What do you consider to be wood-roasted food?

A: The only wood-roasted food is the food that comes out of the patented ovens that serve Original Woodroast Cooking at Shelly's Woodroast restaurant.

Q: And so any other food prepared over a wood fire would not be wood-roasted?

A: Not in my terminology it wouldn't be.

Q: For example, if at the Cannon Falls campground I built a fire and roasted meat over that fire, you wouldn't consider that to be wood-roasted?

A: You can call it anything you want. It's when you call it publicly wood-roasted, then it takes on a whole different meaning to me.

Later, in that same deposition, Jacobs was asked:

Q: So your claim in this case does not extend to the process of preparing wood or preparing food over a wood fire?

A: I have no objection to that.

Renato Riccio, president of Renato Specialty Products, Inc., in Dallas, was called as an expert witness for the defense. He testified that his company specializes exclusively in manufacturing wood-fired cooking equipment such as rotisseries, charbroilers, and brick ovens, and over the prior ten years he has sold them to over a hundred different restaurant companies. He testified that "wood-roasted" is far and away the most common term used in the industry and by his customers to identify food cooked on a rotisserie over a wood-burning fire. His business has always used the term "wood-roasted" to describe such a process. He also stated, "It would be simply idiotic . . . not to use the phrase, wood-roasted, to identify their food roasted over wood."

LINGUISTIC ANALYSIS

Three categories of usage of the words "wood" followed by "roast" emerge from this database: restaurant names, menu item descriptions, and descriptions of cooking methods.

We located five restaurant names cited in the database that included the phrase "wood roasted" in their titles: Cluckers Wood Roasted Chicken, Henpecker's Wood Roasted Chicken, Rollo Pollo Wood Roasted Chicken, and Red Hot Hen's Wood Roasted Chicken. All separate "Wood" from "Roasted," unlike Shelly's Woodroast, which makes one word of it.

Menu items cited in the database include some thirty-eight different entree items preceded by the words "wood roasted."

"Woodroast cooking" is described on Shelly's Woodroast menu as a new style of food preparation. This menu also says, "As the name Woodroast suggests, it's a cooking method in which meats, fish and fowl are slowly roasted in wood burning ovens." *Entrepreneur* magazine (August 1989) calls woodroasting "a form of cooking." *Nation's Restaurant* (May 2, 1988) calls it "a method

of slowly roasting meats, poultry and fish in special wood burning ovens." *Midwest Living* (June 1989) refers to "woodroasting a la Shelly," indicating a type of wood-roasting food preparation. *Skyway News* (February 1988) calls wood-roasting "a style of cooking" that includes marinating and slowly roasting. The *Seattle Times* (September 7, 1991) states "wood roasting was the beginning of all cooking." An article in *Nation's Restaurant News* (May 13, 1991) describes roasting in general, with a focus on the recent trend of restaurants to offer woodroasting.

The general, nonproper-noun uses of "wood-roasted" or "wood roasting" that are found both in media articles about restaurants and food as well as in specific restaurant menus and advertisements include some ninety citations.

In order to determine the meaning or status of a given word in a language, linguists examine the uses of such words in naturally occurring contexts, whether spoken or written. At issue here is how our language evidences the meaning conveyed. The *Oxford English Dictionary,* for example, gathers citations from literary use to create definitions found in that monumental dictionary. Other more recent dictionaries, such as *Webster's Collegiate Dictionary* and the *Thorndike-Barnhart Dictionary*, compile large citation files upon which to base their definitions, whether or not their files are actually cited in their definition entries. Such practice is considered good, scientific lexicographic procedure. Since language changes gradually, particularly with respect to meaning, lexicographers must be vigilant to keep up with such changes and to include them in new editions of their dictionaries.

Certain linguistic principles are at work in discovering, describing, and defining the meanings of words. One such principle, "combining," concerns juxtaposing a noun, such as "air," with another noun, such as "line," to form a new compound, "airline." In this case, the morpheme "air" shifts its function from that of a noun to that of an adjective modifying "line," the base form of the construction. The formation of a new word, however, does not block the continued use of the old words in the same way that they were used before the combining took place.

Historically, the English language has favored the practice of combining two commonly used words into a single word to represent a newer concept or, for that matter, an old concept that suddenly needs a description. This process begins with two words represented separately. Occasionally the two separate words may be combined into one, and at this intermediate stage the compound may be represented with a hyphen between the two words. Since language innovations, including new words, can bring criticism to those who innovate, the more tentative writers sometimes place a hyphen between the two elements of the new compound word as a way of marking its newness.

In the instant case, the noun "wood," combined with another noun, "roast," forms a compound word, creating the name "Woodroast," as in Shelly's Woodroast. The creation of this word, however, does not obliterate the conventional uses and meanings of the two words from which Woodroast was derived. In the database here, "Woodroast" occurs as a proper noun only in references to Shelly's Woodroast restaurant and in that restaurant's menu items such as "Woodroast Salmon," "Woodroast cooking," and "Woodroast sauce." These citations indicate Woodroast's ownership of a style of salmon, cooking, and sauce rather than the method of cooking salmon or sauce. This analysis is supported by the possessive citation in *Twin Cities Reader* (December 16, 1987), "Woodroast's ribs," indicating ribs owned by Woodroast, rather than a method of cooking.

Once the compound is formed, the first element shifts its grammatical function from that of noun to that of adjective. Thus the "rail" of "railroad" modifies "road" and the "cow" of "cowboy" modifies "boy." In each case, the first element describes a type of the second element.

All citations of the phrase "wood roasted," other than those that relate to Shelly's Woodroast restaurant, use the phrase either as a verbal (as in"wood roasting") or an adjectival modifier (as in "wood-roasted chicken"). None of them indicates ownership of the product or style of cuisine. Instead, they signify the method of cooking. Thus the Palomino menu lists "wood-roasted stromboli," indicating how the stromboli was cooked, and "spit-roasted pork loin," indicating a still different variation in cooking.

The database included thirteen restaurant menus from various parts of the country as well as menu advertisements. Except for Shelly's Woodroast, all menus used the "-ed" form of "roast," preceded by the separate word, "wood." That is, all restaurant menus except Shelly's used "roasted" to describe a method of cooking and "wood," the fuel by which the cooking was accomplished. The "-ed" suffix differentiates "wood-roasted" from "Woodroast." The former distinguishes an active process from the more static condition signified by "Woodroast." "Woodroast" is a type, a condition, a style. "Wood-roasted," in contrast, signifies a process, an action, roasting, that takes place with the assistance of its modifier, "wood."

Analysis of menu items indicates a syntax of item descriptions that adheres to the following formula of slots and fillers. The only obligatory slot is the name of the food item itself, without which the menu would be less than useful. In the following analysis of five representative menus, the symbol + indicates an obligatory slot and the symbol +/− indicates that the slot is optional:

	Slot 1 +/− self congratulation	*Slot 2 +/− method of cooking*	*Slot 3 +/− style of food*	*Slot 4 + food item*	*Slot 5 +/− serving modification*
Palomino	none	iron grill	Italian	ham	sandwich
	none	grilled	none	chicken	sandwich
	none	wood roasted	none	stromboli	none
Biba	our famous	wood roasted	none	planked salmon	none
Cluckers	our famous	wood roasted	none	chicken	none
Tuttaposto	none	wood roasted	Sicilian	seafood sausage	none
Woodroast	none	none	Woodroast	chicken	none

Any variation from the above syntactic formula would be unclear, if not ludicrous. For example, "iron grill sandwich ham" would be confusing, if not meaningless. Even if the method of cooking, for example, wood-roasted, were to be placed in the slot following the food item, the resulting phrase begs for the answer to the question, "wood-roasted in what?" Although it is possible for descriptive adjectives to follow the nouns they modify in English, the far more common practice is for them to precede such nouns.

A central principle of communication is to be as brief and orderly as possible (Grice 1975). The more slots that are filled in the menu item, the less crisp and communicative the message will be. This principle argues for the use of a minimal number of optional slots in the menu item, namely, the food item itself plus the most descriptive and salient other slot or slots. It is obvious that the self-congratulatory slot has less salience and descriptive power. Of the remaining slots, method of cooking and serving modification are most crucial for effective communication. In the case of entrees, however, no serving modification, such as "sandwich," is necessary. The entree is the unmarked form. The method of cooking, therefore, is the least central optional slot to be filled.

Too little information is equally problematic in communication. In the case of menus, describing the food item alone gives the reader very little to go on. A menu item labeled "chicken" does not suggest a well-prepared, careful meal.

By using "Woodroast" as a proper noun, indicating ownership or style of cuisine, Shelly's Woodroast effectively switched this proper noun from the method-of-cooking slot to the style-of-food slot, the place where "Italian" is found in the Palomino menu and where "Sicilian" is located in the Tuttaposto

menu. On its menu's historical statement, Woodroast's own words support this switch: "Woodroast, an extraordinary new style of American cuisine."

Where other restaurant menus fill the method-of-cooking slot with "wood-roasted," "grilled," and so on, Shelly's Woodroast leaves that slot vacant. By both self-description and from the syntactic analysis of the menus in the database, it is clear that Shelly's Woodroast does not describe the method of cooking foods found in its menu items. Instead, it indicates that Woodroast is a style of cuisine, owned by Shelly's Woodroast.

One source of potential information about the status of "wood-roasted" as a phrase defining the manner in which the entree was cooked comes from Shelly Jacobs himself. In this deposition of April 13, 1993, Mr. Jacobs says, "if they used it (wood-roasted) as an adjective, I didn't object to it." He went on to explain, however, "'Wood-roasted chicken' to me is not an adjective. If they said 'chicken wood roasted,' that would be an adjective to me." Later Mr. Jacobs continued, "I do not object to someone using the word, 'wood-roasted,' as descriptive of a style of food that they're cooking or an item of food that they're cooking." When asked, "Do you have an objection to anybody using the phrase, 'wood-roasted' if they use it other than a capital . . . preceding the name of the food item," Mr. Jacobs replied, "I do not object." On the one hand, Mr. Jacobs said that he has no objection to the adjectival use of "wood-roasted." On the other hand, Mr. Jacobs denied that "wood-roasted" when used before "chicken" is adjectival and at another point he agreed that he would not object to "wood-roasted" before "chicken."

A second principle for discovering, describing, and defining the meanings of words is the distinction between proper and common nouns. In written texts, proper nouns are capitalized; common nouns are not. In our database, the distinguishable capitalized "W" form, "Woodroasted," occurs *only* in articles specifically about Shelly's Woodroast, and not consistently even then. In a *Skyway News* article (February 1, 1988) entirely about Shelly's Woodroast restaurant, references are made without capital letters to woodroast trout, sausage, and cooking. The various menus in the database often capitalize everything or, alternatively, capitalize the first letter of each word. More significantly, none of the menus of restaurants other than Shelly's Woodroast even uses the unitized word "woodroast." It is clear from this that on menus, Woodroast is used as a proper noun only by Shelly's Woodroast and in media articles describing that restaurant.

A third principle for discovering, describing, and defining the meanings of words is found in historical changes in meaning over time. The articles and menus cited in the database indicate that the phrase "wood roasted" is a relatively recent development. To test this, I reviewed seven contemporary cookbooks.

Generally, they associate roasting with home oven, gas, or electric cooking, probably on the assumption that homes are equipped with such appliances. According to the *Oxford English Dictionary*, the verb "roast" can be found in the English language since at least 1297. That dictionary offers many other citations over the centuries before the invention of modern household stoves and ovens. Obviously, before modern times roasting was done over wood or coal fires. For this reason there would have been no reason to mark the type of roasting in those early citations. Only in very recent years, when the type of roasting needed to be marked as "wood-roasting" because of the availability of other fuels, would there be any need for the term "wood-roasting," created to distinguish this marked method of cooking from the present-day common, unmarked term for roasting.

Merriam-Webster's Collegiate Dictionary defines the verb "roast" as follows:

1. To cook by exposing to dry heat (as in an oven or before a fire) or by surrounding with hot embers, sand or stones.

Webster's New World Dictionary includes the following in its definition of the verb "roast":

1. Originally, to cook (meat, etc.) over an open fire or in hot ashes, etc.

From these definitions one can conclude that despite the influence of modern kitchen stoves and ovens, roasting still includes open-fire methods. *Webster's New World Dictionary*'s definition further supports the conclusion that the original unmarked form of roasting was over an open fire, but neither definition excludes roasting with wood as the necessary fuel.

A fourth principle of discovering, describing, and defining words is found in punctuation, which is often a clue to the emerging status of a new word. New words formed by combining two regularly used terms evidence three punctuation possibilities:

1. the two words are used separately and contiguously
2. the two words are combined by hyphenation
3. the two words are combined into one word

In the creation of new words from old ones it is possible for the process to follow the above sequence. Thus, when commercial air service was started, companies like United and American first called themselves Air Lines, then Air-lines, and finally, Airlines. Until the last stage is reached, it is common to experience divided usage between the three punctuation possibilities. In the instant

case, all three punctuation possibilities are found, but the hyphenated "wood-roasted" is the most frequently used form. Only Shelly's Woodroast makes one word of the compound. Punctuation analysis of this term, therefore, leads to the conclusion that "wood-roasted" is still in divided usage in terms of how it is printed, supporting its modernity as an adjectival form that marks a method of food preparation.

A fifth principle for discovering, describing, and defining words is found in the principle of filling a lexical gap in the language. The absence of a word at a specific structural place in a language is called a lexical gap. Creation or insertion of particular words at particular places in language structure is carried out by means of a process of lexical substitution or lexical transformation. Thus an isolated tribe in the Amazon, seeing an airplane for the first time, reaches into its own vocabulary and calls it a "fire canoe." Since there are a finite number of ways to cook (fry, bake, roast, grill, etc.) and a finite number of fuels available for cooking (gas, electricity, wood, coal, microwave, etc.), the inventory of extant word choices to mark the formerly unmarked form of wood roasting is very limited. If one wishes to identify the process at issue here, one is limited to roasting, which best describes the cooking method, and wood, which best describes the fuel.

To check this, I went to *Roget's Thesaurus* and assembled a list of possible alternatives to the word "wood" in "wood roasted" and concluded that these alternatives were not as good as "wood" because they easily can be interpreted in ways other than intended. "Firewood," for example, suggests home fireplace flames for heating, not cooking. "Kindling wood" suggests sticks and small pieces of fire starters, not cooking. "Logs" suggest large pieces of untrimmed wood of any description, more suitable for lumber mills than cooking. "Fagot" is an archaic term for wood that is not likely to be recognized in its original sense. The only truly descriptive term available is "wood."

Possible alternatives to "roasted" in the expression "wood-roasted" are equally inferior. "Heated" is too broad and suggests warmth, not cooking. "Singed" suggests burned or overly cooked. "Burned" is negative in connotation. "Blazed," "flamed," and "fired" focus on the fire, not on the cooking. "Grilled," "broiled," "boiled," "fried," "baked," "stewed," "toasted," "smoked," and "barbecued" are not descriptive of the method of cooking called "roasting." The only truly descriptive term available is "roasted."

Based on the empirical evidence found in the database upon which my examination rested, my analysis showed that the terms "wood roasted," "wood roasting," and "wood-roasted" are generic or general and relate to the characteristic of a group of common concepts related to the industry they describe. The fact that these terms are used as common nouns in menus and media

articles that make no reference to Shelly's Woodroast or to anything other than a method of cooking indicates that the words are a commonplace part of commercial parlance.

I was not able to locate in any current dictionaries the compounds "wood roasted," "wood roasting," or "wood-roasted" in their definitions or entries, indicating once again the obvious meaning of the terms. The meaning of this expression can be derived easily and obviously from its constituents and needs no further definition than would "coal roasted." The database includes citations of the compound as a common construction (not used as a proper noun) since 1988. This is not to say that the term was not used before that time; only that the citation database did not reveal any before that year. What is clear, however, is that the phrase is very modern.

My analysis showed that "wood-roasted" is defined as *a method of cooking*, as distinguished from "Woodroast," which is defined as *a style of cuisine*. Sheldon Jacobs adapted the term by taking two ordinary words and combining them to denote his own style of cuisine. The creation of this new word does not block the continued, active, and common use of the two words that were used to create "Woodroast." Long after "gingerbread" was created, the words "ginger" and "bread" continue to be used to denote their original meanings. Nor does the word "Woodroast" diminish the capacity of the English language to continue to use "wood" and "roasted" to describe a method of cooking food. The terms "wood roasted," "wood roasting," and "wood-roasted" are descriptive, generic and found in a wide range of contexts. The way these terms are currently used in context does not support Shelly's Woodroast's claim to exclusive use.

Like many trademark battles, this case offered the opportunity to amass a corpus of actual language use from several sources. Electronic searches recently have become standard tools for the use of linguistic analysis. Based on this corpus, it was possible to describe the processes of morphological formation of words and how this process changes over time. The syntax of expressions such as menu items is not often discussed in linguistic literature, but the sequence of optional and obligatory slots found on menus turned out to be central to this case, showing that "Woodroast" is a style of food rather than a method of cooking. Relatively simple language features, such as the difference between a proper and common noun and the details of punctuation, are sometimes overlooked in lawsuits of this type. And the principles of how lexical gaps can be filled are usually beyond the grasp of lawyers.

CHAPTER 17

Battle over Antifreeze

Warren Distribution v. Prestone Products Corporation

Warren Distribution, a maker of antifreeze products used mostly by trucks and other large vehicles, brought a lawsuit against Prestone Products in March 1993, claiming that Prestone's LongLife 460 antifreeze, marketed for automobiles and other vehicles, infringed on Warren's trademarked antifreeze called LongLife. Warren charged that Prestone's new line would cause confusion or misunderstanding of the product's source, namely, that purchasers would be likely to believe that Prestone's product was actually made by Warren or that the two companies were connected with each other in some way, or both.

Prestone's answer and counterclaim argued that Warren's "LongLife" is no more than a common descriptive name of a type or class of antifreeze/coolant that is believed to extend the life and efficiency of an automotive radiator. Prestone cited the recent testing done by the American Society for the Testing of Materials (ASTM) that had evaluated "long-life coolants" and decided that these products should contain materials that would be effective longer than for a single winter season. This ASTM action, Prestone claimed, led the industry to refer to a class of antifreeze as "long-life coolants." Therefore, Prestone reasoned, consumers would consider "long life" as a term that is merely descriptive, even generic. From this, Prestone argued that Warren's LongLife name was therefore not a protectable mark. It was at this point in the process that Warren's attorney called for the help of linguistics. The case went before a jury in April 1996.

Civil Action No. 8:CV95-106

U.S. District Court, District of Nebraska, Omaha, Nebraska

A less detailed version of this case was described in Shuy (2002), 56–68.

DATA

The data used by both sides in this case included dictionary entries, product labels, press releases, and media references.

Dictionary entries

"Long"

Prestone cited the *Compact Edition of the Oxford English Dictionary* (1971) for its definition of "long": "Long: having a great extent in duration." It is significant that Prestone selected only this one definition from that dictionary. Senses of "long" found the *Oxford English Dictionary* not cited by Prestone include the following:

spatial measure
extension from end to end
reference to shape
reference to liquor
reference to serial or spatial expansion
implication of excessive duration
excessive expectation
continuity
distant or remote point in time
phonetic usage
continuity
special terms of commerce

Prestone also cited the following definitions of the adjective "long" from *Merriam-Webster's Collegiate Dictionary* (tenth edition):

1. extending for a considerable distance . . . elongated
2. having a specified length
3. extending over a considerable time . . . specified duration
4. containing many items in a series
5. a speech sound: having a relatively long duration
6. having the capacity to reach or extend a considerable distance
7. larger or longer than the standard

8. extending far into the future . . . beyond what is known
9. possessing a high degree or a great deal of something specified
10. of an unusual degree of difference between the amounts wagered on each side — odds
11. subject to great odds
12. owning or accumulating securities or goods esp. in anticipation of an advance in prices

"Life"

Prestone also cited the *Compact Edition of the Oxford English Dictionary* (1971) for its definition of "life": "Life: the term or duration of an inanimate thing; the time that a manufactured object lasts."

Warren cited the *Oxford English Dictionary* (1989) that lists eighteen major senses of "life":

1. The condition or attribute of living or being alive: animate experience
2. fig. Used to designate a condition of power, activity, or happiness, in contrast to a condition conceived hyperbolically or metaphorically as "death"
3. Animate existence (esp. that of a human being) viewed as a possession of which one is deprived by death
4. Energy in action, thought, or expression; liveliness in feeling, manner, or aspect; animation, vivacity, spirit
5. The cause or source of living; the vivifying or animating principle; or that which makes or keeps a thing alive (in various senses); "soul"; "essence"
6. In various concrete applications: a living being, one's family or line, nonce uses, vitality, or activity embodied in material forms; living things in the aggregate
7. The living form or model; living semblance; life-size figure or presentation
8. With reference to duration: (a) The animate terrestrial existence of an individual viewed with regard to its duration; the period from birth to death; (b) For life: for the remaining period of the person's life; (c) The term of duration of an inanimate thing: the time that a manufactured object lasts

9. Life assurance: A person considered with regard to the probable future duration of his life
10. in proverbial expressions referring to tenacity of life
11. Transferred uses in various games (cards, cricket)
12. Course, condition, or manner of living. The series of actions and occurrences constituting the history of an individual (esp. a human being) from birth to death
13. A written account of a person's "life"; a biography
14. Phrases formed with preps. with the meaning "alive"
15. Lives, the gen. sing. used predicatively = alive, those who are alive, the living
16. General combs: life-activity, life-air, . . . life-absorbing, life-affirming . . . life-clouded, life-orienting . . . life-bereft, life-blissful . . .
17. Special combinations: life arrow, life-belt . . .
18. The gen. sing. Life's . . . as life's end

Warren also cited *Webster's Third New International Dictionary*, which contains twenty-one senses of "life":

1. animate being, the principal force by which animals and plants are maintained in the performance of their functions and which distinguishes by its presence animals from inanimate matter
2. the course of existence
3. biography
4. the earthly state of human existence as distinguished from the spiritual state after death
5. the duration of the earthly existence of an individual
6. a way or manner of living
7. someone held to be as dear to one as existence
8. something held to be essential to animate existence or to a livelihood
9. a vital or living being
10. the force or principle that animates and usu. tends to shape the development of something
11. energy and liveliness in action, thought, or expression
12. the form or pattern of something as it exists in reality
13. a person whose life is insured (as by a life-insurance policy)
14. (a) the period of duration of something held to resemble a natural organism in structure and functions; (b) the period of time in which a material object is fit for use or the efficient performance of

its functions; (c) the period of existence (as of an ion)—compare half-life
15. living or environment
16. human activities
17. one that inspires or excites spirit and vigor
18. another chance or a continued opportunity given to one likely to lose
19. cap. Christian Science: God
20. something resembling animate life
21. conscious existence supposed to be a quality of the soul or as the soul's nature and being

Warren also cited *Merriam-Webster's Collegiate Dictionary* (tenth edition), which defines "life" with twenty senses, as follows:

1. quality that distinguishes a vital and functional being from a dead body
2. the sequence of physical and mental experiences that make up the existence of an individual
3. biography
4. spiritual existence transcending physical death
5. the period from birth to death
6. a way or manner of living
7. livelihood
8. a vital or living being
9. an animating and shaping force or principle
10. spirit, animation
11. the form or pattern of something existing in reality
12. the period of duration, usefulness, or popularity of something (the expected life of flashlight batteries)
13. the period of existence (as a subatomic particle)—compare half life
14. a property (as resilience or elasticity) of an inanimate substance or object resembling the animate quality of a living being
15. living beings
16. human activities, animate activity and movement
17. one providing interest and vigor
18. an opportunity for continued viability
19. cap. Christian Science: God
20. something resembling animate life

"Long-lived"

Prestone cited the *Random House Dictionary of the English Language* (2nd ed., 1987) for its definition of "long-lived": "Long-lived: having a long life, existence, or duration."

"Long-life"

Neither side could find any dictionary citations for "long-life."

Product labels and memos

Prestone's container label

This is as pictured with text in 1995 catalog. Type size and placement reproduce the original as closely as possible, with explanations in square brackets:

Prestone [container pictured here]
LONGLIFE
460

[Text under picture of container:]

MORE MILES [in huge curved print]

Introducing PRESTONE® LONGLIFE 460 Antifreeze/Coolant.
The only antifreeze to guarantee protection for 4 years or 60,000 miles.

Every gallon of PRESTONE antifreeze we sell is backed by more advertising, more promotion, and more consumer preference than any other brand. We simply deliver more per gallon.

PRESTONE LONG LIFE 460 is a technologically advanced: phosphate-free antifreeze that is formulated to meet the needs of today's busier, more mobile consumer. It's backed by an advertising campaign delivering millions of impressions against your target customers and built on the trust of loyal PRESTONE users.

And that's why PRESTONE LONGLIFE 460 is the only choice to stock as a super premium, extended-life antifreeze/coolant.

When you go for an extended-life antifreeze, go with the one that gives you more miles per gallon . . . PRESTONE LONGLIFE 460!

Prestone's advertisement in *Non-Foods Merchandising*, October 1993

[picture of Prestone LongLife 460 container]

[text appearing next to picture:]

GET LONG LIFE WITH PRESTONE

First Brands Corp. (Danbury Conn.) introduces its new Prestone LongLife 460 Antifreeze/Coolant, a product specially formulated to provide guaranteed cooling system protection for 4 years or 60,000 miles. LongLife 460 also offers protection against rust and corrosion to all cooling system metals including aluminum.
For more information call: 800-835-4523.

ZEREX container label

EXTREME [print slanted upward toward the right]
ANTIFREEZE COOLANT
4/50

4 YEAR
50,000 MILE
GUARANTEE

CAT (Caterpillar brand antifreeze coolant) container label

CAT

Long Life Coolant
Antifreeze

Sierra (a wholly owned subsidiary of Warren) container label

SIERRA
Antifreeze • Coolant
Lasts longer than other so-called long life antifreezes.

Warren's LongLife antifreeze/coolant container label

LONGLIFE
Antifreeze • Coolant
Protects Aluminum and All Engine Meals
WARNING: HARMFUL OR FATAL IF SWALLOWED.
Read Cautionary Information on Back Label.
1 GAL. (3.78 L)

Corporate Engineering Standards and Regulations

General Motors Engineering Standards, Materials and Processes, December 1994

"LONG LIFE AUTOMOTIVE ENGINE COOLING ANTIFREEZE CONCENTRATE — ETHYLENE GLYCOL" . . . This material shall be so inhibited that it will provide protection against metal corrosion in normally functioning systems for at least 100,000 miles.

Volvo's *Technical Regulations for Anti-freeze*, September 8, 1983

PURPOSE: This technical regulation specifies the delivery of test materials and tests in connection with development of new long-life anti-freeze compounds and corrosion inhibitions for cooling areas of engines.

Memos

Minutes of the August 15, 1995, Texaco Western Region Distributor Advisory Council Meeting

> It was also stated that the new Havoline Extended Life Anti-Freeze will be aligned with the current Prestone pricing. TLC also explained that the new Havoline Extended Life Anti-Freeze, which will be factory fill for all 1996 GM cars, will be a top-off product for the first years because it's a five year/100,000 mile anti-freeze.

Report of Young and Rubicam, New York office, April 12, 1993, concerning what name Prestone's new antifreeze should be given

> To respond to Zerex Extreme, its "extended life" antifreeze, our objective was to brainstorm for potential names for Prestone's own 50,000 mile antifreeze. . . . We recommend that the name of Prestone's new antifreeze be clear and product descriptive (e.g., a longer-lasting antifreeze, and not just communicate a new and different product. . . . Therefore, Prestone should consider using product descriptive language in naming this line extension (e.g., Prestone Lifetime or Prestone 50 K Mile Antifreeze.

Prestone LongLife 460 trade journal announcement in 1995

> When you choose an extended life antifreeze, go with the one that gives you more miles per gallon. PRESTONE LongLife 460.

Information bulletin sent to dealers by General Motors, June 1995

Subject: New Extended Life Engine Coolant Known as DEX-COOL
Models: 1995 Passenger Cars and Trucks
A new extended life engine coolant known as DEX-COOL will be used in all General Motors vehicles.

Prestone press release, September 1993

When you choose an extended life antifreeze, go with one that gives you more miles per gallon. PRESTONE LongLife 460.

ZEREX message to distributors

CONCEPT/POSITIONING

- First premium quality, long life coolant
- Unique formula
- Superior corrosion inhibition
- Protection guaranteed

CATEGORY PERSPECTIVE

- Automotive aftermarket in doldrums
- Low price and rebates not the answer
- Antifreeze category soft
  - All time low?
  - No innovation, news
  - Pressure on profits

RATIONALE FOR ZEREX EXTREME 4/50

- Technological breakthrough!
- First change since EG replaced methanol
- Improve margins
- Provide more "environmentally friendly" alternative
- Reduce "DIYer workload"
- Provide value
- Demonstrably ensure "peace of mind"

Advertisements

Sierra Antifreeze advertisement in *Motor Trend,* November 1993.

> How does SIERRA Antifreeze compare to the so-called "long-life" antifreezes?

Prestone advertisement in *Motor Trend*, December 1993

> Prestone LongLife 460 is the only choice to stock as a super premium extended-life antifreeze/coolant.

Warren advertisement

> Guaranteed cooling system protection for a minimum of 4 years or 60,000 miles. The engine will last longer since it is protected against rust and corrosion of metals.

Articles in the media

Automotive Cooling Journal, October 1993

> Prestone's LongLife 460 is being targeted at consumers who don't have time to check or change their antifreeze/coolant.

Motor Trend, December 1993

> BASF's Zerex Extreme 4/50 and Prestone's LongLife 460 both feature new extended-life formulas that allow use of the same coolant for four years without changing. . . . These coolants include new formulations of corrosion inhibitors that protect the cooling system for dramatically longer periods.

Discount Store News, November 1, 1993, in an article entitled "New Niche Coolants Raise SKU Counts."

> Prestone and Zerex have introduced antifreeze that lasts twice as long and costs twice as much as conventional products. . . . In fact, one auto parts chain has taken one of the four endcap shelves away from standard Prestone and reserved it for long-life Prestone.

> Moreover, prices on the extended life versions of Prestone and Zerex already are starting to erode from what the vendors wanted to see. . . . Zerex also markets the extended life product in a silver jug. . . . Both of the extended life coolants are priced at $8.99, with some stores carrying both brands. Other stores are offering just one extended life coolant. . . . In other stores, which cater to a more rural, lower-income customer, long life products would be too expensive. . . . Swoboda said sales of both Prestone and Zerex long life versions have been about equal.

PR Newswire Association, January 3, 1996 (re: 1996 Greater Los Angeles Auto Show)

> . . . many models will come standard with extended-life coolants and transmission fluids.

Oil and Gas Journal, December 11, 1995

> At Texaco our new Havoline motor oils handle temperature extremes at both ends of the thermometer; and extended life antifreeze and coolant . . . will last the life of the car.

US Oil Week, December 4, 1995

> GM will be approving other extended life coolants in the near future, the company says.

PR Newswire Association, November 30, 1995

> . . .and many models will come standard with extended-life coolants and transmission fluids.

PR Newswire Association, November 16, 1995

> . . . and many models will come standard with extended-life coolants.

Toronto Star, November 11, 1995

> GM has started to sell the extended-life coolant it's putting in its new vehicles on the after-market.

PR Newswire Association, November 6, 1995 (re: 1996 Seattle Auto Show)

> . . . many models will come standard with extended-life coolants.

US Oil Week, November 6, 1995

> Texaco boasts new Havoline Extended-Life Anti-Freeze/ Coolant that provides engine protection for five years or 100,000 miles.

Tire Business, October 30, 1995

> Mr. Bradley said GM went to the extended-life antifreeze because studies show that customers want longer service intervals.

PR Newswire Association, October 24, 1995

> DEX-COOL — the same extended life coolant that GM recently began using in its new vehicles. . . . Benefits of the new extended-life coolant include: . . .

US News and World Report, August 21, 1995

> In October, Texaco will begin selling Dex-Cool at gas stations and retailers as Havoline Extended Life Antifreeze.

Atlanta Constitution, August 11, 1995

> Bradley said GM went to the extended-life antifreeze because studies show that customers want longer service intervals.

Orlando Sentinel, August 10, 1995

> Bradley said that GM went to extended-life antifreeze . . .

Automotive News, August 7, 1995

> Bradley said GM went to extended-life antifreeze . . .

Non-Foods Merchandising, October 1993:

> First Brands Corp. (Danbury, Conn.) introduces its new Prestone LongLife 460 Antifreeze/Coolant, a product specially formulated to provide guaranteed cooling system protection for 4 years or 60,000 miles. LongLife 460 also offers protection against rust and corrosion to all cooling system metals including aluminum.

ASAP, August 1, 1995

> Even with new extended-life formulations for antifreeze/coolant products, this product category not only met last year's numbers but exceeded them.

Beverage World, May 1995

> Also environmentally, we are coming out with an extended life coolant.

ASAP, August 1, 1995

> We took a step in that direction last fall by introducing Zerex R Extreme 4/50 TM, an extended-life antifreeze. . . . Despite its slow start in the marketplace, extended-life antifreeze effectively addresses an important segment of the overall market. . . . Is the fact that extended-life antifreeze coolant costs more than the regular product likely to be an important deterrent to sales growth. . . . The appearance of "niche" products such as extended-life antifreeze has led to segmentation of a market . . . the product that they're buying—whether it's regular or extended-life—is not just an antifreeze but a coolant as well. . . . George Wattman is the business manager for BASF Automotive Products, marketers of Zerex Extreme 4/50 extended-life antifreeze/coolant . . . .

PR Newswire Association, April 21, 1995

> . . . the new extended-life product has the potential to do more than reduce the drain on a dwindling natural resource.

ASAP, November 1, 1993

> In fact, one auto parts chain has taken one of the four endcap shelves away from standard Prestone and reserved it for long-life Prestone. . . . Moreover, prices on the extended-life versions of Prestone and Zerex already are starting to erode from what the vendors wanted to see. . . . Zerex also markets the extended life product. . . . Both of the extended life coolants are priced at $8.95. . . . Other stores are offering just one extended life coolant.

Coal, March 1991

> The Nalcool Need-Release extended-life engine cooling system treatment releases supplemental coolant additive that eliminates coolant testing and concern about proper levels of cooling system protection for up to one year or 100,000 miles.

ASAP, May 1989

> Most of the chemical and flushing companies have introduced "extended life" chemicals for antifreeze/coolant.

Citations from previous cases

***Anheuser-Busch v. Stroh's Brewery*, 750 F.2d 638 (8th. Cir. 1984)**

> The test, however, is what consumers, not persons in the trade, understand the term to be . . . a court is to view the term from the standpoint of the average prospective purchaser. . . . Generally speaking, if the mark imparts information directly, it is descriptive. If it stands for an idea which requires some operation of the imagination to connect it with the goods, it is suggestive.

***First Federal Savings and Loan Association of Council Bluffs v. First Federal Savings and Loan Association of Lincoln*, Civil No. 88–92 Memorandum of Order 10, July 9, 1990, af'd 020 F.2d 382, 8th Cir. (1991)**

One does not say that he or she is going down to the "First Federal" to deposit some money or take out a loan. Rather, one would say that he or she is going to the "savings and loan," or more likely, to the "bank." This reference to ordinary conversation exposes the categorical nature of a generic term, a characteristic absent from this case.

From motions and briefs in this case

Warren's plaintiff's brief in support of motion to strike, June 12, 1995

In the instant case, Prestone has alleged that the mark LongLife is generic or descriptive (as opposed to suggestive) based on alleged use of the term within the antifreeze trade or industry. Whether a mark is generic, descriptive or suggestive, however, depends upon how the mark is viewed by consumers, not by those in the trade. See *Anheuser-Busch, Inc. v. Stroh Brewery Co*., 750 F.2d 631, 628 (8th Cir. 1984).

Prestone's undated memorandum of law in opposition to plaintiff's motion to strike

In addition to its claims that the term "long life" is generic as understood by those in the trade . . . Prestone is seeking leave to add a claim that the term is generic as understood by purchasers. . . . Further, the generic nature of the phrase can be established by consulting its dictionary meaning. . . . *Webster's Ninth New Collegiate Dictionary* defines both "long" and "life," and even includes a definition of "long-lived" as "having a long life," thus adding even more support for the classification of the term as generic. . . . Consequently, widespread generic use of the phrase "long life" is not irrelevant as

plaintiff would urge; both the industry meaning of the disputed terms as well as the dictionary meaning have been used by courts throughout this circuit to establish the continued generic-ness of non-coined or ordinary words. Accordingly, the understanding and usage in the trade is highly relevant. Plaintiff's motion should be denied.

LINGUISTIC ANALYSIS

This analysis showed that (1) Warren's LongLife mark is suggestive, rather than descriptive or generic (as Prestone claimed); (2) that "long life" is not the commonly understood and used name of a type or class of antifreeze products; and (3) that Prestone's use of LongLife is potentially confusing to consumers in that they are likely to believe that Prestone's and Warren's products are one and the same or that the companies are related in some way, or both.

Warren's LongLife mark is suggestive, not generic or descriptive

Prestone's effort to equate "long-lived" with "long life" simply does not work, since the two expressions are grammatically nonequivalent. Warren's mark, LongLife, is an adjective-noun combination forming a proper noun, while "long-lived" combines an adjective with a verb to form another adjective. In addition, "long-lived" is now becoming archaic.

Prestone, in its use of dictionary definitions, tried to show that LongLife is generic by selectively citing dictionary entries for the common noun "life." This effort was handicapped by the fact that Prestone had to define "long" and "life" independently, not as the compound noun structure that is found in the mark, LongLife. Even then, although the *Oxford English Dictionary* cited by Prestone gave eighteen separate senses for "life," Prestone selected the only one of these eighteen senses that indicated inanimate life, 8c. In contrast, *Webster's Third International Dictionary* offers twenty-one separate senses of "life," where only two subparts of one sense, 14b and 14c, associate "life" with inanimate objects. From the vast preponderance of this dictionary's animate senses, Prestone selectively cited the only subparts of one definition that suited its position, thereby overlooking or ignoring the fact that the inanimate sense of "life" is metaphoric. Since it is metaphoric, this indicates suggestiveness in itself, since readers of metaphoric expressions must use their imaginations to associate the

common sense of the word "life" with inanimate objects such as antifreeze/coolants used in the engines of vehicles.

Because of the fact that Prestone selectively cited its dictionary senses, it stressed only the duration of the antifreeze and overlooked or ignored the second meaning of LongLife that Warren advertised, the resulting long life not just of the antifreeze but also of the vehicle itself. To be considered descriptive but not suggestive, the trade name of a product should clearly identify that product's qualities, kind, type, or kind. In the case of Warren's LongLife, one clear quality, shared with Prestone and other antifreeze manufacturers, is that the antifreeze lasts a long time. But Warren's LongLife, as evidenced by its advertisements, goes beyond this, suggesting that LongLife also extends the life of the engine in which it is used.

To be descriptive is to express directly the quality, kind, or condition of that which is denoted. In the context of product names, a descriptive name is one that informs the consumer directly about the quality or composition of the product to the degree that nothing is left to the imagination and no exercise of inference is necessary to determine what the product really is.

To be generic is to directly express not a particular product but the type or kind of product, such as corn flakes or batteries. In this case the database indicates that the common usage for a class or type of product that lasts a long time is "extended life," and not "long life," as Prestone claims. Even Prestone referred to the class or type of product as "extended life" antifreeze. Therefore, Prestone's claim that the product name 'LongLife' is a generic name for a class or type of antifreeze and therefore not protectable is without merit.

Prestone also cited the Sierra advertisement that used "long life" in its text. Noting that Sierra was a wholly owned subsidiary of Warren, Prestone claimed that even Sierra considered "long life" to be a generic label for a class or type of antifreeze. This argument, however, is easily defeated by the fact that the Sierra advertisement actually said, "*so-called* 'long life' antifreezes," far from an endorsement of "long life" as the generic term for the class or type of product.

It is not possible for people unfamiliar with the product, upon seeing or hearing the name, LongLife, to determine all of the qualities, kind, condition, or functions of the product that the mark refers to. Nor is it possible to determine the type or kind of product referenced. Instead, LongLife suggests the potential effect of using the product. For example, a hypothetical mark, Long-life Socks, would convey to the consumer nothing about the function or qualities of the socks, such as the material used in them or the quality of sewing that put them together. Nor would the mark indicate a type or kind of this product but would, instead, suggest that purchase and use of this product would be economical because the socks allegedly would last a long time, possibly longer, in

fact, than products without such a name. This exercise of thought or imagination goes beyond any direct representation or recognition of the product's qualities, functions, type, or kind. Warren's LongLife, therefore, suggests two separate meanings of long life, one for the product and the other for the product's effect on the vehicle, calling into question any individualized descriptiveness of the name, LongLife, as Prestone claimed.

The phrase "long life" is generally regarded as a positive quality that relates to numerous contexts. By far the most such contexts, however, refer to animate objects, primarily human. The first eleven senses of "life" in *Webster's New Collegiate Dictionary*, in fact, relate to animate objects. Other senses refer to pictorial representations of animal life, or refer to "life" as duration, popularity, or period of existence. Only one of the dictionary's senses refers to inanimate objects. It is clear that the uses of "life" to refer to inanimate objects is metaphorical, a fact which, in itself, requires imagination and exercise of thought, since such metaphors, by definition, invite many readings and suggest many things. Understanding a metaphor requires more than an understanding of the literal meaning of a word or expression.

The exercise of thought and imagination required of the consumer who confronts Warren's product, LongLife, is carried still one step further than recognizing that LongLife refers to endurance of the product, as is the case of the hypothetical Long-life Socks, noted above. Warren's LongLife, on its package label, indicates that the long life suggested by the mark is not the long life of the product but, rather, the long life of the vehicle in which the product is to be used ("Protects Aluminum and All Engine Parts"). Again, a hypothetical mark can be illustrative. If there were a mark called Long-life Vitamins, its name, like that of Long-life Socks, would suggest the potential effect of using the product. Unlike Long-life Socks, however, the potential effect of using Long-life Vitamins is not on the product itself, for there would be considerably less reason to want vitamins to have a long life, but on the user of the vitamins, for whom a long life is obviously more salient and desirable.

In the case of Warren's LongLife, the consumer must exercise thought and imagination not only to infer that LongLife suggests the effect of the product but also to infer that this effect is on the vehicle for which the product is used, not on the product itself. In fact, Prestone's package label suggests two different meanings of "long life": (1) the product will last longer, and (2) the engine will last longer since it is protected against rust and corrosion of metals. Statements on Prestone's package label indicating a longer lasting product include, "four years or 60,000 miles," "gives more miles per gallon," and arguably, "technologically advanced." Likewise Prestone's package label also suggests engine protection: "providing freeze-up and boilover protection against rust and corrosion to all

cooling system materials, including aluminum." Prestone's advertisements in *Motor Trend* (December 1993) and *Non-Foods Merchandising* (October 1993) suggest the same attributes. In Prestone's case, there are, then, two suggested meanings of "long life," one for the product itself and the other for the product's effect on the vehicle, calling into question any specific descriptiveness of the term.

Long life is not the name of a class or type of product

In Prestone's memorandum of law in opposition to Warren's motion to strike, Prestone claims that the term "long life" is the common term used for this particular type of antifreeze/coolant. If this is the case, it is noteworthy that Prestone, in its own advertising and catalog, uses the term "extended life" to refer to this type or class of product. In addition, an advertisement submitted by Prestone says, "Prestone LongLife 460 is the only choice to stock as a super premium extended-life antifreeze/coolant." This choice of words is repeated in another Prestone advertisement as well: "When you choose an extended life antifreeze, go with . . . Prestone LongLife 460."

Other companies producing comparable antifreeze products also refer to the class or type of product with the words "extended life." Texaco Lubricants Company, in the minutes of its 1995 Western Distributor Advisory Meeting (August 15, 1995), says: "It was also stated that the new Havoline Extended Life Antifreeze will be aligned with current Prestone pricing." Likewise, a General Motors information bulletin, dated June 1995, begins: "Subject: New Extended Life Engine Coolant Known as DEX-COOL." The first paragraph of this bulletin begins: "A new extended life engine coolant known as 'DEX-COOL' will be used in all General Motors vehicles." The term "long life" is not the generic term used in these instances for a class or type of antifreeze/coolant.

The way in which words are used and understood varies in different contexts. Technical and occupationally specific terms carry a special meaning for those who use them internally in those fields, but that special meaning is often not the same for outsiders to that group. Technical jargon is an example. Lawyers use the common words "court" and "bench" for example, to refer to a judge in a courtroom context, but this meaning is not commonly understood in that way by laypersons in their everyday language or, for that matter, even in the courtroom context. Likewise, in medical practice, "CA" refers to cancer but the general public does not normally use or understand "CA" in this way.

Past court rulings support the importance of the consumer context in determining the meaning of words. It was central to the ruling in *Anheuser-Busch v.*

Stroh's Brewery, 750 F. 2d, 638 (8th. Cir. 1984). That ruling supports a widely understood principle of sociolinguistics and lexicography—that contextual factors strongly influence the consumer's comprehension and perception: "The test, however, is what consumers, not persons in the trade, understand the term to be." The same was true in the findings of *First Federal Savings and Loan Association of Council Bluffs v. First Federal Savings and Loan Association of Lincoln*, Civil No. 88–92 Memorandum of Order 10, July 9, 1990, aff'd 929 F. 2d 382, 8th Cir. (1991): "One does not say that he or she is going down to the 'First Federal' to deposit some money or take out a loan. Rather, one would say that he or she is going to the 'savings and loan' or more likely, to the 'bank.'"

The common usage principle in both of the above-cited cases is parallel to that of current, acceptable sociolinguistic and lexicographic practice. Meaning, whether of common words or technical jargon, is determined by those who use and receive the language and not just by the specialized users of that language. Such a principle does not exclude meanings determined by specialized groups, such as brewers or bankers, but it attempts to mark such meaning as specialized and, often, not the commonplace meaning understood by nonspecialists. The best lexicographic practice, beginning with the *Oxford English Dictionary* in the nineteenth century, is to systematically gather citations of usage from the people who use the language and to define words based on that usage, a practice that lives on today in the best dictionaries of English. Evidence from the media indicates that public consumers understand the type or class of this product to be "extended life antifreeze," not "long life antifreeze."

Prestone's LongLife 460 can be potentially confusing to consumers

As for the potential confusion of consumers, there is little to question about the identical use of the compound noun, LongLife, by both plaintiff and defendant. Both parties use the capital "L" in both "Long" and "Life." Both parties conjoin the words into a single word, leaving no space between them. In any case, Prestone's own Answer and Counterclaim admitted that the term LongLife is "likely to cause confusion, mistake or deception as to the affiliation, connection or association with Prestone." If Warren's LongLife is confusing for Prestone, then Prestone's LongLife must be equally confusing for Warren, for, after all, it is the same word.

Based on the language evidence in this case, it was my conclusion that (1) Warren's LongLife mark appears to be suggestive and not descriptive or generic, (2)

that "long life" is not the name of the class or type of antifreeze product, and (3) that consumers are likely to be confused by thinking that the product names of Warren's LongLife and Prestone's LongLife 460 are one and the same or are produced by the same company, or both. This conclusion is based on the evidence of dictionary citations that show the mark to be metaphoric and therefore suggestive rather than descriptive. Prestone's claim that "long-life" is the name of a class or type of antifreeze/coolant is defeated by the language evidence used by the industry and by Prestone's own statements in which it called the generic term "extended life."

This case again evidenced the need for building a linguistic corpus of actual language practice that could be used to analyze the issues in dispute. It also shows how dictionary citations and semantics can be used both effectively and ineffectively.

PART VII

Procurement Fraud

A plain English definition of fraud is the use of false representations to gain an unjust advantage, dishonest artifice or tricks, and not fulfilling what is claimed or expected. It is deception made for personal gain, mostly litigated as a criminal matter. In England and Wales there are torts in civil law such as conversion, but there is no such offence as fraud, where deception is the major component. In the United States, procurement fraud relates to the procurement process during which contractors secure business with government agencies. It can occur during the precontract stage, during the formation of the contract, or during the performance of the contract. The latter is often related to the contractor's submission of falsified cost data.

The concept of procurement fraud did not occur in the United States until the Civil War, when the expansion of government and large amounts of materials were needed to fight the war. As these needs increased, so too did the occurrence of procurement fraud, leading Congress to pass the False Claims Act in 1863. Originally, the False Claims Act was a criminal statute that also contained a provision for the government to seek monetary penalties through civil lawsuits. Virtually all cases brought under this act were handled as criminal cases until the 1980s, when it was decided that this emphasis on criminal prosecution was doing too little to stop procurement fraud. Since such cases were expensive to prosecute, it allowed many allegedly guilty contractors to remain unpunished.

To address this issue, in 1986 Congress amended the civil penalty provisions of the False Claims Act, making it easier to bring civil charges under this act against contractors and strengthening the remedies available to the government. Under the provisions of these amendments, contractors who submitted false claims to the government in their effort to procure government funding became liable for civil penalties. The amendments required the government to prove that persons making false claims acted with more than mere negligence. According to 31 U.S.C. A 3729(b), false statements or claims have to be made with the specific intent to defraud or with deliberate ignorance or reckless disregard for

truth or falsity of the information submitted. If the government suffered monetary loss because of such false claims, damages are assessed at an amount equal to three times the government's loss. Much of the emphasis on procurement fraud now centers on defense contractors.

Since a contractor who fails to live up to the expectations of a buyer may be simply incompetent, the issue of intentional use of language rears its head. Did the producer deliberately give a false representation of what it would make or do? Or was the contract worded in such a way that a buyer might well have expected something other than what was purchased? In criminal cases, law enforcement tries to determine the intentions of suspects, sometimes even to the extent that it distinguishes capital murder from second-degree murder. Even though "intentionality" is not always mentioned as a factor in civil cases involving fraud, the word "knowingly" is frequently attached to the claims against defendants. Another expression used is "knew or should have known." In many ways the difference between "intentionally" and "knowingly" can seem minor, if not meaningless. Fraud, whether "intentional" or "knowingly" carried out, is a matter that becomes a fruitful area for linguistic analysis of contracts that lead to litigation.

Following is a case in which alleged procurement fraud was brought about through alleged false representations made by a defense contractor. It was brought by the United States Department of Justice against the manufacturer of military fighter plane engines under the False Claims Act, 31 U.S.C. 3729(a)(1), which included a potential penalty of treble damages.

References on accounting fraud include:

Golden, Thomas, Steven L. Skalak, and Mona M. Clayton. 2006. *A Guide to Forensic Accounting Investigation*. Hoboken, N.J.: John Wiley & Sons.

Silverstone, Howard, and Howard R. Davia. 2005. *Fraud 101: Techniques and Strategies for Detection*. Hoboken, N.J.: John Wiley & Sons.

References on language and deception include:

Canter, David, and Laurence Alison. 1999. *Interviewing and Deception*. Aldershot: Ashgate.

Ekman, Paul. 1985. *Telling Lies: Clues to Deceit in the Marketplace, Politics, and Marriage*. New York: Norton.

Galasinski, Dariusz. 2000. *The Language of Deception: A Discourse Analytical Study*. Thousand Oaks, Calif.: Sage.

Miller, Gerald R., and James B. Stiff. 1993. *Deceptive Communication*. Thousand Oaks, Calif.: Sage.

Robinson, W. Peter. 1996. *Deceit, Delusion, and Detection*. Thousand Oaks Calif.: Sage.

Shuy, Roger W. 1998. *The Language of Confession, Interrogation, and Deception*. Thousand Oaks, Calif.: Sage.

CHAPTER 18

False Representation in a Government Contract

United States of America v. United Technologies Corporation

One of the divisions of United Technologies is Pratt & Whitney, a manufacturer of fighter plane engines. From the early 1970s and continuing through 1982, Pratt was the sole manufacturer of high-performance jet engines used by the U.S. Air Force in its F-15 and F-16 fighters. In 1982 the Air Force decided to solicit bids from General Electric as an alternative supplier, replacing the former sole-source award process. The procurement process then become one of negotiation, leaving open the possibility of awarding either single or dual-source contracts. In May of 1983, the Air Force issued a Request for Proposal (RFP) to both potential contractors to cover six years of production (1985–1990). The Air Force asked for several different kinds of proposals, some for one year, some for three, and some for five, all related to different aspects of production. Because the procurement process was to be negotiated, each contractor was required to submit specific information about cost pricing data that supported its proposal.

This cost or pricing data was to embrace more than historical accounting data. It was to include such factors as all vendor quotations, nonrecurring costs, changes in production methods, data supporting the contractor's projections of business prospects and objectives, related costs of operations, unit cost trends, make-or-buy decisions, other estimated resources to attain their goals, and the comparative analysis by which a particular vendor (subcontractor) was selected.

The proposals were due by August 1983. In November 1983 both contractors were to submit their Best and Final Offers (BAFOs). Government auditors at the Defense Contract Audit Agency (DCAA) first looked at Pratt's

---

Case No. C-3-99-093

U.S. District Court, Southern District of Ohio, Western Division, Dayton, Ohio

proposal and recommended reducing the cost of materials for the engines by 200 million dollars, but since the Air Force found the costs reasonable, a meeting was called with the auditors and Pratt. As a result, the proposal price was subsequently reduced by a billion dollars, causing Pratt concern that the Air Force would think it impossible for them to produce the planes they wanted at that new lower cost. Pratt's BAFO was due in December 1983. After the BAFO was submitted and reviewed, Pratt was given only two weeks to revise it.

Meanwhile, Pratt had sent out price requests to its sole-source vendors, the only subcontractors capable of making the parts needed by Pratt to construct the engines. Sole-source vendors provide "ceiling-price quotes," which means that the estimated price is not permitted to exceed that amount. This type of quote differs from the more flexible "base-price quotes," accounting for the possibility that costs may increase over time, and a base price in 1983 may be lower than a base price in 1990. In writing a proposal that goes over a five-year period, it is commonly necessary to escalate base-type quotes to account for inflation and other things. An independent company, Data Resources, Inc., provides this type of escalation estimates for private contractors such as Pratt. Even though the findings of Data Resources give a best-estimate forecast based on many factors, contractors are not required to agree with such estimates or to follow them. But even before proposals like this are reviewed for estimates of escalation by Data Resources, they are analyzed by an entity called Procurement Contract Analysis Group (PCAG). Each corporation has such an independent PCAG group housed at the contractor's office. When the vendors' ceiling-price quotes come in, PCAG may or may not recommend that vendors lower those ceiling-price quotes.

In order to understand how pricing is determined, it is useful to compare price analysis with cost analysis. There are two ways to look at price, one of which is "price analysis," which says essentially, "I can get X price for these products and I can get another price for comparable products." The Air Force favored this process and used it to compare Pratt's price and General Electric's price with the Air Force's own price estimates. The second way to look at price, "cost analysis," was favored by the government auditors, who wanted contractors to go to their vendors and ask them for their cost plus their profit margins to see if the resulting prices are reasonable.

Complicating matters further, the exact engines specified in the RFP had never been produced before. Therefore, Pratt had to base its estimates on the production cost of a similar engine that they had built in the past.

The processes that such proposals have to go through in the government are also important to note. A proposal is first reviewed by the government's contracting officers and by their price analyst. From there it goes to the Source Selection Evaluation Board (SSEB), made up of some two hundred people. After being vetted by the SSEB, the proposal goes to the Source Selection Advisory Council (SSAC), made up of ranking staff officers of the Air Force along with some civilians. It is then either approved or disapproved by the secretary of the Air Force, who was Verne Orr at that time. After Mr. Orr gave his approval, the proposal was given to the secretary of defense, who was Casper Weinberger at that time.

On the surface, the above details may seem superfluous, but they are critical to understanding the role of a linguist in this case. First of all, the government's complaint was not brought until seventeen years after Pratt's BAFO was submitted. By that time none of the government's participants had a clear memory of the events in 1983, and most had no memory at all. The contracting officer reported having only a vague recollection that it had even happened. He had passed the old BAFO on to his price analyst, who reported that he did not recall the contract very well but that if he did review it, he would have interpreted it the way the government now interprets it, over two decades later. One person, Daniel Zacheretti, worked as a government auditor shortly after the contract was awarded to Pratt. Subsequently, he went to work at the Department of Justice, where he was assigned to review it several years afterward. He spent most of his work time doing this during the following decade. It is his analysis and testimony upon which the Department of Justice brought this case against Pratt—some seventeen years after the events had happened.

DATA

When I was first contacted by lawyers for Pratt in late 1999, the following documents were given me for analysis, since they were the ones that the government claimed showed Pratt's alleged conspiracy to defraud. Both were exhibits that accompanied Pratt's Best and Final Offer in 1983. The type font and document design are reproduced as closely as possible to the original, and irrelevant passages are noted in brackets.

EXAMPLE 18.1

Exhibit 3.8.1

FIGHTER ENGINE COMPETITION
INITIAL TO BAFO COST TRACKING

ADDITIONAL EXPLANATIONS/RATIONALE

Standard material
The difference results from adjustments to quoted parts, unquoted parts and ECP deltas as follows:

A. Quoted Parts

1. Ceiling price quotes were decremented in the BAFO for consideration of final settlement on all sole-sourced vendors. The decrement factor applied by calendar year was developed based upon our review of the PCAG recommendations for each supplier and the cognizant buyer's past experience with the individual vendors involved. The decrement factor reflects our past experience in not being able to achieve PCAG recommendations at final settlement time. The DCAA audit reports as discussed during fact-finding recommended decrementing all ceiling vendor quotes to a level consistent with the PCAG recommendation. While we have incorporate [*sic*] a decremented position, we do not agree that the appropriate estimate should be based solely on PCAG, but rather also should consider past experience by supplier as indicated above.

2. The DCAA audit report indicated that later quote data was available for part numbers 4044892, 4048998 and 01F4023040. Also mechanical errors were found on part numbers 9B54030604m 9B54030605, 91F4000551 and 4061493. We do not take exception to the DCAA in this area and have incorporated appropriate consideration for these in the BAFO.

3. Escalation applied to base price type quotes was revised to reflect consideration for the most recent DRI forecast of the appropriate indices. Although not specifically addressed by the DCAA, we feel that this was only prudent as the new forecast reflected generally lower inflation estimates.

4. [not relevant]

5. [not relevant]

B. Unquoted Material

1. The initial proposals submitted in August 1983 were based upon a January 1983 configuration for the F100-PW-200 engine with parts not specifically quoted for the Fighter Engine Competition (FEC) having been based upon 1984 estimated standards using purchase order activity through January 1983.

The November modification proposals reflected an updated configuration for this engine model with all validated engineering changes through July 1983 and more current purchase order data through October 1983. The DCAA recommended a 4.7% reduction to unquoted material in their report. While we did not specifically take the same approach of an overall decrement, we have agreed with the recommendation and have given consideration in the BAFO to the most current purchasing data available on those parts.

2. [not relevant]

C. F100-PW-200 Engineering Changes

1. [not relevant]
2. [not relevant]
3. [not relevant]

There were many other pages of this document that were not considered relevant to the complaint by either the government or by Pratt. In addition, however, both sides considered the following handwritten document salient (reproduced here in printed form):

ITEM #8

CEILING QUOTE DECREMENT FACTORS

REPORT #: NONE

REPORT DATE: NONE
This sheet displays a summary by vendor for PCAG recommendations and Purchasing buyer assessments of decrement factors for ceiling type quotes contained in the Fighter Engine Competition proposal.
This data was considered in estimating standard material for Fighter Engine Competition BAFO and is being submitted in support thereof.

Accompanying this handwritten page were several pages of charts noting each supplying vendor's name followed by the PCAG recommendation percentage of decrement and by Pratt's actual decrement percentage. In each case Pratt's decrement percentages were lower than the PCAG's recommendations.

The following is the Defense Acquisition Regulation (DAR) applicable to the procurement at issues in this case, 32C.F.R. 3-807-3 (1982), requiring the submission of cost or pricing data along with form DD 633:

> Paragraph 1:
> This form's purpose is to provide a vehicle whereby the offeror submits to the Government a pricing proposal of estimated and/or current costs . . . with supporting information . . . suitable for detailed analysis. . . .
> Paragraph 2:
> The contractor is required to submit with this form any information reasonably required to explain the offeror's estimating process, including the judgmental factors applied and the mathematical or other methods used in the estimate including those used in projecting from known data.

The Truth in Negotiations Act, 10 U.S.C. 2306(f) ("TINA") contains the following requirement:

> "Contractor must submit accurate, complete and current cost and pricing data in support of its proposal and its BAFO."

The Alternate Fighter Engine Contract (F33657-84-C-2014) reads as follows:

> Cost or pricing data consists of all facts existing up to the time of agreement on price which prudent buyers and sellers would reasonably expect to have a significant effect on price negotiations. Cost or pricing data embraces more than historical accounting data. It also includes such factors as all vendor quotations, nonrecurring costs, changes in production methods and production or procurement

> volume, data in support of contractor projections of business prospects and objectives, together with related costs of operations, unit cost trends such as those associated with labor efficiency, make-or-buy decisions and estimated resources to attain business goals and any other management decisions which reasonably could be expected to have a significant bearing on costs under a proposed contract, e.g., the comparative analysis by which a particular vendor was selected. In short, cost or pricing data consist of all facts which reasonably can be expected to contribute to sound estimates of future costs as well as to the validity of costs already incurred. Cost or pricing data, being factual, are that type of information which can be verified.

On December 23, 1983, the Air Force reviewed Pratt's BAFO and DD Forms 633 and determined that they were "traceable to cost support data which was accepted as valid." In this Record of Acquisition Action, the Air Force continued:

> In addition to the face-to-face discussion of issues, the significant comments from the DCAA reports were sent to the contractor in the form of a Contractor Inquiry (CI) with responses due as part of the BAFO. The BAFO contained response to these comments in sufficient detail to allow the Air Force Evaluation Team full visibility into the cost impact of those responses with supporting rationale to justify the Offeror's treatment of each comment in the BAFO.

LINGUISTIC ANALYSIS

In January 2001 the lawyers for Pratt called me to help them deal with the theory of the case that the government had just presented. At that time, the plaintiff's theory was that the language of the above documents was very clear and that a plain meaning interpretation would show that Pratt had been fraudulent in the representations found in its BAFO. Pratt's attorney asked me if this claim had any merit. After examining these documents, I concluded that the government was correct in that Pratt used plain English but that, based on the many documents in evidence, the government was incorrect in believing that this plain English showed Pratt to be committing fraud.

Syntax

My report, written in March 2001, concluded that the syntax in these documents, although it can hardly be considered elegant in style, fits the patterns of acceptable English that a reasonable person could process and understand. Included in my report were simple parsings of each sentence, categorizing by noun, verb, preposition, adverb, and adjective phrases. The following is one example, the first sentence of 3.8.1 (NP stands for noun phrase, VP for verb phrase, and PP for prepositional phrase):

NP	*VP*
Ceiling price quotes	were decremented PP: in the BAFO PP: for consideration PP: of final settlement PP: on all sole-sourced vendors.

Lexicon

My report also dealt with the lexicon of these documents. I stated that terms such as "decrement," "ceiling price quotes," "BAFO," and "sole-source vendors" may not be frequently used or understood by average nonspecialist English speakers, but I understood that they are commonly used and comprehended by specialists in the field of government contracting. Other terms such as "estimate" and "assessment," however, convey plain meaning to the reasonable person, whether specialist or not. The government claimed that "estimate" and "assessment" meant that Pratt had in its possession historical and statistically based figures that the company deliberately did not use but should have used and made available in this proposal. This omission was alleged to represent procurement fraud.

"estimate"

The initial government complaint claimed that the plain meaning of Pratt's BAFO indicated that it should have contained estimates that were grounded on historical and statistically based facts. To test this, I looked to the commonly understood meaning of "estimate," beginning with dictionary definitions such as the one found in the *American Heritage Dictionary*:

1a. tentative evaluation or rough calculation
2a. a preliminary calculation of the cost of a project
2b. the statement of such a calculation
3a. a judgment based upon one's impressions; opinion

Merriam-Webster's Collegiate Dictionary defines the noun "estimate" in much the same way:

1. the act of appraising or valuing quality of a person or thing
2. an operation or judgment of the nature, character, or quality of a person or thing
3a. a rough or approximate calculation
3b. a numerical value obtained from a statistical sample and assigned to a population parameter
4. a statement of the cost of work to be done

The major, plain-meaning definitions of "estimate" stress the tentative, preliminary, judgmental, impressionistic, approximated, and opinion-laden nature of the use of this term. Even when mentioning a statistical sample, dictionaries do not indicate the basis for such a measure or exactly what any sample might contain. If Pratt's proposal writers had intended to indicate a statistical quantification based on historical experience with its vendors, it would have been necessary to have expressed this marked meaning explicitly in the text.

But did these dictionary uses of "calculation" indicate otherwise? It seemed necessary to establish the plain meaning of this word. *Merriam-Webster's Collegiate Dictionary* gave the following senses:

1a. to determine by mathematical processes
1b. to reckon by exercise of practical judgment: estimate
1c. to solve or probe the meaning of: figure out
2. to design or adapt for a purpose
3a. to judge to be true or probable
3b. intend

The *American Heritage Dictionary* said much the same:

1. to ascertain by calculation: reckon
2. to make an estimate of: evaluate
3. to fit for a purpose: make suitable for

Although both dictionaries mention mathematical processes as a means of calculation, they by no means limit "calculation" to this sense, including as well such terms as "judgment," "estimate," and "evaluation."

Nor is the manner of using mathematics specified in these definitions. There is nothing in the plain-meaning definition of "calculation" to support the government's claim that a "statistical quantification of the historical experience with vendors" should have been made. There is no means specified that would indicate how any specific, detailed, or explicit method used to form such a calculation would be made.

"Assessments"

In Item #8 Pratt's proposal explicitly defines the figures on the right-hand side of its accompanying chart as "Purchasing buyer assessments." The government claimed that by using the word "assessments," Pratt indicated that there were historical and statistical bases for its proposed costs. Again the issue was the plain meaning of "assessments." *Merriam-Webster's Collegiate Dictionary* and the *American Heritage Dictionary* define the noun form as "the action or an instance of assessing." Since the noun form is derived from the verb form, the dictionaries define "assess" as:

1. to determine the rate or amount of (as a tax)
2a. to impose (as a tax) according to an established rate
2b. to subject to a tax, charge, or levy
3. to make an official valuation of (property) for the purposes of taxation
4. to determine the importance, size, or value of

SYN: see estimate

There is nothing in these plain meaning definitions of "assessment" to indicate more than estimating, evaluating, or appraising in the effort to determine a rate or to make a valuation. Nor is there any indication of a method used to do this. If Pratt had intended its meaning to be "a statistical quantification based on historical experience with vendors," it would have been necessary to say this explicitly in the text.

Considerable time passed after my report saying much of the above was submitted to the government. Oddly enough, I was not deposed. A few months later, however, I got a call from Pratt's attorney telling me that the government now had changed its theory in the case. It had submitted an amended complaint that reflected this new theory, retaining its original claims about the

meanings of the words used by Pratt, and now focusing in particular on Pratt's meanings of "consideration," "estimates," "appropriate," and "based on our review of," but no longer asserting that these words were the plain meanings. The government now said that its current understandings of the proposal were the only correct ones and that Pratt had committed fraud.

The government's new theory opened the door to a somewhat different linguistic analysis. It had been clear to me from the beginning that although Pratt used words that were plain and clear, what its proposal did *not* say was as important as what it did say. The government's amended complaint also opened the door of analysis to the strategies it used to interpret Pratt's proposal in the way that it did. In addition, the February 2004 deposition of the government's designated representative, Daniel Zacheretti, who had been assigned to this task for over a decade, was also available for analysis.

What the proposal did *not* say

Pratt's proposal, as evidenced by the illustrative language in evidence, cited above, was replete with incomplete statements and things left unclear and unsaid. To illustrate this, I took each sentence of 3.8.1 and constructed charts comparing what the text said, what the indisputable meaning was, and what Pratt had left unclear, vague, and unsaid. Although charts for each disputed sentence were made for my report, only the following two will be provided here as examples:

3.8.1 First sentence

Text language	*Text meaning*	*What is not in the text*
Ceiling price quotes	• "not to exceed" quotes given by sole-source vendors	• what these ceiling price quotes refer to
were decremented	• were lowered or reduced	• how they were decremented • how much they were decremented • what factor(s) were used in decrementing them • how the decrement factors were derived

(continued)

in the BAFO	• in the Best and Final Offer	
for consideration of	• thought about, took into account, reflected on, weighed	• what consideration was given • what factors went into this consideration • what the result was of this consideration
final settlement on sole sourced vendors	• final agreement • those vendors who are the only ones capable of making the needed parts for Pratt	• which specific vendors?

The same process was used for the two sentences in Pratt's Item #8, as follows:

Item #8, first sentence

Text language	*Text meaning*	*What is not in the text*
This sheet displays a summary for PCAG recommendations	• this piece of paper • sets forth • a brief recapitulation	• which piece of paper?
of decrement factors for ceiling type quotes	• judgments of Pratt's purchasing buyer	• which buyer? • what judgments? • how the judgments were derived
	• reduction factors • the "not to exceed" quotes included in Pratt's Fighter Engine Competition proposal	• what decrement factors? • which ceiling type quotes? • where contained? • which Fighter Engine? • which competition proposal? (there were several)

There was a very useful speech act available to the government that it could have used in 1983, after it had received Pratt's proposal and BAFO. If the government did not understand what Pratt had written and if it believed, or even noticed, that Pratt had been unclear, vague, and incomplete in what it represented, the obvious thing to do at that time would have been to request clarifi-

cation. There is no record of this being done until many years later when the lawsuit was brought, long after the contract was over.

HOW THE GOVERNMENT INTERPRETED THE PROPOSAL

In its complaints, the government referred to many sentences in 3.8.1 and Item #8 as "knowingly false" and claimed that the decrement factors reported by Pratt did not indeed reflect Pratt's past experience with its vendors. The government appeared to base these complaints on two interpretations:

1. Pratt's use of "consideration," "appropriate," "assessments," and "estimates," and
2. Mr. Zacheretti's attempt to reconstruct the process that Pratt allegedly used to determine its decrements.

The government's interpretations of the meaning of words are subject to the linguistic analysis that follows. Its attempt to reconstruct Pratt's accounting practice was the subject for other experts used by Pratt's attorneys and will not be dealt with here.

Linguistic analysis

Over the four years after the lawsuit was brought, Pratt's attorney had taken a number of depositions of government employees and experts. This language data was added to the corpus of the government's amended complaints and its responses to Pratt's interrogatories. In reviewing this corpus, I discovered three common and recurring strategies used by the government: (1) misdefining words, (2) adding and deleting words, thus creating meanings that were different from those occurring in Pratt's text, and (3) inferring meanings that were not explicit in the words and expressions that Pratt actually had used. My second expert witness report detailed these at length, but here only illustrative examples will be offered.

The government's strategy of redefining words

The government consistently redefined words used by Pratt in ways that are inconsistent with the commonly understood meanings of those words. The most notable of these misdefinitions were the nouns "consideration," "appropriate," and "review."

"CONSIDERATION" Pratt had used "consider" and "consideration" several times in its 3.8.1 and Item #8 documents. Its proposal was reviewed and vetted by PCAG and DCAA, both of whom made recommendations about which decrements they believed Pratt should make. Pratt made mention of these recommendations and said that it "considered" them. Commonly used desk dictionaries define the verb "consider" using terms such as "to think carefully about, to ponder, to think, to believe, to suppose, to bear in mind, to look at, to regard, and to reflect." Pratt's use of "consideration" was consistent with those meanings. But in his first deposition, Mr. Zacheretti, who officially represented the government, defined it differently:

Q: How does the government construe the words "for consideration of" in the first sentence of 3.8.1, sir?

A: In this instance it means that some of the vendors' ceiling quotes were decremented.

Later, in that same deposition, Mr. Zacheretti was asked about the verb form of that word, this time relating to Item #8:

Q: The question is this. How does the government construe the term "considered," as it appears on the first page of Item #8?

A: Well, we know that the right hand column was used to price the BAFO so, in effect, that's what this is describing.

Q: So you're equating the word, "considered," with "use" is my question.

A: Yes, because it's what happened with the purchasing decrement. . . .

One of the government's other expert witnesses, in his deposition, defined this word in a different, but equally unusual manner. Pratt maintained that its BAFO provided decrements but gave no indication of how they arrived at those figures. If the government were to admit that Pratt gave no clues about how it derived its numbers, this would support Pratt's claim that there was no basis for the government to now claim that Pratt had made fraudulent representations. So government then brought in an expert in accounting practice who testified in his deposition that when Pratt said "considered," in the 3.8.1 document, the verb described its "methodology" for deriving decrements:

Q: Now, identify for me the specific word or words that appear in 3.8.1 that would give any suggestion that this was intended to be a statement of methodology.

A: Sure . . . "Ceiling price quotes were decremented for consideration of final settlement on sole source vendors." . . . That's a method statement right there. . . . Once you say in the BAFO "for consideration of final settlement on sole source vendors," now you are introducing methodology.

Although he didn't say it, perhaps this expert meant that Pratt *implied* a methodology or that he *inferred* as much from Pratt's sentence, but Pratt certainly did not explicitly state a methodology here, and it stretches the imagination to conceive of how he even inferred it. Inferences do not carry the weight of explicitness, especially in law. In any case, there is no indication in the conventional, standard use of "consider" or "consideration" in the English language (or in any dictionary definition of those words) that gives any clues about what consideration was given, what factors went into this consideration, what the result of the consideration was, to whom the consideration was relevant, or any factors that constitute consideration. To consider something means to think about it, bear it in mind, look at it, or reflect upon it. It does not mean "to use" or "to apply" what is being considered, as Mr. Zacheretti testified, nor does it explicitly state a methodology, as the accounting expert tried to indicate. Equally interesting is the following. If, when the contract was being negotiated, the government did not know what Pratt meant by "consideration," it had every opportunity to ask this back in 1983. There is no extant record or report indicating that Pratt was ever asked this question.

"APPROPRIATE" In 3.8.1 and Item #8, Pratt used "appropriate" in the context of "appropriate estimates" and "appropriate consideration." In one sentence, Pratt said, "We do not agree that the appropriate estimate should be based solely on PCAG, but rather should consider past experience by supplier." In another sentence Pratt said, "We do not take exception to the DCAA in this area and have incorporated appropriate consideration for these in the BAFO." The government claimed that Pratt knowingly used "appropriate" falsely in these instances. Examination of any dictionary definition of the adjective "appropriate" yields the following senses: "suitable, fitting, compatible." Nowhere is this word defined in a way that would indicate the conditions around which the adjective "appropriate" is used. Was the "appropriate consideration" one that seemed appropriate to Pratt? Or was the consideration one that seemed appropriate to the Air Force and government? Pratt's words do not tell us this. Apparently the government could see only through its own filters or lenses. Interestingly, this word was not challenged in 1983, at the time the proposal was submitted, but it became central in the lawsuit some two decades later. The government apparently defined it from its own perspective, then claimed that Pratt's use of "appropriate" was knowingly false.

"REVIEW" In the second sentence of 3.8.1, Pratt said, "The decrement factor applied by calendar year was developed *based upon our review of the PCAG recommendation* for each supplier and the cognizant buyer's past experience with the individual vendors involved" (emphasis added). In its complaint the government claimed that this sentence also was knowingly false.

In 3.8.1 paragraph A.1, the government claimed that Pratt stated that it had developed and applied a ceiling quote decrement in the BAFO *based on PCAG recommendations* for each supplier and cognizant buyer's past experience with the individual vendors involved. Here the government redefined "based on our *review of* the PCAG recommendations" to "based on PCAG recommendations." The semantic leap here is similar to the one made by the government for the word "consideration." If considering something is misdefined to mean using it, then why couldn't reviewing something also mean that the product of the review is equivalent to that which it reviewed to get there? No common understanding of the verb "to review" suggests that what is being reviewed then should be agreed with, rejected, or used in toto. The relevant senses of "review" listed in most dictionaries are: "the process of studying a subject again, an exercise designed for study, a general survey, an inspection or examination, a second or repeated view of something, a viewing of the past, to survey mentally, to examine."

The government was not limited to misdefining "consideration," "appropriate," and "review." When asked about Form DD 633, a standard form that contractors are required to submit in which Pratt had used the words "top level program DD 633s," the following colloquy in Mr. Zacheretti's deposition ensued:

Q: What does the government understand Pratt meant by the term, "top level total program DDD 633s"?

A: Summaries.

Q: So the government interprets the term, "top level program DD 633s" to mean "summaries"?

A: Yes

It's hard to imagine how such a definition could be derived.

The government's strategy of adding or deleting words

In addition to misdefining words for its own litigation purposes, the government sometimes also added words to what Pratt actually said and sometimes deleted words that Pratt actually said. Both strategies resulted in changing the

meaning of Pratt's documents. Although this was a rather common occurrence in the testimony of the government's experts, only a few instances of this strategy will be cited below. At one point in his deposition, Mr. Zacheretti claimed that Pratt had indicated a number of decrement factors. Pratt's attorney then asked:

Q: Where in 3.8.1 is there any reference to the "decrement factors" presented in Item #8?

A: . . . your exact words weren't found.

Q: And, in fact, there is no reference in 3.8.1 to "decrement factors," plural, with an "s," is there?

A: That word does not appear.

Pratt's attorney recycled his question a few minutes later:

Q: Tell me specifically where in any submission it made on December 5, 1983 Pratt said it was decrementing all its sole source ceiling quotes for the 220 BOM.

A: I don't see these exact words in the BAFO.

Q: So once again the government is reading something into the BAFO . . . that doesn't appear there, correct?

A: No, I don't believe so.

Q: Where in Item #8 did Pratt say the decrement factors listed in the right-hand column on the second page of Item #8 were applied to the DEEC?

A: It doesn't use the word, "DEEC."

Q: But Pratt doesn't say that in this document, did it?

A: Well, it would then be common practice. . . . It does not use the words but in the government's position the facts that effectually make it that statement.

Q: Do you see the word, "used," or "use" on the first page of Item #8, Mr. Zacheretti?

A: No I do not.

Returning to the example of the DD 633 document, the government's representative openly admitted that the word "summaries" was not in Pratt's statement and that his interpretation added that word meaning:

Q: Do you see the word "summaries" anywhere in that paragraph, Mr. Zacheretti?

A: Not in this paragraph.

Q: So the government is reading into this paragraph and into this sentence the word "summaries," that does not appear there, is that correct?

A: Yes, in accordance with the instructions.

A remarkable example of Mr. Zacheretti's use of adding words not used by Pratt is the following:

Q: Where in its submissions of December 5, 1983, did Pratt identify a composite decrement factor, as you have used that term?

A: In documents that it did not provide, but used. It was in the documents they withheld.

The government's claim that Pratt meant words that it did not use could not be clearer.

The government's strategy of inferring meaning

Many times during his deposition as the government's representative, Mr. Zacheretti both directly and indirectly admitted that he had inferred the meaning of Pratt's documents as well as passages from the government's complaint. On some occasions he openly admitted inferring, using words such as, "it is inferred," "by inference," "in effect," and "represents in my mind." On other occasions he called on his world knowledge to guide his inferences, as when he said that he or the government "knows" or "knew," along with his references to "the reader's knowledge." Some of his inferences grew out of words or expressions that were admittedly not in Pratt's text, as when he used expressions like "purported to," "gives the appearance of," "leading one to believe that," and he even derived his inferences from expressions such as "in documents not provided," and "what's not here." He also called on what he considered the reasonable nature of his inferences, using expressions such as "logic" and "common

sense." In some cases he offered outright guesses and personal opinions that led him to his conclusions, such as "I believe," "I think," and "I can guess." The sheer bulk of the government's use of the strategy of inferring meaning makes it prudent to give only a few illustrative examples from his deposition here:

Q: Do the words "ceiling price quotes" tell the reader what ceiling price quotes are being referred to?

A: I think the reader would understand it to be the ones relative to the engines that the government is going to be buying.

Q: Where does it say anything in 3.8.1 that Pratt was "decrementing all its sole source ceiling quotes"?

A: Well, it certainly does by inference. They don't use those exact words.

Q: So you're reading words into this, is that correct?

A: I don't think it's reading words into it. I think it's based on the understanding that all the documentation that was used, the Air Force's analysis of all those ceiling quotes, what a reasonable person would expect.

Q: What judgmental factors are reflected in 3.8.1?

A: It sets forth their explanation of what they did, which would lead one to believe that there is supporting documentation that would further support and lead one to be able to verify what they did.

Q: Does that sentence even say whether or not escalation was raised or lowered?

A: Well, it describes the most recent DRI forecast. The expectation is that when a contractor uses a known index … you need to use the most current forecast that's available. So this sentence represents in my mind, or it's leading one to believe that that's what they did.

Q: But the words Pratt used didn't explain exactly what Pratt did, did they?

A: It left out the operative words of what Pratt did. But I think they would have read that and thought the most current DRI was used.

Q: So you're reading that word into Pratt's statement on the first page of Item #8, is that correct?

A: The PCAG recommendations only related to the DEEC and the counterparts. So by inference, that's just factually, they don't say it but factually that's the case.

Q: Where does the government believe that Pratt stated in its submissions that it "applied" the decrement factors presented in Item #8?

A: We know Pratt did. Item #8 and 3.8.1 discuss applications of decrements and development, so that's where I think the author of 3.8.1 told us that's what the intention was.

Lacking any useful witnesses' memories about the actual event of Pratt's submission of its BAFO in 1983, the government's case hinged on two factors: the way it interpreted Pratt's documents 3.8.1 and Item #8, and Mr. Zacheretti's reconstructed accounting analysis of the way he believed Pratt may have figured its decrements at that time. Linguistic analysis, offering help to only the first factor, demonstrated that the government's complaint and its expert witnesses-designated representative, Mr. Zacheretti, used three strategies to try to make their case. They defined commonly understood words in ways that violate those common understandings, they added and subtracted words that Pratt had used in its documents, and they inferred meanings in a way that suited only their case.

Linguists who get involved in cases that contain knowledge outside their area of expertise, such as accounting, the aircraft industry, and government procurement processes, have a lot to learn in the process. They still deal with language, of course, but the context in which language is used can be very complex. Once again, it was helpful to obtain a corpus of language use that went beyond the contested documents, 3.8.1 and Item #8. This case was unusual in that, essentially, it had to be done twice, one time for each of the government's two different theories. It was also unusual in that what Pratt did *not* say in its documents was as interesting and useful and what it *did* say. This, of course, led to the discussion of semantics, which played an essential role in distinguishing the government's interpretation of the language from that of Pratt. Painstaking comparisons of how the government used words like "estimate," "consideration," "assessment," "appropriate," and "review" had to be made in context.

APPENDIX

How Linguists Can Help in Corporate Civil Cases

This book has described seven types of civil cases in which corporations were embroiled. In all of them the use of language, written or spoken, played a central role in the fights over words. In order for linguists to be helpful to attorneys in such cases, certain needs have to be met, including the need for adequate data to analyze, the need for the linguists to have a well-equipped toolbox, and the need for linguists to be clear and unambiguous in their presentations. For a more detailed description of the uses of linguistics in the legal context, see Shuy 2006.

THE NEED FOR ADEQUATE DATA

To help lawyers as they fight over words, linguists need to have enough language data to work with. Attorneys often provide all the data that is available to them, but sometimes linguists can suggest other places to find additional supportive data, such as electronic searches for words or expressions, dictionaries, or other sources of historical language usage. Commonly, however, attorneys provide linguists with most of the language data needed.

The cases described in this book dealt with language data of many types, including written contracts, state codes, advertisements, certificates of deposit, warning labels on commercial products, government agency regulations, tape recordings of conversations, dictionaries, owner's manuals for operating equipment, complete texts of books and pamphlets, speeches, business memos, media articles, legal briefs, restaurant menus, and deposition transcripts. The diversity of this list is not surprising, since language is deeply involved in most of the activities of life, including civil cases that involve corporations. For linguists, this means data to analyze. For attorneys, this means calling on linguists to use their tools to find the meaning of their language evidence.

THE NEED TO HAVE A COMPLETE TOOLBOX

Linguists have, or should have, a toolbox full of analytical procedures to choose from as they approach analyzing the data in a given case. As the cases described here illustrate, these linguistic tools include phonetics, morphology, syntax, semantics, pragmatics, speech acts, discourse analysis, historical language change, and comprehensibility. It is optimal for the linguistic experts to be able to call on any of these when appropriate.

Phonetics

Since civil cases most often involve mostly written language, it may seem that the linguist's skills in phonetics might not be needed. But in the product liability case involving an air crash (chapter 11), phonetics played a very important role. Likewise, in trademark cases in which the issue is whether or not marks sound alike, good phonetic skills can be crucial, and in any lawsuit involving tape recorded evidence, the linguist must have finely tuned phonetic abilities. Even in the contract dispute over the meaning of a key employee agreement (chapter 3), the predictable intonation of how a sentence might be spoken came into play.

Morphology

In the product liability case with data consisting of air-to-ground radio communications (chapter 11), the pilot's accurate, proper, and standard production of English morphemes was one of the linguistic features that helped indicate that he was not being overcome by TMPP as he crashed his plane. In a discrimination case (chapter 13), morpheme structure was one of the features of language found by the research to help the court decide that racial identification could be made from a relatively small amount of spoken language used on the telephone. The contrast of present tense versus past tense morphemes in an advertisement made by the manufacturer of an industrial conveyor system (chapter 5) aided in determining whether or not that advertisement was based on past studies or tests. Although morphology is often important in helping to resolve trademark disputes, it was not central in the two cases illustrated in this book (but see Shuy 2002).

Syntax

The syntax used in the contract dispute over the key employee agreement (chapter 3) centered on the syntactic scope that one phrase in a sentence had over the three conditions identified in that sentence. In the air-crash case (chapter 11) the appropriate syntax of the pilot helped indicate that he was not under the influence of a gaseous substance allegedly escaping from the engine. The syntax of restaurant menus (chapter 16) contributed significantly to the resolution of that trademark case. The government's position in the procurement fraud case (chapter 18) hinged on its own unique and grammatically inaccurate interpretation of the syntax of the engine manufacturer's proposal.

Semantics

In one contract dispute case (chapter 1), the semantics of little words like the prepositions "on" and "in" were shown to make an important difference in understanding written texts. The meaning of the verb "contract," and the meaning of "other," "customers," "effectively," "limits," and "trip" were central to understanding other contract disputes (chapters 2 and 3). The semantics of "customers," "effectively," and "limits" framed the analysis in another case (chapter 4). In one deceptive trade case (chapter 6), the meaning of the verbs "stop" and "quit" were at the heart of the analysis. The essential difference between the meanings of "nonrenewed" and "dismissed" was central to the discrimination case (chapter 15). The plaintiff and defendant differed strongly in how they defined "life" in a trademark dispute (chapter 17), and differences in understanding and defining crucial words were critical in the procurement fraud case (chapter 18).

Pragmatics and speech acts

The speech act of warning is often central in product liability cases that address the effectiveness of hazard statements (chapters 8, 9, and 10). Although the use of speech act borrowing has not been tested at trial, it seemed to play a contributing role in the copyright infringement case (chapter 12). Inferred meaning was certainly central in the procurement fraud case (chapter 18) and it framed the case theories of both the defendant and the plaintiff in the air-crash case (chapter 11). Writers' specificity and explicitness or their lack of it, which

frequently lead readers to have to infer meaning, underlie most of the cases involving written-text data in this book, including business contracts, advertisements, CDs, hazard statements, and the contract procurement proposals.

Discourse analysis

The ways topics were selected, introduced, and sequenced framed a large part of the analysis of the owner's manuals in product liability cases (chapters 9 and 10). It was also essential in all three deceptive trade cases (chapters 5, 6, and 7) and the copyright case (chapter 12).

Historical language change

Although language change over time may not seem to be important in the resolution of corporate civil cases, it was central in the deceptive trade practice case involving the evolution over time of the meanings of the terms "interest," "compound interest," and "simple interest" (chapter 7). Likewise, in the trademark case involving menu items (chapter 16) the historical changes of meaning, leading to their current marked and unmarked forms, played an essential role.

Comprehensibility

Although linguists can never claim to know exactly what the sender of a message intended or exactly what the receiver of a message actually understood, the text of the message itself can provide clues to possible intentions and possible comprehension. Product liability cases that contain hazard statements offer good examples of this (chapters 8, 9, and 10). One question to ask is whether or not Grice's maxims of effective communication were followed (especially the maxims of quantity, relation, and manner). Comprehensibility also depends on the quality of document design, including size and type of print, prominence, legibility, sentence complexity, subheadings, bullets, and other factors.

Concerning all of these tools, one thing more should be said. Linguists not only analyze the language that is there but also demonstrate how the writers of the text could have made their points clearly and unambiguously. In many of the cases in this book, more effective speech acts and grammatical forms could have been used to avoid the litigation in the first place. One effective way to highlight an ambiguity or misrepresentation of a text is to show how it could

have been worded if the writers had really intended the meaning they claimed. It's one thing to say that the text is deficient in some way but it is equally effective to point out ways that it could have contributed to the writers' intended purpose.

THE NEED FOR CLARITY OF PRESENTATION

When specialists in any field attempt to apply what they know to a different field, there is usually a chance that misunderstandings can follow. This means that linguists who apply their tools to legal disputes will have to do so very carefully, in ways that attorneys, judges, and juries can understand. No matter how correct the analysis might be, it can fall on deaf ears unless the linguist takes the steps that are suggested by the advice found in Grice's maxims:

1. *Be informative*. The analysis must be linguistically correct. There is no place for shoddy analysis that bypasses or distorts what is known by the field. Unfortunately, not everyone who claims to be a linguist is well versed all aspects of this field. For attorneys, this means carefully selecting experts who are well trained in the tools noted above, who are experienced, and who have a track record of publications and standing in their field. In other words, they should choose linguists who are proven experts. Since linguistics is a recognized academic field, it would seem only obvious that one good way for attorneys to start their search for an expert would be to first contact a university linguistics department or center where such expertise is commonly located.
2. *Be relevant*. The analysis should address only the language issues raised by the case and should not be a platform for digressing into irrelevant, linguistic fine points that experts might like their listeners to know about. Unlike academic meetings where professionals are accustomed to exhibiting how correct or innovative they are, trials, depositions, and expert reports are not an appropriate forum for displaying all of one's knowledge. Often it is as important to know what *not* to say as much as it is what to say. What is relevant for the case is not always the same as what is relevant in the expert's own field.
3. *Be clear*. This is often difficult for linguistic experts, who, like most professionals, are so used to their own ways of thinking and their

own specialized jargon that they risk going over the heads of their listeners or readers. In front of a jury or judge, the latest or most technical linguistic terminology may be considerably less effective than using the language common to the courtroom. Linguistic terms, such as "left embedding," for example may sound perfectly familiar to linguists but the courtroom audience might better understand something a lot simpler, even if it is less precise, such as "sentence complexity." Even the sequencing of information given by linguists should follow the logic of the lay listener. This point was made in the toxic shock case (chapter 10). An important way for experts to be clear and effective is to add a visual dimension to their verbal presentation. I have found that linguistic laypersons are better convinced when they see simple charts that explain and illustrate complex events or ideas. The cases in this book offer some illustrations of this. People remember what they see better than what they hear and they remember roadmap-style charts of what they see better than the texts they read. Today's technology makes visual aids abundantly possible.

One final note about this book's aim at addressing three types of intended readers. I hope that lawyers who try civil cases for corporations will become more aware of the resources that linguistics can offer them as they fight over words in their corporate civil cases, even tools that they may never have heard about. I also hope that linguists have been shown an important area of applied linguistics that can provide them with the data they need to help solve problems, to move their field along, to engage in interesting and much-needed work, and to offer good examples in their classrooms. Finally, I hope that students will now have access to a rich source of language data, along with one linguist's analysis, to help them augment the sometimes abstract and hypothetical advice given in their classes with some real-life, hands-on data to analyze in this dynamic and exciting area of forensic linguistics.

REFERENCES

Baldwin, John, and Peter French. 1990. *Forensic Phonetics*. London: Pinter.

Barbato, C. A., and J. C. Feezel. 1987. The language of aging in different age groups. *Gerontologist* 27.4: 527–531.

Beebe, Barton. 2004. A semiotic analysis of trademark law. *U.C.L.A. Law Review* 51: 621.

Bell, Alan. 1991. *The Language of News Media*. Oxford: Blackwell.

Blackett, Tom. 1998. *Trademarks*. Houndmills: Macmillan.

Blum, Brian A. 2001. *Contracts*. 2nd ed. New York: Aspen.

Brown, Gillian, and George Yule. 1983. *Discourse Analysis*. Cambridge: Cambridge University Press.

Canter, David, and Laurence Alison. 1999. *Interviewing and Deception*. Aldershot: Ashgate.

Chaski, Carole. 2001. Empirical evaluations of language-based author identification techniques. *Forensic Linguistics: The International Journal of Speech Language and the Law* 8.1: 1–65.

Clark, H. H., and S. E. Haviland. 1977. Comprehension and the given-new contract. In R. O. Freedle, ed. *Discourse Production and Comprehension*, 1–40. Norwood, N.J.: Ablex.

Coupland, Nikolas, Justine Coupland, and Howard Giles. 1991. *Language, Society and the Elderly*. Oxford: Blackwell.

Coupland, Nikolas, and Jon F. Nussbaum. 1993. *Discourse and Lifespan Identity*. Newbury Park, Calif.: Sage.

Covey, H. C. 1988. Historical terminology used to represent older people. *Gerontologist* 28: 291–297.

Cruse, D. A. 1986. *Lexical Semantics*. Cambridge: Cambridge University Press.

Cushing, Steven. 1994. *Fatal Words: Communication Clashes in Aircraft Crashes*. Chicago: University of Chicago Press.

Dumas, Bethany K. 1992. The adequacy of cigarette package warnings: An analysis of the adequacy of federally mandated cigarette package warnings. *Tennessee Law Review* 59: 261–265.

Eglit, Howard. *Age Discrimination*. 2nd ed. 1994. New York: McGraw-Hill.

Ekman, Paul. 1985. *Telling Lies: Clues to Deceit in the Marketplace, Politics, and Marriage*. New York: Norton.

Fasold, Ralph. 1984. *The Sociolinguistics of Society*. Oxford: Blackwell.

Felker, Daniel B. 1980. *Document Design: A Review of Relevant Research*. Washington, D.C.: American Institutes for Research.

Felker, Daniel B., Frances Pickering, Veda R. Charrow, V. Melissa Holland, and Janice C. Redish. 1981. *Guidelines for Document Designers*. Washington, D.C.: American Institutes for Research.

Galasinski, Dariusz. 2000. *The Language of Deception: A Discourse Analytical Study*. Thousand Oaks, Calif.: Sage.

Garner, Bryan. 2001. *Legal Writing in Plain English*. Chicago: University of Chicago Press.

Gilson, Jerome, and Anne Gilson Lalonde. 1999. *Trademark Protection and Practice*. Cumulative Supplement. Vols. 1 & 3. New York: Matthew Bender.

Gorman, Robert A. 1963. Copyright protection for the collection and representation of facts. *Harvard Law Review* 76: 1569–1605.

Green, Georgia. 1988. *Pragmatics and Natural Language Understanding*. Hillsdale, N.J.: Erlbaum

Grice, H. P. 1967. *Logic and Conversation*. Unpublished Manuscript of the William James Lectures, Harvard University.

——. 1975. Logic and conversation. In P. Cole and J. Morgan, eds., *Speech Acts*, Vol 3 of *Syntax and Semantics,* 41–58. New York: Academic.

Halliday, M.A.K. 1967. The linguistic study of literary texts. In Seymour Chapman and Samuel R. Levin, eds., *Essays on the Language of Literature*, 217–223. Boston: Houghton Mifflin.

Hollien, Harry. 1990. *The Acoustics of Crime*. New York: Plenum.

——. 2001. *Forensic Voice Identification*. New York: Harcourt.

Huddleston, Rodney, and Geoffrey K. Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.

Hummert, Mary Lee, Teri A. Garstka, and Jaye L. Shaner. 1995. Beliefs about language performance: Adults' perceptions about self and elderly targets. *Journal of Language and Social Psychology* 14.3: 235–259.

Hummert, Mary Lee, John M. Wiemann, and Jon F. Nussbaum. 1994. *Inter-personal Communication in Older Adulthood*. Thousand Oaks, Calif.: Sage.

Johnston, Donald F. 1978. *Copyright Handbook*. New York: R. R. Bowker.

Kimble, Joseph. 1992. "Plain English: A charter for clear writing." *Thomas M. Cooley Law Review* 9.1: 1–58.

Kinsbourne, Marcel. 1980. Language and communication in the elderly: Experimentation and rehabilitation. In Loraine K. Obler and Martin L. Albert, eds., *Language and Communication in the Elderly*, 153–158. Lexington, Mass.: Lexington Books.

Labov, William. 1966. *The Social Stratification of English in New York City*. Washington, D.C.: Center for Applied Linguistics (reprinted in 1982).

——. 1972. *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.

Ladas, Stephen P. 1975. *Patents, Trademarks and Related Rights: National and International Protection*. Vol. 2. Cambridge,: Harvard University Press.

Larsen, Lex K. 1994. *Employment Discrimination*. 11 volumes. New York: Matthew Bender.

Lesseg, Lawrence. 2004. *Free Culture: How Big Media Uses Technology and the Law to Lock down Culture and Control Creativity*. New York: Penguin.

Levinson, Stephen C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.

Lewis, Harold S., Jr., and Elizabeth J. Norman. 2001. *Employment Discrimination Law and Practice*. St. Paul, Minn.: West Group.

Maddox, George L. 1987. *The Encyclopedia of Aging*. 2nd ed. New York: Springer.

McCarthy, Thomas. 1997. *McCarthy on Trademarks and Unfair Competition*. 4th ed. Vols. 3 and 4. St. Paul, Minn.: West Group.

McCawley, James. 1978. Conversational implicature and the lexicon. In P. Cole, *Pragmatics*, Vol. 9 of *Syntax and Semantics*, *9:*245–259. *Pragmatics*, New York: Academic.

McMenamin, Gerald. 1993. *Forensic Stylistics*. Amsterdam: Elsevier.

——. 2002. *Forensic Linguistics: Advances in Forensic Stylistics*. Baton Rouge, La.: CRC Press.

Miller, Gerald R., and James B. Stiff. 1993. *Deceptive Communication*. Thousand Oaks, Calif.: Sage.

Nelson, Robert L., and William P. Bridges. 1999. *Legalizing Gender Inequality*. New York: Cambridge University Press.

Nimmer, Melville B., and D. Nimmer. 2000. *Nimmer on Copyright*. New York: Matthew Bender.

Nuessel, Frank. 1982. The language of ageism. *Gerontologist* 22: 273–276.

——. 1992. *The Image of Older Adults in the Media: An Annotated Bibliography*. Westport, Conn.: Greenwood.

Obler, Loraine K., and Martin L. Albert. 1980. *Language and Communication in the Elderly*. Lexington, Mass.: Lexington Books.

Olsson, John. 2004. *Forensic Linguistics: An Introduction to Language, Crime and the Law*. London: Continuum.

Palmore, Erdman B. 1990. *Ageism: Negative and Positive*. New York: Springer.

Player, Mack A. 1999. *Federal Law of Employment Discrimination in a Nutshell*. St. Paul, Minn.: West Group.

Robinson, W. Peter. 1996. *Deceit, Delusion, and Detection*. Thousand Oaks, Calif.: Sage.

Salcedo, R. N., H. Reed, J. F. Evans, and A. C. Kong. 1972. A broader look at legibility. *Journalism Quarterly* 49: 285–289, 295.

Searle, John. 1969. *Speech Acts*: *An Essay in the Philosophy of Language*. Cambridge: Cambridge University Press.

Shuy, Roger W. 1990. Warning labels: Language, law, and comprehensibility. *American Speech* 65.4: 291–303.

——. 1993. Language evidence in distinguishing pilot error from product liability. *International Journal of the Sociology of Language* 100/101: 101–114.

——. 1998. *The Language of Confession, Interrogation and Deception*. Thousand Oaks, Calif.: Sage.

——. 2002. *Linguistic Battles in Trademark Disputes*. Houndmills: Palgrave Macmillan.

——. 2006. *Linguistics in the Courtroom: A Practical Guide*. New York: Oxford.

Shuy, Roger W., and Frederick Williams. 1973. Stereotyped attitudes of selected English dialect communities. In Roger W. Shuy and Ralph Fasold, eds., *Language Attitudes: Current Trends and Prospects*, 85–96. Washington, D.C.: Georgetown University Press.

Shuy, Roger W., Walt Wolfram, and William K. Riley. 1968. *Field Techniques in an Urban Language Study*. Washington, D.C.: Center for Applied Linguistics.

Smith, J. M., and M. E. McCombs. 1971. Research in brief: The graphics of prose. *Visible Language* 5: 365–369.

Solan, Lawrence. 1993. *The Language of Judges*. Chicago: University of Chicago Press.

——. 2001. The written contract as a safe harbor for dishonest conduct. *Chicago-Kent Law Review* 77.1: 87–120.

Strong, William. 1999. *The Copyright Book: A Practical Guide*. 5th ed. Cambridge: MIT Press.

Tiersma, Peter M. 1999. *Legal Language*. Chicago: University of Chicago Press.

——. 2002. The language of law of product liability warnings. In Janet Cotterill, ed., *Language in the Legal Process*, 59–71. Houndmills: Palgrave Macmillan.

Tinker, M. A. 1965. *Bases for Effective Reading*. Minneapolis: University of Minnesota Press.

——. 1969. *Legibility in Print*. Ames: Iowa State University Press.

INDEX